Report to the Attorney-General and Minister for Justice and Minister for Integrity

Review of Operational Matters at Forensic Science Queensland

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ACKNOWLEDGEMENTS

Thank you to everyone who participated in the DNA Review, your time, openness and expertise was greatly appreciated. There was genuine willingness among participants to improve DNA service delivery for the Queensland community and victims of crime and their families. The Review Team observed committed groups of Forensic Science Queensland (FSQ) staff who have worked diligently to meet the service needs of the police, courts, victims, and the Queensland community under trying circumstances. We believe there is a good core group of ethically motivated staff who can continue to rebuild Queensland's forensic biology laboratory.

Invaluable support was provided by members of the FSQ Implementation Team, the Queensland Police Service, Office of Director of Public Prosecutions, Legal Aid, the Chief Justice, the Chief Judge, the Chief Magistrate, the Deputy Chief Magistrate, Office of the State Coroner, Queensland's Chief Medical Officer, the Sexual Assault Reform Oversight Committee, victims of crime and their families, Office of the Victims' Commissioner, the Homicide Victims Support Group, the Queensland Sexual Assault Network, DVConnect, Legal Aid, Courts and Tribunals, Department of Justice, Forensic Medicine Queensland, private defence lawyers, the Office of the Independent Implementation Supervisor, and FSQ. Vicki and Shannah Blackburn have continued to be strong advocates for victims and their families, and for the broader Queensland community supporting those affected by crime. Thank you for your contributions to the Review, your ongoing commitment to justice for all victims, and for giving a voice to so many impacted by the DNA issues for the last 18 years.

We extend special thanks to Chief Inspector Dave Neville, the 'core group' of police officers involved with the DNA Review workshops, and all officers who participated in the end user focus groups. Your dedication to resolving crime and protecting Queenslanders is inspirational.

Thank you to the Premier David Crisafulli, and Attorney-General the Honourable Deb Frecklington for providing the Review Team with the opportunity to serve the Queensland public in this important role.

Lastly, thank you to the victims of crime and their families for not giving up on justice, and for the Queensland community who supported them and fought for improvements to forensic DNA services and our criminal justice and coronial systems.

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DISCLAIMERS

The information, opinions and recommendations provided in this report are based on information and data provided by participants throughout the DNA Review. The report relies on the accuracy and completeness of documents and information provided by the participants of the DNA Review. The authors have used all reasonable efforts to ensure the information is reliable and complete. The opinions expressed by the DNA Review are genuinely held having regard to the facts upon which they are based as referred to in this report.

The Queensland Police Service provided the following disclaimer and caveats on data provided to the DNA Review:

> *Disclaimer – All figures are not official Service statistics. Official Police Service statistics are released only through Research and Analytics, Policy and Performance Division after available data is collected, classified and collated in accordance with nationally accepted rules.*
>
> *Caveat – QPS understands that a review has been commissioned by the Attorney General to examine the DNA testing processes in Queensland. That Dr Wright and Dr Budowle have been engaged to conduct the review and have requested information from the QPS to inform same. The documents / information are being disclosed to them in that capacity, that is to inform them in the conduct of their review.*

The information, opinions and recommendations provided in this report are based on information and data provided to the DNA Review Team by participants throughout the Review. The information, opinions and recommendations provided are not on behalf of the Commonwealth, the Queensland Government, the NSW Government, or the Australian and New Zealand Forensic Science Society.

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Chapter 1: Executive Summary

1. Executive Summary

1.1 Purpose and scope of the Review

1. The flawed DNA testing and mismanagement of the Queensland Health Forensic and Scientific Services (QHFSS) Forensic Biology laboratory from 2007 to 2023 examined in the 2022 and 2023 Commissions of Inquiries (to be referred to collectively as the Inquiries) is one of the greatest failures of a justice system in the world.[1] Queensland's criminal justice system had been compromised, many thousands of victims had been denied justice, and the communities' trust in forensic DNA services lost.

2. Following the Inquiries, Forensic Science Queensland (**FSQ**) was established under the *Forensic Science Queensland Act 2024* (Qld) (**FSQ Act**)

> *"The main purpose of this Act is to ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland.*
>
> *The purpose is primarily achieved by—*
>
> *(a) establishing the Director of Forensic Science Queensland to lead the provision of forensic services; and*
>
> *(b) establishing the Forensic Science Queensland Advisory Council to give advice and make recommendations about particular matters.*

3. The establishment of FSQ was a new chapter for forensic science in Queensland that was intended to restore trust, give new hope to victims of crime, and provide accurate, reliable, and timely forensic DNA services to the police and courts. The former Queensland Government's significant investment of ~$200M underpinned the changes. The current government announced $50M on 22 May 2025 to further support FSQ through a comprehensive outsourcing strategy.[2]

4. Two and a half years after the establishment of FSQ it is timely to conduct this independent DNA Review and report to Queenslanders on changes which have occurred, and what further support is required. Independent scrutiny lies at the heart of science and is standard practice in all sciences.

5. The DNA Review acknowledges the significant task required to rebuild Queensland's forensic DNA services, address issues reported in the Inquiries and transform the former QHFSS laboratory into a facility the Queensland community and victims deserve. The DNA Review observed many dedicated, hard-working, and ethically motivated experts across multiple organisations contributing to these reforms.

6. The DNA Review was tasked to provide advice to the government on seven Terms of Reference (TOR) which broadly covers the progress of implementing recommendations arising from the Inquiries, identifying best practice for completing implementation of the reforms, advice on how to assist the FSQ historical case review process, advice on how to enhance and improve efficiency, accuracy and reliability of forensic DNA testing

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[1] Joint Statement, The Honourable Deb Frecklington, Attorney-General and Minister for Justice and Minister for Integrity, The Honourable Dan Purdie, Minister for Police and Emergency Services "Crisafulli Government announces DNA blitz to address Labor's backlog" 22/05/2025

[2] https://statements.qld.gov.au/statements/102595

services, and advice on the development and implementation of a framework for the future delivery of forensic DNA testing services.

7. The DNA Review Report will be confronting for many, particularly victims affected by the 2022 and 2023 Inquiry findings, and those still awaiting justice. Issues uncovered by the DNA Review outlined in this Report are serious and have greatly impacted police investigations, and Queensland's criminal justice and coronial system over the last two and a half years.

8. During a 2024 Supreme court information session Justice Boddice revealed a 14-month delay in DNA results for a rape case. He stated:[3]

> *"That is not a justice system. We have to address that problem."*

9. A victim-survivor advised the DNA Review:

> "*The delays in forensic DNA testing are not merely administrative—they have deeply harmful effects on victims, the integrity of justice, and community trust in the system."*
>
> *"Delays of this nature erode faith in our justice system and retraumatise victims who are already burdened with the weight of recovery*."

10. The DNA Review provides the Queensland government with advice and recommendations to consider with the aim of improving outcomes for victims of crime, and regaining public trust in forensic DNA service delivery and the criminal justice system. Solutions are provided to rapidly restore accurate, reliable, and timely DNA service provision for end users. An modernised holistic DNA service delivery model is presented that aligns with best practice, includes a strengthened quality assurance system, and provides greater equity for victims in rural and remote Queensland. Improvements are suggested to further support the completion of reforms and the historical case review.

1.2 Report structure

11. Reflecting the above matters, this Report is structured as follows:

(a) **Chapter 2: About the DNA Review.** Detailing the background and the establishment of the DNA Review, the methodology applied in conducting the DNA Review and the limitations and assumptions applied.

(b) **Chapter 3: Forensic DNA Service Delivery in Queensland.** Detailing the establishment, governance and functions of FSQ, and the role and provision of Forensic DNA services in Queensland's criminal judicial systems.

(c) **Chapter 4**: **Options to enhance and improve the efficiency, accuracy and reliability of service delivery** addressing TORs 6 and 7. Details the current baseline of FSQ service delivery areas corresponding to the interconnected themes of:

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[3] A New Regime for Expert Evidence in Supreme Court Criminal Proceedings (19 June 2024). https://www.youtube.com/watch?v=Wj1DB7_aNYA (29:40)

(i) **Efficiency:** backlogs and reduced service delivery, use of funding for outsourcing and increasing testing capacity;

(ii) **Accuracy:** reliability of results including systemic contamination risks, the recent NATA assessment, implementation of new rape kits, and DNA testing thresholds;

(iii) **Reliability:** delays impacting police investigations, criminal and coronial matters, and consideration of the FSQ Act.

(d) **Chapter 5: A Modernised Holistic DNA Service Delivery Model for Queensland.** Detailing best practice advice on FSQ and system-wide DNA service delivery governance, research and innovation strategy, and program management. Addressing TORs 6 and 7.

(e) **Chapter 6: FSQ Historical Case Reviews** including Project 13 cases which require review subsequent to the Bennett Inquiry and communicating DNA evidence. Addressing TORs 4 and 5.

(f) **Chapter 7: Implementation of the "Outstanding" and "In Progress" Reforms** including details around the resourcing required to implement the reforms. Addressing TORs 1, 2, 3 and 5.

(g) **Chapter 8:** Conclusions of the DNA Review.

1.3 Summary of Findings, Conclusions and Observations

CHAPTER 4: Options to enhance and improve the efficiency, accuracy and reliability of service delivery

Section 4.2: The impact of DNA issues on victim-survivors and their families

Impact to Victims

(a) The delays in DNA testing and the confidence in reliability of results have had a significant impact on victims and their families.

(b) The DNA issues delays victims justice, which also delays their healing, and prolongs their trauma.

(c) Victims impacted by the DNA issues require additional support to assist with their mental health challenges arising from the DNA issues.

Section 4.3: Current FSQ DNA Service Delivery

FSQ Testing Backlog

There are six categories of backlog samples

(d) Historical cases representing 32,412 cases. Of the 8,573 cases reviewed to date 82% (7,065) were determined to not require further testing. It's unclear how many of the 25,347

cases remaining will require further scientific review though it is likely to be equivalent to at least four years of expected routine workloads;

(e) BAU major and volume crime received from 1 May 2023 which fall into five subcategories as at January 2025:

(i) 'Started' cases representing 13,000 samples. FSQ advised this will take two years at current capacity to complete.

(ii) 'Not started cases' representing 641 rape kits, of these 121 relate to child victims or victims with impairment.[4] It also included 96 pairs of underwear, examination of 283 small items, and registration of 298 'in-tube' samples. FSQ advised this will take one year at current capacity to complete.

(iii) Unidentified human remains representing 62 samples. All bone testing at FSQ was halted after the Sofronoff Inquiry, therefore the human remains were only going to be tested if they were outsourced to another laboratory. Cold case homicides across 73 high priority cases. FSQ is only allowing 11 cases to be submitted at a time, and there has been little progress in those 11 homicides over the last two years.

(iv) Coronial cases across 16 cases. Some of these matters have been delayed by up to two years preventing finalisation.

Based on this evidence, the Reviewers have formed the view that:

(f) FSQ backlogs are contributing to reduced DNA service delivery, which is impacting the criminal justice system and police investigations, which delays prosecutions and justice for victims.

(g) A basic analysis of the current FSQ backlogs and capacity suggests to the Reviewers that there is at least six years of work to just clear the backlogs, this is calculated without the constant flow of BAU.

(h) It is certain the backlog is preventing offenders from being arrested, contributing to reoffending across Queensland, preventing justice for victims, and preventing unidentified remains from being identified.

(i) Of significant concern is the ongoing risk to child victims and victims with impairment involved in rape or sexual assault allegations; these victims are most likely to know their perpetrators, either as carers or having regular contact with them.[5] Failure to test rape kits for these priority unresolved cases is likely placing these vulnerable victims at high risk of further rapes or sexual assaults.

FSQ Turnaround Time and Testing Delays

(a) There are three levels of priority for QPS samples provided to FSQ with turnaround times. Priority 1 and Priority 2 relate to major crime cases, and Priority 3 relate to all volume crime cases.

(b) Priority 1 is required in five working days and is the most urgent on the basis that it is critical to community safety. Priority 1 samples are currently the only samples processed

[4] DNA Review Information Request 52 'FSQ Coversheet', March 2025page 2, paragraph 1.
[5]Australian Institute of Criminology "Misperceptions about child sex offenders" Trends and Issues in crime and criminal justice, 2011

by FSQ that are meeting QPS turnaround time requirements. Priority 1 samples represent on average 13 samples per month.

(c) Police require DNA results within 24 hours for some major crimes and 5 to 10 business days for volume crimes to effectively resolve cases and disrupt offending cycles. Court statements are required 8 weeks from request.

(d) The current median turnaround time for major crimes is 412 days (as of December 2024), which is 398 days slower than required. The trendline in delivery was consistent across 2024 and did not show improvement.

(e) The current median turnaround time for volume crimes was 321 days as of December 2024 which has reduced to 84 days by March 2025 due to FSQ responding to QPS prioritisation. FSQ were testing the oldest volume crime cases first which meant the value to the investigators was significantly lower in attempting to solve and disrupt crime.

(f) Although FSQ and QPS used the same system to extract data on turnaround time, there was a discrepancy in how it was calculated. FSQ's data excluded the time taken to finalise and release information to QPS, resulting in a difference between the two data sets of turnaround time.

(g) There are 343 matters in the upper court awaiting DNA results and statements. It is reported that one in two major crime offenders will likely re-offend within a year. One volume crime offender will offend on average 3.7 times a year, though a small number reoffend up to 50 times a year depending on the offence.

(h) There are currently no sufficient policy or service level agreements in place between FSQ and QPS which would require or set out any consequences for FSQ failing to meet turnaround time requirements.

(i) FSQ is allocated funding for DNA testing, which prevents QPS from seeking routine testing from other laboratories when their DNA testing needs are not being met by FSQ.

Based on this evidence, the Reviewers have formed the view that:

(a) Turnaround time should be calculated on a whole life cycle basis to include the time taken to finalise and release information to QPS. On that basis the QPS data was preferred.

(b) The current FSQ turnaround time for service delivery for Priority 2 and 3 samples is not meeting QPS requirements by a significant amount.

  (i) Volume crime: as at March 2025 the median turnaround time was 84 days, which is unacceptable.

  (ii) Major crime: as at December 2024 the median turnaround time was 412 days, which is unacceptable.

(c) The significant FSQ delays in reporting DNA results to the courts have been steadily growing since early 2023 and have not been adequately addressed.

(d) Turnaround time for current BAU demand is being impacted by a number of competing priorities for FSQ which are:

  (iii) addressing the Inquiry reforms;

(iv) trying to clear a significant backlog of samples.

Provision of Reduced DNA Services for Queensland

(e) As a result of FSQ service capacity, from April 2023 QPS reduced the number of samples submitted to FSQ by 38.7%. Major crime samples reduced by 31.6% and volume crime by 45.7%.

(f) Despite QPS significantly reducing the number of samples submitted to FSQ the delays in FSQ service provision for major crime continued to increase.

Impact of the Current DNA Service Delivery on the Courts

(g) The significant FSQ delays in reporting DNA results to the courts have been steadily growing since early 2023 and have not been adequately addressed.

Based on this evidence, the Reviewers have formed the view that:

(h) Courts Queensland-wide relying on DNA evidence are now at a point of critical system failure.

(i) The DNA Review has observed via case studies impacts to Queensland's criminal justice system have included:

(i) Cases being dismissed due to lengthy DNA service provision delays;

(ii) One case going to trial without DNA evidence despite prosecution pleading its relevance to their case;

(iii) Court proceedings being significantly delayed;

(iv) Courts not being advised by FSQ of timelines for provision of DNA results to enable scheduling of court dates;

(v) Alleged offenders being held in custody for extended and unknown periods (including potentially innocent people);

(vi) An alleged murderer considered a risk of reoffending, being released on bail due to the delays;

(vii) Delays in FSQ DNA re-testing means that a person may be remanded for a longer period of time than their sentence if found guilty; and

(viii) Reducing opportunities to remove repeat offenders from the community.

Delays regarding untested Rape Kits

(j) The number of untested rape kits grew significantly from 2023 growing from 75 in June 2023 to 511 by September 2024.

(k) Testing of rape kits is taking over 12 months for FSQ to complete. Rape kits should be tested within two to eight weeks, and ideally within five days.

(l) Analysis of raw data provided to the DNA Review revealed that FSQ output for the new rape kits approximately halved compared to the previous rape kit, and there was an average capacity gap of approximately 50 rape kits a month.

Based on this evidence, the Reviewers have formed the view that:

(m) Part of the reason for the increase in turnaround time for rape kits has been the introduction of a new type of rape kit which FSQ had not appropriately prepared for.

  (i) From 1 August 2023 the former Sexual Assault Investigation Kit (SAIK) was replaced with the Forensic Medical Evidence Kit (FMEK);

  (ii) The transition required validation/verification of workflows and methods and training of staff. The new rape kit required more extensive administrative and scientific time to complete;

  (iii) Training of FSQ staff prior to the introduction of the new rape kits was inadequate according to FSQ staff;

  (iv) Sufficient standard operational procedures were not in place at FSQ according to FSQ staff; and

  (v) Risk assessment documents show that FSQ failed to conduct suitable internal verification on methods and workflows involved in evidence recovery from the new rape kits.

  (vi) As a result, testing of rape kits paused for many months at FSQ creating the large backlog.

(n) It is a service failure that a forensic science laboratory would not be sufficiently prepared to start testing the new rape kits.

(o) In response to the increasing untested rape kits, in November 2024 QPS sought to have 15 of its most urgent rape kits outsourced to an overseas laboratory. FSQ intervened without the knowledge of QPS and requested the overseas laboratory only perform the first step of the testing on the basis that there were technical differences between the laboratories. Ultimately this intervention just delayed the testing of the rape kits by at least three months.

The Government's outsourcing plan

(p) The comprehensive DNA outsourcing plan announced by the government on 22 May 2025 is supported by the DNA Review which will send DNA samples for rape kits, most major crime cases, and unidentified human remains for testing.

Based on this evidence, the Reviewers have formed the view that:

(q) FSQ should maintain the responsibility to manage the 'started cases' backlog as it has advised there are complexities in transferring started cases to an external provider, and complexities identifying unstarted cases they currently hold.

(r) External providers should be accredited to the ISO/IEC 17025 standard and have a proven history of reliable service provision.

(s) An auditing and compliance plan should be developed by DJAG and QPS, with involvement from FSQ to provide proof of compliance to standards and ensure quality results are provided.

(t) This should be considered as a temporary DNA service delivery model which is needed for at least two years. It should have a flexible design to reduce reliance on external providers gradually over time as FSQ capacity increases.

(u) FSQ should only receive the number of cases it can process within the required timeframes of the police and courts, including cases nominated as priority for fast turnaround. The remaining samples should be outsourced.

Reliable FSQ capacity, capability, and quality metrics should be evaluated by the DJAG and QPS to determine the monthly number of cases to be outsourced.

Section 4.4: FSQ Use of Government Funds Allocated for Outsourcing

(a) In December 2022, the Labor government approved $29.5M of funding for FSQ over three financial years (2022-23 to 2024-5) to support the contracting out of DNA analysis to external forensic service providers.

(b) The funding was held by Treasury in a contingency allocation.

(c) FSQ used ~$10M over three financial years for external providers to provide only partial services (one component of the DNA profiling process, as opposed to end-to-end outsourcing).

(d) On 17 July 2024, FSQ wrote a Brief to the Director-General of Queensland Health requesting that a letter be sent to Queensland Treasury requesting that funds held in contingency be released to Queensland Health in order to build FSQ in-house capability. FSQ advised the DG Health that this was a more cost-effective strategy to address sample processing delays.

(e) In September 2023, the request was approved [due to redactions on the documents received the decision maker is unknown to the DNA Review] and $19.5M was reallocated to capital expenditure on FSQ facility and infrastructure renewal, and new and upgraded equipment.

(f) When the decision was made to re-allocate the outsourcing fund in September 2023, the ‘started cases backlog’ had grown to over 18,000 samples (The DNA Review estimates this to be approximately one year’s workload) and continued to increase until January 2024 when it reached a peak of 21,204 samples.

Based on this evidence, the Reviewers have formed the view that:

(g) End-to-end outsourcing would have prevented any new cases from early 2023 from being part of the backlog. The FSQ strategy has resulted in all new cases joining the ~12 to 14 month ‘started cases backlog’ queue.

(h) Since September 2023, the started cases backlog has declined but remains significant sitting at 13,000 samples as set out above and shown in Figure 10. This demonstrates the FSQ strategy to use outsourcing funds to build internal capacity did not have the desired effect of clearing the backlog.

(i) The DNA Review disagrees that building internal capacity was the best strategy to address the backlog, as building internal capacity takes many years, over which time the backlog would persist. A combined strategy of building internal capacity, partial outsourcing, and end-to-end outsourcing was required.

(j) The DNA Review questions FSQ decision-making given the impact it had on police investigations, the courts, and victims awaiting justice.

(k) It reveals that FSQ's decision to reallocate the funding caused police to wait a median of 412 days for major crime DNA results, and cases involving DNA are being delayed in the Magistrates court by two and half to three years.

(l) The FSQ preference to develop in-house capabilities will take many years to clear the DNA backlogs in contrast to end-to-end outsourcing that would clear the backlogs in an appropriate timeframe.

(m) This decision-making lacks strategic direction to facilitate the delivery of DNA services to the police, courts, and provide justice for victims without avoidable delay.

Section 4.5: Increasing FSQ DNA Testing Capacity

(a) The DNA Review notes the following strategies have been utilised already to try and increase testing capacity with limited success:

(i) From 2023 onwards FSQ tried to increase capacity by recruiting and training new staff (including contractors), upgrading facilities, and purchasing new instruments. However, these are costly and time-consuming and did not result in a noticeable increase in capacity in the short to medium term.

(ii) In response to the FSQ capacity and turnaround time issues, QPS has decreased sample submissions by 38.7% since April 2023. This did not see an improvement in turnaround timeframes and the DNA Review note that this is not a long term acceptable strategy to address FSQ capacity issues. (see Section 4.3.4);

(b) The DNA Review has identified two issues which if resolved, may increase FSQ capacity and efficacy, and eliminate the 'started cases backlog' faster.

Solution 1: Ceasing DNA testing of matters no longer required by the Courts

(c) A pilot project was conducted by QPS and the Department of Justice on court data from February 2022 to October 2024 which identified 2,240 finalised major crime and volume crime matters that had not been removed from FSQ DNA testing lists. This represents ~15% of annual DNA sample submissions.

(d) The current process is manual, involving checking data between the QWIK (Courts and Tribunals) and QPRIME (QPS) information systems. It was also the responsibility of the QPS investigator to notify FSQ that the DNA samples no longer required testing, which often did not occur given this was also manual process.

Solution 2: Reducing FSQ Reworking Rates of Crime Scene Samples

(e) In the Reviewers' experience, a laboratory with good processes, reliable instruments, and well-trained staff is expected to re-test less than 5% of DNA samples.

(f) The data shows a high rework percentage for all three priorities of samples, for two scientific methods (amplification and electrophoresis across) across all three years analysed (2022, 2023 and 2024).

(g) Overall, the rework percentage remained at ~25% over 2022, 2023, and 2024 showing no significant improvement over the years (Figure 14). This indicates that in the last two

years there may not have been any significant improvements in two key DNA profiling processes (amplification and capillary electrophoresis), or training associated with these processes.

(h) Over 2024, FSQ performed 3,097 extra tests due to reworking for one method (amplification), and 3,268 extra tests for the second method (electrophoresis). These are the two most expensive processes in DNA profiling and is taking up capacity that could be used to eliminate the backlog.

(i) In 2024 the reworking percentage for one method (electrophoresis) for Priority 1 samples was 67%, for Priority 2 samples it was 42%, and for Priority 3 samples it was 13%. This suggests scientists are striving for a higher quality for Priority 1 samples, and that for ~60% of Priority 1 tests they receive they may not be satisfied the result is the best quality. If so, it is a concern that such a high percentage of results are not being considered the best quality. Sample priority should not dictate the level of quality that is afforded to a sample.

(j) There are a few possible reasons why the rework rates might be high:

(i) One reason may be the lack of awareness by FSQ of how high their current reworking rate is due to this data not being readily available in the Forensic Register.

(ii) Priority 1 and Priority 2 samples (major crime) are reworked two to three times more than Priority 3 samples (volume crime). FSQ has separate teams of scientists who work on major crime and volume crime cases. This data indicates that the major crime teams are reworking DNA samples two to three times more than the volume crime team. This could be due to different policies in the different teams regarding the quality standards set for major crimes versus volume crime, or due to the quality of work being produced by the different teams.

(iii) An internal FSQ audit conducted in 2023 found that many previously validated / verified projects were considered ‘high risk’ because they were not conducted appropriately. Methods that have not been properly validated / verified are more likely to produce unreliable results. Despite this, FSQ continued using these methods, which could explain why ~25% of results cannot be relied upon the first time they are tested.

(iv) The validation of the capillary electrophoresis instruments, its ongoing maintenance and operation also requires review to ensure the instrument is working optimally. Reasons noted by the scientists when requesting the reworks suggest there are multiple issues with the quality of the results attributed to this instrument, which makes profile interpretation difficult.

(v) It was also noted by the DNA Review that FSQ are not sufficiently monitoring the performance of their instruments, meaning that degradation of the instrument over time may not be detected between scheduled preventative maintenance by the manufacturers.

Based on this evidence, the Reviewers have developed two solutions which would increase FSQ's testing capacity:

(k) The introduction of a new automated process that identifies matters involving DNA testing that are no longer required by the courts. This strategy is expected to reduce unnecessary DNA testing by ~15%, leading to a more efficient use of resources.

(i) This process is essentially a new Report that can draw information from QWIK to QPRIME to see finalised cases with DNA submitted;

(ii) This report is reviewed by the QPS DNA Liaison and Major Crime Unit (DLMCU, co-located at FSQ) to determine if DNA testing is still required. This is confirmed with QPS investigators.

(iii) Testing is stopped on any matters where it is no longer required, which removes the samples from the FSQ worklist.

(l) The second is working to reduce the percentage of samples that have to be reworked by implementing the following strategies:

(i) FSQ should optimise methods causing high re-testing rates as a priority.

(ii) FSQ should regularly capture and track their re-testing rates and also include that data in annual Quality Management Reviews as required by ISO/IEC 17025. The information should also be used for strategic planning to develop capacity.

(iii) FSQ should re-prioritise Recommendation 32 (relating to the validation of FaSTR DNA software) to reduce the laboratory's reworking percentage, to save time, money, and to develop more capacity. FSQ advised the DNA Review this recommendation had not yet commenced because it requires two large validation projects and they are awaiting sufficient scientific resources within the validation team to commence, which are currently assigned to higher priority innovation projects.6

(m) It is suggested that FSQ regularly checks data from their critical instruments and conducts trend analysis over time to monitor instrument performance.

Section 4.6: Release of Unreliable Results by FSQ

(a) The DNA Review have found that FSQ is providing unreliable DNA results to the police and courts, and have been since early 2023.

(b) The unreliable results are due to multiple issues including:

(i) systemic DNA contamination (ie, DNA from unknown sources, such as laboratory surfaces or instruments, people, or other samples which can be unintentionally introduced into crime scene samples). DNA contamination is a significant issue because it may not be detected in crime scene evidence compromising the reliability of the results. DNA contamination is detected weekly at FSQ which is a highly unacceptable level;

(ii) the use of methods that have not been validated and/or verified in casework by FSQ, or methods that FSQ found are at high risk of not being reliable;

[6] DNA Review Information Request 53 'Table of FSQ Responses to FSQ Requests'.

(iii) the continued use of methods that internal projects have demonstrated produce significantly less DNA than other methods.

(c) The 17 March 2023 Briefing Note from FSQ to QH (and its attachment) has caused the Review to form the following views:

(i) FSQ were aware unreliable results were being provided to the police and courts from early 2023;

(ii) In March 2023 the FSQ CEO was unable to assert complete confidence in methods used by the laboratory, and advised there was a significant DNA contamination risk that could undermine the criminal justice process.

(iii) FSQ were aware the results were so unreliable that they may need to be reviewed and re-tested at a later date as part of the historical case review;

(iv) Release of unreliable results by FSQ may have impacted victims' chance at justice, may have prevented apprehension of violent repeat offenders, and has put Queensland communities at risk of harm.

(v) that FSQ has suffered from a deficient risk management process, and an inappropriate quality management culture.

(vi) there was a failure to communicate any of the issues outlined in the March Briefing Note by FSQ to end users.

(d) FSQ's recommended path forward to Queensland Health in March 2023 to address the unreliable results was to continue with the recruitment of new staff and provide further staff training. The DNA Review considers that the most appropriate course of action in March 2023 should have been to immediately cease testing DNA evidence, inform all relevant end users and FSQ staff of the issues, provide addendum statements for all affected statements released, commence a comprehensive outsourcing strategy, expand the historical case review to include the affected cases, and not re-commence testing until all methods and instruments had been deemed reliable by independent experts, and all staff fully trained and proficiency tested as competent. This did not occur.

(e) These issues are affecting BAU cases, the historical case review, and are relevant to the ongoing FSQ reforms.

(f) These issues compromise the reliability and accuracy of FSQ DNA services for the police and courts.

Unreliable methods

(g) In October 2023, two FSQ projects revealed significant failings with DNA extraction methods (methods used to recover DNA from crime scene evidence) relating to Maxwell FSC and Maxwell 16.

(i) The first project found that a method used on blood and cells (Maxwell FSC) recovered 18% to 34% less DNA than another method used by FSQ (QIAsymphony).

(ii) The second project conducted in October 2023 demonstrated that one method (Maxwell 16) was recovering 50% less DNA from semen than another method (Maxwell FSC).

(h) The DNA Review considers that concerns with both methods (Maxwell FSC and Maxwell 16) should have been immediately communicated to police (and/or disclosed in reports that would form part of the prosecution disclosure to the courts and defence lawyers), and the Interim DNA Advisory Board. In addition, the methods should have ceased being used immediately, evidence should have been outsourced to another accredited laboratory, addendum statements issued, and where possible, affected evidence re-tested by another laboratory.

(i) The DNA Review has found that since October 2023 FSQ presented unreliable DNA evidence to the police (who then used that before the courts) despite the awareness they had given the commencement of the Bennett Inquiry into Project 13 and the reputational risks.

FSQ Internal Audit

(j) An FSQ internal audit was conducted by the FSQ Research and Innovation Team (the **internal audit**) between December 2023 and February 2024. Six Audit Reports were produced which were presented to the FSQ quarterly Quality Assurance Forum in May 2024. The Internal Audit reports stated:

(i) In total, 250 FSQ projects were risk assessed;

(ii) Of those, 50 were assessed as being 'high risk' relating to scientific methods and instruments. The deficiencies relate to the improper validation or verification of scientific methods and instruments;

(k) The Reviewers' concern is that issues highlighted in the internal audit reports could lead to missed DNA evidence, incorrect scientific interpretations, or contamination of evidence with DNA.

Based on this evidence, the Reviewers have formed the view that:

(l) After reviewing these reports, the DNA Review's concern is that FSQ has not remediated all of the high risk projects, and continued using the instruments and methods on crime scene evidence risking the provision of unreliable results to the police and courts.

(m) The DNA Review found no evidence that the police, courts or DNA Advisory Board were made aware by FSQ of these critical findings presented in the internal audit reports. The DNA Review found evidence the internal reports were intentionally not shared with staff, including reporting scientist. Reporting scientists were therefore placed in a position where they could not warn the police and courts of the limitations and unreliability of the evidence they were presenting.

Supreme Court Practice Direction 14

(n) In July 2024 Supreme Court Practice Direction 14 commenced specifically requiring experts to disclose any limitations or uncertainty affecting the reliability of results including the scientific validity of expert evidence.

(o) While there is a section in each annexure titled ‘Validity and Error Rates’, none of FSQ's statement annexures provided disclose information about the findings of the FSQ

internal audit, the flawed Maxwell FSC and 16 DNA extraction methods, the unreliability of these methods, the systemic contamination, or competency concerns management had of various staff.

NATA Assessment July 2024

(p) FSQ was assessed by the National Association of Testing Authorities (NATA) in July 2024, which is a requirement to maintain its accreditation to ISO/IEC 17025 (2017). The key findings identified were:

(i) NATA found 15 major non-conformances including lack of validation / verification for some methods and instruments, and deficiencies in the FSQ training program. This is considered a large number of non-conformances.

(ii) Out of over ~250 methods and instruments, only three methods and instruments were found by NATA to be insufficiently verified7 resulting in an assessment of 'major non-conformances' despite FSQ being aware of more (as reported in the FSQ internal audit). All three were identified as 'high risk' projects in the FSQ's internal audit.

(iii) The NATA assessment also found a major non-conformance in the FSQ training and competency program, finding it will likely take at least five years to implement the new training program fully (although a staged approach is being taken).

(iv) NATA revisited FSQ on 29 to 30 May 2025 to assess the adequacy of actions taken by FSQ to address all nonconformity findings from July 2024, and to determine if FSQ should retain its accreditation. NATA reported the "facility is operating at a standard that demonstrates it is competent to perform the activities for which accreditation is held." Two minor findings were recorded for FSQ to address (neither related to contamination concerns).

(q) On 3 January 2025, FSQ provided a briefing note to the Attorney-General (the AG Briefing Note) outlining the outcome of the NATA audit. It is the DNA Review's opinion that the flawed DNA extraction methods, the extent or impact of the unreliable methods and instruments, and the systemic DNA contamination were not disclosed to the Attorney-General in that Briefing Note.

(r) FSQ is currently performing a 'technical refresh' on a number of key instruments and methods to replace the unreliable methods. In the Reviewers' experience, the validations and verifications of the new instruments and methods are likely to take years to complete.

(s) The risk strategy that FSQ decided upon in June 2024 was to accept the results from critical and unreliable methods and instruments for a number of years while new methods and instruments are being introduced to replace them. It is the opinion of the DNA Review that this is an unacceptable risk strategy.

(t) It is well known across the forensic science community, and by the DNA Review, that if validation or verification is found to be inadequate, an organisation should not continue to use the methods or instruments in casework until the issues are rectified.

[7] DNA Review Information Request 19.2 'Forensic Biology NATA Reassessment Report-2024.

(u) The 'FSQ Operational Risk Register' demonstrates FSQ was aware of the risks it was accepting/tolerating by using methods (including the tapelift, acid phosphatase, sperm microscopy, and p30 methods) on sexual assault cases that are not verified.

Systemic Contamination at FSQ

(v) Systemic DNA contamination from unknown sources affecting crime scene samples was disclosed by FSQ staff members to the DNA Review on 13 May 2025. This was the same month NATA visited FSQ and came to the conclusion the laboratory met its accreditation requirements. It is unknown whether FSQ advised NATA of the systemic contamination issues it was experiencing during the auditing period.

(w) For crime scene evidence at FSQ, this was reported to the DNA Review as occurring at least weekly and was being detected through negative controls (samples with no DNA). However, the true prevalence may be much higher given contamination is sporadic and may affect crime scene samples without affecting negative controls (which are unknown profiles, making detection of extra unknown DNA from contamination difficult).

(x) Systemic DNA contamination within a forensic biology laboratory is one of the greatest risks to the accuracy and reliability of evidence. Results should not be released if contamination is detected. In the DNA Review's experience, contamination is expected to occur rarely in a forensic biology lab).When it does occur, the process involved in the contamination should be ceased, the source of the contamination needs to be identified, removed, and the forensic biology laboratory should undergo a deep clean (which should be occurring regularly to mitigate against contamination).

(y) DNA Review has concluded that FSQ has not taken the course of action in line with best practice.

(z) Between 1 January 2023 to 31 May 2025 there was 678 out of 1,214 (55.8%) environmental samples with detectable DNA contamination at FSQ. The DNA Review considers this to be unacceptably high. The environmental contamination represents a high risk for the reliability crime scene evidence results produced by FSQ.

(aa) On 20 June 2025 the FSQ Director was stood down over contamination concerns and FSQ paused testing. Limited testing recommenced on 4 July 2025 prior to investigations to locate and remedy all sources of contamination being completed.

(bb) FSQ conducted an investigation into two of their DNA extraction robots and found "*significant contamination was observed with both instruments*". The DNA Review considers this a high risk for crime scene samples which have been processed on these robots. These robots are not being used in the limited retesting.

FSQ documents show that the systemic DNA contamination was discussed at the monthly 'Leadership Group' meetings (Forensic Biology) from January 2024, and in the quarterly Quality Assurance Forums from February 2024.

Section 4.7: Introduction of new Rape Kits

Introduction of new rape kits

(a) Forensic Medical Examination Kits (FMEKs, 'rape kits') were implemented throughout Queensland in July 2023 to address recommendations arising from the Women's Safety and Justice Taskforce (Report 2) and the Sofronoff Inquiry;

(b) The detection of seminal fluid on rape kits swabs relies on three methods used by FSQ (sperm microscopy, the acid phosphatase and p30 methods). None of these methods had been internally verified by FSQ before being used on the new rape kits.

(c) On 22 February 2024 FSQ generated risk assessments for all three critical methods, over six months after introduction of the new rape kits, evaluating the risk of using them prior to internal verification. FSQ acknowledged that this could "lead to the reporting of inaccurate results" and "the provision of inaccurate evidence may result in a miscarriage of justice".

(d) In January 2025 the p30 test was verified (17 months after the new rape kits were introduced), and the acid phosphatase test was verified in February 2025 (18 months after the introduction of the rape kits). The sperm microscopy method still has not been internally verified.

(e) The DNA Review analysed raw data obtained from FSQ in June 2025 which confirms the three methods are not reliably detecting semen when it is present on rape kit samples, despite two of the methods being recently verified:

    (i) One method (acid phosphatase) failed to detect semen when it was microscopically observed in 21.7% of rape kit swabs.

    (ii) The second method (p30) failed to detect semen on 31.9% of rape kits swabs where sperm was microscopically observed and were also positive for acid phosphatase.

    (iii) The third (sperm microscopy). Of 291 rape kits swabs that were microscopically analysed for sperm but were negative, 21 were positive for acid phosphatase and p30 (7.2%).

(f) A project conducted by FSQ in October 2023 (two months after the introduction of the new rape kits) demonstrated that one method (Maxwell 16) was recovering 50% less DNA from semen than another method (Maxwell FSC)[8]. The Maxwell 16 method stopped being used four months later (it is unknown why this method was not terminated immediately). However, semen evidence is still being processed on the instrument (Maxwell FSC) that is recovering 18% to 34% less DNA.

Based on this evidence, the DNA Review has formed the view that:

(g) The sperm detection methods could be providing both false positive and false negative results, and are overall unreliable.

(h) The implementation of testing methods for the new kits was conducted poorly by FSQ. FSQ started testing the new rape kits prior to internally verifying three key methods to detect semen to make sure they would work reliably. These actions do not prioritise the needs and welfare of victims.

(i) The results outlined in (5) identify that the three critical methods mentioned above are unreliable. The DNA Review is concerned that if FSQ decided to use these three methods without internally verification, that decision may be described as reckless.

[8] DNA Review Information Request 55 'Project 275 'Extraction efficiency of semen', October 2023.'

(j) The unreliable semen detection methods, and the poorly performing semen DNA extraction methods in combination, could be significantly reducing the chance to identify offenders of sexual violence and failing victims of crime.

The DNA Review considers all testing of rape kits and of any other evidence from sexual offence matters that may contain semen (including underwear, clothing, bedding, etc) by FSQ should stop immediately due to the unreliable semen detection methods. It is likely that all rape kits and evidence suspected of containing semen processed by FSQ using the unreliable methods will require review, and where possible, re-testing.

Section 4.8: FSQ DNA Testing Thresholds

(a) The Sofronoff Inquiry was triggered by the discovery that QHFSS set a DNA testing threshold too high, knowing this would miss valuable DNA evidence from crime scenes, and would mislead the police and courts. Recommendation 15 was meant to prevent this from re-occurring and give victims confidence they were not being denied justice.

(b) In response to Recommendation 15, FSQ completed a validation study titled 'Project 242: Determination of Limit of Detection which was internally approved by FSQ on 23 August 2023.

(c) In October 2023, a project related to the DNA LOD validation was completed (Project 256 Extraction Efficiency of Blood and Trace). This project tested mock blood and trace samples by quantifying them (to determine how much DNA was present) and fully testing them to obtain DNA profiles. All DNA samples were fully tested even those that fell below the new FSQ DNA threshold FSQ (determined by the LOD validation). The results showed that approximately 12 pieces of DNA information (alleles) out of 42 in samples below the LOD (0.0006 ng/µL) were produced, therefore making it a usable profile and ones that could be uploaded to the National Criminal Investigation DNA Database.

(d) On 13 December 2023 the Board's scientific experts provided feedback on the FSQ DNA LOD validation report (which was presented as part of the Recommendation 15 closure report) requesting that FSQ to complete further experiments associated with the DNA testing threshold.

(e) In February 2024, FSQ outlined a range of further projects it would conduct to 'ensure the successful implementation of the LOD', including extraction efficiency, lower elution volume, and evaluating whether a profile can be obtained from samples below the DNA threshold. The Board agreed to close Recommendation 15. It was closed '*on the provision that the additional work described in the agenda paper be progressed as a priority'.*

(f) The extraction efficiency for some sample types was completed in February 2024, others were completed in June 2024, the lower elution volume experiments were completed in July 2024, but fully testing samples below the threshold was not, and has still not been completed.

(g) Concerns were raised in an FSQ monthly meeting on 1 March 2024 (after the DNA threshold validation was conducted) that: *"No training has been provided to Innovation (or FSQ) in experimental design and validation work. While Innovation members have experience and HDR [higher degree research] qualifications, there is no formal training program and/or competency."* Undertaking critical experimental work and validation of methods used on evidence which is relied upon by courts without such training and experience is not acceptable practice under a forensic quality management system accredited to the international standard ISO/IEC 17025.

(h) On 19 November 2024, FSQ implemented the new DNA threshold, where samples below 0.0006 ng/µL would not be fully tested unless requested by either FSQ reporting scientists, the police, or the courts.

(i) The DNA Review have found that some of the additional work requested by the Board experts is yet to be completed.

(j) After introduction of the new DNA threshold, a Priority 1 crime scene sample from a violent unresolved crime was not fully tested because it fell below the threshold. QPS requested for it to be fully tested, and it provided a useable DNA profile that assisted the investigation.

Based on the above evidence, the DNA Review has formed the following conclusions:

(k) The LOD validation did not attempt to answer the essential question of whether a DNA profile could be obtained from samples below the set DNA threshold. In fact, FSQ did not test any of the samples in the LOD validation study that fell below the set DNA threshold to check if a DNA profile could be obtained. The DNA Review believes that:

  (i) FSQ should not have introduced the DNA threshold on 19 November 2024 until these essential validation experiments were conducted to ensure DNA evidence would not be missed; and

  (ii) the validation was not sufficiently conducted and does not comply with international guidelines for validation of LOD.

(l) The October 2023 validation project (Project 256 Extraction Efficiency of Blood and Trace), indicates to the DNA Review that FSQ knew or ought to have known that by setting the DNA threshold at 0.0006 ng/µL they were likely to be missing evidence containing usable profiles that could be reported to police and the courts.

(m) The DNA Review conducted analysis of raw data from another FSQ experiment. Of the 15 experimental (mock) samples that fell below the set DNA threshold but were fully tested:

  (i) **100%** of samples provided **useable profiles**; and

  (ii) **47%** of samples provided profiles suitable for **uploading to the National Criminal Investigation DNA Database**.

(n) The data above demonstrates the DNA threshold is too high and a significant amount of evidence is likely being missed by FSQ.

(o) These success rates are much higher than the 10.6% of useable profiles obtained below the incorrect QHFSS threshold that triggered the Sofronoff Inquiry in 2022 and the decision to remove the DNA threshold by the Queensland Government.

(p) It is recommended that the current DNA threshold is removed immediately, and an appropriate scientific validation study is conducted to inform the DNA threshold. A list of all samples that fell below the DNA threshold since 19 November 2024 should be provide by FSQ, reviewed by the police and fully tested by FSQ if required.

(q) The new DNA threshold has been in place for several months. Of concern to the DNA Review, the planned three-month post-implementation review of the DNA threshold has

not been conducted by FSQ. FSQ advised this was "*due to emerging priorities including addressing the recent NATA findings*.

Section 4.9: DNA Delays Impacting Coronial Matters

(a) There are 16 outstanding coronial matters across Queensland awaiting DNA testing or DNA reports. Some of these matters have been delayed by up to two years.

(b) Significant backlogs at FSQ (BAU cases, and historical cases see section 4.1), will take years to clear. Therefore, it is likely testing will not be completed for priority coronial cases within one to two years.

(c) The QPS and the DPP use priority lists to request FSQ to perform fast turnaround times for a small number of selected samples. The Coroners Court does not have such a priority list or agreement in place with FSQ, however, would greatly benefit from one in the immediate future. The DNA Review collaborated with the State Coroner and QPS to commence priority requests for coronial cases through the QPS priority testing system. This solution is now underway and effective.

(d) A service level agreement is needed between the QPS and FSQ which states the testing requirements of the Coroners Court.

Section 4.10: Observations on the FSQ Act

(a) The FSQ Act established the FSQ Director as a statutory officer, giving it legal independence from the government and the end users that it serves.

(b) The DNA Review is of the view that the FSQ Director does not have any decision-making functions within the criminal justice system that requires the level of independence provided to it by being a statutory officer.

(c) Forensic service providers do not need to be led by a statutory officer in order to provide high quality, and independent services to the police and courts.

(d) Forensic experts are required under common law (and various expert codes of conduct and associated Practice Directions) to be impartial.

(e) The status of the FSQ Director as a statutory officer means it is independent from government and cannot be directed by the government or any other government agency. There is a high level of discretion afforded to the FSQ Director in performing its functions as demonstrated by section 19 of the FSQ Act which provides that in performing the Director's functions and exercising the Director's powers, the Director is not subject to direction by the Minister.

(f) Given that FSQ sits within the portfolio of DoJ, there is no requirement within the FSQ Act to report annually on how it is administering the Act.

(g) A comprehensive review of the FSQ Act is recommended with consideration to the appointment, functions and powers of the FSQ Director, the future governance of FSQ, and the governance of forensic DNA service delivery.

CHAPTER 5: A Modernised Holistic DNA Service Delivery Model for Queensland

Section 5.3: The DNA Service Delivery Continuum

(a) 'DNA service delivery' is not confined to just the processes conducted in the FSQ laboratory.

(b) It is the system of interdependent processes from the collection of DNA at crime scenes to the presentation of DNA statements to the courts. This is called the DNA Service Continuum (represented in Figure 17).

(c) The DNA Review considers that DNA service delivery needs to meet four strategic levels which are case, region, state and national level policy objectives (see Figure 18 below).

(d) This is the context which underpins the DNA Review's advice in respect of the development and implementation of a framework for the future delivery of forensic DNA testing and analysis.

Section 5.4: Improving Victims' Engagement and Rights in DNA Service Delivery

Victim Engagement and Rights:

(a) Subsequent to the Inquiries, a Forensic Support Line was set up as a resource for people impacted by the Inquiries with specialised therapeutic information, brief counselling, referral and support.

(b) As of February 2025, there has been a low uptake of this service. The DNA Review received evidence that some victims who used the service reported that they have been *"discouraged to make a report (by police) or who feel that it is pointless due to the extended wait time that the backlog has resulted in"*.

(c) The DNA Review believes it is extremely important to further analyse and understand the specific needs of this victim cohort through formal research.

(d) The DNA Review undertook focus groups with victims of crime and their families which identified six key requirements that should be incorporated into the proposed DNA service delivery framework. Connected to these six requirements are barriers that have been identified preventing these requirements from being implemented.

(e) The DNA Review sought international examples of where large numbers of victims had been failed by government systems to gather key learnings to inform the proposed DNA service delivery framework.

The proposed framework comprises of eight improvements designed to meet current gaps in victims' rights and engagement relating to the DNA issues (see Table 7 below). This framework should be developed further and implemented as a project of work.

5.5: Why changes to the DNA Service Delivery Framework are needed in Queensland

Current DNA Service Delivery Framework:

(a) The DNA Review concluded that Queensland's current DNA service delivery framework is outdated, inefficient, and not meeting the needs of police, courts, and victims.

(b) The framework lacks a system of systems approach, sufficient quality assurance, and appropriate governance.

(c) There are inequities in access to forensic testing for regional victims and victims of certain violent crimes.

5.6: Proposed DNA Service Delivery Framework

Proposed DNA Service Delivery Framework:

(a) The Review proposes a modernised, holistic framework with seven major changes, including improved victim engagement and rights, strengthened quality assurance, and transferring DNA service delivery control to QPS.

(b) The framework aims to address systemic issues, improve equity, and align with government policies like "Faster Justice for Victims", "Safer Communities" and "Fewer Victims of Crime".

5.7: Implementation of a strengthened quality assurance framework for Queensland forensic DNA service delivery

Quality Assurance Failures:

(a) During the period covered by the Inquiries, the QHFSS laboratory fulfilled all obligations under the national forensic science quality assurance framework. This included meeting requirements of regular assessment by the National Association of Testing Authorities (NATA) against the ISO/IEC 17025 standard.

(b) Given the issues identified in the Inquiries and this Report, the DNA Review recommends a strengthened quality assurance framework for Queensland that supplements ISO 17025, and the introduction of ISO 31000 (risk management).

(c) This will ensure that the future delivery of DNA testing and analysis aligns with best practices and rebuilds public and end user trust and confidence.

5.8: Expansion of Best Practice Crime Scene DNA Collection for Violent Crimes and for Regional Queensland

(a) Typically, only the most serious and violent offence types, such as homicides and some violent sexual assaults, are forensically examined by specialised forensic experts, being QPS Scientific Officers and Forensic Coordinators (FCs). All property crimes, other violent crimes including attempted murders, rape, sexual assaults, and grievous bodily harm are attended by one of ~300 Scenes of Crime Officers (SOCOs) state-wide.

(b) The DNA Review (with agreement of QPS) proposes that violent and serious offences including attempted homicide, rapes, sexual assault, and grievous bodily harm are attended by Scientific Officers, rather than SOCOs alone, and supported by FCs. In the DNA Review's opinion, this is considered best practice and will improve the chances to identify violent and repeat offenders using DNA and have a multiplier

effect, enabling collection of other high value forensic evidence for violent crimes, which increases the chances of crime resolution and prevention.

Optimisation of DNA Evidence Recovery

(c) When items of evidence are recovered from crime scenes such as clothing, bedding, weapons etc, they require examination in a clean DNA evidence recovery laboratory. This process is called 'DNA evidence recovery' and is currently performed by QPS for all items except rape kits, underpants, samples of fabric from clothing and bedding, and small items (including cigarette butts and chewing gum).

(d) FSQ has one evidence recovery laboratory which FSQ have identified is inadequate as it presents a high risk for contamination. This is key driver for the proposed $450M forensic science building at Coopers Plains.

(e) The DNA Review proposes there should be a transfer of responsibility of evidence recovery from FSQ to QPS for all items except rape kits using the existing network of QPS laboratories state-wide.

(f) The DNA Review (with agreement from QPS) recommends expanding the use of the existing state-wide network of QPS DNA laboratories which will optimise DNA evidence recovery ensuring a timely victim-centric approach and better-informed police investigations.

End to End outsourcing

(g) The proposed DNA service delivery framework should be considered over three iterations, supported by outsourcing at each stage:

(i) The current state of FSQ service delivery is the first iteration where outsourcing will eliminate backlogs, and test new major crime cases and human remains. This is considered a critical response to address the unmet needs of the police and courts.

(ii) The second iteration is a gradual decrease over time in outsourcing as FSQ addresses quality issues and develops capacity.

(iii) The third iteration will be the end 'normal state', where a majority of cases are tested by FSQ, however, contracted outsourcing options will remain in place to ensure required timeframes are met for all cases, as an enduring surge capacity, for access to advanced technologies unavailable at FSQ, and as redundancy if the need arises.

Transfer of DNA Service Delivery Control to QPS

(h) DNA Service Delivery is currently being split over two agencies (now FSQ and QPS).

(i) The DNA Review believes that some of the issues caused by this split responsibility could be improved by QPS assuming full responsibility for the management of DNA services (though not management of the FSQ laboratory) and the proposed framework transfers strategic responsibility of DNA service delivery from FSQ to QPS.

(j) The DNA Review recommends that funds for outsourcing be allocated to QPS, who then manages the outsourcing program and decides which external laboratories evidence is sent to for testing.

Implementation Strategy

(k) The proposed DNA service delivery framework is a generational change encompassing many aspects of service delivery across multiple organisations.

(l) It will require a rolling program of work over three years to implement. This should be performed by a team of qualified and experienced program and project managers, as well as change managers who work closely with DoJ, QPS, the courts, FSQ, and victim advocate groups. The program should deliver priority improvements in six-month tranches and be monitored by the DoJ and the QPS.

5.9: QPS Led DNA Investigative Capability

(f) Currently, the QPS cannot access advanced DNA testing methods such as familial analysis, bio-geographical ancestry testing (**BGA**), phenotype testing, and Forensic Investigative Genetic Genealogy (**FIGG**).

(g) The QPS Cold Case Investigative Team (**CCIT**), the Sexual Crimes Unit (**SCU**), and the Missing Persons Unit (**MPU**) have identified a large number of cold cases that cannot be resolved without using advanced DNA testing methods.

(h) An opportunity exists to support the development of a new QPS led DNA Investigative Group through inclusion in the new DNA service delivery framework.

5.10: New DNA Research and Innovation Framework

(a) The Sofronoff Inquiry recommended the introduction of a dedicated research, development, and innovation team within FSQ which was formed in 2023.

(b) In the Reviewers' opinion, the FSQ Innovation and Research Strategy 2023 - 2027 (**R&I Strategy**) does not demonstrate an inclusive innovation ecosystem or reference an internal policy that supports such an ecosystem.

(i) It does not appear to consider or reference end user needs. QPS and ODPP were not consulted in its development;

(ii) It does not have clearly defined deliverables and fails to provide the details necessary to ensure outputs are delivered.

(iii) The R&I Strategy does not have any clear principles which will sufficiently guide outputs.

(iv) The stated purpose of the R&I Strategy is inwardly focused and does not consider the external environment or its purpose in the DNA service delivery continuum.

(v) Phase III of the R&I Strategy simply lists existing technology, which is not innovation. Concerningly, these are ‘high value and low reward’ methods.

Proposed new framework

(c) A key purpose of the R&I strategy should include the prevention, disruption and resolution of crime, and bringing faster justice to victims.

(d) Queensland's forensic DNA R&D and innovation strategy needs to be a balanced ecosystem framework, with funding and support for scientific research and incentivised innovation. Creating innovation networks should be part of the strategy.

(e) The non-linear innovation system model is more suited to the DNA service delivery continuum and is more likely to generate outcomes that can provide operational and strategic level outcomes.

(f) The DNA Review considers that FSQ and QPS should develop a combined R&I framework that supports joint projects and research that benefits the goals and objectives of both organisations, encompasses the agreed strategic framework and factors in the needs of other stakeholders in and the wider justice system.

5.11: FSQ Program Management

(a) FSQ currently manages their programs and projects via a dispersed model and has established and embedded processes and tools, including portfolio reports, action plans, a Program Management Office (PMO) tool, Program Tracker, and project documents.

(b) The DNA Review recommends that FSQ adopt a Portfolio, Program and Project (3PM) framework. It should have a PMO with formal program management functions to co-ordinate the FSQ program and projects of work. However, implementation of a 3PM model and a PMO requires FSQ organisational structural changes.

(c) FSQ does not have a Change Manager but has a change management function set out in the role description for several positions. The DNA Review considers that to undertake such large-scale reforms following the two Inquires it is best practice to have a dedicated change manager.

5.12 Systems Approach to Governance

(d) There is no one agreed methodology to approach corporate governance. The DNA Review recommends a system of systems approach across DNA service delivery in Queensland, which is an integration of systems that achieve a common objective that cannot be accomplished by any single system alone.

(e) FSQ's current organisational structure is deemed inefficient and not service-focused, and requires reprofiling to make it more service-enabled.

(f) The DNA Review recommends transitioning FSQ to a divisional structure with decentralised decision-making and enhanced program management.

(g) The DNA Review has observed that the FSQ hierarchical approach to governance is there, but witness evidence received was there was a perceived lack of transparency and trustworthiness around the decision-making processes.

(h) The DNA Review considers improvements are needed to FSQ's strategic planning and has observed that FSQ is undertaking inappropriate risk management, putting at risk the

reliability of results it produces for the courts. It is recommended that FSQ implements a risk and issues management system aligned to ISO/IEC 31000.

(i) The 2024 Working for Queensland staff survey shows FSQ is not doing well in organisational culture, leadership, and staff performance management.

Governance and Oversight:

(j) The FSQ Advisory Council was established under the FSQ Act 2024 to provide advice and monitor forensic science policies.

(k) The Forensic Science Steering Committee (FSSC) was created to oversee forensic service delivery but has faced criticism for its decision-making powers and lack of alignment with stakeholder expectations.

(l) The DNA Review considers improvements are needed to strengthen FSQ governance, and system-wide DNA service delivery governance.

CHAPTER 6: FSQ Historical Case Reviews

Section 6.1 Overview

(a) The HCR involves approximately 32,000 major crime cases tested by QHFFS between 1 September 2007 and 30 April 2023. These cases require review and, where necessary, re-testing due to issues identified in the Inquiries.

(b) As of 2 May 2025, FSQ has only reviewed and re-tested historical cases currently before the courts due to capacity constraints, leaving 2,380 historical cases referred by the ODPP or QPS awaiting review and re-testing. FSQ has not yet conducted historical case reviews on these referred cases and cannot provide a timeframe for completion.

(c) Without significant changes and additional support, the DNA Review estimates that the HCR process will take at least ten years to complete, delaying justice for victims and allowing offenders to remain at large.

Principles Guiding the HCR

(a) The HCR is guided by four principles:

(i) **Administration of criminal justice**: Ensuring accurate DNA evidence to prevent miscarriages of justice;

(ii) **Restoring public confidence**: Delivering reliable and accurate DNA testing to rebuild trust in the criminal justice system;

(iii) **Trauma-informed approach**: Engaging victims and their support networks in a safe and compassionate manner; and

(iv) **Reasonable use of government resources**: Pursuing further testing only where DNA evidence is relevant to the case.

(b) The DNA Review notes that these principles are not consistently applied due to resource constraints and a lack of clarity on the scope and depth of the reviews to be undertaken.

Re-Testing of Project 13 Samples

(c) The Project 13 method, used between 2007 and 2016, resulted in significantly reduced DNA recovery (~90% less than manual methods). A total of 103,187 samples were processed using this flawed method.

(d) FSQ does not intend to conduct research to identify the best methods for re-testing Project 13 samples. FSQ's current re-testing strategy is scientifically unreliable and risks failing to detect or destroying evidence, undermining efforts by QPS and ODPP to identify relevant cases.

(e) The DNA Review discovered that tapelifts taken from crime scene evidence and processed using the Project 13 method suffered an additional flaw which was previously unknown. This flaw resulted in 60% to 70& of cells being missed on the tapelift. These tapelifts are still available for re-testing.

(f) The DNA Review highlights the need for collaborative research to develop a scientifically sound method for re-testing samples affected by Project 13 (swabs and tapelifts).

Based on this evidence, the Reviewers have formed the view that:

Current Status and Resourcing

(g) The FSQ HCR Team is significantly under-resourced, with only 2.6 full-time scientific staff supported by three administrative officers.

(h) These staff are only funded until 20 June 2025, creating uncertainty and affecting planning and forecasting.

(i) FSQ has not developed a viable strategy to balance historical case reviews with BAU demands, resulting in delays and inefficiencies.

Suggested Model for HCR Team

(j) The DNA Review, in collaboration with the FSQ HCR Team, has developed a suggested model for managing historical case reviews. Key elements include:

(i) Appointing a dedicated project manager to oversee planning, resource allocation, and progress monitoring;

(ii) Increasing overall internal staffing capacity by training volume crime scientists to become reporting scientists enabling growth of the HCR Team;

(iii) Leveraging external scientific expertise through a voluntary scientific network to provide advice on complex cases;

(iv) Implementing additional quality assurance measures, including blind verification reviews by external experts; and

(v) Enhancing transparency through public reporting of success metrics and de-identified case examples.

(k) The DNA Review supports expanding the FSQ HCR Team to include cold cases and maintaining it as an enduring unit after the historical case reviews are completed.

FSQ's Current Approach:

(l) FSQ's fragmented and under-resourced approach to HCRs is delaying progress and failing to meet the needs of victims and the criminal justice system.

(m) The absence of a dedicated project manager and a clear strategy is hindering the efficient allocation of resources and effective planning.

Re-Testing of Project 13 Samples:

(n) FSQ's current re-testing strategy for Project 13 samples is inadequate and risks wasting evidence, missing critical findings, and undermining the efforts of QPS and ODPP.

(o) Collaborative research is urgently needed to develop a scientifically reliable re-testing strategy.

Resource Allocation:

(p) FSQ's reliance on external contractors, who cost four to five times more than internal staff, represents poor value for money.

(q) Internal staff should be prioritised for training and development to build long-term capacity and reduce reliance on costly external contractors.

Transparency and Public Trust:

(r) FSQ's lack of transparency and public reporting on the progress and outcomes of historical case reviews is undermining public confidence in forensic DNA services.

(s) Greater collaboration with QPS, ODPP, and other end users is essential to ensure the HCRs meet their objectives.

Section 6.7: DNA Evidence in the Courts

(a) Some DNA evidence is not well understood by end users which may impact on the reliability of DNA evidence. Specifically, the some DNA mixtures, and the way FSQ presents the statistical evidence can be difficult to accurately evaluate.

(b) Research is needed to develop an improved DNA reporting model, and end user training is required.

(c) FSQ is not reporting on some DNA mixtures that could be probative. Instead FSQ is reporting some DNA mixtures are too complex to interpret which ignores evidence that can be interpreted and lacks transparency.

(d) The FSQ historical case review should include re-interpretation of these mixtures in their review of cases.

CHAPTER 7: Implementation of the "Outstanding" and "In Progress" Reforms

Section 7.1: Overview

Progress on recommendations

(a) As at 18 June 2025, what remains to be implemented in relation to the now 123 recommendations (for FSQ, QPS, and QH) is as follows:

(i) 79 recommendations are completed and closed;

(ii) 4 recommendations are provisionally completed and are awaiting presentation to the FSQ Advisory Council for formal closure;

(iii) 33 recommendations are in progress (the ‘in progress’ recommendations); and

(iv) 7 recommendations are yet to commence (the ‘outstanding’ recommendations).

(b) In terms of the agency division of the above recommendations, the breakdown is as follows:

(i) FSQ: 62 completed, 2 provisionally completed, 31 in progress and 7 outstanding.

(ii) QPS: has 2 'in progress' recommendations (80 and 81) related to the validation and verification of DNA collection methods.

(iii) QH: has 2 recommendations (95 and 96) with the work completed, closure reports drafted and waiting endorsement for closure. Until formally closed by the Council the DNA Review consider these recommendations ‘in progress’ These recommendations focus on training health practitioners to conduct forensic medical examinations.

(c) The DNA Review notes that FSQ has not implemented a structured project management approach to oversee the reforms which in the Reviewers' opinion has resulted in delays and inefficiencies. Further to that, FSQ's closure reports often lack metrics or evidence demonstrating that the intent of the recommendations has been met. Based on this evidence, the Reviewers have formed the view that:

(d) FSQ's fragmented approach to implementing recommendations is hindering progress and failing to meet the intent of some recommendations;

(e) A structured project management approach, such as a Portfolio, Program and Project Management (3PM) model, is urgently needed to ensure the recommendations are implemented effectively; and

(f) Independent oversight is required to monitor progress, conduct deep dives into recommendations and ensure transparency and accountability.

Governance and Oversight

(g) FSQ lacks a cohesive governance framework to oversee the implementation of recommendations.

(h) The absence of a risk and issues management process has hindered the effective prioritisation and resolution of challenges.

(i) FSQ's governance processes are fragmented, with initiatives being implemented in isolation rather than a part of a coordinated reform strategy.

(j) The DNA Review compared FSQ's approach to the Office of the Independent Implementation Supervisor, which oversaw recommendations from other inquiries. The OIIS model represents what the Reviewers consider to be best practice, specifically its robust oversight, detailed progress reporting and stakeholder engagement.

Based on this evidence, the Reviewers have formed the view that:

(k) FSQ's governance processes are insufficient to ensure the effective implementation of recommendations. FSQ should adopt the OIIS model, including independent oversight, detailed progress reporting and stakeholder engagement.

(l) FSQ must establish a risk and issues management process to address challenges and impediments effectively.

Resource Constraints

(m) FSQ requires significant resources, including enhancements to the Forensic Register and additional training and educations programs.

(n) The DNA Review questions the necessity of some resource requests, such as the $450M facility, given QPS's preference to retain evidence recovery responsibilities.

(o) FSQ has not adequately addressed the time, cost and resources required to implement the reforms, preventing the DNA Review from reporting the time and resources needed to complete the reforms. Training and education programs require improvement, with a focus on cultural change and staff well-being.

Based on this evidence, the Reviewers have formed the view that:

(p) FSQ must reassess its resource allocation to ensure it aligns with the actual needs of the reform agenda.

(q) Investments should prioritise areas that directly impact the quality and efficiency of forensic DNA services.

(r) FSQ's training and education programs must be enhanced to address competency gaps and improve organisational culture.

End User Engagement

(s) There are inconsistencies in the understanding of the intent of recommendations between FSQ and end users, specifically, QPS. FSQ has not adequately engaged end users, such as QPS and the broader criminal justice system, to ensure the reforms meet their needs and expectations.

(t) FSQ has not provided sufficient information or training to end users on critical issues, such as the DNA testing threshold, which has impacted the criminal justice system. This is especially relevant to Recommendations 9 and 10 (regarding explanatory information

published for QPS and the public describing the DNA thresholds), which in the Reviewers' opinion should have been completed prior to closing out Recommendation 15 (regarding the review of the DNA thresholds).The Reviewers note that if QPS and other end users had received the proper training on the effect of DNA thresholds, they may have questioned whether the thresholds were appropriately set.

(u) FSQ must provide end users with adequate information and training on critical issues to restore trust and confidence in forensic science services.

Way Forward

(v) The DNA Review recommends managing the reforms as a cohesive project under a Portfolio, Program and Project management (3PM) model. Independent reviewers should be appointed to oversee the implementation process, conduct deep dives into recommendations and provide regular progress reports. Metrics of success should be established to evaluate whether recommendations achieve their intended outcomes.

(w) FSQ must prioritise transparency, accountability and stakeholder engagement to restore trust in forensic science in Queensland.

1.4 Recommendations

Recommendation No.	Recommendation
Recommendation 1	The DoJ should appoint a temporary team of independent and appropriately qualified experts ('DoJ Expert Team') to assist with the completion of relevant recommendations from the DNA Review.
Intent and desired end state	**Intent:** The DoJ Expert team will ensure relevant DNA Review recommendations are completed to best practice by the recommendation owner. **Desired end sate:** The completed recommendations have met the intent and desired end state of the DNA Review recommendations across the DNA service delivery system.
Impact of the DNA Issues on Victim-Survivors and Their Families	
Recommendation 2	The Government should consider the availability of special assistance to individuals impacted by the current DNA issues, and the historical case review (especially those who may have to re-engage with the criminal justice system). This could include financial assistance to access their preferred psychologists where a gap in support exists.
Intent and desired end state	**Intent:** To enable those impacted by the DNA issues to access support from their preferred psychologists. **Desired end state:** The current gap in support for those impacted by the DNA issues is closed.

Recommendation No.	Recommendation
FSQ Backlogs and Reduced Service Delivery	
Recommendation 3	A set of operational and strategic metrics should be developed by QPS and relevant end users within DoJ to monitor DNA service delivery by FSQ and all external providers (business as usual and FSQ historical case reviews). These metrics should include an agreed, acceptable range of service for end-users. The metrics should include but not be limited to: a) the quantity of DNA service provision (volume of testing and reporting) to QPS and the courts; b) the capacity of the DNA service delivery model; c) timeliness of results; d) the size of backlogs, and e) quality of results. These metrics should be regularly provided to and monitored by DoJ and QPS, and shared with relevant end users. A governance policy should be developed that requires pre-planned action when the acceptable range of service delivery in any category is not met.
Intent and desired end state	**Intent:** The operational and strategic metrics and governance policy will provide real-time transparency on the performance of Queensland's forensic DNA service delivery system to DoJ, QPS, and relevant end users. It will assist with forecasting DNA service delivery resourcing. The metrics and governance policy will prevent backlogs, excessive turnaround times, wide-spread quality failures, and ensure there is no significant reduction of service provision to end users. **Desired end state:** DNA service delivery is monitored to ensure it is provided within ranges that are acceptable by end users.
FSQ Use of Government Funds Allocated for Outsourcing	
Recommendation 4	An independent audit of FSQ's financial management and legislative compliance should be undertaken covering the period from January 2023 to present.
Intent and desired end state	**Intent:** The audit aims to understand whether FSQ is delivering their services effectively, efficiency, economically, and in accordance with policy and legislative requirements. The audit report will be used to improve the financial management of FSQ to better enable it to provide high quality, better value for money DNA services for end users. **Desired End State:** FSQ operates in an effective, efficient, and economically responsible manner in compliance with policy and legislative requirements.

Recommendation No.	Recommendation
Increasing FSQ Capacity	
Recommendation 5	**5.1** FSQ should optimise DNA profiling methods identified by the DNA Review responsible for the high retesting rates. **5.2** FSQ should prioritise the completion of Recommendation 32 (the validation of software to assist FSQ with mixture interpretation).
Intent and desired end state	**Intent:** The FSQ methods responsible for high retesting rates will be optimised so they are robust, working accurately, and reliably. Any staff training associated with optimising the methods will be completed as a priority to facilitate reducing retesting rates. **Desired End State:** The FSQ optimisation reports have been provided to the DoJ Expert Team for review. Re-working rates are included in the annual FSQ Quality Management Review. The FSQ retesting rate is significantly reduced and regularly monitored. FSQ managers encourage scientists to retest samples when needed to generate improved results. Recommendation 32 will be completed within six to twelve months.
Release of Unreliable Results by FSQ	
Recommendation 6	The DoJ Expert Team in collaboration with the FSQ Quality Management Team should conduct an immediate end-to-end evaluation of all FSQ DNA methods, workflows, instruments, validations / verifications, laboratory environment, and compliance to ISO/IEC 17025. Consideration should be given to suspending all FSQ DNA testing services, unless FSQ can provide evidence that their processes can produce accurate and reliable results.
Recommendation 7	**7.1** FSQ should review all coronial and major crime DNA cases analysed at FSQ from 1 May 2023 onwards in consultation with the DoJ Expert Team. Notifications and addendum statements for cases suspected of containing unreliable results should be issued. **7.2** Re-testing of samples where required by QPS or the courts should be conducted.
Recommendation 8	**8.1** Staff training and competency requires re-evaluation against tasks they have been assigned to perform. The DoJ Expert Team should collaborate with the FSQ Quality and Training Units to undertake this as a priority. Where training gaps are identified, the staff will cease performing those tasks until they have been trained and meet competency requirements. **8.2** FSQ should establish an improved staff training program as a priority.
Intent and desired end state	**Intent:** An end-to-end evaluation of FSQ DNA methods will identify which methods and workflows are unreliable and can be used with confidence and expose those which are unreliable and

Recommendation No.	Recommendation
	require improvement. The exercise outcomes will inform the time and resources needed to fix FSQ processes, and reveal which cases require review and re-testing. The competency of each FSQ forensic biology staff member will be evaluated to inform any training gaps. This information will help to forecast the scope and volume of service FSQ can provide to end users. The competency evaluation will inform development of an improved training program. **Desired End State:** All FSQ DNA methods provide accurate and reliable results. All FSQ forensic biology staff are competent in all tasks they are performing. The reliability of FSQ DNA services is empirically demonstrated. Cases nominated by QPS or the courts which have been impacted by unreliable results have all been reviewed, re-tested, and where needed have had amended results released.
Implementation of New Rape Kits	
Recommendation 9	**9.1** FSQ should immediately stop testing all rape kits and all evidence suspected of containing semen. **9.1.1** To ensure accuracy and reliability, various semen detection methods should be tested and compared by FSQ, and the most accurate and reliable validated / verified. FSQ staff should be trained to perform the semen detection methods and interpret their results in the context of sexual offences. Reliable controls should be implemented by FSQ to monitor the reliability of the semen detection methods. **9.1.2** A review should be conducted by the FSQ Quality Assurance Team and the DoJ Expert Team to establish what timeframe the three unreliable methods (sperm microscopy, acid phosphatase, and p30) were used by FSQ on sexual offence cases. **9.1.3** Where required by QPS or the courts, further testing of samples impacted by the three unreliable semen detection methods should be conducted.
Recommendation 10	A project should be initiated to identify, access, and analyse relevant data sets across multiple organisations involved in the collection, continuity, transport, DNA analysis, and reporting of rape kits. This project should be conducted by DoJ with support from an integrated project team from relevant organisations including SAROC, QPS, FSQ, and ODPP.
Recommendation 11	Early evidence kits (EEKS) should be available to victims in remote and rural areas 24 hours a day and should be available at mining sites to collect and preserve DNA and other forensic evidence.

Recommendation No.	Recommendation
Intent and desired end state	**Intent:** Ceasing testing will preserve evidence from sexual violence cases and ensure they are not tested with unreliable methods. The best methods for detecting semen will be validated / verified by FSQ, and staff appropriately trained to ensure all future sexual violence evidence is reliably tested. The multi-agency FMEK data collection project will: a) guide the ongoing improvements to FMEK kit components; b) guide the ongoing improvements to FMEK evidence-based training, sample collection, continuity, transport, and DNA analysis processes; c) implement a feedback loop of DNA success rates to collection points; d) streamline the FMEK processes and help reduce backlogs; and e) enhance justice outcomes for victim-survivors. After the first phase of EEK implementation, a second implementation phase will ensure all victims of sexual violence will have 24 hour access to EEKs, including in remote Queensland and at mining sites. **Desired End State:** Rape kits are tested and interpreted by FSQ with the best methods, performed by competent staff. Quality issues with semen detection methods are detected and remediated immediately, and prior to results being released. Cases nominated by QPS or the courts which have been impacted by the unreliable semen detection methods have all been reviewed, re-tested, and where needed have had amended results released. The rape kit data analysis project has been completed and achieved its aims. Data existing across multiple agencies is regularly monitored by QPS, DoJ, and SAROC. Necessary improvements are made to rape kit collection, continuity, transport, DNA analysis, and reporting system wide. EEKs are available 24 hours a day to all victims across Queensland and at remote mine sites at the completion of the second phase of EEK implementation.
FSQ DNA Testing Thresholds	
Recommendation 12	**12.1** The FSQ DNA testing threshold which was inappropriately set and implemented on 19 November 2024 should be immediately removed. **12.2** A DNA testing threshold validation should be conducted by FSQ as a priority in collaboration with the DoJ Expert Team to ensure robust scientific experimental design, interpretation, and acceptable results. **12.3** The new DNA testing threshold should be approved by DoJ before it is implemented by FSQ. QPS and the courts should

Recommendation No.	Recommendation
	be consulted prior to implementing the new DNA threshold, and information should be provided to end users to educate them about what the new DNA testing threshold means prior to its implementation. A post-implementation review of the threshold should be conducted by FSQ three months after it is implemented, and results made available to end users. **12.4** FSQ should review all coronial and major crime DNA cases analysed at FSQ from 19 November 2024 onwards which contains evidence that fell below the new DNA threshold and was not fully tested. Notifications and addendum statements should be released which contains information about the improper implementation of the DNA threshold by FSQ and the risk that DNA samples which fell below the new DNA threshold could produce a DNA profile. **12.5** Where required by QPS or the courts, further testing of samples that fell below the DNA threshold from 19 November 2024 should be conducted.
Intent and desired end state	**Intent:** The FSQ DNA testing threshold will be informed by end user needs, and reliable scientific validation will be conducted to best practice. The validation will give police and courts confidence in FSQ DNA results, and most importantly give victims reassurance they will not be unfairly denied justice. The new DNA testing threshold will ensure that samples with quantities of DNA below the threshold are not expected to generate a useable profile if fully tested. Crucial evidence will not be missed, and victims will not be unfairly denied justice. **Desired End State:** A reliable DNA testing threshold has been implemented by FSQ after DoJ approval, and information has been provided by FSQ about the testing threshold to end users. Cases nominated by the QPS or the courts which have been impacted by the inappropriate testing DNA threshold have all been reviewed, re-tested, and where needed have had amended results released.
DNA Delays Impacting Coronial Matters	
Recommendation 13	A service level agreement should be implemented which states the testing requirements of the Coroners Court. This should be negotiated and implemented immediately and will be considered in relation to the current and ongoing capacity of FSQ. This service level agreement should form part of a service level agreement with QPS and FSQ.
Intent and desired end state	**Intent:** The service level agreement will clearly articulate the DNA testing needs of the State Coroner. It will ensure Queensland coronial cases will no longer be delayed by DNA testing. **Desired End State:** A service level agreement is in place with FSQ and QPS which includes the DNA testing needs of the State Coroner.

Recommendation No.	Recommendation
Review of the *Forensic Science Queensland Act* (2024)	
Recommendation 14	A review of the FSQ Act should be conducted by DoJ. The review should be comprehensive and include consideration of: a) the appointment, functions, and powers of the FSQ Director; b) requirements to report annually on how FSQ is administering the Act; and c) the future governance of FSQ, and the governance of forensic DNA service delivery.
Intent and desired end state	**Intent:** The review of the FSQ Act and any required amendments will ensure there are no impediments to the provision of high quality and timely DNA service delivery for all end users. It will also provide greater transparency and accountability, and improved governance of FSQ. **Desired End State:** The FSQ Act has been reviewed and amended and passed through parliament.
New DNA Service Delivery Model	
Recommendation 15	A strengthened forensic DNA testing quality assurance framework should be implemented in Queensland by DoJ and QPS. The following improvements should be made to the quality assurance framework: a) A joint role by QPS and DoJ in the oversight of FSQ DNA service delivery quality management; b) Establishment of a process where victims of crime and their family can raise concerns about DNA testing relating to their matters; c) Employment of a full-time civilian QPS DNA service delivery Quality Manager. This position would report to the proposed new position of Superintendent of quality and DNA service coordination; d) Conduct of regular external customer compliance audits by the QPS which should include independent contracted technical experts; e) Attendance by the QPS DNA Quality Manager at the annual FSQ Quality Management Review meetings, with a reciprocated invitation to the FSQ Quality Manager to attend the QPS annual Quality Management Review meetings. f) Visibility of FSQ risk and issues registers by QPS and DoJ, and the FSQ 'Opportunity for Quality Improvement' reports. g) Implementation of a quality concerns system for FSQ staff directed to QPS and DoJ which does not require FSQ management approval and protects the identify of FSQ staff raising concerns;

Recommendation No.	Recommendation
	h) Establishment of a Quality Management sub-committee involving FSQ, QPS, and DoJ; i) Formal notifications by FSQ to the QPS and courts on major workflow changes or changes to circumstance that have a high impact on DNA services (eg DNA testing thresholds, implementation of new methods or instruments); j) Consideration of the FSQ Quality Management governance to include direct reporting of the FSQ Quality Assurance Team to DoJ and QPS, rather than just direct reporting to FSQ senior management; k) Collection of agreed operational-level quality metrics (such as frequency of contamination) to be regularly provided to and monitored by DoJ and QPS; and l) Implementation of a quality policy at FSQ that requires individual accountability and responsibility for compliance with quality practices.
Recommendation 16	Strategic responsibility for forensic DNA service delivery should be transferred to QPS, which includes control of the DNA testing funding. A model to achieve this should be developed between DoJ, QPS, and the DoJ Expert Team.
Recommendation 17	A modernised holistic (system-of-systems) DNA service delivery framework should be implemented across Queensland. The implementation of the new framework should be overseen by DoJ and QPS. The final composition of the framework should be informed by the DNA Review Report. **17.1** A scoping exercise should be conducted to finalise the design of the new service delivery model, estimate associated costs, and establish implementation priorities. The DoJ Expert Team should assist with the scoping exercise; **17.2** A rolling program of work over three years should be initiated following the scoping exercise to deliver the proposed changes. This program should operate under a structured program management framework, with governance and oversight by DoJ and QPS, and support from FSQ. **17.3** Expansion of the existing QPS budget is required to employ critical human resources to support the proposed DNA service delivery model.
Intent and desired end state	**Intent:** The strengthened quality assurance framework will change the quality culture within FSQ, prevent and readily detect quality issues, provide greater transparency to end users, and provide evidence-based confidence in the reliability of FSQ results. The quality assurance framework will help to restore trust in Queensland's criminal justice system. QPS strategic control of DNA testing will provide a greater assurance that Queensland's DNA service delivery is met, while

Recommendation No.	Recommendation
	ensuring FSQ is supported to develop improved capabilities long-term. The modernised holistic DNA service delivery model will give improved efficiencies and enable the collection of better quality biological evidence at more crime scenes involving violent offences, improve DNA evidence recovery at laboratories strategically positioned state-wide, enable faster transport of DNA samples, ensure higher quality and faster DNA testing, improve outcomes for complex cases, and enable DNA evidence to be better understood by end users. Overall, the new model will better meet end user needs, improve justice outcomes for victims, and help to detect and prevent more crimes. A 12 month post-implementation review of the new service delivery model will evaluate the implemented deliverables to ensure they sufficiently meet the expected outcomes. **Desired End State:** All components of the strengthened quality assurance framework have been implemented. The rolling program of work has been completed with all agreed deliverables implemented. The post-implementation review is complete, and any major issues have been remediated.
Improving Victims' Rights and Engagement in DNA Service Delivery	
Recommendation 18	The following improvements should be made to victims' rights and engagement in DNA service delivery. **18.1** Establishment of a dedicated DNA peer support group; **18.2** Establishment of a survivor-led DNA advocacy group; **18.3** Policy improvements on victims' rights and engagement for those impacted by the DNA issues ; **18.4** Research on victims' needs; **18.5** Development of improved historical case review victim notification protocols; **18.6** Improved victim notification training; and **18.7** Development of a DNA education series and resources. The improvements listed above should be conducted as a project under the DoJ.
Intent and desired end state	**Intent:** Improvements to victims' rights and engagement in DNA service delivery will better support victims affected by the DNA issues, help to reduce trauma currently being experienced by DNA delays and quality issues, help to restore trust, and ensure that victims and their families are better represented by improved policy and advocacy. A 12 month post-implementation review will evaluate the implemented deliverables to ensure they sufficiently meet expected outcomes. **Desired End State:** The project has been completed with all improvements listed in Recommendation 18 implemented. The

Recommendation No.	Recommendation
	post-implementation review is complete, and any major issues have been remediated.
New Research and Innovation Model	
Recommendation 19	**19.1** FSQ and QPS should develop a combined innovation, and research and development framework that supports joint research that benefits the goals of both organisations, encompasses an agreed strategic framework, and factors in the needs of other stakeholders in the wider criminal justice and coronial systems. **19.2** Allocation of vast funding over the next four years solely to FSQ in preference to a shared model should be re-considered. At a minimum, a commensurate portion of the FSQ Research and Innovation funding should be quarantined to support QPS biological and DNA-related research under recommendation 19.1.
Intent and desired end state	**Intent:** The new research and innovation model will more effectively deliver improvements to the whole DNA service delivery system, ensuring a better investment of public funds. It will leverage off experts across multiple organisations, and invest in DNA technologies, methods, and service delivery concepts to prevent and disrupt crime, resolve crime, and bring faster justice for victims. **Desired End State:** The research and innovation framework has been implemented and is linked to operational and strategic goals across the DNA service delivery continuum. The research and innovation plan has been finalised. Funding arrangements for the research and innovation model has been finalised.
FSQ Governance	
Recommendation 20	**20.1** FSQ governance and organisational strategy requires further review and improvement. The review should be overseen by DoJ. **20.2** FSQ should implement a risk and issue management system aligned to ISO 31000.
Recommendation 21	There should be a reprofiling of the FSQ organisational structure. The FSQ organisational reprofiling should be overseen by DoJ and be in collaboration with the DoJ Expert Team.
Intent and desired end state	**Intent:** The improved FSQ governance will provide more relevant strategic planning, improved organisational culture, enhanced DNA service delivery and align with a systems approach. Introduction of ISO 31000 will improve FSQ risk and issue based decision making to ensure that strategic operational objectives are achieved. Reprofiling of the FSQ organisational structure will make it more efficient, service-focused and service-enabled. **Desired End State:** The new FSQ governance is fully implemented. FSQ has implemented a risk and issue management system based on ISO 31000. The new FSQ

Recommendation No.	Recommendation
	organisational structure is finalised, including the completion of position descriptions.
FSQ Program Management	
Recommendation 22	Portfolio, Program, and Project Management (3PM) should be implemented in FSQ. **22.1** The FSQ organisational structure needs to be adjusted to implement Portfolio, Program, and Project management. **22.2** A Program Management Office, with a qualified and experienced Program Manager should be established. **22.3** A qualified and experienced Change Manager should be appointed. The Change Manager should report to the Culture and Wellbeing Executive Manager.
Intent and desired end state	**Intent:** Establishment of a 3PM model at FSQ will ensure strategic objectives are efficiently achieved and project resources are maximised. The FSQ Change Manger will better facilitate the significant change underway at FSQ, provide improved support of staff wellbeing, and better identify and remove impediments to change. **Desired End State:** The FSQ Program Management Office has been implemented, and a Change Manager appointed. Programs are established including, but not be limited to BAU, ICT, quality assurance management, and research and innovation. Projects are established including, but not be limited to FSQ historical case review, the FSQ reforms, the DNA backlogs, the FSQ staff training, facilities and assets management
Re-testing samples affected by Project 13	
Recommendation 23	**23.1** Re-testing of Project 13 affected DNA swabs and tapelifts should not occur using the current FSQ approach. **23.2** Research should be conducted to identify the best method to re-test Project 13 samples (swabs and tapelifts). FSQ should collaborate with the DoJ Expert Team, and any relevant external groups to progress this research.
Intent and desired end state	**Intent:** No samples affected by Project 13 will be tested by the current FSQ approach, which will prevent the evidence being wasted. A method will be developed and validated that provides the best chance of recovery and profiling of trace DNA evidence from swabs and tapelifts affected by the Project 13 method. This will provide impacted victims and their families with an opportunity for justice and reassure them the method with the best chance of success was applied. **Desired End State:** The research project is completed and the report provided to DoJ and relevant end users. The method/s identified have been verified / validated.

Recommendation No.	Recommendation
Communicating DNA Evidence	
Recommendation 24	**24.1** The desired end state of DNA evidence presentation needs to be defined and achieved for all levels of end user understanding. **24.2** Collaborative research between end users and research experts should be conducted to: a) Provide an *aide memoire* of assumptions and limitations surrounding DNA mixture statistics, including those used by the STRMix software, in a format that can be easily understood and used by police and the courts when evaluating DNA evidence. b) Identify improved ways of presenting DNA evidence to police and courts so it can be better understood and evaluated. c) Provide a) and b) under various DNA evidence scenarios including single contributor profiles, partial profiles, major minor mixtures, complex mixtures, mixtures of 2-5 people. d) The research should inform new DNA evidence presentation standards in Queensland. e) The research should inform improved DNA evidence education packages catered for the police and courts. These education packages will require funding and resources to develop and deliver in various formats.
Recommendation 25	**25.1** FSQ should change its protocols to allow scientists to report DNA mixtures where the major component in a complex mixture can be manually interpreted. **25.2** FSQ should include this interpretation process as part of the historical case reviews.
Intent and desired end state	**Intent:** End users will be better able to understand DNA evidence, so it has meaning in the context of their role within police investigations or the judicial system, and enable them to better scrutinise the DNA evidence. DNA experts will provide and present the evidence in such a manner that allows for this to take place. End users will be better educated about DNA and have access to newly developed targeted resources to facilitate their understanding. FSQ will change its DNA interpretation standard operating procedures and train their staff to better interpret mixtures, so it accurately reflects the evidence and does not waste information. The FSQ historical case review will include this mixture interpretation when reviewing cases. **Desired End State:** The research project has been completed, the *aide memoir* has been developed and is available for end users. The DNA evidence education packages have been developed and are available to relevant end users. The new DNA

Recommendation No.	Recommendation
	evidence presentation standards have been developed and implemented. FSQ has implemented the improved DNA mixture interpretation standard operating procedure, trained staff, and have included the mixture interpretation strategy in the historical case review.
Implementation of Reforms	
Recommendation 26	**26.1** FSQ should establish a project ('CoI Reforms Project') to manage implementation of the remaining CoI recommendations. **26.2** An Integrated Project Team should be established to monitor each stage of the project life cycle from initiation, mid cycle, closure, and post-implementation review. The Integrated Project Team should consist of the FSQ CoI Reforms Project Manager, relevant end users, relevant independent forensic science experts, and where appropriate a member of the DoJ Expert Team.
Intent and desired end state	**Intent:** The reforms project and Integrated Project Team will ensure the intent of the Inquiry recommendations are met and they are completed in a timely and efficient manner. **Desired End State:** All Inquiry recommendations are completed and meet the intent of the recommendations.

Chapter 2: About the DNA Review

2. About the DNA Review

2.1 Aim and Objectives

12. In November 2024, the Queensland government through the DoJ committed to undertaking an extensive assessment of the progress of reforms and examine the progress of the testing of samples related to historic cases by Forensic Science Queensland (FSQ).

13. The Terms of Reference (TOR) sets out the scope of the review which is to assess the operational environment of FSQ and provide recommendations to ensure the efficiency, accuracy and integrity of its forensic services. This includes evaluating the progress of reforms stemming from the 126 recommendations made by the Sofronoff and Bennett Commissions of Inquiry (the reforms) which were aimed at addressing significant failures in Deoxyribonucleic Acid (DNA) testing practices and restoring public confidence in the criminal justice system. This encompasses identifying the status of "in progress" and "outstanding" recommendations, advising on best practices for their implementation, addressing historical case backlogs, and evaluating FSQ's resourcing needs, scientific process, and DNA service delivery frameworks (the DNA Review).

14. The DNA Review also seeks to provide advice on enhancing FSQ's capacity to delivery reliable forensic DNA testing and analysis, while ensuring alignment with the best practices and end user needs.

15. The aims of the DNA Review align with the government's Faster Justice for Victims policy, which includes clearing court backlogs, ensuring victims' cases are heard sooner by the courts, and ensuring the rights of victims are prioritised. Contributing to crime prevention and reducing victim numbers making communities safer, are key strategic objectives of DNA service delivery that aligns with the government's policies which will be examined by the DNA Review.

16. The desired end state is to ensure the delivery of DNA services in Queensland is of a world-class standard and can be relied upon to bring justice for Queenslanders, delivering on the recommendations from the two commissions of inquiry in a thorough and transparent manner. End user needs of DNA service delivery will be a key focus including the accuracy, quality, reliability, timelines, and communication of DNA results, with the aim of clearing backlogs for both current and historical cases to meet operational policing needs and facilitate the administration of the criminal justice for the criminal and coronial systems.

2.2 DNA Review Team

17. DoJ appointed three reviewers with relevant availability, expertise and experience to answer the TOR (the Reviewers). Relevant details as to their expertise is detailed below:

    (a) Dr Kirsty Wright has over 25 years' experience as a Forensic Biologist. She has worked in Major Crime, assisted in the 2002 Bali Bombings, assisted INTERPOL in the FASTID Project, led the international Thai Tsunami Victim Identification DNA Team, was Manager of the National DNA Database during the national expansion, has worked in academia for over ten years, worked for the Australian Army developing forensic capability for counter-terrorism and national security needs, and is a Squadron Leader in the Royal Australian Air Force helping to recover and identify fallen Australian soldiers from WWI, WWII and current conflicts.

She was in the 2012 Courier Mail's Top 50 Best and Brightest of Queensland, chosen in Australia's 100 Women of Influence and was a finalist in the Global Influence category. She was included in the 2015 Who's Who of Australian Women list and received the Queensland Police Commissioner's Award "for valuable contribution to the investigation into the murder of Daniel Morcombe". Kirsty was named The Australian newspaper's Australian of the Year for 2022 for her work on the Shandee Blackburn investigation which triggered the 2022 and 2023 Commissions of Inquiry into Queensland's forensic DNA testing.

(b) Dr Lauren Wilson is the Director and CEO of TracePath Forensics with over 25 years of experience working in medical science and forensic science. Dr Wilson was the team leader of Biological Intelligence, AFP where she was also a member of the INTERPOL Bioterrorism expert team. Dr Wilson worked for Defence Science and Technology Group (DSTG) for 15 years where she had various roles including: Chemical Biological Radioactive and Nuclear program manager, member of the Defence First Principles review team, and forensic science program manager. In 2016, she was awarded the Secretary of Defence Fellowship to review the ADF forensic science capability and make recommendations for improvement. In 2018, Dr Wilson was posted to the Australian Embassy Washington DC on a diplomatic posting. She was then appointed the inaugural DSTG/Defence liaison officer in the FBI, Huntsville Alabama. Dr Wilson is an adjunct Associate Professor in the National Centre for Forensic Studies at the University of Canberra, she was also the Biology section editor of the Encyclopedia of Forensic Sciences and co-authored the Five Eyes Forensic and Technical Exploitation Handbook.

(c) Alison Sears has over 30 years' experience in forensic science, predominantly in biology/DNA in both operational service delivery and law enforcement environments. She holds a Masters Degree reporting on research outcomes of using DNA results and success rates towards evidence-based triage and reporting strategies and is a published author in the field of forensic science. As an operational forensic biologist for over 15 years, she has interpreted and reported many and varied DNA testing outcomes for criminal and coronial matters including Disaster Victim Identification, as well as providing expert evidence to the courts of NSW. A trained bloodstain pattern analyst and certified trainer and assessor, Alison has had strong involvement with many facets of industry-related research, development, and teaching during her career. As the current Principal Forensic Scientist, Forensic Evidence and Technical Services (FETS) Command, NSW Police Force, Alison has direct leadership of the Forensic Innovation & Quality portfolio, including Research & Innovation, Forensic Pharmacology Services, Quality Team, Technology System Support and Project Office Unit. Through this role, Alison provides whole of enterprise initiatives and strategic advice in the development and maintenance of forensic science quality frameworks and governance structures to support service delivery across NSW law enforcement, forensic disciplines and stakeholders. Alison represents FETS and NSWPF on various national strategic leadership and specialist advisory groups including forensic Intelligence and Forensic Investigative Genetic Genealogy under Australian and New Zealand Policing Advisory Agency (ANZPAA) National Institute of Forensic Science (NIFS) and has professional collaborations with many Australian and International stakeholders in academia, research and policing organisations. Alison is the recently elected, and first female President of the Australia and New Zealand Forensic Science Society (ANZFSS), whose remit is to enhance the education, knowledge and quality of forensic science for

our members and the broader forensic science community. Alison Sears co-led an end-end forensic review into forensic biology/DNA services in Western Australia in 2023, and is an invited member of the QLD DNA Review Team and co-author of the report.

2.3 Terms of Reference and Scope of Work

18. The TOR sets out the scope of work to be undertaken by the Reviewers. Importantly there is another review team, led by Dr Bruce Budowle, which is completely independent and separate to the Reviewers undertaking a portion of the scope of work. The division of the scope is as follows:

    (a) Dr Kirsty Wright's team is responsible for TORs 1 to 7; and

    (b) Dr Bruce Budowle's team is responsible for TORs 8 to 14.

19. Both teams have conducted their reviews completely independently of each other.

20. The TOR requires the DNA Review consider and make recommendations in relation to:

1.	Identifying what remains to be implemented for the 38 'in progress' recommendations;
2.	Providing advice as to 'best practice' for completing the implementation of the 38 'in progress' recommendations;
3.	Providing advice as to 'best practice' for implementing the 11 'outstanding' recommendations;
4.	Providing advice as to availability of any options that may be able to assist FSQ with the historical case review process;
5.	Providing advice as to the resourcing required to efficiently and effectively deliver the reforms outlined in items 1-4;
6.	Provide advice to government on options that may be available to FSQ to enhance and improve efficiency, accuracy and reliability of service delivery in forensic DNA testing and analysis;
7.	Provide advice to government on the development and implementation of a framework for the future delivery of forensic DNA testing and analysis, ensuring alignment with best practices, stakeholder needs, and public confidence.
8.	Providing advice as to the appropriateness of the verification and validation of scientific methods framework implemented by FSQ post the Sofronoff Inquiry;
9.	Reviewing the current backlog of samples for testing and advising of any opportunities that may exist to implement amendments to, or supplement

	current backlog strategies to assist in, reducing backlog numbers in a more expedient manner;
10.	Providing advice as to whether the current systems relating to provision of witness statements, or advice, to the QPS or the Courts could benefit from amendment to ensure cases can progress with optimal speed;
11.	Identifying whether any delays, or backlogs, at FSQ, are impacting active police investigations and/or public safety;
12.	Providing advice as to whether the absence of the provision of some testing services at FSQ (e.g. provision of testing in relation to bone samples) is causing delays in cases requiring such expertise;
13.	Providing advice as to whether the scientific processes at FSQ are impacting upon its service delivery and the veracity of the results being reported; and
14.	Providing advice as to the impact of the FSQ Advisory Council on FSQ, having regard specifically to the scientific processes of FSQ.

2.4 Observations about the Terms of Reference

21. The Reviewers make the following observations in respect of the TOR:

(a) **Relevant period of the DNA Review**: While the DNA Review is primarily forward-looking, it has been necessary to assess the current state and recent past to inform its advice and recommendations for future action. This includes evaluating the progress of the reforms (TORs 1-5) and the current service delivery being provided by FSQ (TORs 6-7). Accordingly, the DNA Review broadly covers the period from 13 December 2022 (marking the conclusion of the Sofronoff Inquiry) to the present. However, its primary focus is on the period from the issuance of the TOR in December 2024 through to July 2025.

(b) **Overlap between subject matter:** Across TORs 1 to 7 and 8 to 14 there are overlapping areas and unavoidable interconnectedness in respect of the substantive subject matters. The Reviewers have similarly approached these areas completely independently from Dr Budowle and his Review team. Dr Wright's team has not reviewed or made any recommendations on matters and issues outside TORs 1 to 7, except for the areas of overlap, of which DoJ was advised, which are as follows:

(i) There is an overlap with TORs 4, 6, 7 and TOR 9. These centre around service delivery for end users and will help to inform implementation of a new service delivery framework (for backlogs, historical reviews and current cases). To enable the FSQ historical case review to progress (TOR 4), and improve current FSQ services for end users (TOR 6 and 7), external outsourcing support is required. An outsourcing solution also required to reduce the current FSQ backlog (TOR 9)

(ii) There is also an overlap with TOR 6 and TOR 10. Communication and understanding of DNA evidence is a key component of the DNA service delivery continuum. Exploring any difficulties being experienced by the courts in understanding DNA evidence is key for FSQ to understand to enable it to improve the reliability of DNA service delivery.

(iii) There is some overlap with TOR 6 and TOR 13. To address TOR 6 "…accuracy and reliability of service delivery…" will require examination of some FSQ scientific methods, validations / verification, and an understanding of the FSQ Quality Management System, which will also need to be undertaken as part of TOR 13.

(iv) There is some overlap with TOR 6, 7 and TOR 11. It is not possible to provide advice on solutions and their priority without first understanding the size of the backlogs and delays in service delivery and their impact on end users.

(c) **Understanding current baselines to inform future focus:** TOR 6 requires advice to 'enhance' and 'improve' the efficiency, accuracy and reliability of DNA service delivery. To achieve this, the current baseline of service delivery must be established first. This will include whether this baseline is satisfactory for end users, and if not, establish what way is it not satisfactory to inform relevant advice. There is a need to access FSQ projections on service delivery, including their planning strategies and estimates for completing backlogs. The Reviewers have approached these terms as follows:

(i) **Efficiency**: refers to the ability of a DNA laboratory to process samples in a timely and resource-effective manner, without compromising quality;

(ii) **Accuracy**: is the degree to which the DNA results correctly reflect the true genetic profile of the sample tested; and

(iii) **Reliability**: refers to the consistency and dependability of DNA testing results over time and across different conditions or operators.

(d) **Understanding end user experience**: TOR 6 and 7 requires an evaluation of DNA service delivery control and coordination across end users (that is, who is setting the work priorities for FSQ, and what information this is based on). This understanding is key in improving end user's access to the results they need when they need them and will therefore require a system of systems approach.

(e) **Number of Inquiry recommendations**: The TOR states that there are 126 recommendations comprising 3 recommendations made by the Sofronoff Inquiry under an 'interim report' delivered 15 September 2022; and 123 recommendations made by the Sofronoff Inquiry under its 'final report' delivered on 13 December 2022. The Bennett Inquiry also made two recommendations which have been treated as detailed extensions of recommendation 105, from the Sofronoff Inquiry, and have, therefore, been added as part of, and not in addition to, the overall count of 126 recommendations. However, since that time, 3 of the recommendations were determined to be duplicates and merged together to make 123

recommendations across the two Inquiries. The three recommendations from the Sofronoff Inquiry interim report are:

(i) *Every Witness Statement issued by FSS since February 2018 in which a sample has been reported under the rubric "DNA insufficient for further processing" or any similar expression, and in which a sample has been reported as "No DNA detected" be identified by FSS without delay in a manner that will ensure ease of production of a list of such statements and, if required, the production of the statements themselves and the due provision of quants that were the basis for such statements.*

(ii) *For every such statement, a further statement be prepared by FSS stating that:*

A. *In each case in which the DIFP Statement has been used, that the statement was not correct and that the sample contains a low level of measurable DNA which, if fully processed, might produce an interpretable profile.*

B. *In each case in which the statement "No DNA detected" has been used, that the statement was not correct and that the sample returned a quantitation result below the level of detection but that further work might result in a useable profile but that that is unlikely.*

(iii) *That the Queensland Government take steps to ensure that public bodies and publicly funded bodies that require additional funds or other resources to investigate, consider and resolve these issues be furnished with the necessary funds and resources so that any miscarriages of justice are resolved as promptly as is practicable.*[9]

(f) Interim Recommendations (a) and (b,i, and b,ii) are duplicates of Recommendations 119 and 120 in the Sofronoff Final Report. The Interim Recommendation relating to funding is a duplication of Recommendation 123 in the Sofronoff Final Report.

(g) **Provisionally completed recommendations**: For the purposes of this Report, the DNA Review consider that a recommendation that is provisionally completed but awaiting presentation to the FSQ Advisory Council is in progress. This is because the Council can and have requested that more work be done for some recommendations upon presentation.

(h) **Point in time considerations:** The TOR is directed to the implementation of "in progress" and "outstanding" recommendations which are continually changing as FSQ progresses the reforms. The TOR requires the Reviewers to consider those recommendations which were "outstanding" and "in progress" as at the date of the TOR.

(i) **Responsibility for progressing recommendations**: FSQ is not the only agency fixed with the responsibility of progressing and completing recommendations arising from the Inquiries. The TOR requires the Reviewers

[9] Sorfronoff "Report Concerning Use by Queensland Health Forensic and Scientific Services of Certain Evidentiary Statements" 15 September 2022

to look at all 'in progress' and 'outstanding' recommendations irrespective of responsibility.

(j) **Application of best practice to all TORs**: TORs 2 and 3 require the Reviewers to provide advice as to best practice for implementing "in progress" and "outstanding" recommendations. TOR 7 also requires the DNA Review to consider their advice in the context of what is considered best practice. While these TORs are the only ones to include the term best practice, the Reviewers have carried this across all of the TORs. That is to say that all the advice provided by the Reviewers is based on what they opine to be best practice.

2.5 Matters beyond the Scope of the Review

22. The Reviewers are also aware that there are specific matters beyond the Scope of the Review, which have been included as contracted restrictions (see Schedule 2 Terms of Reference) as follows:

(a) No comments or recommendations either expressly or impliedly are to pertain to the Director of FSQ, the FSQ Advisory Council or an individual employee of FSQ or members of the FSQ Advisory Council or their involvement in the implementation of past recommendations; and

(b) No consideration inquires or research, or recommendations in respect of, any matters relating to any processes of FSQ as they may pertain to the testing and reporting of sexual assault cases as outlined within a Report authored by Dr Wright dated 26 July 2024.

23. Notwithstanding the above, the Reviewers are required to make comments and recommendations in relation to FSQ operations and service delivery, of which the Director of FSQ, the FSQ Advisory Council and to a lesser extent, employees of FSQ perform key roles within the organisation. It is acknowledged that some reference to these roles and their functions is necessary in order to address the TOR. Any necessary references to these roles are made solely to fulfil the requirements of the TOR and are not intended to critique or evaluate the performance of specific individuals or groups. It has also been necessary for fairness reasons to make reference to specific roles or FSQ functions where criticisms are made so that those not involved in the specific activity are not unfairly perceived to be included within the criticism. On that basis, the Reviewers have endeavoured to keep commentary and recommendations focused on systemic issues within the scope of the DNA Review.

2.6 Relevant Background to the DNA Review

24. The following background and purpose were written by the Office of the Attorney-General and endorsed by Premier and Cabinet and provided as direction for the DNA Review.

25. The Queensland Government has committed, through its '*The First 100 Days*' document, to begin a review into [Forensic Science Queensland (FSQ)] as an election commitment to be delivered upon in its first week of Government.

26. It is of vital importance that FSQ, as the State-run DNA laboratory, holds the confidence of the Queensland community and as an organisation can effectively deliver justice for victims by ensuring the delivery of high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland, consistent with the FSQ Act.

27. This Review will inform the Queensland Government about the status of reform implementation initiatives, with a view to ensuring the efficiency and integrity of FSQ's operations and strengthening the criminal justice system's capacity to deliver justice for victims of crime.

Commission of Inquiry Recommendations – Implementation

28. To date, FSQ (and its predecessor, Queensland Forensic and Scientific Services) has undergone two Commissions of Inquiry, conducted less than 12 months apart. The two Commissions of Inquiry were:

(a) Commission of Inquiry into Forensic DNA Testing in Queensland (**Sofronoff Inquiry**) (commissioned 13 June 2022 to 13 December 2022); and

(b) Commission of Inquiry to examine DNA Project 13 concerns (**Bennett Inquiry**) (commissioned 5 October 2023 to 17 November 2023).

29. The two Commissions of Inquiry (Inquiries) have led to the need for FSQ to implement 126 recommendations. These 126 recommendations are comprised of:

(a) 3 recommendations made by the Sofronoff Inquiry under an 'interim report' delivered 15 September 202210; and

(b) 123 recommendations made by the Sofronoff Inquiry under its 'final report' delivered on 13 December 2022.[11]

30. The Bennett Inquiry also made two recommendations[12] which have been treated as detailed extensions of Recommendation 105, from the Sofronoff Inquiry, and have, therefore, been added as part of, and not in addition to, the overall count of 126 recommendations.

Historical Case Review

31. A case is considered to be within scope as a 'historical case review' case if it is a 'major crime' case, as defined by set QPS crime type categories, for which DNA samples had results reported by the Forensic Biology division of Queensland Forensic and Scientific Services or its successor, FSQ, between 1 September 2007 and 30 April 2023.

32. There are an estimated 41,077 major crime cases received during the time period outlined above for historical case review, [however, this has been reduced to 32,412 due to some duplicates and the large number of volume crime cases that were accidently included due to incorrect recording in information systems]. This total includes some cases that are still active before the courts, cases which were previously active before a court but have since been either discontinued or finalised, and cases which were subject to criminal investigations but never progressed to formal court proceedings.

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[10] Report concerning use by Queensland Health Forensic and Scientific Services of Certain Evidentiary Statements. Walter Sofronoff KC. 15 September 2022. https://www.health.qld.gov.au/__data/assets/pdf_file/0036/1174977/Report-concerning-use-by-QHFSS-of-certain-evidentiary-statements.pdf

[11] Final Report: Commission of Inquiry into Forensic DNA testing in Queensland. Walter Sofronoff KC. 13 December 2022. https://www.health.qld.gov.au/__data/assets/pdf_file/0036/1196685/final-report-coi-dna-testing-qld-dec-2022.pdf

[12] Final Report: Commission of Inquiry to Examine DNA Project 13 Concerns, Dr Anabelle Bennet AC SC. 17 November 2023. https://www.dnaproject13inquiry.qld.gov.au/assets/DNA%20Project%2013%20Report.pdf

33. FSQ, [Queensland Police Services (QPS)], and the Office of the Director of Public Prosecutions (DPP), have developed a set of historical case review principles which broadly outline how historical cases will be reviewed. Under these principles, cases will first be subject to a form of 'Initial Review', consisting of either:

(a) 'DPP legal-led case reviews', in which historical cases which are or were active before a court will be holistically reviewed by the DPP; or

(b) 'QPS probative-led case reviews', in which historical cases that did not progress to formal court proceedings will be holistically reviewed by the QPS.

34. In both types of Initial Review, the DPP or QPS, respectively, will consider whether any of the DNA samples for a historical case should be subject to a further scientific review. This decision will be based upon a consideration as to whether there is a prospect of either a new charge or changes to a historical case's outcome, as well as the interests of any victims and their support networks.

35. Historical cases identified as requiring further review will then be forwarded to FSQ for scientific review. During these scientific reviews, FSQ will consider whether, and what, further testing, analysis or interpretation is appropriate in the individual circumstances of each case. The scientific reviews will be guided by best practice principles and any relevant case-context information made available to FSQ.

2.7 Methods and Approach

36. The DNA Review was evidence-driven and relied heavily on the provision of data, information, and documents from end users and FSQ, and the cooperation of those involved in or affected by the DNA reforms, historical case reviews, and BAU DNA service provision.

37. The methodology adopted and applied in the DNA Review has comprised essentially of:

(a) gathering information and evidence through interviews, focus groups, analysis and review of the relevant information, legislation, policy, and evidence and onsite visits;

(b) forming observations, findings and recommendations; and

(c) consulting on factual and associated matters with relevant persons and entities; and

(d) preparing this Report.

2.8 Framing concepts

38. Given the complexity of the DNA Review, framing concepts were devised at the outset as a logical guide for all those who read this Report, and to ensure key DNA service delivery factors were equally and objectively considered.

2.8.1 Defining FSQ DNA Service Delivery

39. The DNA Review determined that three components constituted DNA service delivery for Queensland, which are led and delivered by FSQ:

(a) Business-as-usual (**BAU**) including BAU changes outside of the Inquiry recommendations;

(b) Historical case reviews and testing; and

(c) Implementation of the Inquiry recommendations (the **Reforms**).

2.8.2 Defining Forensic DNA Services End Users

40. Improved forensic DNA service delivery that meets end user needs is the driver for the DNA Review. Table 1 provides a list of end users of forensic DNA services. An end user can be a group that directly uses DNA services (typically to enable them to perform a function they are responsible for) or a group that benefits from DNA services. Identifying end users' needs, priorities, and issues were crucial to understanding how to improve Queensland's current DNA service delivery and for the design of the future delivery framework.

Table 1: Key end users of forensic DNA services.

Queensland Police Service	Victims of crime and their families
Office of the Director of Public Prosecutions (DPP)	Defendants
Forensic Medicine Queensland	The Queensland Government
Office of the State Coroner	Queensland communities
Legal Aid	The State Coroner
Private defence solicitors and barristers	The jury
The judiciary	

2.8.3 Defining Best Practice in Forensic Science

41. Best Practice in forensic science is adherence to relevant quality standards, policy, legislation, international guidelines, and the delivery of accurate, reliable, and timely results which are rooted in scientific principles, good laboratory practices, coupled with ethical conduct. Reflective of the varied sources of best practice, there is no single definitive standard and therefore opinions on what constitutes best practice can vary.

42. The most contemporary and relevant discussion of best practice in the context of forensic science in Australia is the Sofronoff Inquiry which drew upon the advice of a number of experts across different jurisdictions. It is for this reason that the DNA Review has relied upon and often cited these experts as the appropriate source for aspects of best practice. If not stated otherwise, the standard of best practice applied, is that based on the above and informed by the extensive relevant subject matter expertise and experience of the Reviewers.

2.8.4 Participatory Approach to the Review

43. A participatory approach was taken throughout the DNA Review, with a focus on significant end user involvement. This method has been used successfully for government reviews, evaluations of programs, and research. End user participation was conducted iteratively by:

(a) gathering data and information;

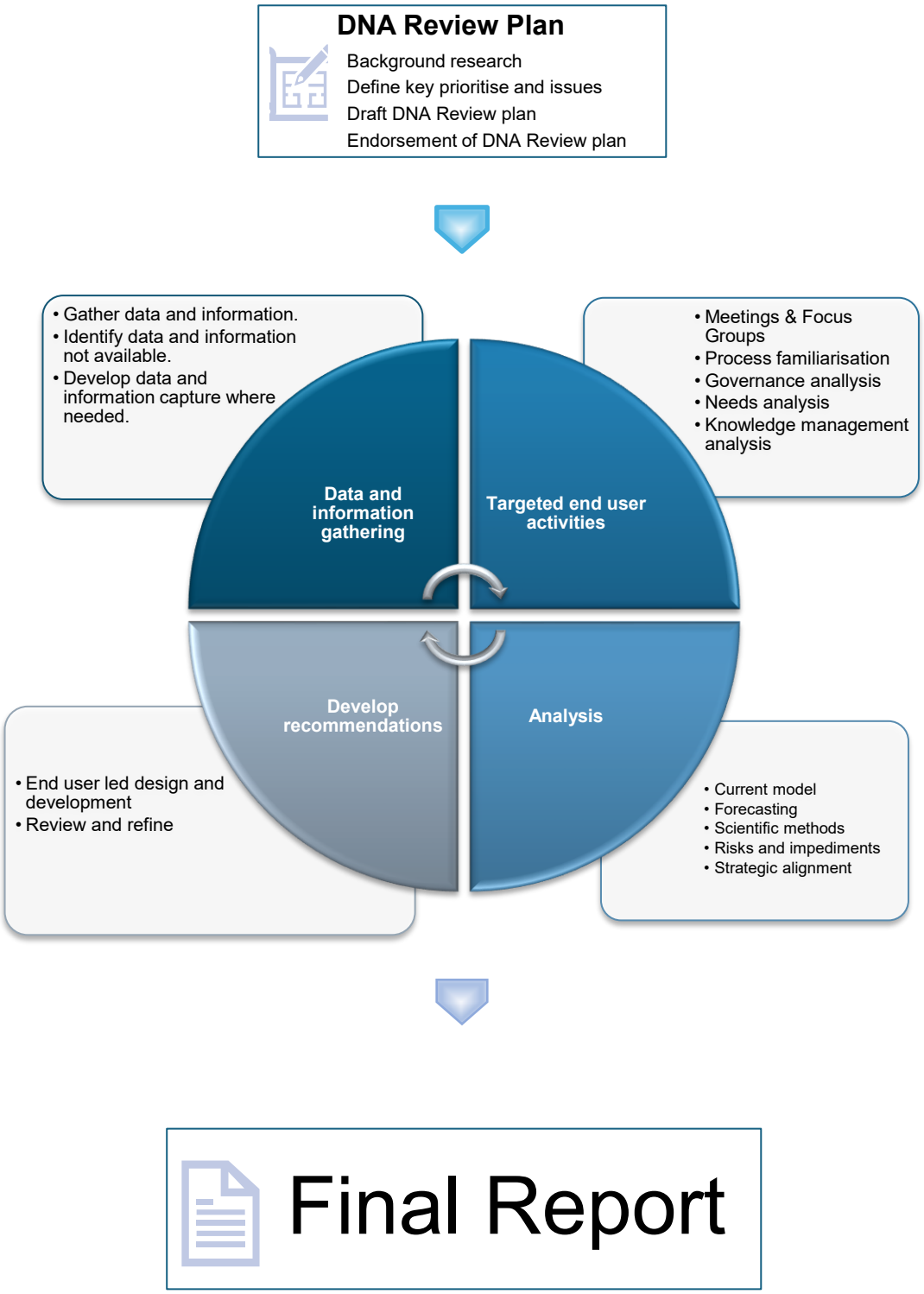
(b) targeted end user activities;

(c) analysis; and

(d) development of recommendations (see Figure 1).

44. This approach provided valuable perspectives at each stage of the DNA Review, facilitated the collection of high-quality data and information, helped to appropriately analyse the data and interpret it based on end user context and logic, and enhanced the DNA Review by building knowledge about and support for the Review's findings. Opposing end user views were valuable to understand different perspectives and to identify significant enduring issues and impediments that required resolution.

Figure 1: A participatory approach to the DNA Review



45. The participatory approach provided opportunities for end users to co-design Queensland's future DNA service delivery framework based on evidence collected throughout the DNA Review, increasing their ownership of the solutions and proposed changes, leading to a greater opportunity to build and improve DNA service delivery

capacity. The participatory approach can generate new knowledge through a more collaborative approach and provide more potential to achieve valid and successful multi-organisational change. This approach also improved the accuracy and relevance of recommendations and increased the likelihood of successful adoption of recommendations by end users.

2.9 Review Participation

46. The DNA Review was provided with advice and expertise from the groups listed in Table 2. Their time and commitment to helping to provide Queensland with an improved DNA service delivery framework was invaluable.

47. Information was provided on a voluntary basis. Individual FSQ staff have not been identified. Other individuals who have been cited within this Report have provided express consent.

Table 2: Review Participation

Victims of Crime	
Office of the Victims' Commissioner	Victims of crime and their families
Homicide Victims' Support Group	Queensland Sexual Assault Network
DV Connect	
Queensland Police Service	
Acting Commissioner Shane Chelepy	Acting Deputy Commissioner Mark Kelly
DNA Management Unit	Scenes of Crime Unit
Major Crime	Missing Persons Unit
Forensic Evidence and Technical Service Command	Child Trauma and Sexual Crimes Unit
Forensic Manager	Investigators
Regional Crime Coordinators	Scenes of Crime Officers
Homicide Group	DNA Major Crime Liaison Unit
Cold Cases Investigative Team	Superintendent Forensic Services Group
QPS Laboratory Director	Chief Inspector DNA Management Section
Scientific Section	Quality Management Section
Police Prosecutions	
Criminal Justice System and Coronial Systems	
DJAG	Office of the State Coroner
Office of the Director of Public Prosecutions	Chief Justice and Chief Judge
Chief Magistrate and Deputy Chief Magistrate	Legal Aid Queensland
Courts and Tribunals	Private Defence lawyers

Forensic Science Queensland	
FSQ Senior Management Team	Historical Case Review Team
Forensic Biology operational staff	FSQ Quality Assurance Team
Other Review Participants	
Office of the Independent Implementation Supervisor	Forensic Medicine Queensland
Queensland's Chief Medical Officer	Sexual Assault Reform Oversight Committee

48. In addition to numerous interviews, the DNA Review conducted a number of focus groups with end users and FSQ. This was consistent with the participatory approach undertaken for the DNA Review. The focus groups were designed to obtain expert advice to identify risks and issues, collaboratively develop solutions, and inform recommendations.

Participants	Purpose
QPS	Design of the new DNA service delivery framework.
QPS, Police Prosecutions, Legal Aid, Courts and Tribunals	Identifying an automated solution to identify cases that no longer require DNA testing by the courts.
Office of the Victims' Commissioner, victims and families, QSAN, HVSG, DVConnect, Joyful Heart	Identifying the DNA service delivery needs of victims and their families, and development of a model which improves victims' rights and engagement.
State Coroner, and Queensland Coroners	Developing an improved DNA service delivery model for coroners.
FSQ	Designing a Program Management model for FSQ.
FSQ	Designing an improved historical case review model for FSQ.
Private defence lawyers	Identifying improvements to communication and presentation of DNA evidence.
Chief Medical Officer, Forensic Medicine Queensland, and Queensland Health	Development of a proposal to obtain and analyse data to enable continuous improvement of rape kits system wide.

2.10 Approach to Making Recommendations

49. Over the last two years FSQ, DPP and QPS have been tasked to implement many recommendations arising from the Sofronoff Inquiry (126 recommendations[13]) and Bennett Inquiry (2 recommendations) and from the Women's Safety and Justice Taskforce.[14] These recommendations have led to significant reforms which have greatly benefited the community. However, it is acknowledged there may be a level of fatigue across organisations to address another large tranche of recommendations. This DNA Review will aim to provide a small number of recommendations which:

(a) Are evidence-based;

(b) Have been tested on relevant end-users, and where needed, the service provider;

(c) Have a clearly defined purpose and end-state post-implementation;

(d) Have qualitative or quantitative metrics to define implementation success;

(e) Have clearly defined owners;

(f) Are linked to strategic policies;

(g) Are linked to the overall DNA service delivery framework;

(h) Are linked to the framing concepts outlined in this Review;

(i) Will overall deliver a measurable positive effect on DNA service delivery; and

(j) Are stand-alone.

50. The DNA Review will seek to avoid making a large number of disparate, low-level or technical recommendations, which may result in unintended consequences for one or more end users or service providers and may not lead to a significant overall effect on DNA service delivery.

51. Recommendations offer specific suggestions for improvement, however, initiatives represent proactive steps or plans to implement significant change based on a number of separate recommendations. Initiatives offer a planned course of action or project designed to achieve a specific goal or enable implementation of significant changes or improvements. Reviews typically provide recommendations which suggest specific actions to take based on feedback, initiatives are the concrete steps required to implement those recommendations and enact enduring change.

52. The preference to present initiatives to the government over a large number of low-level technical recommendations will allow flexibility in design and implementation of the initiatives based on expert involvement post-Review. Reviews are short-term, therefore, it is not possible to fully explore all issues, engage with all end-users, and completely understand consequences of change prior to making recommendations. Recommendations are typically prescriptive in nature, and once accepted by

[13] Three recommendations from the DNA Inquiry Interim Report, and 123 recommendations from the Final Report.
[14] The Women's Safety and Justice Taskforce reports contained 277 recommendations: (Hear her voice – Report One – Addressing coercive control and domestic and family violence in Queensland (89 recommendations) and Hear her voice – Report Two – Women and girls' experiences across the criminal justice system (188 recommendations).

government, are difficult to amend if new knowledge arises making them unsuitable, or partially unsuitable.

53. The initiatives proposed in this Review will be “strawman models”. That is, they will be a rough, initial, and perhaps a flawed version of the final implemented solutions. The strawman models will facilitate brainstorming, identify weaknesses, and refine ideas through iterative feedback, rather than attempt to create the prefect solution. The approach to building the strawman models will be evidence and process driven and focus on problem solving. It will also prevent over-investment of end-users’ time throughout the DNA Review and enable the Review to cover more areas of concern. The new DNA service delivery framework will be presented as a strawman model in this report. It will consist of sub-initiatives including a model to improve victims’ engagement and rights, a strengthened quality assurance framework, a new QPS led DNA investigative capability, and a new research and innovation framework.

54. This Review will preferentially present a small number of initiatives in preference to a large number of recommendations where possible. This will:

(a) More likely be positively received by end users, particularly given the participatory approach to this Review (ie the end users have developed the initiatives or model over a period of months facilitated by the Review);

(b) More likely achieve an overall significant positive effect on DNA service delivery;

(c) More likely to be sustainable and enduring;

(d) More likely to be effectively implemented by organisations responsible;

(e) Define estimated benefits from the end state of the implemented initiative or model;

(f) Provide a holistic cross-organisational approach to reform (system of systems approach); and

(g) Enable a staged approach to major change that is realistic and manageable to ensure BAU is maintained.

2.11 Limitations

55. The findings of the DNA Review are dependent on the accuracy and completeness of documents and information provided by the participants of the DNA Review. The recruitment and commencement of Review Team members occurred after release of the TORs in February 2025. Dr Lauren Wilson commenced on 17 February 2025 and Alison Sears commenced on 28 May 2025 which had some impact on the progress of the DNA Review.

2.11.1 Data limitations regarding the status of Inquiry recommendations

56. The DNA Review notes that FSQ has not implemented a structured project management approach to oversee the reforms which in the Reviewers' opinion has resulted in delays and inefficiencies. Further to that, FSQ's closure reports often lack metrics or evidence demonstrating that the purpose of the recommendations has been met.

Chapter 3: Forensic DNA Service Delivery in Queensland

3. Forensic DNA Service Delivery in Queensland

57. To set the scene for this Report, it is important to first provide an overview of the forensic science landscape in Queensland. Understanding the structure, functions, and historical context of forensic DNA services in the state is essential to appreciating the significance of the findings and recommendations that follow.

3.1 The history and establishment of Forensic Science Queensland

58. FSQ was established on 29 May 2023 within the Department of Queensland Health in response to recommendations from the Sofronoff Inquiry. On 1 July 2024, Forensic Science Queensland moved to the DJAG (now the Department of Justice).

59. The FSQ Act was enacted on 1 July 2024, establishing the FSQ Director as a Statutory Officer supported by an office to be formally called the Office of the Director of Forensic Science Queensland (in short form Forensic Science Queensland) consisting of the Director and the staff of Forensic Science Queensland. The FSQ Act also established the Forensic Science Queensland Advisory Council (the **Council**) who monitor and review policies and procedures of FSQ relating to the administration of criminal justice and provide advice relating to same.

60. FSQ provides forensic biology and forensic chemistry services, with a total of 258 staff including scientists, corporate services, support staff, and management. FSQ has an annual operating budget of $46.9M.[15]

61. Since 1 January 2023, 122 new positions have been created across FSQ (including management, corporate support, and scientific staff). Of these 64 are scientific staff (including scientific managers) and 58 are non-scientific staff.[16]

3.2 Forensic DNA Service Provision in Queensland

62. Forensic DNA services is one of many forensic modalities relied upon by end users to investigate crime and for the administration of the criminal justice system. Forensic services such as fingerprints, digital forensics, and ballistics typically reside within policing agencies. Across Australia DNA services reside either within policing agencies, health departments, or the Attorney-General's Department. DNA service provision can be provided by accredited[17] government laboratories and private laboratories.

63. The FSQ Act defines forensic services in Schedule 1 as:

> (a) *means the application of scientific methods of testing and analysis, and scientific interpretation, for either of the following purposes-*
>
> (i) *the investigation or prevention of crime;*
>
> (ii) *the provision of expert evidence to inform decisions and findings relevant to the administration of criminal justice; and*

[15] DNA Review Information Request 15.2 (2024-25 Grand Total).
[16] DNA Review Information Request 49 'Positions created since 1 Jan 2023'.
[17] ISO/IEC 17025 is the international standard for testing and calibration laboratories.

Examples of decisions and finding for subparagraph (ii)-

A. *a decision whether to prosecute a person for an offence*

B. *a finding of guilt by a court*

C. *a finding in a coroner's investigation under the Coroners Act (2003)*

Examples of scientific methods of testing and analysis- DNA analysis, chemical analysis.

(b) *includes a type of testing and analysis, or scientific interpretation, prescribed by regulation; and*

(c) *does not included a type of testing and analysis, or scientific interpretation, prescribed by regulation.*

64. It is important to note that QPS manages and controls all evidence collected in relation to a police investigation, including all DNA sub-samples arising from the evidence.[18] Section 488B of the *Police Powers and Responsibilities Act 2000* (Qld) (**Police Powers Act**) permits the Commissioner of Police to enter into a contract or other arrangement with one or both of the following: Director of FSQ or the chief executive officer of an accredited laboratory (that is, an external provider).

65. Currently Queensland's forensic DNA service provision comprises of FSQ and eight external DNA service providers.[19] As set out above in framing concepts, throughout this Review FSQ will be considered as a service provider that delivers forensic services to end users. The partial outsourcing of DNA existing services (DNA profile interpretation) is currently managed by FSQ (this excludes the new outsourcing arrangements arising from the government's $50M announcement on 22 May 2025 where QPS will have a management role). For the purpose of this DNA Review, only services directly provided by FSQ were evaluated, however, this also included FSQ's management of outsourcing services which collectively constitutes DNA service provision for Queensland.

66. The FSQ annual operating budget is funded by the government to perform DNA testing services for end users. FSQ received $46.9M for the 2024-25 annual budget.[20] Currently there is no service level agreements between FSQ and the QPS, the ODPP, or the State Coroner for the DNA testing of crime scene evidence or coronial samples.

67. QPS have an arrangement in place with FSQ where they set out priority levels for their crime scene DNA samples, in effect triaging them, from most urgent to least urgent.

68. QPS have a memorandum of understanding (MoU) with FSQ for processing 'person samples'. These are samples collected by QPS, (typically mouth swabs), from suspects, prisoners, and victims. QPS pays FSQ an agreed sum of money per sample. There is no MoU or service level agreement (SLA) between QPS and FSQ for processing 'crime scene samples'. These are samples collected from crime scenes by police officers.

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[18] Police Powers and Responsibilities Act (2000), s196.
[19] Either for laboratory-based testing or provision of remote profile interpretation.
[20] DNA Review Information Request 15.2.'Detailed budget for current financial year'.

Chapter 4: Options to Enhance and Improve the Efficiency, Accuracy and Reliability of Service Delivery

4. Options to enhance and improve the efficiency, accuracy and reliability of service delivery

4.1 Chapter overview

69. To enable the Reviewers to provide advice to government on options that may be available to FSQ to enhance and improve its efficiency, accuracy and reliability of service delivery in forensic DNA testing and analysis it has been necessary to first understand the service currently being provided by FSQ. The Reviewers have formed the view that a DNA testing facility must provide accurate, reliable, and timely services, which are quality-focused and put the needs of the end users first. It is for this reason that these aspects of service delivery have been critically analysed.

70. The analysis undertaken within this section has also informed the Reviewers' approach to TOR 7 which requires advice on the development and implementation of a framework for future delivery of forensic DNA testing and analysis. Underpinning the DNA Review's advice on the future framework is analysis of the current issues and framework including what has and has not been effective in aligning service delivery with best practice, stakeholder needs and public confidence.

71. While it has been identified within the overview for each section whether the topic is most connected to the efficiency, accuracy and reliability of service delivery, ultimately they are all interconnected and they should be read with this in mind.

72. Noting the above, the Reviewers have adopted the following approach in this Chapter:

(a) Section 4.2 looked at the impact of DNA issues on victim-survivors and their families in order to provide advice on the future DNA service delivery framework;

(b) **Improving efficiency**: In sections 4.3 to 4.5 the DNA Review has looked at specific issues that are connected to the efficacy of forensic service delivery as follows:

(i) Section 4.3 provides a data driven assessment of FSQ's current service provision including the status of backlogs (4.3.2), turnaround times for DNA test results and delays (4.3.3) including the effect of QPS reducing the number of samples had on service ability (4.3.4). It then goes on to look at the impact to the Courts (4.3.5), delays regarding untested rape kits (4.3.6) and discusses the Government's outsourcing plan (4.3.7).

(ii) Section 4.4: it has been necessary to examine the use of Government funds allocated for outsourcing to understand strategies that have already been implemented in an effort to increase efficiency;

(iii) Section 4.5 provides advice on two strategies that are available to FSQ to increase testing capacity which would likely increase the efficacy of forensic service delivery;

(c) **Improving accuracy**: In sections 4.6 to 4.7, the DNA Review has:

(i) Section 4.6, provides a data focussed evaluation of the accuracy of FSQ's services including looking at the DNA methods used (4.6.3),

internal audit results (4.6.4), FSQ's approach to Practice Direction 14 (4.6.5), the recent NATA assessment (4.6.7) and systemic contamination (4.6.8).

(ii) Section 4.7: given the issues identified above, looked at the introduction of the new rape kits.

(d) **Improving reliability**: In sections 4.8 to 4.10, the DNA has focussed on:

(i) Section 4.8 looked at FSQ's DNA testing threshold and the process used to develop it;

(ii) Section 4.9 looked at how coronial matters have been affected in order to provide advice on aligning future service delivery with end user needs;

(iii) Section 4.10 set out observations on the FSQ Act focusing on current legislative impediments to Queensland's DNA service delivery framework.

4.2 The impact of DNA issues on victim-survivors and their families

Key observations, findings, and conclusions in relation to the impact of DNA issues on victim-survivors and their families to inform advice aligning future DNA service delivery with the needs of end users:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Impact to Victims

(a) The delays in DNA testing and the confidence in reliability of results have had a significant impact on victims and their families.

(b) The DNA issues delays victims' justice, which also delays their healing, and prolongs their trauma.

(c) Victims impacted by the DNA issues require additional support to assist with their mental health challenges arising from the DNA issues.

73. This is the most important section of the DNA Review. It contains the voices and experiences of those who matter the most, victim-survivors and their families. The DNA issues arising from the Sofronoff and Bennett Inquiries and the current FSQ issues continue to impact on their daily lives. We must do better for them. They deserve to have access to forensic DNA services that are reliable and timely, which always has their needs as the first priority. We must regain their trust and give them confidence they will get the best chance at justice.

74. A victim-survivor advised the DNA Review:

> *"While I acknowledge the challenges that forensic services are facing, the current response lacks the urgency this crisis demands. For victims like*

myself, every day of delay in receiving forensic results prolongs trauma, disrupts healing, and stalls justice. In many cases, all other evidence is ready, but tests from this department [FSQ] hold everything back.

Victims are not cases—we are people. Yet generalised timeframes continue to be applied, failing to recognise the unique urgency of each situation."

75. Another victim-survivor shared how the DNA issues affected her chance at justice with the DNA Review:

> *"When the DNA lab failed me they failed my rights to be able to press charges for the assault too really. That took a huge toll on me mentally emotionally and physically to have all my scans etc there but to be told without DNA proven I couldn't do anything.*
>
> *I lost almost three years from the DNA lab and my offenders and I'm not gonna lose any more time. I'm not hiding myself this time from them, I will speak up for us all. Enough is enough."*

76. The DNA Review wanted to understand the impacts of the DNA issues from two perspectives, those affected by:

(a) the Inquiries who are awaiting outcomes of DNA re-testing; and

(b) the current FSQ issues (which will be discussed in detail within this report).

77. This understanding is vital to redesigning the new DNA service delivery model, and most importantly, making sure mistakes of the past are never repeated.

78. The DNA Review received a letter from Vicki and Shannah Blackburn who helped to trigger the Inquiries and were affected by the QHFSS failings. They are currently waiting on re-testing of DNA samples. They do not know how long they will have to wait.

79. A letter was also received from a victim-survivor who has been waiting since April 2024 (over 14 months) for DNA results from FSQ. This person does not know how long they will have to wait for their results.

80. The DNA Review appreciates the strength and determination of these brave Queenslanders to speak publicly about their experience, with the motive to improve the system for all victims of crime now and in the future.

Figure 2: Letter to the DNA Review by Vicki and Shannah Blackburn

Our involvement in learning about DNA failures in general commenced during the production of the podcast, Shandee's Story. We were advised of some of the claimed inconsistencies between the original and retested results and queries concerning the reporting of the samples taken during the investigation of the killing of Shandee Blackburn.

Since then, we have been no less than astounded as the podcast continued and revealed more and more serious issues dealing with DNA evidence more broadly.

The first inquiry was very much an arduous experience. The evidence that was exposed during those weeks was staggering. The consequences on victims, a heartbreaking reality. The seemingly inadequate consideration and empathy for victim outcomes in the decision-making processes was particularly cruel to watch. As there was no point both Shannah and I putting ourselves through the ordeal, I alone went along almost every day. Each night I would

telephone Shannah and try to explain the proceedings and the evidence. Each night I felt I was only delivering more and more upsetting and unfathomable information.

After one particularly upsetting session during the first inquiry, I walked out of the court room to see one person who had just given evidence, laughing and joking with their lawyers. I was left feeling there was no hope this process would be able to reach anywhere close to rectifying the damage that had been done. I felt that no one cared about any of the victims, not just Shandee. I was completely shattered and distressed. I felt so betrayed. Not just on behalf of Shandee, but for every victim who did not have the DNA in their cases correctly processed. I walked out of the building and as I stood at the corner watching peak hour traffic rushing past, I just had a moment where I could not bear hearing more and more failures unravelling. Knowing how those victims felt. I did not want to call Shannah and talk about what had unfolded that day and give her more disturbing information. In that moment, I thought about just walking out in front of the traffic. It was a very sobering experience and if anyone does not understand the importance of incorrect DNA management, procedures and reporting within the justice system, this is an example of the reality of the impact on victims.

Walter Sofronoff and his team dug into all the issues and the recommendations in his final report invaluable to the rebuilding of the FSQ facility. However, just when we believed all the failures had been uncovered, Project 13 was revealed. I am not sure how to express our utter devastation in our belief that the facility could ever be the vital component of the justice system that it needs to be.

The second inquiry was mercifully short; however, I thought it was also short on victim outcomes. It did, however, force the review and retesting of the historical cases. Without that, all those cases from all those years would never be given any possible opportunity for the justice they were denied.

Thankfully the Australian, Hedley Thomas and his team, along with Dr Kirsty Wright have brought the failures out into the open. Kristy Bell has been the legal mind behind me seeing my wish to have the Double Jeopardy laws amended to be inclusive of historical cases.

Our hope now is for the FSQ to be fully compliant and focused on victim outcomes, with oversight procedures and independent monitoring in place to ensure the focus remains on victims' outcomes now and into the future.

With the focus of the forensic community worldwide on how we rectify and reverse the damage to victims and the Queensland community, and how we avoid a repeat.

We hope no one endures losing a beloved family member in the way we have. However, that is not a reality. Therefore, it is vital that victims and communities can rely on every department within the justice system to be able to provide the services they are designed to do, and give victims, and their families the justice and peace they deserve. Which we and others have been denied.

The revelations about DNA testing that were made over the course of the Podcast and Inquiries have led us to believe that there has been a lack of appreciation of the impact on victims. I am sure there is a general knowledge that management and procedural decisions do have an impact. However, I feel the intensity of the actual impact felt by victims is generalised and not fully understood. The impact of the original crimes are lifelong. It was not until I joined a peer group that I realised the symptoms we are experiencing were 'normal'. There can be no denying, dismissing or minimising those symptoms in some victims or families of victims. They are debilitating to the extent of some becoming unable to continue their lives as they were prior to the crime. Add to that the failure to find justice, whatever the cause, resulting in symptoms becoming more mentally, physically and emotionally exhausting. These effects change not only who you are but how you live your life day to day. Some symptoms are mild, for example I

cannot now watch any competition, I find myself experiencing a greatly heightened anxiety. Not especially important, however, I am not able to enjoy things I used to enjoy. I doubt there is any victim or family member who has not experienced an immediate effect on their sleep patterns. I learnt that 2 hours sleep a night was common for mothers who have lost their son or daughter. All these years later we still experience lack of sleep every night unless medicated. Our bodies have and continue to suffer the result of long-term sleep deprivation. We do the best we can. We push ourselves; we manage our symptoms. But in all these 12 long years we have not woken up feeling refreshed, even with medication, not once. The impact on each person differs, however, they are long term and makes day to day life a struggle, no matter how much we try to overcome. There are good days and there are obviously bad days. But each day is forced and managed. In my opinion a lack of knowledge and information provided to victims through the re-testing process could add another level of trauma to victims. This is because not having knowledge of the processes, of how the retesting is undertaken, by whom it will be undertaken, and little knowledge of progress can add more anxiety, more mistrust and more feelings of not being heard or considered.

As I am talking with Shannah and typing today, tears are flowing down my cheeks, my hands are shaking. I must keep going back to retype my words, making it more distressing for us both. And yet nothing we are feeling as I type this is because of the horrific loss of Shandee. We feel we have suffered another horrific trauma and just like the loss of Shandee, our trauma feels like it has no end.

So, we tell our story, for want of a better word, in the hope that it brings real understanding of the term 'victim-based outcomes'. We feel very strongly and are committed to continue telling our story as we fear if we stop, it will silence other victims now and in the future…and silence has never resulted in change.

We also must keep in mind that the trauma of crime and the failure to realise justice not only impacts victims. It also affects every person they are connected to. The ripple effect of the trauma, the failures, the fear, and the mistrust continues. We can never take back the crimes that have taken place, however, we can bring a measure of peace to victims and allow them to grieve and heal. Shannah and I look forward to that time to come for us and the many other victims still waiting.

Vicki and Shannah Blackburn

Figure 3 Letter to DNA Review from an anonymous victim-survivor

Dear Dr Kirsty Wright,

I am writing to share my experience as a victim of rape crime and to highlight the urgent need for addressing justice delays, particularly starting with Forensic Science Queensland.

Please note: This matter is currently active in the justice system. The details I am sharing reflect my lived experience and are meant to help illuminate areas for improvement. As of today, 16 June 2025, QPS still have not received DNA results for this case or an estimate on when they will.

This letter provides insight and background information on my experience navigating the justice and health system. My aim in sharing these details is to help explain and explore areas for reform and improvement – especially when it comes to timelines for forensic testing and investigations. It is my hope that this can lead to constructive change for victims of sexual

violence and other crimes, and ease some of the secondary trauma that comes from prolonging the justice process.

As a victim, the first step I took was reporting the crime, driven by the non-negotiable need for safety and justice — not just for myself, but for the community. The fear for my own safety and for the safety of others, knowing the perpetrator was still at large, demanded decisive action.

Before reporting, I presented myself to two hospital emergency departments in a state of shock and vulnerability. At the rural hospital I was repeatably asked what I needed from the Doctor, and what I wanted from them. The lack of proper procedures adding to the further suffering powerlessness and confusion. The urine sample collected for 'on-site' drug testing was discarded, and the blood samples were only tested for sexually transmitted infections. I was left sitting alone, distressed and unsure of what to do next, I discharged myself without proper care, support and guidance.

In contrast, my experience at the regional hospital was much more supportive. I was taken to a private room, and a sexual health response worker and Sexual Crimes Unit police were called promptly. The sexual health counsellor explained my options in a clear, compassionate way, and the doctor attempted to collect appropriate samples and follow up with the hospital to secure the bloods from them for evidence – this is my understanding and my recollection. The forensic nurse for rape kit collection was professional and kind. I remember the collection; I do not remember the discussions.

The primary issue I want to highlight is prolonging trauma and secondary harm that arise from delays in the forensic process and delivery of justice. The delay in this specific case progressing is due to the delay in receiving results from the DNA Laboratory Rape kit collected in April 2024 and still no results or communication on an estimate of when QPS is likely to have this information.

Forensic testing and investigations frequently take much longer than expected, adding to a survivor's trauma and extending their recovery. The uncertainty — not knowing when or if justice will be done — prevents survivors from healing and moving forward. It constitutes a form of secondary trauma, where the system itself compounds the original harm, keeping survivors stranded in a state of vulnerability and powerlessness.

To help improve this process and support future survivors, I'd like to recommend the following for consideration:

(a) Establish clear practices for appropriate care and crucial evidence gathering — for example, retaining urine samples for drug testing (the rural/remote hospitals).

(b) Provide simple, relevant, and accessible information in a pamphlet flow style (with QR codes or website links) for victims to absorb when they are able.

(c) Collaborate with QPS and FSQ to produce bite-sized informational materials covering: Forensic Testing: Explain what samples are collected and their purpose; underscore the importance of preserving this evidence and potential outcomes of testing.

(d) Rights and Choices: Clearly outline a victim's rights, including consent and the ability to opt in or out of certain procedures, and their options if they wish to pursue the matter immediately or at a later time.

(e) Support Services: Provide contact details for support services — from crisis counsellors to legal aid — alongside QR codes or website links for ease of access.

(f) Next Steps: Provide a clear timeline of what happens after testing, when results may be available, and how and when the victim will be kept informed. (QPS and FSQ crossover)

I am hopeful these recommendations can help ease the path for future survivors, assuring them that their cases will be treated with urgency, compassion, and fairness — and that their healing will not be further delayed by a slow, confusing, or insensitive process.

I have attached a drafted example of a suggested informational pamphlet that could be used to help bridge the gap between the chaos to clarity.

Thank you for considering these matters. I look forward to your response and the opportunity to meet and further discuss ways to help victim-survivors receive timely justice.

Sincerely

Anonymous victim-survivor

81. The DNA Review was advised by victims and their families the DNA Inquiries, the ongoing historical case review (including the uncertainty around testing wait times and outcomes, and potential re-engagement with the judicial system), and the current FSQ backlogs have re-traumatised them. The issues discovered by the DNA Review will likely create further distress for those affected.

82. The DNA Review was advised by victims and their families that they received support to cover gaps in payments for visits to their preferred psychologists after the initial offence[21], however, there is no similar support to assist them with the trauma caused by the DNA issues. There are also limits on the initial support payments, which is likely to have already been exceeded by many affected by the DNA issues. This has left victims and their families unable to access the help they need as they have exhausted existing avenues of assistance.

83. In December 2022 the former government announced $10 million over four years for victim support services to meet any increased demand for trauma counselling.[22] However, the DNA Review was advised by victims who tried to access this support that the funding allowed them access to counsellors associated with support groups, rather than provide financial support to see their existing psychologists. They advised the DNA Review that having to build trust in another person, and recount their issues is traumatising, causing them to not pursue this assistance. They also preferred assistance from dedicated trauma trained psychologists, feeling that they would be better trained to assist their needs.

84. Victims have expressed to the DNA Review that the re-traumatisation caused by the DNA issues is as bad as the trauma they experienced after the initial offence. The DNA Review has identified a unique group of victims that are not receiving the support they need in relation to the DNA issues.

[21] https://www.qld.gov.au/law/crime-and-police/victims-and-witnesses-of-crime/financial-assistance/types-of-claims
[22] https://statements.qld.gov.au/statements/96816

Recommendation 2	The Government should consider the availability of special assistance to individuals impacted by the current DNA issues, and the historical case review (especially those who may have to re-engage with the criminal justice system). This could include financial assistance to access their preferred psychologists where a gap in support exists.
Intent and desired end state	**Intent:** To enable those impacted by the DNA issues to access support from their preferred psychologists. **Desired end state:** The current gap in support for those impacted by the DNA issues is closed.

4.3 Current FSQ DNA Service Delivery

Key observations, findings, and conclusions in relation to improving the efficiency of FSQ's current DNA Service Delivery:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

FSQ DNA Testing Backlog

There are six categories of backlog samples

(a) Historical cases representing 32,412 cases. Of the 8,573 cases reviewed to date 82% (7,065) were determined to not require further testing. It's unclear how many of the 25,347 cases remaining will require further scientific review though it is likely to be equivalent to at least four years of expected routine workloads;

(b) BAU major and volume crime received from 1 May 2023 which fall into five subcategories as at January 2025:

(i) 'Started cases' representing 13,000 samples. FSQ advised this will take two years at current capacity to complete.

(ii) 'Not started cases' representing 641 rape kits, of these 121 relate to child victims or victims with impairment.[23] It also included 96 pairs of underwear, examination of 283 small items, and registration of 298 'in-tube' samples. FSQ advised this will take one year at current capacity to complete.

(iii) Unidentified human remains representing 62 cases. All bone testing at FSQ was halted after the Sofronoff Inquiry, therefore the human remains were only going to be tested if they were outsourced to another laboratory. Cold case homicides across 73 high priority cases. FSQ is only allowing 11 cases to be submitted at a time, and there has been little progress in those 11 homicides over the last two years.

[23] DNA Review Information Request 52 'FSQ Coversheet', March 2025page 2, paragraph 1.

(iv) Coronial cases across 16 cases. Some of these matters have been delayed by up to two years preventing finalisation.

Based on this evidence, the Reviewers have formed the view that:

(c) FSQ backlogs are contributing to reduced DNA service delivery, which is impacting the criminal justice and coronial systems and police investigations, which delays prosecutions and justice for victims.

(d) A basic analysis of the current FSQ backlogs and capacity suggests to the Reviewers that there is at least six years of work to just clear the backlogs, this is calculated without the constant flow of BAU.

(e) It is certain the backlog is preventing offenders from being arrested, contributing to reoffending across Queensland, preventing justice for victims, and preventing unidentified remains from being identified.

(f) Of significant concern is the ongoing risk to child victims and victims with impairment involved in rape or sexual assault allegations; these victims are most likely to know their perpetrators, either as carers or having regular contact with them.[24] Failure to test rape kits for these priority unresolved cases is likely placing these vulnerable victims at high risk of further rapes or sexual assaults.

FSQ Turnaround Time and Testing Delays

(g) There are three levels of priority for QPS samples provided to FSQ with turnaround times. Priority 1 and Priority 2 relate to major crime cases, and Priority 3 relate to all volume crime cases.

(h) Priority 1 is required in five working days and is the most urgent on the basis that it is critical to community safety. Priority 1 samples are currently the only samples processed by FSQ that are meeting QPS turnaround time requirements. Priority 1 samples represent on average 13 samples per month.

(i) Police require DNA results within 24 hours for some major crimes and 5 to 10 business days for volume crimes to effectively resolve cases and disrupt offending cycles. Court statements are required 8 weeks from request.

(j) The current median turnaround time for major crimes is 412 days (as of December 2024), which is 398 days slower than required. The trendline in delivery was consistent across 2024 and did not show improvement.

(k) The current median turnaround time for volume crimes was 321 days as of December 2024 which has reduced to 84 days by March 2025 due to FSQ responding to QPS prioritisation. FSQ were testing the oldest volume crime cases first which meant the value to the investigators was significantly lower in attempting to solve and disrupt crime.

(l) Although FSQ and QPS used the same system to extract data on turnaround time, there was a significant discrepancy in how it was calculated. FSQ's data reported for December 2024 the median turnaround time for major crime was 13 days and for volume crime 30.5 days. FSQ's data excluded the time taken to

[24]Australian Institute of Criminology "Misperceptions about child sex offenders" Trends and Issues in crime and criminal justice, 2011

finalise and release information to QPS, resulting in a difference between the two data sets of turnaround time.

(m) There are 343 matters in the upper court awaiting DNA results and statements. It is reported that one in two major crime offenders will likely re-offend within a year. One volume crime offender will offend on average 3.7 times a year, though a small number reoffend up to 50 times a year depending on the offence.

(n) There are currently no sufficient policy or service level agreements in place between FSQ and QPS which would require or set out any consequences for FSQ failing to meet turnaround time requirements.

(o) FSQ is allocated funding for DNA testing, which prevents QPS from seeking routine testing from other laboratories when their DNA testing needs are not being met by FSQ.

Based on this evidence, the Reviewers have formed the view that:

(p) Turnaround times should be calculated on a whole life cycle basis to include the time taken to finalise and release information to QPS. On that basis the QPS data was preferred.

(q) The current FSQ turnaround time for service delivery for Priority 2 and 3 samples is not meeting QPS requirements by a significant amount.

(i) Volume crime: as at March 2025 the median turnaround time was 84 days, which is unacceptable.

(ii) Major crime: as at December 2024 the median turnaround time was 412 days, which is unacceptable.

(r) The significant FSQ delays in reporting DNA results to the courts have been steadily growing since early 2023 and have not been adequately addressed.

(s) Turnaround time for current BAU demand is being impacted by a number of competing priorities for FSQ which are:

(iii) addressing the Inquiry reforms;

(iv) trying to clear a significant backlog of samples.

Provision of Reduced DNA Services for Queensland

(t) As a result of FSQ service capacity, from April 2023 QPS reduced the number of samples submitted to FSQ by 38.7%. Major crime samples reduced by 31.6% and volume crime by 45.7%.

(u) Despite QPS significantly reducing the number of samples submitted to FSQ the delays in FSQ service provision for major crime continued to increase.

Impact of the Current DNA Service Delivery on the Courts

(v) The significant FSQ delays in reporting DNA results to the courts have been steadily growing since early 2023 and have not been adequately addressed.

Based on this evidence, the Reviewers have formed the view that:

(w) Courts Queensland-wide relying on DNA evidence are now at a point of critical system failure.

(x) The DNA Review has observed via case studies impacts to Queensland's criminal justice system have included:

  (i) Cases being dismissed due to lengthy DNA service provision delays;

  (ii) One case going to trial without DNA evidence despite prosecution pleading its relevance to their case;

  (iii) Court proceedings being significantly delayed;

  (iv) Courts not being advised by FSQ of timelines for provision of DNA results to enable scheduling of court dates;

  (v) Alleged offenders being held in custody for extended and unknown periods (including potentially innocent people);

  (vi) An alleged murderer considered a risk of reoffending, being released on bail due to the delays;

  (vii) Delays in FSQ DNA re-testing means that a person may be remanded for a longer period of time than their sentence if found guilty; and

  (viii) Reducing opportunities to remove repeat offenders from the community.

Delays regarding untested Rape Kits

(y) The number of untested rape kits grew significantly from 2023 growing from 75 in June 2023 to 511 by September 2024.

(z) Testing of rape kits is taking over 12 months for FSQ to complete. Rape kits should be tested within two to eight weeks, and ideally within five days.

(aa) Analysis of raw data provided to the DNA Review revealed that FSQ output for the new rape kits approximately halved compared to the previous rape kit, and there was an average capacity gap of approximately 50 rape kits a month.

Based on this evidence, the Reviewers have formed the view that:

(bb) Part of the reason for the increase in turnaround time for rape kits has been the introduction of a new type of rape kit which FSQ had not appropriately prepared for.

  (i) From 1 August 2023 the former Sexual Assault Investigation Kit (SAIK) was replaced with the Forensic Medical Evidence Kit (FMEK);

  (ii) The transition required validation/verification of FSQ workflows and methods and training of staff. The new rape kit required more extensive administrative and scientific time to complete;

(iii) Training of FSQ staff prior to the introduction of the new rape kits was inadequate according to FSQ staff;

(iv) Sufficient standard operational procedures were not in place at FSQ according to FSQ staff;

(v) Risk assessment documents show that FSQ failed to conduct internal verification on methods and workflows involved in evidence recovery from the new rape kits; and

(vi) As a result, testing of rape kits paused for many months at FSQ creating the large backlog.

(cc) It is a service failure that a forensic science laboratory would not be sufficiently prepared to start testing the new rape kits.

(dd) In response to the increasing untested rape kits, in November 2024 QPS sought to have 15 of its most urgent rape kits outsourced to an overseas laboratory. FSQ intervened without the knowledge of QPS and requested the overseas laboratory only perform the first step of the testing on the basis that there were technical differences between the laboratories. Ultimately this intervention just delayed the testing of the rape kits by at least three months.

The Government's outsourcing plan

(ee) The comprehensive DNA outsourcing plan announced by the government on 22 May 2025 is supported by the DNA Review which will send DNA samples for rape kits, most major crime cases, and unidentified human remains for testing.

Based on this evidence, the Reviewers have formed the view that:

(ff) FSQ should maintain the responsibility to manage the 'started cases' backlog as it has advised there are complexities in transferring started cases to an external provider, and complexities identifying unstarted cases they currently hold.

(gg) External providers should be accredited to the ISO/IEC 17025 standard and have a proven history of reliable service provision.

(hh) An auditing and compliance plan should be developed by DoJ and QPS, with involvement from FSQ to provide proof of compliance to standards and ensure quality results are provided.

(ii) This should be considered as a temporary DNA service delivery model which is needed for at least two years. It should have a flexible design to reduce reliance on external providers gradually over time as FSQ capacity increases.

(jj) FSQ should only receive the number of cases it can process within the required timeframes of the police and courts, including cases nominated as priority for fast turnaround. The remaining samples should be outsourced.

(kk) Reliable FSQ capacity, capability, and quality metrics should be evaluated by the DoJ and QPS to determine the monthly number of cases to be outsourced.

4.3.1 Summary

85. This section discusses the FSQ backlogs, which are contributing to reduced DNA service delivery. A backlog refers to an accumulation of DNA samples that have not yet been tested and analysed within a timeframe required by the police and courts. The FSQ backlogs are impacting the criminal justice system and police investigations, which delays prosecutions and justice for victims.

86. FSQ is addressing the reforms, conducting scientific historical case reviews from cases between 2007 and 2023, trying to clear a significant backlog of current cases, and trying to keep up with BAU demands. Currently FSQ does not have the capacity[25] to deliver any services in a timely manner which is significantly impacting police investigations, the administration of criminal justice, coronial cases, denying victims justice, and is compromising community safety. The FSQ delays for providing services for current major crime cases exceed 12 months. FSQ service delivery is falling ~400 days short of police requirements[26], and 0% of samples are meeting required timeframes excluding the current Priority 1 samples[27] (which represents on average 13 samples per month since 2022).

87. There is a two and a half to three-year delay in the Magistrates courts for cases awaiting DNA results.[28] FSQ has advised the current major crime backlog will take two years to eliminate with their current capacity.[29] The significant FSQ delays in reporting DNA results to the courts have been steadily growing since early 2023 and have not been adequately addressed.[30] Courts Queensland-wide relying on DNA evidence appear to be at a point of critical system failure. There are 343 matters in the upper court awaiting DNA results and statements.[31]

88. The FSQ backlog includes 177 homicides,[32] and 1,015 sexual assaults. Of the sexual assaults and rapes, 121 relate to child victims, or victims with an impairment.[33]

89. One victim-survivor who advised the DNA Review:

> *"The delays in forensic DNA testing are not merely administrative—they have deeply harmful effects on victims, the integrity of justice, and community trust in the system."*
>
> *"Delays of this nature erode faith in our justice system and retraumatise victims who are already burdened with the weight of recovery."*

90. Due to FSQ testing capacity issues, QPS temporarily reduced sample submissions for major crime and volume crime by 38.7% from April 2023.[34] The significant reduction in this public service is impacting police investigations and the DNA Review considers that

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[25] This includes the number of trained scientists required to undertake the volume and complexity of work, insufficient workflows to cater for the volume of work, and some technology required to do some of the work required.
[26] Information provided by QPS.
[27] Priority 1 samples are the most urgent Major Crime samples from violent and unresolved cases where the offender has not been identified. This category is nominated by QPS.
[28] Communication from the Deputy Chief Magistrate 24 April 2025.
[29] 'Forensic Science Queensland – Outsourcing Options and Costings 12 March 2025 DRAFT', page 4 paragraph 2.
[30] Backlog updates to Interim DNA Advisory Board and FSQ DNA Advisory Council, 'Backlog Updates IAB and AC Summary_Redacted' (DNA Review information requirement 27).
[31] DNA Review Information Request 66 'Information from ODPP dashboard' 15 April 2025.
[32] DNA Review Request 28.4 'Leadership Group Meeting Reports', FSQ, 5 July 2024, page 85.
[33] DNA Review Information Request 52 'FSQ Coversheet', March 2025page 2, paragraph 1.
[34] Data source QPS and 'CSE 101 Biological Evidence Crime Scene Examination'.

this is not sustainable. QPS requires the quantity of DNA testing to significantly increase as soon as possible.

91. QPS manages and controls the crime scene samples as per the Police Powers Act and criminal investigations are their statutory responsibility. There is no SLA between FSQ and QPS, as such QPS has no legal mechanism over DNA testing service delivery and therefore has limited input into DNA service delivery governance. This, despite QPS being better positioned to make informed strategic and operational decisions about resolution and prevention of crime. The DNA Review observed this arrangement has taken some control away from QPS of their investigations due to FSQ services not meeting their needs.

92. Since the Sofronoff and Bennett Inquiries the backlogs have increased, service delays have increased, and there has been a significant reduction in the quantity of testing services. The FSQ DNA service delivery failures and backlogs should not have reached this magnitude and should not have persisted for so long. Service delivery metrics (including quality, quantity, timeliness) need to be developed by end users and the backlogs, historical case review, and FSQ outputs closely monitored by the DoJ. This will contribute to working towards service level agreements between FSQ and end users. FSQ strategic and operational planning requires comprehensive review. Policy needs to be developed outlining action to take when acceptable services ranges are not met to ensure the critical service requirements of the police and courts are maintained.

93. The strategic and holistic end-to-end outsourcing strategy announced in May 2025 to clear unstarted FSQ cases, and for new major crime cases is supported by the DNA Review. This strategy will be Queensland's interim DNA service delivery model for two years and offers flexibility to slowly reduce reliance on external providers as FSQ develops capacity and capability. It will enable FSQ staff to maintain and enhance their skills through continued full-time employment, simultaneously elevating knowledge and education, improve processes without the strain of backlogs and BAU, and gradually rebuild their capacity and capability to meet end user needs.

4.3.2 FSQ Testing Backlog

94. There are currently six categories of FSQ backlogs defined below:

(a) **Historical cases backlog:** Major crime cases[35] received and reported by Queensland Health Forensic and Scientific Services (**QHSS**) or FSQ between 1 September 2007 and 30 April 2023. As of January 2025, FSQ has determined that 41,077 cases fall within the scope of the historical case review process, however, this has been reduced to 32,412 due to some duplicates and the large number of volume crime cases that were accidently included due to incorrect recording in information systems.

(b) Of these, 8,573 cases have been reviewed by either the Office of the Department of Public Prosecutions (**DPP**), the QPS, or FSQ. A determination has been made for 7,065 cases, where no further DNA testing was required. As such, a total of 1,902 cases have been identified for scientific review.[36] However, due to FSQ capacity issues, none of these have been tested. Overall, it is unclear how many of the remaining 25,347 cases will require further scientific review and how many samples within those will require

[35] As defined by set QPS crime type categories. Typically considered a crime against a person.
[36] FSQ website, accessed 27 January 2025. https://www.fsq.qld.gov.au/historical-case-review

testing, though it is likely to be equivalent to at least four years of expected routine workloads. The Review Team has observed that the FSQ Historical Case Review Team is severely under-resourced, impeding their ability to undertake this monumental task.

(c) **BAU backlogs:** Major crime and volume crime[37] cases received by FSQ from 1 May 2023 onwards which fall into six categories:

(i) The **'started cases' backlog**: These are major crime cases (including rape kits where testing has commenced), volume crime cases, and coronial cases FSQ has received and started processing, but have not completed. As of January 2025, there were over 13,000 crime scene samples in the 'started backlog'. FSQ have advised that with the current capacity it will take two years to clear the 'started backlog.'[38] There were also 328 requests for statement of witness / summary of results outstanding.[39]

(ii) The **'not started' backlog**: These are major crime and volume crime cases that FSQ has received but have not started processing. As of January 2025, there was a total number of 641 rape kits, of these 121 relate to child victims or victims with impairment.[40] It also included 96 pairs of underwear, examination of 283 small items, and registration of 298 'in-tube' samples.[41] In the DNA Review's opinion, this is equivalent to approximately one year's workload.[42]

(iii) **Unidentified human remains**: These are skeletal human remains involved in active QPS Missing Person investigations that require evaluation and DNA testing to enable identification. There are currently 62 sets of skeletal remains (including those which were received prior to 2023) awaiting DNA testing, some may be too degraded for analysis, while some have been tested many years ago with older technology.[43]

(iv) **Cold case homicides**: There are 73 high priority cold case homicide investigations awaiting DNA testing. FSQ is only allowing 11 cases to be submitted at a time, and there has been little progress in those 11 homicides over the last two years.[44] These are active homicide investigations that are considered a priority by QPS and just as important as current matters. The FSQ restriction of submitting only 11 homicide cases is unacceptable and requires planning and resources to redress.

(v) **Coronial cases**: There are 16 outstanding coronial matters awaiting DNA testing or reports.[45] Some of these matters have been delayed by up to two years preventing finalisation.

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[37] Typically considered property crimes.
[38] 'Forensic Science Queensland – Outsourcing Options and Costings 12 March 2025 DRAFT', page 4 paragraph 2.
[39] DNA Review Information Request 20.1. 'Forensic Biology Backlogs and Case Stats 14012025'.
[40] DNA Review Information Request 52 'FSQ Coversheet', March 2025page 2, paragraph 1.
[41] DNA Review Information Request 20.1. 'Forensic Biology Backlogs and Case Stats 14012025'.
[42] 'Forensic Science Queensland Responses to Questions Raised by the Attorney-General's Office 5 November 2024, page 3.
[43] Information provided by the QPS Missing Persons Unit, March 2025.
[44] Information provided by QPS.
[45] Information obtained from the Coroners Court, 21 March 2025.

95. A basic analysis of the current FSQ backlogs and capacity by the DNA Review suggests there is at least six years of work to just clear the backlogs, this is calculated without the constant flow of BAU.

96. The 'started cases backlog' increased significantly during the Sofronoff Inquiry and reached a peak of 21,204 in January 2024[46] (see Figure 4). Removal of over 2,000 cases no longer required by the courts for testing by QPS and the Courts and Tribunals office, FSQ recruitment, and outsourcing of profile interpretation has led to a reduction in the backlog.

Figure 4 Number of samples in the FSQ 'started backlog' of crime scene samples. Note: no data was available for April 2022.

97. The number of criminal and coronial cases in the FSQ backlog is extremely concerning. FSQ leadership minutes from 5 July 2024 state:

> *"Insufficient staff to allocate homicides out."*[47]

98. Current FSQ testing priorities focus on a small number of major crime samples nominated by QPS as 'Priority 1' (P1) or 'Priority 1.5' (P1.5), and on the DPP court list, which contains the most urgent cases with a trial date in the higher courts.

99. The DNA Review is greatly concerned that the backlog is preventing offenders from being arrested, contributing to reoffending across Queensland, preventing justice for victims, and preventing unidentified remains from being identified. Of significant concern to the DNA Review is the ongoing risk to child victims and victims with impairment involved in rape or sexual assault allegations; these victims are most likely to know their perpetrators, either as carers or having regular contact with them.[48] Failure to test rape kits for these priority unresolved cases is likely placing these vulnerable victims at high risk of further rapes or sexual assaults.

100. It should be noted that FSQ scientists are working diligently to eliminate the backlogs, though the Government's outsourcing strategy was immediately required to support their efforts. The DNA Review Team requested strategic planning documents from

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[46] DNA Review Information Request 29.1 'Backlog figures by month since January 2022'.
[47] DNA Review Request 28.4 'Leadership Group Meeting Reports', FSQ, 5 July 2024, page 85.
[48] Australian Institute of Criminology "Misperceptions about child sex offenders" Trends and Issues in crime and criminal justice, 2011

FSQ, however, none provided sufficient detail on how the backlogs were being addressed and how sufficient capacity was being built within the budget provided.

101. QPS collects DNA from victims and suspects and pays FSQ per DNA sample under a *Memorandum of Understanding*. As of January 2025, there were 3,560 person samples yet to be processed by FSQ.[49] Timely profiling of person samples is critical to assist police investigations. Profiles from victims and suspects are compared against crime scene DNA profiles to inform police investigations and courts. Suspect samples are also uploaded to NCIDD which may resolve other crimes committed within Queensland or across other Australian states and territories.

102. The 'person sample' backlog was caused by approximately 43% of DNA samples failing when first tested by FSQ,[50] which is surprising for samples that typically contain a good quantity and quality of DNA. The DNA Review holds the view that, ideally, the first pass failure rate should be no more than 5%. In April 2025, FSQ advised the DNA Review Team that it had made numerous changes to its processes and the failure rate and backlog had reduced significantly with further improvements to processes being implemented.

4.3.3 FSQ Turnaround Time and Testing Delays

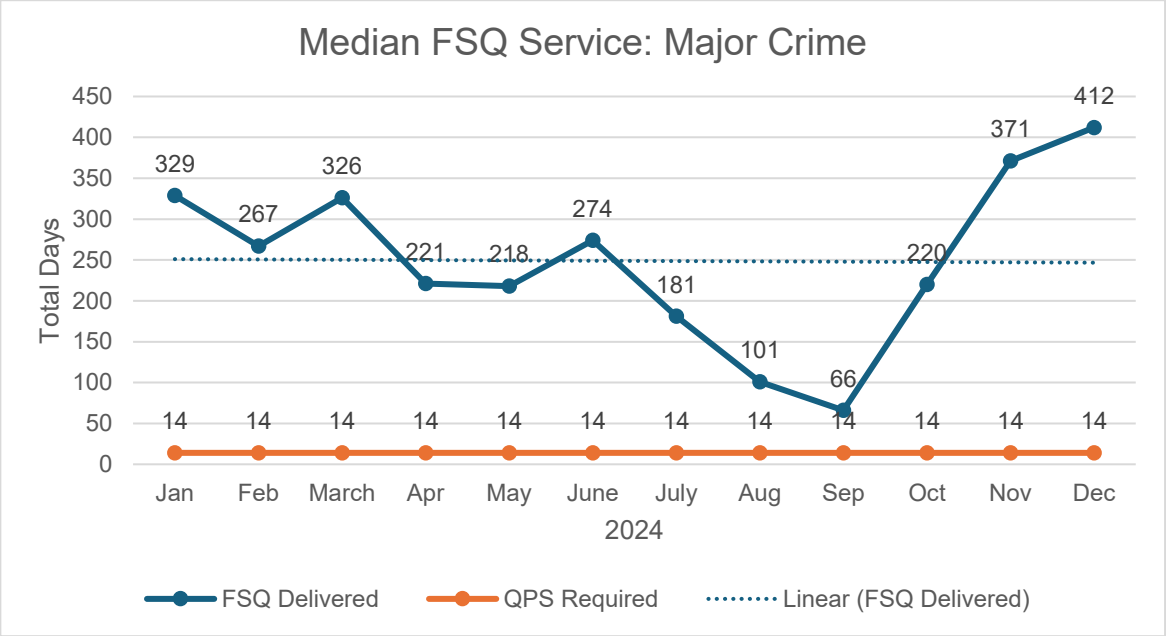
103. Police require DNA results within 5 to 10 business days for volume crime to provide the best opportunity to resolve crime and disrupt the offending cycle (Table 3). For some major crime cases testing is required within 24 hours; however, all should be tested within 8 weeks so QPS can provide briefs of evidence to the courts (Table 3). Note for Priority 1 major crime samples nominated by QPS, the turnaround time is five days, which is currently being met by FSQ, however, this relates to on average 13 samples each month. The value of DNA results as a police intelligence tool is significantly eroded unless timely results are provided which meet the tempo of the investigation and can promptly answer investigative questions.

104. In December 2024, the median time for FSQ to provide DNA results for major crime was 412 days[51] (see Figure 5). Note, this figure was generated by the DNA Review based on raw data from the QPS Forensic Register. Of note, the trendline representing the overall pattern for service delivery over 2024 (that is, whether turnaround times are improving, deteriorating, or staying the same) is not declining, signalling no significant improvement to FSQ turnaround times. This indicates to the DNA Review that the current FSQ strategy is not sufficient to improve service delivery or address backlogs. The current FSQ DNA service delivery is 398 days slower than required by QPS for major crimes, which is unacceptable.

[49] DNA Review Information Request 29.1 'Backlog figures by month since January 2022'.
[50] FSQ Forensic Operations Fortnightly Report, 13 December 2024. IR document 14C.6, page 3.
[51] Data from QPS (total days). The timeframe is from QPS sample submission to FSQ release of cold link information to QPS.

105. The median time for provision of volume crime results for the same period was 321 days.[52] As of March 2025, this was reduced to 84[53] days due to compliance with QPS testing prioritisations, however, even with an 84 day turnaround time, it is not sufficient to inform police investigations in a timely manner.

Figure 5 QPS Data showing median time for provision of results to QPS for major crime cases. The dark blue dotted line represents the trend of total days for service delivery over 2024.



106. The DNA Review requested FSQ to provide the same data for major crime and volume crime cases[54] (see Figure 7 and Figure 6). However, the data provided by QPS is considered a more accurate indication of the DNA testing given the FSQ information does not incorporate the finalisation and release of results to QPS. Not including these processes in the turnaround times significantly under-estimates FSQ DNA service delivery times. For comparison we have included the graphs demonstrating the FSQ data which show a very different picture.

[52] Data from QPS (total days). The timeframe is from QPS sample submission to FSQ release of cold link information to QPS.
[53] Information provided by QPS.
[54] DNA Review Information Request 20 'TAT data volume and major crime'. FSQ data is average, rather than median, however, this does not explain the discrepancy between the two agencies given the both use the same information system (Forensic Register). Calculated from the Forensic Register DNA TAT as at 13 January 2025.

Figure 7 FSQ Data: Median turnaround time (TAT) for major crime cases from receipt to DNA profile review.

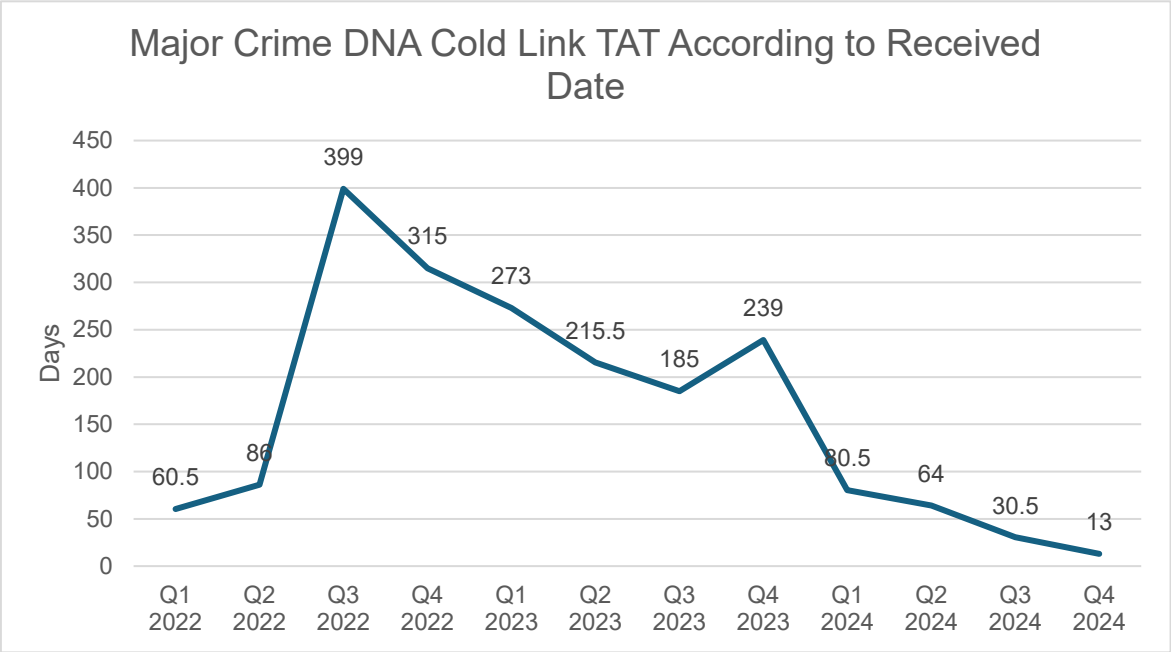
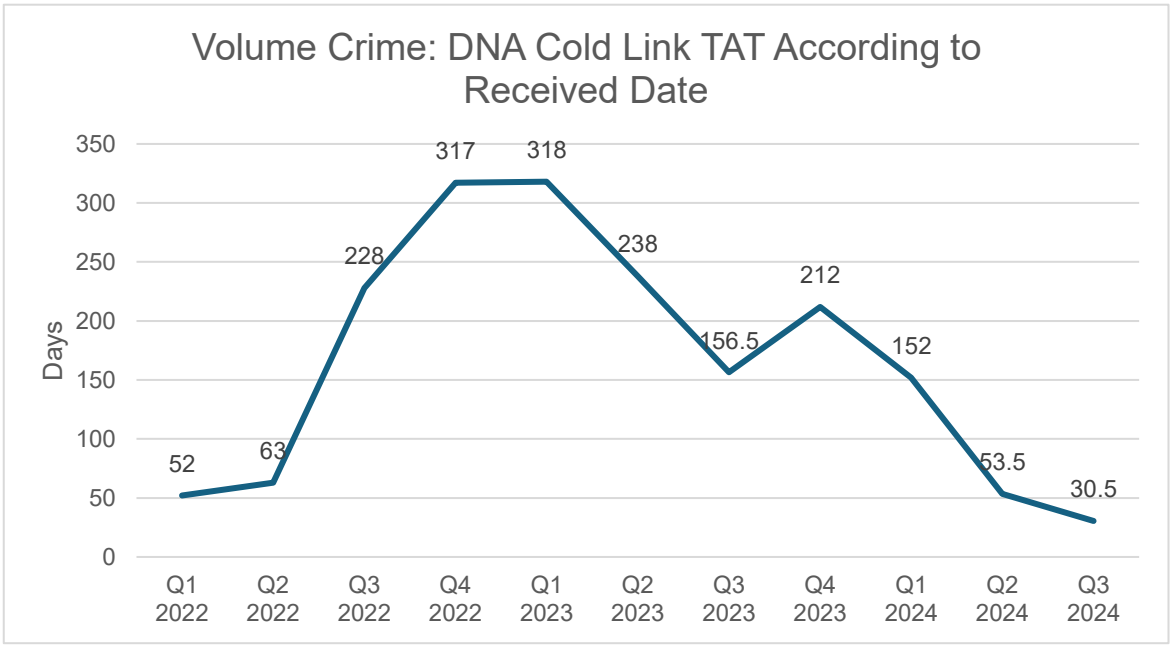


Figure 6 FSQ Data: Median turnaround time (TAT) for volume crime cases from receipt to DNA profile review.



107. QPS requires results within five to ten business days of submission as outlined below in Table 3. The target required is for 90% of samples submitted against a nominated priority to meet the requested timeframe. Court statements are required eight weeks from request.[55] FSQ service delivery is falling ~400 days short of police requirements,

[55] Information provided by QPS.

and 0% of samples are meeting required timeframes excluding the current Priority 1 samples.

108. There are currently no sufficient policy or service level agreements in place to require FSQ to comply with the service delivery needs of the police and courts. The lack of an SLA means even the small amount of capacity FSQ has cannot be relied upon by end users. An SLA would clearly define the actual FSQ capacity, and how many samples and in what timeframes they could be tested. In this way an SLA would at least some provide certainty for end users for a sub-set of their needs. There are no appropriate centrally held metrics in place which enables monitoring of FSQ service delivery, and no clear policy in place to outline actions to be taken when critical service requirements are not met. This is a critical governance failing which will be explored further.

Table 3 Turnaround times required by QPS for DNA profiling of major crime and volume crime samples.

Priority	Criteria (set by QPS)	Business days (90%)	Annual submission (samples) +/- 10%
1	The most urgent Major Crime samples from violent and unresolved cases where the offender has not been identified	ASAP	On an needs basis when critical to community safety
2	Major crime	2	300
3	Major crime	5	1000
4	Major crime	10	3000
5	Major crime	20	5000
6	Major crime	40	6000
7	Volume Crime samples	10	15,000

109. The DNA backlogs in Queensland are affecting major crimes (homicides, violent crimes, sexual assaults and rapes). There are 3,368 major crime cases in the FSQ backlog, including 1,077 outstanding rape kits, 631 rape kits have not been started.[56] It is reported that one in two major crime offenders will likely re-offend within a year.[57] The DNA backlogs are preventing QPS from identifying and arresting offenders and prosecution in the criminal justice system and thus the offenders are free to re-offend. This is compromising community safety across Queensland from violent offenders and preventing justice for victims and their families.

[56] Advice from QPS.
[57] Queensland Treasury Crime research report 'The age distribution of crime by offence type in Queensland' 2023, page 12.

Case Study 1

Homicide. Brisbane Supreme Court. November 2023.[58]

A man accused of a homicide by stabbing was awaiting a committal proceeding but was granted bail due to lengthy delays due to DNA testing and reporting of results. The man, who was 18 years of age at the time, had been in custody for 18 months, and denied bail on two prior occasions. A further eight-month delay waiting for the DNA results led to his release despite the Crown prosecutor advising the accused was a flight risk as he had told a covert police operative he planned to flee to Melbourne. He was also a risk for reoffending as the homicide was committed while he was on bail for another matter.

Case Study 2

Homicide. Townsville District court. September 2024.[59]

A man will remain in custody as police wait for FSQ DNA results. The police estimated the wait could be over 12 months but could not say for sure. FSQ is not providing any time estimates to QPS about the progress of DNA work. This is preventing this case from proceeding to trial.

110. Unresolved rapes and sexual offences have nearly doubled in the last 2.5 years in Queensland from 21% unresolved in 2021/22 to 41% unresolved in the first three quarters of 2024/25 (see

111. Table 4 below).[60] This equates to over 2,000 more sexual offences being unresolved, and countless victims being denied justice a year. QPS are not able to attribute exact causal factors for the increase in unsolved sexual offences observed from 2021/22. Potential factors include changes to reporting of domestic violence occurrences involving sexual assault allegations and delays in DNA testing rape kits.[61] It is normal for offence clear up rates for a particular year to increase over time as further information comes to hand. Therefore, it is not unexpected for the clear up rate for more recent years to be lower than previous years for any offence class. However, sexual offences are heavily dependent on DNA testing to assist to resolve the case.

[58] https://www.theguardian.com/australia-news/2023/nov/22/man-accused-of-aiding-in-stabbing-granted-bail-due-to-dna-testing-delays-in-queensland
[59] https://www.townsvillebulletin.com.au/news/townsville/could-be-12-months-dna-and-telco-data-delay-lar-sue-murder-case/news-story/c5d79cbc7e0ceb903f2b98e0e6747108
[60] QPS data from QPRIME (25 February 2025).
[61] QPS Communication.

Table 4 Queensland sexual offences statistics as-on 25 February 2025.

Sexual Offences	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25 (to Feb 2025)
Crime: Cancelled	0%	0%	0%	0%	0%	0%	0%
Crime: Solved	58%	58%	48%	45%	40%	38%	30%
Crime Unfounded	11%	11%	19%	18%	15%	15%	13%
Crime Unsolved	15%	15%	17%	21%	26%	31%	41%
Crime: Withdrawn	15%	16%	16%	16%	18%	16%	16%
Total Count	7,940	7,536	10,393	12,040	12,509	13,018	9,033

Case Study 3

Alleged rape. Brisbane Magistrates court. June 2024.[62]

An information session by Queensland Courts, Justice Boddice revealed a 14 month delay in DNA results for a rape case, stating FSQ advised results would not be available until August 2025. He stated:

"That is not a justice system. We have to address that problem."

Case Study 4

Alleged rape. Brisbane Magistrates Court. November 2024.[63]

A rape kit was taken from the complainant, but no DNA statement was provided to the court by FSQ in time. A Magistrate ruled there was not enough evidence for the case to proceed to trial and the case was dropped.

[62] A New Regime for Expert Evidence in Supreme Court Criminal Proceedings (19 June 2024). https://www.youtube.com/watch?v=Wj1DB7_aNYA (29:40)
[63] https://www.brisbanetimes.com.au/national/queensland/alleged-rape-case-involving-prominent-brisbane-chef-dropped-20241119-p5krqm.html

Case Study 5

Alleged rape. District court Toowoomba. October 2024.[64]

A man accused of raping a woman will stand trial despite police seeking an adjournment due to outstanding DNA evidence. A request from the Crown prosecutor to adjourn the trial until the middle of 2025 to wait for the DNA results from FSQ was rejected. The judge stated:

> *"Because of the unavailability of the DNA evidence it's not known at this point as to precisely what significance or what result will be available."*
>
> "*The application to adjourn the trial at this late stage would leave the (defendant) hanging until at least the middle of next year*."

The judge advised the trial listings for the first half of 2025 were already organised and the court had expended more resources than usual to prepare for the trial to be heard in 2024.

Case Study 6

Alleged rape. Rockhampton District Court. March 2024.[65]

A man charged with one count of rape, three counts of common assault and one count of assault occasioning bodily harm while armed will have to wait until 2025 for proceedings to commence due to FSQ DNA reporting delays. The judge advised there was another rape case that was also delayed where DNA evidence was crucial and said it was creating difficulties if no one knew when forensics were completed. He stated:

"*What's the solution? Does a person sit in prison forever until the [former Labor] government gets its act together?*"

112. Another crime type that is affected by the DNA backlog is volume crime, which is the largest proportion of crime recorded by the police including breaking and entering, robbery, vehicle theft, theft, and drug possession. One volume crime offender will offend on average 3.7 times a year,[66] though a small number reoffend up to 50 times a year depending on the offence[67]. There are currently 2,288 volume crime cases in the FSQ backlog. The FSQ backlogs and reporting of DNA results are causing a missed opportunity to identify those offenders and prevent them from reoffending. It is certain the FSQ delays are leading to many potential reoffenders remaining unidentified while

[64] https://www.thechronicle.com.au/subscribe/news/1/?sourceCode=TCWEB_WRE170_a_GGL&dest=https%3A%2F%2Fwww.thechronicle.com.au%2Ftruecrimeaustralia%2Fpolice-courts-toowoomba%2Fjudge-orders-toowoomba-rape-trial-to-go-ahead-without-dna-evidence-blood-semen%2Fnews-story%2Fd6ef76945291a26d503a99cc1de9e1c4&memtype=anonymous&mode=premium

[65] https://www.couriermail.com.au/news/queensland/rockhampton/police-courts/cq-rape-case-yearlong-delay-due-to-dna-test-outstanding/news-story/505ff2a720533d35b2556b04ae11b61c

[66] Queensland Treasury Crime research report 'The age distribution of crime by offence type in Queensland' 2023, page 12.

[67] Information provided by QPS.

volume crimes are being committed and greater numbers of victims, which are likely to be in the many hundreds a year based on recidivism rates.

4.3.4 Provision of Reduced DNA Services for Queensland

113. The FSQ DNA backlog has resulted in QPS significantly reducing their submission of DNA evidence for processing. From 2022 to 2024 there has been a total reduction of crime scene samples of 38.7%.[68] In this period major crime samples had reduced by 31.6% and volume crime had reduced by 45.7% (see Figure 8 and Table 5). Although, the QPS DNA evidence submission had dramatically reduced, the delays in FSQ service provision for major crime continued to increase. This indicates that even with decreased DNA evidence submission FSQ is not able to keep up with the reduced service delivery requirements from QPS.

Figure 8 Number of crime scene samples submitted to FSQ annually by QPS

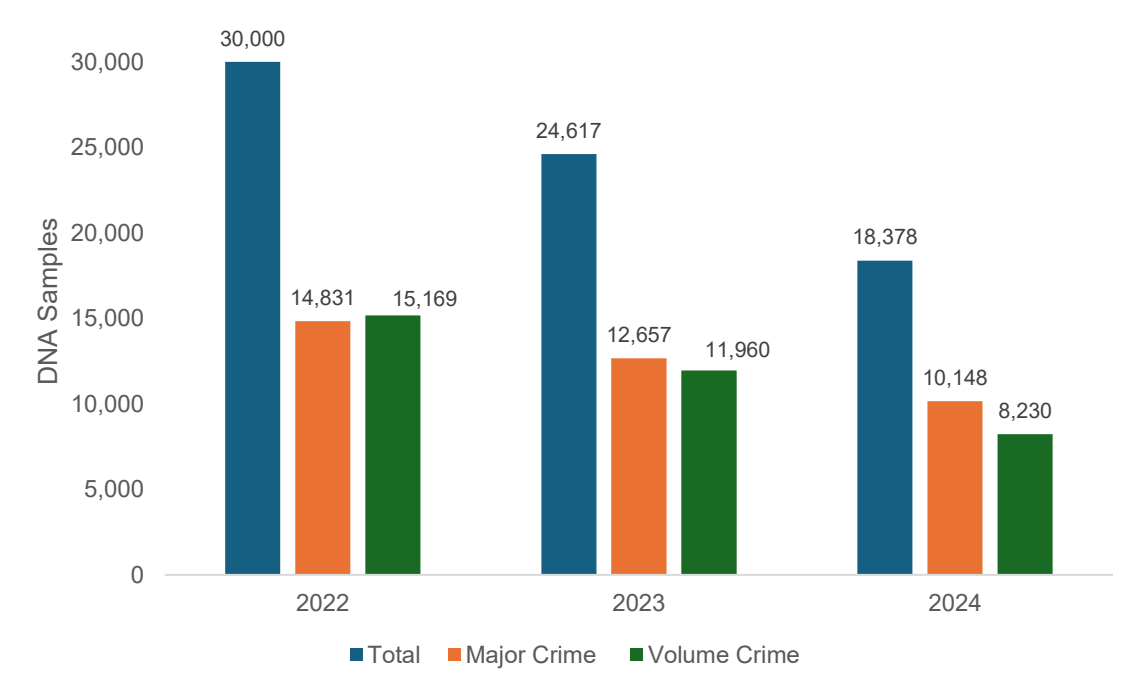


Table 5 Reduction of crime scene samples submitted from 2022.

Year	Total No.	Total %	Major Crime No.	Major Crime %	Volume Crime No.	Volume Crime %
2023	-5,383	-17.9	-2,2174	-14.7	-3,209	-21.2
2024	-6,238	-25.3	-2,509	-19.8	-3,730	-31.2
Total Difference from 2022	-11,622	-38.7	-4,683	-31.6	-6,939	-45.7

[68] Data source QPS, February 2025.

114. From April 2023 QPS routinely submitted only one volume crime DNA sample to FSQ in response to the FSQ testing capacity issues (as opposed to two samples).[69] Despite the reduction of volume crime DNA evidence submission, in November 2023 FSQ advised the Interim DNA Advisory Board it could only test 60% of samples they received due to FSQ's BAU capacity. At that time-point the BAU 'started cases' backlog was approximately 20,000 samples[70] (equivalent to approximately 13 months of annual DNA samples received based on 2024 data[71]). This significant reduction of DNA evidence submission to FSQ is a major reduction in public services for Queensland.

4.3.5 Impact of the Current DNA Service Delivery on the Courts

115. The current DNA service provision does not meet the needs of the police, courts, and victims. DNA backlogs and reporting delays are affecting courts Queensland-wide. The Chief Magistrate advised the DNA Review that delays were extending out matters in the lower courts by a further 2.5 to 3 years.[72]

116. The DNA Review observe that the impacts to Queensland's criminal justice system have included:[73]

(a) Cases being dismissed due to lengthy DNA service provision delays;

(b) One case going to trial without DNA evidence despite prosecution pleading its relevance to their case;

(c) Court proceedings being significantly delayed;

(d) Courts not being advised by FSQ of timelines for provision of DNA results to enable scheduling of court dates;

(e) Alleged offenders being held in custody for extended and unknown periods (including potentially innocent people);

(f) An alleged murderer considered a risk of reoffending, being released on bail due to the delays;

(g) Delays in FSQ DNA re-testing means that a person may be remanded for a longer period of time than their sentence if found guilty; and

(h) Reducing opportunities to remove repeat offenders from the community.

117. The data demonstrates that the FSQ significant delays in reporting DNA results to the courts have been steadily growing since early 2023 and have not yet been adequately addressed.[74] Courts Queensland-wide relying on DNA evidence are now at a point of critical system failure. There are 343 matters in the upper court awaiting DNA results and statements.[75]

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[69] QPS Collection of Biological Evidence Policy, Revision 41, 20 March 2023.
[70] Interim DNA Advisory Board minutes, 16 November 2023, paragraph 3.7.1.
[71] In 2023 FSQ received 25,415 samples. Data from QPS.
[72] DNA Review meeting with the Chief Magistrate and Deputy Chief Magistrate on 24 April 2025
[73] Refer to case studies 1 to 7 in this report.
[74] Backlog updates to Interim DNA Advisory Board and FSQ DNA Advisory Council, 'Backlog Updates IAB and AC Summary_Redacted' (DNA Review information requirement 27).
[75] DNA Review Information Request 66 'Information from ODPP dashboard', 15 April 2025.

118. Chief Magistrate Brassington wrote to the Attorney-General the Honourable Deb Frecklington on 13 February 2025 providing information to the DNA Review (Attachment 1). The letter discussed the impacts of FSQ delays in the following terms:[76]

> *"The delay in receipt of forensic evidence is substantially delaying the progress of matters from the Magistrates Court to the Supreme and District Courts."*
>
> *The delay is particularly concerning in cases involving sexual violence. Delay can impact on witness memory, can be a point of anxiety for both victims and defendants of not knowing how their matter is progressing and it is often as a factor in bail applications, particularly for serious offences. The increasing backlog of cases awaiting DNA draws upon the limited resources of the Court including by increasing the number of matters in our call overs and the number of contested bail applications."*
>
> *"Finally, an important aspect of case management is whether FSQ is able to provide timely and reliable advice as to the possible timeframes for DNA testing completion. This issue is critical in the Court management of cases. The current status of many cases is that there is no estimated time of arrival for DNA results. This lack of information can be frustrating for victims, defendants, and the Court."*

Case Study 7

March 2023. General statement from Townsville court.[77]

Retesting of DNA samples by FSQ is causing significant delays for the courts, mostly involving sexual assault cases. In one case a Crown prosecutor told the court that she had been informed by FSQ that she would be sent a letter explaining the current DNA situation and plans to address the issues, but she never received said letter as promised.

"*Under the circumstances we know it is unavoidable, but our court dates are already bulging under the weight of cases and this will just cause more problems we could have done without,"* said a prominent barrister who agreed to be quoted but did not want to be named.

Another defence lawyer stated he had received notification about retesting for one of his clients, who had already served the jail sentence for the crime he was sentenced for. The defence lawyer noted:

"*Can't help him now if it turns out he was innocent*,''

119. To try and address the DNA delays the Chief Magistrate advised:

> "*…the Magistrates Court has issued two new Practice Directions concerning DNA affected matters (Brisbane and surrounding areas only) and a sexual*

[76] Letter from Chief Magistrate Brassington to the Attorney-General the Honourable Deb Frecklington, 13 February 2025.
[77] https://www.townsvillebulletin.com.au/truecrimeaustralia/police-courts-townsville/dna-debacle-slows-down-townsville-courts-by-four-months/news-story/e3e35b120278b75a08748cea72c6da9f

violence offence callover (Brisbane Magistrates Court cases only). These Practice Directions will facilitate callovers with the aim of streamlining criminal matters caught by the Practice Direction. The sexual violence callover is designed to complement the District Court's Practice Direction 3 of 2024 which established a Sexual Violence Callover.

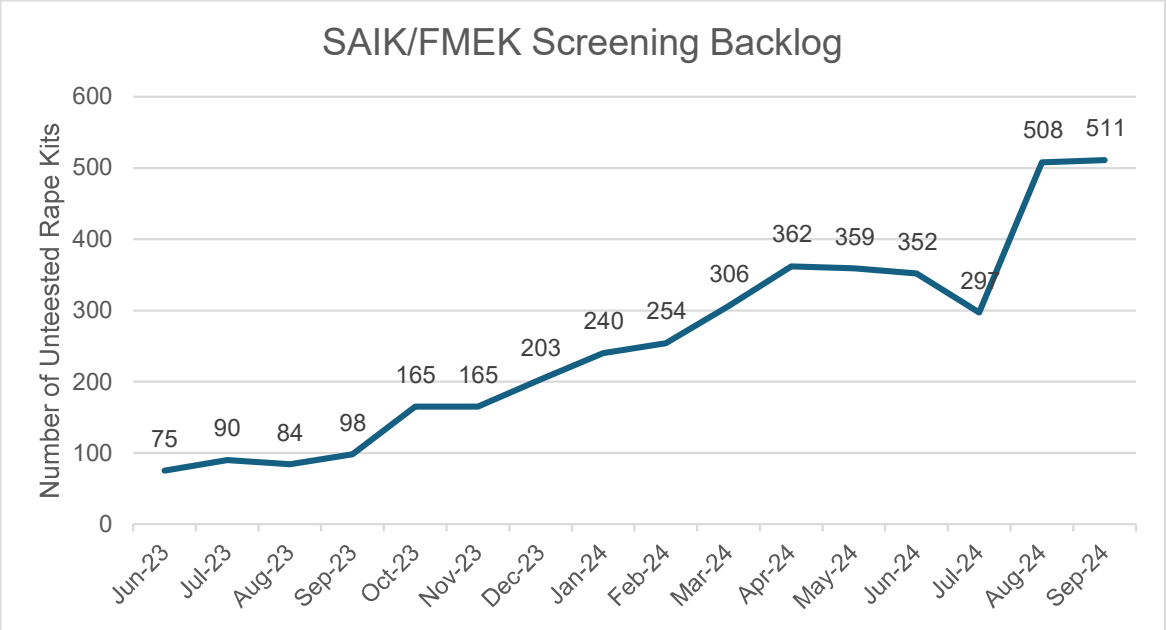
The DNA callover has senior practitioners from the Office of the Director of Public Prosecutions, Queensland Police Service and Legal Aid Queensland in attendance to try to resolve matters pre-committal as to whether DNA evidence is required or not. Deputy Chief Magistrate Gett convenes these callovers to ensure consistency of practice. There are encouraging signs that progress is being made in identifying matters that should be prioritised. However, sustained improvement in clearance rates in serious indictable matters will only come if the delays in FSQ are addressed."[78]

120. The DNA Review heard from private defence lawyers who were in favour of extending the DNA callovers to Ipswich and the Gold Coast using audio visual links. The DNA Review considers this should be investigated to further facilitate progress of matters in the lower courts.

4.3.6 Delays regarding untested Rape Kits

121. The number of untested rape kits grew significantly from 2023[79] (Figure 9) growing from 75 kits in June 2023 to 511 in September 2024 with a sharp increase occurring from August 2024. The Reviewers have concluded that part of the reason for this increase was poor FSQ change management surrounding the introduction of a new type of rape kit. From 1 August 2023 the former Sexual Assault Investigation Kit (SAIK) was replaced by the Forensic Medical Evidence Kit (FMEK) in accordance with recommendations from the 'Hear Her Voice Report 2' and the Sofronoff Inquiry.

Figure 9 Growth of FSQ rape kit backlog since June 2023.



[78] Letter from Chief Magistrate Brassington to the Attorney-General the Honourable Deb Frecklington, 13 February 2025.
[79] DNA Review Information Request 14A 'FMEK Reduction Backlog Plan Update', 17 October 2024. Slide 2.

122. The transition required validation/verification of workflows and methods and training of staff. The new rape kit required more extensive administrative and scientific time to complete. After reviewing documents provided by FSQ, and interviewing FSQ staff the DNA Review considers that training of FSQ staff prior to the introduction of the new rape kits was inadequate, sufficient standard operational procedures were not in place, and FSQ failed to conduct internal verification on methods and workflows involved in evidence recovery from the new rape kits.[80] The basic workflow for the new kits was also not introduced until 17 March 2024, over eight months after implementation which is not consistent with the ISO/IEC 17025 standard and the DNA Review considers to be poor practice.[81] As a result, it was reported to the DNA Review that testing of rape kits paused for many months at FSQ creating the large backlog.[82] Collectively this is inadequate to enable timely and reliable service provision for victims, and it does not comply with the ISO/IEC 17025 standard. It is a service failure that a forensic science laboratory would not be sufficiently prepared to start testing the new rape kits.

123. Analysis of raw data[83] provided to the DNA Review revealed that FSQ output for the new rape kits approximately halved compared to the previous rape kits, and there was an average capacity gap of approximately 50 rape kits a month. Improvements to the new rape kits are ongoing and are being led by Queensland Health's Sexual Assault Reform Oversight Committee.

124. Minutes from an FSQ Leadership Group meeting on 5 July 2024 stated[84]:

> *"Backlog of sexual assault cases, particularly sexual assault of minors are of concern and has been raised in multiple forums. Attempting to get a list of these matters from [redacted] to prioritise and progress."*

125. The growing rape kit backlog at FSQ prompted QPS to approach a laboratory overseas in late 2024. The external laboratory agreed to take 15 rape kits and fully test them as requested by QPS. All were listed as high priority and unsolved by QPS, of these, one was from a child victim, and two from vulnerable victims.[85]

126. The 15 rape kits were sent to an overseas laboratory in November 2024 by FSQ.[86] After the kits were sent, FSQ contacted the overseas laboratory and requested they only perform the first step of the testing ('evidence screening') and return the partially tested kits to FSQ. This was done without the knowledge or approval of QPS who requested the overseas laboratory test the samples[87] and who manage and control the evidence under the Police Powers Act. FSQ cited technical differences between their laboratory and the external laboratory. The DNA Review found these technical differences to not be an issue. FSQ did not arrange an import permit for the untested rape kits, therefore they could not be returned to Australia and remained partially tested at the overseas laboratory (who had the capacity to fully test the kits) for over three

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[80] Information provided by FSQ and DNA Review Information Request 14A 'FMEK Reduction Backlog Plan Update', 17 October 2024. Slide 2.
[81] DNA Review Information Request 14A 'FMEK Reduction Backlog Plan Update', 17 October 2024. Slide 2.
[82] Information provided by FSQ Staff. DNA Review Information Request 14A.05 'RA-003 Implementation of Acid phosphatase test -direct testing of swabs and other substrates', 'RA-004 Implementation of the p30 test for direct testing of swabs and substrates', RA-005 Method changes for preparation of slides for microscopic detection of sperm'.
[83] DNA Review Information Request 32.2 (1-12) 'Evidence Recovery'. Without intervention newly submitted major crime cases will join the end of the 12,000 sample queue and continue to be delayed by up to 2 years. Unchanged, the FSQ strategy for new major crime cases[83] will continue to delay court cases, impede police investigations and put Queenslanders at risk of being victims of violent crimes.
[84] DNA Review Information Request 28.4 'Leadership Group Meeting Reports', 5 July 2024, page 85.
[85] DNA Review Information Request 60, E-mail received from FSQ Implementation Project dated 4 April 2025.
[86] DNA Review Information Request 60 'FMEKS Sent to ESR', cover sheet.
[87] Information provided by QPS.

months until FSQ ordered for them to be fully tested in late February 2024.[88] This demonstrates to the DNA Review that FSQ is not prioritising victims of crime in decision making, and suggests FSQ is not appropriately supporting QPS efforts to resolve sexual offences.

127. The overall FSQ service DNA delivery failures have persisted for two and a half years, with clear data trends showing backlogs and turnaround times were growing at alarming rates, and had reached critical levels. The DNA Review Team could find no sufficient evidence to show the backlog of rape kits would be eliminated using current strategies within an acceptable timeframe and no evidence the service needs of the victims, police and courts would be met in the short to medium-term. The FSQ service delivery failures in respect of rape kits should not have been allowed to reach this magnitude, and to persist without intervention for so long.

4.3.7 The Government's Outsourcing Plan

128. The comprehensive DNA outsourcing plan announced by the government[89] on 22 May 2025 is supported by the DNA Review. Under the new outsourcing strategy, DNA samples for rape kits, most major crime cases, and unidentified human remains will be sent to external laboratories overseas for testing.

129. There are over 13,000 samples in the FSQ 'started cases' backlog, most of these are from major crimes. These cases have been started and are in a bottleneck at the end of the testing process. FSQ advised it will take about two years to clear this backlog.[90] Part of the FSQ strategy to clear this backlog relies on outsourcing only one part of the testing process (profile interpretation) to external experts. FSQ advised the average cost for outsourcing staff per FTE per year is $686,086 +CPI.[91] This is nearly five times the wage of FSQ employed staff who perform the same function. The DNA Review considers the government's end-to-end outsourcing strategy, rather than the FSQ 'partial outsourcing' strategy, is the fastest and most cost effective strategy to clear the rape kit backlog.

130. The Reviewers are of the view that:

(a) The 'started cases' backlog should continue to be the responsibility of FSQ to manage as it has advised there are complexities in transferring started cases to an external provider, and complexities identifying unstarted cases they currently hold.

(b) External providers should be accredited to the ISO/IEC 17025 standard and have a proven history of reliable service provision.

(c) An auditing and compliance plan should be developed by DoJ and QPS, with involvement from FSQ to provide proof of compliance to standards and ensure quality results are provided.

(d) This should be considered as a temporary DNA service delivery model which is needed for at least two years. It should have a flexible design to reduce reliance on external providers gradually over time as FSQ capacity increases.

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[88] DNA Review Information Request 60.6 'MEKS as ESR'.
[89] https://statements.qld.gov.au/statements/102595
[90] 'Forensic Science Queensland – Outsourcing Options', document provided by FSQ March 2025.
[91] 'Forensic Science Queensland – Outsourcing Options', document provided by FSQ March 2025.

(e) FSQ should only receive the number of cases it can process within the required timeframes of the police and courts, including cases nominated as priority for fast turnaround. The remaining samples should be outsourced.

(f) Reliable FSQ capacity, capability, and quality metrics should be evaluated by the DoJ and QPS to determine the monthly number of cases to be outsourced.

(g) The outsourcing approach should enable FSQ staff to maintain and enhance their skills through continued full time employment.

131. The Government's outsourcing plan will help to generate the following effects:

(a) enable results of new major crime cases to be provided within 8-12 weeks of receipt, and new volume crime cases to be provided by FSQ within 10 days;

(b) complete outstanding witness statements required by courts in a timely manner;

(c) give police, courts, and victims reliable timeframes for completion of testing of current cases and the historical case review;

(d) help clear the 'started' major crime and volume crime backlogs in a timely manner;

(e) complete the review and testing of all cold case homicides within 18 to 24 months;

(f) enable re-establishment of bone testing at FSQ;

(g) complete the testing of unidentified human remains within 10-12 months;

(h) complete current QPS requests for familial analysis for violent sexual assault matters within 6 months, and complete testing of 40 violent sexual assault cases (Sexual Crimes Unit) within 12-18 months;

(i) enable the timely completion of the historical case review;

(j) enable the timely completion of reforms;

(k) enable FSQ time to train new staff, introduce new methods and workflows;

(l) prevent burn-out of FSQ staff; and

(m) regain the public's trust in Queensland's forensic DNA service delivery model.

Recommendation 1	The DoJ should appoint a temporary team of independent and appropriately qualified experts ('DoJ Expert Team') to assist with the completion of relevant recommendations from the DNA Review.
Intent and desired end state	**Intent:** The DoJ Expert team will ensure relevant DNA Review recommendations are completed to best practice by the recommendation owner. **Desired end state:** The completed recommendations have met the intent and desired end state of the DNA Review recommendations across the DNA service delivery system.
Recommendation 3	A set of operational and strategic metrics should be developed by QPS and relevant end users within DoJ to monitor DNA service delivery by FSQ and all external providers (business as usual and FSQ historical case reviews). These metrics should include an agreed, acceptable range of service for end-users. The metrics should include but not be limited to: a) the quantity of DNA service provision (volume of testing and reporting) to QPS and the courts; b) the capacity of the DNA service delivery model; c) timeliness of results; d) the size of backlogs, and e) quality of results. These metrics should be regularly provided to and monitored by DoJ and QPS, and shared with relevant end users. A governance policy should be developed that requires pre-planned action when the acceptable range of service delivery in any category is not met.
Intent and desired end state	**Intent:** The operational and strategic metrics and governance policy will provide real-time transparency on the performance of Queensland's forensic DNA service delivery system to DoJ, QPS, and relevant end users. It will assist with forecasting DNA service delivery resourcing. The metrics and governance policy will prevent backlogs, excessive turnaround times, wide-spread quality failures, and ensure there is no significant reduction of service provision to end users. **Desired end state:** DNA service delivery is monitored to ensure it is provided within ranges that are acceptable by end users.

Attachment 1 Letter from Chief Magistrate Brassington to the Attorney-General the Honourable Deb Frecklington, 13 February 2025

MAGISTRATES COURTS OF QUEENSLAND
THE OFFICE OF THE CHIEF MAGISTRATE

Our reference: [redacted]

Brisbane Magistrates Court
363 George Street
Brisbane QLD 4000

GPO Box 1649
Brisbane QLD 4001

[redacted]

www.courts.qld.gov.au

13 February 2025

The Honourable Deborah Frecklington MP
Attorney-General and Minister for Justice and
Minister for Integrity
GPO Box 149
BRISBANE QLD 4001

Via email: attorney.general@ministerial.qld.gov.au

Dear Attorney,

Thank you for your letter informing me of the review into operation of Forensic Science Queensland (FSQ).

The Court has been concerned with the delay in obtaining forensic results, particularly DNA evidence. As you will know in committal proceedings for serious criminal offences the defendant is entitled to a brief of evidence before deciding whether to seek to either cross-examine a witness or consent to matters progressing through the committal process. The delay in receipt of forensic evidence is substantially delaying the progress of matters from the Magistrates Court to the Supreme and District Courts.

The delay is particularly concerning in cases involving sexual violence. Delay can impact on witness memory, can be a point of anxiety for both victims and defendants of not knowing how their matter is progressing and it is often as a factor in bail applications, particularly for serious offences. The increasing backlog of cases awaiting DNA draws upon the limited resources of the Court including by increasing the number of matters in our callovers and the number of contested bail applications.

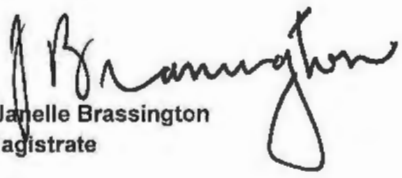
To try and address these issues the Magistrates Court has issued two new Practice Directions concerning DNA affected matters (Brisbane and surrounding areas only) and a sexual violence offence callover (Brisbane Magistrates Court cases only). These Practice Directions will facilitate callovers with the aim of streamlining criminal matters caught by the Practice Direction. The sexual violence callover is designed to complement the District Court's Practice Direction 3 of 2024 which established a Sexual Violence Callover.

The DNA callover has senior practitioners from the Office of the Director of Public Prosecutions, Queensland Police Service and Legal Aid Queensland in attendance to try to resolve matters pre-committal as to whether DNA evidence is required or not. Deputy Chief Magistrate Gett convenes these callovers to ensure consistency of practice. There are encouraging signs that progress is being made in identifying matters that should be prioritised. However, sustained improvement in clearance rates in serious indictable matters will only come if the delays in FSQ are addressed.

Finally, an important aspect of case-management is whether FSQ is able to provide timely and reliable advice as to the possible timeframes for DNA testing completion. This issue is critical in the Court management of cases. The current status of many cases is that there is no estimated time of arrival for DNA results. This lack of information can be frustrating to victims, defendants, and the Court.

These issues will obviously be of interest to the Review.

Yours sincerely,



Judge Janelle Brassington
Chief Magistrate

4.4 FSQ Use of Government Funds Allocated for Outsourcing

Key observations, findings, and conclusions in relation to improving the efficiency of FSQ's current DNA Service Delivery:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

<u>Use of Government Funds Allocated for Outsourcing</u>

(a) In December 2022, the Labor government approved $29.5M of funding for FSQ over three financial years (2022-23 to 2024-5) to support the contracting out of DNA analysis to external forensic service providers.

(b) The funding was held by Treasury in a contingency allocation.

(c) FSQ used ~$10M over three financial years for external providers to provide only partial services (one component of the DNA profiling process, as opposed to end-to-end outsourcing).

(d) On 17 July 2024, FSQ wrote a Brief to the Director-General of Queensland Health requesting that a letter be sent to Queensland Treasury requesting that funds held in contingency be released to Queensland Health in order to build FSQ in-house capability. FSQ advised the DG Health that this was a more cost-effective strategy to address sample processing delays.

(e) In September 2023, the request was approved [due to redactions on the documents received the decision maker is unknown to the DNA Review] and $19.5M was reallocated to capital expenditure on FSQ facility and infrastructure renewal, and new and upgraded equipment.

(f) When the decision was made to re-allocate the outsourcing fund in September 2023, the 'started cases backlog' had grown to over 18,000 samples (The DNA Review estimates this to be approximately one year's workload) and continued to increase until January 2024 when it reached a peak of 21,204 samples.

Based on this evidence, the Reviewers have formed the view that:

(g) End-to-end outsourcing would have prevented any new cases from early 2023 from being part of the backlog. The FSQ strategy has resulted in all new cases joining the ~12 to 14 month 'started cases backlog' queue.

(h) Since September 2023, the started cases backlog has declined but remains significant sitting at 13,000 samples as set out above and shown in Figure 10. This demonstrates the FSQ strategy to use outsourcing funds to build internal capacity did not have the desired effect of clearing the backlog.

(i) The DNA Review disagrees that building internal capacity was the best strategy to address the backlog, as building internal capacity takes many years, over which time the backlog would persist. A combined strategy of building internal capacity, partial outsourcing, and end-to-end outsourcing was required.

(j)	The DNA Review questions FSQ decision-making given the impact it had on police investigations, the courts, and victims awaiting justice.
(k)	It reveals that FSQ's decision to reallocate the funding caused police to wait a median of 412 days for major crime DNA results, and cases involving DNA are being delayed in the Magistrates court by two and half to three years.
(l)	The FSQ preference to develop in-house capabilities will take many years to clear the DNA backlogs in contrast to end-to-end outsourcing that would clear the backlogs in an appropriate timeframe.
(m)	This decision-making lacks strategic direction to facilitate the delivery of DNA services to the police, courts, and provide justice for victims without avoidable delay.

4.4.1 Summary

132. In December 2022, the government allocated $29.5M to FSQ to support further testing and analysis of samples for outsourcing DNA analysis to external providers. FSQ only used ~$10M of these funds for external providers to perform just one step of the DNA profiling process, rather than conduct end-to-end outsourcing. Despite significant and growing backlogs of crime scene evidence, in September 2023 Treasury and Queensland Health approved $19.5M to be reallocated for capital expenditure on FSQ facility and infrastructure renewal, and new and upgraded equipment. Significant backlogs remain at FSQ, some DNA evidence waiting nearly two years before being tested (refer to Section 4.3 - Current FSQ DNA Service Delivery).

133. The negative impact of this decision is still being felt today by victims, the police, and the courts.

134. The DNA Review considers that all of the $29.5M should have been spent on outsourcing, and further funds should have been requested or developing in-house capability. End-to-end outsourcing would have prevented any new cases from early 2023 from being part of the backlog. The FSQ strategy has resulted in all new cases joining the ~12 to 14 month 'started backlog' queue.

4.4.2 Background and Issues

135. In December 2022, after the Sofronoff Inquiry, the Labor government approved $29.5M of funding for FSQ over three financial years (2022-23 to 2024-5) to:

> *"support the contracting out of DNA analysis to external FSPs [forensic service providers]."*
>
> *The funding was held centrally in a contingency allocation.*[92]

136. By December 2022, there were approximately 8,000 samples in the DNA BAU 'started cases backlog'.[93] It was clear a significant effort was needed to address the Sofronoff Inquiry recommendations, keep up with BAU as well as reviewing and testing thousands

[92] DNA Review information request 10A.2, Ministerial Briefing Note (14 June 2023) page 2, paragraph 20, and Ministerial Statement Hon. Yvette D'Ath 29 March 2023. https://documents.parliament.qld.gov.au/speeches/spk2023/Yvette_D%27Ath-Redcliffe-20230329-835565766873.pdf
[93] DNA Review information request 29.3.

of historical cases identified throughout the Sofronoff Inquiry. Given the limited FSQ capacity, the growing backlogs, the large number of Sofronoff Inquiry recommendations that required addressing (123), and the need to manage thousands of historical cases, it would have been apparent end-to-end outsourcing[94] was essential to ensure both major and volume crime case types were managed in a holistic way using the allocated funds.

137. The $29.5M should have been sufficient to avoid the current FSQ backlog of major crime and volume crime. For example, the DNA Review obtained quotes from external providers to test 750 rape kits. Including transport and testing, this was costed at ~$4.5M (rough order of magnitude). Using a strategy to engage three large external providers, all 750 rape kits could be fully tested in under three months of receipt. The FSQ strategy of keeping end-to-end DNA services in-house has meant that a significant proportion of rape kits remained untested for well over 12 months, and results not provided.[95]

138. Consideration of the needs of victims and public safety should have guided the FSQ strategy to clear backlogs. However, the current FSQ backlogs are still at critical levels, causing police and courts lengthy delays, and denying victims justice.

139. The impacts of these delays were highlighted by Acting QPS Commissioner Chelepy in a letter to the DNA Review (refer to Attachment 2 **Letter from A/Commissioner Chelepy to Dr Kirsty Wright, 14 March 2025**

[94] End-to-end outsourcing refers to new cases being directed to an external laboratory who conducts all analysis and reporting of samples.
[95] Letter from A/Commissioner Chelepy to Dr Kirsty Wright, 14 March 2025.

QUEENSLAND POLICE SERVICE

COMMISSIONER'S OFFICE
200 ROMA STREET BRISBANE QLD 4000 AUSTRALIA
GPO BOX 1440 BRISBANE QLD 4001 AUSTRALIA
[redacted]

Our Ref:

Your Ref:

14 March 2025

Dr Kirsty Wright
DNA Review
Department of Justice

Dear Dr. Wright

I refer to your letter of 10 February 2025 regarding the DNA Lab Reform you have been tasked to oversee on behalf of the Attorney-General.

I note your request for advice from the Queensland Police Service (QPS) in relation to four specific components of DNA service delivery, including existing governance arrangements and appropriateness of the current funding model,. which have been addressed individually below.

Governance arrangements

The QPS has a significant interest in the operations of Forensic Science Queensland (FSQ) given the connection it has in the investigation of crime. Almost all examinations undertaken by its laboratories are triggered by the submission of items collected by the QPS. The range of testing available and the quality of results delivered, including their timeliness, greatly impact on our ability to solve crime, place perpetrators before the courts and protect victims and the broader community.

FSQ has been established under the *Forensic Science Queensland Act 2024* (the Act). Under the Act, the Director is appointed by the Governor in Council on the recommendation of the Minister. The Director holds the office on the terms and conditions decided by the Governor in Council. The Director is an independent statutory officer appointed for a term of five years and may be reappointed.

Although the QPS remains the central customer of FSQ, there is no legislative authority to direct FSQ functions. By virtue of FSQ being established as an independent Statutory Authority, the Director is independent from Government.

"Such delays stall the investigation of crime and ordinary court processes, add to the trauma and negative experiences observed by victims in pursuing a fair and timely justice process, and increase an offender's opportunity to reoffend."

140. In March 2023 FSQ provided a Brief to the Director-General of Queensland Health stating:

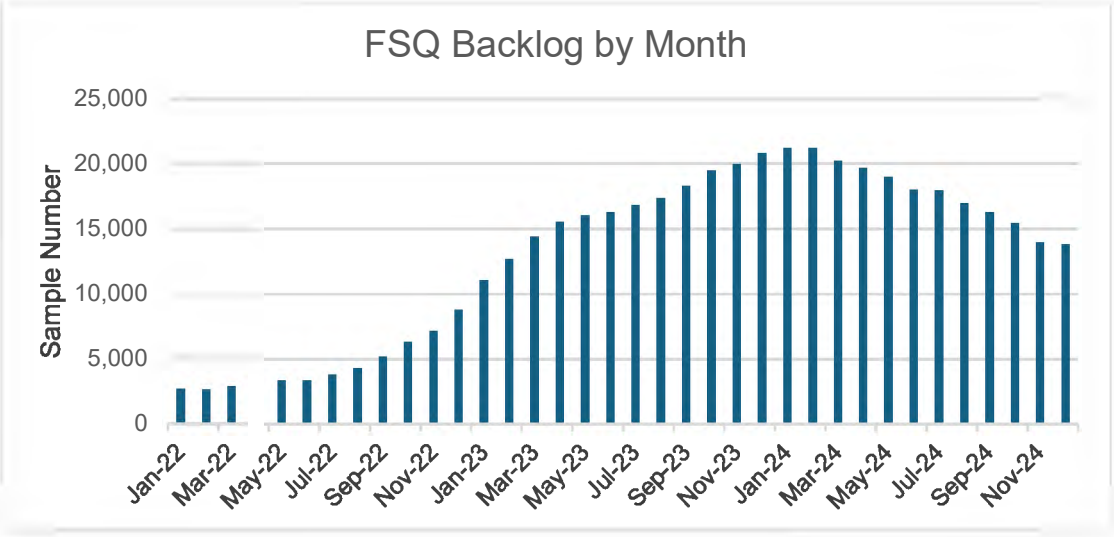
"The rate at which the backlog of unreported DNA samples is growing is not sustainable. The impact that this growing backlog is having on an already highly stressed workforce cannot be underestimated. The inability of the forensic biology laboratory to conduct DNA analysis and provide results to the QPS in a timely manner poses a significant risk to the continued detection and prevention of crime in Queensland".[97]

141. In March 2023 when this Brief was received the 'started cases backlog' (samples where testing had commenced but were not finalised) was over 14,000 samples[98] (see Figure 10) and had been growing for the preceding 8 months. It was also acknowledged in the FSQ brief to the Director-General of Queensland Health this was putting Queenslanders at risk of violent crime and property offences (see the preceding paragraph).

142. On 13 September 2023, the outsourcing funds ($19.5M) were approved to be repurposed.

"[funds] *for external DNA testing to be redirected towards building Forensic Science Queensland's in-house capacity as a more cost-effective strategy to address samples processing delays.*"[99]

Figure 10 The number of DNA samples in the FSQ 'started backlog.'



[96] Letter from A/Commissioner Chelepy to Dr Kirsty Wright, 14 March 2025.
[97] DNA Review Information Request 14B.2 'Attachment 1 to DG Brief – Critical risks summary at FSQ' 17 March 2023.
[98] DNA Review Information Request 29 'Backlog figures by months since January 2022'.
[99] DNA Review Information Request 14D.25: 'DG BA-Release of Treasury centrally held funds to Queensland Health'. Page 3, paragraph 3.

143. FSQ advised the DNA Review that the re-purposed $19.5M consisted of $0.4M operational funding and $19.1M in capital funding over four years which included facility and infrastructure renewal ($11.5M) which included a new office building for management and staff, new and upgraded equipment ($5.7M) some of which remains unused in boxes at the time of writing this report, and equipment upgrades ($1.95M).[100]

144. In September 2023 when this decision was made, the 'started backlog' had grown to over 18,000 samples[101] (approximately one year's workload), which was larger than when it was reported to the Director-General of Queensland Health in March 2023 as a 'high risk'.

145. The DNA Review questions this decision-making given the impact it had on police investigations, the courts, and victims awaiting justice (which includes police waiting a median time of 412 days for DNA results, and delays in the Magistrates court of 2.5 to 3 years). The FSQ preference to develop in-house capabilities will take many years to clear the DNA backlogs in contrast to end-to-end outsourcing of unstarted cases, and partial outsourcing of started cases that would have cleared the backlogs in an appropriate timeframe. This decision-making shows to the DNA Review that FSQ lacks the strategic direction to facilitate the delivery of DNA services to the police, courts, and provide justice for victims without avoidable delay. This is not consistent with the main purpose of the FSQ Act:

> *"The main purpose of this Act is to ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland."*[102]

146. Developing in-house capacity should have been considered alongside an end-to-end outsourcing strategy of unstarted cases, and the partial outsourcing of the started backlog. Hiring and training new staff, purchasing new instruments, validating new instruments, DNA methods and workflows, and conducting building works have their place but they take many years to complete to achieve the desired capacity required by FSQ to avoid the backlogs existing today (which the outsourcing funding was available to achieve). This strategy would have required FSQ to seek additional funding to build FSQ in-house capability, which together with the DNA outsourcing strategy would have assisted to clear the backlog.

147. Due to the lack of end-to-end outsourcing, the decline of the FSQ 'started cases' backlog has been slow, peaking at 21,204 in January 2024[103] and only declining by 7,297 over 11 months. This demonstrates that the re-purposing of funds for FSQ capital expenditure and internal capacity building has not been sufficient to address the backlog in a timely way. End-to-end outsourcing would have prevented any new cases police needed testing from when the outsourcing funds were allocated in December 2022 from being part of the backlog.

148. It is unknown why the FSQ strategy was approved given the DNA backlog increased by nearly 1,000 samples a month in the eight months preceding the decision. It is unknown why expenditure on testing DNA evidence for police and courts in a timely

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[100] DNA Review Information Request, e-mail correspondence from FSQ 2 May 2025 'Reallocation of FSQ Outsourcing Mondy'.
[101] DNA Review Information Request 29 'Backlog figures by month since January 2022'.
[102] DNA Review Information Request 14D.25: 'DG BA-Release of Treasury centrally held funds to Queensland Health'. Page 3, paragraph 3.
[103] DNA Review Information Request 29, Backlog figures by month since January 2022'.

manner using outsourcing was not prioritised by FSQ. The negative impacts of these decisions will be felt for a long time by victims, the police, and courts.

149. FSQ advised the DNA Review that $10M over three financial years was allocated to forensic DNA testing by external providers who performed only one portion of the DNA profiling process (as opposed to end-to-end outsourcing).[104]

> *"It should be noted that the $10M has been allocated to executed contracts currently in place at FSQ."*

150. Taken together the evidence suggests that FSQ may have been reluctant to opt for end-to-end outsourcing which is further demonstrated by the following examples:

(a) In 2024 FSQ failed to facilitate outsourcing requests by the QPS to external providers for cold case homicides.[105] FSQ did not release case file information to investigators and stated if they took resources off-line to find samples in freezers to be sent for testing, it would affect the progress of testing rape kits.[106]

(b) In December 2024, QPS engaged with an overseas provider to test priority rape kits. However, after the rape kits were sent, FSQ contacted the overseas laboratory and halted the testing. FSQ then requested their return, however, this could not occur as FSQ did not organise an import permit for the biological samples. The direction by FSQ to cease testing and return the rape kits untested was done without the knowledge or approval of QPS. Many weeks later, FSQ finally requested the overseas laboratory to fully test the rape kits.

151. It should be noted that QPS manages and controls the DNA samples under the Police Powers Act. Section 488B permits the Commissioner of Police to enter into a contract or other arrangement with one or both of the following: Director of FSQ or the chief executive officer of an accredited laboratory (that is, an external provider). While QPS have this power, it does not have the allocated funding to enable them to engage significantly with external providers.

152. FSQ was established under the FSQ Act and receives an annual budget of ~ $46M from the Queensland Government for forensic DNA and forensic chemistry testing. The QPS, as the key end user of forensic DNA services who manages and controls forensic evidence and who has statutory responsibility over criminal investigations, has very limited funds and control over DNA testing of their evidence by FSQ or any other service provider.[107] The current service delivery arrangement has taken control away from the QPS and is impacting their investigations.

153. FSQ has control over Queensland's DNA testing outsourcing budget. They have hired several contractors and private companies to assist FSQ with parts of DNA service delivery. It may be considered a conflict of interest that FSQ, as a service provider rather than an end user, has control of government funds allocated for outsourcing.

154. Acting QPS Commissioner Chelepy advised the DNA Review:[108]

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[104] DNA Review Information Request#10B. Response provided on 6 February 2025.
[105] QPS communication.
[106] QPS Communication.
[107] Information provided by QPS.
[108] Letter from A/Commissioner Chelepy to Dr Kirsty Wright, 14 March 2025.

"Although the QPS remains the central customer of FSQ, there is no legislative authority to direct FSQ functions. By virtue of FSQ being established as an independent Statutory Authority, the Director is independent from Government".

"I have been informed the governance framework of FSQ requires review to ensure that QPS regains primacy over the testing of its samples for the progress of its investigations. This should include the review of policy and legislative requirements that minimises influence of the QPS over the testing process that has been outsourced to FSQ."

155. In conclusion, the DNA Review has formed the view that:

(a) End-to-end outsourcing should remain in place while FSQ develops capacity to meet end user needs.

(b) QPS should be provided with funding for DNA services and be able to select between providers depending on service delivery and capacity. This is further discussed in the report.

Recommendation 4	An independent audit of FSQ's financial management and legislative compliance should be undertaken covering the period from January 2023 to present.
Intent and desired end state	**Intent:** The audit aims to understand whether FSQ is delivering their services effectively, efficiency, economically, and in accordance with policy and legislative requirements. The audit report will be used to improve the financial management of FSQ to better enable it to provide high quality, better value for money DNA services for end users. **Desired End State:** FSQ operates in an effective, efficient, and economically responsible manner in compliance with policy and legislative requirements.

Attachment 2 Letter from A/Commissioner Chelepy to Dr Kirsty Wright, 14 March 2025

QUEENSLAND POLICE SERVICE

COMMISSIONER'S OFFICE
200 ROMA STREET BRISBANE QLD 4000 AUSTRALIA
GPO BOX 1440 BRISBANE QLD 4001 AUSTRALIA
[redacted]

Our Ref:

Your Ref:

14 March 2025

Dr Kirsty Wright
DNA Review
Department of Justice

Dear Dr. Wright

I refer to your letter of 10 February 2025 regarding the DNA Lab Reform you have been tasked to oversee on behalf of the Attorney-General.

I note your request for advice from the Queensland Police Service (QPS) in relation to four specific components of DNA service delivery, including existing governance arrangements and appropriateness of the current funding model,. which have been addressed individually below.

Governance arrangements

The QPS has a significant interest in the operations of Forensic Science Queensland (FSQ) given the connection it has in the investigation of crime. Almost all examinations undertaken by its laboratories are triggered by the submission of items collected by the QPS. The range of testing available and the quality of results delivered, including their timeliness, greatly impact on our ability to solve crime, place perpetrators before the courts and protect victims and the broader community.

FSQ has been established under the *Forensic Science Queensland Act 2024* (the Act). Under the Act, the Director is appointed by the Governor in Council on the recommendation of the Minister. The Director holds the office on the terms and conditions decided by the Governor in Council. The Director is an independent statutory officer appointed for a term of five years and may be reappointed.

Although the QPS remains the central customer of FSQ, there is no legislative authority to direct FSQ functions. By virtue of FSQ being established as an independent Statutory Authority, the Director is independent from Government.

The FSQ Advisory Council (FSQAC) is also established under the Act as an advisory body, convened to monitor and review policies and procedures of FSQ and give advice or make recommendations about the administration of justice. FSQAC comprises membership from the QPS, the Office of the Director of Public Prosecutions, Legal Aid Queensland and members with specific expertise and qualifications in certain areas of discipline. There are two representatives from the QPS appointed as members of the FSQAC.

The Act provides the Director FSQ the power to establish committees for the purpose of obtaining expert advice on the performance of the Director's functions. The Director has established the Forensic Science Steering Committee (FSSC) as a decision-making body using these powers. Under the proposed Terms of Reference (TOR) the FSSC provides for system-wide oversight of the forensic science service delivery workflow in Queensland and the impacts on the Queensland justice system and the effective coordination and accountability in the management of forensic services across stakeholder agencies. The FSSC consists of 9 voting members, including 1 representative from the QPS at the rank of Superintendent. Representatives from other Queensland Government Departments are positioned within this Committee at a positional designation of Director-General equivalent, however the QPS experience has not been impacted as a result of variation in membership representation.

The QPS has raised concerns regarding the establishment of the FSSC with the Director, FSQ noting the Committee would operate as a decision-making body with potential for decisions to impact the services delivered to the QPS.

I have been informed the governance framework of FSQ requires review to ensure that QPS regains primacy over the testing of its samples for the progress of its investigations. This should include the review of policy and legislative requirements that minimises influence of the QPS over the testing process that has been outsourced to FSQ.

Service delivery

It is important that police obtain timely results from DNA testing to identify offenders and disrupt crime. This is especially the case for volume crime given recidivism rates and it provides an opportunity to return property to the victims. Timely results for major crime also generate leads and can prevent resources being diverted to unnecessary lines of enquiry.

Since the establishment of FSQ the size of the DNA backlog has increased considerably. As of 24 January 2025, there were approximately 14,000 samples awaiting testing. Further information is provided in the below table:

Crime Type	Total Cases	Total Samples	Number of samples relating to unsolved crimes	Number of samples relating to unsolved crime awaiting testing for more than 12 months
MAJOR	3387	10924	4362	2200
VOLUME	2309	2866		

The data indicates that approximately 4300 samples from unsolved major crime. More than 2000 of these unsolved major crime samples have been in the backlog for more than a year. These figures do not include over 600 sexual assault kits (SAKs) that have not commenced testing. A significant proportion of the SAKs have been in the queue for well over 12 months.

The rate of testing since the establishment of FSQ is concerning. The average turnaround time currently fluctuates around 200 working days (40 weeks) for both volume and serious crime. FSQ maintains a faster pipeline upon request which is categorised according to priority, however this is limited to a very small number of cases, meaning that the vast majority of cases continue to remain unprogressed due to priority cases taking precedence. Such delays stall the investigation of crime and ordinary court processes, add to the trauma and negative experiences observed by victims in pursuing a fair and timely justice process, and increase an offender's opportunity to reoffend.

I have been informed improvements in the timeliness of testing through enhanced case management would better serve the needs of all stakeholders in the justice system including victims, defendants and the judiciary. The QPS is required to take a lead role in the process given it holds the information that provides context to the case and is the agency responsible for liaising with victims and commencing prosecutions. The powers to collect and test a DNA sample is prescribed in the *Police Powers and Responsibilities Act 2000* and in that regard the Act does not provide FSQ with greater autonomy.

I understand you are interested in the QPS' views regarding a split case management model, and I have been informed the relevant subject matter experts are exploring evidence-based practice and research to inform a position. I intend to provide further information regarding this matter upon receipt.

The DNA COI findings acknowledged considerable issues in the testing of some samples in specific cases, resulting with some offenders potentially

being undetected. Since establishment of FSQ, a greater volume of cases remains untested routinely for protracted periods of time. The QPS has no recourse and cannot engage any other service provider to meet its needs given funding to implement expected remedial actions and reform recommendations was committed by Government directly to FSQ.

I am advised that in other jurisdictions the funding for DNA testing is direct to the police agency who arrange payment for testing through a fee for service model, with agreed performance criteria including quantum and turnaround times. This arrangement provides the opportunity for the police to engage other service providers when their demand for service exceeds the capacity of their primary service provider. It provides a business continuity avenue should the primary provider experience diminished capacity. Additionally, it provides the police the opportunity to seek services not delivered by the primary service provider. I am of the view that the QPS would benefit from a similar funding arrangement.

With respect to the review, the QPS is committed to engaging with this process to assist in highlighting deficiencies in the systems, structures and processes that have been established to enhance future operations of and identify opportunities for improvement to ensure public confidence in the collection and testing of DNA in Queensland.

I trust that this information assists with your review. Please contact [redacted]

Yours sincerely

SHANE CHELEPY APM
ACTING COMMISSIONER

4.5 Increasing FSQ DNA Testing Capacity

Key observations, findings, and conclusions in relation to improving the efficiency of FSQ's current DNA Service Delivery:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) The DNA Review notes the following strategies have been utilised already to try and increase testing capacity with limited success:

(i) From 2023 onwards FSQ tried to increase capacity by recruiting and training new staff (including contractors), upgrading facilities, and purchasing new instruments. However, these are costly and time-consuming and did not result in a noticeable increase in capacity in the short to medium term.

(ii) In response to the FSQ capacity and turnaround time issues, QPS has decreased sample submissions by 38.7% since April 2023. This did not see an improvement in turnaround timeframes and the DNA Review note that this is not a long term acceptable strategy to address FSQ capacity issues. (see Section 4.3.4);

(b) The DNA Review has identified two issues which if resolved, may increase FSQ capacity and efficacy, and eliminate the 'started cases backlog' faster.

Solution 1: Ceasing DNA testing of matters no longer required by the Courts

(c) A pilot project was conducted by QPS and DoJ on court data from February 2022 to October 2024 which identified 2,240 finalised major crime and volume crime matters that had not been removed from FSQ DNA testing lists. This represents ~15% of annual DNA sample submissions.

(d) The current process is manual, involving checking data between the QWIK (Courts and Tribunals) and QPRIME (QPS) information systems. It is also the responsibility of the QPS investigator to notify FSQ that the DNA samples no longer required testing, which often did not occur given this was also manual process.

Solution 2: Reducing FSQ Re-testing Rates of Crime Scene Samples

(e) In the Reviewers' experience, a laboratory with good processes, reliable instruments, and well-trained staff is expected to re-test less than 5% of DNA samples.

(f) The data shows a high re-testing percentage for all three priorities of samples, for two scientific methods (amplification and electrophoresis) across all three years analysed (2022, 2023 and 2024).

(g) Overall, the re-testing percentage remained at ~25% over 2022, 2023, and 2024 showing no significant improvement over the years (Figure 14). This indicates that in the last two years there may not have been any significant improvements in two key DNA profiling processes (amplification and capillary electrophoresis), or training associated with these processes.

(h) Over 2024, FSQ performed 3,097 extra tests due to reworking for one method (amplification), and 3,268 extra tests for the second method (electrophoresis). These are the two most expensive processes in DNA profiling and is taking up capacity that could be used to eliminate the backlog.

(i) In 2024 the re-testing percentage for one method (electrophoresis) for Priority 1 samples was 67%, for Priority 2 samples it was 42%, and for Priority 3 samples it was 13%. This suggests scientists are striving for a higher quality for Priority 1 samples, and that for ~60% of Priority 1 tests they receive they may not be satisfied the result is the best quality. If so, it is a concern that such a high percentage of results are not being considered the best quality. Sample priority should not dictate the level of quality that is afforded to a sample.

(j) There are a few possible reasons why the re-testing rates might be high:

(i) One reason may be the lack of awareness by FSQ of how high their current reworking rate is due to this data not being readily available in the Forensic Register.

(ii) Priority 1 and Priority 2 samples (major crime) are reworked two to three times more than Priority 3 samples (volume crime). FSQ has separate teams of scientists who work on major crime and volume crime cases. This data indicates that the major crime teams are re-testing DNA samples two to three times more than the volume crime team. This could be due to different policies in the different teams regarding the quality standards set for major crimes versus volume crime, or due to the quality of work being produced by the different teams.

(iii) An internal FSQ audit conducted in 2023 found that many previously validated / verified projects were considered ‘high risk’ because they were not conducted appropriately. Methods that have not been properly validated / verified are more likely to produce unreliable results. Despite this, FSQ continued using these methods, which could explain why ~25% of results cannot be relied upon the first time they are tested.

(iv) The validation of the capillary electrophoresis instruments, its ongoing maintenance and operation also requires review to ensure the instrument is working optimally. Reasons noted by the scientists when requesting the reworks suggest there are multiple issues with the quality of the results attributed to this instrument, which makes DNA profile interpretation difficult.

(v) It was also noted by the DNA Review that FSQ are not sufficiently monitoring the performance of their instruments, meaning that degradation of the instrument over time may not be detected between scheduled preventative maintenance by the manufacturers.

Based on this evidence, the Reviewers have collaboratively developed two solutions which would increase FSQ's testing capacity:

(k) The introduction of a new automated process that identifies matters involving DNA testing that are no longer required by the courts. This strategy is expected to reduce unnecessary DNA testing by ~15%, leading to a more efficient use of resources.

    (i) This process is essentially a new Report that can draw information from QWIK to QPRIME to see finalised cases with DNA submitted;

    (ii) This report is reviewed by the QPS DNA Liaison and Major Crime Unit (DLMCU, co-located at FSQ) to determine if DNA testing is still required. This is confirmed with QPS investigators.

    (iii) Testing is stopped on any matters where it is no longer required, which removes the samples from the FSQ worklist.

(l) The second is working to reduce the percentage of samples that have to be re-tested by implementing the following strategies:

    (i) FSQ should optimise methods causing high re-testing rates as a priority.

    (ii) FSQ should regularly capture and track their re-testing rates and also include that data in annual Quality Management Reviews as required by ISO/IEC 17025. The information should also be used for strategic planning to develop capacity.

    (iii) FSQ should re-prioritise Recommendation 32 (relating to the validation of FaSTR DNA software) to reduce the laboratory's reworking percentage, to save time, money, and to develop more capacity. FSQ advised the DNA Review this recommendation had not yet commenced because it requires two large validation projects and they are awaiting sufficient scientific resources within the validation team to commence, which are currently assigned to higher priority innovation projects.

    (iv) It is suggested that FSQ regularly checks data from their critical instruments and conducts trend analysis over time to monitor instrument performance.

4.5.1 Summary

156. The discussion in Section 4.2 highlights the lack of FSQ capacity to meet end user needs to deliver DNA services in a timely manner. FSQ tried to increase capacity by recruiting and training new staff (including contractors), upgrading facilities, and purchasing new instruments.[109] However, these are costly and time-consuming and did not result in a noticeable increase in capacity in the short to medium term.[110] In response to the FSQ capacity issues, QPS has decreased sample submissions by 38.7% since April 2023. This did not see an improvement in turnaround timeframes and

[109] DNA Review Information Request 14B.5 'Forensic Science Queensland Strategic Plan 2023-27'.
[110] DNA Information Request 29.1 '(CORRECTED) Backlog figures by month since January 2022'.

the DNA Review note that this is not a long term acceptable strategy to address FSQ capacity issues.

157. The DNA Review worked with QPS (including Police Prosecutions), Courts and Tribunals, Legal Aid, and bdna (the provider for the FSQ laboratory information management system, the Forensic Register) and found two possible solutions to increase capacity by reducing unnecessary testing. Both solutions could be achieved in the short to medium term and result in an improvement in testing capacity, cost savings, and eliminate the 'started backlog' sooner.

(a) Solution 1: The first is the introduction of a new automated process, which was implemented in June 2025 and is being trialled to identify matters involving DNA testing that are no longer required by the courts. This strategy is expected to reduce unnecessary DNA testing by ~15%, leading to a more efficient use of resources.

(b) Solution 2: The second solution aims to reduce the number of DNA samples which are unnecessarily re-tested. The DNA Review worked with bdna and found there was a ~25% rework[111] rate at FSQ. In the Reviewers' experience, within a properly functioning DNA laboratory, the reworking percentage is expected to be below 5%. This analysis found two main laboratory methods causing the need for re-testing (discussed in this section), which the Review recommends should be targeted and fixed as a priority.

158. Both solutions could result in a ~30% reduction in unnecessary testing, which will free up FSQ resources, save money, and create greater testing capacity. The Review believes that these initiatives would also significantly decrease turnaround times for all cases and reduce the 'started cases backlog'.[112]

4.5.2 Solution 1: Ceasing DNA testing of matters no longer required by the Courts

159. After FSQ has received a request for the testing of DNA evidence, the courts may finalise the matter without needing the DNA results (for example if the offender pleads guilty). The DNA laboratory will not know that this DNA test request is no longer required unless they are notified which previously often did not occur. The DNA Review recommends that a more streamlined and comprehensive process is implemented across three organisations (DoJ, QPS, and FSQ) to ensure this notification occurs.

160. As at January 2025, there were ~13,000 samples in the 'started cases' backlog at FSQ[113], and ~650 unstarted rape kits.[114] The Chief Magistrate has indicated delays for DNA testing results and statements are between 2.5 to 3 years.[115] Defendants are being held on remand for extended periods awaiting DNA testing results and statements, and overall justice is being delayed. FSQ has advised with its current capacity levels it will take just under two years to eliminate the 'started cases' backlog.[116] Therefore, any unnecessary testing is using vital FSQ resources that cannot be spared.

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[111] The 'rework rate' has been calculated on the total number of reworks for all samples tested for a given method. If a sample is reworked multiple times, this is included in the rework percentage.
[112] The 'started backlog' are DNA samples which have commenced testing at FSQ but have not been completed.
[113] DNA Review Information Request 29.1 'Backlog figures by month since January 2022.'
[114] DNA Review Information Request 20.01 '(20A) Forensic Biology Backlogs and Case Stats 14012025'.
[115] Communication with the Chief Magistrate and Deputy Chief Magistrate.
[116] 'Forensic Science Queensland – Outsourcing Options and Costings 12 March 2025.'

161. The 2018 Queensland Audit Office 'Delivering Forensic Science' report[117] analysed 32,630 finalised cases in the Magistrates Court, each involving one offender. Of these cases, 852 (3%) of the cases had unnecessary forensic testing conducted (652 cases related to DNA and illicit drugs). It was estimated that unnecessary forensic testing could be as high as 2,636 cases over a two-year period. The Audit Office recommended that a better interface of IT systems across departments, supported by notifications that alert agencies to changes to the status of a criminal investigation, could improve timeliness and information flow. The DNA Review had no evidence that any significant improvements over the last seven years have been made to address this issue.

162. Between February 2022 to October 2024 a pilot project was conducted by QPS and the Department of Justice which identified 2,240 finalised major crime and volume crime matters that had not been removed from FSQ DNA testing lists. This represents ~15% of annual DNA sample submissions.[118] This is a significant proportion of cases that do not require testing, especially for a laboratory struggling with large backlogs. It also represents a significant waste of public resources.

163. The manual process involves the Queensland Wide Interlinked Courts (QWIK) database automatically transferring court results (matters finalised) to the Queensland Police Reporting Information Management Exchange (QPRIME). However, there was no automatic way for QPRIME to inform the QPS DNA Management Unit and FSQ of which cases no longer needed DNA testing. Therefore, previously if an offender pled guilty, it was the responsibility of the QPS investigator to notify FSQ that the DNA samples no longer required testing, which often did not occur given it was a manual process.

164. In May 2025, the DNA Review facilitated a focus group with QPS (including Police Prosecutions), Courts and Tribunals, and Legal Aid which led to the identification of a new fully automated process, that was able to be developed and trialled weeks later, to capture and notify FSQ of samples that no longer needed testing as follows:

(a) QPS analytics commenced developing a QPRIME query that can identify matters finalised in the upper and lower courts between any given dates, where DNA samples have been taken and submitted to FSQ. An operator simply needs to nominate date ranges for court matters, then run the search query automatically. This could be done daily or weekly.

(b) The query generates a report that is reviewed by the QPS DNA Liaison and Major Crime Unit (DLMCU, co-located at FSQ). DLMCU conducts a review of each case to identify if there are any outstanding known suspects or unknown offenders, or any other need for the DNA testing to continue.

(c) Investigators are contacted to clarify any potential further testing requirements, or to advise them that testing is being stopped and to provide instructions to restart testing if required.

(d) Testing is stopped on any matters where it is no longer required, which removes the samples from the FSQ worklist.

(e) This fully automated process will replicate and replace the current process.

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[117] Delivering forensic services. Report 21: 2018-19', page 39. https://www.qao.qld.gov.au/sites/default/files/reports/delivering_forensic_services_report_21-2018-19_0.pdf

[118] Assuming an average of 3 samples per case, and an annual submission of 18,000 samples (as per 2024 annual submission to FSQ).

165. This QPRIME query is still being refined, however upon finalisation, should be a useful tool to rapidly identify finalised cases in real time.[119] This is a rapid and enduring solution which did not require additional funding to implement and will reduce pressure on FSQ human resources and budget, which the Reviewers anticipate will increase FSQ's testing capacity.

4.5.3 Solution 2: Reducing FSQ Re-testing Rates of Crime Scene Samples

166. In the Reviewers' experience, a laboratory with good processes, reliable instruments, and well-trained staff is expected to have a re-testing rate of less than 5% . This re-testing may be due to complex samples requiring further work to better inform scientists of the results, or an instrument or process error which should only occur rarely.

167. The Sofronoff Inquiry reported widespread issues across the QHFSS laboratory, including flaws in methods, training gaps, and improper validations.[120] These issues resulted in poor quality DNA results and in the Reviewers' opinion would create the need for samples to be re-tested to obtain better quality results.

168. The DNA Review worked with bdna to obtain the percentage of FSQ re-testing occurring (bdna can extract data from the Forensic Register, whereas FSQ cannot).[121] The data was interrogated over three years (2022 to the end of 2024) to understand which scientific processes caused significant reworking, the reason for the rework, and the percentage of reworks for different priority DNA samples:

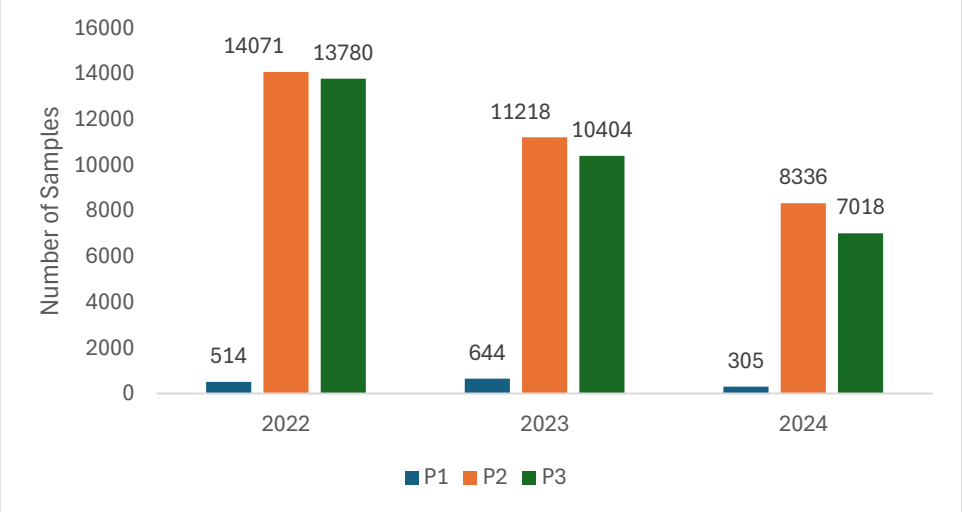
(a) Priority 1 samples (P1) - the most urgent major crime samples,

(b) Priority 2 samples (P2) - all other major crime samples, and

(c) Priority 3 - volume crime samples (P3).

169. P1 samples represents only on average 13 samples per month, while P2 and P3 samples submitted in approximately the same proportion (Figure 11).

Figure 11 Total number of crime scene samples submitted by QPS to FSQ for each priority between 2022 to 2025



[119] Information provided by QPS.
[120] Final Report 'Commission of Inquiry into Forensic DNA Testing in Queensland', 13 December 2022.
[121] Samples requiring further testing due to the Sofronoff Inquiry classified as 'DNA insufficient for further processing' are not included as a 'reworked' sample, neither were samples that underwent 'Micorcon concentration'.

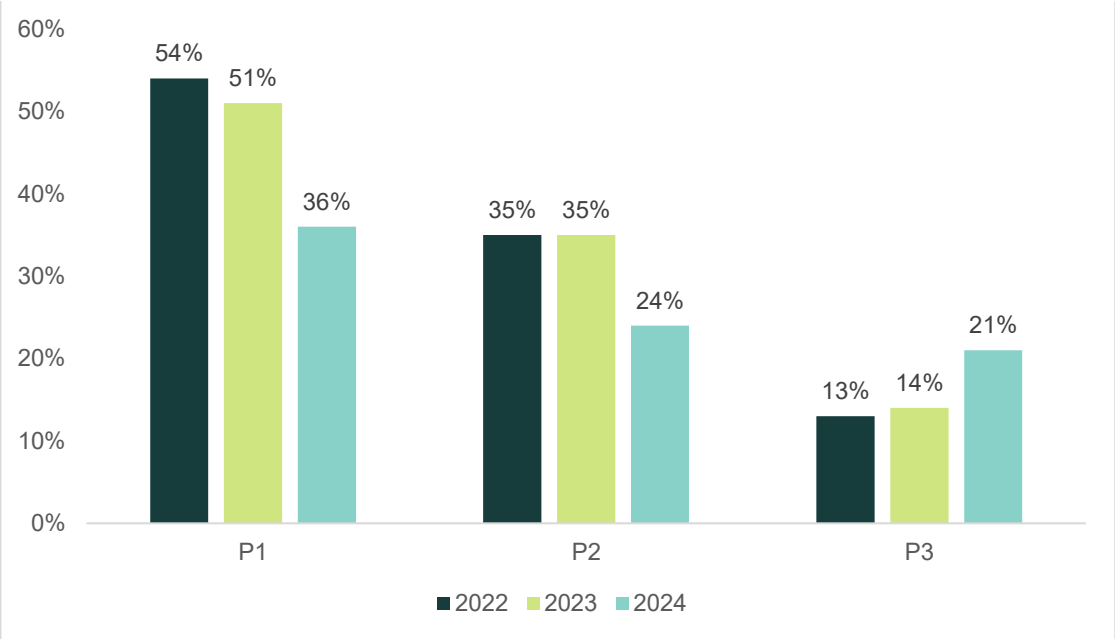
170. The data shows a high re-testing percentage for all three priorities of samples, for two scientific processes (amplification and electrophoresis across) across all three years (Figure 12 and Figure 13).[122] Over 2024, FSQ performed 3,097 extra tests due to re-testing for one method (amplification), and 3,268 extra tests for the second method (electrophoresis). These are the two most expensive processes in DNA profiling, and is taking up capacity that could be used to eliminate the backlog.

171. Priority 1 and Priority 2 samples (major crime) are re-tested two to three times more than Priority 3 samples (volume crime). FSQ has separate teams of scientists who work on major crime and volume crime cases. This data indicates that the major crime teams are reworking DNA samples two to three times more than the volume crime team. This could be due to different policies in the different teams regarding the quality standards set for major crimes versus volume crime, or due to the quality of work being produced by the different teams.

172. The DNA Review considers the level of quality produced by a laboratory should not be determined by what the sample category or offence type is, all samples should be processed to the highest quality standard, and all victims of crime should have the same opportunity at justice.

173. The data was also analysed to determine if the percentage of reworks had improved in the last two years since the conclusion of the Sofronoff Inquiry.

Figure 12 FSQ re-testing percentage by priority (amplification) and year (2022, 2023, and 2024).



[122] Figures derived from raw data provided to the DNA Review by bdna.

Figure 13 FSQ re-testing percentage by priority (capillary electrophoresis) and year (2022, 2023, and 2024).

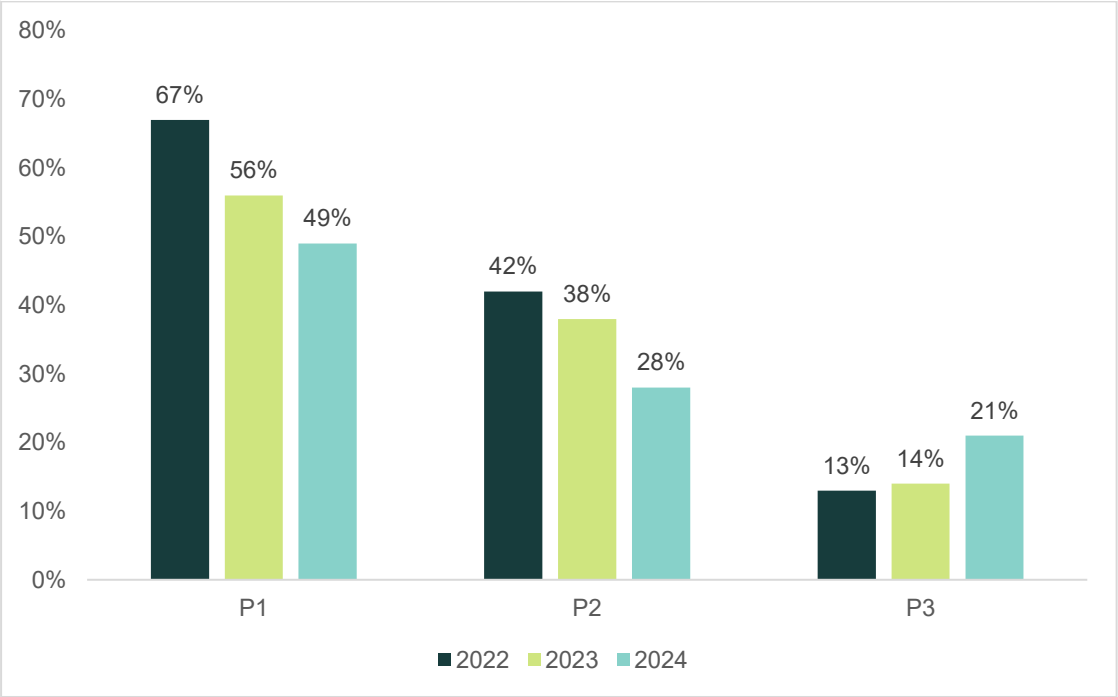
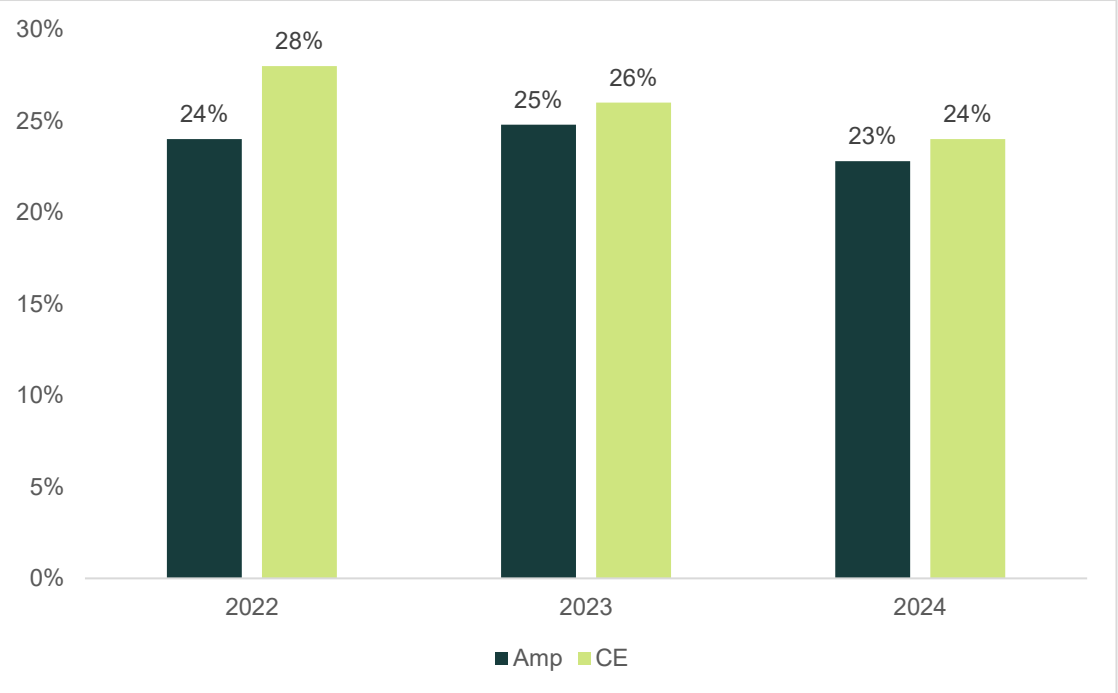


Figure 14 Total FSQ re-testing percentage for all P1, P2 and P3 sample priorities (amplification and capillary electrophoresis) for 2022, 2023, and 2024.



174. Overall, the re-testing percentage remained at ~25% over 2022, 2023, and 2024 showing no significant improvement over the years (Figure 14).[123] Over two years since

[123] Figures derived from raw data provided to the DNA Review by bdna. Note that P1 samples comprise of only on average 13 a month, whereas P2 and P3 are many hundreds a month, so an improvement in P1 sample reworks won't significantly improve the overall rework rate.

the Sofronoff Inquiry and the creation of FSQ this rework percentage should be closer to a normal rework percentage (under 5%). This indicates there may not have been any significant improvements in these two key DNA profiling processes, or training associated with these processes. One reason may be the lack of awareness by FSQ of how high their current re-testing rate is. should track this information regularly and also include it in annual Quality Management Reviews, and the information should be used for strategic planning to develop capacity.

175. Analysis of the data showed that some samples were re-tested up to five times for one process (amplification), though typically only twice. For the second process (capillary electrophoresis) samples were re-tested up to seven times, though typically two or three times. Five to seven attempts to obtain good quality results are considered excessive. The larger percentage of re-testing was observed for all priority of samples, however, was more common in P1 and P2 samples.

176. The data provided by bdna shows the reasons for a scientist to request re-testing of a sample is to either confirm the number of contributors in a DNA mixture, or to obtain more information from a DNA profile. However, ~25% of reworking relate to 'single contributor' profiles. That is, profiles relating to the DNA of one person, which are typically considered the easiest to interpret. This suggests even basic profiling processes at FSQ are not working optimally.

177. The DNA Review considers if critical processes were working optimally then the need to re-test samples to obtain more information would rarely be required. That is, the processes should be optimised so the best result is obtained the first time it is tested. The DNA Review found FSQ is using a number of methods that were not validated / verified (discussed in Section 4.6.3). An internal FSQ audit conducted in 2023 found that many previously validated / verified projects were considered 'high risk' because they were not conducted appropriately. Despite this, FSQ continued using these methods, which could explain why the re-testing rate is so high.

178. Recommendation 32 from the Sofronoff Inquiry recommended that FSQ should consider:

> *"a. the validation and consistent use of the variable number of contributors feature in STRmix to assist in the interpretation of profiles where a single number of contributors cannot be assigned; and*
>
> *b. the validation and use of FaSTR DNA to assign the number of contributors to a profile."*[124]

179. FaSTR DNA is a software program that allows scientists to optionally estimate the number of people who may have contributed to a DNA mixture, rather than the version of software FSQ currently has which requires scientists to assign a specific number of people. This software would greatly assist scientists to better interpret DNA mixtures reducing the need for re-testing (re-testing is being used by FSQ scientists to have a more reliable indication of how many people's DNA is in a DNA mixture). FSQ advised the DNA Review this recommendation had not yet commenced because it requires two large validation projects and they are awaiting sufficient scientific resources within the validation team to commence, which are currently assigned to higher priority innovation projects.[125] The DNA Review suggests FSQ should re-prioritise Recommendation 32 to

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[124] Final Report" Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022. https://www.health.qld.gov.au/__data/assets/pdf_file/0036/1196685/final-report-coi-dna-testing-qld-dec-2022.pdf

[125] DNA Review Information Request 53 'Table of FSQ Responses to FSQ Requests'.

reduce the laboratory's re-testing percentage, to save time, money, and to develop more capacity.

180. The validation of the capillary electrophoresis instruments, its ongoing maintenance and operation also requires review to ensure the instrument is working optimally. Reasons noted by the scientists when requesting the reworks suggest there are multiple issues with the quality of the results attributed to this instrument,[126] which makes profile interpretation difficult.

181. It was also noted by the DNA Review that FSQ are not sufficiently monitoring the performance of their instruments[127], meaning that degradation of the instrument over time may not be detected between scheduled preventative maintenance by the manufacturers. It is suggested that FSQ regularly checks data from their critical instruments and conducts trend analysis over time to monitor instrument performance.

182. Finally, the high re-testing rate is a reflection that case reporting scientists who worked at QHFSS and are now working at FSQ, care about the quality of results they are providing the police and courts. They should not be discouraged from re-testing samples they believe are not the best quality. Rather, they need to be better supported through training (Refer to Section 7.4.5), and by ensuring methods and processes in the laboratory are being properly validated / verified, and instruments are being maintained.

Recommendation 5	**5.1** FSQ should optimise DNA profiling methods identified by the DNA Review responsible for the high retesting rates. **5.2** FSQ should prioritise the completion of Recommendation 32 (the validation of software to assist FSQ with mixture interpretation).
Intent and desired end state	**Intent:** The FSQ methods responsible for high retesting rates will be optimised so they are robust, working accurately, and reliably. Any staff training associated with optimising the methods will be completed as a priority to facilitate reducing retesting rates. **Desired End State:** The FSQ optimisation reports have been provided to the DoJ Expert Team for review. Re-working rates are included in the annual FSQ Quality Management Review. The FSQ retesting rate is significantly reduced and regularly monitored. FSQ managers encourage scientists to retest samples when needed to generate improved results. Recommendation 32 will be completed within six to twelve months.

[126] Raw data provided by bdna.
[127] Information obtained during interviews with FSQ staff.

4.6 Release of Unreliable Results by FSQ

Key observations, findings, and conclusions in relation to improving the accuracy of FSQ's current DNA Service Delivery:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Release of Unreliable Results by FSQ

(a) The DNA Review have found that FSQ is providing unreliable DNA results to the police and courts, and have been since early 2023.

(b) The unreliable results are due to multiple issues including:

(i) systemic DNA contamination (ie, DNA from unknown sources, such as laboratory surfaces or instruments, people, or other samples which can be unintentionally introduced into crime scene samples). DNA contamination is a significant issue because it may not be detected in crime scene evidence compromising the reliability of the results. DNA contamination is detected weekly at FSQ which is a highly unacceptable level;

(ii) the use of methods that have not been validated and/or verified in casework by FSQ, or methods that FSQ found are at high risk of not being reliable;

(iii) the continued use of methods that internal projects have demonstrated produce significantly less DNA than other methods.

(c) The 17 March 2023 Briefing Note from FSQ to QH (and its attachment) has caused the Review to form the following views:

(i) FSQ were aware unreliable results were being provided to the police and courts from early 2023;

(ii) In March 2023 the FSQ CEO was unable to assert complete confidence in methods used by the laboratory, and advised there was a significant DNA contamination risk that could undermine the criminal justice process.

(iii) FSQ were aware the results were so unreliable that they may need to be reviewed and re-tested at a later date as part of the historical case review;

(iv) Release of unreliable results by FSQ may have impacted victims' chance at justice, may have prevented apprehension of violent repeat offenders, and has put Queensland communities at risk of harm.

(v) That FSQ has suffered from a deficient risk management process, and an inappropriate quality management culture.

(vi) There appears to be a failure to communicate any of the issues outlined in the March Briefing Note by FSQ to end users.

(d) FSQ's recommended path forward to Queensland Health in March 2023 to address the unreliable results was to continue with the recruitment of new staff and provide further staff training. The DNA Review considers that the most appropriate course of action in March 2023 should have been to immediately cease testing DNA evidence, inform all

relevant end users and FSQ staff of the issues, provide addendum statements for all affected statements released, commence a comprehensive outsourcing strategy, expand the historical case review to include the affected cases, and not re-commence testing until all methods and instruments had been deemed reliable by independent experts, and all staff fully trained and proficiency tested as competent. This did not occur.

(e) These issues are affecting BAU cases, the historical case review, and are relevant to the ongoing FSQ reforms.

(f) These issues compromise the reliability and accuracy of FSQ DNA services for the police and courts.

Unreliable methods

(g) In October 2023, two FSQ projects revealed significant failings with DNA extraction methods (methods used to recover DNA from crime scene evidence) relating to Maxwell FSC and Maxwell 16.

(i) The first project found that a method used on blood and cells (Maxwell FSC) recovered 18% to 34% less DNA than another method used by FSQ (QIAsymphony).

(ii) The second project conducted in October 2023 demonstrated that one method (Maxwell 16) was recovering 50% less DNA from semen than another method (Maxwell FSC).

(h) The DNA Review considers that concerns with both methods (Maxwell FSC and Maxwell 16) should have been immediately communicated to police (and/or disclosed in reports that would form part of the prosecution disclosure to the courts and defence lawyers), and the Interim DNA Advisory Board. In addition, the methods should have ceased being used immediately, evidence should have been outsourced to another accredited laboratory, addendum statements issued, and where possible, affected evidence re-tested by another laboratory.

(i) The DNA Review has found that since October 2023 FSQ presented unreliable DNA evidence using these methods to the police (who then used that before the courts) despite the awareness they had, given the commencement of the Bennett Inquiry into Project 13 and the reputational risks.

FSQ Internal Audit

(j) An FSQ internal audit was conducted by the FSQ Research and Innovation Team (the **internal audit**) between December 2023 and February 2024. Six Audit Reports were produced which were presented to the FSQ quarterly Quality Assurance Forum in May 2024. The Internal Audit reports stated:

(i) In total, 250 FSQ projects were risk assessed;

(ii) Of those, 50 were assessed as being 'high risk' relating to scientific methods and instruments. The deficiencies relate to the improper validation or verification of scientific methods and instruments;

(k) The Reviewers' concern is that issues highlighted in the internal audit reports could lead to missed DNA evidence, incorrect scientific interpretations, or contamination of evidence with DNA.

Based on this evidence, the Reviewers have formed the view that:

(l) After reviewing these reports, the DNA Review's concern is that FSQ has not remediated all of the high risk projects, and continued using the instruments and methods on crime scene evidence risking the provision of unreliable results to the police and courts.

(m) The DNA Review found no evidence that the police, courts or DNA Advisory Board were made aware by FSQ of these critical findings presented in the internal audit reports. The DNA Review found evidence the internal reports were intentionally not shared with FSQ staff, including reporting scientists. Reporting scientists were therefore placed in a position where they could not warn the police and courts of the limitations and unreliability of the evidence they were presenting.

Supreme Court Practice Direction 14

(n) In July 2024 Supreme Court Practice Direction 14 commenced specifically requiring experts to disclose any limitations or uncertainty affecting the reliability of results including the scientific validity of expert evidence.

(o) While there is a section in each annexure titled 'Validity and Error Rates', none of FSQ's statement annexures provided disclose information about the findings of the FSQ internal audit, the flawed Maxwell FSC and 16 DNA extraction methods, the unreliability of these methods, the systemic contamination, or competency concerns management had of various staff.

NATA Assessment July 2024

(p) FSQ was assessed by the National Association of Testing Authorities (NATA) in July 2024, which is a requirement to maintain its accreditation to ISO/IEC 17025 (2017). The key findings identified were:

(i) NATA found 15 major non-conformances including lack of validation / verification for some methods and instruments, and deficiencies in the FSQ training program. This is considered a large number of non-conformances.

(ii) Out of over ~250 methods and instruments, only three methods and instruments were found by NATA to be insufficiently verified resulting in an assessment of 'major non-conformances' despite FSQ being aware of more (as reported in the FSQ internal audit). All three were identified as 'high risk' projects in the FSQ's internal audit.

(iii) The NATA assessment also found a major non-conformance in the FSQ training and competency program, finding it will likely take at least five years to implement the new training program fully (although a staged approach is being taken).

(iv) NATA revisited FSQ on 29 to 30 May 2025 to assess the adequacy of actions taken by FSQ to address all nonconformity findings from July 2024, and to determine if FSQ should retain its accreditation. NATA reported the "facility is operating at a standard that demonstrates it is competent to perform the

activities for which accreditation is held." Two minor findings were recorded for FSQ to address (neither related to contamination concerns).

(q) On 3 January 2025, FSQ provided a briefing note to the Attorney-General (the AG Briefing Note) outlining the outcome of the NATA audit. It is the DNA Review's opinion that the flawed DNA extraction methods, the extent or impact of the unreliable methods and instruments, and the systemic DNA contamination were not disclosed to the Attorney-General in that Briefing Note.

(r) FSQ is currently performing a 'technical refresh' on a number of key instruments and methods to replace the unreliable methods. In the Reviewers' experience, the validations and verifications of the new instruments and methods are likely to take years to complete.

(s) The risk strategy that FSQ decided upon in June 2024 was to accept the results from critical and unreliable methods and instruments for a number of years while new methods and instruments are being introduced to replace them. It is the opinion of the DNA Review that this is an unacceptable risk strategy.

(t) It is well known across the forensic science community, and by the DNA Review, that if validation or verification is found to be inadequate, an organisation should not continue to use the methods or instruments in casework until the issues are rectified.

(u) The 'FSQ Operational Risk Register' demonstrates FSQ was aware of the risks it was accepting/tolerating by using methods (including the tapelift, acid phosphatase, sperm microscopy, and p30 methods) on sexual assault cases that are not verified.

Systemic Contamination at FSQ

(v) Systemic DNA contamination from unknown sources affecting crime scene samples was disclosed by FSQ staff members to the DNA Review on 13 May 2025. This was the same month NATA visited FSQ and came to the conclusion the laboratory met its accreditation requirements. It is unknown whether FSQ advised NATA of the systemic contamination issues it was experiencing during the auditing period.

(w) For crime scene evidence at FSQ, this was reported to the DNA Review as occurring at least weekly and was being detected through negative controls (samples with no DNA). However, the true prevalence may be much higher given contamination is sporadic and may affect crime scene samples without affecting negative controls (which are unknown profiles, making detection of extra unknown DNA from contamination difficult).

(x) Systemic DNA contamination within a forensic biology laboratory is one of the greatest risks to the accuracy and reliability of evidence. Results should not be released if contamination is detected. In the DNA Review's experience, contamination is expected to occur rarely in a forensic biology lab).When it does occur, the process involved in the contamination should be ceased, the source of the contamination needs to be identified, removed, and the forensic biology laboratory should undergo a deep clean (which should be occurring regularly to mitigate against contamination).

(y) The DNA Review has concluded that FSQ has not taken the course of action in line with best practice.

(z) Between 1 January 2023 to 31 May 2025 there was 678 out of 1,214 (55.8%) environmental samples with detectable DNA contamination at FSQ. The DNA Review

considers this to be unacceptably high. The environmental contamination represents a high risk for the reliability crime scene evidence results produced by FSQ.

(aa) On 20 June 2025 the FSQ Director was stood down over contamination concerns and FSQ paused testing. Limited testing recommenced on 4 July 2025 prior to investigations to locate and remedy all sources of contamination being completed.

(bb) FSQ conducted an investigation into two of their DNA extraction robots and found "*significant contamination was observed with both instruments*". The DNA Review considers this a high risk for crime scene samples which have been processed on these robots. These robots are not being used in the limited retesting.

(cc) FSQ documents show that the systemic DNA contamination was discussed at the monthly 'Leadership Group' meetings (Forensic Biology) from January 2024, and in the quarterly Quality Assurance Forums from February 2024.

4.6.1 Summary

183. This section discusses FSQ providing unreliable DNA results to the police and courts. The unreliable results are due to multiple issues, including systemic DNA contamination (ie, DNA from unknown sources, such as laboratory surfaces or instruments, people, or other samples which can be unintentionally introduced into crime scene samples). DNA contamination is a significant issue because it can be detected in crime scene evidence compromising the reliability of the results. DNA contamination is detected weekly at FSQ[128] which is highly unacceptable level.

184. Another issue is the use of methods that have not been validated and/or verified in casework by FSQ. Validation/verification is the experimental process of ensuring a procedure, method, or instrument is accurate, reliable, reproducible, and fit for purpose, and is a requirement of the accreditation standard that FSQ needs to comply with.[129] The issues outlined in this report are relevant to TOR-4 to TOR-7 of the DNA Review. There is some unavoidable overlap with TOR-13 given scientific processes are also relevant to accurate and reliable service provision, and the conduct of the historical case review.

185. These issues are affecting BAU cases, the historical case review, and are relevant to the ongoing FSQ reforms. These issues compromise the reliability and accuracy of FSQ DNA services for the police and courts. This would be inconsistent with the main purpose of the FSQ Act:

> *"The main purpose of this Act is to ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland."*

186. FSQ has not disclosed the extent of these critical issues to reporting scientists, the police, or the courts, risking inaccurate judicial outcomes and police investigations, jeopardising community safety, and potentially wasting critical evidence. See Attachment 6 for a timeline of events.

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[128] FSQ Communication.
[129] ISO/IEC 17025: 'General Requirements for the competence of testing and calibration laboratories'.

187. On 17 March 2023 FSQ provided a Briefing Note to the Director-General of Queensland Health with an attachment outlining several issues (referred to in the Briefing Note as 'Attachment 1') (the **March Briefing Note**):[130]

> *"There is a significant risk that samples being analysed under current processes may not be delivering optimal outcomes or may require re-analysis in the future under the Historical case review process. This risk will continue until all the processes are re-validated."*
>
> *"The CEO is unable to assert complete confidence in the methods utilised by the Forensic Biology until this work is undertaken."*
>
> *"The level of knowledge of current forensic biologists within FSQ is a significant risk that must be addressed urgently to provide confidence that errors are not being made with current samples and processes. The CEO is unable to assert complete confidence in the work being undertaken by forensic biologists until this further training is conducted."*

188. It should be noted that existing FSQ scientists had been following standard operating procedures and completed all training required of them by previous management. The Sofronoff Inquiry found that it was the training, standard operational procedures and previous management which were the issue and not the staff. The DNA Review observed that the QHFSS staff who remained at FSQ were dedicated, eager to learn, and wanted to be given an opportunity to advance their skills. The DNA Review also observed many FSQ staff who were dedicated to trying to improve the quality issues outlined in this section and has concluded that they would benefit from further and significant support.

189. The March Briefing Note continues:

> *"Further, failure to address these risks in a timely and effective manner will contribute to ongoing and long-term delays in the Queensland justice system and may adversely impact matters before the courts."*
>
> *"The significant potential for contamination introduces risks to the integrity of exhibits, and therefore risks undermining the criminal justice process. In particular, the Evidence Recovery function carries the highest risk for contamination and requires sterile, DNA-free spaces with minimal contamination risks."*

190. Due to the extent and seriousness of these issues, it is the opinion of the DNA Review that in or around late March 2023:

(a) FSQ should have stopped receiving and testing DNA evidence until all issues were resolved, promptly notified all end users, and released addendum statements for all DNA evidence processed using unreliable methods; and

(b) a comprehensive outsourcing strategy should have been immediately implemented using the $29.5M allocated to FSQ in December 2022 for this specific purpose.

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[130] DNA Review Information Request 14B.2: 'Attachment 1 to DG Brief-Critical Risks Summary at FSQ.' DNA Review Information Request 14B.1: DG Brief- FSQ Short term accommodation options'. This information request provided in folder titled 'DNA Service Delivery Documents-Management'.

191. However, none of this occurred and in September 2023 a decision was made to repurpose $19.5M that was allocated for outsourcing (refer to Section 4.4 - FSQ Use of Government Funds Allocated for Outsourcing). [131]

192. FSQ found further confirmation of unreliable results in October 2023, discovering their methods recovered up to 50% less DNA from crime scene evidence compared to other internal methods,[132] however, FSQ decided to continue using the flawed[133] DNA methods.

193. In late 2023 an FSQ internal audit of previous projects relating to methods used by FSQ reported ~50 projects (~25%) were considered 'high risk',[134] and several methods currently being used had not been appropriately validated or internally verified. The National Association of Testing Authorities (NATA) 2024 assessment of FSQ also reported methods used on crime scene evidence were not validated or verified leading NATA findings of 'major non-conformances', which if not addressed within a given timeframe would result in FSQ losing their accreditation.[135]

4.6.2 Background and Issues

194. The Inquiries reported the following of the QHFSS organisation:[136]

(a) Management knowingly provided unreliable evidence to the police and courts;

(b) The unreliability of the evidence was not disclosed to the police or courts by laboratory management, and stakeholders were deliberately misled to conceal the laboratory's failures;

(c) Management concealed the extent of the failures from reporting scientists; and

(d) A poor quality culture was adopted by laboratory management leading to systemic unreliability of evidence.

195. The findings led to a major overhaul of the forensic biology laboratory, and establishment of a 'historical review' of major crime cases from 1 September 2007 to 30 April 2023 (~41,000 cases). Community trust in the provision of forensic science services and the judicial process in Queensland was significantly impacted. It should be noted that the Inquiries found many technical issues with the forensic biology laboratory which resulted in recommendations in the final report. However, given the relatively short timeframe of the Sofronoff Inquiry, it was not possible to investigate and find all unreliable methods and instruments.

196. It should also be noted that the unreliable methods and staff competency issues outlined in the Sofronoff Inquiry were attributed to the previous QHFSS management.[137]

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[131] DNA Review Information Request 14D.25: 'DG BA-Release of Treasury centrally held funds to Queensland Health'. Page 3, paragraph 3.
[132] Project 256 'Extraction efficiency comparison of current DNA extraction methods for blood and trace samples', 30 October 2023. Project 275 'Extraction efficiency of semen', October 2023.
[133] Ie, methods shown to not work effectively, producing a lower quality result than is expected.
[134] DNA Review Information Request 31.1 to 31.6 'Review of Scientific Processes'.
[135] [135] DNA Review Information Request 19 'List of all findings of the 2024 NATA assessment for FSQ'.
[136] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland, 13 December 2022. Sections 4 and 5.
[137] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland, 13 December 2022, sections 4 and 4.

This DNA Review focuses on events occurring at FSQ in relation to the provision of unreliable DNA services since the Inquiries.

197. FSQ provided a Briefing Note to the Director-General of Queensland Health on 17 March 2023. FSQ reported that the issues are:

> *"more widespread than the CoI first anticipated."*[138]

198. Several 'risk reports' were attached to the Briefing Note including 'Need for revalidation of end-to-end forensic biology processes', 'Capacity and capability of existing forensic biology scientists', and 'The layout of the Forensic Biology facilities does not support the operation of a best-practice facility'.

199. The following critical issues were reported in the March Briefing Note attachment:

> *"Risk 4: Need for revalidation of end-to-end forensic biology processes."*
>
> *"A comprehensive, end-to-end re-validation of all methods and critical equipment used within the Forensic Biology laboratory must be conducted as a matter of urgency, putting business-as-usual operations under stress and implementation timeframes at risk."*
>
> *"There is a significant risk that samples being analysed under current processes may not be delivering optimal outcomes or may require re-analysis in the future under the Historical case review process. This risk will continue until all the processes are re-validated."*
>
> *"The CEO is unable to assert complete confidence in the methods utilised by the Forensic Biology until this work is undertaken. This confidence is necessary to begin to rebuild stakeholder confidence in forensic biology, and in the criminal justice system more broadly. Samples currently undergoing analysis may require re-analysis in the future, and this situation will continue until all methods and critical equipment are fully reviewed and re-validated to meet best practice requirements."*
>
> *"Risk 5: Capacity and capability of existing forensic biology scientists."*
>
> *"The level of knowledge of current forensic biologists within FSQ is a significant risk that must be addressed urgently to provide confidence that errors are not being made with current samples and processes. The CEO is unable to assert complete confidence in the work being undertaken by forensic biologists until this further training is conducted."*
>
> *"Samples currently undergoing analysis may require re-analysis in the future, and this situation will continue until staff training is adequate to ensure that all samples are processed in a way that meets best practice requirements."*

200. The DG Brief further reported that:

> *"These doubts extend to several of the remaining senior members of the Forensic Biology team."*

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[138] DNA Review Information Request 14B.2: Attachment 1 to DG Brief-Critical Risks Summary at FSQ.' Page 8, paragraph 3.

"There is a need to fully re-train existing Forensic Biology scientists in contemporary forensic biology techniques, including safety procedures and laboratory contamination minimisation."

"The FSQ CEO has stated that she is not able to assert complete confidence in the work being undertaken by Forensic Biologists until further training is conducted."

201. The March Briefing Note materials such as those cited above has caused the Review to form the view that FSQ has not prioritised the needs of the victims, police or courts, not properly considered community safety, has a poor quality culture, suffer from a deficient risk management process, an ineffective and inappropriate risk culture, and has exhibited a general lack of knowledge of risk management (for example, FSQ are treating issues[139] as risks[140]).

202. The DNA Review acknowledges that it would be difficult for QHFSS staff that remained at FSQ to read the statements contained in the March Briefing Note. We emphasise our previous points that the DNA Review observed staff originally employed by QHFSS who remained at FSQ to be hard-working, dedicated, and ethically motivated to rebuild FSQ. We observed these staff wanted to learn and expand their skills, but in some instances were not afforded that opportunity.

203. Another key "High Risk" issue raised in the March Briefing Note was the contamination issue in the Forensic Biology laboratory which FSQ advised was due to the layout of laboratory that does not support the operation of a best-practice facility. The March Briefing Note asserted that the Forensic Biology and Forensic Chemistry laboratories do not meet acceptable standards to allow for quality work, also posing a risk to workplace health and safety. The internal Audit Report also identified several "High Risks" related to DNA contamination.

204. The March Briefing Note states under 'RECOMMENDATION[141]':

"It is recommended the Director-General:

Note the Current Critical Risks at FSQ outlined in Attachment 1;

Note these risks will be outlined by [redacted] at the FSQ Advisory Board Meeting on 28 March 2023;

Note these risks have not yet been raised with the Department of Justice and Attorney-General (DJAG) or Department of the Premier and Cabinet (DPC): and

Note these risks have not been raised with the Minister for Health and Ambulance Services".

205. The Briefing Note also stated:

"Further, failure to address these risks in a timely and effective manner will contribute to ongoing and long-term delays in the Queensland justice system and may adversely impact matters before the courts. In light of [redacted]

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[139] Issues have 100% certainty that they will occur.
[140] Risks are the effect of uncertainty on objectives.
[141] DNA Review Information Request 14B.1: DG Brief- FSQ Short term accommodation options'.

concerns, these matters will be highlighted with the FSQ Advisory Board at their first meeting on 28 March 2023."

206. The minutes of the FSQ Advisory Board for 28 March 2023 do not contain any information about the critical issues contained in the March Briefing Note, neither do minutes from any subsequent Advisory Board meetings despite an FSQ representative being present. It is unknown whether the information was disclosed to the previous Attorney-General, Department of the Premier and Cabinet, or the Minister for Health. Given the nature and potential impact of the issues outlined in the attachment, the Review considers that this information should have been shared with all of the above as a priority and also shared with the courts, and QPS.

207. On 28 March 2023, eleven days after the March Briefing Note was written, the Directors-General Steering Committee for Government Reforms Arising from the Commission of Inquiry was held, with members representing the Department of Premier and Cabinet, DJAG, QPS, Queensland Health, Queensland Treasury and importantly a representative from FSQ. The critical concerns that the FSQ had advised QH about the reliability of DNA evidence (which would be of relevance to both police and courts) are not recorded in the minutes from this meeting. These concerns are also not recorded in any meeting minutes that the Review has seen subsequent to this date.

208. Such critical and systemic issues can have an immediate and ongoing impact, causing DNA evidence to be missed or incorrectly interpreted, and could result in a wrongful conviction. This results in offenders evading justice, which places the community at risk, denies victims' justice and ultimately delays justice if unreliable evidence is presented to police and the courts compromising the integrity of Queensland's criminal justice system.

209. The March Briefing Note provided a 'path forward' for both issues as nominated by FSQ. The recommendation was to continue with the recruitment of new staff and provide further staff training. The DNA Review considers these recommendations are not adequate to mitigate unreliable methods or contamination (albeit noting the recommendation for further staff training that may improve competency levels). Recruitment and training of staff are both time-consuming endeavours that would require many months, if not years to complete (FSQ is still in the process of recruiting and training scientists). The FSQ recommendations did not address the root cause of the issues, and the immediate and critical impact that any unreliable DNA results could have for police investigations (and ultimately the courts), and the harm it may cause the community. There were no recommendations to cease DNA testing or presenting evidence until the issues could be addressed, or to advise the police (who have disclosure obligations to the courts) of the prospect of unreliable DNA results provided by FSQ so that they could be rectified.

210. The DNA Review considers that the most appropriate course of action in March 2023 should have been to immediately cease testing DNA evidence, inform all relevant end users and FSQ staff of the issues, provide addendum statements for all affected statements released, commence a comprehensive outsourcing strategy, expand the historical case review to include the affected cases, and not re-commence testing until all methods and instruments had been deemed reliable by independent experts, and all staff fully trained and proficiency tested as competent. This did not occur at the time and has not occurred since.

211. The timeframe determined for the historical case review arising from the Inquiries was 1 September 2007 to 30 April 2023. Given FSQ was aware of the unreliable methods and had concerns about staff competency in March 2023, it is unclear why the 30 April 2023 date was set. It was known that cases tested from 1 May 2023 onwards would

be unreliable, yet they were presented as being reliable to the police and courts for judicial decision making. The March Briefing Note noted that FSQ was aware the DNA results were unreliable and may need to be re-tested in the historical case review. The opinion of the DNA Review is that it is a highly inappropriate strategy for FSQ to knowingly permit the release of known or suspected unreliable DNA results to police for investigations and prosecutions that will inform decision making by the courts and/or juries and significantly affect people's lives – with the risk of denying justice for victims and risking a miscarriage of justice.

4.6.3 FSQ Unreliable Methods

212. As set out above, the DNA Review has found that FSQ is providing unreliable DNA results to the police and courts. One contributing factor is FSQ's use of scientific methods that internal projects have demonstrated produce significantly less DNA than other methods.

213. In October 2023 two FSQ projects[142] revealed significant failings with DNA extraction methods (methods used to recover DNA from crime scene evidence) (the **October 2023 Maxwell Projects**)

214. The first project found that a method used on blood and cells (Maxwell FSC) recovered 18% to 34% less DNA than another method used by FSQ (QIAsymphony). FSQ forensic biologists were so concerned about the poor performance they recommended to management to cease using the Maxwell FSC method on evidence containing blood and cells and use another instrument instead[143]. However, FSQ continued using the method on sexual assault evidence as there was no alternative instrument to use within the laboratory that was validated for sperm samples. The Maxwell FSC method is still being used on sexual assault evidence at the time of writing. The use of this method could result in offenders failing to be identified because DNA was not able to be obtained from the crime scene evidence.

215. The second project conducted in October 2023 demonstrated that one method (Maxwell 16) was recovering 50% less DNA from semen than another method (Maxwell FSC). The Maxwell 16 method stopped being used four months later (it is unknown why this method was not terminated immediately). However, semen evidence is still being processed on the instrument (Maxwell FSC) that is recovering 18% to 34% less DNA compared to the QIASymphony. The use of such poor methods on evidence could result in offenders failing to be identified because a greater amount of available DNA is not recovered from the crime scene evidence.

216. An FSQ monthly Innovation team report dated 1 February 2024 states:

> *"Following the Extraction Efficiency projects and the endorsement of recommendations, risk now sits with the processing of semen samples on the Maxwell instruments. A project proposal has been approved to conduct an assessment to inform this risk. However, results from the previous FMEK [Forensic Medical Examination Kit - rape kit] swab project suggest the method may be performing effectively."*[144]

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[142] Project 256 'Extraction efficiency comparison of current DNA extraction methods for blood and trace samples', 30 October 2023. Project 275 'Extraction efficiency of semen', October 2023.
[143] DNA Review Information Request 55.2 "FSQ Project #256 Extraction efficiency comparison – DNA extraction methods -blood and trace', page 20, section 6.
[144] DNA Review Information Request#28.4, 'Innovation Monthly Report', p119.

217. As at January 2025, FSQ is conducting a project to enable testing of sexual assault samples on another instrument[145] (QIAsymphony), however, the completion is many months away. In the Reviewers' opinion it is not acceptable that it has taken FSQ over 1.5 years to commence this project given the critical findings in October 2023 regarding the Maxwell FSC method.

218. The DNA Review considers that concerns with both methods (Maxwell FSC and Maxwell 16) should have been immediately communicated to police (and/or disclosed in reports that would form part of the prosecution disclosure to the courts and defence lawyers), and the Interim DNA Advisory Board. In addition, the methods should have ceased being used immediately, evidence should have been outsourced to another accredited laboratory, addendum statements issued, and where possible, affected evidence re-tested by another laboratory. There is no evidence that any of these actions occurred.

219. At this time the Bennett Inquiry into Project 13 was underway (announced 5 October 2023 and findings released 19 November 2023). The Bennett Inquiry found that QHFSS knowingly used a failed method which was recovering ~90% less DNA from evidence than another method. No warnings were provided to the police or courts, and the method was used for over nine years. The Bennett Inquiry found that QHFSS management used the failed methods to avoid backlogs.[146] Therefore, the Bennett Inquiry provides a stark example, and FSQ should have been aware of the negative impacts and consequences of using flawed methods to test DNA evidence.[147] Yet the DNA Review found FSQ still presented unreliable DNA evidence to the police and courts despite understanding the impact of this decision and the reputational risks.

4.6.4 FSQ Internal Audit

220. An FSQ internal audit was conducted by the FSQ Research and Innovation team (the **internal audit**) between December 2023 and February 2024 which looked at all of FSQ's verification or validation projects relating to scientific methods and instruments. The reason for the internal audit was stated in an 'opportunity for quality improvement' (OQI) record dated 6 June 2024 as:

> *"The review followed the identification of potentially analogous results in various Innovation projects in Q4 2023. The goal was to assess risks and implications for current and future projects within Innovation and FSQ, especially those responding to the 2022 Commission of Inquiry into Forensic DNA Testing in Queensland (COI) recommendations."*[148]

221. The stated reason for triggering the internal audit does not include either the concerns raised by FSQ to the Director-General of Queensland Health in the March 2023 Briefing Note or the issues with the Maxwell FSC and Maxwell 16 DNA extraction methods that had been identified in October 2023.

222. In the March 2024 'Monthly Innovation Report' (FSQ leadership group reports) the cause of the internal audit is expressed differently:[149]

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[145] DNA Review Information Request#28.6.7 'Weekly Reporting 17 January 2025'. page 21.
[146] Final Report Commission of Inquiry to Examine DNA Project 13 Concerns. https://www.dnaproject13inquiry.qld.gov.au/assets/DNA%20Project%2013%20Report.pdf
[147] Final Report Commission of Inquiry to Examine DNA Project 13 Concerns, pages 2-3. https://www.dnaproject13inquiry.qld.gov.au/assets/DNA%20Project%2013%20Report.pdf
[148] DNA Review Information Request 14A, 'Report for QIS Audit- 30817 Innovation – DNA Extraction'. 6 June 2024.
[149] DNA Review Information Request 28.4, 'Innovation Monthly Report', 1 March 2024.

"Because of increased concerns of the existing methods due to the observation of result anomalies, a review was established to review all existing validation and verification projects".

223. Given the critical nature of the issues raised by FSQ to the Director-General of Queensland Heath in the March 2023 Briefing Note, the Review is critical of the fact that it took over eight months to commence the internal audit. The stated explanation for the internal audit does not refer to any of the concerns previously raised about the reliability of results in the October 2023 Maxwell Projects, the potential need for re-testing evidence, and potential impact on matters before the courts. The document does not contain or specifically reference the alarming findings of the internal audit which was known at the time the document was produced.

224. In total, 250 FSQ validation or verification projects were reviewed, with various 'low and high risk' projects identified in the form of six FSQ Project Audit Reports[150]. The category 'high risk' refers to whether a risk element existed in the initial project conducted to test a method before it was implemented by the laboratory, which may significantly impact the end results or outcome.[151] After reviewing these reports, the DNA Review's concern is that FSQ has labelled and treated issues as risks without adequately addressing the underlying issue that gives rise to the risk. (A risk is a potential future problem that might occur, while an issue is a problem that has occurred or is occurring and requires immediate action if it affects the accuracy or reliability of forensic evidence).

225. The internal audit report found over 50 'high risk' projects (about 20% of the projects) relating to scientific methods and instruments. The DNA Review has found nearly all are still being used by FSQ in casework.[152] The deficiencies relate to the improper validation or verification of scientific methods and instruments.[153] The Reviewers' concern is that issues highlighted in the internal audit reports could lead to missed DNA evidence, incorrect scientific interpretations, or contamination of evidence with DNA. The internal audit findings are highly alarming and confirms the concerns raised to the Director-General of Queensland Health in March 2023 relating to contamination, unreliable validation / verification, and staff competency. However, the internal audit reports did not lead to FSQ ceasing testing of DNA evidence, or police and courts being informed of the unreliable DNA processes.

226. The six internal audit reports were presented to the FSQ quarterly Quality Assurance Forum in May 2024, which comprises all FSQ senior managers (see Attachment 4 for relevant minutes). Given the significance of the findings which directly relate to the quality and reliability of results produced by the forensic biology laboratory, this DNA Review expects that the internal audit reports (referred to as 'the attachments' in the minutes) ought to have been the central focus for discussion at the Quality Assurance Forum. The minutes state:[154]

"Can we refer to the attachments out of session".

227. The quote above indicates the focus of the discussion was instead whether the six internal audit reports should be released to the general FSQ staff. The Quality

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[150] DNA Review Information Request 31.1 to 31.6 'Review of Scientific Processes'.
[151] DNA Review Information Request 31.2 'FSQ Project Audit Report – DNA Extraction and Contamination', page 6.
[152] Information provided by FSQ.
[153] Validations and verifications are thorough tests of a method or instrument using mock samples before they are used on evidence to make sure they are producing reliable results. This is a requirement of NATA accreditation and critical to ensure good scientific practices.
[154] FSQ Quality Assurance Forum minutes, 17 May 2024, pages 13-14.

Assurance Forum minutes capture only discussion about who the report should be distributed to. There is no record of any further discussion about the internal audit in subsequent FSQ Quality Forum meetings.

228. A contradictory statement is also captured in the minutes which the DNA Review believes provides an insight into FSQ's approach to transparency. That is, reports should be open and transparent, but the reports may not be disclosed:

> *"Need to acknowledge that the people performing reviews to be as open as possible to provide an honest and transparent report. Reports not produced in the mind of releasing the reports."*

229. Internal audits are required under ISO/IEC 17025 (the standard FSQ is accredited against) to promote continuous improvement within a laboratory, and identify any risks or issues that could affect the quality of results being released. Internal audits follow a standard process which includes the communication of findings. Typically, an internal audit report is provided to relevant laboratory management and staff, so they are aware of the findings and potential corrective actions. Sharing audit findings is considered good practice within a laboratory. The DNA Review read the FSQ internal audit report (six attachments) and found an objective evaluation of technical processes, which was suitable to share with all laboratory staff.

230. A decision was made by the FSQ Quality Assurance Forum to not communicate or distribute the internal audit report to staff.

> *"For clarification the reports submitted as appendix 1-6 of the Innovation Briefing Paper are not for distribution?"*
>
> *"Agreed"*

231. The 'Decision Register' notes:

> *"Recommendation Appendix 1-6 Innovation Briefing Paper submission not for distribution, publication or communication to general FSQ."*

232. This decision prevented those DNA reporting scientists who formed part of 'general FSQ' from being aware of the content referred to above. This limited their ability to disclose matters affecting the unreliability of the FSQ results in their expert forensic reports to police and the courts. This has relevance also to the then soon to be (now) implemented Supreme Court Practice Direction 14, (discussed further below) which amongst other things requires an expert to:

(a) confirm that no matters of significance which the expert regards as relevant have, to the knowledge of the expert, been withheld;

(b) qualify any opinion expressed in the report, without which the report would or might be incomplete or misleading;

(c) identify limitations or uncertainties affecting the reliability of the opinion(s) in the report as a result of:…(ii) insufficient data/evidence;

(d) provide details of matters relevant to the precision, margin of uncertainty or reproducibility that may affect the accuracy or reliability of the results referenced in the report.

233. It also prevented the opportunity for FSQ scientists to rebuke the decision by FSQ to continue testing evidence with methods now known to be unreliable.

234. The DNA Review found no evidence that the police, courts or DNA Advisory Board were made aware by FSQ of these critical findings presented in the internal audit reports.

235. In June 2024 only partial results of the internal audit were posted on the FSQ 'Quality Information System' ('QIS2' accessible to all FSQ scientists).[155] However, the reason for the internal audit, serious nature and extent of the findings of the internal audit are not revealed.

236. An FSQ staff member was asked about the internal audit and findings by the DNA Review team. They were aware that the Research and Innovation team had reviewed previous projects, but they were not aware that reports had been produced. This staff member claimed that multiple staff at the time thought that the Research and Innovation team conducted the internal audit because they "*were bored and had nothing else to do*". (The DNA Review has not in the time available, sought or obtained independent corroboration of that expressed view).

237. The Sofrnoff Inquiry is the most contemporary and relevant evaluation of forensic science best practice in Queensland. The Inquiry engaged with many external experts for their advice, which was presented in the final report. The DNA Review is aware the Sofronoff Inquiry final report is used as a resource for forensic biology laboratories around Australia as a tool to discuss improvements and identify best practices. As such relevant advice provided by experts engaged in the Sofronoff Inquiry will be referred to in the DNA Review report.

238. Case reporting scientists need to be aware of the quality and reliability of validation and verification projects so they can provide accurate expert opinions in statements to the court, including the limitations of methods, this was discussed at the Sofronoff Inquiry:[156]

> *"Further, Professor Wilson-Wilde said the relevant validation and verification studies should be included as references in the relevant standard operating procedures. This is because it will assist forensic practitioners "to identify the relevant information regarding limitations, limits of detection, false positive rates etc." Keeping the references up to date will ensure practitioners have contemporary information for the methods they use."*

4.6.5 Supreme Court Practice Direction 14

239. In July 2024 Supreme Court Practice Direction 14 commenced specifically requiring experts to disclose any limitations or uncertainty affecting the reliability of results including the scientific validity of expert evidence.[157] Relevantly the Practice Direction states:

> *"Content of all expert reports. Paragraph 16:*
>
> *(h) a declaration that the expert has made all the inquiries and considered all the issues which the expert believes are desirable and appropriate, and that*

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[155] DNA Review Information Request 14A, document 1A 30817. 'Report for QIS Audit'.
[156] Final Report into the Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022. Page 191, paragraph 621.
[157] Supreme Court Practice Direction 14, paragraphs 16 to 22.

no matters of significance which the expert regards as relevant have, to the knowledge of the expert, been withheld;

(i) any qualification of an opinion expressed in the report, without which the report would or might be incomplete or misleading;

(j) any limitation or uncertainty affecting the reliability of:

(i) the methods or techniques used; or

(ii) the data/evidence relied on, to arrive at the opinion(s) in the report; and

(k) any limitation or uncertainty affecting the reliability of the opinion(s) in the report as a result of:

(i) insufficient research; or

(ii) insufficient data/evidence.

Paragraph 18: Where the expert's opinion is of a scientific, medical or technical nature, the report shall additionally state, specify or provide:

(a) whether, and if so how, the method relied on by the expert in forming the opinion has been validated in conditions consistent with the intended use of the report in the proceeding;

(b) if the method is not amenable to validation through testing or other means, the reasons why that is the case;

'Scientific validity of expert evidence' Paragraph 21

For this purpose, expert evidence is scientifically valid if the scientific method relied on by the expert in forming the expert opinion has been shown to be capable of producing repeatable, reproducible and accurate results in practice, in conditions which are consistent with the intended use of the evidence in the proceeding. In addition, the expert needs to have demonstrated proficiency in the application of the scientific method in such conditions."

240. In June 2024 FSQ released new statement annexures specifically to comply with Supreme Court Practice Direction 14. FSQ released these to the DNA Review with the following explanation:[158]

> *"The annexures were first published in 2024, are based on similar annexures used within Victoria and along with the [Statement of Witness] SOW are aimed at satisfying the requirements of the Supreme Court of Queensland Practice Direction Number 14 of 2024."*

241. While there is a section titled 'Validity and Error Rates'[159], none of the statement annexures provided disclose information about the findings of the FSQ internal audit, the flawed Maxwell FSC and 16 DNA extraction methods, the unreliability of these

[158] DNA Review Information Request 47 Cover Sheet.
[159] DNA Review Information Request 47.1 '37067V2 FSQ Annexure Foundations of DNA Profiling and Interpretation-PowerPlex 21'.

methods, the systemic contamination, or competency concerns management had of various staff.

242. There is one section in the statement annexure titled 'Validity and Error Rates' which states:

> "*FSQ has previously validated the application of the methodology for each component of the analysis and interpretation process. In response to the final reports from the 2022 Commission of Inquiry into Forensic DNA Testing in Queensland and the 2023 Commission of Inquiry to examine DNA Project 13 concerns, FSQ has reviewed these internal validations and continues to progress projects to ensure the validity of the method as applied by FSQ."*[160]

243. The DNA Review is concerned that failure to disclose the method reliability and contamination issues undermines the purpose of the FSQ Act and more particularly Practice Direction 14 which is to:

> *"1. (a) enhance the quality and reliability of expert evidence relied on by the prosecution and the accused in criminal trials and pre-trial hearings in the Supreme Court of Queensland;"*

244. FSQ has been referencing un-validated / un-verified methods in the statement annexures that are being used in casework. This includes processes that have been recommended by FSQ not to be used in casework (such as the Maxwell FSC DNA extraction method),[161] the previously un-validated / unverified methods (such as the tapelift, p30 and acid phosphatase methods which are both used to detect semen) and methods that have been found to have poor experimental design and were identified by the FSQ audit as 'high risk'.[162]

245. In the statement annexure for screening for semen FSQ do not make it clear they are using methods that have not been validated / verified.

> "*While references to internal validations are included in this annexure, in response to the final reports from the 2022 Commission of Inquiry into Forensic DNA Testing in Queensland and the 2023 Commission of Inquiry to examine DNA Project 13 concerns, FSQ has reviewed these internal validations and continues to progress projects to ensure the validity of the method as applied by FSQ."*[163]

246. The reliance on methods and workflows known to be involved in systemic contamination, or which are failing, or not properly validated / verified[164] to form opinions in expert statements, and the non-disclosure of this to end users, may undermine FSQ's integrity but also cause a forensic expert to breach the requirements of Supreme Court Practice Direction 14 if not disclosed.

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[160] DNA Review Information Request 47.1 '37067V2 FSQ Annexure Foundations of DNA Profiling and Interpretation-PowerPlex 21'.
[161] DNA Review Information Request 55.2 'FSQ Project#256 Extraction efficiency comparison – DNA extraction methods – blood and trace', page 20 section 6 .Project Report #186 – Assessment of 3500xl A Genetic Analyzer for Processing Casework PowerPlex® Samples,
[162] DNA Review Information Request 31.1 to 31.6 'Review of Scientific Processes'.
[163] DNA Review Information Request 47.5 '37070V2 FSQ Annexure Foundations of the Screening for Semen'. Page 8.
[164] Such as the Maxwell FSC for semen, p30, acid phosphatase, tapelifts, and sperm microscopy.

4.6.6 FSQ Act

247. The provision of DNA evidence over this prolonged period of time to the police and courts known to FSQ to be unreliable may undermine the following purposive and functional statements within the FSQ Act which states:

> *"The main purpose of this Act is to ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland."* [165] *And:*
>
> *"The director's functions are to support the administration of criminal justice in Queensland by –*
>
> *(b) ensuring forensic services and advice provided to the entities mentioned in paragraph (a) [QPS, DPP, coroners] are –*
>
> *(i) reliable, independent and impartial; and*
>
> *(ii) based on high quality processes and techniques that comply with relevant standards and accreditation requirements."*[166]

248. The failure to disclose the unreliability of FSQ methods and the systemic contamination is also not consistent with the Australia New Zealand Policing Advisory Agency, National Institute of Forensic Science, Biology Specialist Advisory Group (which FSQ is a member of) 'Principles for Reporting Forensic Biology Evidence' which states under the principle of 'transparency:[167]:

> *"Disclose any known issues around the reliability of the methodology or technique used." And:*
>
> *"Provide information on quality issues that may impact the result of the reported samples."*

4.6.7 NATA assessment

249. FSQ was assessed by the National Association of Testing Authorities (NATA) in July 2024, which is a requirement to maintain its accreditation to ISO/IEC 17025 (2017). NATA found 15 major non-conformances including lack of validation / verification for some methods and instruments, and deficiencies in the FSQ training program. This is consistent with the findings in the internal audit and the March Briefing Note to the Director General of QH.[168] NATA found 15 major non-conformances including lack of validation / verification for some methods and instruments. A major non-conformance is considered the most significant audit finding.

250. A 'major non-conformance' is defined as including, but not limited to, the following:[169]

> *"An issue that contributes directly or has the potential to contribute directly, to the reliability of test results (eg. Inadequate staff training, calibration*

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[165] *Forensic Science Queensland Act 2024* (Qld) Part 1, section 3: (1).
[166] *Forensic Science Queensland Act 2024* (Qld) Part 2, Division 1, section 13: (1) b.
[167] ANZPAA NIFS, 'Principles for Reporting Forensic Biology Evidence', 2024. https://www.anzpaa.org.au/ArticleDocuments/346/ANZPAA%20NIFS%20Principles%20for%20Reporting%20Forensic%20Biology%20Evidence.PDF.aspx
[168] DNA Information Request 19 'NATA Audit'.
[169] 'NATA Technical Assessor Information and Guidance Documents. November 2024. Page 39.

deficiency, inadequate quality control). This is irrespective of whether the issue is random/infrequent or systemic;

An issue, that whilst it does not contribute directly to the reliability of test results, is systemic (ie. The same deficiency has occurred on at least a number of occasions);

An issue that contributes directly to how results may be interpreted by the client (eg. Sampling deficiencies);

An issue that has been raised previously as a minor nonconformity but has not been fully or appropriately addressed."

251. The 2024 NATA findings state[170]:

"The laboratory must verify that it can properly perform methods before introducing them by ensuring that it can achieve the required performance. The following were noted:

There was no evidence of verification of the tape lift currently being used by both this facility and QPS with current platforms, chemistry and methods. It is acknowledged that a risk assessment of this has been undertaken, however the justification for using the tape lifts whilst the verification is underway (as provided in the risk assessment) includes consideration that the same tape lifts are being used in other jurisdictions.

This however does not include consideration as to whether the equipment, chemistry and methods in those jurisdictions are comparable to those used by this facility.

It is noted that the risk assessment currently rates this as "medium risk". Considering the above, this must be reviewed. Any action taken must be commensurate with the identified risk (if this risk changes).

Further, the facility must verify the extraction efficiency of other substrates that may be received (for example, but not limited to, swabs and cigarette butts)."

252. This NATA finding identifies that FSQ has been using methods which are not internally verified on DNA evidence which is required under accreditation to ISO/IEC17025 standard. In some instances, the DNA method had been validated in other jurisdictions. An FSQ risk assessment evaluated the risk of not internally verifying a method versus the risk of allowing the backlog of evidence to increase.[171] The risk assessments identified that the greater risk was not implementing the unverified method and allowing the backlog to increase. FSQ was aware of the possible consequences of accepting this risk as outlined in one risk assessment:[172]

"The APT [Acid phosphatase test to detect semen] *is not fit for purpose and leads to inaccurate results which impacts downstream testing and ability to*

[170] DNA Review Information Request 19 'List of all findings of the 2024 NATA assessment for FSQ'.
[171] DNA Review Information Request 14A 'RA-001 Use of tapelifts in casework', RA-003 Implementation of Acid Phosphatase Test', and RA-004 Implementation of the p30 test for direct testing of swabs and substrates'.
[172] DNA Review Information Request 14A 'RA-003 Implementation of Acid Phosphatase Test', p3-4.

provided valuable evidence to the justice system. This represents a major consequence for business operations."

253. The risk assessment goes on to state:

> *"The provision of inaccurate evidence may result in a miscarriage of justice. This represents an extreme consequence."*
>
> *"Additionally, there is the potential for sustained national negative media coverage and notation in the international media because of implementing a change to the method without a complete internal verification. Insufficient validation was identified as a source of poor scientific practices in the Commissions of Inquiry into DNA testing in Qld (2022) and Project 13 (2023). Risk assessments were also not conducted."*

254. It is inconceivable to the DNA Review that a forensic science laboratory would knowingly use methods that are not verified and are not fit for purpose, especially when they have risk assessed this as having an extreme consequence of miscarriage of justice. Especially, a forensic laboratory such as FSQ given its predecessor QHFSS had been under political, scientific, and public scrutiny.

255. Only three methods and instruments (out of ~250) were found by NATA to be insufficiently verified[173] resulting in an assessment of 'major non-conformances' despite FSQ being aware of more (as reported in the FSQ internal audit). All three were identified as 'high risk' projects in the FSQ's internal audit. There is an obligation for laboratories to disclose significant quality issues (such as systemic contamination) or non-compliances with the ISO/IEC 17025 standard to NATA, especially during audits.

256. The NATA assessment also found a major non-conformance in the FSQ training and competency program, finding it will likely take at least five years to implement the new training program fully (although a staged approach is being taken). This is in line with the risks identified by FSQ in the March Briefing Note and the internal audit. Concerningly NATA stated that: [174]

> *"Training records do not consistently reflect if staff are trained or competent to undertake their assigned tasks. "*

257. The NATA Assessment noted that the facility layout introduces serious contamination risk that must be reviewed to retain accreditation. The issue of DNA contamination was also raised in the March Briefing Note and the internal audit.

258. On 3 January 2025, FSQ provided a briefing note to the Attorney-General (the AG Briefing Note) outlining the outcome of the NATA audit. It is the DNA Review's opinion that the flawed DNA extraction methods, the extent or impact of the unreliable methods and instruments, and the systemic DNA contamination were not disclosed to the Attorney-General in that Briefing Note. The advice was also not consistent with the level of risk raised in the 2023 March Briefing Note. The DNA Review is of the view that there was not a significant change in the level of risk between March 2023 and January 2025, and believes the AG Briefing Note should have articulated in greater detail the risks and issues then known along with the mitigation strategy to enable

[173] DNA Review Information Request 19.2 'Forensic Biology NATA Reassessment Report-2024.
[174] DNA Review Information Request 19 'List of all findings of the 2024 NATA assessment for FSQ'.

informed decision making about the reliability of previous and ongoing DNA testing and the scope of any reporting to the police and courts. The AG Briefing Note stated that:

> *"Following the 2022 COI FSQ undertook a review of Forensic Biology validations, identifying systemic issues and scientific shortfalls in several of these, and formulating a priority order to revalidate those processes."*[175]

259. The FSQ staff competency issues were also not articulated to the Attorney-General in the same manner as previously presented to the Director-General of QH in 2023. The AG Briefing Note stated:

> *"Following the 2022 COI the new FSQ management team identified that the root cause behind many of the 2022 COI findings stemmed from a lack of robust training and competency-based assessment for FSQ staff."*[176]

260. FSQ is currently performing a 'technical refresh' on some key instruments and methods. In the Reviewers' experience, the validations and verifications of the new instruments and methods are likely to take years to complete.

261. The risk strategy that FSQ decided upon in June 2024 was to accept the results from critical and unreliable methods and instruments for a number of years while new methods and instruments are being introduced to replace them. As stated in an FSQ Quality Information System report :

> *"The full impact of other projects remains uncertain, so the Innovation Division will continue validating and re-validating all methods within the Biology Division. The transition to a new end-to-end biology and DNA workflow is expected to resolve any current technique concerns."*[177]

262. It is the opinion of the DNA Review that this is an unacceptable risk strategy. The strategy is also not consistent with expert advice provided at the Sofronoff Inquiry about the critical requirement to ensure methods and instruments are properly validated or verified prior to use in casework given the potential they have to substantially impact DNA results and subsequent investigations and court proceedings:[178]

> *"Professor Wilson-Wilde also noted that all biological sample methods used must be checked to ensure they are validated or verified, and that the associated reports be available to those using the methods. Professor Wilson-Wilde informed me that any method or critical equipment used by the QPS that has the potential to substantially impact the results obtained should be validated or verified prior to implementation."*

263. Dr Bruce Budowle was engaged by the Sofronoff Inquiry to review validation and verification reports by QHFSS. He also confirms that laboratories should perform internal validation on methods

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[175] Briefing Note to the Attorney-General 3 January 2025. Paragraph 29.
[176] Briefing Note to the Attorney-General 3 January 2025. Paragraph 35.
[177] DNA Review Information Request#1A 30817. 'Report for QIS- 30817 Innovation – DNA Extraction', 6 June 2024.
[178] Final Report into the Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022. Page 192, paragraph 622.

> *"While each laboratory should validate internally the methods that will be implemented and some variation is expected between laboratories, laboratories should not work within a bubble."*[179]

264. NATA also requires that:

> "*Where a facility introduces a validated method, it must first demonstrate the reliability of the procedure in-house (i.e. verify) against any documented performance characteristics of that procedure*."[180]

265. It is well known across the forensic science community, and by the DNA Review, that if validation or verification is found to be inadequate, an organisation should not continue to use the methods or instruments in casework until the issues are rectified. This point was also discussed at the Sofronoff Inquiry:[181]

> *"Professor Wilson-Wilde concluded that the verification was inadequate, rendering the laboratory's use of the automated DNA IQ method in 2008 inconsistent with best practice."*

266. In September 2023 an FSQ Forensic Biology monthly report stated:

> *"Slow progression of development of best practice workflows and verification of methods in Evidence Recovery [ER], in part due to a paucity of advanced ER expertise. This further impacts our ability to optimize collection of evidence and expand evidence recovery for major crime cases."*[182]

267. In February 2024 a FSQ Forensic Biology monthly report stated:

> *"Slow progression of development of best practice workflows and verification of methods in Evidence Recovery, in part due to a paucity of advanced ER expertise."*[183]

268. These entries in FSQ management monthly reports demonstrate that the same serious concerns continued over a five-month period (lack of internal verification, not using best practice workflows, and not producing reliable evidence). This reinforces the DNA Review's assessment that since March 2023, FSQ was using methods on DNA casework that it knew were not sufficiently validated / verified and workflows which were not considered best practice. Evidence recovery is the first and most critical step of DNA analysis of items collected by QPS at the crime scene. If this is not performed to best practice it can lead to evidence being missed, contaminated evidence, with the impact being offenders not being identified, and essential DNA evidence not being presented to court or DNA evidence being presented that does not meet the standards required.

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[179] Dr Bruce Budowle expert report, Exhibit 31 'Review and Assessment of the Appropriateness of Not Concentrating Low Quantity DNA Samples by Queensland Health Forensic and Scientific Services (QHFSS)', page 7, paragraph 3. https://www.dnainquiry.qld.gov.au/public-hearings/assets/exhibits/module-1/EXH%2031%20-%20EXP.0001.0001.0001_r.pdf

[180] 'ISO/IEC 17025 Application Document Legal (including Forensic Science) – Appendix 2023', (s) 7.2.1.1, page 9. https://nata.com.au/files/2021/05/Forensic-Science-ISO-IEC-17025-Appendix-effective-feb-2020.pdf

[181] Final Report into the Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022. Page 359, paragraph 1138.

[182] DNA Review Information Request#28.4, 'Forensic Biology Monthly Report', p232.

[183] DNA Review Information Request#28.4, 'Forensic Biology Monthly Report', p111.

269. The 'FSQ Operational Risk Register' demonstrates FSQ was aware of the risks it was accepting / tolerating by using methods (tapelift, acid phosphatase, sperm microscopy, and p30 methods) on sexual assault cases that are not verified. The risk assessment dated 9 October 2023 for the tapelift method for recovery of DNA from sexual assault evidence states:

> *"Due to a significant backlog of sexual assault items within the laboratory, a commercial DNA tapelift product is being implemented for the collection of DNA from casework items prior to the tapelift's verification being completed. Because the verification has not been completed, the main risk is the product's ineffectiveness in collecting DNA from forensic exhibits"*[184]

270. Another three methods for semen detection (the p30, acid phosphatase, and sperm microscopy methods) used on swabs in the new FMEKs (rape kits) was not validated /verified before it was implemented by FSQ. This contributed to the significant backlog of rape kits. The p30 risk assessment dated 22 February 2024 states:

> *"…prompting the need to implement the methods [p30] within the workflow without a full internal verification. To mitigate this risk, adoption of the p30 method validation at Forensic Science SA is being implemented."*

271. The risk assessment goes on to state that:

> *"Implementation of a new procedure without internal verification has the potential to detrimentally impact downstream decision making and processing of exhibits, and as a worst-case scenario, lead to the reporting of inaccurate results. If this were to occur the consequences for the organisation and FSQ stakeholders would be major and the reputational consequences for FSQ would be extreme."*

272. Forensic Science South Australia (FSSA) validated the tapelift and p30 methods, but FSQ still needed to undertake an internal verification to demonstrate that the methodology remains fit for purpose at FSQ. The risk assessments acknowledge that FSQ are accepting / tolerating the risk by using these techniques on casework and aware this is not best practice, and required for accreditation to ISO/IEC 17025 (2017):

> *"Quality standards consider. ISO/IEC17025 accreditation states:*
>
> *7.2.1.5 'The laboratory shall verify that it can properly perform methods before introducing them by ensuring that it can achieve the required performance. Records of the verification shall be retained'"*

4.6.8 Systemic Contamination at FSQ

273. On 13 May 2025 systemic DNA contamination was disclosed by FSQ staff members to the DNA Review, many of whom expressed real concern about its likely impact on police investigations and the criminal justice system.

274. The FSQ staff advised the DNA Review the DNA contamination at FSQ is from unknown sources, suspected of affecting crime scene samples and person samples processes. For crime scene evidence at FSQ, this was reported to the DNA Review as

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[184] DNA Review Information Request#14.A05 'RA-001 Use of tapelifts in casework - Forensic Biology'

occurring at least weekly and was being detected through negative controls (samples with no DNA).[185] However, the true prevalence may be much higher given contamination is sporadic and may affect crime scene samples without affecting negative controls (which are unknown profiles, making detection of extra unknown DNA from contamination difficult). In this instance, it is difficult to detect contamination in an unknown crime scene sample, and an unreliable contaminated result could then be released to the police and courts. The DNA Review also found that FSQ were not recording each instance of contamination in the quality information system[186] ('opportunity for quality improvements') which is poor practice.

275. One source of DNA contamination is 'environmental contamination', which is DNA from surfaces and items within the laboratory which could be transferred onto crime scene evidence. FSQ conducts an environmental monitoring program, which is described below:

> "*The environmental monitoring program in Forensic Biology is focused around identifying and controlling the potential for DNA contamination within the laboratory. A summary of this program Is provided as follows:*
>
> - *10 swabs* ['environmental samples'] *are taken from both the Analytical laboratory and Evidence Recovery laboratory at the start of each month prior to the laboratory clean to observe how much environmental DNA is present.*
>
> - *Samples that had a high DNA load are usually targeted again the next month to see if the DNA load has reduced. The remainder of the swabs for the month are taken at random*."[187]

276. On 6 November 2024, an internal FSQ report outlined incidences of environmental contamination over one year (November 2023 to November 2024) within the Evidence Recovery and Analytical laboratories. The FSQ reports states:

> *"There were 69 contamination events (or post-clean verifications) profiled for Evidence recovery and 40 for Analytical (109 in total)."*[188]

277. The 'contamination events' referred to do not involve crime scene samples, they are from clean swabs that are rubbed on laboratory items and surfaces after they have been cleaned to check whether the FSQ cleaning and DNA decontamination measures are working effectively. If the cleaning protocols are effective, no detectable DNA should be obtained from the clean swabs. These checks occur at regular intervals throughout the year so contamination is detected quickly, and improvements made to eliminate the contamination.

278. The FSQ internal report demonstrates two concerning issues. Firstly, throughout 2024 there was a high number of environmental contamination occurring within two laboratory spaces which risks the reliability of DNA evidence, and secondly, it demonstrates that FSQ were aware of systemic contamination at least six months prior to when it was found by the DNA Review in May 2025.

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[185] FSQ communication, 13 May 2025.
[186] FSQ communications 13 May 2025.
[187] DNA Review Information Request 14AP1.5 '2023-1 (7Nov) Quality Assurance Forum Minutes'. 7 November 2023, page 66.
[188] DNA Review Information Request 79.5.4.22 'OQI 61659 EvRec ENVM Trend 2024', page 1, paragraph 3.

279. The DNA Review conducted further investigation to understand the duration and prevalence of the environmental contamination at FSQ. Analysis of FSQ data[189] by the DNA Review of environmental samples taken from the Evidence Recovery and Analytical laboratories from 1 January 2023 to 31 May 2025 (pre-clean and post-clean[190]) showed the following:

(a) Overall, contamination was detected in 678 out of 1,214 environmental samples (55.8%);

(b) In 2023 contamination was detected in 282 out of 420 environmental samples (67.1%);

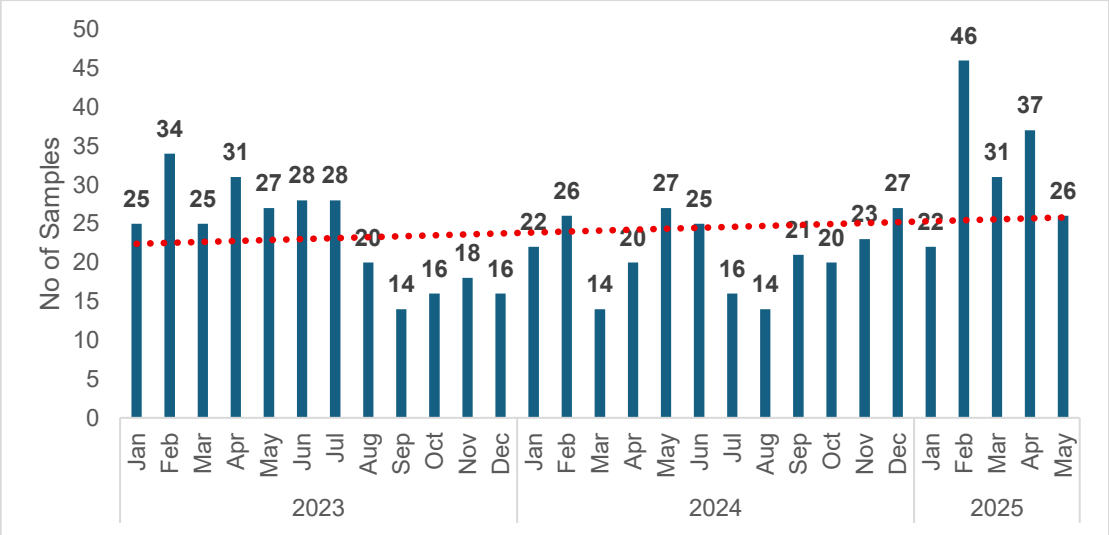
(c) In 2024 contamination was detected in 256 out of 539 environmental samples (47.5%); and

(d) In 2025 contamination was detected in 140 out of 255 environmental samples (54.9%).

280. The DNA Review considers this to be unacceptably high level of environmental contamination. A laboratory who is aware they have systemic environmental contamination should rapidly put measures in place to mitigate contamination and regularly track data to see if the trend in the number of contaminated samples is increasing or decreasing over time.

281. The red dotted line (trendline) in Figure 15 below shows no reduction in the number of contaminated environmental samples at FSQ over two and a half years. The trendline is actually going in a slightly upwards direction, demonstrating the overall number of contaminated environmental samples at FSQ is increasing.

Figure 15 FSQ environmental contamination from 1 January 2023 to 31 May 2025[191]. The dotted line represents the trend in the number of environmental samples with contamination detected.



[189] DNA Review Information Request 79.5. 3.12 'Environmental Data 23-25'.
[190] An environmental sample taken before the FSQ cleaning process is called a 'pre-clean' sample. These should not contain any DNA. An environmental sample taken after the FSQ cleaning process is called a 'post-clean' sample. These should not contain any DNA.
[191] DNA Review Information Request 79.5.3.12 'Environmental Data 23-25'. Graph produced by the DNA Review.

282. The percentage of environmental samples where contamination was detected post-cleaning is 67.1% in 2023, 44.9% in 2024, and 52.3% in 2025[192]. The DNA Review considers these are high, and demonstrates the FSQ cleaning process, which should eliminate DNA from benches and instruments used to examine crime scene evidence, is not effective, only removing detectable DNA contamination approximately half of the time cleaning is performed.

283. Of the 678 contaminated environmental samples, 148 (21.8%) were taken stainless steel benches where crime scene evidence is examined, 205 (30.2%) were taken from scientific instruments used by scientists while examining crime scene evidence, 95 (14.0%) were taken from hand tools used while examining crime scene evidence, and 85 (12.5%) from various locations in the laboratory (eg door freezer door handles, chairs) that are touched throughout examination of crime scene evidence.[193] The DNA Review considers this represents a high risk for contaminating crime scene evidence.

284. The number of environmental samples with 4 alleles (pieces of DNA information) or more is 171 in 2023, 87 in 2024, and 69 in 2025. The number of environmental samples with 10 alleles or more is 135 in 2023, 56 in 2024, and 41 in 2025.[194] The DNA Review considers this to be a high quantity of contaminating DNA. The highest number of alleles recorded in the contaminated samples was 115 (a DNA profile from one person would have no more than 42 alleles).[195]

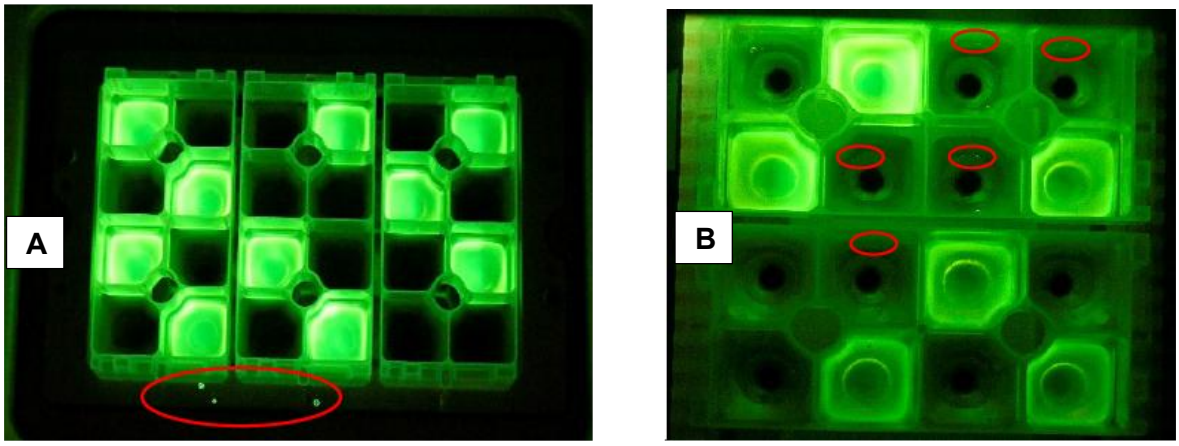
285. Of the 678 contaminated environmental samples 103 (15.2%) met the criteria to be reported, and 147 (21.7%) would be reported as 'complex mixtures' (36.9% for both categories).[196] The DNA Review considers with these figures it is expected that some crime scene DNA evidence would be unknowingly impacted by contamination, and if so, will affect the reliability of the DNA result reported to the police and courts. This could prevent an offender from being identified and/or lead to an incorrect judicial outcome.

286. On 24 June 2025 (after the pause on DNA testing on 20 June 2025), FSQ investigated two DNA extraction robots (QIASymphony) to determine whether they could be involved in the systemic contamination. A fluorescent liquid dye was used in place of DNA samples to visualise whether droplets were being transferred from sample to sample, or onto robot surfaces where it should not be (Figure15). FSQ found:

> *"Significant contamination was observed with both instruments, including droplet transfer between wells and dye detected on robotic components, indicating a critical risk area for cross-contamination."*[197]

[192] DNA Review Information Request 79.5.3.12 'Environmental Data 23-25'.
[193] DNA Review Information Request 79.5.3.12 'Environmental Data 23-25'.
[194] DNA Review Information Request 79.5.3.12 'Environmental Data 23-25'.
[195] DNA Review Information Request 79.5.3.12 'Environmental Data 23-25'.
[196] DNA Review Information Request 79.5.3.12 'Environmental Data 23-25'.
[197] DNA Review Information Request 79.4.1 'DNA Contamination Mitigation Tracker'. Excel spreadsheet rows 25 and 26.

Figure 15: FSQ contamination investigation of the QIASymphony robots. The red circles show where fluorescent droplets (representing potential DNA contamination) were found on robotic surfaces (A) and between sample wells on the robot (B). Several droplets were found within one robotic run.



287. The DNA Review considers these findings represents a high risk of 'sample to sample contamination', meaning the DNA from one crime scene sample could contaminate a separate crime scene sample either from within the same case, or between cases. At the time of writing, FSQ could not verify how long both robots may have been contaminating crime scene evidence.

288. Other potential sources of contamination were found by FSQ during their investigation in July 2025[198], and at the time of writing, the investigation of all FSQ work processes for other sources of contamination had not been completed. The DNA Review considers it is possible there are multiple sources of systemic environmental and sample to sample contamination within FSQ. Despite the contamination investigation not being completed, it was announced on 4 July 2025 that FSQ would resume limited testing of DNA samples, however, the QIASymphony robots are not being used to test samples, and a number of additional contamination mitigation processes were introduced by FSQ.[199]

289. Systemic DNA contamination within a forensic biology laboratory is one of the greatest risks to the accuracy and reliability of evidence. Results should not be released if contamination is detected. In the DNA Review's experience, contamination is expected to occur rarely in a forensic biology lab. When it does occur, the processes involved in the contamination should be ceased, the source of the contamination needs to be identified, removed, and the forensic biology laboratory should undergo a deep clean (which should be occurring regularly to mitigate against contamination). The police and courts need to be promptly advised by a laboratory if results have been released to them that may be at risk of contamination and a review of cases which may be affected should be conducted. Of greatest concern is when contamination is regularly detected, but the source cannot be determined which is what was reported to the DNA Review to be occurring at FSQ.

290. The Sofronoff Inquiry reviewed the QHFSS response to the detection of systemic contamination in 2008.[200] The issue was thoroughly investigated, a review of all cases

[198] DNA Review Information Request 79.7.5 'Interim_Report_Contamination Detection XXv2.0'.
[199] The Australian, Mackenzie Scott, 'DNA Lab Testing resumes' 4 July 2025.
[200] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report, 2023, pages 353-361.

conducted, end users promptly advised, two external audits were conducted, technical experts engaged from instrument manufacturers, the method causing the contamination ceased being used in casework, and Crown Law was engaged to seek legal advice on how QHFSS should address the release of unreliable results in addendum statements.

291. The Sofronoff Inquiry outlined the advice from the Solicitor General about the appropriate course of action for DNA results already released by QHFSS during the period of contamination.

> "*In December 2008, Crown Law forwarded advice they had obtained from the Solicitor General which advised that the laboratory's decision* ***not to rely upon*** *results of tests run during the relevant time where there had been an adverse result and no available sample to perform a second test was appropriate. In relation to tests where there was no adverse result or there was a sample available to perform a second test, the advice was that disclosure should be made when reporting results. Following receipt of this advice, statements were re-issued for results from tests performed during the relevant time with the recommended disclosure."*[201]

292. The DNA Review considers this to be the correct course of action for the current systemic contamination at FSQ.

293. The Sofronoff Inquiry final report further states:

> *"The Commission procured Professor Linzi Wilson-Wilde OAM to consider whether the methods employed by the laboratory, both before and after the DNA IQ contamination issue arose, and the investigation undertaken by the laboratory were in accordance with best practice".*[202]
>
> *"Professor Wilson-Wilde found that most contamination events were identified in real time and appropriately recorded. Further, the investigation of the contamination issue was performed in accordance with best practice, including ceasing to use the process while the investigation continued and then re-introducing it after further validation."*[203]

294. The DNA Review has concluded that FSQ has not taken the course of action outlined in the Sofronoff Inquiry, which was evaluated by experts as best practice. This is a questionable decision given the seriousness and impact of the systemic contamination.

295. Minutes from FSQ monthly 'Leadership Group Meetings' (Forensic Biology) from January 2024 note the systemic contamination issues, below the headings 'Red flags' and some of the actions taken and proposed by FSQ.

> **January 2024:** "*Large backlog for Environmental sample PDA and reporting. Results not reported in a timely manner internally and externally contribute to inability to resolve the contamination issue and potentially compromises other*

[201] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report, 2023, pages 358, paragraph 1133.
[202] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report, 2023, page 353, paragraph 1111. Note Dr Wilson-Wilde was the only expert engaged by the Sofronoff Inquiry.
[203] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report, 2023, page 360, paragraph 1141

results. Review of environmental monitoring processes has been logged as a project for Biology on the Biology tracker."[204]

March 2024: "*Large number of outstanding batch investigations.* [Redacted] *is assisting to assess open investigations and develop a plan to resolve. Trend analysis of 2023-2024 investigation required to determine if cause of contamination events has common root cause."* [205]

Note: 'Batch investigations' refers to batches of crime scene evidence samples where contamination has been detected, and investigation into the cause is conducted.

May and June 2024: "*Number of outstanding batch investigations contributing to delays in sample processing. Focused effort in May led to reduction in number of open batches (triaged by team leader analytical). Analytical Controls SOP* [standard operational procedure] *with BSAG* [The Australian and New Zealand Policing Advisory Agency, Biology Specialist Advisory Group] *comments to be converted to new template and published before NATA. Trend analysis of 2023-2024 investigation required to determine if cause of contamination events has common root cause."*[206]

296. Minutes from the FSQ Quality Assurance Forum also notes the systemic contamination issue and actions taken.

February 2024: "*Large number of batch investigations. Require information of contamination incidences, trend analysis. observation is that contamination mitigation practices and SOP require improvement. Biology quality specialist to assist*."[207]

August 2024: "*68% of all OQIs* [internal FSQ quality register 'opportunity for quality improvements'] *created between May and August relate to the Laboratory Management Unit. Potential trends are listed below.*

24% = possible contamination events including batch/samples and consumables.

*8% = environmental monitoring investigations."*208

"*Based on the possible risks identified in the extraction projects, the recommendations are: A holistic Investigation of contamination in the whole process from evidence recovery, extraction and amplification and CE* [capillary electrophoresis]*, rather than investigating each step separately should be performed to assess the current risks. SOPs* [standard operational procedures] *that detail best lab practice in relation to contamination mitigation and decontamination of surfaces, samples, equipment, and reagents need to be reviewed and updated. One of the main concerns is the acceptable*

[204] DNA Review Information Request 28.4 'Leadership Group Meeting Reports 1', page 112.
[205] DNA Review Information Request 28.4 'Leadership Group Meeting Reports 1', page 259.
[206] DNA Review Information Request 28.4 'Leadership Group Meeting Reports 1', pages 333 and 67.
[207] DNA Review Information Request 14AP1.5 '2023-1 (7 Nov) Quality Assurance Forum Minutes', 7 November 2023. Page 66.
[208] DNA Review Information Request 14AP1.5 '2023-1 (7 Nov) Quality Assurance Forum Minutes', 7 November 2023. Page 51.

contamination detected in blanks are still set as 0.024ng/ul which is the very old LOD [limit of detection]*, while the current LOD is set to 0.0006ng/ul*."[209]

November 2024: "*An investigation is required to determine whether the issue lies with improper cleaning practices or ineffective cleaning methods/supplies. Trends should be communicated to relevant Team Leaders, consider senior scientists. Forensic Biology Quality Coordinator to raise in the Analytical meetings, ensuring they are minuted. Validation of cleaning procedures, methods, and products may be necessary to address potential systemic issues with cleaning processes, methods, and training."*[210]

297. The minutes from the Quality Assurance Forum records a high prevalence of detectable systemic contamination at FSQ, (both sample to sample and environmental). The DNA Review considers the systemic contamination repeatedly recorded at the Leadership Group meetings and Quality Assurance Forum meetings presents a high risk for the reliability of crime scene evidence being reported by FSQ to the police and courts.

298. NATA revisited FSQ on 29 to 30 May 2025 to assess the adequacy of actions taken by FSQ to address all nonconformity findings from July 2024, and to determine if FSQ should retain its accreditation. NATA reported the "*facility is operating at a standard that demonstrates it is competent to perform the activities for which accreditation is held*."[211] Two minor findings were recorded for FSQ to address (neither related to contamination concerns). It is unknown if FSQ advised NATA of the systemic contamination, which it is their obligation to do so.

299. On 20 June 2025, the FSQ Director was suspended by the Attorney-General due to the contamination concerns, and DNA testing by FSQ paused for several days. Investigations by FSQ into the cause of the contamination have initially revealed 'sample to sample' contamination (the DNA from one sample contaminating a separate sample) and 'environmental contamination'[212]

300. The DNA Review has found evidence of ongoing provision of unreliable results by FSQ which have not been conveyed to police or the courts. This compromises police investigations and the integrity of the courts.

Recommendation 6	The DoJ Expert Team in collaboration with the FSQ Quality Management Team should conduct an immediate end-to-end evaluation of all FSQ DNA methods, workflows, instruments, validations / verifications, laboratory environment, and compliance to ISO/IEC 17025. Consideration should be given to suspending all FSQ DNA testing services, unless FSQ can provide evidence that their processes can produce accurate and reliable results.
Recommendation 7	**7.1** FSQ should review all coronial and major crime DNA cases analysed at FSQ from 1 May 2023 onwards in consultation with the DoJ Expert Team. Notifications and

[209] DNA Review Information Request 14AP1.5 '2023-1 (7 Nov) Quality Assurance Forum Minutes', 7 November 2023. Page 65.
[210] DNA Review Information Request 14AP1.5 '2024-3 (7 Nov) Quality Assurance Forum Minutes', 13 November 2024. Page 8.
[211] 'Forensic Biology & QMS Interim Report' NATA Interim Report on Assessment, 30 May 2025.
[212] DNA Review Information Request 'FSQ Info Sheet- Contamination June 2025'.

	addendum statements for cases suspected of containing unreliable results should be issued. **7.2** Re-testing of samples where required by QPS or the courts should be conducted.
Recommendation 8	**8.1** Staff training and competency requires re-evaluation against tasks they have been assigned to perform. The DoJ Expert Team should collaborate with the FSQ Quality and Training Units to undertake this as a priority. Where training gaps are identified, the staff will cease performing those tasks until they have been trained and meet competency requirements. **8.2** FSQ should establish an improved staff training program as a priority.
Intent and desired end state	**Intent:** An end-to-end evaluation of FSQ DNA methods will identify which methods and workflows are unreliable and can be used with confidence and expose those which are unreliable and require improvement. The exercise outcomes will inform the time and resources needed to fix FSQ processes, and reveal which cases require review and re-testing. The competency of each FSQ forensic biology staff member will be evaluated to inform any training gaps. This information will help to forecast the scope and volume of service FSQ can provide to end users. The competency evaluation will inform development of an improved training program. **Desired End State:** All FSQ DNA methods provide accurate and reliable results. All FSQ forensic biology staff are competent in all tasks they are performing. The reliability of FSQ DNA services is empirically demonstrated. Cases nominated by QPS or the courts which have been impacted by unreliable results have all been reviewed, re-tested, and where needed have had amended results released.

Attachment 3 Timeline of Events

Date	Description
13 December 2022	Sofronoff Inquiry Final Report released.
December 2022	The Labor government allocates $29.5M for external DNA testing.
17 March 2023	FSQ Briefing Note to the Director-General of Queensland Health about critical issues surrounding methods, instruments, and staff competency.
28 March 2023	The Directors-General Steering Committee for Government Reforms Arising from the Commission of Inquiry was held. The critical concerns raised by FSQ are not recorded in the minutes, despite a representative of FSQ attended the meeting.
28 March 2023	DNA Advisory Board meeting. The minutes do not contain any information about the issues raised by FSQ to the Director-General, despite an FSQ representative being present.
1 May 2023	The time range for the historical case review is from 1 September 2007 to 30 April 2023. Cases received from 1 May 2023 will not require review or re-testing to ensure their accuracy despite the critical issues known to FSQ at this time.
September 2023	An FSQ management report “Slow progression of development of best practice workflows and verification of methods in Evidence Recovery, in part due to a paucity of advanced ER expertise. This further impacts our ability to optimize collection of evidence and expand evidence recovery for major crime cases”.
13 September 2023	Decision to repurpose $19.5M of outsourcing funds.
5 October 2023	Commission of Inquiry into Project 13 announced. One method was recovering 92% less DNA, though QHFSS management used it on evidence regardless.
16 October 2023	Final draft of FSQ semen extraction efficiency project (#257). FSQ finds one method (Maxwell 16) is recovering less than 50% of DNA than another method (Maxwell FSC) for semen. FSQ do not provide any warnings to police or courts.
30 October 2023	Final draft of FSQ DNA blood and cells extraction and efficiency project (#256). FSQ finds one method (Maxwell 16) is recovering less than 50% of DNA than another method (QIASymphony). The Maxwell 16 method continues to be used on evidence for another 3 to 4 months. FSQ also finds a second method (Maxwell FSC) is recovering up to 34% less DNA, and 43% less profile information than another method (QIASymphony). FSQ do not provide any warnings to police or courts.
19 November 2023	Findings of the Bennett Commission of Inquiry released showing QHFSS management knowingly used a method that would recover

Date	Description
	significantly less DNA to avoid backlogs. QHFSS did not disclose the method failures to the police or courts.
December 2023 to February 2024	An FSQ internal audit was conducted and found ~50 'high risk' projects.
January, March, May and 2024	Minutes from the FSQ 'Leadership Group (Forensic Biology) meetings record discussions about the systemic contamination.
February, August, and November 2024	Minutes from the FSQ Quality Assurance Forum meetings record discussions about the systemic contamination.
February 2024	Maxwell 16 instrument decommissioned.
17 May 2024	The internal audit was presented to the FSQ Quality Assurance Forum. The forum decided the internal audit reports should not be disseminated, published, or communicated to FSQ general staff.
6 June 2024	An 'opportunity for quality improvement' record was entered about the internal audit. It does not highlight the critical reasons for the audit, or the alarming internal audit findings. The FSQ strategy to tolerate unreliable results while end-to-end replacement of methods and instruments occurred is documented here.
June 2024	FSQ statement annexures released to comply with the upcoming Supreme Court Practice Direction 14. The annexures do not disclose the known limitations, uncertainties, and overall unreliability of the FSQ results.
1 July 2024	The *FSQ Act* comes into effect establishing the Director of FSQ a statutory officer supported by the Office of the Director of Forensic Science Queensland (Forensic Science Queensland).
15 July 2024	Supreme Court Practice direction 14 comes into effect requiring experts to disclose any limitations or uncertainty affecting the reliability of the results.
29 July 2024	NATA technical reaccreditation assessment of FSQ conducted.
August 2024	NATA finds 15 major non-conformances including lack of validation / verification for some methods, instruments, and deficiencies in the FSQ training program.
3 January 2025	FSQ briefing note to the Attorney-General regarding the 'FSQ NATA accreditation'. The extent and impact of the unreliability of methods and instruments, systemic contamination, and staff competency were not disclosed to the Attorney-General by FSQ.
13 May 2025	FSQ staff advised the DNA Review there was systemic contamination in the laboratory from unknown sources.
29 to 30 May 2025	NATA visits FSQ to assess the adequacy of actions taken by FSQ to address all non-conformity findings from July 2024, and to determine if

Date	Description
	FSQ should retain its accreditation. NATA reported the "facility is operating at a standard that demonstrates it is competent to perform the activities for which accreditation is held".
20 June 2025	Dr Linzi Wilson-Wilde is suspended by the Attorney-General due to the contamination issues, and FSQ ceases testing all routine crime scene samples.
4 July 2025	Limited DNA testing to re-commence at FSQ.

Attachment 4 Extract of Minutes from FSQ Quality Assurance Forum on 17 May 2024

Item 7 – Innovation Updates

- Updates provided by [redacted] as per the Briefing Paper *"Item 7 – Innovation Updates"*.
  - [redacted] – Can we refer to attachments out of session.
  - [redacted]: where are these attachments intended to be going?
  - [redacted] - should they be registered in QIS2 as internal audits, using the private settings to capture the work done and to provide evidence of internal audits being performed. Then the recommendations can also be captured as OQIs
  - [redacted]: who will have access to these reports?
  - [redacted]: Innovation conducted an audit of all Biology projects, these are the findings in reports. Have been through two COI and other investigations over the time. This is to identify what has been addressed and what still requires addressing. Correctly translated the risks, inform innovation risks and also Forensic Biology risk.
  - [redacted]: would not be advocating that all documents be available to all staff. We have seen, even recently, there are a lot of individuals involved that are still apart of the organisation. This information and particularly the language will not go down well. Staff not given proper training to perform these projects. I think the front part the summary is fine, the appendix (reports 1-6) not for dissemination.
  - [redacted] - summary and recommendations uploaded into QIS2 as an IA with the recommendations then OQIs.
  - [redacted]: read the report SS and I have detailed less concerned with the risks due to mitigation listed.
  - [redacted]: need to work through what is an OQI and what is not.
  - [redacted] need to acknowledge that the people performing reviews to be as open as possible to provide an honest and transparent report. Reports not produced in the mind of releasing the reports.
  - [redacted]: items outlined in table 2 have already been done. Endorsement of the translation into report is transparent.
  - [redacted]: PCR amplification needs to be updated. Cross check on some findings, agree with what was said in the attachments. Commends the quality of work and the large volume of work in these reports. Staff to be congratulated.
  - [redacted]: running critical projects on suboptimal framework. Endorse responses outlined in table 2.
  - [redacted] : for clarification the reports submitted as appendix 1-6 of the Innovation Briefing Paper are not for distribution?
  - [redacted], [redacted], [redacted], [redacted] – agreed.
  - [redacted]: Innovation will now be commencing a similar review of Forensic Chemistry validations. Forensic Chemistry will be supplying the validation reports to the Innovation Team.

QAF Decision Register	
Recommendation for Decision	**QAF Decision**
[redacted] really good work done, really valuable for organisation	Noted ✓
Projects Review first document: Innovation - note risks raised.	Noted ✓
Recommendation to Endorse Table 1 of Innovation Review Report Final document as the other reports were not written with the intension of dissemination.	
Endorse table 1 and table 2 of Innovation Summary Report	Endorsed
Recommendation Appendix 1-6 Innovation Briefing Paper submission not for distribution, publication or communication to general FSQ.	
Not for Distribution Appendix 1-6 Innovation Project Audit Reports: FSQ Project Audit Report – DNA Amplification V0.1 FSQ Project Audit Report – DNA CE V0.2 FSQ Project Audit Report – DNA Extraction and Contamination V0.3 FSQ Project Audit Report – Quantification V1.1 FSQ Project Audit Report – Statistics and Software V1	Endorsed

4.7 Introduction of the new Rape Kits

Key observations, findings, and conclusions in relation to improving the accuracy of FSQ's current DNA Service Delivery:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Introduction of new rape kits

(a) Forensic Medical Examination Kits (FMEKs, 'rape kits') were implemented throughout Queensland in July 2023 to address recommendations arising from the Women's Safety and Justice Taskforce (Report 2) and the Sofronoff Inquiry;

(b) The detection of seminal fluid on rape kits swabs relies on three methods used by FSQ (sperm microscopy, the acid phosphatase and p30 methods). None of these methods had been internally verified by FSQ before being used on the new rape kits.

(c) On 22 February 2024 FSQ generated risk assessments for all three critical methods, over six months after introduction of the new rape kits, evaluating the risk of using them prior to internal verification. FSQ acknowledged that this could "*lead to the reporting of inaccurate results*" and "*the provision of inaccurate evidence may result in a miscarriage of justice*".

(d) In January 2025 the p30 test was verified (17 months after the new rape kits were introduced), and the acid phosphatase test was verified in February 2025 (18 months after the introduction of the rape kits). The sperm microscopy method still has not been internally verified.

(e) The DNA Review analysed raw data obtained from FSQ in June 2025 which confirms the three methods are not reliably detecting semen when it is present on rape kit samples, despite two of the methods being recently verified:

    (i) One method (acid phosphatase) failed to detect semen when it was microscopically observed in 21.7% of rape kit swabs.

    (ii) The second method (p30) failed to detect semen on 31.9% of rape kit swabs where sperm was microscopically observed and were also positive for acid phosphatase.

    (iii) The third method (sperm microscopy: of 291 rape kits swabs that were microscopically analysed for sperm but were negative, 21 were positive for acid phosphatase and p30 (7.2%).

(f) A project conducted by FSQ in October 2023 (two months after the introduction of the new rape kits) demonstrated that one method (Maxwell 16) was recovering 50% less DNA from semen than another method (Maxwell FSC)[213]. The Maxwell 16 method stopped being used four months later (it is unknown why this method was not terminated immediately). However, semen evidence is still being processed on the instrument (Maxwell FSC) that is recovering 18% to 34% less DNA.

Based on this evidence, the DNA Review has formed the view that:

[213] DNA Review Information Request 55 'Project 275 'Extraction efficiency of semen', October 2023.'

(g) The sperm detection methods could be providing both false positive and false negative results, and are overall unreliable.

(h) The implementation of testing methods for the new kits was conducted poorly by FSQ. FSQ started testing the new rape kits prior to internally verifying three key methods to detect semen to make sure they would work reliably. These actions do not prioritise the needs and welfare of victims.

(i) The results outlined in (5) identify that the three critical methods mentioned above are unreliable. The DNA Review is concerned that if FSQ decided to use these three methods without internally verification, that decision may be described as reckless.

(j) The unreliable semen detection methods, and the poorly performing semen DNA extraction methods in combination, could be significantly reducing the chance to identify offenders of sexual violence and failing victims of crime.

(k) The DNA Review considers all testing of rape kits and of any other evidence from sexual offence matters that may contain semen (including underwear, clothing, bedding, etc) by FSQ should stop immediately due to the unreliable semen detection methods. It is likely that all rape kits and evidence suspected of containing semen processed by FSQ using the unreliable methods will require review, and where possible, re-testing.

Continued Improvement of new rape kits

(l) There is no method to conduct end-to-end data analysis to understand how well the new rape kits have been implemented across the entire system and to enable continuous improvement.

(m) The DNA Review collaborated with experts to devise a project to remedy this.

Early Evidence Collection Kits

(n) Early evidence collection kits need to be available in rural and remote communities and at mine sites 24 hours a day. Not having this access disadvantages victims in these locations.

4.7.1 Summary

301. Forensic Medical Examination Kits (FMEKs, 'rape kits') were implemented throughout Queensland in July 2023 to address recommendations arising from the Women's Safety and Justice Taskforce (Report 2)[214] and the 2022 Sofronoff Inquiry which were critical of the composition of the kits, collection practices, and DNA laboratory methods for analysing rape kits.[215] The new rape kits replaced inferior kits and aimed to meet best practice for collection, continuity, transportation, and DNA analysis, with the objective of giving victims of sexual assault and rape the best care and chance of justice.

302. The implementation of the new rape kits was a significant investment of public funds, and a major undertaking involving Forensic Medicine Queensland (FMQ), Queensland

[214] https://www.publications.qld.gov.au/ckan-publications-attachments-prod/resources/5b70727a-cc0e-4e08-8eda-e1434e6e0814/wsjt-hear-her-voice-report-2-volume-1.pdf?ETag=e7ff438db3d61317be5d683ce05e7023
[215] Final Report Commissioner of Inquiry into Forensic DNA Testing in Queensland, 13 December 2022. Section 3.3.

Health, the Sexual Assault Reform Oversight Committee (SAROC), QPS, DoJ, FSQ, and ODPP.

303. The DNA Review has concluded that the implementation of testing methods for the new kits was conducted poorly by FSQ. When the new rape kits were implemented, FSQ failed to internally verify three key methods to detect semen (p30, acid phosphatase, and sperm microscopy) to make sure they would work reliably when analysing rape kit samples. In February 2024 FSQ conducted a risk analysis on each method which stated:[216]

> *"The delayed development and implementation of the workflows for both FMEKs and application of the p30 test of swabs contained within the FMEKs, has led to a significant backlog of exhibits for processing, prompting the need to implement the methods within the workflow without a full internal verification."*
>
> *"The delayed development and implementation of the workflows for both FMEKs and application of the APT* [acid phosphatase test] *swabs contained within the FMEKs, has led to a significant backlog of exhibits for processing, prompting the need to implement the methods within the workflow without a complete internal verifications (some aspects of the workflow and methods have been verified)."*
>
> *"Implementation of a new procedure without internal verification has the potential to detrimentally impact downstream decision making and processing of exhibits, and as a worst-case scenario, lead to the reporting of inaccurate results."*
>
> *"The provision of inaccurate evidence may result in a miscarriage of justice."*

304. Despite these risks which FSQ describe as "extreme"[217] in the risk analysis, the three semen detection methods were used on the new rape kits. These actions do not prioritise the needs of the victims and their wellbeing or consider the implications for police investigations, community safety, or the criminal justice system.

305. In January 2025 the p30 test was verified (17 months after the new rape kits were introduced), and the acid phosphatase test was verified in February 2025 (18 months after the introduction of the rape kits). The sperm microscopy method has still not been internally verified.

306. The DNA Review analysed raw data obtained from FSQ (generated in May and June 2025) which confirms the three methods are not reliably detecting semen when it is present on rape kit samples, despite the two methods being only recently verified:

    (a) One method (acid phosphatase) failed to detect semen when it was microscopically observed in 21.7% of rape kit swabs.

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[216] DNA Review Information Request 14A 'RA-003 Implementation of Acid Phosphatase Test -direct testing of swabs and other substrates', 'RA-004 Implementation of the p30 test for direct testing of swabs and substrates', 'RA-005 Method changes for preparation of slides for microscopic detection of sperm.'

[217] DNA Review Information Request 14A 'RA-003 Implementation of Acid Phosphatase Test -direct testing of swabs and other substrates', 'RA-004 Implementation of the p30 test for direct testing of swabs and substrates', 'RA-005 Method changes for preparation of slides for microscopic detection of sperm.'

(b) The second method (p30) failed to detect semen on 31.9% of rape kits swabs where sperm was microscopically observed and were positive for acid phosphatase.

(c) The third method (sperm microscopy): Of 291 rape kits swabs that were microscopically analysed for sperm but were negative, 21 were positive for acid phosphatase and p30 (7.2%).

307. The DNA Review considers that it would be reckless for a forensic science laboratory to knowingly use methods on critical evidence when they knew the methods were not verified and may be unreliable. To act in such a manner may deny victims justice and cause significant trauma and mistrust of the forensic laboratory and the criminal justice system. Affected victims may include children and victims with impairments who could remain at risk if their offender is not brought to justice.

308. A second topic of discussion in this section relates to continuous improvement of the rape kits. The DNA Review understands that there is currently no method to collect end-to-end data to understand how well the rape kits have been implemented across the entire system to enable continuous improvement. This section will discuss an opportunity to collect and analyse data to improve the experience of sexual violence victims and increase their chance of obtaining justice.

309. Lastly, the need to have early evidence kits (EEKs) available in rural and remote communities 24 hours a day, and at mine site for victims of sexual violence will be discussed. Not having 24-hour access to EEKs disadvantages victims in rural and remote communities and at mine sites.

4.7.2 Poor implementation of new rape kits by FSQ and missed evidence

310. In Queensland rape kits are ideally taken within 72 hours for allegations of penile penetration, although there is discretion for kits to be collected up to seven days in some instances, and longer in exceptional circumstances.[218]

311. The Sofronoff Inquiry found that QHFSS did not have appropriate methods to detect sperm from rape kit samples using microscopy.[219] This failure led to cases affected being included in the historical case review that met the criteria below, and a need to improve laboratory processes.

> *"Samples collected for sexual assault cases between 1 January 2008 and 8 August 2016 in which spermatozoa were not identified and which were not subject to further testing, from which it may be possible to obtain an interpretable DNA profile with further processing and testing."*[220]

312. FSQ started receiving the new rape kits on 1 August 2023. The transition required validation / verification of workflows and methods, training of staff, and the new rape kit required more extensive administrative and scientific time to process. These elements are all essential to ensure evidence is not missed or destroyed, and reliable results will be obtained. These are also requirements under the ISO/IEC 17025 standard which FSQ is accredited against.

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[218] 'Forensic DNA analysis in cases of sexual violence: A plain language guide.' Queensland Health 2024. https://www.health.qld.gov.au/__data/assets/pdf_file/0027/1353870/plain-language-guide-dna-analysis.pdf
[219] Final Report Commissioner of Inquiry into Forensic DNA Testing in Queensland, 13 December 2022. Section 5.3.
[220] 'Historical Case Review Principles', Classes of cases impugned by the CoIs, page 6. https://www.fsq.qld.gov.au/__data/assets/pdf_file/0024/334374/Historical-Case-Review-Principles.pdf

313. Information provided by FSQ has caused the DNA Review to conclude that training of FSQ staff prior to the introduction of the new rape kits was inadequate[221], sufficient standard operational procedures were not in place,[222] and FSQ failed to conduct internal verification on methods and workflows involved in semen detection for the new rape kits[223]. As a result, the DNA Review received evidence from FSQ personnel to the effect that that testing of rape kits paused for many months in 2024, which the DNA Review has concluded contributed to the large backlog.

314. The basic workflow for the new rape kits was not introduced until 17 March 2024, some eight months after the new rape kits were introduced.[224]

315. Analysis of raw data[225] (January 2022 to December 2024[226]) provided to the DNA Review revealed that the number of new rape kits processed by FSQ approximately halved compared to the previous rape kits. FSQ was receiving ~70 rape kits a month to test, however, it could only test ~25 rape kits a month.[227] Therefore, there was an average capacity gap of approximately 40 to 50 rape kits a month which has accumulated into a backlog of ~700 rape kits.

316. Minutes from an FSQ Leadership Group meeting on 5 July 2024 stated[228]:

> *"Backlog of sexual assault cases, particularly sexual assault of minors are of concern and has been raised in multiple forums. Attempting to get a list of these matters from* [redacted] *to prioritise and progress."*

317. As of January 2025, the FSQ backlog included 641 rape kits. Of these, 121 relate to child victims or victims with impairment.[229]

318. The detection of seminal fluid on rape kits swabs relies on three methods used by FSQ (sperm microscopy, the acid phosphatase and p30 tests). None of these methods had been internally verified by FSQ prior to implementation of the new rape kits. Internal verification is a process to ensure any new method introduced into a forensic laboratory and used on evidence is accurate, reliable, and fit for purpose. It involves testing the new method on mock experimental samples, prior to using it on evidence. This process is also a requirement for ISO/IEC: 17025 accreditation and is considered best practice.

319. On 22 February 2024 FSQ generated risk assessments for all three critical methods, evaluating the risk of having used them on the new rape kits prior to the completion of internal verification. The risk assessments shows that FSQ made the decision to not conduct internal verifications on these three key processes because of the growing rape

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[221] Information provided by FSQ.
[222] Information provided by FSQ.
[223] DNA Review Information Request 14A.05 'RA-003 Implementation of Acid Phosphatase Test – direct testing of swabs and other substrates', 'RA-004 Implementation of the p30 test for direct testing of swabs and substrates', 'RA-005 Method changes for preparation of slides for microscopic detection of sperm'.
[224] DNA Review Information Request 14A 'FMEK Reduction Backlog Plan Update', 17 October 2024. Slide 2.
[225] DNA Review Information Request 32.2 (1-12) 'Evidence Recovery'. Without intervention newly submitted major crime cases will join the end of the 12,000 sample que and continue to be delayed by up to 2 years. Unchanged, the FSQ strategy for new major crime cases[225] will continue to delay court cases impede police investigations and put Queenslanders at risk of being victims of violent crimes.
[226] DNA Review Information Request 32.21 to 32.2.12 'Evidence Recovery…'.
[227] Note, after submission some rape kits no longer require testing (the complaint may have been withdrawn).
[228] DNA Review Information Request 28.4 'Leadership Group Meeting Reports', 5 July 2024, page 85.
[229] DNA Review Information Request 52 'FSQ Coversheet', March 2025page 2, paragraph 1.

kit backlog and their lack of readiness to start analysing the new rape kits within the laboratory.[230]

> *"The delayed development and implementation of the workflows for both FMEKs and application of the* [acid phosphatase, p30] *test of swabs contained within the FMEKs, has led to a significant backlog of exhibits for processing, prompting the need to implement the methods within the workflow without a complete internal verification."*

320. FSQ acknowledged the risk of not conducting the internal verifications in the three risk assessments.[231]

> *"Implementation of a new procedure without internal verification has the potential to detrimentally impact downstream decision making and processing of exhibits, and as a worst-case scenario, lead to the reporting of inaccurate results."*
>
> *"The provision of inaccurate evidence may result in a miscarriage of justice."*

321. A further risk of FSQ implementing these methods without first completing the necessary internal verification is that precious evidence from rape kit swabs could be lost (the failure to detect semen could affect which downstream test was used, The wrong test would have discarded intact sperm cells). In some instances it would cause a failure to recover sperm (by not locating where semen may be on an item), denying victims a chance at justice, and failing to identify offenders who may reoffend. This could place communities Queensland-wide in harm and cause additional trauma for victims of sexual violence.

322. The Queensland Health '*Forensic DNA analysis in cases of sexual violence: A plain language guide*' informs practitioners of the processes involved in examination of rape kits. The guide clearly states the importance of detecting semen in rape kit samples for the investigation and prosecution of cases.[232]

> *"In sexual assault cases, the presence of certain biological fluid/cell types in evidentiary samples may or may not support specifics of the sexual assault allegation. For example, if the allegation is vaginal/penile penetration with ejaculation, the finding of semen or sperm cells on samples taken from a victim-survivor's vagina may be highly probative to the case."*

323. From a technical perspective, when there is no positive result for semen with the acid phosphatase or p30 test, and there is no sperm found microscopically, the FSQ workflow ('Sexual offences workflow')[233] suggests the sample should then undergo routine DNA extraction of the swab from the rape kit. In the DNA Review's experience, a routine DNA extraction (as opposed to a differential lysis extraction specifically for sperm cells mixed with other cells) will not obtain DNA from sperm cells, and the sperm cells will be lost during that process (a chemical will not be applied to break open the

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[230] DNA Review Information Request 14A 'RA-003 Implementation of Acid Phosphatase Test -direct testing of swabs and other substrates', and 'RA-004 Implementation of the p30 test for direct testing of swabs and substrates'.
[231] DNA Review Information Request 14A 'RA-003 Implementation of Acid Phosphatase Test -direct testing of swabs and other substrates', 'RA-004 Implementation of the p30 test for direct testing of swabs and substrates', 'RA-005 Method changes for preparation of slides for microscopic detection of sperm.'
[232] 'Forensic DNA analysis in cases of sexual violence: A plain language guide.' Queensland Health 2024. https://www.health.qld.gov.au/__data/assets/pdf_file/0027/1353870/plain-language-guide-dna-analysis.pdf page 14.
[233] DNA Review Information Request 37 '37.02 Case Management V3.001_11_25 Draft', page 29 'Sexual offences workflow'.

sperm cell to release the DNA, and the sperm cells will be discarded during the DNA extraction process). Therefore, a failure of these semen detection methods can affect critical decision making by scientists, could waste valuable evidence, and/or misguide downstream scientific conclusions as to the presence (or not) of semen, and the linking of possible biological source of the DNA profile from the routine DNA extraction.

324. The impact for a victim of receiving false negative results from a rape kit would be devastating. It may also result in their reliability as a witness being questioned and negatively impact on court proceedings.

325. Another scenario presents a risk, where a decision is made by the FSQ reporting scientists to conduct a DNA extraction specifically used on sperm samples (differential lysis), which is different to the routine method for DNA extraction. In this instance, a profile could be obtained from the semen on the rape kit sample. However, the DNA statement of witness would disclose the negative sperm microscopy, acid phosphatase and p30 results. Therefore, the DNA profile cannot be attributed to seminal fluid and may instead infer the DNA came from cells which could be the result of a consensual activity.

326. The DNA Review sought advice from an experienced private defence lawyer to better understand the ramifications of this potential scenario. The defence expert stated:

> *"Experienced defence lawyers generally do not take instructions from their clients until the Crown's case, including obtaining DNA experts /reports, is known.*
>
> *In a circumstance where a DNA profile obtained from a rape kit swab taken from the complainant is consistent with the defendant, but all tests for the presence of seminal fluid is negative (sperm microscopy, acid phosphatase, and p30) such a state of the evidence may actually corroborate the defendant's version of events thus becoming corroboration for defendant's case."*

327. Therefore, where negative results were obtained from all three semen detection methods, yet a male DNA profile was obtained which was consistent with the defendant, a victim can still be negatively impacted by the FSQ failings because it may be at odds with their version of events.

328. Overall, regardless of whether a DNA profile is obtained or not from rape kits swabs where the three semen detection methods were negative (and where semen is present), it could have a significantly detrimental impact on the outcome of the case. Therefore, verification is an extremely important step for decision making on how to correctly test the samples (as reinforced by ISO/IEC: 17025 accreditation requirements), and to provide confidence in the results reported to police and the courts.

329. The DNA Review heard from concerned FSQ scientists who advised that they believed that ~70% - 80% of the rape kits which were being examined provided negative results for the semen detection methods. They stated they had previously escalated their concerns but were not aware of any actions being taken to investigate them. These scientists were unaware that the methods had not been internally verified when the new rape kits were introduced and were not aware of the three risk assessments which had been conducted on the methods. One scientist stated to the DNA Review:

> *"There is no way we would be allowed to use methods on evidence that wasn't properly validated or verified".*

330. In June 2025 the DNA Review requested from FSQ results from a trial it was conducting on rape kits from May and June 2025. As part of the trial, all samples were processed using the DNA extraction method for sperm (differential lysis) rather than the general DNA extraction method (which would have resulted in no male DNA profiles from sperm). The raw data showed whether the three semen detection methods were positive or negative, and stated whether a male DNA profile was obtained.

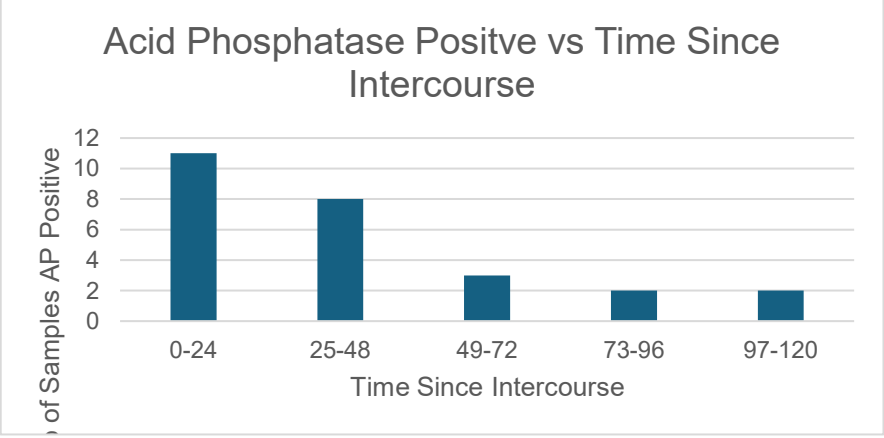
331. The results are of concern to the DNA Review as they support a conclusion that the three methods used by FSQ on rape kits are not reliable.

332. Method 1 (acid phosphatase[234]): Of 60 rape kit swabs where sperm was observed from the sample microscopically (that is, confirms semen is present), the acid phosphatase method failed to detect semen in 13 of those samples (21.7%). The percentage of these suggests that one in every five rape kits swabs could fail to detect semen when it is present using this method.

333. The acid phosphatase test can generally be detected two to three days after intercourse[235] and can be found up to six days[236]. Of the 13 samples that were negative for acid phosphatase, yet sperm was observed microscopically, ten had a nominated time since intercourse. Four samples were from cases where time since intercourse was recorded as being within 3 days. These were ~4.5 hours, two were less than a day, and one was ~33 hours, so would have expected to have been positive.

334. Further analysis of the FSQ data[237] by the DNA Review shows acid phosphatase results have been obtained from samples nominated as being over 48 hours since intercourse and up to 120 hours since intercourse (Figure 16). This data suggests the acid phosphatase test FSQ is using could be producing both false positive results and false negative results.

Figure 16 FSQ acid phosphatase positive rape kit samples with nominated time since intercourse (hours).



[234] Acid phosphatase is a chemical screening tests, where the chemical will change colour to purple within a given timeframe if semen is present. It is a presumptive test, meaning substances other than semen can provide a positive result.
[235] D Casey, K. Domijan, S. MacNeill, & D. Rizet. The Persistence of Sperm and the Development of Time Since Intercourse (TSI) Guidelines in Sexual Assault Cases at Forensic Science Ireland, Dublin. Journal of Forensic Sciences 62(3) 2016. DOI:10.1111/1556-4029.13325
[236] L R Ricci, S A Hoffman. Prostatic acid phosphatase and sperm in the post-coital vagina. Ann Emerg Med . 1982 Oct;11(10):530-4. DOI: 10.1016/s0196-0644(82)80424-1

[237] DNA Review Information Request 75 'Response to request 75 – FMEK Casework Study Data (18 June 25)'.

335. Method 2 (p30[238]): Of 47 rape kit swabs where semen was observed microscopically and was positive for acid phosphatase, 15 were negative for the p30 test (31.9%). Once again, the percentage of false negative results is high, suggesting this method could fail to detect semen in one in three rape kits swabs when semen is present.

336. The p30 test can generally detect semen between 24 to 48 hours since intercourse.[239] The DNA Review conducted further analysis to find the estimated time since intercourse recorded for the 15 samples (Table 6). All fifteen samples were collected within two days of intercourse, so would have been expected to be positive, further suggesting a false negative rate of 31.9% which is not acceptable.

Table 6 Rape kit samples where sperm was observed microscopically, and were positive for acid phosphatase, but negative for the p30 test.

Estimated Time Since Intercourse	Number of Samples
16 hrs	2
24 hrs	3
<48 hrs	4
32 hrs	1
48 hrs	5

337. Method 3 (sperm microscopy[240]): Of 291 rape kit swabs that were microscopically analysed for sperm but were negative, 21 were positive for acid phosphatase and p30 (7.2%). This could be caused by the donor being vasectomised (producing semen which does not contain sperm), however, given the donors of these samples are unknown, this cannot be verified. Another reason which could explain these results are when only trace amounts of semen is present, it is more difficult to microscopically detect sperm. A final reason could be that the FSQ sperm microscopy or slide preparation is not being conducted to best practice and they are false negative results.

338. Of 50 samples where no sperm was found microscopically and no semen was detected (using acid phosphatase), one sample provided a DNA profile consistent with the suspect (2%). This result is concerning, because if this sample was not part of the trial, it could have been processed in a different way where this DNA profile may not have been obtained.

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[238] The p30 test is a confirmative test for semen which relies on a specific antigen / antibody interaction to provide a colour change on a test pad (like a pregnancy test pad).

[239] https://www.abacusdiagnostics.com/Comparison_of_Rapid_Stain_ID_Test_for_Semen_RSID_Semen_Seratec_PSA_Semiquant_and_ABAcard_p30_Tests_for_the_Forensic_ID_of_Seminal_Fluid.pdf

[240] Sperm microscopy involves transferring some sample from the rape kit swab to a glass slide, staining it and looking at it under a microscope to visualize sperm. It is a confirmatory test, meaning that it proves sperm / semen is present.

339. In addition to the unreliable semen detection methods, the method used by FSQ to obtain DNA from sperm cells (differential lysis DNA extraction) is performing poorly as described in Section 4.6 (Release of Unreliable Results by FSQ). In combination, these unreliable methods could be significantly reducing the chance to identify offenders of sexual violence and failing victims of crime.

340. A project conducted by FSQ in October 2023 (two months after the introduction of the new rape kits) demonstrated that one method (Maxwell 16) was recovering 50% less DNA from semen than another method (Maxwell FSC)[241]. The Maxwell 16 method stopped being used four months later (it is unknown why this method was not terminated immediately). However, semen evidence is still being processed on the instrument (Maxwell FSC) that is recovering 18% to 34% less DNA. The use of such poor methods on evidence could result in offenders failing to be identified because DNA is not recovered from the crime scene evidence.

341. An FSQ monthly Innovation team report dated 1 February 2024 states:

> "*Following the Extraction Efficiency projects and the endorsement of recommendations, risk now sits with the processing of semen samples on the Maxwell instruments. A project proposal has been approved to conduct an assessment to inform this risk. However, results from the previous FMEK* [Forensic Medical Examination Kit - rape kit] *swab project suggest the method may be performing effectively*."[242]

342. FSQ is currently conducting a project to enable testing of sexual assault samples on another instrument[243] (QIAsymphony), however, the completion is many months away. It is unknown why it has taken FSQ over 1.5 years to commence this project given the critical findings in October 2023 of the flawed DNA method.

343. These results lead the DNA Review to view:

(a) these three critical methods are unreliable

(b) any decision to use the three methods without first undertaking the necessary internally verification was reckless.

(c) that FSQ may not have adequately prioritised the needs of victims.

344. A decision by FSQ to implement unverified testing methods may also be contrary to the main purpose of the FSQ Act which is to:

> *"…ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland.[244]"*

345. The DNA Review considers all testing of rape kits and of any other evidence from sexual offence matters (including underwear, clothing, bedding, etc) by FSQ should stop immediately to avoid incorrect test outcomes and lost evidence from rape kits. It is likely that all rape kits and evidence suspected of containing semen processed by FSQ

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[241] DNA Review Information Request 55 'Project 275 'Extraction efficiency of semen', October 2023.'

[242] DNA Review Information Request#28.4, 'Innovation Monthly Report', p119.
[243] DNA Review Information Request#28.6.7 'Weekly Reporting 17 January 2025'. page 21.
[244] *Forensic Science Queensland Act* (2024) Part 1, Section 3.

will require review, and where possible, re-testing. The time period that these tests were used will need to be investigated.

346. Significant resources have been expended over the last two years to implement the new rape kits by multiple organisations. However, given these findings, it is the opinion of the DNA Review that FSQ may represent the single biggest point of failure in meeting the purpose of the Women's Safety and Justice Taskforce and the Sofronoff Inquiry recommendations.

4.7.3 Ongoing Improvements to the new rape kits

347. Forensic Medical Examination Kits (FMEK, 'the new rape kits') were implemented throughout Queensland in July 2023 to address recommendations arising from the Women's Safety and Justice Taskforce (Report 2) and the Sofronoff Inquiry.

348. At the time of the above inquiries forensic DNA testing was the responsibility of Queensland Health, however, it transitioned under the remit of the Department of Justice in July 2024. QH and the Department of Justice are now partner agencies, and despite ongoing close collaboration, have limited oversight or influence on each other's strategic and operational functions.

349. The DNA Review established a focus group with the Chief Medical Officer of Queensland (SAROC Chair), and other members of the SAROC representing FMQ and the Clinical Forensic Medicine Unit. The focus group discussed implementation of the new rape kits and Queensland Health Sexual Assault Reforms. The work of the experts state-wide has led to various reforms for the experience of sexual violence victims (Attachment 5).

350. The first review of the new rape kits and associated paperwork (including the forensic medical examination record) began in February 2024 with feedback sought from forensic examiners, forensic DNA scientists, the ODPP, and QPS. Improvements to the kits are ongoing and overseen by FMQ and the multiagency SAROC.

351. There are four key elements of the forensic medical examination (**FME**) process that can each significantly impact the quality and timeliness of outcomes for a sexual assault / rape investigations and the subsequent justice opportunities for victims:

(a) collection;

(b) continuity;

(c) transport; and

(d) laboratory DNA analysis.

352. FMEs are conducted by examiners in every Hospital and Health Service, across many facilities with varying service frameworks and support capabilities The multiple agencies involved in responding to a report of sexual violence collect various metrics across multiple information and communication technology systems with no wider data sharing agreements or collaborative analysis tools. This includes Queensland Health, QPS, FSQ, and ODPP.

353. A complete set of relevant data is therefore not readily accessible, however, is needed to:

(a) guide the ongoing improvements to the new rape kit components;

(b) guide the ongoing improvements to the new rape kits evidence-based training, sample collection, continuity, transport, and DNA analysis processes;

(c) implement a feedback loop of DNA success rates to collection points;

(d) streamline the FMEK processes and help reduce backlogs; and

(e) enhance justice outcomes for victim-survivors.

354. While ongoing evidence-based research and development is needed, a short-term project is required to identify and collect relevant FME and rape kit data across multiple systems, including offence type, evidence type, collection practices, DNA processing methods, and DNA testing outcomes. Analysis of the data will compare actual results with expected outcomes, identify any significant variances, and help to identify areas of clinical and scientific improvements.

355. This work is not able to be practically achieved with existing resources already undertaking heavy workloads. Accordingly, this project requires additional temporary resources, including a business analyst and a statistician, to support Queensland Health forensic services and support staff within FMQ, Queensland Pathology and hospital and health services; the Department of Justice agencies of FSQ and the ODPP; and the QPS, to collaborate and deliver project components relative to speciality expertise.

356. From this project, ongoing system requirements would be identified to ensure continued high standards of service delivery. The project could be conducted with a research partner or through short-term contracted resources.

357. Overarching project governance, coordination and management of the project should be conducted by DoJ with support from an integrated project team from relevant organisations. The project would require permission to access data across multiple organisations considering the nature of the information being obtained.

358. The DNA Review considers that if such information sharing, and tracking of the end-to-end rape kit collection, transport, and DNA testing processes had been initially in place, the FSQ failings would likely have been rapidly detected and remediated.

4.7.4 Twenty-Four Hour Access to Early Evidence Kits Across Rural Queensland and in Mine Sites

359. An early evidence collection kit (EEK) is a rape / sexual assault kit designed for victims in rural and remote areas who are not close to a hospital or clinic where a forensic medical examination can be conducted by trained professionals. The purpose of the kit is to secure evidential material from the victim that may be compromised or lost due to delays in hospital attendance, while also allowing them to eat, drink and attend to personal hygiene needs. It is not a substitute for a rape kit. Currently there is no access to EEKs in Queensland, however, this is being progressed by Queensland Health, Forensic Medicine Queensland and the SAROC.

360. During focus group meetings with QPS, it was raised that some remote health clinics do not operate 24 hours a day, therefore victims would not be able to access the EEKs outside of operating hours and valuable DNA evidence may be lost that could identify an offender and bring justice to victims. Not having 24-hour access to EEKs disadvantages victims in rural and remote communities.

361. It was also raised by QPS that currently there are no plans to distribute EEKs to mine sites around Queensland. Western Australia is implementing access to EEKs at remote mine sites.[245] QPS suggested that consideration should be given to mine sites having access to EEKs in locations where they are not accessible 24 hours a day.

362. Twenty-four-hour access to EEKs was discussed in a DNA Review focus group with the Chief Medical Officer of Queensland (SAROC Chair), and other members of the SAROC representing FMQ and the Clinical Forensic Medicine Unit. They advised that access to EEKs should be accompanied by health experts to ensure an appropriate standard of care for an alleged victim, however, they will be considering ways to overcome this limitation in the second phase of the EEKs roll out.

Recommendation 9	**9.1** FSQ should immediately stop testing all rape kits and all evidence suspected of containing semen. **9.1.1** To ensure accuracy and reliability, various semen detection methods should be tested and compared by FSQ, and the most accurate and reliable validated / verified. FSQ staff should be trained to perform the semen detection methods and interpret their results in the context of sexual offences. Reliable controls should be implemented by FSQ to monitor the reliability of the semen detection methods. **9.1.2** A review should be conducted by the FSQ Quality Assurance Team and the DoJ Expert Team to establish what timeframe the three unreliable methods (sperm microscopy, acid phosphatase, and p30) were used by FSQ on sexual offence cases. **9.1.3** Where required by QPS or the courts, further testing of samples impacted by the three unreliable semen detection methods should be conducted.
Recommendation 10	A project should be initiated to identify, access, and analyse relevant data sets across multiple organisations involved in the collection, continuity, transport, DNA analysis, and reporting of rape kits. This project should be conducted by DoJ with support from an integrated project team from relevant organisations including SAROC, QPS, FSQ, and ODPP.
Recommendation 11	Early evidence kits (EEKS) should be available to victims in remote and rural areas 24 hours a day and should be available at mining sites to collect and preserve DNA and other forensic evidence.

[245] 'Implementing the use of CARC kits on remote mine sites https://www.wnhs.health.wa.gov.au/~/media/HSPs/NMHS/Hospitals/WNHS/Documents/Professionals/SARC/SARC-EEK-Kit-Implementation-Infosheet.pdf

Intent and desired end state	**Intent:** Ceasing testing will preserve evidence from sexual violence cases and ensure they are not tested with unreliable methods. The best methods for detecting semen will be validated / verified by FSQ, and staff appropriately trained to ensure all future sexual violence evidence is reliably tested. The multi-agency FMEK data collection project will: f) guide the ongoing improvements to FMEK kit components; g) guide the ongoing improvements to FMEK evidence-based training, sample collection, continuity, transport, and DNA analysis processes; h) implement a feedback loop of DNA success rates to collection points; i) streamline the FMEK processes and help reduce backlogs; and j) enhance justice outcomes for victim-survivors. After the first phase of EEK implementation, a second implementation phase will ensure all victims of sexual violence will have 24 hour access to EEKs, including in remote Queensland and at mining sites. **Desired End State:** Rape kits are tested and interpreted by FSQ with the best methods, performed by competent staff. Quality issues with semen detection methods are detected and remediated immediately, and prior to results being released. Cases nominated by QPS or the courts which have been impacted by the unreliable semen detection methods have all been reviewed, re-tested, and where needed have had amended results released. The rape kit data analysis project has been completed and achieved its aims. Data existing across multiple agencies is regularly monitored by QPS, DoJ, and SAROC. Necessary improvements are made to rape kit collection, continuity, transport, DNA analysis, and reporting system wide. EEKs are available 24 hours a day to all victims across Queensland and at remote mine sites at the completion of the second phase of EEK implementation.

Attachment 5 Summary of Queensland Health Sexual Assault Reforms[246]

363. Queensland Health is committed to the continued provision of a trauma-informed, accessible, effective and high-quality service to victim-survivors of sexual assault, and to ongoing improvement.

364. In recent years, Queensland Health has dedicated significant efforts and resources towards improving care for people disclosing sexual assault across the state, under the overarching sexual assault reform program.

365. Reforms and improvements undertaken across this space include:

- Publication of a Health Service Directive (HSD), Caring for people disclosing sexual assault | Health service directive | Queensland Health which requires every Hospital and Health Service (HHS) to provide 24-hour access to clinical care and forensic examinations for people 14 years and over disclosing a sexual assault in accordance with the Guideline for the management of care of people 14 years and over disclosing sexual assault (the Guideline). Originally published in 2019, both the HSD and Guideline have been recently updated.
- Statewide rollout of new, modular best-practice, forensic medical examination kits and supporting documentation in August 2023, which were designed to address specific, expert-informed recommendations accepted by Government. They were also created to maximise the quality and evidentiary potential of samples collected in relation to allegations of sexual violence.
- Development of the statewide Forensic Examiner Training Program by Forensic Medicine Queensland, which provides education for doctors and nurses in performing forensic examinations. Training includes a number of online modules followed by an in-person workshop, and over 850 clinicians have completed training since 2023. Forensic Medicine Queensland also provides 24/7 phone support by experienced Forensic Physicians to any doctor or nurse across the state required to perform a forensic medical examination.
- In mid-2024 $56 million over four years was announced to support and uplift sexual assault response services across every HHS. This includes $44 million for services to care for adults and older adolescents, and $12 million to support paediatric service provision. The funding has enabled a permanent dedicated core team to be established within every HHS to coordinate and oversee local models of care, including both nursing and psychosocial support positions.
- A Ministerial Direction (the Direction) Ministerial Direction - Crisis Care Process | Queensland Health was also released on 17 November requiring in-scope hospitals to have a crisis care process in place within their emergency departments, and to accept victim-survivors into their care and commence an appropriate care pathway within 10 minutes.
- Statewide oversight of these reforms is provided by the Office of the Chief Medical Officer, which offers support and guidance at the system level including:
- Establishment of the multi-agency Sexual Assault Reform Oversight Committee (SAROC) which includes representation from the Department of Justice and

[246] Information provided by the Office of the Chief Medical Officer Queensland.

Attorney-General, Queensland Police Service, Forensic Science Queensland, Forensic Medicine Queensland, Department of Health, Hospital and Health Services and the Queensland Sexual Assault Network.

- Publication of the Queensland Health Sexual Assault Services Framework, which articulates the core requirements for service delivery within Hospital and Health Services, taking into consideration contextual factors for Exemplar Hubs, other metro and larger regional services, and those situated in rural/remote environments.
- Development of a performance reporting framework to enable greater system-level oversight of care for people disclosing sexual assault, as well as early identification of trends and challenges. This work is currently underway, and is overseen by a Data Review Subcommittee reporting to the SAROC.

4.8 FSQ DNA Testing Thresholds

366. This section relates to TOR 6 which requires the DNA Review to provide advice to the Government on how to improve the efficiency, accuracy and reliability of FSQ DNA service delivery. A key factor in accuracy and reliability of DNA service delivery hinges upon the DNA testing threshold and the integrity of the validation process utilised to determine it (limit of detection, LOD, validation). It is for this reason that the DNA Review has looked at FSQ's DNA testing threshold and LOD validation in order to be able to provide advice to enhance the accuracy and reliability of service delivery.

367. There is some overlap in this section with TOR 13 which is unavoidable given scientific processes used by FSQ impact on the accuracy and reliability of service delivery.

Key observations, findings, and conclusions in relation to FSQ DNA testing Thresholds:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) The Sofronoff Inquiry was triggered by the discovery that QHFSS set a DNA testing threshold too high, knowing this would miss valuable DNA evidence from crime scenes, and would mislead the police and courts. Recommendation 15 was meant to prevent this from re-occurring and give victims confidence they were not being denied justice.

(b) In response to Recommendation 15 from the Sofronoff Inquiry, FSQ completed a validation study titled 'Project 242: Determination of Limit of Detection' which was internally approved by FSQ on 23 August 2023.

(c) In October 2023, a project related to the DNA LOD validation was completed (Project 256 Extraction Efficiency of Blood and Trace). This project tested mock blood and trace samples by quantifying them (to determine how much DNA was present) and fully testing them to obtain DNA profiles. All DNA samples were fully tested even those that fell below the new FSQ DNA threshold FSQ (determined by the LOD validation). The results showed that approximately 12 pieces of DNA information (alleles) out of 42 in samples below the LOD (0.0006 ng/µL) were produced, therefore making it a usable profile and ones that could be uploaded to the National Criminal Investigation DNA Database.

(d) On 13 December 2023 the Board's scientific experts provided feedback on the FSQ DNA LOD validation report (which was presented as part of the Recommendation 15 closure report) requesting that FSQ to complete further experiments.

(e) In February 2024, FSQ outlined a range of further projects it would conduct to 'ensure the successful implementation of the LOD', including extraction efficiency, lower elution volume, and evaluating whether a profile can be obtained from samples below the DNA threshold. The Board agreed to close Recommendation 15. It was closed '*on the provision that the additional work described in the agenda paper be progressed as a priority'.*

(f) The extraction efficiency for some sample types was completed in February 2024, others were completed in June 2024, the lower elution volume experiments were completed in July 2024, but fully testing samples below the threshold was not, and has still not been completed.

(g) Concerns were raised in an FSQ monthly meeting on 1 March 2024 (after the DNA threshold validation was conducted) that: *"No training has been provided to Innovation (or FSQ) in experimental design and validation work. While Innovation members have*

experience and HDR [higher degree research] qualifications, there is no formal training program and/or competency." Undertaking critical experimental work and validation of methods used on evidence which is relied upon by courts without such training and experience is not acceptable practice under a forensic quality management system accredited to the international standard ISO/IEC 17025.

(h) On 19 November 2024, FSQ implemented the new DNA threshold, where samples below 0.0006 ng/µL would not be fully tested unless requested by either FSQ reporting scientists, the police, or the courts.

(i) The DNA Review have found that some of the additional work requested by the Board experts is yet to be completed.

(j) After introduction of the new DNA threshold, a Priority 1 crime scene sample from a violent unresolved crime was not fully tested because it fell below the threshold. QPS requested for it to be fully tested, and it provided a useable DNA profile that assisted the investigation.

Based on the above evidence, the DNA Review has formed the following conclusions:

(k) The LOD validation did not attempt to answer the essential question of whether a DNA profile could be obtained from samples below the set DNA threshold. In fact, FSQ did not test any of the samples in the LOD validation study that fell below the set DNA threshold to check if a DNA profile could be obtained. The DNA Review believes that:

  (i) FSQ should not have introduced the DNA threshold on 19 November 2024 until these essential validation experiments were conducted to ensure DNA evidence would not be missed; and

  (ii) the validation was not sufficiently conducted and does not comply with international guidelines for validation of LOD.

(l) The October 2023 validation project (Project 256 Extraction Efficiency of Blood and Trace), indicates to the DNA Review that FSQ knew or ought to have known that by setting the DNA threshold at 0.0006 ng/µL they were likely to be missing evidence containing usable profiles that could be reported to police and the courts.

(m) The DNA Review conducted analysis of raw data from another FSQ experiment. Of the 15 experimental (mock) samples that fell below the set DNA threshold but were fully tested:

  (i) **100%** of samples provided **useable profiles**; and

  (ii) **47%** of samples provided profiles suitable for **uploading to the National Criminal Investigation DNA Database**.

(n) The data above demonstrates the DNA threshold is too high and a significant amount of evidence is likely being missed by FSQ.

(o) These success rates are much higher than the 10.6% of useable profiles obtained below the incorrect QHFSS threshold that triggered the Sofronoff Inquiry in 2022 and the decision to remove the DNA threshold by the Queensland Government.

(p) It is recommended that the current DNA threshold is removed immediately, and an appropriate scientific validation study is conducted to inform the DNA threshold. A list of

all samples that fell below the DNA threshold since 19 November 2024 should be provided by FSQ, reviewed by the police and courts and fully tested by FSQ if required.

(q) The new DNA threshold has been in place for several months. Of concern to the DNA Review, the planned three-month post-implementation review of the DNA threshold has not been conducted by FSQ. FSQ advised this was "*due to emerging priorities including addressing the recent NATA findings*.

4.8.1 Summary

368. This section discusses the FSQ Limit of Detection (LOD) validation which was then used to set the new DNA testing threshold. The new FSQ DNA threshold was introduced on 19 November 2024, however, it was not set correctly. The validation failed to fully test samples that fell below the set DNA threshold to determine if they would produce useable profiles. This essential aspect of the validation testing was critical for FSQ to conduct before introducing the new DNA threshold (see Attachment 6 for a timeline of events).

369. The DNA Review conducted analysis of raw data from another FSQ experiment.[247] Of the 15 experimental (mock) samples that fell below the set DNA threshold but were fully tested:

(a) **100%** of samples provided **useable profiles**;[248] and

(b) **47%** of samples provided profiles suitable for **uploading to the National Criminal Investigation DNA Database**.

370. The data above demonstrates the DNA threshold is too high and a significant amount of evidence is likely being missed by FSQ.

371. It appears that FSQ also knew usable profiles were obtained well below the set DNA threshold from a second experiment.[249] Therefore, it appears to the DNA Review that although FSQ knew the threshold was too high, it nevertheless implemented it. It is certain that crime scene evidence that could produce usable profiles are not being fully tested when they should be. This could be contrary to the purposes of the FSQ Act which states:

> *"The main purpose of this Act is to ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland."*

372. It is recommended that the current DNA threshold is removed immediately, and an appropriate scientific validation study is conducted to inform the DNA threshold in collaboration with the DNA Review. A list of all samples that fell below the DNA

[247] DNA Review Information Request Project 256 'Extraction efficiency comparison of current DNA extraction methods for blood and trace samples' February 2024.
[248] This ranged from 6 to 29 alleles, with an average of 12 alleles.
[249] DNA Review Information Request Project 257 'Semen Extraction Efficiency'. Page 15, Table 3 (1/3,000 dilution ratio. First daft 16 October 2023, final version 16 August 2024. At a level well below the DNA threshold (0.000g/ul to 0.0003ng/ul an average of 2.6 alleles was obtained from one DNA extraction robot, and an average of 5 alleles from another extraction robot.

threshold since 19 November 2024 should be reviewed by the police and/or courts and fully tested if required.

4.8.2 Background

373. A DNA testing threshold is used in many forensic biology laboratories as a decision point on whether to fully test crime scene evidence, or not to progress testing. This is essentially a business decision informed by the level of risk tolerance (not testing a sample below the DNA threshold when it could potentially provide a DNA profile) and should be informed by reliable scientific validation studies and the needs and priorities of the police, courts, and victims.

374. Concerns over the QHFSS DNA threshold triggered the Sofronoff Inquiry. On 6 June 2022, the Attorney-General Minister for Justice Yvette D'ath ordered the removal of the QHFSS DNA threshold, with the purpose that all crime scene DNA samples should be fully tested.

375. The Sofronoff Inquiry found:[250]

(a) the DNA threshold was too high leading to valuable DNA evidence being missed that could resolve and prevent crime;

(b) setting of the threshold was not supported by a valid scientific approach, and not considered best practice by scientific experts;

(c) that police and courts were misled by the introduction of the threshold; and

(d) QHFSS did not adequately explain the DNA threshold to police and courts, who were confused by reporting of results that fell below the threshold.

376. These findings were among the most significant revelations of the Sofronoff Inquiry and considerably affected the public's trust in QHFSS and Queensland's forensic DNA service delivery. It also led to a State Government commitment to review and retest cases affected by the DNA threshold (included in the historical case review). In March 2024 it was reported that fully testing or re-interpreting affected samples where a profile was not previously obtained has led to useable profiles in 22.6% of samples, from 43.9% of cases.[251]

377. The Sofronoff Inquiry provided Recommendations 8, 9, 10, 15, and 16 with the purpose of providing a reliable DNA threshold that would not lead to DNA evidence being missed:[252]

378. Recommendation 8 (closed 12 December 2024):

> *"The laboratory should, after the limit of detection is validated in accordance with recommendation 15 and the report of Dr Duncan Taylor, change its standard operating procedures for the application of the limit of detection threshold so that:*

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[250] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland, 13 December 2022. Section 4, p240-352.
[251] Question on Notice No. 255. Asked on 19 March 2024. Note this figure may also contain improvements from DNA mixture interpretation.
[252] Final Report Commission of Inquiry into Forensic DNA testing in Queensland, Walter Sofronoff KC, 13 December 2022, page 63.

(a) *for Priority 1 and Major Crime cases, the case manager or another reporting scientist should validate the result; and*

(b) *the ceasing of routine DNA testing for samples that fall below the threshold can be determined on a sample-by-sample basis at the discretion of a reporting scientist based on considerations including diagnostic information, case and sample context and availability of sample context and availability of alternative DNA profiling techniques."*

379. Recommendation 9 (not started):

> "*The laboratory should provide written and video information and the opportunity for discussion to the QPS and other participants in the criminal justice system explaining the threshold and the way it affects the processing of DNA samples."*

380. Recommendation 10 (not started):

> "*The laboratory should have written and video information explaining the threshold and the way it affects the processing of DNA samples publicly available on its website*."

381. Recommendation 15 (closed on 14 February 2024):

> *"The laboratory should within 6 months complete a full and appropriate validation to identify the true limit of detection (LOD) of Quant Trio and Quant Studio 5. For Quant Trio, the validation should include testing the ability to detect DNA over a range of concentrations where each dilution series has 10 to 20 replicates to allow the LOD to be set at the concentration at which DNA is detected less than 95% of the time. The validation should be:*
>
> (a) *performed by a scientist with formal qualifications or established expertise in both experimental design and statistics; and*
>
> (b) *externally reviewed by an eminent Australian or international expert before it is implemented by the laboratory."*

382. Recommendation 16 (closed 28 March 2023):

> *"Until such time as a full and appropriate validation of the LOD of Quant Trio and Quant Studio 5 has been completed, the laboratory should not report any sample as "No DNA detected" and all samples should be processed as though their quantitation result exceeded 0.001 ng/µL."*

383. It should be noted that the completion of the LOD validation and Recommendation 15 is not alone sufficient to appropriately determine the FSQ DNA threshold. A range of factors need to be included in the scientific experimentation; however, it would not be expected that the Sofronoff Inquiry recommendations would include such a prescriptive list to direct the FSQ experts.

384. Rather, it is the purpose of the recommendations that should have been fulfilled prior to the relevant recommendations being closed and the implementation of a new DNA threshold. The purpose of the Sofronoff Inquiry recommendations was to ensure FSQ set a DNA threshold where samples below the threshold would not be expected to generate a useable profile if fully tested, and therefore crucial evidence would not be

missed as per the police and courts' risk appetite. This would give police and courts confidence in FSQ DNA results, and most importantly give victims reassurance they were not being denied justice.

4.8.3 Issues

385. This section will analyse the decisions and actions of FSQ in relation to setting and implementing the new DNA threshold.

386. In response to Recommendation 15, FSQ completed a validation study titled 'Project 242: Determination of Limit of Detection which was internally approved by FSQ on 23 August 2023. The LOD was to become the new DNA threshold, which the Reviewers have found (and is detailed below) was not based on scientifically sound data, due to poor LOD validation, and was therefore a highly questionable decision.

387. On 16 November 2023 the Interim DNA Advisory Board (the **Board**) met and considered the 'Completion Report for Recommendation 15' (**Project 242**), with the LOD validation report attached. At this meeting the Board endorsed the closure of Recommendation 15, pending feedback from the scientific experts on the Board.

388. On 13 December 2023 the Board's scientific experts provided feedback on the FSQ DNA LOD validation report. They found that FSQ used commercially purchased DNA that had already been extracted ('NIST standards'), rather than test a range of biological operationally relevant mock samples (such as blood, saliva, swabs, tapelifts, fabric). The DNA Advisory Board experts stated:

> *"We note the specific nature of the recommendation and consider the report, in isolation, to be fine. However, the validation was performed using NIST [National Institute of Standards and Technology] standards*[253] *(as opposed to samples similar to those encountered in casework) and did not factor extraction efficiency. Therefore, all this report tells us is how well the instrument is performing on a set of standards. The key question in casework is though the LOD of the sample. A whole-of-system approach (linking LOD to extraction efficiency) is required to answer this question. We understand that this work has been completed for blood samples, enabling assessment of end-to-end system performance. We urge this work to be completed for all substrates."*[254]

389. It appears to the DNA Review that in essence the Board is stating that FSQ only did the experiments on dilutions of a commercially purchased standard and needs to repeat the experiment on samples similar to those encountered in casework. This approach will ensure the new methodology also works well on actual crime scene samples as well as commercially purchased clinical grade samples. The Board also advised the validation study should include the entire DNA profiling workflow rather than one small section, that is, fully test samples to make sure evidence is not missed.

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[253] National Institute of Standards and Technology (NIST), clinical grade DNA samples.
[254] DNA Information Request 2A.05. Forensic Science Queensland Interim Advisory Board: Item 3.2e-FSQ's proposed approach to address scientific Board members' feedback', 14 February 2024.

390. On 14 February 2024 FSQ responded to the concerns of the Board's scientific experts by stating:[255]

> *"FSQ agrees that further work beyond the validation of the LOD is required; however, recommendation 15 only requires the determination of the quantitation instruments' LOD which is in addition to the existing quantification validations."*

391. [redacted]

392. FSQ outlined a range of further projects it would conduct to '*ensure the successful implementation of the LOD*', including extraction efficiency, lower elution volume, and evaluating whether a profile can be obtained from samples below the DNA threshold. The extraction efficiency for some sample types was completed in February 2024, others were completed in June 2024, the lower elution volume experiments were completed in July 2024[256], but fully testing samples below the threshold was not, and has still not been completed.

393. On 14 February 2024 the Board minutes note:

> *"Endorsed the closure of recommendation 15 on the provision that the additional work described in the agenda paper be progressed as a priority."*[257]

394. Subsequent to the Boards' formal closure of Recommendation 15, FSQ implemented a new DNA threshold on 19 November 2024, where samples below 0.0006 ng/µL would not be fully tested unless requested by either FSQ reporting scientists, the police, or the courts. The DNA Review have found that some of the additional work requested by the Board experts who required a "whole-of-system approach"[258] is yet to be completed.[259]

395. The failure to properly conduct such critical experiments by FSQ experts requested by the Advisory Board who closed this Sofronoff Inquiry recommendation with the expectation and agreement that they would be completed, raises doubts over other experiments being conducted by FSQ, its internal closure report process, and the closure of other Sofronoff Inquiry recommendations without meeting their intent.

396. The validation did not attempt to answer the essential question of whether a DNA profile could be obtained from samples below the set DNA threshold. In fact, FSQ did not test

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[255] DN Review Information Request#2. Document 2A.05 'CLOSURE REPORT-Recommendation 15 – 14 February 2024 IAB (FSQ)'.
[256] FSQ Project 257 'Semen extraction efficiency', Project 244 'Lower elution volume', and Project 256 'Extraction efficiency comparison of current DNA extraction methods for blood and trace samples'.
[257] Interim DNA Advisory Board minutes 14 February 2024, page 6 (Agreed outcomes).
[258] Forensic Science Queensland Interim Advisory Board: Item 3.2e-FSQ's proposed approach to address scientific Board members' feedback', 14 February 2024.
[259] DNA Information Request 25 'Further information sought-1 May 2025'.

any of the samples in the LOD validation study that fell below the set DNA threshold to check if a DNA profile could be obtained. The DNA Review believes that:

(a) FSQ should not have introduced the DNA threshold on 19 November 2024 until these essential validation experiments were conducted to ensure DNA evidence would not be missed; and

(b) the validation was not sufficiently conducted and does not comply with international guidelines for internal validation of LOD.[260]

397. Concerns were raised in an FSQ monthly meeting on 1 March 2024 (after the DNA threshold validation was conducted) that:

> *"No training has been provided to Innovation (or FSQ) in experimental design and validation work. While Innovation members have experience and HDR* [higher degree research*] qualifications, there is no formal training program and/or competency."*[261]

398. Undertaking critical experimental work and validation of methods used on evidence which is relied upon by courts without such training and experience is not acceptable practice under a forensic quality management system accredited to the international standard ISO/IEC 17025. This is also contrary to part b) of Recommendation 15 that requires the validation is:

> *"performed by a scientist with formal qualifications or established expertise in both experimental design and statistics."*

399. However, even without such training, it should have been obvious to even non-DNA experts that fully testing samples below the set DNA threshold was an essential step in the validation process. The lack of training raises questions for the DNA Review about the reliability of other validation and verification work that has been conducted at FSQ and implemented in casework.

400. An expert from the Sofronoff Inquiry outlined that when determining the DNA threshold, samples should be fully tested.

> *"A proper approach, she said [Professor Linzi Wilson-Wilde], would have been to collect data for all samples analysed within a set time period, breaking down the samples by quantitation values (and grouped in defined and equal ranges), whether they were concentrated, progressing all samples through PCR and interpretation and recording the end result (reported by number / percentage of alleles obtained)."*[262]

401. A large quantity of information was available to FSQ at the time of the LOD validation study and prior to setting the DNA threshold. This included data from 6 June 2022 when Minister D'Ath removed the DNA threshold, and all crime scene samples were fully tested. The quantity of DNA in each crime scene DNA sample was known and the profiling results were available and would have been highly informative but was not used by FSQ to compare against their LOD validation study and DNA threshold. The

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[260] European Network of Forensic Science Institutes 'Guideline for internal validation/verification of various aspects of the DNA profiling process', 10 May 2023.
[261] DNA Review Information Request document#2 28.4 'Leadership Group Meeting Reports', page 143.
[262] Final Report Commission of Inquiry into Forensic DNA testing in Queensland, Walter Sofronoff KC, 13 December 2022, page 263, paragraph 819.

DNA Review considers that this valuable case work data should have been used by FSQ to ensure the reliability of the new DNA threshold.

402. The following example indicates to the DNA Review that FSQ was aware or ought to have been aware that useable profiles were being obtained well below the DNA threshold prior to its implementation from data obtained from two projects containing experimental data.

403. In October 2023 a project related to the DNA LOD validation was completed (Project 256 Extraction Efficiency of Blood and Trace). This project tested mock blood and trace samples by quantifying them (to determine how much DNA was present) and fully testing them to obtain DNA profiles. All DNA samples were fully tested even those that fell below the new FSQ DNA threshold FSQ. Concerningly the report states:

> *"While allelic recovery appears to correlate with DNA yield, results demonstrate that allelic recovery was less than 35% when DNA yield was below the LOD (i.e. 0.0006 ng/µL)."*

404. This means that approximately 12 pieces of DNA information (alleles) out of 42 in a sample below the LOD (0.0006 ng/µL) was produced, therefore making it a usable profile and ones that could be uploaded to the National Criminal Investigation DNA Database. This indicates to the DNA Review that FSQ knew or ought to have known that by setting the DNA threshold at 0.0006 ng/µL they were likely to be missing evidence containing usable profiles that could be reported to police and the courts.

405. In May 2025 the DNA Review requested raw data from Project 256 to interrogate this finding further. Analysis of data by the DNA Review found that of the 15 samples that fell below the DNA threshold (0.0006 ng/µL) and were fully tested:

(a) **100%** of samples contained **useable profiles**[263]; and

(b) **47%** of samples provided profiles suitable for **uploading to the National Criminal Investigation DNA Database**.

406. These success rates are much higher than the 10.6% of useable profiles obtained below the incorrect QHFSS threshold that triggered the Sofronoff Inquiry and the decision to remove the DNA threshold by the Queensland Government. These findings are highly concerning and further indicates to the DNA Review that FSQ has implemented a DNA threshold which is set too high with the apprehended consequence that critical DNA evidence is not being fully tested.

407. The second FSQ project[264] first reported in October 2023 found on average 5 alleles (pieces of DNA information) were recovered from samples that fell well below the DNA threshold of 0.0006 ng/µL (samples that ranged between approximately 0.000 ng/µL to 0.0003 ng/µL). The DNA Review views this as further evidence that the DNA threshold is set too high, and that FSQ had experimental data demonstrating this.

408. Obtaining even a small amount of DNA information ('alleles') from DNA evidence can be valuable. This was discussed by experts at the Sofronoff Inquiry.

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[263] This ranged from 6 to 29 alleles, with an average of 12 alleles.
[264] Project 257, 'Semen Extraction Efficiency'. Page 15, Table 3 (1/3,000 dilution ratio). First draft 16 October 2023, final version 16 August 2024. Page 15, Table 3.

"Professor Wilson-Wilde pointed out that just two alleles might be useful to police.[265]"

"…even partial DNA profiles could yield useful information for an investigator.[266]"

409. A risk assessment conducted by FSQ on 8 May 2024 stated[267]:

"Implementation of a LOD [DNA threshold] has potential to significantly reduce backlogs and improve FSQs capacity to report NA results [no detectable DNA] to our stakeholders."

410. At the time of this risk assessment, the FSQ backlog was 19,000 samples[268] (equivalent to over one year of sample submissions).

411. The '*Possible Consequences*' arising from implementing the new DNA threshold were listed in the FSQ risk assessment as:

"1. Negative media attention and possible notation in national media. This represents a major consequence.

2. Missed opportunity to provide probative evidence to the justice system. This represents an extreme consequence."

412. The 2022 Inquiry found QHFSS misled QPS and the courts when they implemented a new DNA threshold in 2008.[269] In an attempt to avoid any future misunderstanding two recommendations (9 and 10) associated with Recommendation 15 (implementation of the new DNA threshold) were made. These were made to ensure QPS and the courts understood any risks or limitations with the threshold.

"*Recommendation 9: The laboratory should provide written and video information and the opportunity for discussion to the QPS and other participants in the criminal justice system explaining the threshold and the way it affects the processing of DNA samples"*

"Recommendation 10: The laboratory should have written and video information explaining the threshold and the way it affects the processing of DNA samples publicly available on its website"

413. FSQ have not started to address either of these recommendations. It is the opinion of the DNA Review that Recommendations 9 and 10 should have been completed prior to Recommendation 15 being closed, and prior to the new DNA threshold being implemented. This may have avoided some confusion around the new threshold and may have led to the realisation it was set too high.

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[265] Final Report Commission of Inquiry into Forensic DNA testing in Queensland, Walter Sofronoff KC, 13 December 2022, page 263, paragraph 820.
[266] Final Report Commission of Inquiry into Forensic DNA testing in Queensland, Walter Sofronoff KC, 13 December 2022, page 261, paragraph 812.
[267] DNA Review Information Request 14A.05 'RA-019 FSQ Risk Assessment Implementation of LOD threshold'.
[268] DNA Review Information Request 29.1 'Backlog figures by month since January 2022'.
[269] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland, 13 December 2022, Section 4.

414. The new DNA threshold was implemented regardless on 19 November 2024. The following results line was provided to police by FSQ after the DNA threshold was introduced[270]:

> *"A DNA profile has not been generated because the estimated DNA concentration is below the LOD at FSQ."*

415. The following wording was provided to police and in FSQ expert witness statements for the courts:

> *"The estimated DNA concentration for this sample is below the quantification limit of detection (LOD) as determined by FSQ through internal validation. This means the presence of DNA within the sample could not be reliably determined during quantification and therefore the sample has not progressed for DNA profiling. Based on internal validation, some samples below the limit of detection have been shown to contain low levels of DNA. There is a chance that if profiled, the sample may or may not yield DNA information suitable for interpretation and comparison."*

416. The DNA Review believes that this information does not alert police or the courts to the insufficiency of the DNA LOD validation to determine the threshold or implementation. Expert DNA knowledge would be needed to understand what a LOD actually means, and that it is not suitable alone for setting a DNA threshold. The wording does suggest that '*some samples*' below the LOD could provide useable DNA profiles. However, it does not estimate the percentage of samples that this could occur in, or how far below the threshold this could occur even though FSQ had experimental data that determined this (100% of samples produced usable profiles for Project 256). This leaves the police and courts with insufficient information to make informed decisions regarding whether they need to request DNA evidence that fell below the set DNA threshold to be fully tested. Further, FSQ currently does not readily provide police with access to data for each sample to show how far below the DNA threshold it is (quantitation data) to enable them to make informed decisions. If the LOD validation was robust and correct, and the DNA threshold correctly set, this decision would not be so difficult for the end users to make.

417. The DNA Review has seen evidence that shows FSQ did not provide sufficient training or explanation to QPS of what the new reporting lines meant when the DNA threshold reporting line was introduced.[271] This risks police making uninformed decisions on whether samples should be fully tested or not and likely led to QPS not asking for samples to be fully tested.

> *"Seems we have FSQ wording updates, but we don't actually get informed on what they mean." and:*
>
> *"Can you please provide us with some information behind this? I am really just chasing to 'humanize' the true meaning behind it all."*

418. Further, a QPS officer spoke to an FSQ scientist who opined that the new DNA threshold:

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[270] DNA Review Information Request# 54.
[271] DNA Review Information Request # 54.5 'QPS LOD wording e-mail', February 2025.

"…means that it is unlikely that there is a sufficient amount of DNA to generate a DNA profile."

419. The DNA Review considers that this broad explanation does not provide QPS experts with the information they need to request for a DNA sample below the threshold, to be fully tested. The FSQ scientist did, however, advise that if the sample is critical, it can be fully tested. The DNA Review considers that a critical sample should be fully tested as a matter of routine as the risk of missing critical DNA evidence outweighs the benefit of saving resources of not testing the sample.

Case Study 8

Evidence from a homicide below the set DNA testing threshold

After implementation of the FSQ DNA testing threshold, critical evidence from a homicide fell below the set DNA threshold, and FSQ did not fully test the sample, therefore a DNA profile was not generated. QPS asked for the sample to be fully tested, which resulted in a profile that identified the offender, and assisted the police investigation. As a result, QPS have asked for all Priority 1 DNA evidence (urgent samples from unresolved violent offences) to be fully tested by FSQ, regardless of whether it is below the set DNA testing threshold,[272] However, Priority 1 samples consist of on average only 13 of samples every month (0.07%). At the time of writing, it is unknown how many other DNA samples that were not fully tested by FSQ since 19 November 2024 could also provide a DNA profile to potentially help resolve and prevent serious and violent crime committed by repeat offenders.

420. Upon request by the DNA Review, FSQ provided a cover sheet summarising the implementation of the new DNA threshold. It stated:

"On 13 December 2023, the scientific experts provided feedback in relation to the completion of recommendation 15, stating the Project Report #242 [the DNA threshold validation] appeared 'to be fine'. Noting this feedback, FSQ returned to IAB [Interim Advisory Board] at its 14 February 2024 meeting and sought its endorsement to close Recommendation 15, which IAB endorsed."[273]

421. The FSQ summary provided to the DNA Review does not disclose the full opinions of the Board experts which highlight the insufficiency of the experiments and need to do more work as 'a priority' and that work had not been done. [redacted]

"We note the specific nature of the recommendation and consider the report, in isolation, to be fine. However, the validation was performed using NIST standards[274] *(as opposed to samples similar to those encountered in casework) and did not factor extraction efficiency. Therefore, all this report tells us is how well the instrument is performing on a set of standards. The key question in casework is though the LOD of the sample. A whole-of-*

[272] QPS communication.
[273] DNA Review Information Request #25 'LOD Validation Report'.
[274] National Institute of Standards and Technology, clinical grade DNA samples.

system approach (linking LOD to extraction efficiency) is required to answer this question. We understand that this work has been completed for blood samples, enabling assessment of end-to-end system performance. We urge this work to be completed for all substrates."[275]

422. The new DNA threshold has been in place for eight months. Of concern to the DNA Review, the planned three-month post-implementation review of the DNA threshold has not been conducted by FSQ. FSQ advised this was "*due to emerging priorities including addressing the recent NATA findings*.[276]

423. The implementation of a DNA threshold by FSQ known to be set too high may be contrary to the main purpose of the FSQ Act to ensure high quality and reliable forensic services.

424. Upon finding the flawed validation and incorrectly set DNA threshold, DNA Review experts offered to work with FSQ to provide an acceptable experimental design for the LOD and DNA threshold as a matter of priority, and to help them in any way they needed. To date this offer has not been accepted by FSQ. The DNA Review flagged its concerns to FSQ on 28 April 2025 about the DNA threshold, however, FSQ has not removed the threshold.

425. On 9 May 2025 FSQ responded to a DNA Review request for information.[277] The response confirmed that FSQ still had not conducted any experiments to fully test samples that fell below the DNA threshold. The FSQ response stated:

"However, the LOEP[278] *[experimental work to fully test samples below the DNA threshold] has been identified as an important complimentary project to this work and will be commenced as soon as practically possible."*

426. The FSQ response acknowledges the need to conduct the essential experimental work. However, it did not commit to a definite short-term deadline which the DNA Review does not consider to be acceptable given evidence is being missed.

Recommendation 12	**12.1** The FSQ DNA testing threshold which was inappropriately set and implemented on 19 November 2024 should be immediately removed. **12.2** A DNA testing threshold validation should be conducted by FSQ as a priority in collaboration with the DoJ Expert Team to ensure robust scientific experimental design, interpretation, and acceptable results. **12.3** The new DNA testing threshold should be approved by DoJ before it is implemented by FSQ. QPS and the courts should be consulted prior to implementing the new DNA threshold, and information should be provided to end users to educate them about what the new DNA testing threshold means prior to its implementation. A post-implementation review of the threshold should be conducted by FSQ three

[275] Forensic Science Queensland Interim Advisory Board: Item 3.2e-FSQ's proposed approach to address scientific Board members' feedback', 14 February 2024.
[276] DNA Review Information Request# 63.
[277] DNA Review Information Request 25 'Further information sought 1 May 2025'.
[278] LOEP = Limit of effective profiling

	months after it is implemented, and results made available to end users. **12.4** FSQ should review all coronial and major crime DNA cases analysed at FSQ from 19 November 2024 onwards which contains evidence that fell below the new DNA threshold and was not fully tested. Notifications and addendum statements should be released which contains information about the improper implementation of the DNA threshold by FSQ and the risk that DNA samples which fell below the new DNA threshold could produce a DNA profile. **12.5** Where required by QPS or the courts, further testing of samples that fell below the DNA threshold from 19 November 2024 should be conducted.
Intent and desired end state	**Intent:** The FSQ DNA testing threshold will be informed by end user needs, and reliable scientific validation will be conducted to best practice. The validation will give police and courts confidence in FSQ DNA results, and most importantly give victims reassurance they will not be unfairly denied justice. The new DNA testing threshold will ensure that samples with quantities of DNA below the threshold are not expected to generate a useable profile if fully tested. Crucial evidence will not be missed, and victims will not be unfairly denied justice. **Desired End State:** A reliable DNA testing threshold has been implemented by FSQ after DoJ approval, and information has been provided by FSQ about the testing threshold to end users. Cases nominated by the QPS or the courts which have been impacted by the inappropriate testing DNA threshold have all been reviewed, re-tested, and where needed have had amended results released.

Attachment 6 Timeline for Implementation of DNA Testing Threshold

Date	Description
6 June 2022	Minister D'ath orders removal of the QHFSS DNA testing threshold and all DNA samples are fully tested.
23 August 2023	FSQ completes a validation titled 'Determination of Limit of Detection (LOD). They fail to fully test any samples that fell below the threshold to check if they would provide profiles. The LOD will become the new DNA threshold.
16 October 2023	FSQ conducts Project 257 ('Semen Extraction Efficiency') and reports samples well below the threshold are providing profiles (on average 5 alleles).
30 October 2023	FSQ conducts Project 265 ('Extraction Efficiency of Blood and Trace') and reports that samples below the threshold are providing profiles below the DNA threshold (38% allelic recovery, ie 12 alleles).
16 November 2023	The Interim Advisory Board met and considered the LOD report. They endorsed the closure of Recommendation 15 pending feedback from the scientific experts on the Board.
13 December 2023	The Board's scientific experts considered the LOD validation insufficient alone to determine the new DNA threshold and requests FSQ conduct further experimentation.
14 February 2024	FSQ responds to the Board agreeing that further work is required, but that they believe the LOD report does fulfill Recommendation 15. The Board agrees to close Recommendation 15 on the provision the extra work is conducted by FSQ as a priority.
8 May 2024	FSQ conducts a risk assessment on the implementation of the new DNA threshold. At this time the backlog is 19,000 samples (approximately one year of test submissions).
19 November 2024	FSQ implements the new DNA testing threshold for all crime scene DNA samples without completing the extra work requested by the Board.
6 January 2025	FSQ provides the LOD validation report to the DNA Review upon request. The FSQ cover sheet does not accurately reflect any issues reported by the Interim DNA Advisory Board scientific experts, instead just quoting the scientific experts stated it appeared to "be fine".
Early 2025	QPS request FSQ to test all Priority 1 samples after evidence reported as falling below the threshold and not fully tested, was fully tested upon request by QPS and provided a profile that assisted a homicide investigation.
28 April 2025	The DNA Review Team met with an FSQ expert to discuss the LOD validation and DNA threshold, flagging concerns about both. DNA Review experts offered priority assistance to develop further experiments. To date this offer of assistance has not been accepted by FSQ, and they have not removed the DNA threshold.
9 May 2025	FSQ responds to a DNA Review request for information confirming they had still not conducted experiments to fully test samples below the DNA threshold, but will be commenced 'as soon as practically possible' which is not sufficient given evidence is being missed.

4.9 DNA Delays Impacting Coronial Matters

427. This section relates to TOR 6 which requires the DNA Review to provide advice to the Government on how to improve the efficiency, accuracy and reliability of FSQ DNA service delivery.

428. In addition to looking at key processes which affect the efficiency, accuracy and reliability of DNA service delivery within the laboratory, the DNA Review has also undertaken analysis on the current service being received by particular end users. This has been another perspective that the DNA Review has utilised to analyse whether there are any ways to enhance and improve DNA testing and analysis.

Key observations, findings, and conclusions in relation to DNA Delays Impacting Coronial Matters:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) There are 16 outstanding coronial matters across Queensland awaiting DNA testing or DNA reports. Some of these matters have been delayed by up to two years.

(b) Significant backlogs at FSQ (BAU cases, and historical cases see section 4.1), will take years to clear. Therefore, it is likely testing will not be completed for priority coronial cases within one to two years.

(c) The QPS and the DPP use priority lists to request FSQ to perform fast turnaround times for a small number of selected samples. The Coroners Court does not have such a priority list or agreement in place with FSQ, however, would greatly benefit from one in the immediate future. The DNA Review collaborated with the State Coroner and QPS to commence priority requests for coronial cases through the QPS priority testing system. This solution is now underway and effective.

(d) A service level agreement is needed between the QPS and FSQ which states the testing requirements of the Coroners Court.

4.9.1 Summary

429. There are 16 outstanding coronial matters across Queensland awaiting DNA testing or DNA reports.[279] Some of these matters have been delayed by up to two years preventing finalisation and preventing coroners from fulfilling their statutory functions. The State Coroner has advised the DNA Review that in some cases, FSQ has not been able to meet requests from coroners in a timely way and has been unable to provide a timeframe for completion of testing.

430. Significant backlogs at FSQ (BAU cases, and historical cases see section 4.1), will take years to clear. Therefore, it is likely testing will not be completed for priority coronial cases within one to two years.

431. There are also 62 sets of unknown human remains at FSQ which relate to coronial investigations. Many of these have awaited testing for years or have been tested many years ago with older technology, however, should have been outsourced to

[279] Information obtained from the Coroners Court, 21 March 2025.

laboratories who have the capacity and advanced technologies not available at FSQ.

432. The QPS and the DPP use priority lists to direct FSQ to perform fast turnaround times for a small number of selected cases. The Coroners Court does not have such a priority list or agreement in place with FSQ, however, would greatly benefit from one in the immediate future.

433. The *Coroners Act 2003* (Qld) does not have any provisions to require FSQ to provide DNA services for priority cases by a given date. Similarly, the FSQ Act has no specific provisions to require FSQ to comply with Coroners' requests. These legislative issues are preventing Coronial matters relying on DNA from progressing in a timely manner.

4.9.2 Arrangements between FSQ, QPS and the Coroners Court

434. Section 3 of the FSQ Act provides that the main purpose of the FSQ Act "is to ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland".

435. The Coroners Act provides for the coroner to "make, or arrange for, any examination, inspection, report or test that the coroner considers is necessary for the investigation[280]." In a small number of coronial cases, the progress and resolution of an investigation or inquiry is reliant on DNA testing. The Coroners Act further states: [281]

(a) "*During the investigation of a death, a coroner may seek the help of a lawyer or other person who the coroner reasonably believes can help the coroner investigate the death.*

(b) *The duty of a police officer to help a coroner is stated in the Police Powers and Responsibilities Act 2000, section 794*."

436. Section 794 of the Police Powers Act states:

> *(1) It is the duty of police officers to help coroners in the performance of a function, or exercise of a power, under the Coroners Act 2003, including—*
>
> *(a) the investigation of deaths; and*
>
> *(b) the conduct of inquests.*
>
> *(2) Without limiting subsection (1), it is the duty of police officers to comply with every reasonable and lawful request, or direction, of a coroner.*

437. Section 16 of the Coroners Act enables a coroner to require that a person provide them with information, a document or anything else that is relevant to a coronial investigation. The DNA Review considers this includes a witness statement from FSQ in relation to any DNA testing that has been undertaken. It is an offence to fail, without reasonable excuse, to comply with a requirement.

438. While it could be argued that FSQ cannot reasonably comply with the coroners' requests due to the current backlog, the DNA Review recommends that an

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[280] *Coroners Act 2003* (Qld) s13(2).
[281] *Coroners Act 2003* (Qld) s15.

agreement on priority of testing, or outsourcing be made with a view to significantly ameliorating or eliminating the current impasse impacting coronial cases state-wide.

439. The QPS have had an informal agreement in place with the state's DNA testing laboratory for many years to preferentially test a small number of priority samples (Priority 1' samples, on average 13 samples a month). These samples are processed within 5 days. As a result of the FSQ backlogs, QPS have created a 'Priority 1.5' category which requires testing to be completed in 3 weeks. The QPS priority list has given QPS some control of testing at FSQ to progress cases deemed a high priority despite the lengthy FSQ delays. Typically, only a very small number of samples are allocated Priority 1 or 1.5 by QPS each month so as not to overwhelm FSQ.

440. As a result of the FSQ backlogs, the DPP have created a similar 'court priority list', which is provided to FSQ who then preferentially allocate resources to the nominated cases to ensure the court statements required are completed by the required date.

441. Prior to the DNA Review, coronial investigations awaiting DNA testing at FSQ were delayed for the reasons outlined below:

(a) The FSQ capacity issues;

(b) The lack of a service level agreement between either the Coroners Court or the QPS[282] and FSQ; and

(c) The lack of an agreed Coroners Court priority DNA testing list.

442. Without resolution, coronial cases will continue to be significantly delayed Queensland-wide. Such delays will prevent finalisation of coronial matters, will delay or possibly prevent the apprehension and prosecution of murderers, will delay or may deny the families of victims the opportunity to obtain a coronial or prosecutorial finding in their life time (many loved ones are elderly), may delay the identification of unknown human remains causing emotional and financial stress for families, and negatively affect community trust in DNA service delivery in Queensland.

443. The DNA Review collaborated with the State Coroner and QPS to commence priority requests for coronial cases through the QPS priority testing system. This solution is now underway and effective.

Recommendation 13	A service level agreement should be implemented which states the testing requirements of the Coroners Court. This should be negotiated and implemented immediately and will be considered in relation to the current and ongoing capacity of FSQ. This service level agreement should form part of a service level agreement with QPS and FSQ.
Intent and desired end state	**Intent:** The service level agreement will clearly articulate the DNA testing needs of the State Coroner. It will ensure Queensland coronial cases will no longer be delayed by DNA testing.

[282] QPS and FSQ have an SLA in place, but only for person samples, not for crime scene samples.

	Desired End State: A service level agreement is in place with FSQ and QPS which includes the DNA testing needs of the State Coroner.

4.10 Observations on the FSQ Act

Key observations, findings, and conclusions in relation to improving the efficiency, accuracy and reliability of FSQ's current DNA Service Delivery:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) The FSQ Act established the FSQ Director as a statutory officer, giving it legal independence from the government and the end users that it serves.

(b) The DNA Review is of the view that the FSQ Director does not have any decision-making functions within the criminal justice system that requires the level of independence provided to it by being a statutory officer.

(c) Forensic service providers do not need to be led by a statutory officer in order to provide high quality, and independent services to the police and courts.

(d) Forensic experts are required under common law (and various expert codes of conduct and associated Practice Directions) to be impartial.

(e) The status of the FSQ Director as a statutory officer means it is independent from government and cannot be directed by the government or any other government agency. There is a high level of discretion afforded to the FSQ Director in performing its functions as demonstrated by section 19 of the FSQ Act which provides that in performing the Director's functions and exercising the Director's powers, the Director is not subject to direction by the Minister.

(f) Given that FSQ sits within the portfolio of DoJ, there is no requirement within the FSQ Act to report annually on how it is administering the Act.

(g) A comprehensive review of the FSQ Act is recommended with consideration to the appointment, functions and powers of the FSQ Director, the future governance of FSQ, and the governance of forensic DNA service delivery.

4.10.1 Summary

444. FSQ was established under the FSQ Act with the main purpose to:

> *"…ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland."*

445. Data obtained by the DNA Review (see Chapter 4 - Options to enhance and improve the efficiency, accuracy and reliability of service delivery) and during interviews with the QPS and the courts show Forensic DNA service delivery has declined

significantly in the last two and half years since the establishment of FSQ. This includes:

(a) large backlogs of evidence from all crime types have accumulated to critical levels (refer to Section 4.3.2 - FSQ Testing Backlog);

(b) unacceptable delays for provision of all DNA results to police, the criminal justice and coronial systems are the new normal (refer to Section 4.3.3 - FSQ Turnaround Time and Testing Delays;

(c) the quantity of service testing services has decreased by ~40% (refer to Section 4.3.4 - Provision of Reduced DNA Services for Queensland);

(d) the quality of FSQ DNA results is unreliable due to prolonged systemic contamination and the use of unverified / unvalidated methods (refer to Section 4.6 - Release of Unreliable Results by FSQ);

(e) critical quality issues affecting the reliability of evidence are not being appropriately disclosed to the police and courts (refer to Section 4.6 - Release of Unreliable Results by FSQ); and

(f) the DNA Review concludes that a poor quality culture exists.

446. Overall, this is delaying justice for victims, compromising Queensland's criminal justice and coronial systems, preventing the opportunity for police to resolve and prevent crime, and putting the Queensland community at risk.

447. The FSQ Act established the FSQ Director as a statutory officer, giving it legal independence from the government and the end users that it serves. There are no mechanisms in place for the QPS, the State Coroner, or the courts to require the Director of FSQ or its staff to comply with specific testing requests. This has constrained the ability of the police and courts to perform their statutory functions or jurisdictional responsibilities.

448. Forensic experts are required under common law (and various expert codes of conduct and associated Practice Directions) to be impartial.[283]

449. The DNA Review has concluded that it is arguable that FSQ is now the highest risk for the administration of criminal justice in Queensland for matters involving DNA. The DNA Review has formed the view that a comprehensive review of the FSQ Act is required to remediate the issues identified above.

4.10.2 Background and Issues

450. The Sofronoff Inquiry found significant issues at the QHFSS laboratory ranging from workplace culture, poor management, and poor quality science. In response the Sofronoff Inquiry recommended:

> *"…that a new Forensic Science laboratory in Queensland is to mimic the structure of the Office of the Director of Public Prosecutions."*[284]

[283] https://www8.austlii.edu.au/au/journals/ANZRIArbMedr/2001/3.pdf
[284] Final Report into the Commission of Inquiry into Forensic DNA Testing in Queensland (2023), page 497, paragraph 1630.

451. However, the DNA Review is of the view that the FSQ Director does not have any decision-making functions within the criminal justice system that requires the level of independence provided to it by being a statutory officer.

452. The Sofronoff Inquiry led to the transfer of QHFSS from Queensland Health to the then DJAG and the formation of FSQ in 2023. The FSQ Act established the Director of FSQ as a statutory officer, appointed by the Governor in Council upon recommendation by the Minister.

453. The decision to make the FSQ Director a statutory officer is key, as the impact of this has become more apparent over time, which will be discussed below.

454. Forensic service providers do not need to be led by a statutory officer to provide high quality, and independent services to the police and courts.

455. Forensic experts are required under common law to be impartial and carry out their functions for the courts. Therefore, being led by an independent statutory officer is not required for them to carry out their functions as an expert witness for the courts.

456. Supreme Court Practice Direction 14 (2024) also requires experts to disclose any limitations or issues they are aware of that may affect the reliability of their opinions.[285] A further legislative provision exists to ensure forensic experts provide reliable and impartial evidence. FSQ experts provide a written expert statement of witness signed by them to comply with the Justices Act 1886 (Qld) which has the effect that:

> *"(i) the statement is true to the best of the person's knowledge and belief; and*
>
> *(ii) the person made the statement knowing that the person may be liable to prosecution for stating in it anything that the person knew was false."*[286]

457. The FSQ Act requires FSQ to provide '*forensic services'*. The legislation defines forensic services as:

> *"The application of scientific methods of testing and analysis, and scientific interpretation, for either of the following purposes:*
>
> *(i) the investigation or prevention of crime;*
>
> *(ii) the provision of expert evidence to inform decisions and findings relevant to the administration of criminal justice.*"

458. FSQ is therefore a service provider. It performs independent testing for QPS, the courts, and the State Coroner. The term 'service provider' to describe the primary function of FSQ is consistent with the description of other important government organisations who perform vital roles for the community, for example hospitals are health care service providers.

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[285] Supreme Court Practice Direction 14 of 2024.
https://www.courts.qld.gov.au/__data/assets/pdf_file/0010/797050/scpd-14-of-2024.pdf
[286] *Justices Act 1886* (Qld) s 100A, 6(C) (c).

459. FSQ is the only facility in Queensland that provides forensic DNA services. There are no other public service options available to meet the regular DNA testing needs of QPS or the courts.

460. The status of the FSQ Director as a statutory officer means it is independent from government and cannot be directed by the government or any other government agency, including the Attorney-General, QPS, the DPP, or the State Coroner to provide services (including conducting specific testing within required timeframes). There is a high level of discretion afforded to the FSQ Director in performing their functions as demonstrated by section 19 of the FSQ Act which provides that in performing the Director's functions and exercising the Director's powers, the Director is not subject to direction by the Minister. Section 27 allows the Minister to direct another function to the FSQ Advisory Council and also make requests for their advice or recommendations.

461. There are no provisions in the *Police Powers and Responsibilities Act 2000* (Qld) or the *Coroners Act 2003* (Qld) requiring the FSQ Director or its staff to comply with any direction from the Police Commissioner, the DPP, the State Coroner, or any of their representatives. There are no provisions in the FSQ Act requiring the FSQ Director or its staff to comply with any directions from the Police Commissioner, the Director DPP, or the State Coroner. There are no legal consequences if FSQ cannot comply with a Magistrate's Direction requesting testing of evidence within prescribed timeframes.

462. The FSQ Act has had the unintended consequence of impeding other responsible government bodies within the criminal justice system from carrying out their statutory functions.

463. The Acting QPS Commissioner Chelepy advised the DNA Review:

> *"Although the QPS remains the central customer of FSQ, there is no legislative authority to direct FSQ functions. … the Director is independent from Government."*[287]

464. The DNA Review considers that Queensland's forensic DNA testing laboratory is no longer positioned as a service provider whose focus and sole purpose should be to meet the needs of end users. The core principles of service provision are customer-centricity, reliability and consistency, transparency and communication, and continuous improvement. The DNA Review considers that FSQ is failing across most of these principles and in the main purpose for their establishment under the FSQ Act.

465. Since establishment, Queensland's forensic DNA services have significantly declined with critical backlogs, delays, a significant decrease in the volume of testing, provision of unreliable results, and a lack of transparency about such unreliable results (see Chapter 4 - Options to enhance and improve the efficiency, accuracy and reliability of service delivery).

466. There is no requirement for FSQ within the FSQ Act to report annually on how it is administering the Act because FSQ remains under the portfolio of DoJ.

467. Presently, for the reasons discussed, FSQ arguably represents the single biggest point of risk in the criminal justice and coronial systems due to service failures and current system-wide DNA service delivery governance. There is currently no legal

[287] Letter from A/Commissioner Chelepy to Dr Kirsty Wright 14 March 2025.

instrument or mechanism which requires FSQ to comply with service requests from end users.

468. A/Commissioner Chelepy advised the DNA Review that a review of the FSQ Act alongside a broader review of the FSQ governance framework is required.

> *"I have been informed the governance framework of FSQ requires review to ensure that QPS regains primacy over the testing of its samples for the progress of its investigations. This should include the review of policy and legislative requirements that minimises influence of the QPS over the testing process that has been outsourced to FSQ."*[288]

Recommendation 14	A review of the FSQ Act should be conducted by DoJ. The review should be comprehensive and include consideration of: a) the appointment, functions, and powers of the FSQ Director; b) requirements to report annually on how FSQ is administering the Act; and c) the future governance of FSQ, and the governance of forensic DNA service delivery.
Intent and desired end state	**Intent:** The review of the FSQ Act and any required amendments will ensure there are no impediments to the provision of high quality and timely DNA service delivery for all end users. It will also provide greater transparency and accountability, and improved governance of FSQ. **Desired End State:** The FSQ Act has been reviewed and amended and passed through parliament.

[288] Letter from A/Commissioner Chelepy to Dr Kirsty Wright 14 March 2025.

Chapter 5: A Modernised Holistic DNA Service Delivery Model for Queensland

5. A Modernised Holistic DNA Service Delivery Model for Queensland

5.1 Chapter overview

469. Drawing on the analysis and conclusions presented in Chapter 4 (Options to enhance and improve the efficiency, accuracy and reliability of service delivery), this chapter outlines the DNA Review's findings and recommendations for a modernised DNA service delivery framework in Queensland largely addressing TOR 7, however also covers to some extent TORs 2, 3, 4, 5 and 6.

470. In order to provide advice on the development and implementation of a forensic DNA testing and analysis framework that is aligned with best practice, end user needs and public confidence, the DNA Review has adopted the following approach:

(a) Section 5.3 explains the interdependent processes that comprise DNA service delivery as a continuum from the crime scene to the court room, and the four levels of DNA service delivery as they align to the government's strategic policies.

(b) In order to ensure that the proposed framework is aligned with end user needs, in Section 5.4 it has set out the qualitative data sourced from victim focus groups and have set out improvements that could be made to the current framework.

(c) Section 5.5 has set out the reasons why changes to the DNA service delivery framework are needed in Queensland identifying the key issues in the current framework.

(d) Section 5.6 has proposed seven major changes to the service delivery framework in order to better align it with best practices, end user needs and public confidence. This includes a rolling program of work to implement the proposed changes over three years.

(e) Section 5.7 has set out their proposal for a strengthened quality assurance framework to enhance and improve the efficiency, accuracy, and reliability in forensic DNA testing and analysis. This will also assist to ensure that the framework aligns with best practice and builds public confidence.

(f) Section 5.8 examines best practice crime scene examination for DNA recovery, leveraging existing resources including the QPS state-wide DNA evidence recovery laboratories, the use of end-to-end outsourcing, transferring strategic DNA service delivery control to QPS and an implementation plan. This includes a rolling program of work to implement the changes over three years.

(g) Section 5.9 has looked at expanding advanced DNA testing methods via increasing QPS capability to undertake these methods including a proposed new QPS led DNA Investigative Group.

(h) Section 5.10 analyses FSQ's Research and Innovation Strategy 2023 – 2027. The DNA Review proposes a new system-wide research and innovation framework (linked to Inquiry Recommendations 55, 56 and 57) with the key purpose to provide the best opportunity to prevent and disrupt crime, resolve crime, and bring faster justice for victims.

(i) Section 5.11 proposes a formal project management structure (3PM framework) for FSQ including the implementation of a Program Management Office, and a Change Manager to assist in delivering reforms, the historical case review, and delivering BAU..

(j) Section 5.12 FSQ's governance has been analysed with improvements identified and a systems approach to system-wide DNA service delivery governance proposed. Reprofiling of the FSQ organisational structure is required to make it more service focused and more service enabled.

471. The DNA Review's findings are based on a system of systems assessment of the current DNA service delivery framework, including its governance, quality assurance, victim engagement and rights, and operational processes.

472. The Review conducted focus groups with end users (e.g. QPS, court experts, victims and their families and victim advocates), analysed historical case data, reviewed international best practices and evaluated systemic issues across the DNA service continuum. This evidence-based approach allowed the DNA Review to identify critical gaps and propose a holistic framework to address these deficiencies, and align with system-wide strategic and operational priorities.

5.2 Summary

473. The DNA Review has concluded that Queensland's current DNA service delivery framework is not meeting the needs of the police, courts, and victims, and is not operating to best practice. In the DNA Review's view, the current framework:

(a) has significant points of strain, risk, and failure (see Section 4.1);

(b) does not take a system of systems approach (discussed in Section 5.11 below);

(c) is inefficient (see Section 4.1);

(d) is not fit-for-purpose (discussed in Section 5.12.6 below);

(e) does not leverage existing state-wide DNA evidence recovery facilities or the high levels of scientific expertise within the Queensland Police Service (QPS) (discussed in Section 5.8 below);

(f) creates inequities in access to forensic testing for regional victims (discussed in Sections 5.8 and 4.7.4 above);

(g) creates inequities for victims across some violent offence types (discussed in Section 5.8 below);

(h) lacks a sufficient quality assurance framework (discussed in Sections 4.6 and 5.7 below); and

(i) lacks appropriate system-wide governance and knowledge management (discussed in Sections 4.5, 4.7, and 5.12 below).

474. DNA service delivery is a continuum from the crime scene to the courtroom, encompassing multiple elements and government organisations. Focusing on just one element, DNA analysis within one single laboratory, and one organisation (FSQ), will not deliver an efficient and reliable end-to-end DNA service delivery framework. Queensland's new DNA service delivery framework needs to be

modernised and take a systems-of-systems approach considering all organisations and end users involved in to end-to-end DNA service delivery. The proposed framework will be better linked to operational and strategic priorities to meet the Government's policies of Faster Justice for Victims,[289] Safer Communities, and Fewer Victims of Crime[290].

475. The proposed framework includes seven major changes:

(a) Improved victims' engagement and rights. This will be examined in section 5.4 (Improving Victims' Engagement and Rights in DNA Service Delivery);

(b) Implementation of a strengthened quality assurance framework for forensic DNA service delivery (see section 5.7 - Implementation of a strengthened quality assurance framework for Queensland forensic DNA service delivery);

(c) Expansion of best practice crime scene DNA collection for violent crimes and across regional Queensland (see section 5.8 - Expansion of Best Practice Crime Scene DNA Collection for Violent Crimes and for Regional Queensland);

(d) Optimisation of DNA evidence recovery using existing state-wide DNA laboratories (see section 5.8.1 - Optimisation of DNA Evidence Recovery Using Existing State-Wide DNA Laboratories);

(e) Best practice enhancements and a police-led DNA investigative group. This will be addressed in section 5.9.5 (Development of a QPS led DNA Investigative Group);

(f) Transfer of DNA service delivery control to QPS (see section 5.8.3 - Transfer of DNA Service Delivery Control to QPS); and

(g) An improved system-wide forensic DNA research and innovation strategy (see Section 5.10.4 - Proposed New Research and Innovation Framework).

476. The proposed framework is a generational change and will position Queensland's DNA service delivery as best practice for the future, including any surge capacity required to respond to major incidents state-wide. It will ensure that Queensland has reliable DNA services from the crime scene to the court room, and have strategic business continuity options to avoid backlogs, testing delays, and poor-quality results. The proposed framework will also provide greater equity to victims across violent offence types, and greater access to best practice forensic services across remote and regional Queensland, and improved victim rights and engagement.

477. To progress from the current state to deliver best practice DNA services for Queenslanders will take multiple coordinated iterations of the proposed DNA service delivery framework, rather than one major change which would be disruptive to services.

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[289] https://online.lnp.org.au/news/faster-justice-for-queenslanders

[290] https://online.lnp.org.au/david-crisafulli/right-priorities/making-your-community-safer
https://www.qld.gov.au/makingqldsafe

478. This section proposes a modernised holistic DNA service delivery framework which should be implemented across Queensland and overseen by the DoJ and QPS. The approach to implementation should include:

(a) A scoping exercise to finalise and cost the framework, and determine implementation priorities; and

(b) A rolling program of work should be established to implement the proposed changes to the DNA service delivery framework established under a program management structure, delivering staged enhancements in six monthly tranches.

479. The greater use of existing state-wide QPS DNA evidence recovery laboratories and employment of QPS civilian forensic professional officers removes the existing risk of using the FSQ evidence recovery laboratory which is inadequate and risks DNA contamination. Utilising the QPS state-wide DNA evidence recovery laboratories will remove the major need for a new $450M laboratory requested by FSQ in 2024[291], creating a significant saving for the state government.

480. Implementation of the proposed strengthened quality framework will help to restore confidence and trust in FSQ DNA service provision, change attitudes and culture negatively affecting quality management within FSQ, enable early detection of quality issues, better enable continuous quality improvement within FSQ, and protect the government's significant investment in FSQ.

5.3 The DNA Service Delivery Continuum

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) 'DNA service delivery' is not confined to just the processes conducted in the FSQ laboratory.

(b) It is the system of interdependent processes from the collection of DNA at crime scenes to the presentation of DNA statements to the courts. This is called the DNA service delivery continuum (represented in Figure 17).

(c) The DNA Review considers that DNA service delivery needs to meet four strategic levels which are case, region, state and national level policy objectives (see Figure 18 below).

(d) This is the context which underpins the DNA Review's advice in respect of the development and implementation of a framework for the future delivery of forensic DNA testing and analysis.

481. The government is seeking advice on the development and implementation of a framework for the future delivery of forensic DNA testing and analysis, ensuring alignment with best practices, stakeholder needs, and public confidence.

[291] https://www.abc.net.au/news/2024-09-24/qld-health-forensic-dna-lab-testing-calls-for-replacement/104384730

482. ‘DNA service delivery’ is not confined to just the processes conducted in the FSQ laboratory. It is the system of interdependent processes from the collection of DNA at crime scenes to the presentation of DNA evidence to the courts. If any one part of that system is not working effectively, the DNA service delivery is compromised. This concept (represented in Figure 17) is vital to the design of Queensland’s new DNA service delivery framework, and includes the following processes:

(a) Detection and collection of DNA samples at crime scenes by QPS experts;

(b) Examination of clothing, weapons etc in a DNA evidence recovery laboratory to recover biological evidence and DNA samples;

(c) Deciding which DNA samples should be tested to help resolve crime while being efficient with resources (‘triaging’);

(d) Rapid transportation of DNA samples Queensland-wide to a DNA testing laboratory which maintains continuity and preserves the DNA sample;

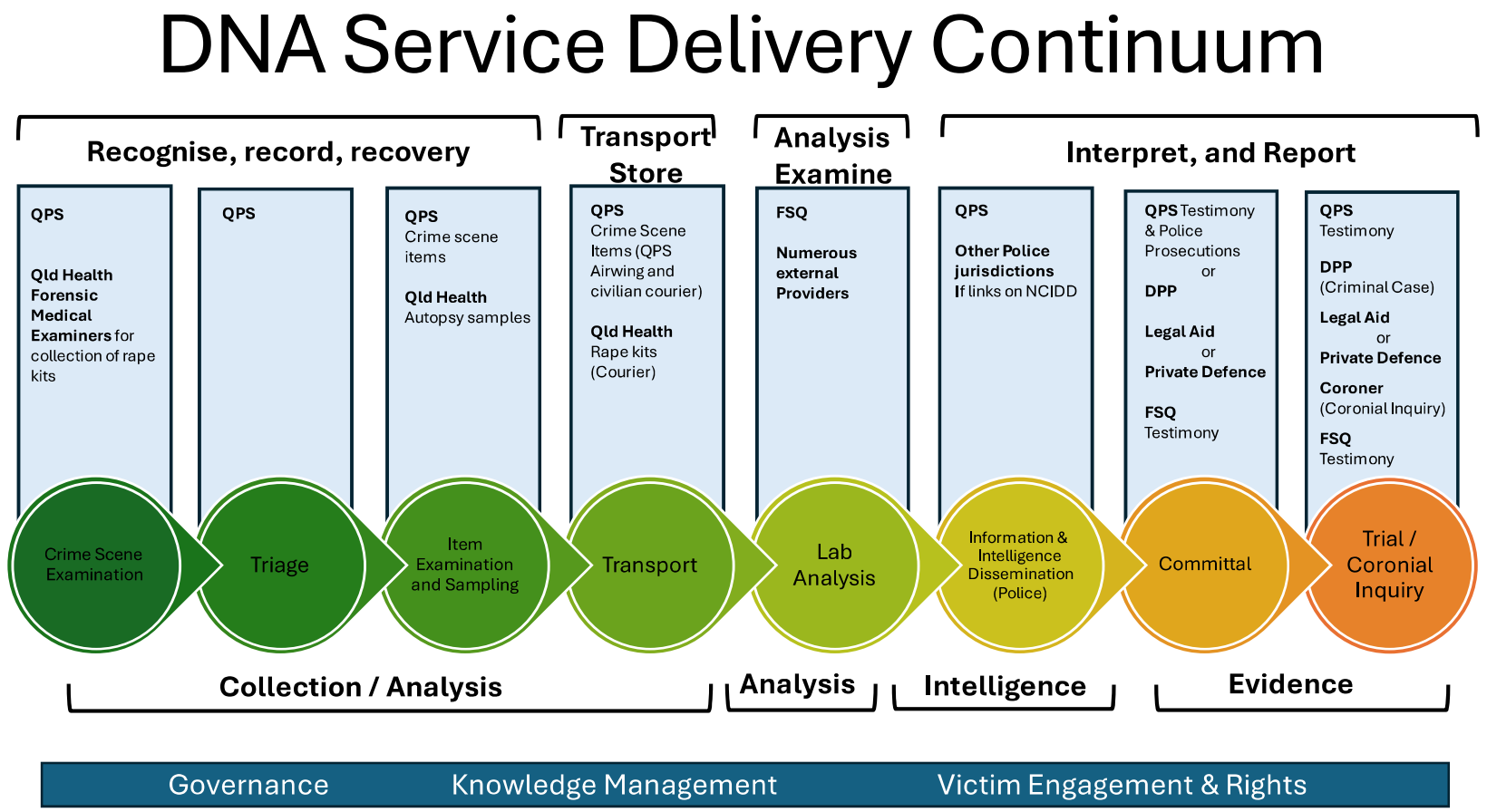
(e) DNA testing within a laboratory;

(f) Rapid provision of DNA results to investigators and fusion with other forensic and police intelligence; and

(g) Provision of expert testimony (both written and oral) for the courts.

483. The DNA service delivery continuum should be supported by good governance and knowledge management and should encompass appropriate victim rights and engagement.

Figure 17 The DNA service delivery continuum, highlighting the key elements of a DNA service delivery framework and organisations involved.



484. Each of the above processes is a critical element that needs to be included in the proposed DNA service delivery framework. Missed, or poorly executed elements breaks this continuum and introduces unacceptable risk to the formation of a best practice framework. If processes conducted prior to laboratory submission are not performed to best practice, DNA evidence will be missed or insufficiently collected. This may prevent obtaining a DNA result, or cause a poorly preserved exhibit. Similarly, if triaging is not performed to best practice, the laboratory will be flooded with too many unnecessary DNA samples (blowing out backlogs and testing timeframes), or conversely samples which could assist the investigation will not be tested. If timely distribution and clear presentation of the DNA results to investigators is not performed to best practice the value of the DNA result could be diminished. For example, this may occur if the DNA results are not received in time by investigators to assist their investigation, or if the meaning of the DNA results are not understood by the investigators and the courts.

485. Each of the above elements are linked. Changes to one element may have critical unintended consequences for other elements. The DNA Review observed this with the FSQ failures, which impacted the ability of QPS crime scene experts to work effectively. These failures included DNA sample submission restrictions, and delayed results, preventing completion of crime scene reconstruction reports for the courts. Likewise, FSQ delays prevented the investigators from utilising evidence which could have advanced their cases, and have significantly impacted courts Queensland-wide.

5.3.1 The Four Strategic Levels of DNA Service Delivery

486. The DNA Review considers that DNA service delivery needs to meet four strategic levels which are case, region, state and national level policy objectives (see Figure **18** below). The design of the proposed framework was driven by a strategic, coordinated, and deliberate approach to have the greatest measurable effect across the four levels.

Figure 18 DNA service delivery strategic requirements

487. The case level service delivery framework focuses on the needs of victims, supports the Faster Justice for Victims policy, and ensures DNA testing backlogs are cleared and victims' cases are heard sooner by the courts.

488. Different regions across Queensland may have different crime patterns that QPS need to respond to and work to prevent. At the region level, DNA services need to support various strategies required by police to detect and prevent crime, which supports the Queensland Government's Making Our Communities Safer Policy.

489. At the state level, DNA services need to support crime prevention and detection of recidivism, assisting to reduce the overall number of victims of crime.

490. Borders don't stop crime, therefore, at the national level DNA services need to support federal biometrics strategies, such as the National DNA Investigation DNA Database (NCIDD), to identify offenders and patterns of organised crime.

491. The DNA Review observed that the current DNA service delivery framework is failing to consistently meet strategic requirements at all levels.

5.4 Improving Victims' Engagement and Rights in DNA Service Delivery

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Victim Engagement and Rights:

(a) Subsequent to the Inquiries, a Forensic Support Line was set up as a resource for people impacted by the Inquiries with specialised therapeutic information, brief counselling, referral and support.

(b) As of February 2025, there has been a low uptake of this service. The DNA Review received evidence that some victims who used the service reported that they have been *"discouraged to make a report (by police) or who feel that it is pointless due to the extended wait time that the backlog has resulted in"*.

(c) The DNA Review believes it is extremely important to further analyse and understand the specific needs of this victim cohort through formal research.

(d) The DNA Review undertook focus groups with victims of crime and their families which identified six key requirements that should be incorporated into the proposed DNA service delivery framework. Connected to these six requirements are barriers that have been identified preventing these requirements from being implemented.

(e) The DNA Review sought international examples of where large numbers of victims had been failed by government systems to gather key learnings to inform the proposed DNA service delivery framework.

(f) The proposed framework comprises of eight improvements designed to meet current gaps in victims' rights and engagement relating to the DNA issues (see Table 7 below). This framework should be developed further and implemented as a project of work.

5.4.1 Summary

492. Issues uncovered at the 2022 and 2023 Inquiries impacted victims' and the public's trust in not only the state's forensic DNA testing laboratory (QHFSS), but also in Queensland's criminal justice system. Victims and their families are key end users of forensic DNA services and require special consideration. This group includes those impacted by:

(a) the historical case review and re-testing;

(b) the reforms arising from the Inquiries; and

(c) issues with DNA testing services for current cases.

493. The DNA Review engaged with victims and their families affected by the 2022 and 2023 Inquiries and current FSQ testing delays, as well as, the Office of the Victims' Commissioner and victim advocate and support groups to identify six key

requirements that need to be incorporated into the proposed DNA service delivery framework. These include:

(a) improvements to victim notifications;

(b) the need for specialised support groups;

(c) a dedicated DNA issues victim-led advocacy group;

(d) greater public access to information about the reforms and historical case reviews;

(e) improvement to existing DNA service delivery policies and victim advocacy; and

(f) restoration of confidence in DNA service delivery in Queensland.

494. This section will propose how these requirements could be incorporated into the new DNA service delivery framework leveraging off existing frameworks.

5.4.2 Background

495. The 2022 and 2023 Inquiries found evidence that QHFSS did not prioritise victims' needs when making decisions about DNA testing processes. QHFSS management sacrificed quality for speed, which meant many victims may have been denied justice.[292]

496. As a result of the QHFSS failures, major crime cases between 1 September 2007 and 30 April 2023 require review by the ODPP, QPS, and FSQ and, where needed, re-testing. The historical case review represents over fifteen years[293] of cases affecting at least ~32,000 victims[294], which is unprecedented globally.

497. The Sofronoff Inquiry recommended the historical case review should include various characteristics, including:

> "*Consultation with victims should be conducted in a trauma-informed way and be by the QPS and ODPP in accordance with their procedures for consulting with, and providing information to, victims in criminal proceedings where appropriate, or through some other mechanism.*"[295]

498. Four guiding principles were developed for the historical case reviews, with one relating to victim consultation.

> *"Trauma-informed approach: Where it is appropriate to do so, historical case reviews will proactively involve victims and members of their support networks in a manner that is safe, collaborative, accessible and compassionate. Consultation with victims will be carried out in accordance with any relevant QPS or ODPP policies and procedures."*[296]

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[292] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022, page 8 paragraph 68, p19 paragraph 114, page 22 paragraph 126.
[293] https://www.fsq.qld.gov.au/historical-case-review
[294] Information provided by QPS.
[295] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022, Recommendation 14, page 55 paragraph.
[296] Historical Case Review Principles. https://www.fsq.qld.gov.au/__data/assets/pdf_file/0024/334374/Historical-Case-Review-Principles.pdf

499. The Sofronoff Inquiry also recommended the establishment of an advisory board that included a representative from a victims' support organisation.[297] This representative has been part of the Interim DNA Advisory Board, and now the FSQ Advisory Council.

500. Within months of the Sofronoff Inquiry, measures were implemented to commence the historical case review and reform the state's DNA testing laboratory.

501. On 15 December 2022 the Labor Government pledged $10M over four years for victim support services to meet the anticipated increase in demand for trauma counselling arising from the Sofronoff Inquiry findings.[298] These funds were divided across existing victim support services around Queensland to provide support and counselling services, including, the Homicide Victims Support Group, the Queensland Sexual Assault Network, and DVConnect.

502. DVConnect established the 'Forensic Support Line' whose stated purpose is:

> *"… a specialist support telephone connecting people who have been impacted by The Commission of Inquiry into Forensic DNA Testing in Queensland with specialised therapeutic information, brief counselling, referral and support. Forensic Support Line is a dedicated line, that can provide information and brief counselling about how the DNA Inquiry findings may affect the criminal justice outcomes for sexual violence cases that were reported to police during the periods identified by these inquiries. This is provided by specialist sexual assault counsellors."*[299]

503. Despite the expectation that many thousands of victims would access this service, as of February 2025, the DNA Review was advised the Forensic Support Line received a very low uptake. A victim advocacy expert suggested there may not be sufficient awareness of the service despite many victims suspecting their cases may have been impacted. Further, some victims may not be ready to seek support, while the historical nature of the offences may influence those decisions, for example avoiding re-traumatisation.[300]

504. The victim advocate advised the DNA Review of feedback from the few victims who contacted the Forensic Support Line.

> *"…some feedback from the few callers have been that they are discouraged to make a report (by police) or who feel that it is pointless due to the extended wait time that the backlog has resulted in."*[301]

505. Both reasons are troubling and indicate continued lack of victims' trust in Queensland's justice system which needs remediation. Victims impacted by the DNA issues represent almost one generation of Queenslanders who should not be ignored or forgotten. The response that is shown to these victims represents how our society views their denial of justice. For many victims, while their case may be viewed as 'historical', their need for justice still exists today and is also critical for their healing, and for some, their sense of safety.

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[297] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022, page 500 Recommendation 121 (g) vi.
[298] https://statements.qld.gov.au/statements/96816
[299] https://www.dvconnect.org/forensic-support-service/
[300] Information provided by DVConnect.
[301] Information provided by DVConnect.

506. The feedback from those who accessed the Forensic Support Line, along with advice from the victim advocate, is extremely important to further analyse and understand the specific needs of this victim cohort through formal research. The feedback strongly suggests there are complexities with this victim cohort which have not been well understood prior to the support response. It indicates mistrust in the criminal justice system, which may also be a reason why other victims impacted by DNA issues are not seeking support. Understanding the support needs from those directly impacted and what gaps currently exist, is therefore vital to the design of the proposed DNA service delivery framework.

5.4.3 Improvements Needed in Victims' Rights and Engagement

507. The DNA Review established a victims' focus group with the Office of the Victims' Commissioner, victim and family representatives, the Queensland Sexual Assault Network, the Homicide Victims' Support Group, DVConnect, ODPP, and QPS to provide advice to the DNA Review. The focus group provided invaluable advice on current support, policies and legislation, and what improvements were needed to the current DNA service delivery framework.

508. The findings of the 2022 and 2023 Inquiries and the volume of cases requiring historical case review is unprecedented. Experts across multiple organisations did not have policies, procedures, or a best practice guide to use for this specific scenario. Instead, they relied largely on existing policies and procedures to support and notify victims impacted by the laboratory failures and adapted those as needed.

509. Despite this, there are improvements needed in victims' rights and engagement that should be incorporated into the proposed DNA service delivery framework. The scope of improvements is targeted towards victims and families:

(a) impacted by the historical case reviews;

(b) impacted by the current FSQ DNA testing delays and quality issues; and

(c) relying on Queensland's forensic DNA testing services in the future.

510. Victims of crime and their families helped the DNA Review identify six key requirements that should be incorporated into the proposed DNA service delivery framework. These are:

(a) Recognition that those affected by the DNA issues require a specialised approach, different to victims' needs after the initial offence. Recognition that the DNA issues have caused an additional and different kind of trauma to what they experienced after the initial offence;

(b) Improvements to victim notification for historical case reviews and ongoing cases;

(c) Improved public access to general information about current DNA testing issues, DNA reforms, the historical case review, and improvements to information access for victims about their specific cases;

(d) Policy improvements relating to the victims' rights and engagement and the DNA issues, DNA reforms, and the historical case review;

(e) Improved ongoing victim advocacy relating to the DNA reforms, the historical case review, and ongoing forensic DNA testing services; and

(f) Restoration of trust in Queensland's DNA testing services and the criminal justice system.

511. Gaps were identified that have prevented these six requirements from being fulfilled. They include:

(a) A lack of research is available to understand the specific needs of victims impacted by Queensland's DNA issues reported by the 2022 and 2023 Inquiries and the current FSQ backlogs. This includes understanding victims' information requirements and what additional support they need throughout the re-testing process, the investigation process, and possible further judicial processes.

(b) No victim and family peer support group has been established for those specifically impacted by the DNA issues.

(c) No education or training exists for the QPS or ODPP that specifically caters for how victims and families impacted by the DNA issues are notified. An assumption has been made that their needs are the same as other victim cohorts not impacted by the DNA issues. While these organisations have vast experience in victim liaison, additional consideration is needed for the unique cohort of victims affected by the DNA issues.

(d) There is insufficient education available for victims and families affected by the DNA issues to explain the historical case review process, the DNA issues reported by the Inquiries and their implications for different cases, possible outcomes of testing, and the possible next steps for judicial proceedings.

(e) Insufficient metrics are available to victims, their families, and the public about the historical case review and reforms. While FSQ, QPS, and DVConnect have some public information available,[302] the DNA Review found more detail and information was needed, and there was a lack of awareness that this information existed.

(f) Insufficient information is being provided to victims affected by the FSQ backlogs to inform them of the progress of their case, how long DNA testing may take to be completed, and what is being done to improve the current FSQ issues. This is adding to trauma experienced by some victims.

(g) There is insufficient victim consultation and advocacy surrounding DNA reforms, historical case reviews, and current FSQ DNA testing issues.

5.4.4 Changes to Queensland's Double Jeopardy Laws: An Example of Victim Consultation

512. After the Sofronoff Inquiry the government announced it would make amendments to the state's double jeopardy laws which would expand exceptions to the rule against double jeopardy, which prohibits retrial for the same offence except for

[302] https://www.fsq.qld.gov.au/historical-case-review , https://www.police.qld.gov.au/initiatives/qps-taskforce-review-dna-files and https://www.dvconnect.org/forensic-support-service/

murder or some tainted acquittals. The amendments would consider concerns about potential miscarriages of justice caused by the DNA testing issues.[303]

513. The government worked closely with Vicki Blackburn (the mother of murdered woman Shandee Blackburn whose case triggered the Sofronoff Inquiry, and now victim advocate) and her lawyer Kristy Bell throughout the amendment process. They both ensured key changes were made to the law allowing any evidence previously heard before a court, which was then re-tested because of the historical case review, would be considered 'fresh evidence'. These amendments would apply to an expanded number of offences retrospectively.[304] This is a positive example of victim consultation to achieve significant and enduring reforms and rebuild trust in Queensland's criminal justice system.

5.4.5 Proposed Framework for Victims and Families Impacted by the DNA Issues: Improvements to Queensland's DNA Service Delivery

514. The DNA Review sought international examples of where large numbers of victims had been failed by government systems. The best example was the USA rape kit backlog, which was estimated to be ~400,000 kits nationwide, involving samples from victims that were collected over decades and never submitted for DNA testing. While there are many aspects of the USA example which are different to the Queensland context, key learnings could still be gained to inform the proposed DNA service delivery framework. The USA response included bespoke victim support and notification protocols, and enduring rape kit testing reforms. It should be used as a benchmark to aspire to.

515. The DNA Review and victims' focus group met with Joyful Heart Foundation (Joyful Heart) representatives in April 2025. Joyful Heart is an American based organisation who provides advocacy and education to improve society's response to sexual assault, domestic violence, and child abuse.[305] They have provided critical advocacy leading to national policy and legislative reforms in the United States. These reforms address the processing the USA rape kit backlog and handling of current rape kits, victims' rights, education and improvement to victim notification, training, and improvements to information sharing on the rape kit backlogs and reforms.[306]

516. Joyful Heart representatives provided advice to the DNA Review focus group on victim notification improvements. Further research on the USA response to the rape kit backlog and consultation with members of the focus group was conducted. The focus group and research informed improvements aimed at addressing the six requirements for the proposed DNA service delivery framework previously discussed.[307]

517. The proposed framework comprises of eight improvements designed to meet current gaps in victims' rights and engagement relating to the DNA issues (see Table 7 below). This framework should be developed further and implemented as a project of work (incorporated into the recommended rolling program of work to implement Queensland's new DNA service delivery framework). These initiatives have been

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[303] https://www.abc.net.au/news/2022-12-15/qld-forensic-dna-lab-inquiry-crimes-response-double-jeopardy/101776466
[304] http://netk.net.au/Queensland/Queensland94.pdf
[305] https://www.joyfulheartfoundation.org/about-us/our-story
[306] https://www.endthebacklog.org/
[307] https://www.endthebacklog.org/ , https://www.sakitta.org/ , https://rainn.org/articles/addressing-rape-kit-backlog The Detroit Sexual Assault Kit Action Research Project https://www.ojp.gov/pdffiles1/nij/grants/248680.pdf

collaboratively devised by the DNA Review, victims and their families, the Office of the Victims' Commissioner, and experts from the victims' focus group.

Table 7 Proposed framework

1	**Access to Information** Greater general information should be made publicly available by QPS, ODPP, and FSQ about the historical case review, reforms, and the current FSQ DNA testing issues. This information could be included on the FSQ, QPS, and ODPP websites, with links to these sites on victim support websites. The DNA advocacy group (see improvement 3 below) should help to inform what information is released and regularly updated. This information should be released publicly as a priority. Victims awaiting DNA results should be provided with more specific information about the status of their case and expected timeframes for testing completion. The scope of information shared, and timing of access should be informed by policy improvements (see improvement 4 below). Information sharing between FSQ and QPS is needed. This could be included in service level agreements between FSQ and QPS. An information booklet or links to a website should be provided to victims when they have initially reported an offence that includes information about forensic testing, their rights and choices, support services available to them, and an outline of how the victim will be kept informed of forensic test results and the police investigations. This should include specific information directed to survivors of sexual offences such as explaining what a rape kit is, the purpose and relevance for its collection, and what happens to the kit after it is collected
2	**Dedicated DNA Peer Support Group** Form ongoing peer support groups for those affected by the DNA issues. This should reside with existing advocacy groups such as the Homicide Victims Support Group or services within the Queensland Sexual Assault Network and funded as needed. These groups have established services including sexual violence specialists, counsellors, support services, and successful frameworks which include a dual facilitator framework combining professional and survivor facilitators. It is noted that victims are affected by a broader range of crime types and the support group type could be expanded as needed. The support groups should consider online and in person meetings as well as supporting those who prefer anonymity to ensure safety and accessibility. The groups should be established as a priority given the current critical gap in support.
3	**Survivor led DNA Advocacy Group** This group should consist of victims and families impacted by the 2022 and 2023 Inquiries, the historical case review, the current FSQ testing issues, and include representatives of victims from non-English speaking backgrounds and First Nations groups. The group should be consulted with for relevant decision making, process development, policy, and legislative

	improvements relevant to the historical case review, DNA reforms, and ongoing DNA service delivery. The group could have links to the government's newly announced Professional Victim Advocacy Service.[308] This service aims to guide victims through the criminal justice process and be a central point for victims to access end to end support through the justice process. The DNA advocacy group could help inform this unique service to meet the needs of those impacted by the DNA issues. The DNA advocacy group could consult with the newly formed Victims' Commissioner and Sexual Violence Review Board ('the Board') who is independent from government. The Board's functions includes identifying and reviewing systemic issues in relation to the reporting, investigation and prosecution of sexual offences, reviewing government policy, practices, procedures and systems, and making recommendations to the government.[309] There are also opportunities for the DNA advocacy group to provide information to the Victims' Commissioner noting the broad impacts the DNA issue have on victims across Queensland.
4	**Policy Improvements** The DNA advocacy group should be consulted on the following which should be incorporated into relevant policy: Guiding principles for victim notification for the historical review, DNA reforms, and ongoing DNA service delivery; Guiding principles for information sharing for the historical review, reforms, and ongoing DNA service delivery, and access to case specific information on DNA testing for victims; and Model language for use in relevant processes, policy, and legislation. The Office of the Victims' Commission has advised the DNA Review they would welcome the opportunity to work with Government in respect to improving policy on victim notification rights, information sharing, and model language. This should be supported by appropriate funding and resourcing to the Victims' Commissioner. The DNA advocacy group could also work with the Sexual Violence Review Board to facilitate these changes. The Board could assist with monitoring

[308] https://debfrecklington.com.au/media/state-news/2024/10/09/lnp-boosts-victim-support-with-professional-advocacy-service This service will not be available until 2026.

[309] *Victims' Commissioner and Sexual Violence Review Board Act* (2024), Section 62. https://www.legislation.qld.gov.au/view/html/asmade/act-2024-021#ch.4

	and implementing these improvements, which is consistent with their statutory functions.[310] Policy improvements should be considered for: (a) victims' rights to notification and access to information on historical cases and ongoing cases (QPS and ODPP); (b) ongoing victim representation in DNA service delivery governance (Department of Justice); (c) ongoing victim representation in DNA reforms (Department of Justice); and (d) ongoing victim representation in the historical reviews (QPS, FSQ, and ODPP). The Office of the Victims' Commissioner is currently reviewing the Charter of Victims' Rights to assess how well it meets the diverse needs of victims of crime in Queensland.[311] This presents an opportunity for the unique needs and rights of those affected by the DNA issues to be considered regarding amendments to the Charter of Victims' Rights. This advice could be provided to the Office of the Victims' Commissioner through the DNA advocacy group.
5	**Research** Research is required to better understand the need for information and support of those affected by the DNA issues. The research should include needs surrounding victim notification for historical case reviews. It should consider the various offence types included in the historical case review and victim demographics. The Office of the Victims' Commission has advised the DNA Review they would welcome the opportunity to work with Government on research around information and support needs for those affected by the DNA issues, and research for victim notification and historic case reviews. This should be supported by appropriate funding and resourcing to the Victims' Commissioner. The research could be conducted through a research partner, and in collaboration with the Victims' Commissioner, Sexual Violence Review Board. Organisations involved in the historical case review process (FSQ, DPP, and QPS), the DNA advocacy group, and victim advocacy groups. It should leverage off international examples including the USA rape kit response. This information will be essential to inform improvements 4, 6, 7, and 8.

[310] *Victims' Commissioner and Sexual Violence Review Board Act* (2024), Section 62. https://www.legislation.qld.gov.au/view/html/asmade/act-2024-021#ch.4

[311] The Charter of Victims' Rights, within the Victims' Commissioner and *Sexual Violence Review Board Act (2024).* https://www.victimscommissioner.qld.gov.au/our-work/review-of-the-charter-of-victims-rights

6	**Development of Improved Historical Case Review Victim Notification Protocols** Organisations currently responsible for historical case review victim notification (QPS and ODPP) should develop improved protocols based on the aforementioned research and policy improvements. A multi-disciplinary team should be formed with representatives from ODPP, QPS, FSQ, the DNA advocacy group, a qualified mental health expert specialising in victim trauma, legal experts, and representatives from existing victim support groups. This team should continually monitor and improve the notification protocols. This same group should be available for consultation when complex notification cases arise. The multi-disciplinary team could work with the Office of the Victims' Commissioner to help review and implement the improved notification protocols. The multi-disciplinary team should be supported by appropriate funding and resourcing to the Victims' Commissioner. Given the historical case review has commenced and there is a critical need to improve victim notifications, this work should be conducted as a priority. This also presents an opportunity to review and improve other victim notification protocols where required, which should be specifically designed for various offence types.
7	**Improved Victim Notification Training** After the improved victim notification protocol has been developed, specialised notification training should be provided to those engaging with victims and families affected by the DNA issues. This approach is consistent with the Queensland Trauma Strategy (2024-2029) for integrating trauma-informed practices across the whole-of government network for those engaging with victims.[312] Learnings could be leveraged off the USA rape kit backlog training program[313] and expanded for more offence types. The multi-disciplinary team should be involved in the development and implementation of the training program and funded appropriately.
8	**DNA education series and resources** DNA education and resources should be developed for victims and their families, and the community about the DNA issues, DNA reforms, the historical case review processes, relevant legal processes, and general DNA testing. Learnings could be leveraged off the USA rape kit education resources.[314] The multi-disciplinary team (improvement 6) should be involved in the development and implementation of the education. This information is essential to restore the trust of the victims, families, and the community and could also be available through existing victim support networks, and Queensland health services.

[312] The Queensland Trauma Strategy , Queensland Mental Health Commission, 2024.
[313] https://www.sakitta.org/learn/
[314] https://www.sakitta.org/webinars/

518. This initiative will increase the chance of:

(a) healing for victims and their families;

(b) help to restore confidence in DNA testing and Queensland's criminal justice system, mitigate re-traumatisation;

(c) provide processes to ensure the needs and rights of this unique victim cohort are represented;

(d) ensure the proposed DNA service delivery framework is more transparent, victim-centred, and trauma informed; and

(e) leverage off existing government initiatives to provide better support for victims in Queensland.

Recommendation 18	The following improvements should be made to victims' rights and engagement in DNA service delivery. **18.1** Establishment of a dedicated DNA peer support group; **18.2** Establishment of a survivor-led DNA advocacy group; **18.3** Policy improvements on victims' rights and engagement for those impacted by the DNA issues ; **18.4** Research on victims' needs; **18.5** Development of improved historical case review victim notification protocols; **18.6** Improved victim notification training; and **18.7** Development of a DNA education series and resources. The improvements listed above should be conducted as a project under the DoJ.
Intent and desired end state	**Intent:** Improvements to victims' rights and engagement in DNA service delivery will better support victims affected by the DNA issues, help to reduce trauma currently being experienced by DNA delays and quality issues, help to restore trust, and ensure that victims and their families are better represented by improved policy and advocacy. A 12 month post-implementation review will evaluate the implemented deliverables to ensure they sufficiently meet expected outcomes. **Desired End State:** The project has been completed with all improvements listed in Recommendation 18 implemented. The post-implementation review is complete, and any major issues have been remediated.
Recommendation 2	The Government should consider the availability of special assistance to individuals impacted by the current DNA issues, and the historical case review (especially those who may have to re-engage with the criminal justice

	system). This could include financial assistance to access their preferred psychologists where a gap in support exists.
Intent and desired end state	**Intent:** To enable those impacted by the DNA issues to access support from their preferred psychologists. **Desired end state:** The current gap in support for those impacted by the DNA issues is closed.

5.5 Why changes to the DNA Service Delivery Framework are needed in Queensland

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Current DNA Service Delivery Framework:

(a) The DNA Review concluded that Queensland's current DNA service delivery framework is outdated, inefficient, and not meeting the needs of police, courts, and victims.

(b) The framework lacks a system of systems approach, sufficient quality assurance, and appropriate governance.

(c) There are inequities in access to forensic testing for regional victims and victims of certain violent crimes.

519. The DNA Review conducted multiple focus groups of end users across QPS, court experts, and victim advocates. Typically, each group wanted faster access to DNA results and was severely impacted by FSQ's critical backlogs, significant service delays, reduced quantity of testing services, and limited access to advanced technologies. However, faster results alone does not guarantee a best practice DNA service delivery framework.

520. The DNA Review found the following key issues with the current DNA service delivery framework:

(a) FSQ currently does not have the capacity or capability to meet end user needs (discussed in Section 4.1);

(b) A reliance on one DNA service provider to conduct end-to-end testing and lack of any strategic redundancy creates an ongoing risk (discussed in Section 4.1);

(c) There is no sufficient system-wide approach to DNA service delivery, including monitoring and responding to failures, nor is there an ongoing and coordinated multi-agency strategy to continuously improve DNA services for victims and the public and meet the government's strategic policies (discussed in Section 4.1 and 5.1);

(d) Best practice is not always used, and critical evidence is being missed (discussed in Section 5.6);

(e) FSQ is not best positioned to manage DNA services for Queensland to meet the operational and strategic needs of end users (discussed in Sections 4.1 and 5.1);

(f) Expert QPS scientific personnel and existing QPS state-wide DNA evidence recovery laboratories are not being utilised to their full potential (discussed in Section 5.6);

(g) There is inequality in the provision of best practice DNA services for victims across different serious offence types (discussed in Section 5.6);

(h) There is inequality in access to best practice DNA services for some regional victims (discussed in Section 5.6); and

(i) Lack of appropriate victim engagement and rights in the DNA reforms and historical case review process (discussed in Section 5.4).

5.6 Proposed DNA Service Delivery Framework

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Proposed DNA Service Delivery Framework:

(a) The Review proposes a modernised, holistic framework with seven major changes, including improved victim engagement and rights, strengthened quality assurance, and transferring DNA service delivery control to QPS.

(b) The framework aims to address systemic issues, improve equity, and align with government policies like "Faster Justice for Victims", "Safer Communities" and “Fewer Victims of Crime”.

521. The DNA Review conducted multiple focus groups across end users, including QPS, the court, and victim advocates. The proposed DNA service delivery framework discussed in this section is based on their advice and solutions provided throughout the DNA Review in line with the participatory approach taken to conduct the review.

522. The DNA Review believes that seven major changes need to be implemented into Queensland’s DNA service delivery framework. These are:

(a) Improved victims’ rights and engagement (see Section 5.4 above);

(b) Implementation of a strengthened quality assurance framework for forensic DNA service delivery (see Section 5.7);

(c) Expansion of best practice crime scene DNA collection for violent crimes and across regional Queensland (see Section 5.8);

(d) Optimisation of DNA evidence recovery using existing state-wide DNA laboratories (see Section 5.8.1);

(e) Best practice enhancements, and a police-led DNA investigative group (see Section 5.9.5);

(f) Transfer of DNA Service Delivery Control to QPS (See Section 5.8.3); and

(g) An improved system-wide forensic DNA research and innovation strategy (see Section 5.10.4).

523. These seven major changes should be enabled and enhanced by lower-level changes (**Figure 19**). A scoping phase involving end users should be conducted to determine which of the improvements and enablers listed in **Table 8** and **Figure 19** could be included in the final DNA service delivery framework and in what priority. Collectively the proposed framework is intended to achieve best practice DNA service delivery from the crime scene to the court room, meet end user needs, restore public confidence, and help to achieve the government's strategic policies.

524. A summary of the potential changes between the existing and proposed framework is listed below in **Table 8**.

Figure 19 The proposed DNA service delivery framework including key changes and enablers

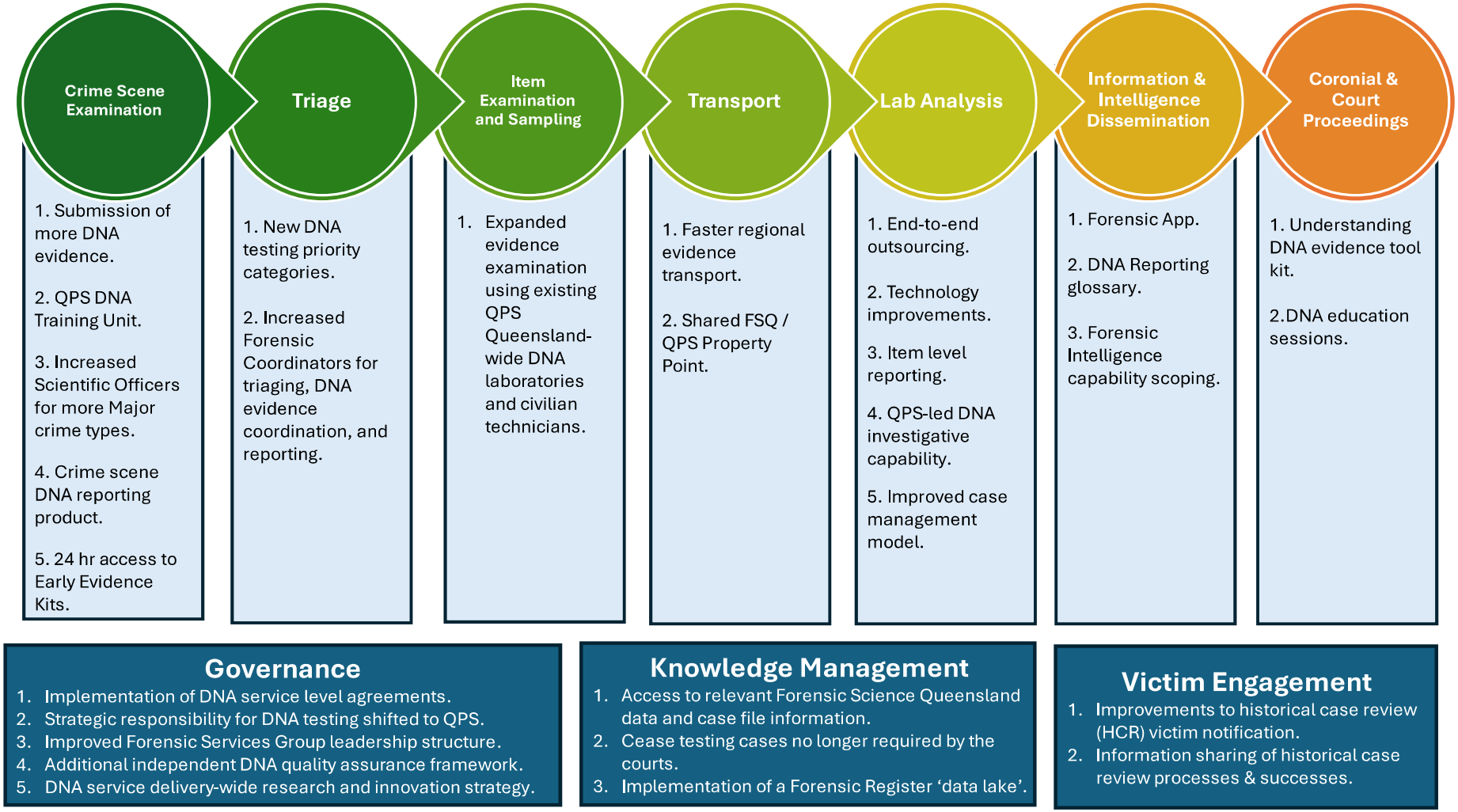


Table 8 Main changes proposed by end users to the DNA Review to Queensland's DNA service delivery framework.

Current Framework	New Framework
FSQ is the one major DNA service provider for Queensland for end-to-end testing.	Multiple DNA service providers for end-to-end testing (FSQ, and external private laboratories).
Submission of 18,000 crime scene samples per year.	Submission of 35,000 to 40,000 crime scene samples per year.
Limited routine access to advanced DNA technologies.	Regular access to advanced DNA technologies via outsourcing.
Reliance on SOCOs to undertake examinations of major crime scenes where it may exceed their expertise and are unable to access higher levels of DNA detection and enhancement techniques.	Expansion of violent major crime offence categories that QPS Scientific Officers attend (eg to include sexual assaults / rapes and grievous bodily harm).
No QPS DNA training unit to support best practice for SOCOs, Scientific Officers, Forensic Coordinators, Investigators, Forensic Managers, or Police Prosecutions.	New QPS DNA Training Unit established.
FSQ recovers evidence from rape kits, underpants, small items (eg cigarette butts, chewing gum), and some whole items.	QPS conducts all DNA evidence recovery in their existing DNA laboratories state-wide (except for rape kits). Employment of civilian forensic professional officers to perform DNA evidence recovery.
Monthly transport of major crime DNA evidence from regional Queensland to FSQ. Note: volume crime evidence is already transported by courier.	Rapid transport of major crime DNA evidence from regional Queensland to a DNA service provider using a secure cold chain courier. This provides timelier DNA testing for violent crimes across Queensland.
Limited capability for QPS to conduct investigations through advanced DNA technology.	New QPS-led DNA Investigative Group (Forensic Investigative Genetic Genealogy, familial analysis, etc).
FSQ strategic control of DNA service delivery and DNA testing budget.	QPS strategic control of DNA service delivery budget.
FSQ control of DNA service delivery research and innovation.	DNA service delivery-wide research and innovation strategy.
Limited QPS access to FSQ data and case file information.	QPS access to DNA quantitation data and case file information to facilitate investigations, re-testing decisions, and outsourcing.

Current Framework	New Framework
Limited FSQ and QPS access to data within the Forensic Register.	Implementation of a Forensic Register 'data lake' to enable access of data to perform queries and quality assurance.
No automated process to identify cases no longer required by the court for testing creating ~15% - 20% unnecessary testing.	Implementation of automated knowledge management solution across Courts and Tribunals and QPS to identify cases that no longer require testing for the courts, reducing unnecessary DNA testing.
Limited access to information about DNA reforms and the historical case review for victims and the community.	Implementation of agreed publicly available metrics and information about reforms and historical case review.
Victim notification strategy does not meet all victims' needs.	Implementation of an improved victim notification strategy informed by research and victims and advocacy groups.
Limited DNA education and training for end users in the courts.	Establishment of a DNA training program for Legal Aid, Police Prosecutors, and DPP.
Uncertainty about the meaning of some DNA evidence by end users (for example DNA mixture statistics and opinions).	Improved DNA reporting language and development of an *aide memoir* to assist police and the courts.
Excessive FSQ DNA reporting lines, and insufficient clarity of their meaning by end users.	Implementation of a DNA glossary and reduced DNA reporting lines.
No 24-hour access to Early Evidence Kits in remote and regional areas where clinic hours have standard operating hours, and no access at mine sites.	Twenty-four hour access to Early Evidence Kits across all remote and regional areas, and at mine sites.
QPS distribution of DNA results to investigators and general duties police is onerous, which could affect the timely response to resolve and prevent crime.	QPS are developing a prototype 'Forensic App' which provides improved deployment of results linked to relevant case information.[315]
Reliance on the NATA and the Australian forensic science quality framework to ensure quality services which is not sufficient to ensure reliable and good quality DNA testing in Queensland.	A strengthened Queensland quality assurance framework for DNA service delivery which supplements the national forensic DNA quality framework.

[315] Information provided by QPS: QPS Forensic Services Group (FSG) are currently exploring an extension of existing notifications with the implementation of an application which has the ability to notify police in real time which is reliant and determinant on faster DNA identifications and notifications. In particular, the implementation of the app has the ability to notify front line police (not currently covered with the email groups) so that further investigations can be directed accordingly. The email groups and app mitigates the notification delays caused within QPrime reporting so that they are received in real time, that is once FSG are aware then police are aware.

5.7 Implementation of a strengthened quality assurance framework for Queensland forensic DNA service delivery

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Quality Assurance Failures:

(a) During the period covered by the Inquiries, the QHFSS laboratory fulfilled all obligations under the national forensic science quality assurance framework. This included meeting requirements of regular assessment by the National Association of Testing Authorities (NATA) against the ISO/IEC 17025 standard.

(b) Given the issues identified in the Inquiries and this Report, the DNA Review recommends a strengthened quality assurance framework for Queensland that supplements ISO/IEC 17025, and the introduction of ISO 31000 (risk management).

(c) This will ensure that the future delivery of DNA testing and analysis aligns with best practices and rebuilds public and end user trust and confidence.

525. Queensland needs a strengthened quality assurance framework for forensic DNA service delivery to supplement the national forensic science quality framework. This is essential to prevent further unreliable results from being released, create enduring quality improvement, regain the trust of victims and the Queensland community in the criminal justice system, and to protect the significant investments made by the former and current state governments. The DNA Review proposes the scope of the strengthened quality assurance framework should include services provided by FSQ and the external DNA service providers.

526. The 2022 and 2023 Inquiries reported system-wide quality failures at QHFSS[316]. The laboratory had been producing results so unreliable that major crime cases from 2007 to 2023 require review, and where needed, re-testing under the historical case review process. During this period the QHFSS laboratory fulfilled all obligations under the national forensic science quality assurance framework. This included meeting requirements of regular assessment by the National Association of Testing Authorities (NATA) against the ISO/IEC 17025 standard. Throughout this period, NATA accreditation provided QPS, the courts, victims, defendants, and the government a false sense of reassurance that results provided by QHFSS were accurate and reliable.

527. Of note, NATA conducted a technical assessment of QHFSS between 25 to 28 July 2022, and 8 to 9 August 2022, after the Sofronoff Inquiry had been announced. During this assessment NATA found no major non-conformances, no minor non-conformances, and only four observations.[317] The NATA findings were in stark contrast to what was reported by the 2022 and 2023 Inquiries. Therefore, the DNA Review has

[316] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022, sections 4 and 5.
[317] DNA Review Information Request 6 'NATA Assessment Reaccreditation Update (Inc Att 1 and 2') page 8.

reached the conclusion that NATA accreditation alone is not sufficient to provide confidence to Queenslanders that the results produced by FSQ are accurate and reliable.

528. FSQ underwent a NATA technical assessment between 29 July and 2 August 2024. NATA sent double the number of technical and lead assessors compared to the 2022 assessment. NATA reported 15 major non-conformances, 5 minor non-conformances, and 23 observations for the FSQ DNA laboratory.[318] All non-conformances required remediation prior to a follow up visit in June 2025 to ensure FSQ retained its accreditation. NATA reported at the completion of the June 2025 visit they accepted the FSQ remediations and reported only two conditions which needed to be met for FSQ to retain its accreditation.

529. The NATA findings are significantly different to the DNA Review Team's findings, which identifies major systemic issues that have rendered the FSQ DNA results unreliable and highlighted a need to review and re-test cases from May 2023 onwards. The DNA Review consider that this provides an additional example as to why NATA accreditation alone is not sufficient to ensure reliable DNA results for the police, courts, victims, defendants and the public in Queensland.

530. The DNA Review heard from FSQ staff there was no process available for them to adequately alert organisations external to FSQ of the systemic quality issues they were observing. This issue was confirmed in the DNA Review's analysis of the FSQ and system-wide governance. If such a process was previously available, it could be argued the extent and duration of the QHFSS issues could have been averted, as too the current quality issues at FSQ.

531. The new quality framework should include:

(a) A joint role by QPS and DoJ in the oversight of FSQ DNA service delivery quality management;

(b) Establishment of a process where victims of crime and their family can raise issues and concerns about DNA testing;

(c) Employment of a full-time civilian QPS DNA service delivery Quality Manager. This position would report to the proposed new position of Superintendent of quality and DNA service coordination;

(d) Conduct of regular external customer compliance audits by the QPS which should include independent contracted technical experts;

(e) Attendance of the QPS DNA Quality Manager at the annual FSQ Quality Management Review meetings, with a reciprocated invitation to the FSQ Quality Manager to attend the QPS annual Quality Management Review meetings.

(f) Visibility of FSQ risk and issues registers to QPS and DoJ, and the FSQ 'Opportunity for Quality Improvement' reports.

[318] DNA Review Information Request 6 'NATA Assessment Reaccreditation Update (Inc Att 1 and 2') page 8.

(g) Implementation of a direct quality complaints system for FSQ staff directed to QPS and DoJ;

(h) Establishment of a Quality Management sub-committee involving FSQ, QPS, and DoJ;

(i) Formal FSQ notifications to the QPS and courts on major workflow changes or changes to circumstance that have a high impact on DNA services (eg DNA testing thresholds, implementation of new methods or instruments);

(j) Consideration of the FSQ Quality Management governance to include direct reporting to DoJ and QPS, rather than just direct reporting to FSQ senior management;

(k) Collection of agreed operational-level quality metrics (such as frequency of contamination) to be regularly provided and monitored by DoJ and QPS; and

(l) Implementation of a quality policy at FSQ that requires individual accountability for compliance with quality practices.

532. The DNA Review believes that collectively the proposed quality framework will help to restore confidence and trust in FSQ DNA service provision, change attitudes and culture negatively affecting quality practices within FSQ, enable early detection of quality issues, better enable continuous quality improvement within FSQ, and protect the Government's significant investment in FSQ. However, changes to the FSQ Act may be required to provide the level of transparency and compliance outlined in the proposed quality framework and to ensure requested quality documents are provided to DoJ and QPS.

533. An expansion of the FSQ Quality Management Team is needed in the short term to assist in addressing the various quality assurance issues, and to support relevant recommendations from the DNA Review. It should be noted that the DNA Review observed dedicated and ethically motivated staff trying to uphold quality management principles, however, it believes that they require additional support.

5.8 Expansion of Best Practice Crime Scene DNA Collection for Violent Crimes and for Regional Queensland

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) Typically, only the most serious and violent offence types, such as homicides and some violent sexual assaults, are forensically examined by specialised forensic experts, being QPS Scientific Officers and Forensic Coordinators (**FCs**). All property crimes, other violent crimes including attempted murders, rape, sexual assaults, and grievous bodily harm are attended by one of ~300 Scenes of Crime Officers (**SOCOs**) state-wide.

(b) The DNA Review (with agreement of QPS) proposes that violent and serious offences including attempted homicide, rapes, sexual assault, and grievous bodily harm are attended by Scientific Officers, rather than SOCOs alone, and supported by FCs. In the DNA Review's opinion, this is considered best practice and will improve the chances to

identify violent and repeat offenders using DNA and have a multiplier effect, enabling collection of other high value forensic evidence for violent crimes, which increases the chances of crime resolution and prevention.

Optimisation of DNA Evidence Recovery

(c) When items of evidence are recovered from crime scenes such as clothing, bedding, weapons etc, they require examination in a clean DNA evidence recovery laboratory. This process is called 'DNA evidence recovery' and is currently performed by QPS for all items except rape kits, underpants, samples of fabric from clothing and bedding, and small items (including cigarette butts and chewing gum).

(d) FSQ has one evidence recovery laboratory which FSQ have identified is inadequate as it presents a high risk for contamination. This is a key driver for the $450M forensic science precinct at Coopers Plains by FSQ.

(e) The DNA Review proposes there should be a transfer of responsibility of evidence recovery from FSQ to QPS for all items except rape kits using the existing network of QPS laboratories state-wide.

(f) The DNA Review (with agreement from QPS) recommends expanding the use of the existing state-wide network of QPS DNA laboratories which will optimise DNA evidence recovery ensuring a timely victim-centric approach and better-informed police investigations.

End-to-End outsourcing

(g) The proposed DNA service delivery framework should be considered over three iterations, supported by outsourcing at each stage:

(i) The current state of FSQ service delivery is the first iteration where outsourcing will eliminate 'unstarted cases' backlogs, and test new major crime cases and human remains. This is considered a critical response to address the unmet needs of the police, courts, and victims.

(ii) The second iteration is a gradual decrease over time in outsourcing as FSQ addresses quality issues and develops capacity.

(iii) The third iteration will be the end 'normal state', where a majority of cases are tested by FSQ, however, contracted outsourcing options will remain in place to ensure required timeframes are met for all cases, as an enduring surge capacity, for access to advanced technologies unavailable at FSQ, and as redundancy if the need arises.

Transfer of DNA Service Delivery Control to QPS

(h) DNA Service Delivery is currently being split over two agencies (now FSQ and QPS).

(i) The DNA Review believes that some of the issues caused by this split responsibility could be improved by QPS assuming full responsibility for the management of DNA services (though not management of the FSQ laboratory) and the proposed framework transfers strategic responsibility of DNA service delivery from FSQ to QPS.

(j) The DNA Review recommends that funds for outsourcing be allocated to QPS, who then manages the outsourcing program and decides which external laboratories evidence is sent to for testing.

Implementation Strategy

(k) The proposed DNA service delivery framework is a generational change encompassing many aspects of service delivery across multiple organisations.

(l) It will require a rolling program of work over three years to implement. This should be performed by a team of qualified and experienced program and project managers, as well as change managers who work closely with DoJ, QPS, the courts, FSQ, and victim advocate groups. The program should deliver priority improvements in six-month tranches and be monitored by the DoJ and the QPS.

534. Best practice crime scene examination and management for serious and violent crimes improves DNA collection and provides a victim centric approach for Queensland communities. It also has a multiplier effect enabling collection of other valuable forensic evidence that could help resolve crimes.

535. Typically, only the most serious and violent offence types, such as homicides and some violent sexual assaults, are forensically examined by specialised forensic experts. This approach offers the best chance of locating DNA evidence and other forensic evidence. This is performed by QPS Scientific Officers and Forensic Coordinators (**FCs**) attending crime scenes (Figure 20).[319] Collectively they are trained to:

(a) examine the crime scene in more detail;

(b) perform additional scientific processes to detect, locate and interpret biological evidence for DNA analysis;

(c) provide crime scene reconstruction evidence to courts;

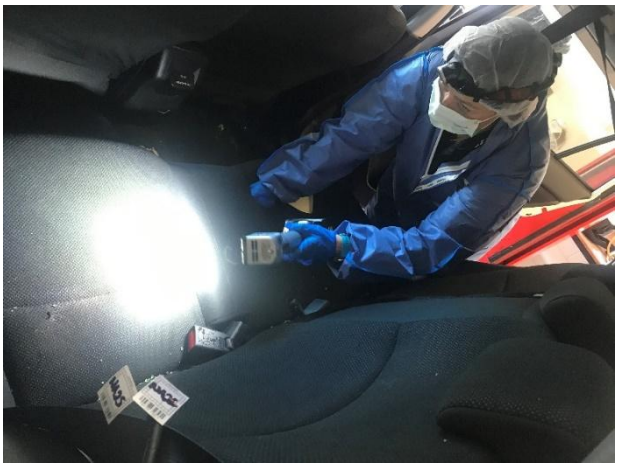
(d) better assist investigators to use forensic science in investigations; and

(e) make expert decisions about which DNA samples to send for testing.

536. Their holistic oversight provides timely, professional forensic services that offer reassurance and a sense of justice to victims, reinforcing public confidence in the response to Queensland's most serious crimes, which is considered best practice crime scene examination and management. These QPS experts are highly skilled, some with years of operational forensic science experience and many have scientific degrees, including a Master's degrees in Forensic Science.

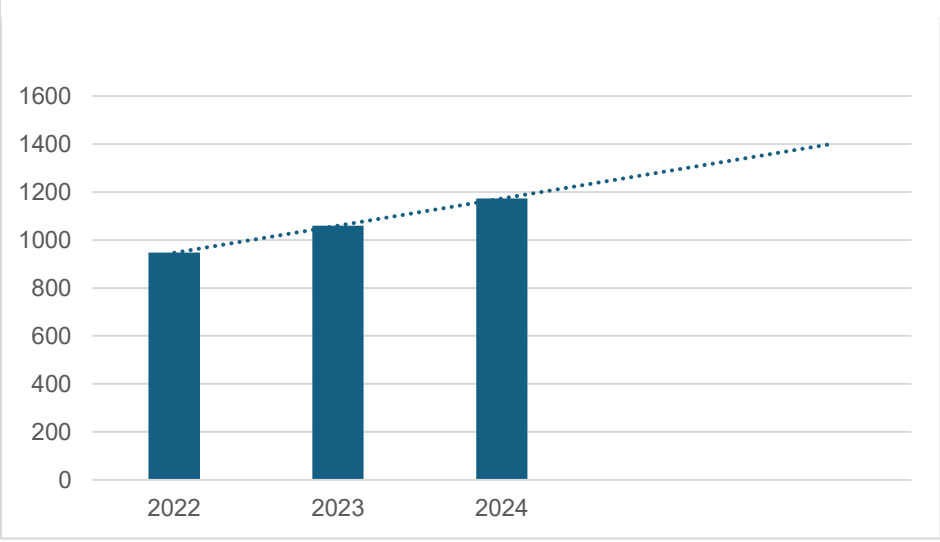
[319] Images supplied by QPS.

Figure 20 QPS Scientific Officers detecting and collecting DNA at crime scenes



537. All property crimes, other violent crimes including attempted murders, rape, sexual assaults, and grievous bodily harm are attended by one of ~300 Scenes of Crime Officers (**SOCOs**) state-wide. Reliance on SOCOs to undertake examinations of violent crime scenes where it may exceed their expertise, and where they may be unable to access higher levels of DNA detection and enhancement techniques will limit DNA evidence available for investigations and the courts. The number of major crimes requiring scientific examination has been increasing which require more access to best practice crime scene examination[320] (Figure 21).

Figure 21 Total offences of major crime including homicides per year



538. For violent crime types, SOCOs should also be supported by Scientific Officers and FCs. However, there are only 35 Scientific Officers and 8 FCs state-wide (**Table 9**).[321] This limited number creates inequity among victims of some violent offence types and

[320] Information provided by QPS.
[321] Figure provided by QPS, extracted from the Forensic Register 8 May 2025.

may reduce the chance of apprehending violent repeat offenders, especially rapists. It also leads to delays in attending crime scenes in some rural areas across Queensland due to the large distances they have to travel. For example, in the Northern Region, their scientific experts cover 527,000km^2 (Table 9). This creates inequity between rural and metropolitan victims of crime, and potentially the level of community safety across regional Queensland.

Table 9 Current state-wide forensic crime scene response by district. One FC is responsible for each district.[322]

	Far Northern Region	Northern Region	Central Region	Wide Bay/Sunshine Coast Districts	North Brisbane /Moreton Districts	South Brisbane District	South East Region	Southern Region
Located at	Cairns	Townsville	Rockhampton	Maroochydore	Police HQ	Police HQ	Coomera	Toowoomba
Responsible Districts	Far North District	Mt Isa District Townsville District	Capricornia District Whitsunday District	Wide Bay District Sunshine Coast District	North Brisbane District Moreton District	South Brisbane District	Logan District Gold Coast District	Darling Downs District Ipswich District South West District
Area of control	286,544km^2	527,000km^2	557,485km^2	43,196km^2	5,864km^2	1,030km^2	4,476km^2	428,948km^2
Local forensic personnel FC-Forensic Coordinators SOCO FP = Fingerprint SCI – Scientific Officers *21 SCI in total.	1 FC 24 SOCO 2 FP 7 SCI	1 FC 16 SOCO 3 SCI 1 FP	1 FC 32 SOCO 2 FP 4 SCI	1 FC 31 SOCO 2 FP SCI accessed from Brisbane and Gold Coast*	1 FC 60 SOCO FP and SCI accessed from Brisbane and Gold Coast*	1 FC 41 SOCO FP and SCI accessed from Brisbane and Gold Coast*	1 FC 47 SOCO FP and SCI accessed from Brisbane and Gold Coast*	1 FC 44 SOCO 2 FP SCI accessed from Brisbane and Gold Coast

539. The DNA Review (with agreement of QPS) proposes that violent and serious offences including attempted homicide, rapes, sexual assault, and grievous bodily harm are attended by Scientific Officers, rather than SOCOs alone, and supported by FCs. In the DNA Review's opinion, this is considered best practice and will improve the chances to identify violent and repeat offenders using DNA and have a multiplier effect, enabling collection of other high value forensic evidence for violent crimes, which increases the chances of crime resolution and prevention.

540. This is a framework followed by some other jurisdictions, with attendance to major incidents by more specialist staff, equivalent to QPS Scientific Officers and Forensic Investigators.

541. In one Australian jurisdiction, the forensic teams are strategically located in regional areas around the State with staff numbers that facilitate a forensic response to volume crime incidents (SOCO's), and serious matters including homicide and sexual assault (Crime Scene Officers (**CSOs**), and sworn Forensic Investigators (**FI's**)). Necessary

[322] Information provided by QPS.

examinations including DNA sampling are conducted both in the field and/or in one of their 19 laboratories state-wide maintained to ISO/IEC17025 accreditation standards.

542. More QPS Scientific Officers (a further 11) and FCs (a further 6) are needed to support the proposed DNA service delivery framework. SOCO training to support violent offence types should continue so, where needed, they can attend to support Scientific Officers at crime scenes.

5.8.1 Optimisation of DNA Evidence Recovery Using Existing State-Wide DNA Laboratories

543. The DNA Review (with agreement from QPS) recommends expanding the use of the existing state-wide network of QPS DNA laboratories which will optimise DNA evidence recovery ensuring a timely victim-centric approach and better-informed police investigations.

544. When items of evidence are recovered from crime scenes such as clothing, bedding, weapons etc, they require examination in a clean DNA evidence recovery laboratory to avoid contamination. This is conducted by either SOCOs or Scientific Officers, depending on the offence type, and involves removing a small portion of the evidence, a procedure known as sub-sampling. The examination at the QPS DNA laboratory includes locating and sub-sampling DNA from the evidence, which is placed in a small tube ready for DNA profiling and sent to FSQ. This process is called 'DNA evidence recovery' and is performed by QPS for all items except rape kits, underpants, samples of fabric from clothing and bedding, and small items (including cigarette butts and chewing gum). A small number of whole items not sub-sampled by QPS are sent to FSQ, though is infrequent.

545. QPS has dedicated DNA evidence recovery laboratories located strategically around the state, including Brisbane (three separate laboratories within one facility), Gold Coast, Rockhampton, Townsville and Cairns (see Figure 22 to Figure 26).[323] These laboratories are staffed by 35 Scientific Officers collectively.[324] They all meet clean room standards, with HEPA[325] filtrated isolated air supply. The laboratories are designed as a suite, with separate rooms for the examination of evidence collected from the victim and suspect to prevent cross contamination. QPS maintain these to ISO/IEC17025 accreditation standards. They are part of accredited facilities, that have scheduled deep cleaning, and regular environmental monitoring conducted by QPS experts. The DNA of all QPS staff is on an internal quality assurance database which is used to investigate any occurrences of contamination.

[323] Images provided by QPS.
[324] Information provided by QPS.
[325] HEPA = high efficiency particulate air systems designed for sterile environments and used by forensic biology laboratories to mitigate DNA contamination.

Figure 22 Carins QPS DNA evidence recovery laboratory

Figure 23 Rockhampton QPS DNA evidence recovery laboratory

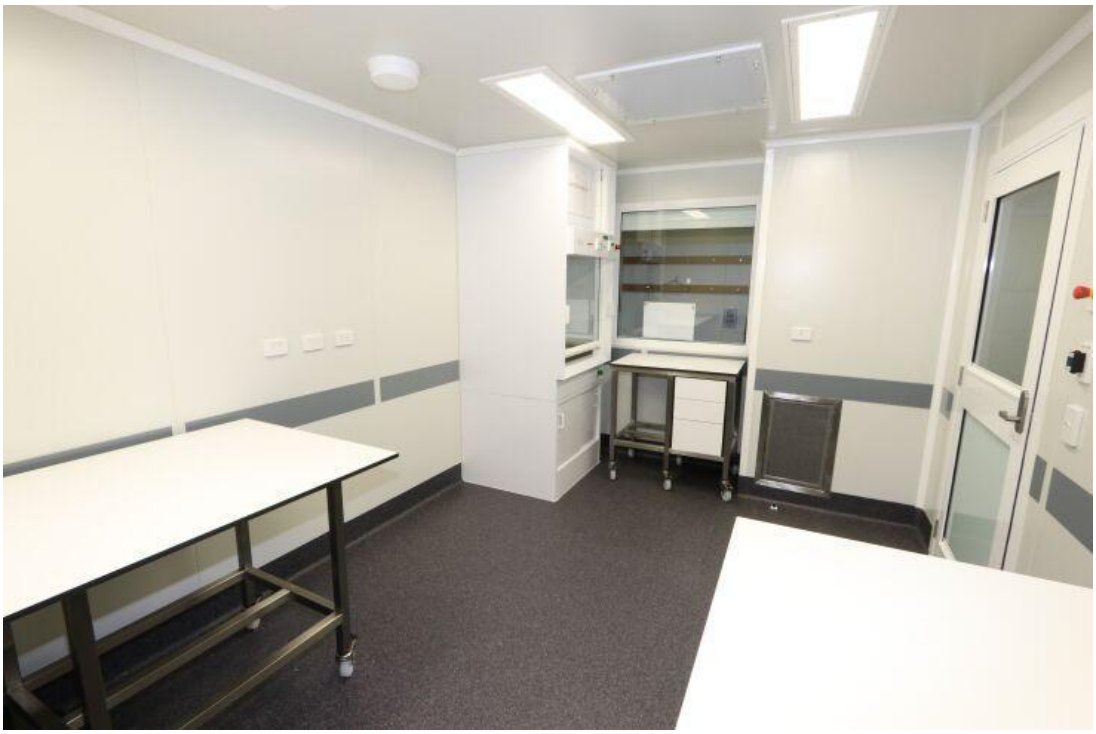


Figure 24 Gold Coast QPS DNA evidence recovery

Figure 25 Brisbane QPS DNA evidence recovery laboratory. There are three DNA evidence recovery laboratories within the facility in Brisbane

Figure 26 Townsville QPS DNA evidence recovery laboratory

546. Recently QPS hired and trained civilian forensic professional officers to perform DNA evidence recovery for their Brisbane laboratories. This new framework has been successful, resulting in faster evidence recovery, while freeing up a significant amount of time for QPS Scientific Officers to perform more advanced duties, including, attending additional crime scenes, and preparing statements for and appearing in court.[326]

547. FSQ has one evidence recovery laboratory. However, FSQ has cited the inadequacy of its evidence recovery laboratory as a high risk for contamination, and a key reason for requiring a new $450M forensic science building at Coopers Plains. The NATA technical assessment visit to FSQ in 2024 noted the following non-conformance.

> *"Evidence Recovery: there is a significant volume of cases/items being examined in a relatively small physical footprint."*[327]

548. The FSQ 2024 response to this NATA non-conformance contains no remedy to improve evidence recovery to remove this risk, other than requesting a new $450M laboratory.

> *"The first and final points cannot be addressed by refurbishing given that Queensland Health own the buildings in which FSQ is situated. A briefing note to the Director-General of DJAG [Department of Justice and Attorney-General] and QLD Attorney General has been submitted by the Office of the*

[326] Information provided by QPS.
[327] DNA Review Information Request 19.3 FSQ Response to the Forensic Biology NATA Reassessment Report-2024.'

Director of FSQ addressing the need to prioritise a new purpose-built FSQ facility."[328]

549. The QPS DNA evidence recovery laboratories are currently superior to the FSQ evidence recovery laboratory.

550. It is proposed there should be a transfer of responsibility of DNA evidence recovery from FSQ to QPS using the existing network of QPS laboratories state-wide for all items except rape kits (all whole items, and small items). There should be an expansion of QPS-employed civilian forensic professional officers (a further eight) to perform evidence recovery in the Gold Coast, Rockhampton, Townsville, and Cairns laboratories. This will have the following benefits:

(a) Removes the current risk of evidence contamination at FSQ;

(b) Assists FSQ in the short to medium-term to eliminate their backlogs and improvements to DNA profiling processes;

(c) Reduces one of the bottlenecks at FSQ, enabling them to focus on faster examination of rape kits;

(d) Provides a high degree of redundancy and business continuity not currently available;

(e) A more timely, equitable and victim-centric provision of specialist services to all regions;

(f) Reduces DNA recovery times from the crime scene to the laboratory, especially in regional areas;

(g) QPS has a better understanding of the crime scene and context of the evidence which ensures the best samples are collected to resolve a case;

(h) Enables Scientific Officers to perform more specialist crime scene roles;

(i) Transport of small tubes to Brisbane is logistically easier and more cost effective than transportation of whole items;

(j) Transport of small tubes to Brisbane better preserves the original whole evidence which can be maintained in the region where it was collected;

(k) Better use of existing QPS laboratories, rather than investing in new laboratories;

(l) Facilitates outsourcing DNA samples to external providers; and

(m) Removes a main reason for the FSQ request for a new $450M laboratory.

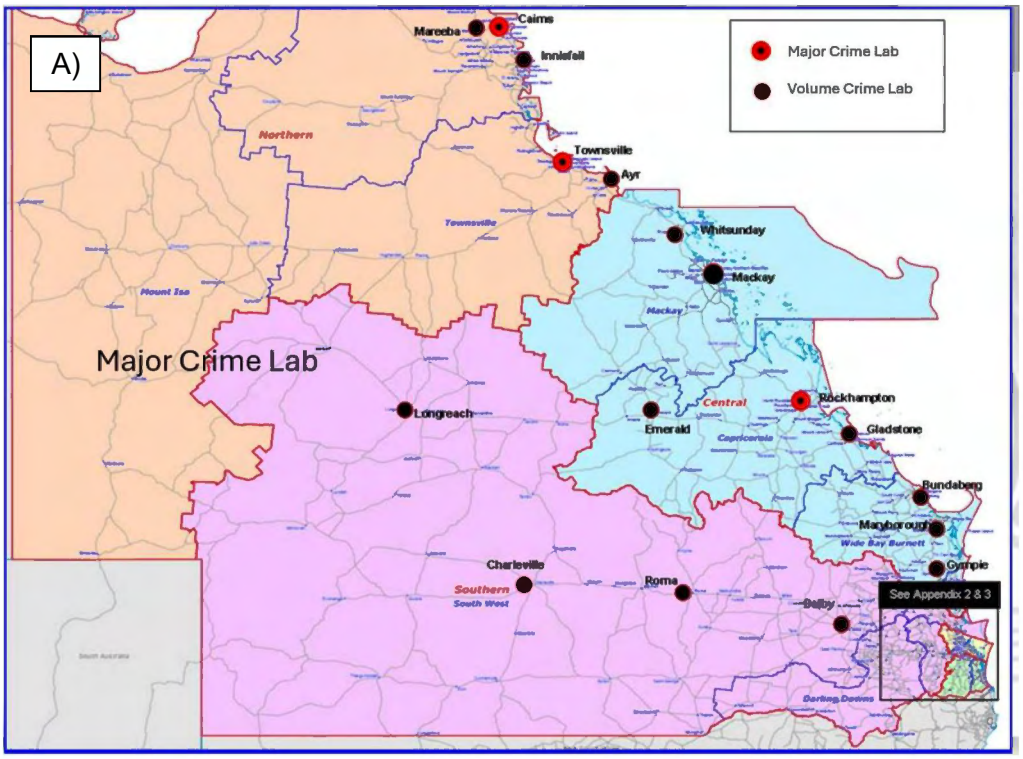
551. The QPS has a further 29 laboratories staffed by over 300 SOCOs positioned around Queensland (these laboratories are used for Volume Crime cases). These are not to the standard required for DNA evidence recovery, however, with some refurbishments

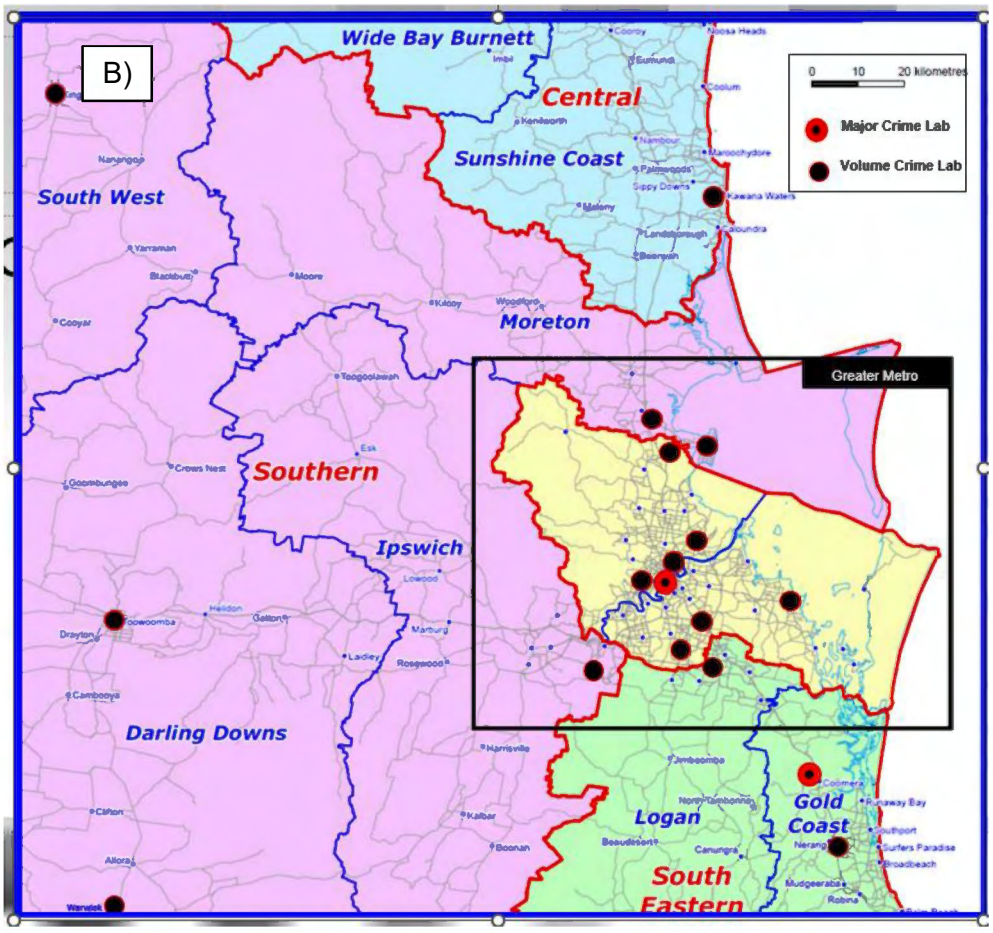
[328] Note the 'final point' referred to relates to DNA samples being transferred from one building to another via a common corridor. There are a range of strategies that can be implemented to address this other than a new DNA facility.

they could be. The expanded DNA evidence recovery concept could include using existing 'Volume Crime' QPS laboratory facilities at Mackay, Toowoomba, and the Sunshine Coast with some refurbishments to make them suitable for DNA evidence recovery. This would then provide eight DNA evidence recovery laboratories across each of the five geographical QPS policing regions across Queensland (see Figure 27)[329], in addition to the FSQ DNA evidence laboratory.

[329] Images provided by QPS.

Figure 27 A) The network of QPS DNA evidence recovery laboratories (Major Crime Lab') and Volume Crime laboratories. B) South-East Queensland major Crime and volume crime laboratories





552. The Sofronoff Inquiry was critical of the DNA service delivery framework in place at the time where DNA evidence recovery was conducted by QPS. The Inquiry noted:

> *"the laboratory applies a "what we receive we test" approach, so that all samples received are processed. The laboratory is wholly reliant on the QPS for sample selection and prioritization, with generally no scientist allocated to apply their expertise when a sample arrives at the laboratory as to when or how it should be tested".*[330]

553. It should be noted that, in the DNA Reviewers' opinion, it was not the framework that was the cause of the issues (that is evidence recovery performed by QPS), rather it was the poor implementation of the framework at FSQ and lack of safeguards which caused the issues.

554. Experts evaluated the framework where QPS performed evidence recovery for the Sofronoff Inquiry and stated:

> *"Dr Kogios and Ms Baker did not consider the division of responsibility between Queensland Health and the QPS is unworkable or must be changed. In fact, they say it falls within the range of accepted operating models in Australia. However, the model as it operates in practice falls below best practice because of the absence of safeguard that must be implemented to ensure the risk of degradation of the quality of results are not realised."*[331]

555. In response to the Inquiry findings, FSQ has now allocated scientists ('case managers') to take responsibility for each major crime case received, which is a positive change. This enables QPS to communicate when needed to FSQ scientists about case matters, including evidence recovery and examination strategies. The QPS has also established the DNA Liaison and Major Crime Unit consisting of members with expertise in determining what items will provide the most probative evidence based on the circumstances of each case. The unit is embedded in FSQ, enabling scientists to confer with QPS, obtain advice, and review final DNA results to determine if any further testing is required.

556. QPS investigators, Forensic Managers, Forensic Coordinators, and Scientific Officers all advised the DNA Review they would like more access to FSQ case managers. Therefore, a transfer of responsibility for evidence recovery to QPS will not be exclusionary to FSQ case management and will not present the risks that were once present at QHFSS when no case managers were allocated to a case.

557. It should be noted that QPS have a range of highly trained and experienced forensic scientific experts, many of whom have scientific degrees, which also mitigates the risks to case management identified at the Sofronoff Inquiry. These include over 300 SOCOs and 35 Scientific Officers. Given FSQ are struggling to employ and then train the number of scientific experts they need, greater reliance on existing, fully trained QPS

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[330] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report. 13 December 2022, page 39, paragraph 186.
[331] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report. 13 December 2022, page 46, paragraph 208.

scientific experts is required. This approach is further supported by the proposed expansion in the employment of civilian QPS technical officers.

558. The Sofronoff Inquiry Final Report stated:

> *"The determination of whether and how responsibilities over the end-to-end forensic DNA caseflow should be split between QPS and the laboratory must be a decision of government. The reconsideration of many aspects of the laboratory's operations, both during this Commission and by its recommendations, presents an opportunity for government to reconsider that division in light of key principles that should govern how forensic DNA evidence is collected and analysed."*[332]

559. Another topic relevant to inequity of regional victims was discussed at the Sofronoff Inquiry, who recommended that:

> *"The QPS should undertake a state-wide review of their transportation arrangements for sample submissions, including transportation of Sexual Assault Investigation Kits, to ensure that all sample submissions reach the DNA Laboratory as quickly as possible and within a reasonable time period."*[333]

560. In response, QPS now transports rape kits by secure cold chain courier from regional areas to Brisbane. However, the transfer of all other major crime evidence from across Queensland's regional areas to Brisbane requires a monthly QPS air wing flight. This delays access to DNA testing for regional victims by weeks compared to metropolitan victims.

561. The QPS advised the DNA Review that safe courier of rape kits has been successful, and they will soon expand this process to all major crime samples (volume crime samples are already transported by courier to FSQ). The proposed expanded DNA evidence recovery and rapid safe courier of major crime DNA samples from regional areas around Queensland will reduce current DNA testing delays and inequities affecting regional victims.

5.8.2 Continued End-to-End Outsourcing of DNA Testing to External Providers

562. Prior to the Government's DNA outsourcing announcement[334] on 22 May 2025, Queensland's current DNA service delivery framework relied on FSQ as the one main DNA service provider to conduct end-to-end DNA testing. There was no redundancy in this framework, which created excessive backlogs, service delays, and limited access to new technologies.

563. The Government's outsourcing announcement is an essential element to support the proposed DNA service delivery framework and is likely to generate the following effects:

(a) enable results of new major crime cases to be provided within 8 to 12 weeks of receipt via outsourcing, while new volume crime cases to be provided by

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[332] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report 13 December 2022, page 197, Recommendation 83.
[333] DNA Commission of Inquiry into Forensic DNA Testing in Queensland: Final Report 13 December 2022, page 47, paragraph 209.
[334] https://statements.qld.gov.au/statements/102595

FSQ within 10 days (note Priority 1 major crime samples will continue to be tested by FSQ within five days);

(b) enable FSQ to complete outstanding DNA witness statements required by courts in a timely manner;

(c) give police, courts, and victims reliable timeframes for completion of testing of current cases and the historical case review;

(d) help clear the FSQ 'started cases' major crime and volume crime backlogs in a timely manner;

(e) enable FSQ to complete the review and testing of all cold case homicides within 18 to 24 months;

(f) enable re-establishment of bone testing at FSQ;

(g) complete the testing of unidentified human remains within 10-12 months;

(h) complete current QPS requests for familial analysis for violent sexual assault matters[335] within 6 months, and complete testing of 40 violent sexual cases[336] within 12-18 months;

(i) enable the timely completion of the FSQ historical case review;

(j) enable the timely completion of FSQ reforms;

(k) enable FSQ time to train new staff, introduce new methods and workflows;

(l) prevent burn-out of FSQ staff; and

(m) regain the public's trust in Queensland's forensic DNA service delivery framework.

564. The proposed DNA service delivery framework should be considered over three iterations, supported by outsourcing at each stage.

565. The current state of FSQ service delivery is the first iteration where outsourcing will eliminate 'unstarted cases' backlogs, and test new major crime cases and human remains. This is considered a critical response to address the unmet needs of the police, courts, and victims.

566. The second iteration is a gradual decrease over time in outsourcing as FSQ addresses quality issues and develops capacity.

567. The third iteration will be the end 'normal state', where a majority of cases are tested by FSQ, however, contracted outsourcing options will remain in place to ensure required timeframes are met for all cases, as an enduring surge capacity, for access to advanced technologies unavailable at FSQ, and as redundancy if the need arises.

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[335] Priority cases identified by the QPS Child Trauma and Sexual Crimes Unit of which are violent in nature and unresolved.
[336] Using standard testing technologies currently available at FSQ.

568. The DNA Review recommends that funds for outsourcing be allocated to QPS, who then manages the outsourcing program and decides which external laboratories evidence is sent to for testing (see discussion below).

5.8.3 Transfer of DNA Service Delivery Control to QPS

569. The 2018 report 'Delivering Forensic Services' by the Queensland Audit Office[337] highlighted problems caused by delays in DNA testing which have only increased since that time. The report identified that a lack of planning and modelling has limited the ability to effectively manage the increased demand. This is a function of responsibility that is being split over two agencies (now FSQ and QPS), which could be improved by QPS assuming full responsibility for the management of DNA services (though not management of the FSQ laboratory).

570. DNA testing laboratories around the country reside within and are managed by local police services, including, Victoria Police, Tasmania Police, the Australian Federal Police, the Northern Territory Police, Fire and Emergency Services. Therefore, police control of funding for forensic DNA testing is not a novel concept.

571. QPS have advised the establishment of a service level agreement with FSQ for crime scene samples has not been possible given QPS could not agree to accepting the current FSQ turnaround times. The DNA Review recommends that an SLA be implemented as soon as possible with consideration given to the current FSQ capacity.

572. The proposed framework transfers strategic responsibility of DNA service delivery from FSQ to QPS. This includes:

(a) Transferring control of the DNA service delivery funding from FSQ to QPS, while FSQ retains the capital, operating, personnel, program/project, development, and contingency funding;

(b) Responsibility for ensuring that adequate arrangements are in place with DNA service providers to deliver the required testing capacity for end user needs;

(c) Oversight of quality assurance in conjunction with DoJ across the DNA service delivery framework;

(d) Responsibility for forecasting the budget required to procure DNA services and seeking funding from Government;

(e) Joint responsibility with FSQ for the system-wide research and innovation programs;

(f) Developing strategic and operational policies, and a concept of use for DNA input and outputs;

(g) Establishing a QPS DNA Training Unit; and

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[337] Delivering Forensic Service, Queensland Audit Office. 2018. https://www.qao.qld.gov.au/reports-resources/delivering-forensic-services

(h) Management of the proposed state-wide QPS DNA evidence recovery laboratories with civilian and uniformed scientific staff;

573. The risks and impact of mismanagement of Queensland's DNA service delivery to the criminal justice system and community were clear throughout the Sofronoff and Bennett Inquiries. Poor decision-making, inadequate management, and the absence of strategic and operational-level policy within QHFFS led to the removal of the top two levels of management. This mismanagement cost over $200M to remediate the issues of DNA service delivery.

574. If strategic responsibility for DNA service delivery is shifted to QPS, it would require changes to its organisational structure to provide appropriate levels of leadership with corporate support, and to enable management of the risk for such a critical service. Failure of this service has critical impacts on police investigations, community safety, timely access to justice, and community confidence.

575. This is a major transfer of responsibility and risk from FSQ to QPS, specifically to the sole Superintendent of the QPS Forensic Service Group (FSG). The current QPS FSG organisational structure does not support the proposed changes and will prevent the additional responsibilities from being performed.

576. FSG sits under the 'Regional Services' portfolio, within 'Operations Support Command' (which also oversees Aviation Capability Group, Covert and Specialist Operations Group, Specialist Response Group, Specialist Services Group, and Weapons Licensing Group).[338] This is a large and diverse group led by one Assistant Commissioner.

577. The span and control of QPS FSG is state-wide, and includes 616 staff (of those, 564 are full-time), across 36 locations, and includes management of five major crime laboratories, and 30 volume crime laboratories.[339] Within QPS FSG there are several highly specialised forensic science disciplines including ballistics, fingerprints, document examination, forensic chemistry, digital evidence and forensic imaging, vehicle examination, marks comparison, botanical identification of cannabis, and crime scene reconstruction. QPS FSG is led by only one Superintendent. By comparison, the New South Wales Police Force's Forensic Evidence and Technical Services Command is led by an Assistant Commissioner and supported by four Superintendents and one civilian forensic science expert at the equivalent of a Superintendent.

578. A further comparison, FSQ, which comprises of both Biology and Chemistry departments, operates as a single facility in Brisbane with ~250 staff. However, it has a much denser leadership structure than QPS FSG, with the equivalent of seven Superintendents, two Assistant Commissioners, and a Deputy Commissioner (FSQ Director). This structure was implemented after the Sofronoff Inquiry in 2023 based on the organisational risk profile and recognition of the importance of DNA services to the criminal justice system.

579. To implement and sustain the proposed DNA service delivery framework the QPS FSG requires a Chief Superintendent appointed as the Laboratory Director, which aligns with similar sized forensic structures in other Australian policing organisations. The Chief Superintendent should be supported by three Superintendents. One Superintendent would be responsible for the quality and coordination of all DNA service delivery and the potential coordination of chemical testing services. The second Superintendent

[338] Information provided by QPS.
[339] Information provided by QPS.

would be responsible for specialist forensic services currently residing with QPS and metropolitan operations (management of metropolitan staff and volume and major crime laboratories), and the third Superintendent would be responsible for regional operations (management of regional staff and volume and major crime laboratories).

580. The Sofronoff Inquiry explored the impact of the QPS FSG Superintendent not having scientific or forensic qualifications and experience when decisions were made about DNA testing thresholds in 2018. Recommendation 101 states:

> *"The QPS should ensure that one of the requirements for appointment to the position of Superintendent of the Forensic Services Group is a tertiary qualification in science and experience in forensic science."*[340]

581. The Sofronoff Inquiry recommendations and ISO/IEC 17025 accreditation requirements are based on a premise that relevant scientific knowledge is required to make decisions about best practice by those in control of laboratory facilities (that is the network of QPS DNA evidence recovery laboratories). This should extend to decisions about the control of DNA service delivery. In the absence of this knowledge, there is a risk that QPS may again agree to practices that diminish the reliability of DNA testing, leading to justice failures.

582. Each new Superintendent position and the Chief Superintendent within FSG should follow this recommendation, rather than be considered as generic positions. These recommendations accord with the generally accepted standards for personnel in charge of a forensic laboratory. Each position should require the candidate holds a relevant tertiary qualification in science and experience in forensic science.

583. The new QPS FSG leadership framework recognises the risk, complexity, and span of control of QPS forensic service delivery with the inclusion of the proposed DNA service delivery framework, and enables the development of DNA-related policy, concepts of operation, and effective implementation. This structure was developed in collaboration with the QPS focus groups.

5.8.4 Implementation Strategy

584. The proposed DNA service delivery framework is a generational change encompassing many aspects of service delivery across multiple organisations. It will require a rolling program of work over three years to implement. This should be performed by a team of qualified and experienced program and project managers, as well as, change managers who work closely with DoJ, QPS, the courts, FSQ, and victim advocate groups. The program should deliver priority improvements in six-month tranches and be monitored by the DoJ and the QPS.

585. This implementation strategy will provide near-term focus and achievements, offer flexibility, reduce risk, enhance collaboration, increase efficiency and adaptability, and importantly avoid disruption to services. The approach is preferred to making operational experts responsible for addressing many separate recommendations while trying to manage BAU demands.

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[340] Final Report: Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022.

586. An initial scoping exercise should be conducted with end users to scope and cost which improvements (listed in Figure 19 and Table 8, should be should be included in the new framework and in what priority of implementation.

587. As set out in Section 5.6 above, the DNA Review believes that seven major changes need to be implemented into Queensland's DNA service delivery framework.

588. The expanded QPS role in the proposed DNA service delivery framework will require additional QPS resources for leadership, DNA collection and triaging, DNA sample preparation, packaging, contract management, development of strategic and operational policies, quality assurance functions, logistics, data and information management, risk management, state-wide QPS DNA laboratory oversight, DNA training functions, and DNA expertise to provide ongoing advice and support to QPS. Therefore, an expansion of the existing QPS budget is needed to include the following human resources:

(a) An expanded strategic and operational QPS FSG command structure, which includes an additional Chief Superintendent and two additional Superintendents;

(b) Eleven additional Scientific Officers state-wide;

(c) Six additional Forensic Coordinators (Senior Sergeant) state-wide;

(d) Eight civilian DNA evidence recovery professional officers state-wide;

(e) A QPS forensic DNA Quality Manager; and

(f) A new QPS DNA training unit (currently there is only one QPS training officer that covers all forensic training and simultaneously occupies a Quality Office.

Recommendation 17	A modernised holistic (system-of-systems) DNA service delivery framework should be implemented across Queensland. The implementation of the new framework should be overseen by DoJ and QPS. The final composition of the framework should be informed by the DNA Review Report. **17.1** A scoping exercise should be conducted to finalise the design of the new service delivery model, estimate associated costs, and establish implementation priorities. The DoJ Expert Team should assist with the scoping exercise; **17.2** A rolling program of work over three years should be initiated following the scoping exercise to deliver the proposed changes. This program should operate under a structured program management framework, with governance and oversight by DoJ and QPS, and support from FSQ. **17.3** Expansion of the existing QPS budget is required to employ critical human resources to support the proposed DNA service delivery model.

Intent and desired end state	**Intent:** The strengthened quality assurance framework will change the quality culture within FSQ, prevent and readily detect quality issues, provide greater transparency to end users, and provide evidence-based confidence in the reliability of FSQ results. The quality assurance framework will help to restore trust in Queensland's criminal justice system. QPS strategic control of DNA testing will provide a greater assurance that Queensland's DNA service delivery is met, while ensuring FSQ is supported to develop improved capabilities long-term. The modernised holistic DNA service delivery model will give improved efficiencies and enable the collection of better quality biological evidence at more crime scenes involving violent offences, improve DNA evidence recovery at laboratories strategically positioned state-wide, enable faster transport of DNA samples, ensure higher quality and faster DNA testing, improve outcomes for complex cases, and enable DNA evidence to be better understood by end users. Overall, the new model will better meet end user needs, improve justice outcomes for victims, and help to detect and prevent more crimes. A 12 month post-implementation review of the new service delivery model will evaluate the implemented deliverables to ensure they sufficiently meet the expected outcomes. **Desired End State:** All components of the strengthened quality assurance framework have been implemented. The rolling program of work has been completed with all agreed deliverables implemented. The post-implementation review is complete, and any major issues have been remediated.

5.9 QPS Led DNA Investigative Capability

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) Currently, the QPS cannot routinely access advanced DNA testing methods such as familial analysis, bio-geographical ancestry testing (**BGA**), phenotype testing, and Forensic Investigative Genetic Genealogy (**FIGG**).

(b) The QPS Cold Case Investigative Team (**CCIT**), the Sexual Crimes Unit (**SCU**), and the Missing Persons Unit (**MPU**) have identified a large number of cold cases that cannot be resolved without using advanced DNA testing methods.

(c) An opportunity exists to support the development of a new QPS led DNA Investigative Group through inclusion in the new DNA service delivery framework.

5.9.1 Summary

589. The QPS Cold Case Investigative Team (**CCIT**), the Sexual Crimes Unit (**SCU**), and the Missing Persons Unit (**MPU**) have identified a large number of cold cases that cannot be resolved without using advanced DNA testing methods. DNA technologies are available that can provide additional DNA intelligence for police and coronial investigations when all other DNA testing and investigative leads have been exhausted. These include familial analysis, bio-geographical ancestry testing (**BGA**), phenotype testing, and Forensic Investigative Genetic Genealogy (**FIGG**).[341]

590. Currently QPS does not have the resources or training to conduct police led DNA investigations using these technologies and cannot access these technologies in Queensland. In contrast, most Australian jurisdictions have developed specialised police-led teams who can utilise advanced DNA technologies to provide new opportunities for resolution of serious and violent crimes. This capability gap means that Queensland victims and their families do not have the same opportunity for justice as victims in other jurisdictions.

591. The new DNA capability aims to prevent violent sexual offenders from re-offending, resolve complex homicides and missing person cases, prevent victimisation and re-victimisation, and improve community safety and confidence. This initiative supports the government's strategic policies including Faster Justice for Queenslanders, Safer Communities, and Fewer Victims, the QPS Strategic Plan (2024-2028)[342], the QPS

[341] Familial DNA searching involves comparing an unknown DNA profile from evidence that has not directly matched to any profiles on the National Criminal Investigation DNA Database (NCIDD) and conducting a search for the unknown persons' relatives on NCIDD. Familial searching became available nationally using NCIDD in 2018. Phenotype DNA testing can predict the physical appearance of a person. FIGG involves searching commercial databases for distant relatives of the offender and using genealogy techniques to discover these links.
[342] QPS-Strategic-Plan-2024-28b.pdf

Operational Plan (2024/25)[343], the QPS Sexual Violence Response Strategy (2023-2025),[344] and recommendations from the Women's Safety and Justice Taskforce.

592. An opportunity exists to support the development of a new QPS led DNA Investigative Group through inclusion in the new DNA service delivery framework (TOR 7). This section outlines what is required to implement the QPS led DNA Investigative Group.

5.9.2 Critical Capability Gap

593. It has not been possible for QPS to test a large number of cases with new technologies for the following reasons:

(a) the failure of the former QHFSS DNA laboratory to provide advice to QPS about testing methods not available in Queensland. The Sofronoff Inquiry found:

> *"The laboratory has failed to send or advise QPS to send, all appropriate samples to other laboratories for testing by means of techniques not available in the Queensland laboratory...The laboratory has not operated in accordance with best practice in this respect".*[345]

(b) the failure of the former QHFSS DNA laboratory to conduct adequate research and innovation, validate new DNA technologies and keep up with best practice, means Queensland victims were not given the same opportunities as victims in other states. The Sofronoff Inquiry found:

> *"The limitations of the Queensland laboratory's technical toolbox are potentially of most significant consequence for those who have been sexually assaulted";*[346]

(c) the current service capacity issues at FSQ and long delays for other major crime cases, including those before the courts, and historical case reviews;

(d) difficulties accessing information held by FSQ, particularly those in legacy systems[347];

(e) communication difficulties with FSQ and accessing advice from their scientists;

(f) lack of access to specialised technology not available in Queensland to progress some cases;

(g) QPS do not have control of the DNA funding, this resides with FSQ; and

(h) lack of a police-led DNA investigative capability which enables investigators to use alternative DNA testing technologies for cases that cannot be progressed by traditional DNA methods.

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[343] https://www.police.qld.gov.au/sites/default/files/2024-12/QPS-Operational-Plan-2024-25.pdf
[344] QPS Sexual Violence Response Strategy 2023-25
[345] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland (paragraph 290).
[346] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland (paragraph 291).
[347] Those laboratory information management systems used by FSQ prior to the Forensic Register, which include AUSLAB and paper-based records. While the information is accessible, FSQ resources are required to retrieve the information which QPS advise have been a slow and tedious process.

594. Without a police-led DNA investigative group and access to new technology through external providers to remedy the above service issues, the DNA Review believes that many hundreds of violent offences against Queenslanders will likely remain unsolved with offenders being given the opportunity to reoffend in communities state-wide.

> **The Golden State Killer**[348]
>
> In 2020, Joseph De Angelo pled guilty to the murder of 13 people, the rape of around 50 women and committing burglaries across California during the 1970's and 80s. He was arrested in 2018 after detective work was combined with FIGG.

5.9.3 Sexual Crimes Unit Cold Cases

595. The SCU comprises of 13 officers, 6 of whom are working mostly full-time on long-term unresolved violent sexual offences. SCU currently have 3,689 cases from 2004 to 2024 they have been triaging for the last few years based on the following criteria:

(a) the evidence has already provided an unknown male DNA profile from initial testing;

(b) the victim is supportive of progressing the investigation;

(c) the offender has been assessed as high risk, high harm, and has potential for multiple, prolific or violent re-offending;

(d) other evidence is available that could be DNA tested; and

(e) the case has a high probability of being resolved with new DNA evidence.

596. The SCU works with the Forensic Behaviour Specialist Unit (**FSBU**) who identifies and monitors high risk offenders, changes in offending patterns, and levels of harm. The unit provides an evidence base for a sophisticated and scalable prevention response, while also facilitating the application of disruption and enforcement strategies targeting offenders. FBSU uses forensic science-based approaches, assessing offenders in terms of harm/risks they pose to the community, identification and prioritisation of offenders that pose the greatest potential of harm. The QPS are concerned some offenders in the SCU unresolved cases are in the community re-offending.[349]

597. The SCU project is endorsed by the Assistant Commissioner of the Child Abuse and Sexual Crimes Unit. As of 10 March 2025, SCU has reviewed 189 cases with approximately 40 cases (about 21%) identified as having potential for further testing of evidence through standard technology, or progression through advanced DNA investigative strategies such as familial DNA searching, phenotyping, BGA, or FIGG.[350] However, use of advanced DNA investigative strategies by QPS is in its infancy, and there are currently no enabling capabilities to ensure cases identified by SCU, MPU, CCIT, and the Homicide Group can progress. The DNA Review considers this is a

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[348] https://www.forbes.com/sites/jvchamary/2020/06/30/genetic-genealogy-golden-state-killer/
[202] Information for each case study provided by QPS.
[349] Information provided by QPS.
[350] Information provided by QPS.

significant gap in Queensland's DNA service capability, does not meet best practice used by other policing jurisdictions, and disadvantages affected Queensland victims.

598. Of the 40 SCU cases, the DNA testing requirements are broad. Some cases need extensive work including location of the original evidence and re-sampling. Other cases already have a sufficient unknown offender DNA profiles that need identification using familial analysis or testing with advanced technologies. It could be expected at the completion of the SCU triaging process that several hundred cases will be identified which are considered high priority candidates for further DNA testing. The submission of these cold cases will be over a period of many years.

5.9.4 Cold Case Homicides and Missing Persons

599. CCIT is part of the Homicide Group who investigate homicides where leads have been exhausted by local detectives and new leads are required (often referred to as 'cold case homicides'). The CCIT consists of 12 detectives, one forensic officer, two intelligence officers and three administrative officers.

600. Of key importance, the CCIT cases are considered by QPS as active homicide investigations that can be resolved. Since 2017, the CCIT's work has resulted in 13 arrests for 12 murders and the referral of 30 murders to the Coroner. Of these 25 remain active within the Coronial system.[351]

Violent Gang Rape[352]

A female was raped by multiple males. Investigations conducted at the time were unable to identify the suspects, however, a DNA profile from an unknown male was obtained from an item left at the crime scene which also contained the female victim's DNA. An SCU cold case review first conducted in 2008 provided no further leads. A further SCU review commenced in March 2024 and familial DNA analysis was requested of the crime scene sample, however, FSQ has not performed this advising QPS they do not have the resources to conduct the tests.

Violent Rape

A female was violently assaulted and raped in her home. Extensive investigations were undertaken at the time with no success, however, the DNA profile of an unknown male was obtained from semen located at the crime scene. This unknown male DNA profile was also searched through the Australian and New Zealand databases with no success. The attack on this woman was particularly brutal and violent and needs to be resolved due to the depravity of the offending conduct. This can only be achieved through advanced DNA testing.

Serial Attempted Rapes

Female victims were both attacked while exercising. Both cases were linked via the same unknown male DNA samples obtained from both crime scenes. A further two cases were identified as having a high probability of being linked through similar location and modus operandi. Extensive investigations were undertaken at the time to try and identify this serial rapist with no success. These linked cases need to be

[351] Information provided by QPS.
[352] Information provided by QPS

resolved due to the serial nature of the offending, and this can only be achieved through advanced DNA testing.

601. CCIT conducted a thorough forensic triage of over 170 unsolved homicides, identifying 73 as the highest value where DNA, if found on crime scene evidence, could identify the offenders. Some of these cases are also active Coronial investigations that cannot progress without further DNA testing.[353]

602. Currently, FSQ only allows CCIT to submit eleven of the 73 triaged cold case homicides to them for review and analysis at one time. Due to FSQ capacity issues and lack of advanced technologies, these cases have progressed little over the last year and a half despite repeated requests by QPS. Homicides are the most serious offence in Queensland and involve offenders who are a risk to the community. For the state's forensic lab to deny QPS requests to submit homicide cases for testing is a major public service delivery failure. These cases could be progressed by the implementation of a QPS led DNA Investigative Group.

603. The QPS MPU is actively trying to identify 62 sets of skeletal remains using DNA. Some of the remains have been tested with older technology, and some have not been tested. The remains could be victims of homicide, and all have been assessed as forensically relevant by QPS.[354] The identification of human remains is a basic human right that has ethical, social and legal implications.

5.9.5 Development of a QPS led DNA Investigative Group

604. The following outlines a proposed framework for the new QPS led DNA Investigative Group (the '**Group'**) and how it could be implemented as part of the DNA Review's recommended three-year rolling program to improve DNA service delivery. The development of a QPS led Investigative DNA Group will bring Queensland in-line with best practice established in other jurisdictions including the Australian Federal Police, Western Australia Police Force, New South Wales Police Force, and South Australia Police Force to assist in promptly resolving sexual assaults, homicides, and unidentified human remains. These policing agencies have established a police-led and funded investigative DNA capability to resolve crime with new DNA technologies.[355] This follows similar international police-led investigative DNA groups across Europe and the USA.

605. The Group will require three components:

(a) Access to data and information held at FSQ;

(b) Access to outsourcing options and funds for additional technologies and DNA services; and

(c) Resourcing and training for a QPS-led Investigative DNA Group which enables police to conduct advanced DNA-led investigations.

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[353] Information provided by QPS.
[354] Information provided by QPS.
[355] https://www.police.nsw.gov.au/about_us/information_of_interest_to_the_community/forensic_investigative_genetic_genealogy; https://www.crimestopperswa.com.au/investigative-genetic-genealogy/; https://www.afp.gov.au/news-centre/media-release/national-dna-program-partners-othram-use-forensic-genetic-genealogy

606. QPS' access to DNA data and information held at FSQ for cold cases tested by them previously is critical to enable QPS to the triage cases for further DNA testing (by FSQ and external providers). This is the first step in the process which requires administrative support.

607. The QPS does not have sufficient funding for DNA testing by external providers who offer advanced technologies. The new DNA framework proposes that QPS has control of the DNA testing budget which would remove this current impediment.

608. Under this proposed framework, the Group will be police-led and comprise of:

(a) a core membership of at least one dedicated officer from the SCU, CCIT, MPU, the Homicide Investigation Unit, and the QPS FSG,

(b) a 0.5 part-time QPS Forensic Coordinator, and will be supported by one core scientific subject matter expert, and invited scientific subject matter experts sourced from within QPS and the FSQ Historical Case Review Team,

(c) a scientist within QPS, and

(d) an optional external expert in FIGG.

609. Consideration could also be given to a legal representative advisor given the public commercial aspects of FIGG (members of the public volunteer through a commercial provider for their data to be used by police).

610. The Group will be responsible for developing a suitable policy framework for the application of advanced DNA technologies for QPS.

611. The application of advanced DNA technologies including the FIGG policy and governance, needs to be established within a quality forensic framework to address legal privacy, confidentiality and ethics, governance, oversight and compliance, ownership, and on-going training and education of officers involved in the Investigative DNA Group consistent with national guidelines.[356]

612. The Group will function as Reviewers responsible for establishing policy and procedure for the implementation and use of FIGG and other advanced technologies. The Group should be co-chaired by a nominated person from the QPS investigative arm and the QPS Forensic Services Group. Membership can be the same as the DNA Investigative Group, with the option of invited case officers relevant to casework being discussed.

613. QPS should position a senior executive with delegation as sponsor of the Group, either from the QPS FSG (recommended), or a senior executive connected to the CCIT, MPU, and SCU. The sponsor is responsible for endorsing the Group's policy, activity, and decision making in line with QPS policies and frameworks including any legal obligations.

614. The Group, including the sponsor, will have delegation for the Group's decision-making on nominated casework being progressed using advanced DNA technologies.

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[356]Principles for the Application of Forensic/Investigative Genetic Genealogy https://www.anzpaa.org.au/ArticleDocuments/346/Australia%20New%20Zealand%20Forensic%20Investigative%**20Genetic%20Genealogy%20(FIGG)%20Principles.pdf.aspx**

5.10 New DNA Research and Innovation Framework

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) The Sofronoff Inquiry recommended the introduction of a dedicated research, development, and innovation team within FSQ which was formed in 2023.

(b) In the Reviewers' opinion, the FSQ Innovation and Research Strategy 2023 - 2027 (**R&I Strategy**) does not demonstrate an inclusive innovation ecosystem or reference an internal policy that supports such an ecosystem.

(i) It does not appear to consider or reference end user needs. QPS and ODPP were not consulted in its development;

(ii) It does not have clearly defined deliverables and fails to provide the details necessary to ensure outputs are delivered.

(iii) The R&I Strategy does not have any clear principles which will sufficiently guide outputs.

(iv) The stated purpose of the R&I Strategy is inwardly focused and does not consider the external environment or its purpose in the DNA service delivery continuum.

(v) Phase III of the R&I Strategy simply lists existing technology, which is not innovation. Concerningly, these are 'high value and low reward' methods.

Proposed new framework

(c) A key purpose of the R&I strategy should include the prevention, disruption and resolution of crime, and bringing faster justice to victims.

(d) Queensland's forensic DNA R&D and innovation strategy needs to be a balanced ecosystem framework, with funding and support for scientific research and incentivised innovation. Creating innovation networks should be part of the strategy.

(e) The non-linear innovation system model is more suited to the DNA service delivery continuum and is more likely to generate outcomes that can provide operational and strategic level outcomes.

(f) The DNA Review considers that FSQ and QPS should develop a combined R&I framework that supports joint projects and research that benefits the goals and objectives of both organisations, encompasses the agreed strategic framework and factors in the needs of other stakeholders in and the wider justice system.

5.10.1 Summary

615. Approximately $11M has been allocated over four years to the FSQ Research and Innovation Team. This is considered a significant public investment and is one of the

largest single investments in forensic science research and innovation in Australia. In the Reviewers' opinion, the FSQ Innovation and Research Strategy 2023 - 2027 (**R&I Strategy**) does not demonstrate an inclusive innovation ecosystem or reference an internal policy that supports such an ecosystem. The strategy overlooks key components of a successful innovation ecosystem which is a combination of Transformational Leadership and most importantly Innovation Networks featuring end users.

616. As reflected in the 'Strategic Partnerships' section of the R&I Strategy, and throughout the narrative of the document, the lack of acknowledgement of QPS as a strategic partner is detrimental to a truly innovative systems framework. Whilst noting the various phases of iteration, the strategy misses the point of an innovative systems framework - the necessity of contribution by networks, internal and external to FSQ, from the beginning of Phase I. As a major consumer of FSQ services, key knowledge holder in operational applications and capability gaps, omission of QPS, including the principal research scientist, within the QPS Forensic Service Group translates to missed opportunities for the people of Queensland in forming a world-class DNA service provision.

617. The R&I Strategy's direction silos the research and development strategy (**R&D**) from the innovation strategy. This is evidenced by the phases outlined in the document indicating innovation doesn't commence until Phase III. Although complex, the partnership between innovation and R&D from the beginning is necessary to bring value, align outcomes to customer and stakeholder needs, and facilitate best practice for the needs of the Queensland community.

618. The R&I Strategy does not consider digital transformation. This is likely due to the siloing of R&D from innovation.

619. The validation and verification strategy are not research and innovation. It could be considered as Incremental Innovation that follows a Linear Model, rich in knowledge though 'poor' in value-added outcomes. Optimising and checking existing accredited capabilities to demonstrate optimal performance requires a quality-led strategy which is not alluded to in any portion of the R&I Strategy. Incremental Innovation does not foster a collaborative approach and can stifle innovation, negatively affecting the strengthening of existing services, increasing capabilities and FSQ's ability to truly innovate.

620. The FSQ strategy spotlights the scientific R&I needs of FSQ, though the DNA Review considers that it does not pay sufficient regard to the integration of their strategy with the needs and knowledge of their key stakeholder, QPS. QPS is integral so FSQ's research and innovation strategy remains contemporary, addresses operational gaps and facilitates the introduction of new capabilities - critical to bringing a world-class forensic DNA service to the people of Queensland.

5.10.2 Background

621. The Sofronoff Inquiry recommended the introduction of a dedicated research, development, and innovation team within FSQ. This was due to the Inquiry findings that the QHFSS laboratory had fallen behind in international advancements in DNA

technologies and was to ensure that validations and evaluations were conducted in line with standard research methodology.[357]

622. In response, the FSQ Research and Innovation Team was formed in 2023 comprising of ten full-time scientists: an Executive level Manager; Deputy Manager; a specialist statistician; five senior scientists (including one forensic chemist); two further scientists; and a part-time academic contractor. The team receives an annual operating budget of $850,000 for consumables and other non-labour costs associated with conducting research and validating new methodologies. A further $1,000,000 was provided in 2023 as capital costs for establishing the innovation laboratory.[358] Including staffing, the FSQ Research and Innovation Team costs ~$2.25 million a year. This level of funding and staffing significantly exceeds any other forensic laboratory in Australia and would be equivalent to the expenses of a top tier university research group. It should be noted that some members of the Research and Innovation Team have recently been re-tasked to assist in other areas of the laboratory.

623. In 2023 FSQ completed the R&I Strategy 2023-27, stating the strategy provides an action plan to improve forensic science service delivery and capabilities available to the State of Queensland. Over the four-year period, the FSQ Research and Innovation strategy will cost Queenslanders between $10M to $12.25M.

624. Currently the FSQ Research and Innovation Team are attempting to manage 42 projects (DNA and chemistry).[359]

5.10.3 Evaluation of the FSQ Research and Innovation Strategy

625. Forensic DNA service delivery is a continuum from the crime scene to the court room. Therefore, it is essential R&D and innovation for the new DNA service delivery framework considers processes from the crime scene, laboratory, and court room to meet the government's strategic objective of faster justice for victims, safer communities, and fewer victims.

626. The FSQ R&I Strategy is comprised of three phases:

(a) Phase I - Strengthening existing services: conduct of validation, verification and re-validation of existing capabilities, improving current capabilities, and the introduction of a new automated end-to-end workflow for DNA analysis.

(b) Phase II – Increasing capabilities: evaluation and implementation of new techniques, and ongoing research and development.

(c) Phase III - Innovate: FSQ seeks to drive forensic science innovation on a local, national and global level. FSQ lists 29 existing technologies as examples.

627. Typically, a research and innovation strategy requires an understanding of end user needs, which is driven by their organisational, operational and strategic plans, and government level strategic policy. The R&I Strategy does not consider or reference

[357] Final Report Commission of Inquiry into Forensic DNA Testing in Queensland CoI. Recommendations 55, 56, and 57, p135. https://www.health.qld.gov.au/__data/assets/pdf_file/0036/1196685/final-report-coi-dna-testing-qld-dec-2022.pdf
[358] FSQ Recommendation Completion Report: Recommendations 55-58. Provided to the Interim DNA Advisory Board on 14 February 2024.
[359] DNA Review information request 28 'Weekly reporting 17 January 2025, page 21.

these. It does not have clearly defined deliverables and fails to provide the details necessary to ensure outputs are delivered. The R&I Strategy does not have any clear principles which will sufficiently guide outputs. The stated purpose of the R&I Strategy is inwardly focused and does not consider the external environment or its purpose in the DNA service delivery continuum.

> *"To develop a strategy to embrace science innovation to support and optimise existing capabilities, as well as implementing new capabilities at FSQ, by fostering both a research culture and a culture focussed on continuous improvement."*[360]

628. A key purpose of R&I should be investment in DNA technologies and DNA service delivery concepts to assist in the prevention, disruption and resolution of crime, and bring faster justice for victims.

629. The DNA Review found neither the QPS or ODPP were consulted in the development of the R&I Strategy and they had not received a copy.[361] Some key end users were not even aware it existed.[362] FSQ advised the DNA Review that it had not shared the R&I Strategy with end users and agreed that collaboration is required in the future.[363]

630. Phase III of the R&I Strategy simply lists existing technology, which is not innovation. Concerningly, these are 'high value and low reward' methods. That is, the cost to taxpayers to purchase the technology, implement and maintain it are excessive, and would only be used on a few cases a year. The QPS advised they did not support the strategy of investing large amounts of time and money in technology which would be infrequently used and could be outsourced to existing providers.[364] Lower cost and high value technology should be considered as a priority, cost being assessable through a cost-benefit analysis with end users.

631. The FSQ Research and Innovation Team is primarily taking on a quality assurance function for Phase I. However, the DNA Review considers that innovation management should not be limited to compliance or exercising control or managing (mitigating) risk. It is a capacity to lead through innovation and transformational leadership.[365]

632. R&D are two intimately related processes by which new products and new forms of old products are brought into being through technological innovation.[366] Research in operational forensic science disciplines is mostly applied research, while the development stage of R&D includes the steps necessary to bring a new or modified process into production.

633. Innovation by its very definition is to renew. It is a process by which an organisation can update and/or renew a system or process, introduce a new technique, and facilitate successful ideas to create new value or benefit. The foundation of innovation is an idea or invention that is developed via research, piloted and transitioned into operational use. The idea or invention stems from stakeholder or end user needs.[367]

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[360] DNA Review information request 14 '14A.14 Research and Innovation Strategy 2023-2027 FINAL'.
[361] Information provided by QPS and FSQ.
[362] Information obtained from interviews throughout the DNA Review.
[363] FSQ interview with the DNA Review April 2025.
[364] QPS interviews with the DNA Review.
[365] Innovation in the Boardroom – a culture of risk aversion in corporate Australia? 27 May 2024
[366] *Research and development | Definition, Types, Examples, Strategy, & Facts | Britannica*.
[367] *Research and development | Definition, Types, Examples, Strategy, & Facts | Britannica*.

634. Innovation is often confused with R&D – they are not the same, though have a complex, mutually beneficial relationship. An effective innovation ecosystem is required to embrace this critical connection. R&D alone can be stifling for innovation without a strong innovation ecosystem - alone R&D's ability to drive value will go unrealised. An imbalanced management focus on R&D at the expense of smaller innovative ideas (from external organisations and end users), causes lack of diversity in the innovation ecosystem.[368]

635. For example, QPS scientific experts who detect and collect DNA from crime scenes and recover evidence within their laboratories have many small ideas that could have significant operational value. However, QPS does not have sufficient funding or resources to progress many of these and FSQ has not made provision for accessing this wealth of ideas in their strategy.

636. The DNA Review considers that prioritising R&I as a commitment to future technological leadership as in the R&I Strategy, in isolation of a corresponding investment in developing and strengthening innovation ecosystems, puts at risk FSQ's potential to drive economic and social value for customers, stakeholders and Queensland communities.

637. There are two models of innovation that need to be evaluated for their suitability to apply to Queensland's forensic DNA service delivery framework research and innovation strategy, the 'Linear Innovation' model (Figure 28)[369] and an 'Innovation System' or 'non-linear' model (Figure 29).[370] Without the correct model, the risk is that research and innovation capabilities will not be fit for purpose which will be a waste of public funds and will not significantly improve DNA service delivery across the continuum.

638. The heavy focus on internal validation and verification of existing testing processes throughout Phase I and Phase II, reflects a linear model of incremental innovation, that focuses on research and development of current methods (scientific knowledge and technologies), has a defined start and end point, and has narrow opportunity for input from users.

639. For FSQ, this risks redundancy in the specific methodologies being targeted. In innovation management terms, the risk is that the result is not fit-for-purpose, remaining indefinitely in development without achieving practical implementation.[371] The DNA Review considers that this linear model represents a fixed mindset strategy that fails to capture the complex iterative and interactive nature of innovation, particularly in an operational context – and the critical role of management in capacity and capability building to drive innovation is at risk in a linear model. The non-linear innovation system model embraces the iterative and interactive nature of innovation, and brings

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[368] *Beyond the Lab: The Critical Difference Between R&D and Innovation*.
[369] 'Mode 3' and 'Quadruple Helix': toward a 21st century fractal innovation ecosystem. Elias G. Carayannis, David F.J. Campbell
International Journal of Technology Management (IJTM), Vol. 46, No. 3/4, 2009 DOI: 10.1504/IJTM.2009.023374
[370] 'Mode 3' and 'Quadruple Helix': toward a 21st century fractal innovation ecosystem. Elias G. Carayannis, David F.J. Campbell
International Journal of Technology Management (IJTM), Vol. 46, No. 3/4, 2009 DOI: 10.1504/IJTM.2009.023374.
[371] The innovation valley of death - by Mary Hui - a/symmetric 27 July 2024. https://theasymmetric.substack.com/p/the-innovation-valley-of-death

perspective from a diverse range of knowledge, perspective and user needs. It allows fast flexibility with an unending number of iterations of a three-part cycle:

(a) build (presentation of idea);

(b) measure (does it have value for end user/stakeholder/community?); and

(c) learn (apply this new knowledge to what you have/want to do).

Figure 28 The linear innovation model

640. The non-linear innovation system model is more suited to the DNA service delivery continuum and is more likely to generate outcomes that can provide operational and strategic level outcomes.

641. An accomplished example of a non-linear model of innovation is evident by the published research by the Forensic Evidence & Technical Services (FETS) Command, NSW Police Force. The Forensic Innovation and Quality unit within FETS follows an innovation ecosystem model, supporting operational staff, cross-agency representatives, and academia to produce numerous successful outcomes. The published examples are a testament to their innovation system model including innovation networks, specifically to:

(a) meet the needs and gaps to support operational policing;[372]

(b) identify and prioritise research and innovation activities according to combined strategic priorities, in consideration with staffing and funding resources;[373]

[372] Atwood, L., Lain, R., Kotzander, J., McCardle, P., Mason, B., Raymond, J. and Sears, A. A casework study: The effect of the porcine digestive process on animal carcasses and human teeth. Forensic Science International 345 (2023) 111617. Prasad, E., Atwood, L., van Oorschot, R.A.H., McNevin, D., Barash, M. and Raymond, J Trace DNA recovery Rates from firearms and ammunition as revealed by casework data Aust J For Sci https://doi.org/10.1080/00450618.2021.1939783. Elder, B., Sharp, M. and Harvey Walker, N A stain with all the fixing's - Enhancement of fingermarks in blood using a combined fixative and aqueous protein stain. FSI 363 (2024) 112181 Nadort, A., Hogg, K., Paine, D., Raymond, J. and Bolton, M. Every little bit helps: An overview of unpublished research towards validating forensic ballistics AFTE Journal, Vol 55, (2) 2023. Taylor, M., Turbett, G.R., Lee, J. & Sears, A. Forensic Intelligence in Australia and New Zealand: Status and future directions Forensic Science International 364 (2024) 112207. https://doi.org/10.1016/j.forsciint.2024.112207.

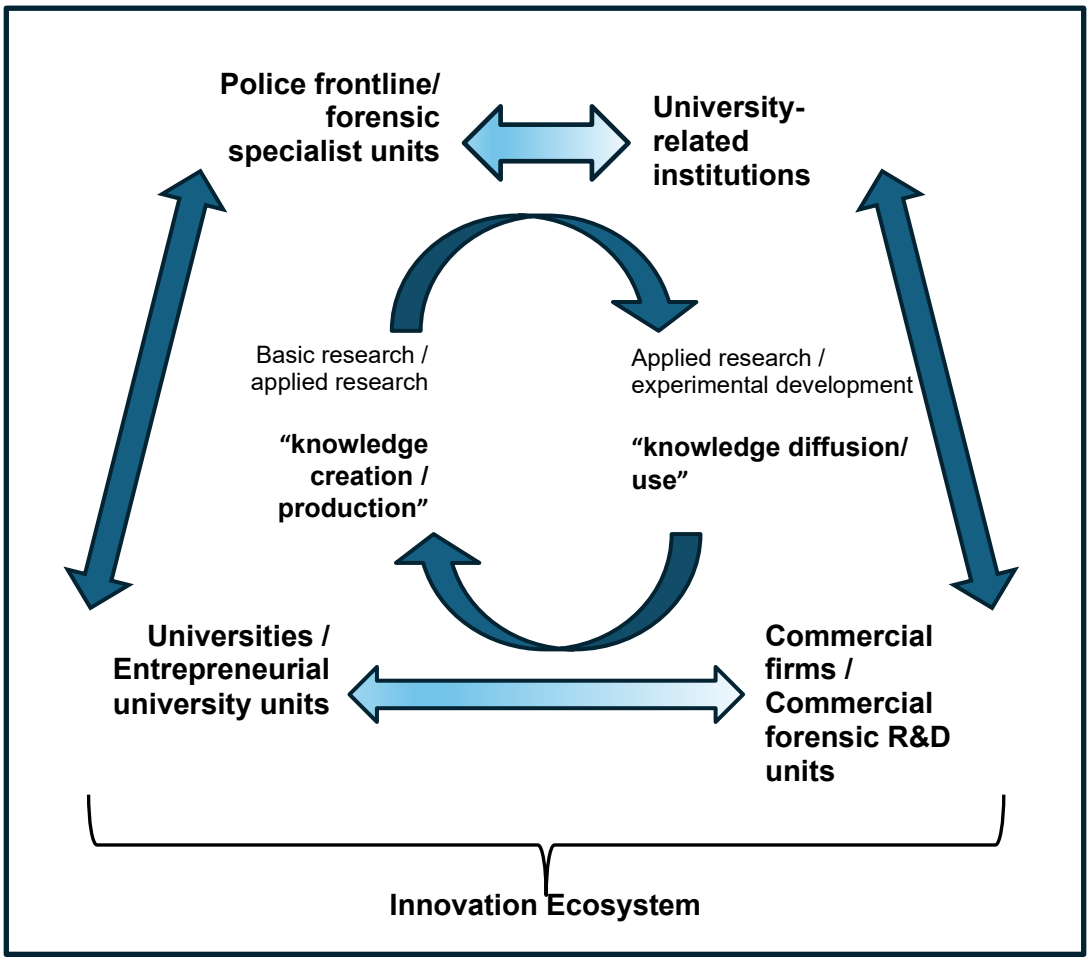
[373] Atwood, L., Raymond, J., Sears, A., Bell, M. and Daniel, R. From Identification to Intelligence: An assessment of the suitability of Forensic DNA Phenotyping service providers for use in Australian Law Enforcement casework. Frontiers in Genetics January 2021, https://doi: 10.3389/fgene.2020.568701. Sears, A & Rosenberg, L. Forensic

(c) review of emerging technology and processes and initiating research/projects to pilot potential application;[374] and

(d) monitor proficiency, progress and/or impediments and tracking implementation outcomes and post-implementation review.[375]

642. Of note, the implementation of FIGG in an operational capability started in 2019 as a small collaborative research project into the DNA technologies required to support FIGG.[376] It escalated to a successful operational capability responding to increasing

Figure 29 The non-linear model for innovation



Investigative Genetic Genealogy: The new frontier of partnership to solve cases. Presented at 'PC23', ANZPAA Police Conference, Melbourne, 2023.

[374] Scudder, N., Daniel, R., Raymond, J. & Sears, A. Operationalising forensic genetic genealogy in an Australian context. Forensic Science International Journal Pre-proof, Accepted 6th October 2020 https://doi.org/10.1016/j.forsciint.2020.110543

Hoffman, R., Sears, A., Atwood, L., Raymond, J., Hales, S. Field, C., Meakin, G., Morelato, M and Roux, C. Utility of Trace DNA: Investigation of the effectiveness of trace DNA for investigative and intelligence purposes. Presented at the International Association of Forensic Science (IAFS) conference, 2023. Blackmore, L., Poulsen, F., Kotzander, J., Prasad, E., Paton, K., Hitchcock, C. and Nadort, A. Should NSWPF back the M-Vac? An evaluation of wet-vacuum DNA recovery. Presented at the International Association of Forensic Science (IAFS) conference, 2023.

[375] Wallis, L., Hitchcock, C., McNevin, D. and Raymond, J. Source level attribution: DNA profiling from the ABACard® HemaTrace® Kit. Forensic Sci 2021, 1, 116-129. O'Connor, R. and Chapman, A. How often do fingerprint examiners disagree in routine casework? FSI 361 (2024) 112139.

[376] Scudder, N., Daniel, R., Raymond, J. & Sears, A. Operationalising forensic genetic genealogy in an Australian context. Forensic Science International Journal Pre-proof, Accepted 6th October 2020 https://doi.org/10.1016/j.forsciint.2020.110543.

demand by law enforcement nationally. The work has led to a national collaborative joint publication outlining agreed principals of the use of FIGG within Australia.[377]

5.10.4 Proposed New Research and Innovation Framework

643. Queensland's forensic DNA R&D and innovation strategy needs to be a balanced ecosystem framework, with funding and support for scientific research and incentivised innovation. It should also provide creative environments that encourages innovation networks among service providers, researchers, and end users.

644. Creating innovation networks should be part of the strategy, with more cyclic input from end users and service providers, including but not limited to:

(a) the FSQ Quality Assurance Team;

(b) FSQ Research and Innovation Team, the Historic Case Review Team;

(c) operational DNA scientists and operational DNA reporting scientist;

(d) representative from project teams (FSQ and QPS);

(e) QPS operational teams (Forensic Services Group and specialist commands as appropriate);

(f) the justice system;

(g) academia; and

(h) similar agencies external to the state.

645. The innovation networks can be formed and disbanded as necessary with approval through the research and innovation Integrated Project/Program Teams and relevant working groups, according to the innovative idea. The DNA Review recommends that the networks be inter-linked, and report to an over-arching 'research and innovation program. The program should sit under an established governance framework between QPS and FSQ, within the proposed new DNA service delivery framework. Links with the ODPP, courts and Tribunals, Legal Aid, and private defence barristers are essential to understand the sub-committee's needs, and inform research and innovation aimed at improving the communication and presentation of DNA evidence.

646. The DNA Review proposes that the Integrated Program/Project Teams be co-chaired by QPS (Principal Research Scientist) and FSQ (operational level senior researcher, as opposed to an Executive Director level). Core membership should consider representation from the QPS research team, SOCOs, Scientific Officers, and Forensic Coordinators, Forensic Managers, and FSQ and QPS quality teams.

647. Ideas and research projects from innovation networks need to be tracked through this group to ensure transparency of research, validation and development of new

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[377] FIGG Principles Document, 2024, approved by ANZPAA, published on ANZPAA NIFS website Groups | ANZPAA Website & Australia New Zealand Forensic Investigative Genetic Genealogy (FIGG) Principles (4).pdf co-developed by FIGG PWG, A. Sears (NSWPF) Chair, Nathan Scudder (AFP) Deputy Chair.

capabilities of interest. These initiatives should be tabled and tracked, with progress status updates, and decisions on priority of work made collectively.

648. Given the large volume of projects and the enduring nature of the Research and Innovation Team's outputs, the group needs to be managed under a program of work (see Section 5.11 - FSQ Program Management). The DNA Review considers that FSQ and QPS should develop a combined R&D framework that supports joint projects and research that benefits the goals and objectives of both organisations, encompasses the agreed strategic framework and factors in the needs of other stakeholders in and the wider justice system. Allocation of the vast funding over the next four years solely to FSQ in preference to a shared model should be re-considered. As a minimum, a commensurate portion of the FSQ Research and Innovation funding should be quarantined to support QPS DNA-related research.

Recommendation 19	**19.1** FSQ and QPS should develop a combined innovation, and research and development framework that supports joint research that benefits the goals of both organisations, encompasses an agreed strategic framework, and factors in the needs of other stakeholders in the wider criminal justice and coronial systems. **19.2** Allocation of vast funding over the next four years solely to FSQ in preference to a shared model should be re-considered. At a minimum, a commensurate portion of the FSQ Research and Innovation funding should be quarantined to support QPS biological and DNA-related research under recommendation 19.1.
Intent and desired end state	**Intent:** The new research and innovation model will more effectively deliver improvements to the whole DNA service delivery system, ensuring a better investment of public funds. It will leverage off experts across multiple organisations, and invest in DNA technologies, methods, and service delivery concepts to prevent and disrupt crime, resolve crime, and bring faster justice for victims. **Desired End State:** The research and innovation framework has been implemented and is linked to operational and strategic goals across the DNA service delivery continuum. The research and innovation plan has been finalised. Funding arrangements for the research and innovation model has been finalised.

5.11 FSQ Program Management

Key observations, findings, and conclusions in relation to the DNA service delivery framework:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) FSQ currently manages their programs and projects via a dispersed model and has established and embedded processes and tools, including portfolio reports, action plans, a Program Management Office (PMO) tool, Program Tracker, and project documents without a formal program and project management model.

(b) The DNA Review recommends that FSQ adopt a Portfolio, Program and Project (3PM) framework. It should have a PMO with formal program management functions to co-ordinate the FSQ program and projects of work. However, implementation of a 3PM model and a PMO requires FSQ organisational structural changes.

(c) FSQ does not have a change manager but has a change management function set out in the role description for several positions. The DNA Review considers that to undertake such large-scale reforms following the two Inquires it is best practice to have a dedicated change manager.

5.11.1 Summary

649. This section on Portfolio, Program and Project Management relates to TOR 7 to "provide advice to government on the development and implementation of a framework for the future delivery of forensic DNA testing and analysis, ensuring alignment with best practices, stakeholder needs, and public confidence."

650. The Queensland Government's policy on Portfolio, Program and Project Management[378] (3PM) mandate only applies to assurance for digital and ICT-enabled investments. There is no mandate for FSQ to implement a 3PM framework. However, it has been shown that organisations (i.e., Government and Public Service) benefit greatly from program management as best practice to manage interconnected projects.[379] 3PM is the coordinated management of programs, projects and business-as-usual (BAU) aligned to organisational strategic objectives with the aim to achieve benefit for the organisation.

651. FSQ has established and embedded processes and tools, including portfolio reports, action plans, a Program Management Office (PMO) tool, Program Tracker, and project documents. However, FSQ does not have formal program management functions, instead managing their programs and projects via a dispersed model, e.g., they have program and project tools and processes that are not centrally managed. The DNA

[378] Portfolio, program and project management and assurance policy https://www.forgov.qld.gov.au/information-and-communication-technology/qgea-directions-and-guidance/qgea-policies-standards-and-guidelines/portfolio,-program-and-project-management-and-assurance-policy#:~:text=use%20the%20project%2C%20program%20and%20portfolio%20management,project%20benefits%20management%20process%20is%20continually%20reviewed

[379] Stephen Jenner "Transforming Government and Public Services, Realising Benefits through Project Portfolio Management" 24 February 2016 https://doi.org/10.4324/9781315550091

Review has been working closely with FSQ to develop a draft structure for a proposed PMO. A PMO is a centralised office within an organisation that is responsible for the coordination of and oversight of projects. The PMO ensures that the projects are meeting organisational strategic objectives, that resources are balanced across the projects, and manages interdependencies. Establishment of a PMO within FSQ will help to co-ordinate the FSQ program and projects of work (including BAU, the reforms, the historical case review, the backlogs, ICT, facilities and assets management, quality management, training, and research and innovation).

652. The anticipated benefit of the framework proposed includes enhanced transparency and improved management of projects as programs of work to efficiently coordinate resources across FSQ to improve oversight and risk management. It will also better position FSQ as a reliable DNA service provider.

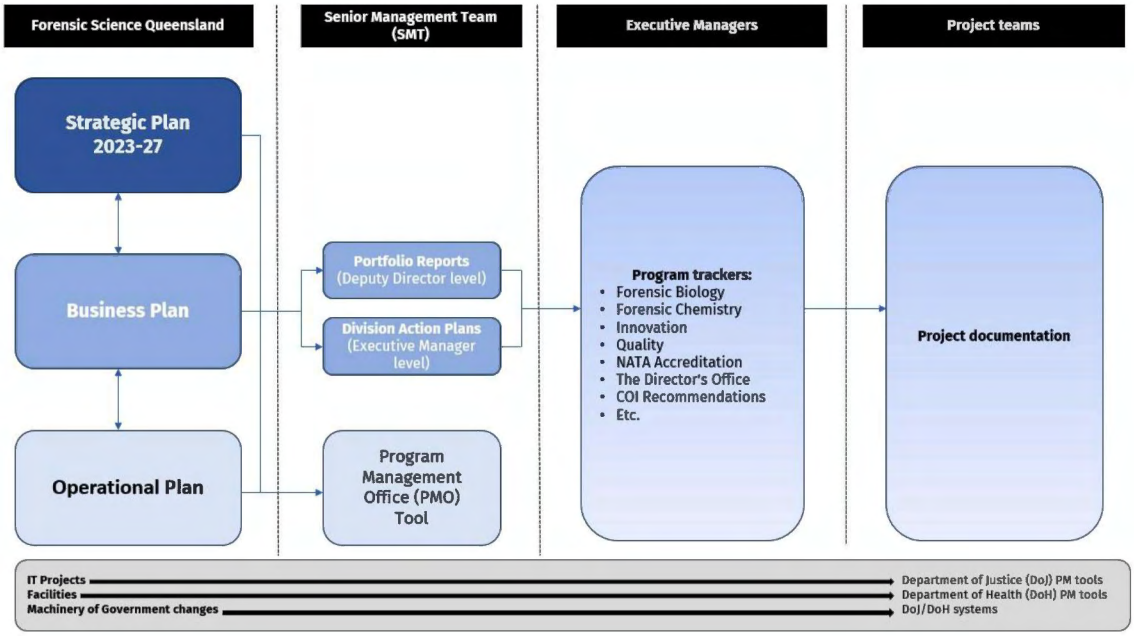
653. FSQ currently has project managers throughout the organisation undertaking the role that the DNA Review considers should be undertaken in a 3PM model. The DNA Review proposal is to review all of the project manager position descriptions to be reviewed to determine, which roles are project managers, program managers or actually policy officers[380]. This will allow for assessing which roles should be centralised into the PMO, which roles should be matrixed managed between the division and the PMO, and what roles are policy officers. For detailed information on 3PM please refer to Attachment 7.

5.11.2 FSQ Project and Program Management

654. The DNA Review Team[381] met with FSQ on 3 April 2025 and held a follow up meeting on 13 June 2023. FSQ presented the FSQ Program Management Schematic (Figure 30), and was advised by FSQ that it does not currently have a formal program management structure. The DNA Review was informed that these functions are managed by the Senior Management Team (**SMT**) who are responsible for the program governance, including action reports, risk registers, trackers, etc. The project documentation is reviewed by the SMT before being endorsed by the accountable officer. Furthermore, the forensic biology action plan (monthly update) is essentially a program management document, that is managed independently of other project management efforts in FSQ.[382] Although the DNA Review does not consider this to be best practice program and project management, it demonstrates that FSQ has some appropriate processes in place.

[380] DNA Review interviews with FSQ staff revealed that some of the roles described as project managers are preforming policy officer roles.
[381] Dr Kirsty Wright and Dr Lauren Wilson.
[382] DNA Review Information Request 13A and14. The forensic biology action plan (monthly update) is essentially a program management document. However, FSQ does not seem to have a formal program management structure.

Figure 30 FSQ Current Informal Program Management Schematic



655. FSQ has implemented Strategic, Business, and Operational Plans but do not have formal program management structure. FSQ provided the DNA Review Figure 30 'FSQ Current Informal Program Management Schematic', which describes the process for establishing projects within FSQ. Briefly, the FSQ SMT are responsible for the portfolio reports and action plans, and the Operational Plans feed into the PMO Tool. The PMO Tool is software that helps organisations to plan, track the project management function. The PMO Tool is specifically designed to be managed by a PMO – a team that manages the projects. The DNA Review assesses that it is unusual for an organisation to have a PMO Tool without establishing a PMO team to manage and oversee the projects. Finally, the Executive Managers are responsible for the Program Trackers and the Project Teams are responsible for the Project Documents.

656. Without a centralised and formal project/program management structure, FSQ does not have all of the essential project/program management functions, including a PMO. However they do have decentralised processes and tools, including portfolio reports, action plans, a PMO tool, a Program Tracker, and project documents.[383] It is the DNA Reviews opinion that FSQ are very process driven, they are focused on the tools, documentation and bureaucracy to manage projects. The DNA Reviewers opinion is that the purpose of managing programs and projects is to ensure efficiency and that strategic organisational objectives are meet.

657. FSQ does not have a change manager but has a change management function set out in the role description for several positions. Not having a change manager to lead the change management function is a significant gap and the DNA Review does not consider it best practice to undertake such large-scale reforms following the two

[383] IR 13A.12; 13A.16; 13A.19; 13A.21; 13A.23; 13A.34; 13B.3; 13A.4; 13A.8; 21.1; 21.2; 21.3; 21.4; 21.5; 21.6; 21.7; 21.8; 21.11; 31 relate to project planning and audit reports. However, FSQ is not centrally managing these projects as a program of work.

Inquires without a dedicated change manager.[384] The DNA Review suggests that a change manager position would be best positioned under the Culture and Welfare function in FSQ. While project/program managers focus on meeting organisational goals, change managers are important for guiding an organisation through significant change. They focus on fostering positive culture, supporting staff to minimise impediments to change and prioritising staff wellbeing. Subsequent to meeting with FSQ on the 3 April and 13 June 2025, FSQ provided the draft 'FSQ Change Management Manual' issue date 1 April 2025. However, at the two meetings with FSQ there was no mention of a draft 'FSQ Change Management Manual' even though the gap of FSQ not having a change manager was brought up at both meetings by the DNA Reviewers.[385, 386]

658. The DNA Review considers that a lack of a PMO team, lack of formal program managers, dispersed project and change management and no change management lead means that the current FSQ organisational structure is not fit for purpose for implementation of a 3PM model. The DNA Review considers this represents a significant impediment to achieving the goals of the organisation. FSQ has noted that the 3PM program management model will provide benefit and enhanced transparency and oversight over risk management.[387]

5.11.3 FSQ Programs and Projects

659. The current FSQ framework involves projects that are either related to core functions, scientific projects managed under the Research and Innovation Team, facility enhancements and assets management, or are projects established to address issues from the NATA audit or the Inquiry recommendations. These projects progress through different pathways depending on their purpose. Facilities projects need to go through the QH project management process and require collaboration and negotiation with QH as they are the site owner. There are also many ongoing Machinery of Government (MOG)[388] changes that require joint work with both QH and DoJ.

660. The DNA Review assessed that there are other projects and programs of work that FSQ undertakes but does not manage as formal projects/programs, which is impacting risk management process and its ability to achieve organisational objectives.[389] Under a formal 3PM model, programs of work represent the permanent BAU activities that are managed by the PMO. Whereas projects are established for a period of time to achieve a specific objective.

661. The DNA Review met with FSQ on 13 June 2025 to discuss a draft PMO model and identify programs and projects of work. The DNA Review notes that FSQ has taken onboard feedback that the DNA Review provided during the meeting on 3 April 2025 regarding the 3PM model and has put in a lot of considered thought and effort to

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[384] IR 13A.26; 14A.1; 14A.2 14A.7; 14A.8; 14A.9; 14A.10; 14A.11; 14B.4; 14D.20; 14D24; 14D29; 14A.15; relate to minor or significant change (i.e., restructuring forensic biology and address CoI). There is also documentation on the values for FSQ. However, there is no documentation on change management and the cultural aspect of significant change in an organisation, including staff access to support services.
[385] Meeting minutes 3 April 2025 meeting between DNA Review Dr Kirsty Wright and Dr Lauren Wilson and FSQ.
[386] Meeting minutes 13 April 2025 meeting between DNA Review Dr Lauren Wilson and FSQ.
[387] Information provided by FSQ.
[388] Machinery of government (MoG) changes refer to decisions made by the government to reorganize the structure and functions of public service agencies. These changes involve the reallocation of responsibilities, the movement of functions, resources, and personnel between different entities. .
[389] DNA Review interviews with FSQ current and previous staff

developing a draft proposal. The following is a discussion on FSQ's draft organisational structure and the DNA Review's assessment on the programs and projects.

5.11.4 FSQ's draft organisational structure

662. Implementation of a 3PM model and a PMO requires FSQ organisational structural changes. Attachment 8 shows the draft proposed organisation structural change provided by FSQ. The DNA Review views this as a good first step to developing a 3PM model. The next step required is the development and implementation of a PMO based on the draft organisation structure, and a 3PM standard operating procedure (SOP). FSQ proposes that the PMO be under the Capability and Development Division. Currently, the FSQ staff that would perform a PMO like function are dispersed across the FSQ structure. To establish the PMO would require a critical review of FSQ staff performing these roles and centralising them into a small PMO team There would be an upfront investment required to develop the 3PM model SOP, including any staff training requirements. Below is a discussion of the DNA Review's assessment of a proposed 3PM project and program function to help guide establishment of the PMO and development of the 3PM Office SOPs.

Portfolio Management

663. The draft FSQ organisational structure proposes that Capability and Development, Corporate Operations, and Forensic Operations are at the portfolio level. Under a 3PM model the portfolio level is at the enterprise level of an organisation, and therefore would be the FSQ SMT, including the team responsible for developing the strategic and business plans. As such, in this section the Capability and Development, Corporate Operations, and Forensic Operations are referred to as 'Divisions'.

Capability and Development 'Division'

664. The Capability and Development 'Division' consists of the Research and Innovation Team and the Quality Assurance Team, as well as, the Director's Office. The DNA Review notes that the Director's Office has no direct reporting line to the Director of FSQ and thus the Director's Office does not have any direct links or reporting to the Director FSQ. The DNA Review suggests that the Director's Office is matrix managed[390], with a reporting line also going directly to the Director of FSQ. FSQ has proposed that the PMO could sit under the Capability and Development 'Division', but it could equally sit under the Corporate Operations 'Division'. For two reasons the DNA Review suggests that the Capability and Development 'Division' is the right fit for the PMO. Firstly, the Director's Office is undertaking a lot of the PMO roles, and secondly, the Corporate Operations 'Division' is a large 'Division' and the PMO would be better managed under the smaller Capability and Development 'Division' to ensure that the PMO is managed effectively and efficiently.

665. The DNA Review suggests the following program and project structure for FSQ. Noting that a program of work is a group of interrelated projects. The following section discusses the larger program of work and then the projects under that program. Noting that in general the program of work is the enduring structure and the projects have a life cycle, where they are proposed through a business case, endorsed, managed,

[390] Matrix management is an organisational structure where employees report to multiple managers, often within different functional areas or project teams.

closed, and then reviewed for lessons learned. New projects can be stood up when required under a program.

Quality Management System – Program

666. The Quality Assurance Team would run the Quality Management System (QMS) Program with a QMS Program Manager assigned to the PMO. The key projects that the QMS Program Manager would oversee include, but are not limited to the NATA audits, proficiency testing, training projects, and links to the Research and Innovation Team's validation and verification project. Each of these projects would have a project manager, noting that there are FSQ staff already undertaking these roles, but may not have any qualifications as project managers.[391]

Training Project

667. The FSQ training project sits under the Quality Assurance Team. The Sofronoff Inquiry reported that the QHFSS training, SOP and previous management were the issue and not the staff. On 17 March 2023, FSQ provided a Briefing Note to the Director-General of Queensland Health with an attachment outlining several issues, including staff training and competency.[392] The brief noted:

> *"The level of knowledge of current forensic biologists within FSQ is a significant risk that must be addressed urgently to provide confidence that errors are not being made with current samples and processes. The CEO is unable to assert complete confidence in the work being undertaken by forensic biologists until this further training is conducted."*

668. Subsequently, FSQ advised in January 2025 that:

> *"Following the 2022 COI the new FSQ management team identified that the root cause behind many of the 2022 COI findings stemmed from a lack of robust training and competency-based assessment for FSQ staff."*[393]

669. The NATA audit in July 2024 identified 15 major non-conformances including lack of validation / verification for some methods and instruments, and deficiencies in the FSQ training program.[394] One major non-conformance was the FSQ training and competency program, NATA noted that it will likely take at least five years to fully implement the new training program. The DNA Review is hopeful that the government's two-year outsourcing announcement[395] on May 2025 will provide FSQ time to dedicate to standing up a formal staff training program to ensure that staff are competent against their required training modules.

670. During interviews with FSQ staff, the DNA Review was informed that external contracting staff performing DNA profile interpretations were not being formally trained under a training project and instead were being trained by the Historical Case Review Team. Although, the Historical Case Review Team are highly qualified and competent

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[391] Project/Program management qualification include, but are not limited to: Managing Successful Programs (MSP), Certified Associate in Project Management (CAPM), Project Management Professional (PMP), and PRINCE2.
[392] DNA Review Information Request 14B.2: 'Attachment 1 to DG Brief-Critical Risks Summary at FSQ.' DNA Review Information Request 14B.1: DG Brief- FSQ Short term accommodation options'. This information request provided in folder titled 'DNA Service Delivery Documents-Management'.
[393] Briefing Note to the Attorney-General 3 January 2025. Paragraph 35.
[394] DNA Review Information Request 19 'NATA Audit'.
[395] https://statements.qld.gov.au/statements/102595

forensic biologists, the DNA Review considers that training of staff is outside the scope of their role. Furthermore, training of contractors is taking away from their priority work of the Historical Case Review. Without a formal training project, the DNA Review recommends that this role should have been managed by the Quality Assurance Team, who are responsible for FSQ training.

5.11.5 Research and Innovation Program

671. The Research and Innovation Team manages scientific projects (see section 5.10 – New DNA Research and Innovation Framework)

672. New DNA Research and Innovation Framework). The Research and Innovation Strategy (2023-2027)[396] outlines the three phased approach to innovation. Phase 1 focuses on validation, verification and re-validation, implementing operational improvements, and assessing alternative available techniques. The major project that underpins this work involves the introduction of a new automated end-to-end workflow for DNA analysis. The Research and Innovation Team is currently responsible for writing the project plans (which are reviewed by the SMT and then endorsed), as well as developing the experimental design and conducting the experiments. The DNA Review understands that the Research and Innovation Team does not have any project managers to undertake this work. Furthermore, the Research and Innovation Team is responsible for the quality of the Phase 1 projects, which is a quality function and should be managed by the Quality Assurance Team. Because the Research and Innovation Team is focusing on the large number of validation, verification, and re-validation projects they are not conducting any innovation which in the future will hamper FSQ from being a cutting-edge scientific organisation. The DNA Review asked FSQ why the validation and verification, which is typically and quality function was not under the Quality Assurance Team. FSQ noted:

> *"In response to the question, we took on notice - why validation does not currently sit under Quality Assurance: The Validation function sits under Research and Innovation because it requires specialised skills in research design and empirical methodology—skills not currently held within the Quality Assurance Division. Designing valid empirical studies, including for example ensuring no confounding variables, and drawing defensible conclusions demands research expertise. This corrects issues seen in past studies and ensures future work is methodologically sound and evidence based."*

673. The DNA Review notes that this is a reasonable response and that FSQ has proposed to split the Research and Innovation Team into the 'Research Futures' and 'Validation' teams. The DNA Review agrees that this is an appropriate way forward for FSQ. The DNA Review suggests that the validation work is matrix managed with a dotted line going to the Quality Assurance function. This will enhance collaboration between the Validation Team and Quality Assurance Team to ensure that the research and quality objectives are met.

5.11.6 Reforms Project

674. In Section 7 of this Report (Implementation of the "Outstanding" and "In Progress" Reforms) the DNA Review suggested that FSQ reforms are managed as a project of work. The current draft FSQ structure does not have a function for managing the

[396] IR 14A.14 Forensic Science Queensland, Research and Innovation Strategy 2023-2027, Queensland Government

reforms. The DNA Review suggests that the reform project be under the Capability and Development 'Division' and work closely with the Director's Office. The resources required would be a project manager to manage and track the recommendations. This includes, ensuring they are meeting their intent, are on track, and meeting organisational and end user objectives to deliver value to victims, their families, Queenslanders, and the government. The DNA Review recommends that the project managers work closely with the stakeholders / end users as well as the independent oversight that the DNA Review has recommended in Section 7.

5.11.7 Corporate Operations 'Division'

675. The Corporate Operations 'Division' in the draft FSQ organisation structure is responsible for HR functions, Culture and Wellbeing, and Corporate and Infrastructure. The DNA Review has noted that FSQ does not have a change manager and has suggests that there be a change manager under the Culture and Wellbeing function (refer to Section 5.12 - Systems Approach to Governance for discussion on organisational culture).

5.11.8 Facilities and Assets Management Project

676. Management of laboratory facilities and assets is a complex undertaking, especially as storage of evidence requires chain of custody to be maintained and samples stored under the appropriate conditions. FSQ currently does not manage facilities and assets management as a formal project of work, the current approach is *ad hoc* with projects being established if and when needed. The projects are currently not managed under a formal project or program management framework. FSQ is housed on the QH Coopers Plains site and as such, any facility management projects needs to go through QH as the site owner.[397] There is a need for facilities and assets to be managed as a project of work to enable the project to be coordinated with the other projects under a centralised program. This will allow funding and resources to be balanced and ensure compliances are met, including Work Health and Safety (**WHS**).

5.11.9 ICT Project

677. The MOG changes have resulted in FSQ moving from QH and losing the centralised QH ICT support. FSQ have had to develop its own in-house ICT program. The Queensland Government's policy mandates that digital and ICT-enabled investments are managed as a program of work.[398]

5.11.10 Forensic Operations 'Division'

678. The Forensic Operations 'Division' is a proposed new 'Division' bringing together Forensic Biology, Historical Case Review, and Forensic Chemistry. Discussion on Forensic Chemistry is outside the scope of the DNA Review. In this proposed program and project management structure, the program of work would be the 'forensic biology program' with the projects of work under the forensic biology program. A forensic biology program manager would be appointed to the PMO to holistically manage the program and oversee the projects. The program manager would be matrix managed by the Manager Forensic Biology and Capability and Development 'Division'. The projects

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[397] DNA Review interviews with FSQ staff

[398] Queensland Government "Portfolio, program and project assurance framework" Queensland Government Enterprise Architecture (QGEA) framework, June 2024

would include, but are not limited to FSQ HCR, and Backlogs. Additional projects can be proposed through development and endorsement of a business case.

5.11.11 FSQ HCR Project

679. The HCR (refer to Chapter 6 - FSQ Historical Case Reviews for an in-depth discussion) was established as a result of the Sofronoff Inquiry due to identified concerns with DNA samples that required review and possible re-testing. As of January 2025, FSQ has determined that 41,077 cases fall within the scope of the historical case review process.[399] A historical case is any major crime case processed at QHFSS between 1 September 2007 and 30 April 2023 which may have unreliable results due to the Inquiry findings.[400] In the current FSQ organisational structure, the HCR Team is siloed from forensic biology and is therefore competing for the same laboratory resources as BAU, which is often prioritised over the historical case review.[401] The draft proposed FSQ organisational structure brings together the HCR Team and Forensic Biology under Forensic Operations. The proposed benefit of having HCR Team and Forensic Biology under Forensic Operations is that they use the same laboratory resources and HCR often is competing with BAU to gain access to laboratory resources.[402] Centralised management of the two projects will enable coordinated management.

680. The announcement of DNA outsourcing by the Queensland government on 22 May 2025 should free up resources to be re-allocated to the HCR Team and the DNA Review recommends that a project manager be assigned/recruited to run the project.

5.11.12 Backlogs Project

681. In the draft FSQ organisational structure, the ‘started cases' backlog is under forensic biology but has not been identified as a project. The DNA Review has observed that the started backlog would benefit from being managed as a project of work, but could remain under forensic biology in the organisational structure and be matrix managed as a project that is also reporting to a program manager in the PMO.

682. An example where FSQ would have benefited from project management oversight was in August 2023, when there was a change from the Sexual Assaults Investigation Kits (SAIK) to Forensic Medical Examination Kits (FMEK - the new rape kits). This was a multi-agency endeavour involving QH and FSQ to implement the new rape kits. This change process would have benefited from being managed as a project and having a change manager.

683. Issues that were identified by the DNA Review when it evaluated the evidence it received regarding the process which included:

(a) FSQ staff were not sufficiently consulted on the development of the new rape kits and were not aware of what was contained within them.[403]

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[399] FSQ website, accessed 27 January 2025. https://www.fsq.qld.gov.au/historical-case-review
[400] IR 11.11 Forensic Science Queensland, Historical Case Review Policy, Queensland Government.
[401] DNA Review interviews with FSQ staff members.
[402] DNA Review interviews with FSQ staff
[403] DNA Review interviews with FSQ staff

(b) The SOP had to be written prior to receiving the new rape kits and prior to knowing what was in the kit. Therefore, the SOP was not fit-for-purpose and needed to be updated once the new rape kits were received.

(c) Many scientific methods for the FMEKs were not verified which caused a pause in processing the new rape kits for many months. This delay contributed to the large backlog of unprocessed samples (refer to Section 4.3.2 - FSQ Testing Backlog).

684. To mitigate the issue set out in (c) above, FSQ adopted scientific methods from South Australia and Victoria, which had internally verified the Acid Phosphatase (AP) test for the presumptive screening for semen. FSQ modified the formation of the reagents in the test and commenced using it on case work without internal verification of the methodology.[404]

685. The tapelift methodology was adopted from Forensic Science South Australia (FSSA). An FSQ risk assessment recommended the implementation of the commercial DNA tapelift in the forensic biology laboratory prior to internal verification. The risk of increasing backlogs was assessed to be higher than the risk of introducing unverified methodology.[405]

686. FSQ operates under a quality management system and is accredited to the international standard ISO/IEC 17025 by the National Association of Testing Authorities (NATA). ISO/IEC 17025 requires that any standard methods the laboratory uses must be validated before introducing the tests. If the standard method changes or is adapted from another laboratory, the method needs to be internally verified to demonstrate that it remains fit for purpose.[406] The Sofronoff Inquiry made several recommendations relating to the scientific rigor of validations.

> *"Validations are essential to a laboratory which is to produce reliable results. They must be performed before any new system or process is introduced into the laboratory and confirm that it is fit for the specific purpose for which it is intended."*[407]

687. FSQ has continued to use methods that are un-verified on case work post the Sofronoff Inquiry (refer to Section 4.6.3 - FSQ Unreliable Methods). This does not comply with the ISO/IEC 17025 standard, recommendations from the Sofronoff Inquiry or forensic science best practice.

688. One key difference between the SAIK and the FMEK is that nurses who collected the samples from the victims also prepare the slide for microscopy analysis for sperm by FSQ. The DNA Review was informed during interviews with FSQ staff, that:

(a) the nurses collecting the DNA evidence did not receive adequate training in slide preparation;

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[404] IR 14A.05 Memorandum Reliability Testing of Acid Phosphatase Reagent – Modified Formation
[405] IR 14A.05 RA – 001 Risk Establishment Form, Date Risk Raised 9/10/2023
[406] International Organization of Standards ISO17025 international standard for testing and collaboration laboratories
[407] Walter Sofronoff KC "Final Report Commission of Inquiry into Forensic DNA testing in Queensland" 13 December 2022

(b) they were given a brief presentation and no follow-up competency testing or proficiency testing;

(c) there were not enough trained FSQ staff capable of processing the new rape kits, which reduced the number that could be processed and significantly contributed to the backlog;[408] and

(d) the kits changed through improvement, but the FSQ staff were again not sufficiently consulted for their input. They were not aware of the roll out or changes as they were made.

689. If a project management approach had been taken to implement the new rape kits at FSQ it would have mitigated the issues that occurred including the backlogs. The DNA Review considers that workflow should have been trialled on mock kits to identify whether more staff were needed to process the volume being submitted. A phased approach should have been taken to validate the FMEKs, while the SAIKs were still used in casework. This would have prevented the backlog, as would have outsourcing.

Recommendation 21	There should be a reprofiling of the FSQ organisational structure. The FSQ organisational reprofiling should be overseen by DoJ and be in collaboration with the DoJ Expert Team.
Intent and desired end state	**Intent:** The improved FSQ governance will provide more relevant strategic planning, improved organisational culture, enhanced DNA service delivery and align with a systems approach. Introduction of ISO 31000 will improve FSQ risk and issue based decision making to ensure that strategic operational objectives are achieved. Reprofiling of the FSQ organisational structure will make it more efficient, service-focused and service-enabled. **Desired End State:** The new FSQ governance is fully implemented. FSQ has implemented a risk and issue management system based on ISO 31000. The new FSQ organisational structure is finalised, including the completion of position descriptions.
Recommendation 22	Portfolio, Program, and Project Management (3PM) should be implemented in FSQ. **22.1** The FSQ organisational structure needs to be adjusted to implement Portfolio, Program, and Project management. **22.2** A Program Management Office, with a qualified and experienced Program Manager should be established. **22.3** A qualified and experienced Change Manager should be appointed. The Change Manager should report to the Culture and Wellbeing Executive Manager.
Intent and desired end state	**Intent:** Establishment of a 3PM model at FSQ will ensure strategic objectives are efficiently achieved and project resources are maximised. The FSQ Change Manger will better facilitate the significant change underway at FSQ,

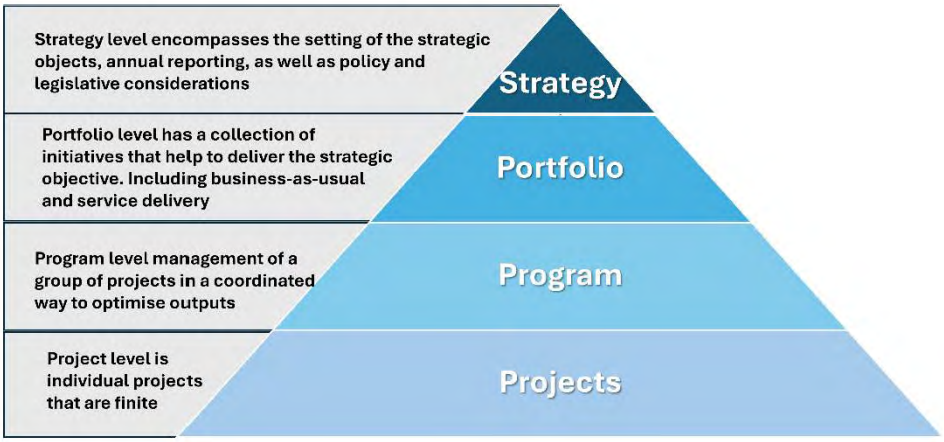
[408] IR28.4 FSQ Establishment Monthly Report, Leadership Group Meeting Report 1 September 2023

	provide improved support of staff wellbeing, and better identify and remove impediments to change. **Desired End State:** The FSQ Program Management Office has been implemented, and a Change Manager appointed. Programs are established including, but not be limited to BAU, ICT, quality assurance management, and research and innovation. Projects are established including, but not be limited to FSQ historical case review, the FSQ reforms, the DNA backlogs, the FSQ staff training, facilities and assets management.

Attachment 7 - Portfolio, Program and Project Management (3PM)

When an organisation uses 3PM collectively it enables the delivery of organisational strategy, while maximising portfolio potential and managing risks and issues (Figure 31).

Figure 31 Portfolio, Program and Project Management (3PM) enables the delivery of the organisational strategy



Portfolio management

The portfolio approach enables BAU as well as change management to achieve the strategic objectives, while optimising the use of resources, and managing portfolio risks and the inevitable changes that will arise over time. The enterprise strategy and annual review set the strategic objectives that are met at the portfolio level. There is also a need to consider policy and legislation. The portfolio is the enterprise level of an organisation, such as the departmental level. Quality management and risk management is done at all levels (portfolio, program, and project).

Program management

Program management is the management of a group of related projects in a coordinated way to optimise the outcomes within allocated resources. Many organisations establish a formal PMO that serves as the centralised home for managing strategic projects. This model aligns with systems thinking allowing for holistic and centralised management of projects. It allows for the same level of quality for each project under the program, instead of a siloed approach where projects are managed individually and in diverse areas of the organisation, resulting in

inconsistencies in quality and effectiveness. The program office is responsible for developing and implementing templates, best practices, and SOPs.

Program management and implementation of a PMO should enable the organisation to achieve the strategic objectives and should not place unnecessary bureaucracy and processes on the management of the projects. It should be adaptable and flexible to meet the portfolio and project needs. It should also enable urgent operational requirements to meet urgent unplanned needs and requirements.

Program managers

The PMO has program managers that take a holistic approach to projects by leveraging systems thinking by considering the interdependence of the projects to form the program. They review the status and timeline of each project and mentor the project managers. While projects are time bound, programs are enduring, and the program manager needs to have a high-level view to maintain the alignment with strategic objectives. The program manager needs to manage the scope, schedule, finances, risks, resources, and change for the projects at the program level. These need to align with the strategic objectives at the portfolio level.

Project management

Project management refers to the management of a unique, finite, sometimes multidisciplinary and organised endeavour to deliver capability and changes to an organisation. Grouping closely related projects together results in benefits that would not be realised if the projects are managed individually. Applying systems thinking, this means that the whole is greater than the sum of its parts. It also allows the organisation to manage the resources and funding across the projects.

Project managers

Project managers may sit under the PMO and report directly to the program manager or a matrix organisational framework where the project managers sit under the relevant area of the organisation and there is a dotted line to the PMO and program manager. The organisational structure will depend on the goals and objectives, size and operating environment of the organisation.

Regardless of the organisational structure, project managers will provide regular reporting and status updates to program management. This allows the program managers to holistically manage the projects and evaluate the progress of the projects and provide program reports to the portfolio level to evaluate continuous improvement and alignment to the strategic objectives.

The roles of program and project managers are sometimes confused due to the apparent similarities. Other program/project roles that are often confused are the project owner, sponsor, and stakeholders.

Project Owner

The project owner is the accountable manager for the success of the project on time and on budget. This is different to the project manager who is responsible for the delivery of the project.

Project Sponsor

The delivery of the project benefits the sponsor, who may or may not have resources invested in the project.

Project Stakeholders

A project sponsor is also a stakeholder in the project, but there may be other stakeholders who do not directly benefit from the project as much as the sponsor does. Stakeholders do not have resources invested in the project.

Systems thinking approach to program management

Implementation of 3PM into an organisation considers a systems thinking approach because it involves an holistic endeavour that joins up similar projects under a program rather than focusing on individual projects independent of each other. The programs and projects are made up of interconnect parts that add up to more than a sum of the parts. Changes in one area due to project delivery can affect the entire system. Systems thinking helps to understand the interdependencies resulting in better collaboration and communication with sponsors and stakeholders. Systems thinking allows teams to adapt more quickly to changes by understanding the systemic implications of those changes. This increases the flexibility and adaptability of the organisation. It also helps improve decision making by linking to the strategy and allowing consideration of the bigger picture and the implications that the decision will have on the system as a whole.

Governance

Governance is an essential aspect of 3PM it provides the structure and oversight necessary to ensure that all the projects within the program align with the organisation's strategic objectives. It helps to ensure any changes or risks are addressed holistically and considers the impact on the projects within the program. Effective governance involves collaboration and communication between project owners, sponsors, and stakeholders. A strong governance structure ensures transparency, manages escalations efficiently, and ensures that program goals are being met on time and within budget. The governance should outline clear roles and responsibilities among stakeholders, decision-makers, and program / project managers.

Integrated Program/Project Team

Establishment of an Integrated Program/Project Team (IPT) is one mechanism to ensure appropriate governance. IPTs focus on collaboration of a multidisciplinary team, which includes the project manager, project owner, sponsor, stakeholders and relevant decision makers. The role of the IPT is to provide holistic project oversight and monitor critical milestones.

IPTs establish regular meetings where project progression is monitored such as budget, resources, milestones, risk and issues, and production of any relevant reporting.

Project life cycle

The project life cycle describes the key phases, which include the milestones, approval steps, and processes. An example of the key phases of a project life cycle are:

(a) **Need and requirements**: The first phase of a project life cycle is the identification of the need of the project. This could be through risks/issues in the organisation that have been identified and can be mitigated by establishing a project, a stakeholder raising the need, or the organisation's identification of a need. The requirements for the project can then be identified which are the specific criteria that will address the need.

(b) **Project definition and initiation**: Once the need and requirements have been captured the project is defined. This includes the objectives, scope, justification, and use case (how the end product of the project will be used). The project manager should work with the IPT to understand the strategic objects and capture how the project will

meet the objectives. The project manager will lead the IPT to develop the business case, deliverables, identify risks, resource allocation, and governance structure. This phase should also identify the Rough Order of Magnitude (ROM) cost for the project. The outcome is approval (or not) of the project to commence, which is the first milestone for the project.

Project planning includes detailed planning of the project including articulating the budget from the ROM costs, the timeline, and resources needed. The value proposition and benefits are articulated as well as measures of success. At this stage the risk management plan, including a risk register, is developed and risk owners identified. Any high risks should be escalated to the risk owner and reported to the program or portfolio level if required. The planning phase makes sure that the project aligns with the strategy by clearly articulating the milestones and desired outcomes of the project.

For larger, more complex projects, work packages are developed that break down the project into manageable work efforts. This might also include identifying Lines of Efforts (LOE) for each of the work packages. The project work packages and LOE can be captured in a Gantt chart to monitor the progress of the project.

The milestone of the project planning phase should be a status report to the decision makers on the plan and approval for the project to start work or the need for further planning. This is a go / no go stage of the project life cycle.

Project execution is the start of the project work. This phase will involve actively managing the project through the IPT, mitigating risks and issues, communicating with stakeholders and project reporting. This allows for any adjustments that need to be made to the project as changes will inevitably be needed as the project progresses.

The project closure phase occurs once the project has met its goals and delivered the product. A formal review of the project should be conducted to ensure that the project has delivered against the identified objectives and the business case. Any lessons learned are captured and documented to inform future projects. The benefits realisation plan is reviewed to confirm that the anticipated outcomes have been achieved. The final report is written and disseminated to relevant end users (internal and external).

Value of a 3PM Approach

Best practice for 3PM ensures that portfolio, programs, and projects are executed efficiently and aligned with organisational goals while managing risks, resources, and stakeholder expectations effectively. Program management allows identification of cross project and program interdependencies and management of them. This helps to avoid bottlenecks and ensure that resources (budget and human resources) are used efficiently. For example, the Historical Case Review Program is interdependent on the BAU and backlog work as they use the same staff and resources. Applying a program overlay will help to balance the resources and budget for the historical case review, BAU and the backlogs. Furthermore, these can then be managed and tracked at the portfolio level.

There are many advantages to establishing a 3PM approach with the key advantages being providing a holistic oversight of the programs and projects and ensuring that the projects meet organisational strategic objectives. Program management is essential when an organisation is undergoing change management with external dependencies and stakeholder needs. Any transformational activity is nearly impossible to execute and implement without program and project management and portfolio oversight. It also requires an experienced and dedicated Change Manager.

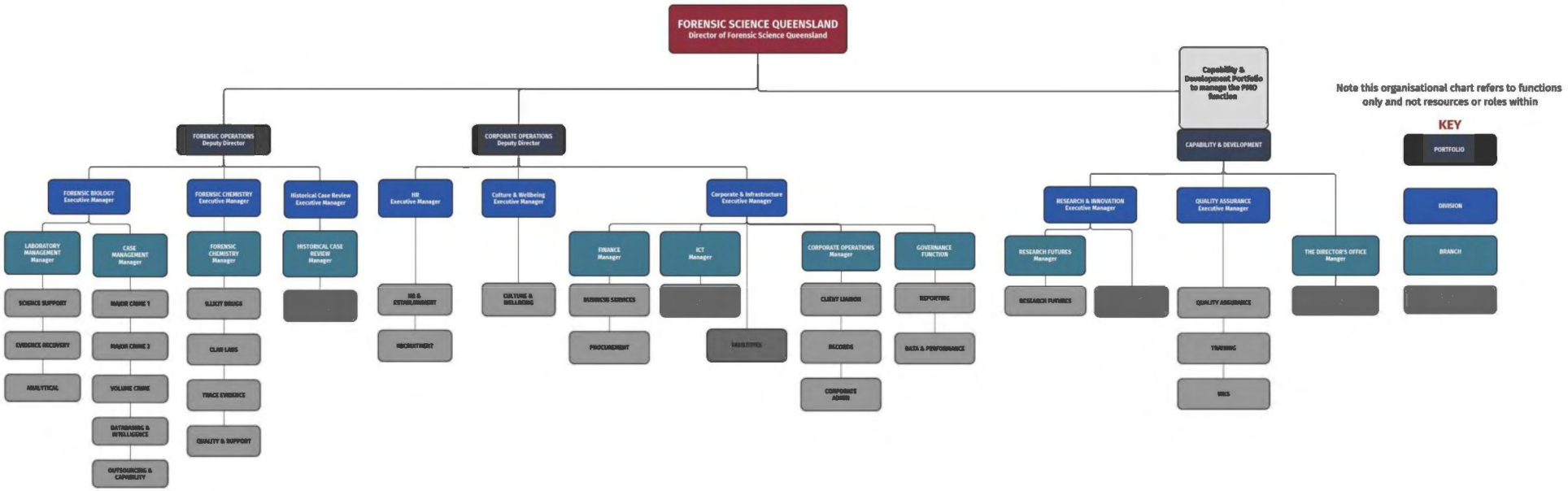
Some project management tools, such as Lean Six Sigma (which has been applied to forensic science organisations) can be resource intensive to implement and the value from the initiative may not be seen for years. Investment in effective 3PM management can easily be achieved through small organisational changes and processes. There are various program / project management methodologies that can be utilised, such as PRINCE2, waterfall, scrum, Managing Successful Projects (MSP), etc. The methodology that is selected or combination of methodologies will depend on the organisational needs. The benefits of implementing 3PM include:

(a) increase the likelihood of achieving the desired results within desired timeframes;

(b) ensure effective and efficient use of resources (funding and human resources);

(c) satisfy the needs of different stakeholders.

Attachment 8 Draft Program Management Model Provided by FSQ



5.12 Systems Approach to Governance

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(a) There is no one agreed methodology to approach corporate governance. The DNA Review recommends a system of systems approach across DNA service delivery in Queensland, which is an integration of systems that achieve a common objective that cannot be accomplished by any single system alone.

(b) FSQ's current organisational structure is deemed inefficient and not service-focused, and requires reprofiling to make it more service-enabled.

(c) The DNA Review recommends transitioning FSQ to a divisional structure with decentralised decision-making and enhanced program management.

(d) The DNA Review has observed that the FSQ hierarchical approach to governance is there, but witness evidence received was there was a perceived lack of transparency and trustworthiness around the decision-making processes.

(e) The DNA Review considers improvements are needed to FSQ's strategic planning and has observed that FSQ is undertaking inappropriate risk management, putting at risk the reliability of results it produces for the courts. It is recommended that FSQ implements a risk and issues management system aligned to ISO/IEC 31000.

(f) The 2024 Working for Queensland staff survey shows FSQ is not doing well in organisational culture, leadership, and staff performance management.

Governance and Oversight:

(g) The FSQ Advisory Council was established under the FSQ Act 2024 to provide advice and monitor forensic science policies.

(h) The Forensic Science Steering Committee (FSSC) was created to oversee forensic service delivery but has faced criticism for its decision-making powers and lack of alignment with stakeholder expectations.

(i) The DNA Review considers improvements are needed to strengthen FSQ governance, and system-wide DNA service delivery governance.

5.12.1 Summary

690. Governance is a crucial part of an organisation's ability to provide services, and function as a healthy part of broader system of systems. The DNA Review has reviewed FSQ governance and system-wide DNA service delivery governance to address TOR 6 and 7, seeking to identify opportunities for improvement that could further strengthen the organisation.

691. The DNA Review believes that improvements are needed to strengthen FSQ governance including a review of the Forensic Science Steering Committee's purpose

and TOR. Improvements are also needed to FSQ's strategic planning and FSQ is undertaking inappropriate risk management, putting at risk the reliability of results it produces for the police and courts.

692. The FSQ organisational structure was assessed as being not fit for purpose. Specifically, it is not efficient, is not service-focused, or service enabled. This is considered a critical impediment to FSQ meeting end user needs.

5.12.2 Background and Issues

693. Governance is the process by which organisations establish their rules and policies including the implementation, reporting and monitoring of them. It enables an organisation to achieve strategic objectives ethically and in compliance with legislation, standards, regulations, and policies.

694. There is also no one agreed methodology to approach corporate governance. The DNA Review recommends a system of systems approach, which is an integration of systems that achieve a common objective that cannot be accomplished by any single system alone.

695. FSQ's Governance Manual includes a hierarchy of four tiers of oversight, as well as the external and internal forums. The DNA Review is of the view that governance frameworks are generally broader and that FSQ would benefit from expanding its governance framework to include:

(a) **Strategy** - to set the vision, purpose, mission, values, goals and overall objective. The current FSQ strategy is only two-pages. The DNA Review's view is that an organisation going through significant change should develop a robust organisational strategy.

(b) **Decision-making and accountability** –The DNA Review recommends that FSQ adopt the RAECI (Responsible, Authority/Accountable, Endorses, Consulted, and Informed) model in-line with the DoJ draft governance framework.

(c) **Risk and issues** – The DNA Review considers that the risk processes at FSQ have at times been used to support decision-making rather than to mitigate risks. The DNA Review recommends that FSQ implements a risk and issues management process based on ISO/IEC 31000 the international standard on Risk Management.

(d) **Organisational structure** – The current FSQ structure is hierarchical, but to achieve efficient and effective DNA service deliver to end users, the DNA Review recommends that the organisational structure is reprofiled, to restructure the organisation to be more efficient and effective.

696. There is no one agreed definition of governance, the Queensland Government Statutory Body Handbook, defines Governance as:

> "*Governance encompasses management's behaviour and accountability for the way it directs an agency's operations, and also relates to the agency's*

structures, responsibilities, competencies, reporting and risk management processes."[409]

697. Good governance should establish an environment for individuals within the organisation, stakeholders, and end-users to have a voice (i.e., it is an aspect of participation in governance). It should also ensure a clear understanding of the organisational strategy, decision-making process, authorities and responsibilities, as part of establishing an ethical, professional and trustworthy organisation.

698. Organisations without good corporate governance have poor oversight, accountability transparency, and ethical issues. Poor decision making by leadership can occur leaving the organisation vulnerable to reputational risk. Taken together this leads to a dysfunctional work culture, a lack of innovation and fosters low morale among the employees. It can also hinder the allocation of resources, and ultimately prevent the organisation from achieving its objectives. Good governance increases the legitimacy and transparency of decision making, which increases stakeholders and end user confidence in the organisation.[410]

699. A good corporate governance framework is required under the *Financial and Performance Management Standard 2019.*[411]

700. The organisational structure, policies, legislation, standards, and the management environment needs to be understood to develop effective governance. To be successful the governance framework must meet the organisation's strategic objectives. It is widely accepted that good governance is needed in organisations, companies, and for management of Boards.[412] However, there is very little publication and discussion on forensic science laboratory governance for provision of forensic science services. The US National Academy of Science report stated:

> "*The forensic science enterprise [in the United States] lacks the necessary governance structure to pull itself up from its current weaknesses. The forensic science enterprise needs strong governance to adopt and promote an aggressive, long-term agenda to help strengthen the forensic science disciplines*."

701. The DNA Review has observed that FSQ, similarly, requires a governance review and will benefit from the development of a contemporary governance framework (also referred to as governance structure).

702. This provides direction how people interact with the organisation, regulators, stakeholders, and end users to guide and monitor operations closely. It enables the organisation to set out the rules and practices around decision making, values, trust, transparency, and accountability.[413] The framework provides the structure that drives the strategic plan and the business plan to move the organisation forward.

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[409] Queensland Treasury "Statutory Body Handbook A practical guide to establishment and management of Statutory Bodies" February 2021

[410] Directors' Institute 'Corporate Governance Failures: Case Studies and Lessons Learned' 28 August 2024 Corporate Governance Failures: Case Studies and Lessons Learned

[411] Department of Justice "Corporate Governance Framework – Aspire" Queensland Government 2025

[412] Dan Byrne 'What is good corporate governance?' Corporate Governance Institute accessed, 26 June 2025 What is good corporate governance? | Corporate Governance | CGI

[413] Directors' Institute 'Corporate Governance Failures: Case Studies and Lessons Learned' 28 August 2024 Corporate Governance Failures: Case Studies and Lessons Learned

703. FSQ states that its Governance Manual has been developed:

> "*with the objective of outlining the hierarchy of oversight of FSQ operations and engagement with stakeholders internally, externally and in state, national and international forums*."[414]

704. The FSQ Governance Manual is based on a hierarchy of four tiers of oversight to consider strategic and operational matters:

(a) Tier 1 - Strategic oversight;

(b) Tier 2 – Management oversight;

(c) Tier 3 – Operational oversight; and

(d) Tier 4 - Staff engagement.

705. The FSQ Governance Manual outlines the external governance as the FSQ Advisory Council, FSSC, Forensic Research and Innovation Steering Committee (**FRISC**), and the Forensic Science Panel of Experts. With the internal governance being the Director's Leadership Team (**DLT**), SMT, Quality Assurance Forum (**QAF**), Leadership workshops, and FSQ Awards Panel. These are all important parts of governance, but the DNA Review observes that there is much more involved in good organisational governance, including transparent decision-making, values/ethics, transparency, trust in the organisation, and risk management, which are not included in the FSQ Governance Manual .[415,416]

706. This section of the DNA Review discusses organisational governance (also referred to as corporate governance in the private sector) as a way to provide strategic direction to FSQ to enhance its governance framework, meet organisational objectives and deliver better DNA services to end users.

707. A good starting point for FSQ is the draft DoJ governance framework, discussed further below, which can provide FSQ with high level guidance. The DNA Review has observed that the FSQ hierarchical approach to governance is there, but witness evidence received was there was a perceived lack of transparency and trustworthiness around the decision-making processes.[417] This was also a common theme of the Sofronoff Inquiry.[418]

708. The A/Commissioner QPS has expressed a view to the DNA Review with respect to FSQ governance, stating that:

> *"I have been informed the governance framework of FSQ requires review to ensure that QPS regains primacy over the testing of its samples for the progress of its investigations. This should include a review of policy and*

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[414] Forensic Science Queensland "FSQ Governance Manual" 20 November 2024

[415] The Governance Institute of Australia "Capability Framework" accessed 19 June 2025 https://www.governanceinstitute.com.au/education/capability-framework/

[416] Deloitte "Developing an effective governance operating model A guide for financial services boards and management teams" accessed 19 June 2025 dttl-fsi-US-FSI-DevelopinganeffectivegovernanceFINAL-031913.pdf

[417] DNA Review interviews with FSQ staff, current and previous staff members

[418] Walter Sofronoff KC "Final Report, Commission of Inquiry into Forensic DNA testing in Queensland" 13 December 2022

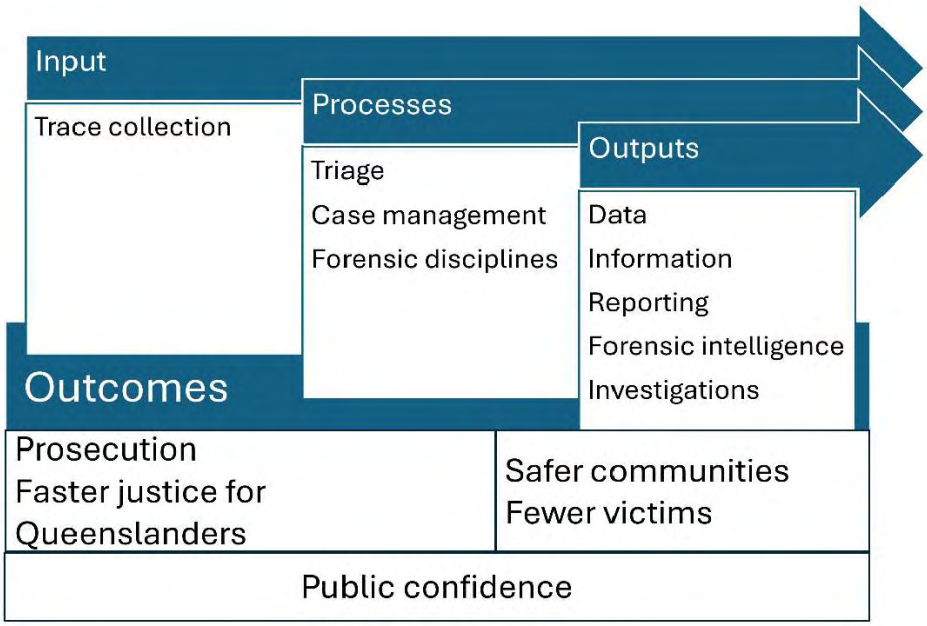
legislative requirements that minimises the influence of the QPS over the testing process that have been outsourced to FSQ."[419]

709. The purpose of this section is to consider these matters, taking into account the broader criminal justice system, including victims, their family, Queenslanders, and the government.

5.12.3 Governance as part of the System-of-System

710. Systems are made up of units that take stimuli from the environment and process them to provide outputs that add value to larger systems. 'System' can be defined as a group or set of related or associated things perceived or thought of as a unity or complex whole. Systems are a collection of functions (parts) that are integrated to accomplish an overall outcome that is larger than the sum of the parts. The system takes inputs from the environment, processes them into outputs and produces outcomes (Figure 32). The system-wide outcomes that the FSQ function supports are prosecutions in the criminal justice system, justice for Queenslanders, outcomes for victims (and ideally fewer victims if offenders are caught before they reoffend), and renewed public confidence in forensic science.

Figure 32 Systems have inputs, processes, outputs and outcomes that add value to the larger system of systems



711. System of systems are characterised by a set of systems, sub-systems, and elements (units) that interact to provide a unique capability that none of the constituent systems /elements can accomplish on their own. A good analogy is the human body as a system of systems. The body is made of the nervous system, respiratory system, reproductive system, skeletal system, digestive system etc. These systems work together in the larger system of systems (the human body) and form a function (humans) that each of its constituent parts are not capable of doing on their own.

[419] Acting Commissioner Shane Chelepy APM "Letter to Dr Kirsty Wright, DNA Review" 14 March 2025

Figure 33 Forensic Science system of systems is comprised of the forensic science system that provides outputs for the coronial, law enforcement, and criminal justice system. The purpose of a system-of-system design is to breakdown organisational siloes

712. Applying the system of systems to Queensland forensic science, the forensic science system supports the larger criminal justice system, law enforcement system, and the coronial system (Figure 33). The DNA Review recommends that a system of systems approach to DNA service delivery in Queensland is implemented to ensure a holistic (integrated) system that works together seamlessly. The anticipated end state is breaking down organisational siloes to enhance efficiency, effectiveness, value for money and forensic science outcomes for Queensland.

713. Effective system of systems management requires robust governance. Poor governance can result in individual systems being implemented without considering the system of systems. Therefore, governance of a system which occurs within a system of systems can affect the functioning of the entire system. There is a need to understand each systems' objectives in order to ensure the governance framework is fit for purpose.

5.12.4 Department of Justice Governance Framework

714. The DoJ is drafting the corporate governance framework – ASPIRE. The DNA Review considers that the draft DoJ governance framework is a good starting point for FSQ to review and update its current governance manual. The draft DoJ governance framework sets the principles and policies of how the organisation is operated, interacts with stakeholders and achieves its objectives. It clarifies decision-making, accountability, transparency, and compliance with laws and regulations.

715. Noting that the FSQ current Governance Manual only covers the hierarchy and external / internal forums the following discussion focuses on the documents and process that FSQ has implemented that should be consolidated under their governance framework.

5.12.5 Strategic Planning

716. An organisational strategy sets the vision / purpose, mission, values and goals to achieve the overall strategic objective. It provides the framework for making decisions at all levels of the organisation. For example, when monitoring progress of projects, the project is assessed against achieving the organisational strategic objective. Therefore, it is important that the objective is clearly articulated and can be measured against.

717. The Australian Institute of Company Directors states that:

> *"An organisation's strategy lies at the core of its success and competitive advantage. Strategy defines how an organisation will leverage its strengths and resources to fulfill its purpose in an evolving landscape."*[420]

718. FSQ's strategic plan was developed through a series of workshops and staff surveys held between 2023-2024. It is a two-page strategy that links the strategic focus to the vision and the goals. The DNA Review considers that a two-page strategy is not an acceptable approach for an organisation that is going through significant reform, A more detailed and robust organisational strategy is required that clearly outline FSQ objectives, and service delivery to end users across the system-of-system. Since FSQ is undergoing reform, the DNA Review recommends that the strategy should focus on/cover the time period that the reform is anticipated to take. A two-page overview summary, can then be developed from that, if it is helpful as an executive summary.

5.12.6 People and Culture

719. Organisational theory is the study of how organisations function, including their structure, behaviour, and how they interact with their environment. It provides frameworks for understanding and improving organisational effectiveness, efficiency, and sustainability. The DNA Review applied organisational theory to assess FSQ as an organisation and to classify the type of organisation.

720. Classical organisational theory focuses on an understanding of organisational objectives to improve processes. Neo-classical organisational theory emerged to encompass behavioural science in business management, to focus on the human element with little emphasis on process and organisational structure. Modern organisational theory was developed to consider organisational and behavioural theory. Modern organisational theory is based on the principle that the only meaningful way to study an organisation is to study it as a system.

721. The DNA Review has assessed FSQ as a classical organisation, as it focuses on the processes, and although the FSQ strategy considers people and culture, the strategic focus is not on the 'soft skills' to build a positive work culture around psychological safety, and opportunities for growth and recognition. Modern organisational theory involves an organisation focussing on processes (service delivery) and people (culture). The DNA Review recommends that FSQ apply modern organisational theory and systems approach to organisational management that is reflected in the strategic plan.

722. FSQ conducted a value statement staff survey and out of ~250 people who work at FSQ,[421] 37 staff members responded (13 chemistry, 20 biology, and 4 from the Directors Office).This represents only ~15% of the survey group. The top five staff values identified were Quality, Innovation, Integrity, Respect, and Professionalism.[422]

5.12.7 Working for Queensland Survey

723. The 2024 Working for Queensland Survey (conducted in August/September 2024 relating to the previous 12 months) is an annual survey for public sector organisations that aims to support public service values and the Government's commitment to

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[420] Australian Institute of Company Directors "Organisational Strategy, Strategy and Governance" at Organisational strategy accessed 19 June 2025
[421] Information provided to the DNA Review by FSQ
[422] F"FSQ Value Statement, staff survey"

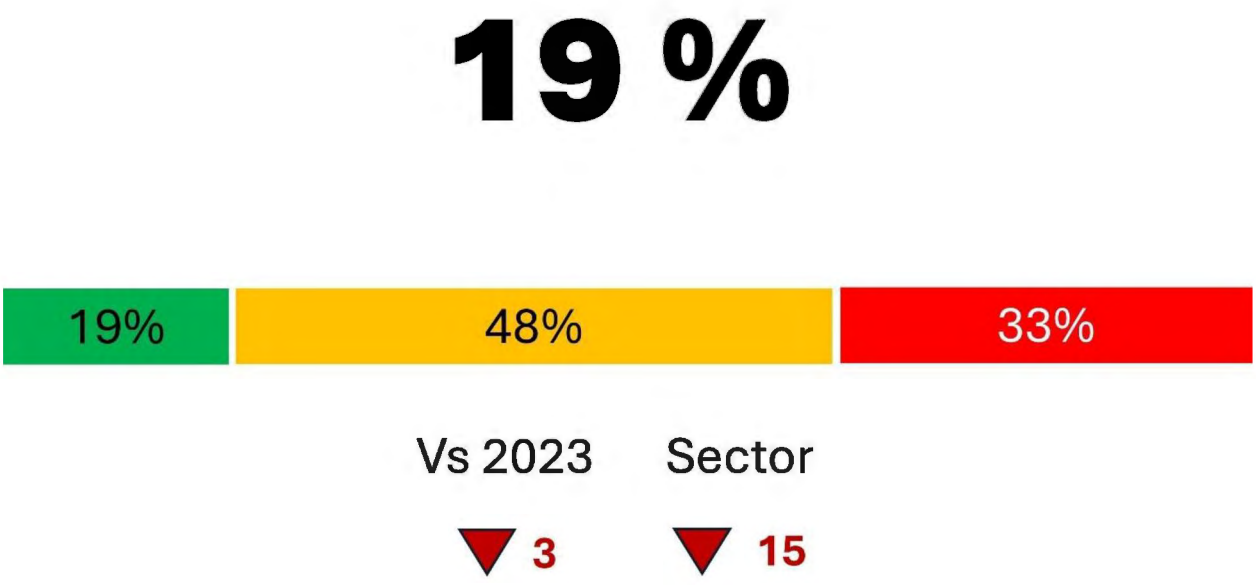
providing better outcomes for Queenslanders through accountability, transparency and performance. The results from the 2024 FSQ Working for Queensland survey had a response rate of 77% (138 of 195). The employee engagement score was only 46%. The results identified that around only 50% or less of the FSQ respondents were proud, inspired, and motivated to work at FSQ, had personal attachment to FSQ or would recommend FSQ as a place to work. This lack of engagement was reflected in interviews that the DNA Review had with former FSQ staff who had left the organisation and some current staff who disclosed that they were thinking of leaving the organisation.[423]

724. The areas that FSQ is thriving relate to the overall organisation (over 70% positive responses) include: social support, task significance, staff flexibility needs, staff understanding of WHS responsibilities, respect and psychological safety, diversity (except for disability) and non-senior manager / team leader respectful relationships, honesty and integrity.

725. The following is a discussion on where the DNA Review considers that FSQ is falling short based on the Working for Queensland survey as well as information from FSQ staff interviews with the DNA Review.[424] The FSQ organisation across the survey did not score as well compared against the whole of the Queensland Government results from the Working for Queensland Survey.[425]

726. The following graphs from the Working for Queensland Survey show the percentage of FSQ staff that had a positive response (green), neutral response (orange), or negative response (red) to the questions. Below the graph the down or up arrows show the percentage change from 2023 or the percentage difference between the overall Queensland Government organisation respondents.

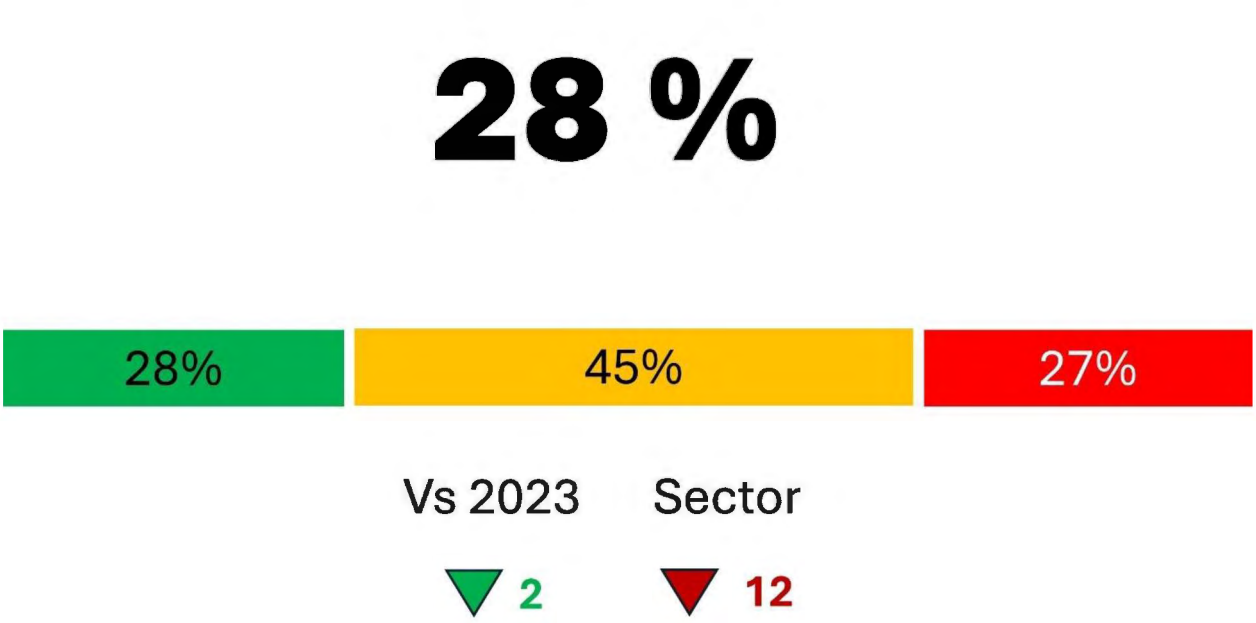
Figure 34 ***Professional Development***



[423] DNA Review interviews with FSQ current and previous staff
[424] Information gather from FSQ staff (current and previous) interviews
[425] **Working for Queensland "Highlight Report – Public Sector Commission"** 2024 Working for Queensland survey report

727. 33% of FSQ staff responded in the negative regarding their professional development, with only 19% positive responses. During interviews, a number of FSQ staff informed the DNA Review that they believed they were not receiving some professional development opportunities, such as conference attendance, acting positions, or training opportunities (refer to Section 5.11 - FSQ Program Management).[426]

Figure 35 *Performance Discussions*



728. 27% of FSQ responded negatively regarding the performance discussions process. Furthermore, only 23% of respondents stated that they have a performance development plan. McKinsey and Company report that organisations that focus on their staff's performance are 4.2 times more likely to outperform other organisations and have a five-percentage point lower attrition rate.[427] They also have improved culture, collaboration, and innovation, which are all desired values of FSQ.

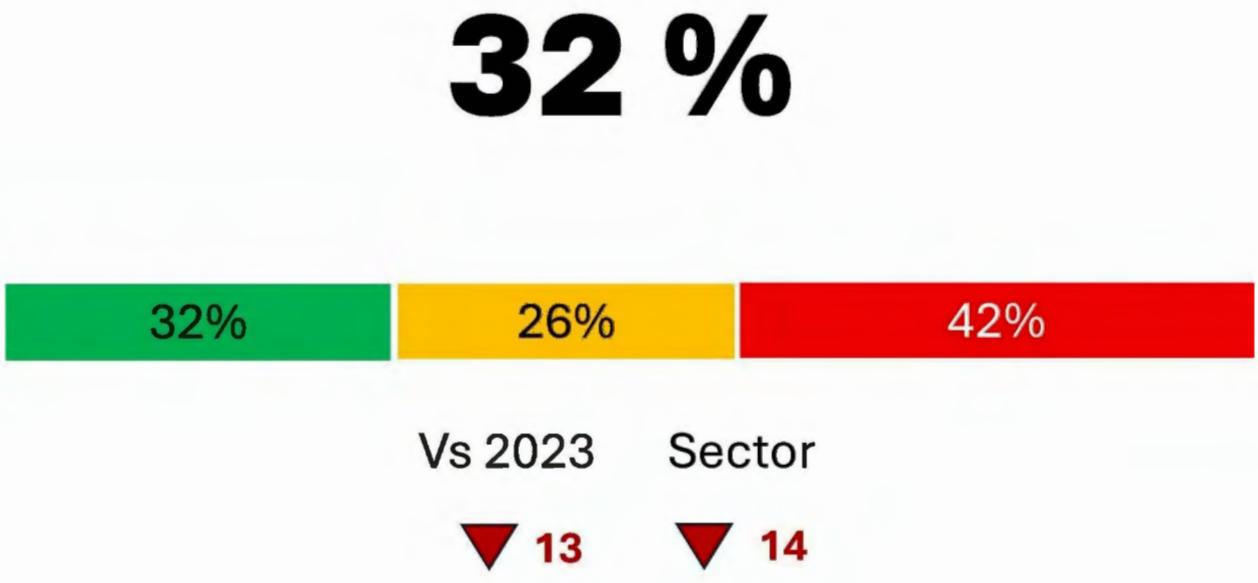
[426] DNA Review interview with FSQ current and previous staff
[427] Amaia Noguera Lasa, Andrea Pedroni, Asmus Komm, and Simon Gallot Lavallée "In the spotlight: Performance management that puts people first" McKinsey and Company 15 May 2024

Figure 36 ***Keeping you well: In my workgroup***

729. 'Keeping well in my work group' scored low due to a perceived lack of proactively discussing workplace safety issues, promoting staff wellbeing, and mental health.

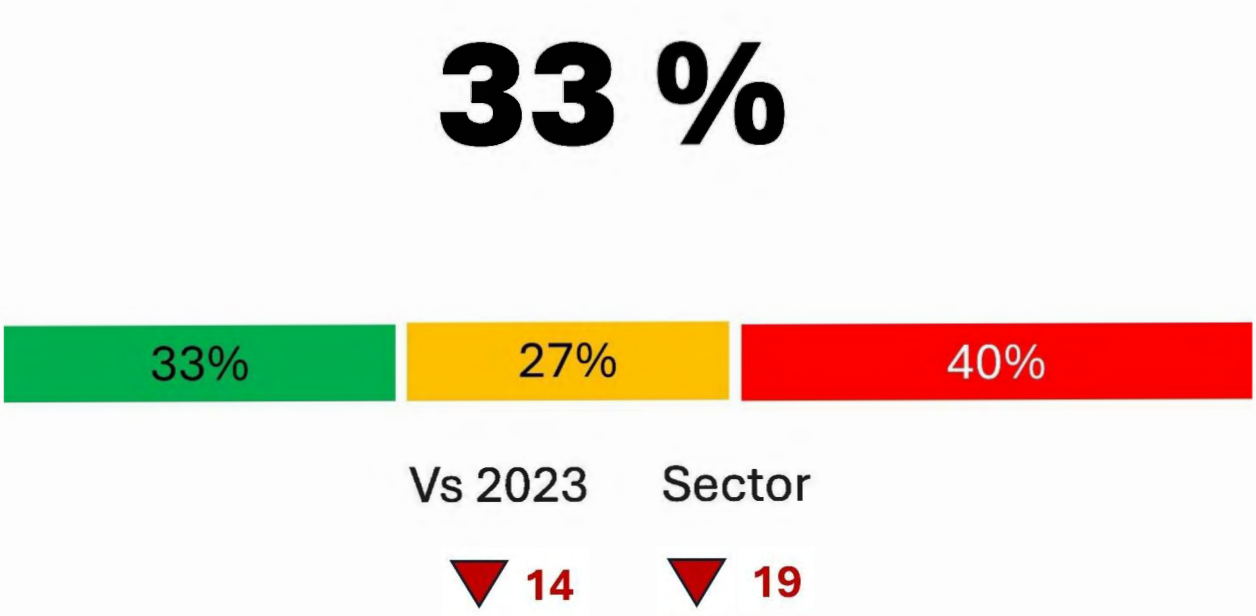
730. FSQ has a wellbeing officer (with responsibility to promote staff wellbeing) and a WHS officer. The DNA Review recommends that FSQ evaluate whether these roles could be managed or performed more effectively to increase respondent engagement. The DNA Review has also recommended establishment of a change manager to lead the reform and large organisation change, focusing on the people and culture aspect of change (refer to Section 5.11 - FSQ Program Management)

Figure 37 ***Backfilling roles***



731. The survey noted that some FSQ staff did not think backfilling of roles was a transparent process. In interviews with FSQ staff, they informed the DNA Review that they perceived that the process was not transparent and the preferred candidate may not be the one endorsed for the role due to the staff member being needed for their operational role. This is reasonable and within the authority of FSQ, however, under a system-of-system approach contingencies are built into the system to allow staff movement and career development. Other staff expressed opinion to the DNA Review that they believed there was under-resourcing and lack of strategic workforce planning.[428]

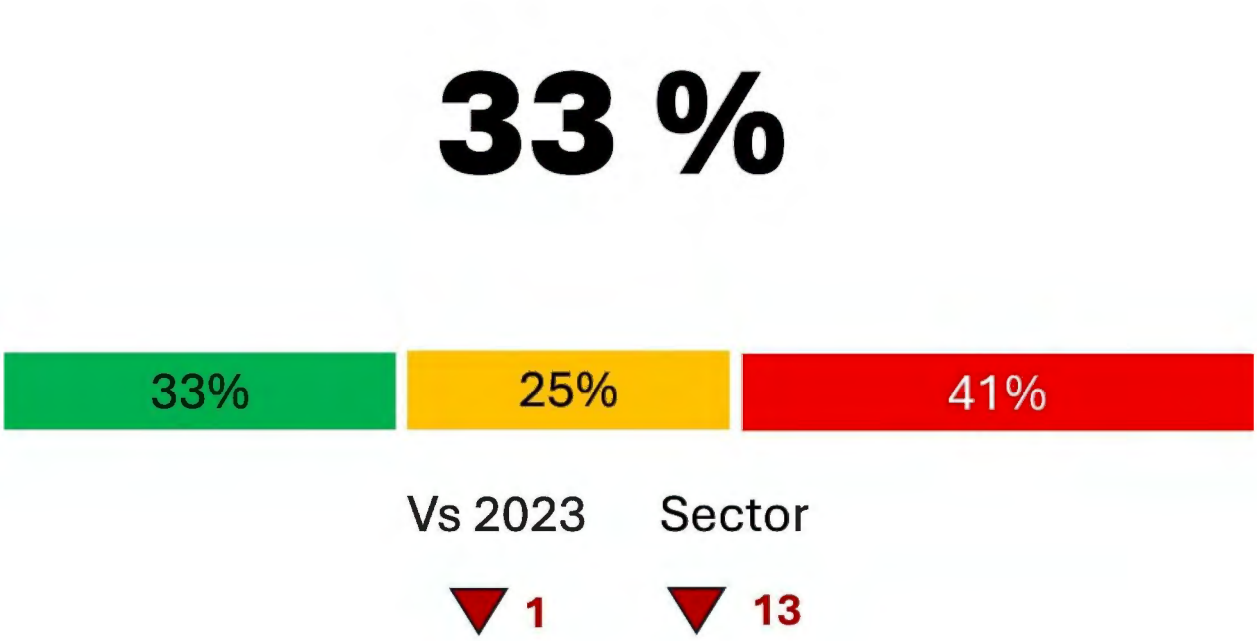
Figure 38 ***Recruitment***



732. With respect to the recruitment process, the issue was that 40% of FSQ staff who responded expressed a view that they did not think recruitment was a fair and transparent process.

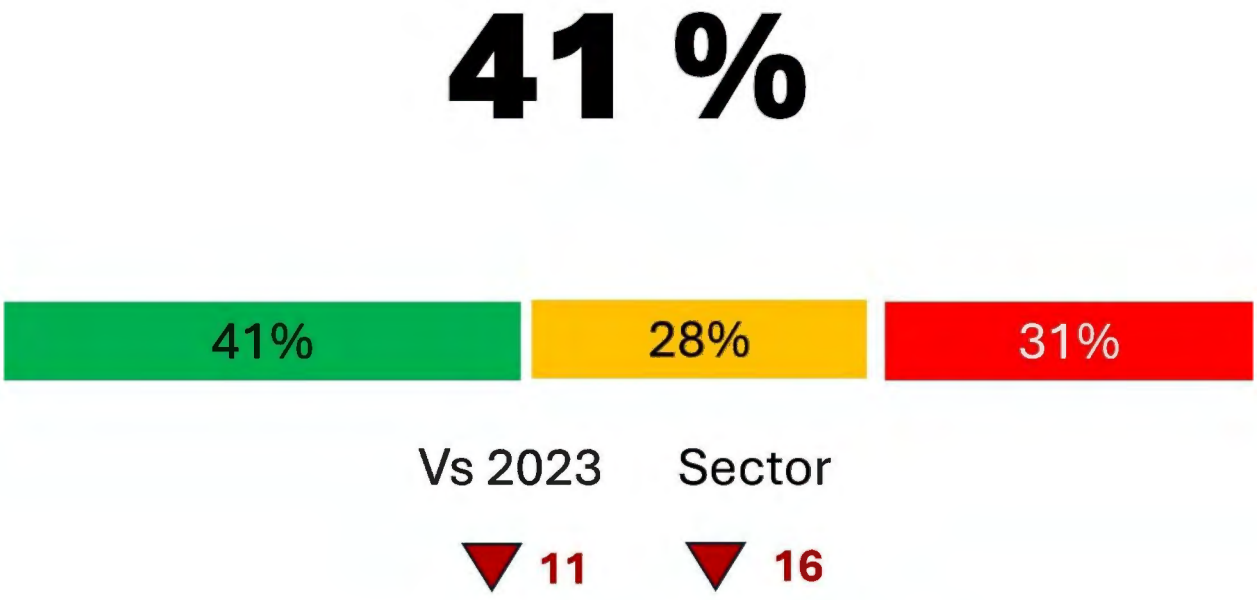
[428] DNA Review interviews with FSQ current and previous staff

Figure 39 *Promotion*



733. The survey identified that about 40% of respondents expressed a view that promotion decisions were not based on clear criteria. FSQ staff also expressed opinion to the DNA Review that they felt overlooked for promotions and opportunities that they believed that they had the required skill sets for.[429]

Figure 40 Senior management



[429] DNA Review interviews with FSQ current and previous staff

734. The survey reported some key areas where senior managers were rated low. These were: clear direction for the future of the organisation; values / principles; keeping employees informed; employees feeling heard, and demonstrating honesty and integrity.

735. One example of leadership is the US Marines who have a long tradition of 'the leader eats last'. This is where in the mess hall the most junior staff eat before the Officers. This establishes a culture in the Marines of the leaders putting the needs of their subordinates before their own to build trust, foster empathy, and ensure their team feels valued. This approach in the Marines reportedly leads to a more engaged and productive culture and environment. This style of leadership demonstrates honesty and integrity where the team is prioritised, resulting in a more engaged and motivated workforce. Leadership experts have observed this style of leadership in the Marines and the benefits and in the book 'Leaders Eat Last: Why Some Teams Pull Together and Others Don't' Simon Sinek explores the concept of the symbolism of 'Officers eating last' in the mess hall and how that translates into leadership in government, big business, and investment banking.[430]

736. The DNA Review notes that the areas in which the surveys suggest FSQ is not doing well relate to organisational culture, senior management, and staff performance management. Furthermore, FSQ is trending down in all but one (performance development) since the last survey in 2023. The DNA Review expects that an organisation that is going through change and is making positive changes to the work culture should begin to experience an upward trend in the survey of its employees.

5.12.8 Key Performance Indicators

737. One way to measure staff performance are Key Performance Indicators (KPI), which provide values to determine how individual, teams and departments are functioning holistically. *Recommendation 77* (in progress) from the Sofronoff Inquiry states:

> *"The laboratory should implement Team and Individual Performance and Development Key Performance Indicators within the laboratory which focus on scientific best practice, quality and values of the laboratory."*

738. In Section 7.4 (Resources required to deliver the reforms) the DNA Review discusses that the resource requested by FSQ to meet this recommendation involves enhancement of the Forensic Register to access data on staff performances, (i.e., how many DNA samples are processed by teams and individuals). The DNA Review notes that this reflects a transactional leadership style that sets clear expectations, structured tasks, and provides rewards or corrective actions based on employee performance. The primary focus is on achieving measurable objectives (such as number of DNA samples processed). Transactional leadership is beneficial for an efficient, clear process with a known desired outcome, such as a factory process. A forensic organisation that wants to manage its staff and processes as a factory line would use transactional leadership. However, the Working for Queensland survey results demonstrate that a transactional leadership approach is not optimally serving FSQ staff to progress their career progression and have job satisfaction. This is demonstrated in the fact that the Working for Queensland survey results had a larger percentage of negative responses for career development themes including, professional development, promotion process, backfilling roles, recruitment, performance discussion, keeping you well in the workplace, and senior management. All these require a transformational leadership style that develops people and their career

[430] Simon Sinek "Officers Eat Last: why Some Teams Pull Together and Others Don't'" 23 May 2017

progression. A transactional leadership style that focuses on rewards and punishments to achieve set tasks, and adherence to rules. The DNA Review recognises these are important for the forensic science compliance and quality, however people, innovation, job satisfaction, and career development are also important.

739. The purpose of Recommendation 77 as stated in the recommendation is "*scientific best practice, quality and values".* Addressing this purpose requires a transformational approach that focuses on inspiring and motivating staff to implement best practice, strive for quality and adherence to values. Transformational leadership communicates a vision that inspires a team to work toward shared goals, fostering a collaborative and supportive work environment. It also develops and mentors staff career development. An organisation that uses a transformational leadership style develops a culture of innovation, trust, and mutual respect, ultimately leading to increased employee motivation and engagement (which were reported to be lacking for FSQ in the Working for Queensland survey). An example where transformational leadership is effective in complex organisational environments with high stakes and unique challenges (rapid technological advancements, complex service delivery needs, and evolving policies) is the healthcare sector. This is similar to FSQ's complex operating environment. Transformational leadership inspires, motivates, and fosters positive change in organisations that face complexity, such as healthcare and should be applied to FSQ. Transformational leadership allows for flexibility, adaptability, and innovation, which are all essential for FSQ.[431]

Strategic update

740. The discussion above focuses on strategy, people and culture. People and culture needs to be one of the key focus areas of an organisational strategy. Organisations that put their people first as a priority, values their employees, and nurtures the organisational culture, promoting a positive work environment, enhancing employee motivation. This leads to a more productive and innovative workplace. The DNA Review recommends that the updated FSQ strategy involves the focus of "FSQ strategy – People First to Deliver Forensic Science to Queensland".

5.12.9 Statutory arrangements

741. The Sofronoff Inquiry, noted that:

> *"…the structure provides for independent oversight of the work of the laboratory and the giving of expert advice to its chief executive officer[432]….. I have concluded that the best way to establish a new Forensic Science laboratory in Queensland is to mimic the structure of the Office of the Director of Public Prosecutions.[433]*

742. The ODPP is an organisation established by an Act of Parliament (legislation) to carry out specific functions or provide services on behalf of the government.

743. FSQ was established under the FSQ Act to be comprised of the Director and an office comprising of the staff of Forensic Science Queensland (refer to Section 4.10 - Observations on the FSQ Act for a detailed discussion). The FSQ Act establishes the

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[431] PK Singh *et al* "Navigating healthcare leadership: Theories, challenges, and practical insights for the future" J Postgrad Med. 2024 Dec 11;70(4):232–241
[432] Sofronoff Report - Commission of Inquiry into Forensic DNA testing in Queensland - Final Report. Paragraph 1622
[433] Sofronoff Report - Commission of Inquiry into Forensic DNA testing in Queensland - Final Report. Paragraph 1630

Director as a statutory officer, established the FSQ Advisory Council, and authorises the Director FSQ to establish advisory committees.

5.12.10 Boards, Councils, and Committees

744. Governance boards, councils, and committees are bodies that provide advice to organisations to ensure accountability, transparency, and effective decision-making.

Interim DNA Advisory Board

745. One of the main purposes in the FSQ Act was to establish the FSQ Advisory Council (the **Council**) to give advice and make recommendations about particular matters.[434] The Interim DNA Advisory Board (the **Board**) TOR were established May 2023 (TOR established) and the Board ran until 30 June 2024. The main purpose of the Board was to oversee the prioritisation and implementation of recommendations from the Inquiries.[435]

746. The Board provided strategic oversight from a whole-of-sector perspective to support the establishment and operations of FSQ, including forensic biology and forensic chemistry. This Report only assesses the provision of forensic biology DNA services. The Board's sub-committees included:

(a) **Forensic Biology Advisory Sub-Committee** – to advise on scientific and technical best practice in DNA forensic service delivery.

(b) **Forensic Justice Advisory Sub-Committee** – to advise on the principles, priorities and processes for retrospective review and analysis of cases and DNA samples, and to oversee the conduct of that review and analysis.

(c) **Forensic Medical Examinations Advisory Sub-Committee** – to advise on best practice sexual assault forensic responses and services.

747. The Board members include representatives from a variety of backgrounds:

(a) One or more independent Chair/s with significant knowledge and experience in the criminal justice system;

(b) A senior representative of the Queensland Police Service;

(c) A senior representative of the Office of the Director of Public Prosecutions;

(d) A senior representative of Legal Aid Queensland;

(e) The Director-General of Queensland Health;

(f) A representative from a victims' support organisation;

(g) One or more experienced criminal law barristers nominated by the Bar Association of Queensland or the Chair/s;

[434] Forensic Science Queensland ACT, Act no. 8 of 2004
[435] Forensic Science Queensland interim Advisory Board, Terms of Reference, May 2023

(h) An experienced criminal law practitioner nominated by the Queensland Law Society;

(i) The Director-General of the Department of Justice and Attorney General; and

(j) Up to three independent/external members with significant expertise in forensic science service delivery or in academia/forensic science research (forensic biology or forensic chemistry).

748. The DNA Review observes with interest that there were only up to three members on the Board with significant expertise in forensic science in circumstances where the Board was appointed to oversee the establishment of FSQ from the whole of the criminal justice perspective (systems perspective – refer to 5.12.3 - Governance as part of the System-of-System).

749. One of the key functions of the Board involved overseeing the prioritisation and implementation of recommendations from the Inquiries and functioning as a central register for managing the status of every recommendation, including recommendation approval, closure and variation. The Governance Institute of Australia notes that:[436]

> *"The enabling legislation may allow the board to delegate authority to board subcommittees, individual board members, management, employees or other persons within prescribed limits. Conversely, establishing legislation may also prohibit delegation of certain powers or functions by reserving those powers to a Minister."*

750. Generally, the function of a Board is to govern organisational strategy, oversee the overall direction of the organisation, and to ensure that it operates ethically, efficiently and effectively to deliver to stakeholders.[437] However, the Interim DNA Advisory Board had an advisory role only. It had no authority to delegate. The Board's TOR state:

> *"The Board will perform an advisory role and cannot direct the Chief Executive Officer [Director] or staff of Queensland Health or FSQ. Any recommendations made by the Board will be carried out by FSQ once endorsed by the Director-General of Queensland Health, who will sit as a member of the Board but who will retain sole responsibility for directing Queensland Health staff."*

751. The DNA Review notes that as a statutory officer under the FSQ Act the Director could not be directed by the Board.[438] This governance arrangement came into focus on 16 November 2023 when the Board met to consider the closure report for Recommendation 15 (the Limit of Detection DNA threshold which is discussed in-depth in Section 4.8 - FSQ DNA Testing Thresholds). The Board suggested further experimentations were needed. On 14 February 2024, the Board met and FSQ advised it of planned experiments. The Board closed Recommendation 15 on the provision that FSQ conduct those further experiments, but the Board did not have any authority to direct that these experiments be conducted. The DNA Review notes that nearly a year and half later these experiments have not yet been completed and Recommendation 15 remains closed, notwithstanding the significant issues that the DNA Review reports in Section 4.8 - FSQ DNA Testing Thresholds. The DNA Review recommends that the

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[436] Governance Institute of Australia "Governance principles for boards of public sector entities in Australia" Second Edition 2023

[437] A Capability-Based View of Boards: A New Conceptual Framework for Board Governance" Academy of Management Perspectives VOL. 35, NO. 1 16 Feb 2021

[438] Forensic Science Queensland interim Advisory Board, "Terms of reference" May 2023

Council reviews the issues with Recommendation 15 that are outlined in this report to consider reopening Recommendation 15.

752. The Sofronoff Inquiry notes that if there had been an independent board it would have prevented the issues it had uncovered, stating that:

> *"If a forensic science advisory board had existed, it would have precluded the adoption of speed of results as a criterion that deformed the integrity of the laboratory. It would have prevented the blunder that was the Options Paper process. Indeed, it is difficult to see how many of the mistakes dealt with in this report could have lain undetected for long if there had been such oversight."*

753. The Board's term ended on 30 June 2024. As discussed below, the FSQ Advisory Council ('the Council') was established and the role of the Board was in effect handed over to the Council.

The FSQ Advisory Council

754. The Sofronoff Inquiry recommended the establishment of a Board as part of the governance structure:

> *Dr Kogios and Ms Baker saw benefit in a governance structure which connected the laboratory with other criminal justice agencies to ensure the laboratory's frame of reference encompassed the whole system it services. They recommended the creation of a Forensic Science Advisory Board to enable broad engagement in the setting of policies that would affect the criminal justice system, and bring accountability, transparency and governance from a whole-of-sector perspective."*[439]

755. The Sofronoff Inquiry went on to recommend:

> *"The Director of Forensic Science should report to a non-executive advisory board, like that recommended by Dr Kogios and Ms Baker."*[440]

756. On 13 August 2024, the Council replaced the role of the Board. It was appointed to provide advice directly to the Attorney-General. It was established under the FSQ Act (with FSQ administratively assigned to the Department of Justice and Attorney General). The FSQ Act outlines the role of the Council:

> *(1) The council has the following functions*[441]
>
> *(a) to monitor and review policies and procedures of Forensic Science Queensland relating to the administration of criminal justice;*
>
> *(b) to give advice or make recommendations about the policies and procedures mentioned in paragraph (a);*
>
> *(c) another function as directed by the Minister.*

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[439] Walter Sofronoff KC "Final Report, Commission of Inquire, Forensic Science Queensland" 13 December 2022: paragraph 1626

[440] Walter Sofronoff KC "Final Report, Commission of Inquire, Forensic Science Queensland" 13 December 2022: paragraph 1638

[441] *Forensic Science Queensland Act (2024*), Part 4, Division 1, Section 27 Functions

(2) The council may give the advice or make the recommendations mentioned in subsection (1) (b) to the Minister or the director, on its own initiative or on request by the Minister.
The council has the power to do anything necessary or convenient to be done in performing the council's functions.[442]

757. The DNA Review notes that the Council's TOR does not explicitly state that its role is to manage and close the Inquiry Recommendations, however, the function of the Board was essentially handed over to the Council. The FSQ Governance Manual notes that the Council:

> *"Sets direction on Forensic Science Reform and tracks progress. Approves closure and/or variation of Commission of Inquiry final report recommendations. Sets direction on better practice, endorses practice, policy and legislative changes. Monitors and reviews policies and procedures of FSQ."*[443]

758. The Council can also open recommendations that were previously closed if it believes that further work is required.

759. The Attorney General appoints the members of the Council, which must consist of up to 11 members (including a chairperson):

- one person who is a representative of the Queensland Police Service;
- one person who is a representative of the Office of the Director of Public Prosecutions;
- one person who is a representative of Legal Aid Queensland;
- one person who holds qualifications, or has experience, relating to supporting victims of crime;
- one person who holds qualifications, or has experience, relating to forensic services and is not employed by the State; and
- one person who is a practising lawyer and is not employed by the State.

760. The DNA Review notes that there is only one person on the Council who holds qualifications, or has experience, relating to forensic sciences.

761. A question at a meeting of the Council is decided by a majority of the votes of the members present, subject to any conflict of interest considerations. A member present at the meeting who abstains from voting is taken to have voted for the negative.

Forensic Science Steering Committee (FSSC)

762. The FSQ Act also provides the power for the FSQ Director to establish an advisory committee or subcommittee for the purpose of obtaining 'expert advice' on the performance of the Director's functions. FSQ held a Strategic Workshop (30 April – 1

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[442] *Forensic Science Queensland Act (2024*), Part 4, Division 1, Section 28 Powers
[443] Forensic Science Queensland, "FSQ Governance Manual' 20 November 2024

May 2024) to review the operating model for forensic science delivery in Queensland and to meet the purpose of Recommendation 1 from the Sofronoff Inquiry which was:

> *QH* [now FSQ] *should engage in consultation with QPS and other participants in the criminal justice system, and decide, whether the operating model will remain split in its current form between QPS and the laboratory or will be divided in some other way.*

763. The attendees included FSQ, QPS, relevant stakeholders, and high level national and international forensic scientists.[444] A graphic artist was engaged to capture the workshop minutes of the strategic workshop. A series of cartoons are the only formal record of the strategic workshop (see Attachment 9), which the DNA Review views, based on their experience, is an unusual approach to capture such strategic and high-level outcomes. The FSSC was established and the inaugural meeting was held on 10 October 2024 (five months after the strategic workshop). The meeting minutes from the FSSC note that the illustrations are the minutes of the two-day strategic workshop (Attachment 9):

> *"A Strategic Conversation is an open forum designed to identify issues and devise a path forward, rather than finding the solution. Therefore, this is an ongoing body of work for stakeholder agencies to reach an agreement on the future operating model for forensic science service delivery in Queensland. This has been the impetus for the creation of the FSSC"*

764. The only outcome and action from the Strategic Workshop was the establishment of the FSSC. However, attendees at the Strategic Workshop have informed the DNA Review that establishment of a Committee such as an FSSC was not the focus of the meeting and was not discussed. Following the Strategic Workshop FSQ also drafted a report titled 'Outcomes Report and Next Steps Strategic Conversations', which the DNA Review understands is yet to be circulated to participants. Regarding the Outcome Report and Next Steps document, FSQ provided the following response to the DNA Review:

> *"The circulation of the Outcome and Next Steps Report has been delayed as QPS indicated they will be collating and providing feedback from the QPS participants in the Strategic Conversation. The latest advice from QPS is that this feedback will be brought to the July 2025 meeting of the FSSC."*

765. QPS has informed the DNA Review that the above statement from FSQ did not reflect the QPS position, stating that:

> *"Several months later [after the strategic workshop] the QPS was provided the cartoon minutes and the strategic outcomes document. This document indicated that the workshop endorsed the establishment of the FSSC. We were then given the TOR of the FSSC. The QPS did not agree with the TOR given it established a decision-making body that diluted any influence of the QPS over the services it receives from FSQ. Many of the members that attended did not think that the strategic outcomes were reflective of the conversations had at the workshop.*

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[444] FSQ Advisory Council member, ODPP, Legal Aid Queensland, Queensland Law Society, Queensland Sexual Assault Network member, Office of the Interim Victims' Commissioner, Pathology Queensland, Coronal Services, Office of the Chief Medical Officer, Forensic Medicine Queensland, Australian Federal Police, University of Tasmania, Victoria Police, NSW Police, and NSW Health Pathology.

We have since suggested changes to the TOR that removes it decision making powers and adjusts representation."

766. The DNA Review notes that the only 'strategic outcome' from the strategic workshop was the establishment of the FSSC (with FSQ as the permanent Chair). QPS have indicated above that members of the FSSC, who also attended the strategic workshop, did not believe that establishment of a committee was reflective of the conversation at the workshop.

767. The Outcome Report and Next Steps Strategic Conversations reported three themes from the strategic conversation:

Service Delivery

a) *A multi-agency working group (embedded in each stakeholder agency's governance structure) be formed to define and agree on the future operating model for forensic science service delivery in Queensland.*
b) *Conduct a gap analysis between the current and future state operating model.*
c) *Develop transition/implementation plan (including a change management strategy), in consultation with agency staff and stakeholders, and with regard to budget /funding considerations.*
d) *Implement/change management.*

In relation to inter-agency cooperation:

a) *Establish or leverage governance groups with representation of key stakeholders (at all levels) from the Queensland justice system to ensure a unified understanding of the system as a whole and reduce the risk of working in 'silos'.*
b) *Prioritise collaboration by creating regular opportunities to facilitate information flow throughout the system.*
c) *Celebrate and promote wins across stakeholder agencies and with the public.*

In relation to case management

a) *Define the stages of case management from crime scene to court.*
b) *Determine each agency's needs and responsibilities.*
c) *Establish governance mechanisms, including joint processes, policies and procedures.*
d) *Design and build a case management system.*

768. There was high level national and international participation at the strategic conversation but there were no tangible next steps, way forward or action items captured in the 'cartoon minutes' which aligned to Recommendation 1. The three themes outlined above have not been taken forward. The DNA Review regards this as a missed opportunity to address some of the key issues facing forensic DNA services in Queensland. The principal outcome was the establishment of the FSSC as a 'decision making' body. The QPS A/Commissioner has provided a letter to the DNA Review noting:

"The Act provides FSQ the power to establish committees for the purpose of obtaining expert advice on the performance of the Director's functions. The Director has established the Forensic Science Steering Committee (FSSC)

as a decision-making body using these powers. Under the proposed Terms of Reference (TOR) the FSSC provides for system-wide oversight of the forensic science service delivery workflow in Queensland and the impacts on the Queensland justice system and the effective coordination and accountability in the management of forensic services across stakeholder agencies. The FSSC consists of 9 voting members, including 1 representative for the QPS at the rank of Superintendent. Representatives from other Queensland Government Departments are positioned within this Committee at a positional designation of Director-General equivalent, however the QPS experience has not been impacted as a result of variation in membership.

The QPS has raised concerns regarding the establishment of the FSSC with the Director, FSQ noting the Committee would operate as a decision-making body with potential for decisions to impact the services delivered to the QPS."

769. The DNA Review considers that further clarification is needed regarding the FSSC position in relation to the closure reports. The Director Generals Steering Committee states that FSSC will 'approve' the closure reports, but the FSSC TOR states that they will 'endorse' them before the Council does. 'Approval' and 'endorsement' are two different processes. Approval provides agreement and satisfaction that the closure report is fit for purpose to go to the Council for its consideration for endorsement. Conversely, if the FSSC endorses the closure report then it is essentially closed, and the Council is approving the closure report. In the latter scenario, it suggests that the FSSC has the authority to make the decision to endorse the closure report and not the Council. It is the DNA Reviews' opinion that under the FSQ Act the FSSC is not a decision making body and does not have the authority to endorse closure reports and only has the authority to approve the closure reports to go the Council.

5.12.11 Decision Making and Accountability

770. The Sofronoff Inquiry Recommendation 104 requires FSQ to implement a policy that outlines the appropriate level of decision-making (this recommendation is in progress). The DoJ ASPIRE corporate governance framework draft outlines the RAECI model of decision-making and accountability, which is a good example of a decision-making model that FSQ could adopt to meet the purpose of Recommendation 104.

R - **Responsible** for development, consultation, and implementation
A - **Authority** to approve [and accountable]
E - **Endorses** for progression before approval
C - **Consulted** during development or review
I - **Informed** of creation or major updates

771. The DNA Review recommends, to meet the objective of the recommendation, FSQ adopt the RAECI model in line with the DoJ draft governance framework, with a supporting SOP that outlines the different forms and aligns the RAECI model.

Service Level Agreement

772. FSQ is a service provider of forensic DNA to QPS, ODPP, Legal Aid, Defence, and the State Coroner. QPS is the principal customer for FSQ DNA service delivery. However, there is no legislative authority for QPS to direct FSQ service delivery. The QPS Acting Commissioner has raised concerns that QPS does not have primacy over testing of the DNA samples and has suggested that there is a need to review relevant policy and legislation.[445] Neither QPS, or other end-users has Service Level Agreements (SLA) with FSQ that establish the Key Performance Indicators (KPI). Thus, in the absence of SLAs or other legal arrangements FSQ cannot be held accountable to end-users for DNA service delivery.

773. The DNA Review recommends a review of the costing of DNA service provision to assist with the drafting of a SLA between FSQ and the required end-users.

5.12.12 Risk and Issues Management

774. Risk is the effect of uncertainty on objectives, which is expressed in terms of a combination of the consequences of an event and the associated likelihood of the occurrence.

775. A key update from the 2017 published ISO/IEC 17025 was the need to include risks and issues management in the quality management system of forensic sciences laboratories. The international standard for risk and issues management is ISO/IEC 31000. It describes risk as the effect of uncertainty on objectives and is expressed in terms of consequence of an event and the associated likelihood of occurrence. The consequences of an event can be either positive (opportunity) or negative (threat). For an event to be a risk, there needs to be uncertainty of the likelihood of the event occurring ('known unknowns' or 'unknown unknowns'). Issues on the other hand have 100% likelihood of occurring; therefore, there is no uncertainty associated with issues (known knowns or known unknowns). The terms 'risk' and 'issue' are sometimes used interchangeably by organisations, however, they are not the same thing (Figure 41).

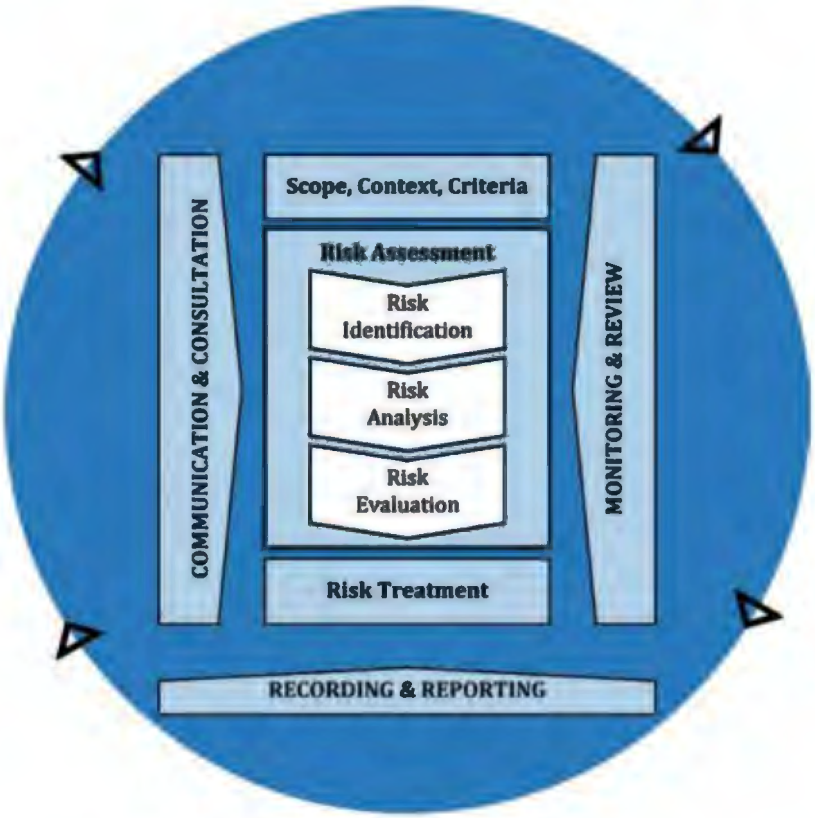
[445] Acting Commissioner Shane Chelepy APM "Letter to Dr Kirsty Wright, DNA Review" 14 March 2025

Figure 41 the Rumsfeld Matrix is a quadrant that divides knowledge and uncertainty into four categories. The matrix provides a framework for identifying potential risks and issues.

Known knowns Things we are aware of and understand	**Known Unknowns** Things we are aware of and don't understand	**Issues**
Unknown knowns Things we are not aware of but understand	**Unknown Unknowns** Things we are not aware of and don't understand	**Risks**

776. The risk management process involves the systematic application of policies, procedures and practices to the activities outlined in Figure 42. Risk assessment is the overall process of risk identification, risk analysis and risk evaluation.

Figure 42 Risk Management Process



777. This process cannot be done in isolation. For example an organisation should not have a process to record risk, such as a risk register, without first designing the entire risk process, developing a risk manual, and associated policies. The main outcome is the implementation of risk treatments to mitigate the risk.

778. [redacted]

779. [redacted]

780. [redacted]

781. There are various tools that are used to assess risk, the most widely used is the risk matrix. The risk matrix is a tool for ranking and displaying risks by defining ranges for consequence and likelihood. FSQ utilises a risk matrix shown in Figure 43.

Figure 43 FSQ Risk Matrix

		Consequence				
		Negligible	Minor	Moderate	Major	Extreme
Likelihood	Almost Certain	Medium (7)	Medium (11)	High (17)	Very High (23)	Very High (25)
	Likely	Medium (6)	Medium (10)	High (16)	High (20)	Very High (24)
	Possible	Low (3)	Medium (9)	High (15)	High (18)	High (22)
	Unlikely	Low (2)	Medium (8)	Medium (12)	Medium (14)	High (21)
	Rare	Low (1)	Low (4)	Low (5)	Medium (13)	High (19)

782. An organisation's risk attitude is its approach to assess and eventually pursue, retain, take or turn away from risk. During interviews with FSQ staff, opinion was expressed that FSQ's risk attitude was to conduct a risk assessment to justify decision-making rather than to manage the risks. This opinion appears to be supported by the risk assessment and highlighted in the examples below, from "Hazpak DNA Tapelift Kit

[446] EY definition of risk appetite – is an integral component of effective risk management. Risk appetite is the amount of risk an organisations is willing to accept to achieve the objectives.
[447] ISO Guide 73 "Risk Management – Vocabulary" First Edition 2009.
[448] EY, "FSQ draft risk appetite statement" 2024

Validation risk assessment" and "Implementation of the Acid Phosphatase Test for direct testing of swabs and other substrates."

783. The Hazpak DNA Tapelift Kit "tapelift" Validation risk assessment[449] states that the commercial DNA tapelift product is being implemented for collection of DNA into case work before the verification is completed. The main risk was assessed to be ineffective collection of DNA from the evidence. The DNA Review anticipates that an adverse consequence could be that offenders may not be detected because their DNA was not collected from evidence. FSQ identified there is a risk between undertaking tapelifts prior to verification being completed versus the risk of not undertaking tapelifts and allowing the backlog of exhibits to increase. The FSQ risk assessment identified that the greater risk was not undertaking tapelifts and allowing the backlog to increase. The risk assessment states:

> *"The risk to operational timeframes and backlogs was assessed to be greater than the risk of implementing a method validated used in other jurisdictions but not validated in-house."*

784. The overall risk was assessed as 'medium'. This runs contrary to the FSQ medium risk appetite of exploring options to implement methods that have not been validated/verified by FSQ only if the risk is very low and FSQ implemented an unverified method that was assessed as medium risk.

785. The risk assessment of the Implementation of the Acid Phosphatase Test for direct testing of swabs and other substrates, was conducted due to the introduction of the new rape kits and the need to validate the new Acid Phosphatase Test that was used on the new rape kits. Due to the time, it would take to conduct the validation study, FSQ implemented an Acid Phosphatase Test that was validated at Victoria Police Forensic Service Division (VPFSD). FSQ assessed that:

> *"Given the methods to be implemented are well established and are used routinely for the same purpose at Victoria Police, the likelihood of reporting an incorrect result is expected to be rare."*

786. FSQ assessed the reputational risks as 'High':

> *"…there is the potential for sustained national negative media coverage and notation in international media because of implementing a change in the method without complete internal verification. Insufficient validation was identified as a source of poor scientific practices in the Commissions of Inquiry into DNA testing in Qld (2022) and Project 13 (2023). Risk assessments were also not conducted."*

787. The regulatory risk overall was assessed as 'High':

> *"Potential for the unit to impact FSQ's ISO/IEC 17025 accreditation due to requirements of Section 7.2 Selection, verification and validation of methods."*

788. The strategic planning risk ('medium') also addresses compliance with accreditation:

[449] RA-001"Risk Establishment Form" Metro North Health 9 October 2023

"Implementation of a method without internal verification or broader validation impacts FSQs ability meet [sic] organisational and client-based expectations to maintain accreditation against the standard ISO 17025."

789. The overall assessment was 'extreme' (consequence), 'possible' (likelihood) and overall 'high' (Risk Rating). The DNA Review is of the view that FSQ acceptance of this risk and implementing the unvalidated and unverified Acid Phosphatase Test is unacceptable practice in a NATA accredited forensic science laboratory. FSQ noted in the risk assessment that it was accepting the risk to losing its ISO/IEC 17025 accreditation by doing so. It also noted that insufficient validation was a major issue in the 2022 and 2023 Inquiries, yet it appeared to be willing to repeat this same mistake again and further risk the reputation of Forensic Science in Queensland.

790. The two risk assessments discussed above are examples of concern to the DNA Review as to how the risk assessment process has been used by FSQ to justify decision-making rather than manage risk. It indicates to the DNA Review that risks which occurred in the past are still occurring, notwithstanding whether the consequences of those risks are known or ought to be known.

5.12.13 Organisational Structure

791. The Sofronoff Inquiry discussed organisational structure and noted that there are two main principles.

> *"The principle that must guide the government in deciding upon an organisational structure must be that:*
>
> *the structure is one that ensures that senior management of the laboratory faithfully maintains the standpoint that the function of the unit is to serve the administration of criminal justice by providing reliable information to the QPS and reliable expert evidence to the courts; and*
>
> *the structure provides for independent oversight of the work of the laboratory and the giving of expert advice to its chief executive officer [Director FSQ]."*[450]

792. In this section on governance the DNA Review has discussed organisational theory, specifically that modern organisational theory that considers process and people (culture). Modern organisational theory also observes that there is no one best fit organisational structure, but the structure needs to be fit for purpose.

793. The current FSQ organisational structure is a hierarchal structure and given the Director is a statutory officer this represents an obvious structure. For this reason, FSQ also has centralised decision making. However, as a service provider, the DNA Review considers the FSQ organisational structure is not an efficient structure that is best placed to be service-focused or service-enabled. The DNA Review therefore considers that the FSQ organisational structure warrants reprofiling, to restructure the FSQ organisational structure.

794. The reprofiling of the FSQ organisational structure would require transitioning from a hierarchical structure / centralised decision-making structure to a divisional structure aligned to the operational speciality, corporate, and program management. This structure would allow for the increase of the number of bench scientists to enable more

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[450] Walter Sofronoff KC, "Final Report, Commission of Inquire, Forensic Science Queensland" 13 December 2022, paragraph 1622

efficient and effective service provision. The program management function would also take on a matrix structure (refer to Section 5.11 - FSQ Program Management). The matrix structure would allow for project managers to report to the program manager in the PMO to coordinate projects as well as the technical leads. This organisational structure would allow for decisions to be delegated to the appropriate decision makers rather than to the highest level in the organisation.[451]

Recommendation 20	**20.1** FSQ governance and organisational strategy requires further review and improvement. The review should be overseen by DoJ. **20.2** FSQ should implement a risk and issue management system aligned to ISO 31000.
Recommendation 21	There should be a reprofiling of the FSQ organisational structure. The FSQ organisational reprofiling should be overseen by DoJ and be in collaboration with the DoJ Expert Team.
Intent and desired end state	**Intent:** The improved FSQ governance will provide more relevant strategic planning, improved organisational culture, enhanced DNA service delivery and align with a systems approach. Introduction of ISO 31000 will improve FSQ risk and issue based decision making to ensure that strategic operational objectives are achieved. Reprofiling of the FSQ organisational structure will make it more efficient, service-focused and service-enabled. **Desired End State:** The new FSQ governance is fully implemented. FSQ has implemented a risk and issue management system based on ISO 31000. The new FSQ organisational structure is finalised, including the completion of position descriptions.

[451] 'Institute of Directors, 'What is an organisational structure?'

Attachment 9 Cartoon Minutes from the FSQ run Strategic Workshop (30 Aril 2024- 1 May 2024)

Attachment 1 – Graphic images from Strategic Conversation

Illustration 1

Illustration 2

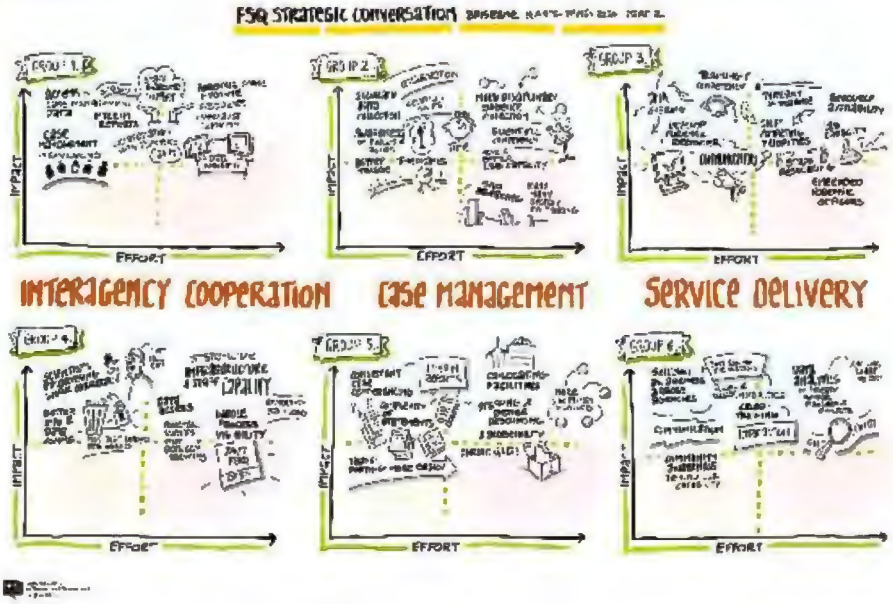
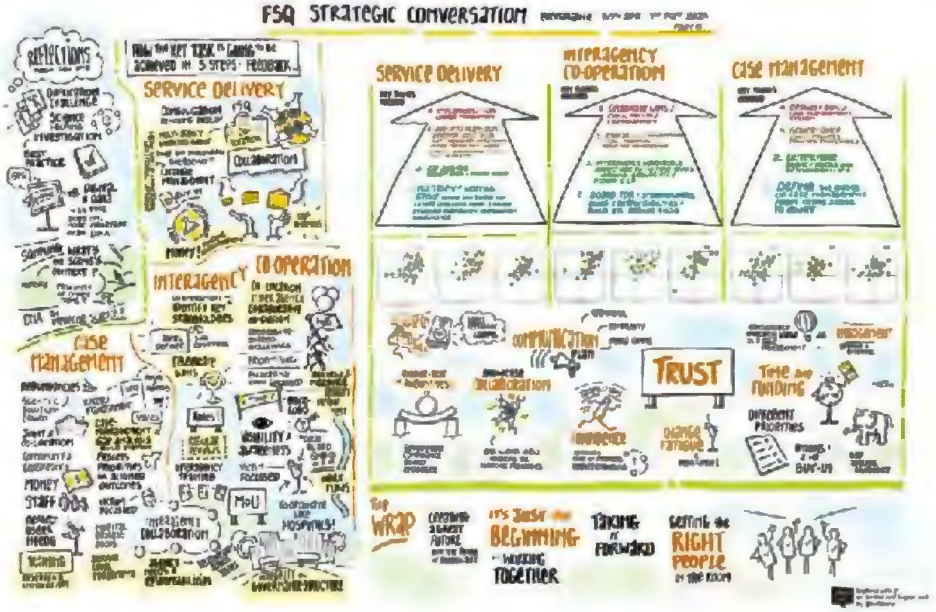


Illustration 3



Chapter 6: FSQ Historical Case Reviews

6. FSQ Historical Case Reviews

6.1 Overview

795. In this chapter, the DNA Review examines the progress, challenges and systemic issues associated with FSQ's Historical Case Reviews (**HCR**). The Reviewers are required to provide advice on the availability of any options that may be able to assist FSQ with the historical case review (**HCR**) process including resourcing required.

796. In order to do this, the Review have assessed and considered:

(a) the current status and issues relating to HCRs;

(b) the HCR Team including staffing levels, the processes, team structure; and

(c) the Project 13 cases (which comprise part of the HCRs).

797. This evidence has then been used to develop a suggested model for managing FSQ's HCRs, developed in collaboration with the FSQ HCR Team.

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

Historical Case Review Process

(a) The HCR involves approximately 32,000 major crime cases tested by QHFFS between 1 September 2007 and 30 April 2023. These cases require review and, where necessary, re-testing due to issues identified in the Inquiries.

(b) As of 2 May 2025, FSQ has only reviewed and re-tested historical cases currently before the courts due to capacity constraints, leaving 2,380 historical cases referred by the ODPP or QPS awaiting review and re-testing. FSQ has not yet conducted historical case reviews on these referred cases and cannot provide a timeframe for completion.

(c) Without significant changes and additional support, the DNA Review estimates that the HCR process will take at least ten years to complete, delaying justice for victims and allowing offenders to remain at large.

Principles Guiding the HCR

(d) The HCR is guided by four principles:

(i) **Administration of criminal justice**: Ensuring accurate DNA evidence to prevent miscarriages of justice;

(ii) **Restoring public confidence**: Delivering reliable and accurate DNA testing to rebuild trust in the criminal justice system;

(iii) **Trauma-informed approach**: Engaging victims and their support networks in a safe and compassionate manner; and

(iv) **Reasonable use of government resources**: Pursuing further testing only where DNA evidence is relevant to the case.

(e) The DNA Review notes that these principles are not consistently applied due to resource constraints and a lack of clarity on the scope and depth of the reviews to be undertaken.

Re-Testing of Project 13 Samples

(f) The Project 13 method, used between 2007 and 2016, resulted in significantly reduced DNA recovery (~90% less than manual methods). A total of 103,187 samples were processed using this flawed method.

(g) [redacted] FSQ's current re-testing strategy is scientifically unreliable and risks failing to detect or destroying evidence, undermining efforts by QPS and ODPP to identify relevant cases.

(h) The DNA Review discovered that tapelifts taken from crime scene evidence and processed using the Project 13 method suffered an additional flaw which was previously unknown. This flaw resulted in 60% to 70% of cells being missed on the tapelift. These tapelifts are still available for re-testing.

(i) The DNA Review highlights the need for collaborative research to develop a scientifically sound method for re-testing samples affected by Project 13 (swabs and tapelifts).

DNA Evidence in the Courts

(j) Some DNA evidence is not well understood by police and the courts which may impact on the reliability of DNA evidence. Specifically for some DNA mixtures and the way FSQ presents the evidence can be difficult to accurately interpret.

(k) FSQ is not reporting on some DNA mixtures that could be probative, instead FSQ is reporting the DNA mixtures are too complex to interpret which ignores the evidence and lacks transparency.

Based on this evidence, the Reviewers have formed the view that:

Current Status and Resourcing

(l) The FSQ HCR Team is significantly under-resourced, with only 2.6 full-time scientific staff supported by three administrative officers.

(m) These staff are only funded until September 2025, creating uncertainty and affecting planning and forecasting.

(n) FSQ has not developed a viable strategy to balance historical case reviews with BAU demands, resulting in delays and inefficiencies.

Suggested Model for HCR Team

(o) The DNA Review, in collaboration with the FSQ HCR Team, has developed a suggested model for managing historical case reviews. Key elements include:

(i) Appointing a dedicated project manager to oversee planning, resource allocation, and progress monitoring;

(ii) Increasing overall internal staffing capacity by training volume crime scientists to become reporting scientists enabling growth of the HCR Team;

(iii) Leveraging external scientific expertise through a voluntary scientific network to provide advice on complex cases;

(iv) Implementing additional quality assurance measures, including blind verification reviews by external experts; and

(v) Enhancing transparency through public reporting of success metrics and de-identified case examples.

(p) The DNA Review supports expanding the FSQ HCR Team to include cold cases and maintaining it as an enduring unit after the historical case reviews are completed.

FSQ's Current Approach:

(q) FSQ's fragmented and under-resourced approach to HCRs is delaying progress and failing to meet the needs of victims and the criminal justice system.

(r) The absence of a dedicated project manager and a clear strategy is hindering the efficient allocation of resources and effective planning.

Re-Testing of Project 13 Samples:

(s) FSQ's current re-testing strategy for Project 13 samples is inadequate and risks wasting evidence, missing critical findings, and undermining the efforts of QPS and ODPP.

(t) Collaborative research is urgently needed to develop a scientifically reliable re-testing strategy.

Resource Allocation:

(u) FSQ's reliance on external contractors, who cost four to five times more than internal staff, represents poor value for money.

(v) Internal staff should be prioritised for training and development to build long-term capacity and reduce reliance on costly external contractors.

Transparency and Public Trust:

(w) FSQ's lack of transparency and public reporting on the progress and outcomes of historical case reviews is undermining public confidence in forensic DNA services.

(x) Greater collaboration with QPS, ODPP, and other end users is essential to ensure the HCRs meet their objectives.

6.2 Summary

798. The historical case review involves ~32,000 major crime cases that were analysed by the Queensland Health and Forensic Sciences Laboratory (QHFSS) from 1 September

2007 to 30 April 2023. These cases require review and where needed, further testing, due to matters arising from the 2022 and 2023 Commissions of Inquiry.[452] The historical case review provides a valuable opportunity to identify violent offenders, progress justice for victims, and regain the trust of victims and the community.

799. Two and a half years after the 2022 Sofronoff Inquiry, the FSQ Case Management Unit (who only analyse current cases, including those before the courts) has only reviewed historical cases, because they also happen to be currently before the courts. FSQ capacity issues are preventing historical cases which do not have court dates, from being reviewed and re-tested. FSQ informed the DNA Review that these cases are not following the Historical Case Review Principles which have been developed to check cases against issues identified by the Inquiry.[453]

800. As of 2 May 2025, 2,380 historical cases reviewed by either the DPP or the QPP which do not have court dates are awaiting review and re-testing by FSQ.[454] By June 2025 the FSQ HCR Team have not conducted historical case reviews on any of these cases due to under-resourcing, and cannot provide any timeframes to complete the reviews.

801. Unless significant support is provided to the FSQ HCR Team and the recommended changes occur, the DNA Review assessment is that the historical case review will not be completed for at least ten years. This lengthy delay will significantly delay justice for victims and their families and prevent perpetrators from being arrested and prosecuted, meaning they are free to reoffend.

802. This section provides advice to the government on options that may assist FSQ with the historical case review process as per DNA Review TOR 4 and 5.

6.3 Background

803. As of January 2025, FSQ determined that 41,077 cases fell within the scope of the historical case review process, however, this has been reduced to 32,412 due to some duplicates and the large number of volume crime cases that were included due to incorrect recording in information systems.[455] See Attachment 10 for the number of cases involved in the historical review by region and offence type.[456]

804. In March 2024, FSQ reported to government that fully testing or re-interpreting affected DNA evidence where a profile was not previously obtained has led to useable profiles in 22.6% of samples from 43.9% of cases (of 4,795 samples from 440 cases).[457] This early success reinforces the importance of the historical case review.

805. Below are six examples of success from historical case reviews and re-testing which further reinforces the benefits they provide for victims and community[458]:

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[452] Historical Case Review Principles, page 6. https://www.fsq.qld.gov.au/__data/assets/pdf_file/0024/334374/Historical-Case-Review-Principles.pdf
[453] Historical Case Review Principles, page 6. https://www.fsq.qld.gov.au/__data/assets/pdf_file/0024/334374/Historical-Case-Review-Principles.pdf and DNA Review Information Request 70 'HCR Implementation Plan KW Workshop' page 13.
[454] DNA Information Request 5 '4-FSQ Dashboard-as at 2 May 2025'.
[455] Information provided by QPS.
[456] Information provided by QPS.
[457] Question on Notice No. 255. Asked on 19 March 2024. Note this figure may also contain improvements from DNA mixture interpretation.
[458] 'Forensic Science Queensland – Outsourcing Options and Costings 12 March 2025'. Approved for publication by QPS. DNA Review Information Request 72 'HCR Case studies'.

(a) Sexual offence: A DNA sample from a pair of the complainant's underpants went from 'No DNA Detected' to a profile that linked to the defendant with a high degree of statistical certainty.[459]

(b) Sexual offence: A DNA sample from the rape kit of a male defendant accused of sexually assaulting a child went from 'DNA insufficient for further processing' to a DNA profile consistent with the complainant.

(c) Sexual offence: A DNA sample from the rape kit of a male complainant went from 'DNA insufficient for further processing' to obtaining an unknown male DNA profile suitable for uploading to the National Criminal Investigation DNA Database. In this case the suspect's reference sample was destroyed and FSQ scientists are coordinating with the QPS to investigate whether another reference sample from the suspect can be obtained.

(d) Sexual offence: Four samples taken from the underpants of a sexual assault complainant all provided a DNA profile consistent with the defendant when no DNA profiles were originally obtained.

(e) Sexual offence: A DNA profile was obtained from the genitals of a defendant that was consistent with the complainant, when the original result failed to obtain the complainant's profile. A metal blade used in the offence was re-tested and provided a DNA profile consistent with the defendant and complainant, when no DNA profile was originally obtained.

(f) Sexual offence: A DNA profile was obtained from the genitals of a defendant consistent with the complainant, when no DNA profile was originally obtained.

806. To complete the historical case review involves a large and complex body of work spanning the ODPP, QPS, and FSQ. A set of agreed 'Historical Case Review Principles' has been developed and agreed to by these organisations.[460] The four guiding principles are:

(a) **Administration of criminal justice**: Parties to the historical case review process will work together to facilitate the provision of accurate DNA evidence and ensure that this evidence has not, or will not, result in a miscarriage of justice.

(b) **Restoring public confidence in DNA testing**: To restore the confidence of courts and the public, it is critical that the criminal justice system in Queensland is serviced by a best-practice approach to DNA testing that consistently produces reliable and accurate results. By considering the importance of DNA evidence within the context of each case to determine whether further DNA testing, analysis or interpretation is required, the historical case review process will endeavour to consistently provide the best possible evidence to the criminal justice system.

(c) **Trauma-informed approach**: Where it is appropriate to do so, historical case reviews will proactively involve victims and members of their support networks in a manner that is safe, collaborative, accessible and

[459] Likelihood ration of >100 billion.
[460] Historical Case Review Principles. https://www.fsq.qld.gov.au/__data/assets/pdf_file/0024/334374/Historical-Case-Review-Principles.pdf

compassionate. Consultation with victims will be carried out in accordance with any relevant QPS or ODPP policies and procedures.

(d) **Reasonable use of government resources**: Further testing, analysis or interpretation of DNA samples will only be pursued where it is determined by the parties to a case that DNA evidence is relevant in the context of that case. In this manner, historical case reviews will balance the need to implement the COIs' recommendations with the responsible use of government resources.

807. It should be noted that the Inquiries were limited in duration and therefore did not have the capacity to uncover all testing issues. The DNA Review anticipates that other undetected issues may have affected the outcome of cases currently involved in the historical case review.

808. There are five main categories of historical cases being reviewed by FSQ. These are:

(a) Cases reviewed by ODPP which have been finalised in the higher courts. The ODPP nominates specific samples for FSQ to test.

(b) Cases reviewed by QPS / ODPP which are unfinalised and have not progressed beyond the lower courts (committal stream).

(c) Cases in the lower court which were finalised as guilty or discontinued which are to be reviewed by QPS.

(d) Cases that are currently before court and being managed by ODPP.

(e) QPS reviewed cases from unsolved matters (Operation Helix – see Attachment 11 which states priority categories for review).[461]

809. At the April 2025 Forensic Science Steering Committee (FSSC, a new committee chaired by FSQ) the following was agreed:

> *"Agreed to the approach to historic scientific review, in that it seeks to only remediate the issues identified by the Commission of Inquiry. Additional work identified as outside of scope will be communicated to stakeholders but not automatically progressed."*[462]

810. However, minutes from the May 2025 FSSC state further clarification and agreement is needed about the extent of the FSQ review for historical cases, including if only issues reported in the Inquiries are examined, or if the case is reviewed to find all possible issues and remedies. A workshop conducted by the DNA Review with the FSQ HCR Team reinforced the need for clarification.

811. FSQ advised there are three different kinds of scientific case reviews that FSQ could conduct. These are:

(a) A 'full review' is the standard scientific review conducted for any new case. It does not apply any restrictions on the number and type of samples, or the types of testing/re-testing that could be applied to a case. However, it does not involve reviewing a case to remediate the issues identified by the Inquiries.

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[461] Information provided by QPS and information from 'QPS RE-TESTING PRIORITIES'.
[462] DNA Review Information Request 5 '8 Historical Case Review (Inc Att 1)', page 1.

(b) An 'historical case review' (HCR) seeks to remediate only the issues identified by the Inquiries,[463] and there are suggested limits on the number of samples that could be tested. It does not consider other issues not identified by the Inquiries and does not automatically progress testing samples using advanced technologies.

(c) A 'full review' plus an 'historical case review' includes a) and b) above, giving the case the best chance of being resolved, however, it is more time and resource intensive.

812. The difference between the scientific reviews is critical and will impact the chance that a case has of being resolved.

813. The DNA Review sought advice from QPS on their scientific review type preference for each of the five main categories of historical cases. The QPS advice is provided in Table 10. QPS highlighted the priority was for cases to be given the best chance to be resolved.

Table 10 The QPS preferred approach for FSQ historical case reviews.

	1.ODPP Review: Cases finalized in higher court	**2.Cases not progressed past lower courts (committal stream)**	**3. Cases in the lower court which were finalised as guilty or discontinued. To be reviewed by QPS**	**4.Cases currently before the courts and managed by DPP**	**5. Operation Helix. Unresolved cases**
Current FSQ Practice	Not started	Not started	Not started	Full review only by Case Management Unit*	Not started
ODPP expectation	Test only nominated samples. No full review or HCR conducted	Not applicable as being completed by QPS	Not applicable as being completed by QPS	Full review	Not applicable
QPS expectation	In line with the DPP request, only test or re-interpret the nominated samples	Full review + HCR	Full review + HCR	Full review + HCR	Full review + HCR

[463] Historical Case Review Principles, page 6. https://www.fsq.qld.gov.au/__data/assets/pdf_file/0024/334374/Historical-Case-Review-Principles.pdf

6.4 Current Status and Issues Relating to FSQ Historical Case Reviews

814. The FSQ HCR Team has been significantly under-staffed since its creation in October 2024[464] due to competing priorities with BAU. Only historical cases that are active before the courts have been completed. Currently there is only an equivalent of 2.6 full-time scientific staff in the FSQ HCR Team, with support from three administrative officers. This level of resourcing is insufficient to implement or progress historical case reviews at FSQ. These staff are only funded until September 2025, and at the time of writing, no extensions have been approved, which is not only creating uncertainty among staff but also affecting forecasting and planning.[465]

815. Up until June 2025, the HCR Team was also tasked with training external staff contracted to FSQ who work remotely to interpret DNA profiles for BAU.[466] FSQ does not have a sufficient dedicated training unit. (The DNA Review notes that this was raised as an issue in the Sofronoff Inquiry and the 2024 NATA FSQ audit). The DNA Review believes that it should not be the role of the HCR Team to be the FSQ training unit. The DNA Review were advised the training responsibility was recently removed from the HCR Team.[467]

816. FSQ needs to balance BAU service delivery and the historical case reviews, however a lack of experienced reporting scientist means both needs are not being met. The DNA Review considers that over the last two and a half years there has not been a viable strategy developed for the FSQ historical case review which also appropriately balances BAU demands.

817. At the 1 April 2025 extraordinary FSQ Advisory Council meeting,[468] FSQ presented its strategy for completing historical case reviews. It estimated that 10,000 cases may be referred for FSQ historical case review, containing on average five samples per case (50,000 samples), which is equivalent to nearly three times the number of crime scene samples received by FSQ for testing in 2024.

818. FSQ recommended that the historical case review should be completed over four years, and the scientific review should be conducted by internal FSQ staff as well as outsourcing some components to external contracted staff (a 'hybrid' model). FSQ state that the average cost for outsourcing staff per full-time employee (FTE) is $686,086 + consumer price indexing. This is approximately four to five times the cost of an internal FSQ scientist. FSQ presented the costings shown in **Table 11** of contracted staff to the FSQ Advisory Council.[469] Note, this cost is human resources only; it does not include the cost to re-test samples.

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[464] October 2024 is when scientific staff commended in the FSQ HCR Team. Prior to this there was administrative staff only.
[465] Information provided by FSQ.
[466] Information provided by FSQ.
[467] Information provided by FSQ.
[468] 'FSQ Advisory Council meeting minutes 1 April 2025 'Att 2-FSQ outsourcing initiatives'.
[469] [469] DNA Review Information Request 5 '8 Historical Case Review (Inc Att 1)', page 3 (Table 5).

Table 11 Number and costing for external contracted scientists required to conduct the FSQ historical case review within 1 to 4 years.

HCR Duration in Years	FTE	2025-26	2026-27	2027-28	2028-29	Total 4 Years
HCR 4 Years	17	$11,663,474	$11,955,061	$12,253,938	$12,560,286	$48,432,760
HCR 3 Years	22	$15,093,908	$15,471,256	$15,858,037		$46,423,201
HCR 2 Years	33	$22,640,862	$23,206,884			$45,847,746
HCR 1 Year	66	$45,281,724				$45,281,724

819. FSQ presented its recommended hybrid model costings to the April 2025 FSQ Advisory Council meeting (Table 12). The FSQ Advisory Council supported FSQ's contracted strategies.[470]

Table 12 FSQ Summary of costs for the recommended hybrid staffing model over four years, including FTEs, contracting costs, and consumables.

Item	2025-26	2026-27	2027-28	2028-29	Total
FSQ FTE	$6,127,250	$6,127,250	$6,127,250	$6,127,250	$24,509,000
Outsourcing costs	$11,663,474	$11,955,061	$12,253,938	$12,560,286	$48,432,760
Consumables	$5,625,000	$5,765,625	$5,909,765	$6,057,509	$23,357,899
Total	**$23,415,724**	**$23,847,936**	**$24,290,953**	**$24,745,045**	**$96,299,659**

820. Use of contracting staff that are four to five times the cost of internal FSQ staff would cost the government an additional $36M to $38M over four years in FTEs alone. In the Reviewers' opinion, this is questionable value for money resourcing. The government's end-to-end outsourcing announcement[471] on 22 May 2025 frees up internal FSQ staff to be reassigned from BAU to the historical case review. This will significantly reduce the time it takes to undertake the historical case review project. Furthermore, outsourcing new major crime cases end-to-end is more cost efficient than contractor support to only undertake one part of the DNA profiling process (DNA interpretation).

821. [redacted] This suggests the FSQ recruitment process may have missed an opportunity to recruit suitable DNA experts. The reasons for this are not clear to the DNA Review. The DNA Review is also aware of multiple existing staff within FSQ

[470] DNA Review Information Request 5 'Issues paper-Additional functions-Extraordinary meeting-1 April 2025'.
[471] https://statements.qld.gov.au/statements/102595
[472] Information provided to the DNA Review from anonymous scientists.

who could be trained to perform historical case reviews, which again would be more cost effective than hiring external contractors (many of whom are based overseas and interstate) and would contribute to the long-term growth of existing staff and support jobs for Queenslanders.[473]

822. The DNA Review suggests that previous employment applications to FSQ be reviewed to identify suitable DNA experts, and internal experts, who (if they remain available) should be offered the opportunity to advance their skills and be trained to perform DNA profile interpretation, case management, report writing, and historical case reviews.

6.5 Suggested Model for FSQ Historical Case Reviews

823. The DNA Review conducted a workshop with the FSQ HCR Team in June 2025 to discuss their ideas and to better understand current impediments. The suggested model outlined below has arisen from a collaborative approach with the DNA Review and the FSQ HCR Team. The model considers the management structure, how staffing capacity can be increased internally, the HCR Team composition, balancing historical case reviews with BAU, provision of external scientific advice and support, additional quality assurance measures, training and competencies, incorporation of research support, improvement to case management systems, collection of metrics, measures which could rebuild community and victim trust, collaboration with QPS, and an enduring vision for the HCR Team which would benefit ongoing cold cases.

6.5.1 Establishing a Project Manager Position

824. The FSQ HCR should be managed as a project by an experienced and qualified project manager linked to the proposed FSQ Program Management Office (see section 5.11469). This project management role is currently performed by scientific staff, whose time should be focused on scientific tasks. This will also enable more effective planning and efficient allocation of resources. A project manager should be appointed as soon as possible to provide a better indication to government of exactly what resources are required to complete the historical case review and anticipated timeframes. An agile model is suggested to allow for the complexity, uncertainty in number of cases and samples, and discovery of any new issues arising from the historical reviews.

6.5.2 Increasing the Number of Scientists in the FSQ HCR Team and HCR Team Composition

825. The current FSQ work model separates volume crime and major crime reporting scientists, with major crime reporting scientists receiving a higher level of training which enables them to provide court testimony. This includes four extra training modules, however, the base skills are the same with both groups of scientists completing seven modules of training.[474] There are two teams of major crime scientists, one comprising of 13 scientists and the other 14 scientists. The volume crime team comprises of 13 scientists, some of whom have many years of experience. The DNA Review considers the volume crime scientists should receive the extra four modules of training to enable them to become reporting scientists. The extra training, followed by mentoring and development of experience working on major crime cases will enable the volume crime scientists to be competent reporting scientists. This will provide a significant surge of capability for FSQ, providing more scientists for the HCR Team, and to assist in the 'started cases backlog'. Investing in full-time Queensland government employees is

[473] Information provided to the DNA Review from anonymous scientists.
[474] DNA Review Information Request 48 'QIS2 37239V2 – Case Management Unit Technical Training Program'.

preferred to investing in training short-term contracted employees and will provide long-term solutions for FSQ.

826. The FSQ HCR Team contains highly knowledgeable and skilled scientists, although they are under resourced, with only 2.6 FTE employees. The complexity of the historical case reviews requires highly experienced forensic biologists with in-depth organisational knowledge spanning the 15 years of QHFSS management to understand and address the Inquiry concerns, use FSQ legacy systems, and the ability to detect new issues which may help to resolve cases. More highly experienced internal scientists with extensive corporate knowledge are needed within the HCR team to undertake the complexity of the reviews. The DNA Review recommends this should also be supplemented with new junior forensic biologists to develop and share corporate knowledge and build experience. The government's outsourcing plan will free up scientists who are currently working on BAU and will enable the training of these staff.

827. Further internal experienced reporting scientists should join the FSQ HCR Team throughout the second half of 2025, and more scientists are expected to join as the BAU pressures are relieved by the government's outsourcing plan. Data should be regularly collected and analysed by the HCR Team Project Manager to better understand effort and resources required to complete the scientific reviews and enable more refined forecasting for staffing needs and estimated timeframes to complete all reviews.

828. The next six to 12 months of the FSQ HCR Team should be considered a 'test and adjust' period to further develop procedures, refine workflows, and fully develop case management information systems.

829. Access to resources used for BAU (for example evidence recovery experts and the analytical processes) should be planned for and balanced with BAU demands to enable both to progress.

6.5.3 Establishment of a Voluntary Expert Scientific Network

830. The DNA Review recommends that the DoJ should establish a voluntary scientific network of highly experienced advisors from across Australia and internationally to support the FSQ HCR Team (the 'HCR scientific network'). This network could be drawn upon to review scientific approaches and provide advice on complex cases. This is similar to the approach taken for the scientific response to the World Trade Centre Attacks in 2001, where the Kinship and Data Analysis Panel[475] was formed by highly regarded volunteers. This group should provide scientific advice as needed by FSQ, rather than being a decision-making group or a committee with a governance function. This group should also review HCR project milestone reports and provide independent advice on the progress of the historical case review.

831. An advanced draft suite of documents have been generated by the FSQ HCR Team. Support is required to enable finalisation of these (which includes corporate documents, manuals, standard operating procedures, working instructions, templates, etc). The 'HCR scientific network' could provide some support to achieve this.

6.5.4 Quality Assurance

[475] Kinship and Data Analysis Panel. https://www.ishinews.com/wp-content/uploads/2021/07/Kinship-and-Data-Analysis-Panel-Handouts_Bruce-Budowle.pdf

832. Additional quality assurance measures are needed for the FSQ HCR, to provide reassurance to victims and the community that cases are being completed to the highest standard, to rebuild trust, and avoid conflicts of interest and any perceptions of bias (i.e., 'FSQ is reviewing its own work'). The HCR Team should collaborate with the FSQ Quality Team to develop additional quality assurance measures. This should include providing a small number of cases reviewed by each FSQ scientist to the 'HCR scientific network' or other independent scientists to conduct blind verification reviews (these review of documents and written strategies can be performed remotely).

833. An external independent review of the FSQ HCR Team competencies required to undertake the historical reviews would provide further assurances of reliability and identify any areas of knowledge that could be bolstered to perform the complex work, including advanced DNA methods and technologies that could be applied to cases undergoing a full review.

6.5.5 Access to Research and Development

834. Access to research and innovation is essential to ensure the best methods for re-testing are chosen (refer to Section 6.6 - FSQ Re-testing of Samples Affected by Project 13). It is acknowledged that the FSQ Research and Innovation Team's priority is validation and verification of instruments and workflows, therefore academic and external partnerships should be considered to assist the HCR Team with research and development.

6.5.6 Case Management System and Communication

835. FSQ advised there was not an appropriate historical case review case management information system available.[476] It also stated that FSQ currently has an in-house solution, however, FSQ is of the view that this should be upgraded or replaced with a more suitable alternative.

836. The DNA Review supports FSQ's plan to collect success metrics for the historical case review and make them publicly available to rebuild victim and community trust.[477] The DNA Review regards the current level of transparency as insufficient.[478] Where approved by QPS, ODPP, and DoJ, de-identified case examples should be conveyed publicly to highlight successes.

837. There should be greater communication between the FSQ HCR Team and the QPS HCR Team on a case-by-case basis, and to enable ongoing process improvements. This will be addressed if the FSQ historical case review is managed by a Project Manager, which will involve the establishment of an integrated project team with FSQ, QPS, and ODPP.

6.5.7 FSQ HCR as an Enduring Highly Specialised Team

838. The FSQ HCR Team needs to be supported to become a highly skilled team. They are currently well positioned to achieve this given current experience levels, extensive corporate knowledge, opportunities to further expand their knowledge through the historical case review process, and via the proposed 'HCR scientific network'.

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[476] Information provided by FSQ.
[477] Information provided by FSQ.
[478] https://www.fsq.qld.gov.au/historical-case-review

839. The FSQ HCR Team suggested to the DNA Review there are synergies between the historical case reviews and ongoing cold cases. These are currently handled by the FSQ Case Management Unit and not sufficiently progressing given no resources have been dedicated to cold cases.[479] BAU cases with court dates are currently prioritised ahead of cold cases, which is another reason cold cases do not progress while residing in the Case Management Unit.

840. The synergies between the FSQ historical case review and cold cases include case complexity, the requirement to have a high level of corporate knowledge, and the need to review cases considering the historical review principles. The DNA Review supports the expansion of the FSQ HCR Team to include cold cases and remain as an enduring unit after the historical case reviews are completed. QPS have advised there are many hundreds of unresolved violent sexual offences and homicides (cold cases) they would like progressed, which are not able to be progressed due to ongoing competition with BAU[480] (see Section 5.9.5 –Development of a QPS led DNA Investigative Group). QPS have triaged these cold cases and believe they could be resolved with further DNA testing.

Attachment 10 Investigations Involved in the Historical Case Review[481]

Table 13 Investigations involved in the historical case review by region.

District	Count
BRISBANE	8945
SOUTHEASTERN	6415
NORTH COAST	4857
SOUTHERN	3587
CENTRAL	3074
NORTHERN	2781
FAR NORTHERN	2652
(blank)	86
STATE	7
INTERNATIONAL	4
INTERSTATE	4
Grand Total	**32412**

[479] Information provided by FSQ.
[480] Information provided by QPS.
[481] Data provided by QPS.

Table 14 Investigations involved in the historical case review by offence type.

Offence	Count
Armed Robbery	3988
Serious Assault	3931
Rape & Att. Rape	3897
Grievous Assault	3637
Other Sexual Offences	2347
Unarmed Robbery	1828
Fire	1514
Serious Assault (Other)	1296
Referral Services	1215
Accidental	1022
Unlawful Entry With Intent - Dwelling	1011
Domestic Violence Contravene DFVPA	672
Life Endangering Acts	672
Kidnapping & Abduction etc	571
Other Property Damage	553
Other Miscellaneous	375
Drug Offences	358
Unlawful Use of Motor Vehicle	357
Common Assault	324
Homicide - Attempted Murder	292
Domestic Violence Applications	246
Hit and Run	226
Traffic and Related Offences	196
Injury	185
Stalking	177
Weapons Act Offences	170
Missing Person	157
Good Order Offences	140
Fatal	108
Other Stealing	88
Hit and Run	86
Vehicles (steal from/enter with intent)	84
Undetermined Fire	82
Traffic and Related Offences	78

Offence	Count
(blank)	54
Unlawful Entry With Intent - Other	53
Police Use of Force - Human	51
Extortion	46
Exploitation of Children	41
Homicide - Manslaughter (excluding driving causing death)	33
Stealing from Dwellings	30
Homicide - Driving causing death	29
Possess etc. Tainted Property	22
Trespassing and Vagrancy	20
Domestic Violence Investigation	19
Unlawful Entry With Intent - Shop	18
Weapons Act Offences - Other	15
Liquor (excl. Drunkenness)	11
Shop Stealing	11
Other Fraud	10
Assault	9
Homicide - Unlawful striking causing death	8
Receiving Stolen Property	8
Marine Incident	5
No Injury	5
Aircraft Incident	4
Police Use of Force - Animal	4
Departmental	3
Non Suspicious Fire	3
OC Spray - Human	3
Possess Property Suspected Stolen	3
Departmental	2
Other Miscellaneous	2
Cyber	1
EEA (Emergency Examination Authority)	1
Forensic Scene Reports	1
Found Property	1
Mental Health Act 2000 - Request for Police Assistance	1

Offence	Count
Operation (Drugs)	1
Prostitution Offences	1
Grand Total	32412

Attachment 11 Operation Helix DNA Testing Priorities[482]

Where it is determined retesting should occur, it will need to be prioritised based on the nature of the offence and the threat to community safety.

1. Life imprisonment offences that presents a high community safety risk. (e.g. offender unknown, risk of repetition, DNA highly probative)
2. 14 year imprisonment offences with high community safety risk
3. Life imprisonment offences that presents a low to moderate community safety risk.
4. 14 year imprisonment offences with a low to moderate community safety risk
5. Life imprisonment offences with no community safety risk
6. 14 year imprisonment offence with no community safety risk
7. All other matters

[482] Information provided by QPS 'QPS RE-TESTING PRIORITIES'.

6.6 FSQ Re-testing of Samples Affected by Project 13

6.6.1 Summary

841. The Project 13 method was the failed introduction of robots in 2007 to extract DNA from crime scene evidence by the QHFSS and was the subject of the Bennett Inquiry. Project 13 was found to recover ~90% less DNA than the manual method it replaced and was used by the laboratory until 2016. A total of 103,187 crime scene samples were processed using this method.[483] The QPS, ODPP and FSQ are conducting historical case reviews which will identify which of these DNA samples require re-testing.

842. Of concern to the DNA Review, FSQ staff advised that it has not conducted any research to understand the best way to identify, and re-test samples affected by Project 13. FSQ advised the DNA Review that it does not intend to conduct any research to identify the best method prior to re-testing samples.[484] The DNA Review considers that FSQ's current plans to review and re-test samples affected by Project 13[485] are not scientifically reliable and there is a very high risk it will fail to detect and/or destroy evidence. Such an outcome would also undermine the considerable efforts and resources undertaken by QPS and the ODPP to identify relevant cases.

843. The DNA Review made a new discovery about tapelift evidence[486] processed using the Project 13 method. They were treated in a way where 60% to 70% of cells on the tapelift were missed in the DNA extraction process. The tapelift containing these cells has been retained at FSQ and can therefore be re-tested. This is a key discovery which will greatly benefit re-testing of these samples.

844. FSQ should not re-test any samples affected by Project 13 until research has been conducted to identify the best method to use on these samples. Until this is accomplished, the DNA Review is of the opinion that the historical case review cannot be successfully completed.

845. The DNA Review observed a disconnect between key FSQ groups required to complete the historical case review, including the HCR Team, the Research and Innovation Team, the FSQ Quality Team, and the operational sections. The DNA Review believes that this is inhibiting a holistic, best practice approach being taken to the historical case review.

6.6.2 Background and Issues

846. It was discovered in the Sofronoff Inquiry that a method used by QHFSS on the Blackburn evidence[487] was not working appropriately (the 'Project 13' method). Whilst the Sofronoff Inquiry did not uncover the flawed Project 13 method it nevertheless provided a sufficient recommendation in the final report to investigate it further.[488]

> *"The laboratory should conduct a retrospective review of positive control extraction batches processed by the MultliProbe II instrument to determine if*

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[483] Media Statement 'Government commits to DNA Commission of Inquiry Recommendations', 20 November 2023. https://statements.qld.gov.au/statements/99193
[484] FSQ communication 28 April 2025.
[485] DNA Review Information Request 11.10 'Forensic Science Queensland Review of Historical Case Files-DRAFT'.
[486] Tapelift: A method used to recover DNA from crime scene evidence.
[487] Shandee Blackburn was murdered in 2013 and DNA evidence presented in her homicide trial was later found to be improperly tested. This triggered two Commission of Inquiries in Queensland (2022 and 2023).
[488] 'Final Report: Commission of Inquiry into Forensic DNA Testing in Queensland', page 265, paragraph 3.

this extraction method was performing sub-optimally, and if so, the period of time in which a sub-optimal method was used and whether there is utility in re-testing or re-analysing any potentially affected samples."

847. After the Sofronoff Inquiry, the flaws of Project 13 were discovered, which triggered the Bennett Inquiry. The Bennett Inquiry confirmed that the Project 13 method was improperly introduced by QHFSS in 2007 and had never been properly validated or fixed. It remained unvalidated throughout its use in the laboratory until being decommissioned in 2016. The Bennett Inquiry stated:

> "*As a consequence, the COI recommends that all samples previously tested using the Automated DNA IQ Method be re-tested, wherever possible and in accordance with a proper process of re-testing. It is not sufficient to re-test DNA extracted by the Automated DNA IQ Method. The relevant recommendation from the First COI should be amended to make this clear*."[489]

848. To date the ODPP have identified four serious and violent cases that may have been affected by Project 13 (these do not have court dates so are not currently being progressed by FSQ).[490] These have yet to be re-tested by FSQ. It is unknown how many have been identified by QPS, though the DNA Review expects it to be significantly more.

849. The Historical Case Review Principles lists the classes of cases impugned by the Inquiries, and relevantly includes:

> "*Samples previously tested using the MultiProbe II instrument* [the method relating to Project 13] *between 29 October 2007 and 21 November 2016*."[491]

850. The draft FSQ procedure for 'Scientific Review of Historical Case Files'[492] states:

> "*The Multiprobe II was used in DNA extractions but did not provide consistent yields in DNA extractions. Some extraction runs on the instrument may have yielded less DNA in the extract than in other runs. There may be samples in which the Multiprobe II provided acceptable results and might not need reworking."*

851. The assumption made by FSQ that there may have been some Multiprobe II extraction runs that provided acceptable results does not appear to be based on any scientific data or research. Data analysis conducted to date for the Bennett Inquiry demonstrates this assumption is false.[493]

852. Jo Veth was engaged as an independent expert for the Sofronoff Inquiry and confirmed the Project 13 method was flawed.

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[489] Final Report: Commission of Inquiry to Examine DNA Project 13 Concerns', page 3, paragraph 1.
[490] ODPP e-mail communication to Dr Kirsty Wright, 31 March 2025.
[491] DNA Review Information Request 11.11 'Historical Case Review Principles: Developed in accordance with Recommendation 14 of the Commission of Inquiry into Forensic DNA Testing in Queensland final report.'
[492] DNA Review Information Request 11.10 'Forensic Science Queensland Review of Historical Case Files-DRAFT', pages 6-7.
[493] Statement of witness Dr Kirsty Wright 'Introduction of a Failed DNA Extraction Method at Queensland Health Forensic and Scientific Services DNA Analysis Unit', 23 October 2023. https://www.dnaproject13inquiry.qld.gov.au/assets/exhibits/1-EXP.010.010.0001_Redacted.pdf and report provided to CoI 2023 by Dr Kirsty Wright 'Retesting Advice for Samples Affected by Project 13', 5 November 2023. This document was publicly available on the CoI 2023 website, but has since been removed without explanation.

"*The data set showed that positive controls extracted from the MultiProbe® II instrument* [arising from Project 13] h*ad much lower quantitation results than the positive controls extracted from the Maxwell® instrument. This suggests that DNA was not being recovered optimally using the MultiProbe® II extraction method*."[494]

853. The Bennett Inquiry also confirmed the Project 13 method was flawed and none of the failed results could be relied upon throughout the time the method was in use:

> *"The Automated DNA IQ Method extracted less DNA than comparable manual methods. It follows that samples that were subject to this method of extraction that recorded insufficient DNA for further testing may well have contained sufficient DNA for forensic purposes. It goes without saying that the evidence available for criminal trials may thus have been compromised and convictions that could otherwise have been secured did not occur."*[495]
>
> *"no proper validations were carried out to support the reliability of the whole procedure of extracting DNA and then utilising the MultiProbe Device."*
>
> *"Accordingly, no faith can be placed in results over the whole of the period from 29 October 2007 to 21 November 2016 in cases where there was a failure to measure extracted DNA from samples sufficient for processing."*

854. The FSQ procedure further states the strategy for re-testing samples affected by Project 13 is to:

> "*...evaluate positive control and sample quantification and electropherogram data. If the data does not appear to be commensurate to the sample type or case information thereby indicating the extraction method was performing sub-optimally, determine whether the samples should be reworked through re-extraction*."[496]

855. This strategy is also scientifically flawed, as it incorrectly assumes the positive control (a known test sample included in a batch of crime scene samples processed by the Project 13 method) will be a reliable indicator of whether all samples have been affected. Simply re-testing the affected samples with standard methods does not consider how the flawed method impacted the remaining cells and DNA, and what is the best method to retrieve them from crime scene substrates stored at FSQ (swabs and tapelifts). Overall, the DNA Review believes that the FSQ strategy (if not altered) will fail to detect or destroy evidence, and waste evidence through incorrect testing methods. This introduces a further risk of failing to identify violent offenders and may deny victims long-awaited justice.

856. The DNA Review found a new issue in relation to the Project 13 method. The process to extract DNA tapelifts using the flawed Project 13 method missed 60% to 70% of available cells because not enough of the chemicals needed to remove cells from the

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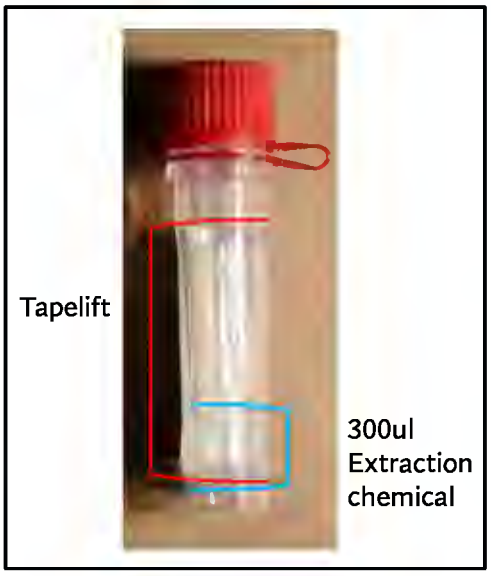
[494] Final Report 'Commission of Inquiry into Forensic DNA Testing in Queensland', page 363, paragraph 1152. Taken from Exhibit 218, Expert report of Dr Bruce Budowle and Johanna Veth, 23 November 2022.
[495] Final Report 'Commission of Inquiry to examine DNA Project 13 Concerns', page 2, paragraph 5, and page 4, paragraph 4. https://www.dnaproject13inquiry.qld.gov.au/assets/DNA%20Project%2013%20Report.pdf
[496] DNA Review Information Request 11.10 'Forensic Science Queensland Review of Historical Case Files-DRAFT', page 7.

tapelift was added to the tubes (Figure 44). Therefore, the cells remained on the tapelift rather than being available for DNA profiling.

857. This key finding by the DNA Review was not uncovered in the 2022 or 2023 Inquiries and is vital knowledge for the historical case review re-testing strategy. This flaw is in addition to the flaws already identified from the Project 13 method. Therefore, of the 30% to 40% of cells that were removed from the tapelift, it would be expected that ~90% less DNA would be retrieved from them compared to if the previous QHFSS manual method was used. These two issues combined would mean that trace tapelifts would be unlikely to provide any DNA profiles when they would be expected to.

858. It is the DNA Review's opinion that the benefit of re-testing tapelifts has been further confirmed with this discovery. However, research is needed to ensure the best methods are used to retest the tapelifts and swabs.

Figure 44 A tube containing a tapelift processed using the Project 13 method. The red bracket indicates the height of the tapelift in the tube. The blue bracket indicates the volume of chemical covering the tapelift, leaving 60% to 70% of the without any contact with the chemical.



859. FSQ has indicated it is willing to take advice from the DNA Review and external researchers in relation to re-testing DNA samples affected by Project 13.[497] Such a collaborative approach is considered a positive path forward to achieve success for the FSQ historical case review.

Recommendation 23	**23.1** Re-testing of Project 13 affected DNA swabs and tapelifts should not occur using the current FSQ approach. **23.2** Research should be conducted to identify the best method to re-test Project 13 samples (swabs and tapelifts). FSQ should collaborate with the DoJ Expert Team, and any relevant external groups to progress this research.

[497] FSQ communication.

Intent and desired end state	**Intent:** No samples affected by Project 13 will be tested by the current FSQ approach, which will prevent the evidence being wasted. A method will be developed and validated that provides the best chance of recovery and profiling of trace DNA evidence from swabs and tapelifts affected by the Project 13 method. This will provide impacted victims and their families with an opportunity for justice and reassure them the method with the best chance of success was applied. **Desired End State:** The research project is completed and the report provided to DoJ and relevant end users. The method/s identified have been verified / validated.

6.7 DNA Evidence in the Courts

Key observations, findings, and conclusions:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

(o) Some DNA evidence is not well understood by end users which may impact on the reliability of DNA evidence. Specifically, the some DNA mixtures, and the way FSQ presents the statistical evidence can be difficult to accurately evaluate.

(p) Research is needed to develop an improved DNA reporting model, and end user training is required.

(q) FSQ is not reporting on some DNA mixtures that could be probative. Instead FSQ is reporting some DNA mixtures are too complex to interpret which ignores evidence that can be interpreted and lacks transparency.

(r) The FSQ historical case review should include re-interpretation of these mixtures in their review of cases.

6.7.1 Summary

860. The DNA Review spoke to a range of participants in the criminal justice system. A common concern conveyed was the difficulty they had understanding some DNA evidence presented by FSQ including witness statements and oral testimony. Typically, it was the presentation of DNA statistics, (the likelihood ratio) which made evaluating the DNA results difficult, particularly for DNA mixtures and partial profiles.[498] If DNA evidence is not adequately understood and accurately evaluated, it presents both a challenge and risk to police investigations and court outcomes, potentially leading to a prejudicial effect on the outcome of the proceedings (for example if evidence was incorrectly weighted it could unfairly create a bias in decision making). Currently FSQ has no strategy in place to overcome this difficulty, and it will therefore persist unless there is opportunity to better educate end users of the reports and/or facilitate

[498] Partial profiles are any profiles where the full complement of DNA regions are not successfully profiled. DNA mixtures are profiles consisting of more than one person's DNA.

presentation of content in a manner that remains scientifically true and accurate while being more comprehensible to a lay person.

861. Another issue discovered during the DNA Review was how FSQ chose to report some evidence from DNA mixtures. [redacted]

6.7.2 Communication and Presentation of DNA Evidence

862. When a DNA profile from a suspect or victim is consistent with a crime scene DNA profile, forensic biologists use statistical software (FSQ uses STRMix™) to provide a likelihood ratio calculation. The likelihood ratio compares how well the DNA evidence supports a proposition that the crime scene DNA came from a nominated person rather than from someone else. The understanding of this statistic becomes more difficult when two or more people have contributed to a DNA profile (a 'DNA mixture'). To help the courts understand what the likelihood ratio means, scientists may provide a qualitative, or 'verbal scale' which describes how much support the DNA evidence provides for the nominated person being the donor of the crime scene DNA.

863. The DNA Review heard from many experts who had been working with police or as part of the legal system for many years, who had difficulty understanding the likelihood ratio or verbal scale in some instances. This expressed difficulty of comprehension impacts investigators and the court's ability to perform their roles and make appropriate decisions. All groups consulted sought for the presentation of DNA evidence to be improved, and for training to be provided to help them better understand it and utilise the results effectively.

864. The manner of communication of DNA evidence is therefore a matter that requires improvement to ameliorate risk to the delivery and use of Queensland's forensic DNA services. Misunderstanding DNA evidence could cause incorrect judicial outcomes, the evidence could also be considered prejudicial under the Christie Discretion.[499]

865. A focus group facilitated by the DNA Review with private defence lawyers heard four main issues:

(a) The presentation of DNA evidence in some instances is not well understood by the legal fraternity, police, and the jury, in particular the likelihood ratio calculation.

(b) The complexity and risk for misunderstanding increases when evaluating and presenting partial profiles and complex mixtures.

(c) Forensic biology experts are not reporting the number of alleles which are consistent between a nominated person and the crime scene evidence making the distinction between what the evidence is (the alleles) and what the opinion of the experts is, difficult to discern. That is, the statistic (likelihood

[499] The Christie discretion allows a trial judge to exclude evidence that would otherwise be admissible if it may unfairly prejudice the defendant. It involves weighing the probative value of the evidence against the risk it will unfairly prejudice the accused.

ratio) helps form the opinion and is reported, but the evidence, which includes the number of alleles, is not reported.

(d) The STRMix™ software operates under many assumptions and limitations which are unknown or not well understood by some forensic biology experts and some court experts given the highly complex statistical underpinnings of the software.

866. The focus group, which included private defence lawyers and a forensic biology statistical expert, compiled a paper detailing each of the issues further (Attachment 12).

867. The presentation of DNA evidence to courts is a critical step in the DNA service delivery continuum. Investment in crime scene collection and laboratory analysis is wasted if the final DNA results are not well understood, and worse, may cause a miscarriage of justice. The DNA Review considers there is clear evidence that DNA results in Queensland need to be communicated and presented in a way that is more easily understood by police and courts.

868. However, end users also provided positive feedback about the new summary of results table provided by FSQ. They advised the results table is easy to use and effectively collates all the DNA evidence together under each crime scene item.

6.7.3 Lack of Transparency of Some DNA Evidence

869. The Sofronoff Inquiry found the QHFSS laboratory was not correctly reporting some DNA mixtures. Specifically, they reported DNA mixtures as 'complex' and not suitable for interpretation when they should have provided these results to the police and courts. Additionally, scientists were over-estimating the number of contributors to a DNA mixture.[500] The HCR includes these two issues as part of the case review process.[501]

870. Given the relatively short timeframe of the Inquiry, it would not be expected that all issues concerning DNA interpretation could be identified.

871. The DNA Review found that FSQ is not reporting on some DNA mixtures which could be probative. For a mixture with a clear major contributor[502] and an indeterminable number of minor contributors[503], FSQ currently report this as a complex mixture[504] [redacted].

872. The DNA Review concludes the failure to appropriately report these DNA mixtures appears to be due to the mixture not being suitable for automated interpretation. However, in this instance, the major contributor could be interpreted first by isolating it from the mixture through a manual process and then analysing it with STRMix™ to

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[500] Final Report DNA Commission of Inquiry into Forensic DNA Testing in Queensland. 13 December 2022. https://www.health.qld.gov.au/__data/assets/pdf_file/0036/1196685/final-report-coi-dna-testing-qld-dec-2022.pdf

[501] Historical Case Review Principles, page 6. https://www.fsq.qld.gov.au/__data/assets/pdf_file/0024/334374/Historical-Case-Review-Principles.pdf

[502] Major contributor to a DNA mixture: One person's DNA is present in a crime scene DNA samples in much greater quantities than other people's DNA, making it possible for a scientist to separate their alleles from the rest of the alleles in the mixture.

[503] Minor contributors to a DNA mixture: One or more peoples DNA is present in a crime scene DNA sample in much smaller quantities than another person's DNA. In some instances it is not possible for a scientist to nominate how many people's DNA is present in a DNA mixture.

[504] A 'complex mixture' is a term used by FSQ to convey they cannot reliably interpret a DNA profile that contains the DNA of more than one person due to complex technical limitations.

provide a calculation which could be reported. However, FSQ does not allow its reporting scientists to perform this manual process.

873. Essentially, this approach lacks transparency and is wasting valuable evidence which could be reported to police, the courts, or uploaded to the National Criminal Investigation DNA Database to find links which could help resolve the crime. The QPS advised the DNA Review they would prefer for these DNA mixtures to be interpreted by FSQ.

Recommendation 24	**24.1** The desired end state of DNA evidence presentation needs to be defined and achieved for all levels of end user understanding. **24.2** Collaborative research between end users and research experts should be conducted to: a) Provide an *aide memoire* of assumptions and limitations surrounding DNA mixture statistics, including those used by the STRMix software, in a format that can be easily understood and used by police and the courts when evaluating DNA evidence. b) Identify improved ways of presenting DNA evidence to police and courts so it can be better understood and evaluated. c) Provide a) and b) under various DNA evidence scenarios including single contributor profiles, partial profiles, major minor mixtures, complex mixtures, mixtures of 2-5 people. d) The research should inform new DNA evidence presentation standards in Queensland. The research should inform improved DNA evidence education packages catered for the police and courts. These education packages will require funding and resources to develop and deliver in various formats.
Recommendation 25	**25.1** FSQ should change its protocols to allow scientists to report DNA mixtures where the major component in a complex mixture can be manually interpreted. **25.2** FSQ should include this interpretation process as part of the historical case reviews.
Intent and desired end state	**Intent:** End users will be better able to understand DNA evidence, so it has meaning in the context of their role within police investigations or the judicial system, and enable them to better scrutinise the DNA evidence. DNA experts will provide and present the evidence in such a manner that allows for this to take place. End users will be better educated about

	DNA and have access to newly developed targeted resources to facilitate their understanding. FSQ will change its DNA interpretation standard operating procedures and train their staff to better interpret mixtures, so it accurately reflects the evidence and does not waste information. The FSQ historical case review will include this mixture interpretation when reviewing cases. **Desired End State:** The research project has been completed, the *aide memoir* has been developed and is available for end users. The DNA evidence education packages have been developed and are available to relevant end users. The new DNA evidence presentation standards have been developed and implemented. FSQ has implemented the improved DNA mixture interpretation standard operating procedure, trained staff, and have included the mixture interpretation strategy in the historical case review.

Attachment 12 Advice From DNA Review Focus Group – Private Defence Experts

Drafted by Lynne Weathered, Janet Chaseling, Ron Behlau, and Jason Murakami

Communication and Presentation of DNA Evidence

Issues

1. It is submitted that the communication and presentation of DNA evidence, in particular the likelihood ratio calculation, is (with some exceptions) not generally well understood by the legal fraternity, police, and the jury.

Comments by senior legal figures and attendees at various forums as well as a number of symposiums held by Griffith University Innocence Project over the past twenty years, have underscored challenges with understanding DNA statistics and the desire for this evidence to be presented in such a way that it can more easily be understood by them and all those dealing with DNA evidence within the criminal justice system. For example, at the 2017 Public Symposium: *Lifting the Veil on DNA: What Do the Statistics Really Mean?,* held at Griffith University, Southbank, senior legal figures publicly expressed this concern about understanding of DNA evidence.

More broadly, research articles have highlighted how DNA evidence and in particular the likelihood ratio is highly influential in criminal matters but can be misunderstood by juries.

2. Use of DNA Qualitative Table

The following table is used in Queensland and elsewhere, as a guideline for DNA experts to communicate how strongly the DNA evidence supports the prosecution's hypothesis (based on LR thresholds):

If the likelihood ratio is…	Then the evidence provides…
1 to 10	limited support…
10 to 100	moderate support…
100 to 1,000	moderately strong support…
1,000 to 10,000	strong support…
10,000 or greater	very strong support…

It is submitted that this guideline is subjective, outdated and represents stronger support for the prosecution case than can be fairly attributed by the relevant LR. Further, it does not communicate the risks involved of an adventitious match with any LR of less than 1 million.

It is recommended that the qualitative table no longer be used, or at a minimum be reviewed, with any future qualitative table to include a report on the probability of an adventitious match using appropriate population data.

3. The complexity and risk for misunderstanding increases when evaluating and presenting partial profiles and complex mixtures.

i. This was one of the issues specifically raised by a leading DNA researcher in Queensland at a 2017 Research Roundtable, held at Griffith University, Southbank.

ii. According to a 2019 report in the Brisbane Times, 138 cases involving mixed DNA between the years of 2013 and 2018, needed to be recalled due to uncertainty as to the number of contributors. The article further noted that at that time it was unclear as to by whom and how these cases were reviewed. We have no further knowledge as to whether the clarity sought around how these cases were reviewed was ever resolved. Please see: https://www.brisbanetimes.com.au/national/queensland/more-than-130-cases-of-mixed-dna-samples-recalled-in-five-years-20190131-p50uw0.html

iii. In 2023, a major review undertaken by the National Institute of Justice in the United States, noted that mixture samples were the most common source of evidence interpretation error in regard to DNA evidence. See https://nij.ojp.gov/topics/articles/impact-false-or-misleading-forensic-evidence-wrongful-convictions

iv. In 2024 a major Report by the National institute of Standards and Technology in the United States, (NIST) highlighted that "DNA mixtures, in which the DNA of more than one individual is present in a sample, are inherently more difficult to interpret than high-quality single-source." See: Butler, J.M., et al. (2024) DNA Mixture Interpretation: A NIST Scientific Foundation Review. (National Institute of Standards and Technology, Gaithersburg, MD), NIST IR 8351. https://doi.org/10.6028/NIST.IR.8351 : https://nvlpubs.nist.gov/nistpubs/ir/2024/NIST.IR.8351.pdf (at p 35)

4. The forensic biology experts are often no longer reporting the number and identity of alleles that are consistent between a nominated person and the crime scene evidence making the distinction between what is the evidence (the DNA alleles) and what is the expert's opinion of the evidence difficult to discern.

i. 'DNA evidence' is clearly being confused with the 'interpretation of the DNA evidence'. This issue was highlighted by the NIST Report, Key Takeaway #2.6:

KEY TAKEAWAY #2.6: Likelihood ratios are assigned and not measured. Different individuals may assign different LR values, even when using probabilistic genotyping systems, when presented with the same evidence because they base their judgments on different collection protocols, quantification systems, STR kit results, interpretation protocols, models, assumptions, or computational algorithms. For any given sample, there is no single, true likelihood ratio. (at p 54)

ii. The NIST Report also notes within it that the forensic scientist should interpret the evidence before any statistical analysis is carried out and that this initial interpretation should be part of the material that the court receives.

5. ***The STRMix software (the probabilistic genotype software chosen by Queensland) operates under many assumptions and limitations, some of which are unknown or not well understood by forensic biology experts and the courts****.*

See for example Butler, J.M., et al. (2024) DNA Mixture Interpretation: A NIST Scientific Foundation Review. (National Institute of Standards and Technology, Gaithersburg, MD), NIST IR 8351. https://doi.org/10.6028/NIST.IR.8351: https://nvlpubs.nist.gov/nistpubs/ir/2024/NIST.IR.8351.pdf , where key takeaways included but were not limited to:

KEY TAKEAWAY #4.2: There is a growing body of scientific literature on DNA mixture interpretation. However, supporting data provided in the scientific literature is not always sufficiently detailed for an independent review of claims. Such data and details, if required as part

of the journal publication acceptance process, will assist with independent review of published articles. (at p 91)

KEY TAKEAWAY #4.3: Currently, publicly accessible validation data does not have the detail (including metadata, protocols, conditions, etc.) to enable an external and independent assessment of the degree of reliability of DNA mixture interpretation practices, including the use of probabilistic genotyping software (PGS) systems. (at p 94)

KEY TAKEAWAY #4.4: Current proficiency tests are primarily focused on single-source samples and simple two-person mixtures containing large quantities of DNA. To appropriately assess the ability of analysts to interpret complex DNA mixtures, tests of analysts should include the types of samples often seen in forensic casework, such as mixtures with low-template components and more than two contributors. (at p 96)

6. The sum of the above issues risk DNA evidence being incorrectly evaluated by the courts, potentially resulting in wrongful acquittals and wrongful convictions.

Chapter 7: Implementation of the "Outstanding" and "In Progress" Reforms

7. Implementation of the "Outstanding" and "In Progress" Reforms

7.1 Overview

874. In this chapter, the DNA Review has addressed TORs 1, 2, 3 and 5 as follows:

(a) Identifies what remains to be implemented for the 'in progress' recommendations (including those which are provisionally closed) which has been broken down by which agency (QPS, QH and FSQ) is responsible for progressing and completing it;

(b) Provides advice as to 'best practice' for completing the implementation of the 'in progress' and 'outstanding' recommendations; and

(c) Provides advice on the resourcing required to efficiently and effectively deliver the reforms.

875. In providing advice for completing the implementation of reforms, it was necessary for the Reviewers to establish and be informed by what the FSQ's process are for completing recommendations. To achieve this, the Reviewers have analysed examples of FSQ completed and closed recommendations.

Key observations, findings, and conclusions in relation to FSQ's implementation of the "outstanding" and "in progress" reforms:

Please refer to footnote references within the body of the Report as they have not been included in the summaries.

<u>Progress on recommendations</u>

(a) As at 18 June 2025, what remains to be implemented in relation to the now 123 recommendations (for FSQ, QPS, and QH) is as follows:

(i) 79 recommendations are completed and closed;

(ii) 4 recommendations are provisionally completed and are awaiting presentation to the FSQ Advisory Council for formal closure;

(iii) 33 recommendations are in progress (the ‘in progress’ recommendations); and

(iv) 7 recommendations are yet to commence (the ‘outstanding’ recommendations).

(b) In terms of the agency division of the above recommendations, the breakdown is as follows:

(i) FSQ: 62 completed, 2 provisionally completed, 31 in progress and 7 outstanding.

(ii) QPS: has 2 'in progress' recommendations (80 and 81) related to the validation and verification of DNA collection methods.

(iii) QH: has 2 recommendations (95 and 96) with the work completed, closure reports drafted and waiting endorsement for closure. Until formally closed by the Council the DNA Review consider these recommendations ‘in progress’. These

recommendations focus on training health practitioners to conduct forensic medical examinations.

(c) The DNA Review notes that FSQ has not implemented a structured project management approach to oversee the reforms which in the Reviewers' opinion has resulted in delays and inefficiencies. Further to that, FSQ's closure reports often lack metrics or evidence demonstrating that the intent of the recommendations has been met. Based on this evidence, the Reviewers have formed the view that:

(d) FSQ's fragmented approach to implementing recommendations is hindering progress and failing to meet the intent of some recommendations;

(e) A structured project management approach, such as a Portfolio, Program and Project Management (3PM) model, is urgently needed to ensure the recommendations are implemented effectively; and

(f) Independent oversight is required to monitor progress, conduct deep dives into recommendations and ensure transparency and accountability.

Governance and Oversight

(g) FSQ lacks a cohesive governance framework to oversee the implementation of recommendations.

(h) The absence of a risk and issues management process has hindered the effective prioritisation and resolution of challenges.

(i) FSQ's governance processes are fragmented, with initiatives being implemented in isolation rather than a part of a coordinated reform strategy.

(j) The DNA Review compared FSQ's approach to the Office of the Independent Implementation Supervisor (OIIS), which oversaw recommendations from other inquiries. The OIIS model represents what the Reviewers consider to be best practice, specifically its robust oversight, detailed progress reporting and stakeholder engagement.

Based on this evidence, the Reviewers have formed the view that:

(k) FSQ's governance processes are insufficient to ensure the effective implementation of recommendations. FSQ should adopt the OIIS model, including independent oversight, detailed progress reporting and stakeholder engagement.

(l) FSQ must establish a risk and issues management process to address challenges and impediments effectively.

Resource Constraints

(m) FSQ requires significant resources, including enhancements to the Forensic Register and additional training and educations programs.

(n) The DNA Review questions the necessity of some resource requests, such as the $450M facility, given QPS's preference to retain evidence recovery responsibilities.

(o) FSQ has not adequately addressed the time, cost and resources required to implement the reforms, preventing the DNA Review from reporting the time and resources needed

to complete the reforms. Training and education programs require improvement, with a focus on cultural change and staff well-being.

Based on this evidence, the Reviewers have formed the view that:

(p) FSQ must reassess its resource allocation to ensure it aligns with the actual needs of the reform agenda.

(q) Investments should prioritise areas that directly impact the quality and efficiency of forensic DNA services.

(r) FSQ's training and education programs must be enhanced to address competency gaps and improve organisational culture.

End User Engagement

(s) There are inconsistencies in the understanding of the intent of recommendations between FSQ and end users, specifically, QPS. FSQ has not adequately engaged end users, such as QPS and the broader criminal justice system, to ensure the reforms meet their needs and expectations.

(t) FSQ has not provided sufficient information or training to end users on critical issues, such as the DNA testing threshold, which has impacted the criminal justice system. This is especially relevant to Recommendations 9 and 10 (regarding explanatory information published for QPS and the public describing the DNA thresholds), which in the Reviewers' opinion should have been completed prior to closing out Recommendation 15 (regarding the review of the DNA thresholds).The Reviewers note that if QPS and other end users had received the proper training on the effect of DNA thresholds, they may have questioned whether the thresholds were appropriately set.

(u) FSQ must provide end users with adequate information and training on critical issues to restore trust and confidence in forensic science services.

Way Forward

(v) The DNA Review recommends managing the reforms as a cohesive project under a Portfolio, Program and Project management (3PM) model. Independent reviewers should be appointed to oversee the implementation process, conduct deep dives into recommendations and provide regular progress reports. Metrics of success should be established to evaluate whether recommendations achieve their intended outcomes.

(w) FSQ must prioritise transparency, accountability and stakeholder engagement to restore trust in forensic science in Queensland.

7.2 Summary

876. FSQ, and its predecessor, QFSS have undergone two Inquiries that collectively made 123 recommendations (now consolidate to 121 recommendations). This section relates to TORs 1, 2, and 3 which requires the Reviewers to identify the in progress and outstanding recommendations and provide advice for the completion and implementation these recommendations in accordance with best practice.

877. The Inquiry recommendations are being addressed by QPS and Queensland Health (**QH**) with the majority owned by FSQ.

878. This section will present evidence that FSQ are not meeting the key purpose of some of the recommendations. It is the opinion of the DNA Review that FSQ may not be achieving the desired outcomes of the Inquiries, and this is jeopardising the overall reform agenda for DNA service delivery in Queensland. The DNA Review has suggested that the Inquiry recommendations owned by FSQ are managed as a project to help ensure the purpose of the recommendations are met and organisational strategic objectives achieved. The DNA Review has been working closely with FSQ to develop a Portfolio, Program, and Project Management (3PM) model for FSQ (refer to Section 5.11 on FSQ Program Management). The DNA Review assesses that this would greatly assist FSQ to plan, track, manage, and close the Inquiry recommendations.

879. This section also discusses processes undertaken by the Office of the Independent Implementation Supervisor (OIIS) as an example of best practice for monitoring implementation of reforms. It is the opinion of the DNA review that FSQ would benefit from independent strategic management of the reform processes, in line with the OIIS processes.

7.3 'In progress' and 'outstanding' recommendations

880. The DNA Review requested FSQ (refer to **Attachment 13**), QPS, and Queensland Health to provide information relating to in progress and outstanding recommendations.

7.3.1 QPS owned Inquiry recommendations

881. QPS have two recommendations that are 'in progress' and remain to be implemented (Recommendations 80 and 81).

882. Recommendation 80 requires the validation of the swabs and wetting agents used to collect DNA samples from crime scenes and evidence. QPS informed the DNA Review:[505]

> "*The QPS and FSQ has completed phase 1 of the validation which involved testing the efficacy of three different combinations of swabs and wetting agents commonly used to collect samples, in terms of the efficiency of collection and release of the DNA. This revealed that the rayon swabs and 70% ethanol currently used by QPS were the most effective at recovering DNA from evidence. FSQ confirmed that continued use of these swabs was valid and appropriate.*
>
> *Additional validation experiments had been planned involving the testing of mock samples collected from various substrates. To date FSQ has not had the capacity to complete this work which is extensive due to competing casework priorities. Recently, Phase 2 and 3 experiments have been approved and initiated; these will assess collection of seminal fluid and touch DNA from a non-porous substrate, and the extraction and collection efficiency of various swabs and wetting agents. All samples have been collected and provided to FSQ for DNA analysis. FSQ has not provided advice to QPS regarding the timeframe for return of results."*

883. QPS noted in their statement above to the DNA Review that "*FSQ to date has not had the capacity to complete this work which is extensive due to competing casework*

[505] QPS Email to the DNA Review "IR - QPS - CoI Recommendations" 11 June 2025

priorities." The DNA outsourcing model that was announced by Government[506] on 22 May 2025 will free up resources to work on the QPS validation study, however, this will require that FSQ forensic biologists are trained to undertake validation studies (refer to Section 4.6 - Release of Unreliable Results by FSQ')

884. Recommendation 81 is another validation/verification study being actioned by QPS for all other DNA collection and detection techniques. QPS informed the DNA Review that the following detection techniques are being validated/verified:

(a) *Combur test strips (for blood)*

(b) *ABACard Hema-trace (for blood)*

(c) *Tetramethylbenzidine (TMB) test (for blood)*

(d) *Leuco Crystal Violet (LCV) staining (for blood enhancement)*

(e) *Luminol test (for blood)*

(f) *Harris's Haematoxylin stain (for identification of nuclear material in cells in hair follicles)*

(g) *ABA Card p30 test (for seminal fluid)*

(h) *Acid phosphatase (AP) test (for seminal fluid)*

(i) *Swabs and wetting agents*

(j) *Tape lift method*

(k) *Vacuuming method*

(l) *Swabs for fingernail scrapings*

(m) *Hair examination (where the human is the 'instrument')*

(n) *Forensic Light Sources, such as the Rofin Polilight®, Rofin Polilight® Flares,*

(o) *Foster + Freeman Crime-lite® and Coherent TracER™ Laser*

885. QPS further notes that:

> *"All of the forementioned methods have been validated/verified with the exception of F, J, L and M. Hair triage examinations (methods F and M) have been paused by QPS, with samples submitted directly for DNA analysis or AFP for human vs non-human determination.*
>
> *In 2024, a validation experiment focusing on method M (hair examination) was conducted which prompted re-training of some experts, which is taking place. This validation will be repeated following this training is completed. QPS has informed the DNA Review that they anticipate that the repeat of*

[506] https://statements.qld.gov.au/statements/102595

validation testing will proceed over the next three months as QPS casework load and rostering logistics allow.[507]*"*

886. In relation to the tapelift validation method QPS informed the DNA Review that:

> *"Validation of tapelifts (method J) has been completed by FSQ and approved by FSQ in December 2024. QPS have prepared a validation document that captures the results of this testing along with previous in-house experiments and have submitted it to FSQ for endorsement."*

887. QPS have engaged with FSQ's Research and Innovation Team regarding validation of the fingernail scraping swabs (method L). QPS have informed the DNA Review:

> *"to date FSQ have not prioritised this project.*[508]*"*

7.3.2 QH owned Inquiry recommendations

888. Queensland Health has two recommendations, 95 and 96. Both of these involve the training of health practitioners to conduct forensic medical examinations. The work for these recommendations has been completed but pending closure by the Council. Regarding Recommendation 95 the Office of the Chief Medical Office (**OCMO**) states:

> *"The Forensic Examiner Training program has been rolled out across the state, with over 800 doctors and nurses including representation from every Hospital and Health Service now having completed training in performing forensic medical examinations. This program is now embedded within Queensland Health and continues to be heavily promoted. Demand remains consistently strong."*

889. Recommendation 96 states:

> *"The training or initial credentialing, and the recredentialling and continuing professional development, of physicians and nurses who conduct forensic medical examinations should include appropriate competency-based training."*

890. The OCMO states:

> *"There were challenges in the interpretation of this recommendation due to terminology as 'credentialling' has a different definition in medical settings to any other. Medical application implies a professional status, where formal education and training credentials are further credentialled by employing services/HHSs to a higher level. Local credentialling is an HHS coordinated process.*
>
> *As the intent of this recommendation is understood more to do with assessing and maintaining competency, having been achieved through the rollout of the Forensic Examiner Training Program for nursing and medical staff, closure of the recommendation will be progressed as a 'request for closure' with a qualifying explanation provided. Options for 'refresher training' are available*

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[507] QPS Email to the DNA Review "IR - QPS - CoI Recommendations" 11 June 2025
[508][508] QPS Email "IR - QPS - CoI Recommendations" 11 June 2025

within the Forensic Examiner Training Program for any staff member wishing to update their skills and knowledge."

7.3.3 FSQ owned Inquiry recommendations

891. The majority of the Inquiry recommendations are owned by FSQ which is a significant body of work in both volume, complexity and importance. The DNA Review have observed that FSQ have not established a reform strategy/policy, stood up a dedicated team to address and monitor the recommendations, nor have they appointed a change manager.[509] Section 5.11 of this Report on Program Management provides an in-depth discussion for the need for a 3PM (Portfolio, Program, and Project Management) model for FSQ, including a reform project. The DNA Review observed that the lack of strategic approach and project management is contributing to delays in completing the reforms as well as some of the completed recommendations not meeting the Inquiry intent. The large FSQ backlogs and BAU requirements are also competing for resources.

892. The DNA Review has identified the following key documents required for the FSQ reform management:

(a) **Program prioritisations and interdependencies**: While there is some information regarding what recommendations cannot start until another recommendation has been completed, improved planning is required;

(b) **Implementation plan:** for each recommendation;

(c) **Risk management plan:** identification of risks and issues, and implementation of mitigation/controls;

(d) **Work breakdown structure:** including detailed requirements, 'go/no go' on progressing implementation;

(e) **Communication plan:** to engage with stakeholders specifically regarding any changes and issues;

(f) **Project schedule:** timeline, milestones, and decision points;

(g) **Effective monitoring of individual recommendation progress:** milestones and adequacy of completion of recommendations;

(h) **Progress of implementation across the system:** in thematic areas and broader findings and conclusions; and

(i) **Deep dives:** of recommendations to highlight best practice and innovation.

893. The following is a discussion on the 'in progress' and 'outstanding' recommendations owned by FSQ, including, how many remain to be completed, implementation priorities, impediments, estimated completion time, process for completion, and a recommended way forward suggested by the DNA Review. The resources required to complete the recommendations is discussed below in the section entitled 'Resources Required to Complete Reforms'.

[509] DNA Review meeting with FSQ.

894. **What remains to be implemented:** as of 18 June 2025, the status of the now 123 recommendations (for FSQ, QPS, and QH) is as follows:[510]

(a) 79 recommendations are completed and closed;

(b) 4 recommendations are provisionally completed and are awaiting presentation to the FSQ Advisory Council for formal closure;

(c) 33 recommendations are in progress[511] (the 'in progress' recommendations);[512] and

(d) 7 recommendations are yet to commence implementation[513] (the 'outstanding' recommendations).[514]

895. **What are the priorities of the recommendations:** FSQ has assessed the in progress and outstanding recommendations as high, medium and low (**Attachment 13**). Noting that some high priority recommendations are outstanding because they are dependent on external deliverables that are outside of FSQ's control.

896. **Are there any impediments, risks or issues to implementation:** FSQ do not have a risk and issues management process for the Inquiry recommendations. It did provide a list of impediments (Attachment 13). From this information the DNA Review has assessed that the key impediments include:

(a) Resource constraints, including recruitment of qualified staff;

(b) Education and training of staff;

(c) Competing priorities (BAU, NATA accreditation, reform, historical case reviews, project work, development of documents etc);

(d) Changes to the Forensic Register, Laboratory Information Management System (LIMS);

(e) Development of the Case Management System (CMS); and

(f) ICT procurement process timeframes.

897. **Estimated timeframe for completion** of the recommendations: (refer to **Attachment 13**). The time to complete the recommendations varies depending on the complexity, interdependency, prioritisation level, and whether FSQ is reliant on other agencies or vendors. The DNA Review advises that it is difficult to determine the relevance of the FSQ assigned timeframe for completion as FSQ have not provided a schedule or a work breakdown as they are not managing the reform as a project of work they do not have project documentation. The Reviewers are of the view this is best practice for a project of work of this magnitude. Establishing the implementation of the reforms as a

[510] DNA Review information request 11C 'COI recommendation implementation progress – FSQ Advisory Council (May 25).'
[511] Recommendations 1, 4, 5, 6, 11, 12, 13, 22, 25, 27, 28, 36, 38, 40, 41, 42, 44, 45, 46, 60, 63, 77, 80, 81, 95, 96, 104, 105, 108, 112, 113, 116, 117, 118, 120, 122, 123 and interim report recommendation 2.
[512] When the ToR were drafted there were 38 in progress recommendations.
[513] Recommendations 9, 10, 17, 32, 50, 64, 65, 66, 109, 110 and 114.
[514] When the ToR were drafted there were 11 outstanding recommendations.

project of work within FSQ would enable FSQ to provide an accurate estimate of timeframes which is not currently possible.

898. **Any additional resources required to complete the recommendation:** TOR 5 is specific to this question, please refer to the Section below entitled Resources required to deliver the reforms that discusses this in detail.

899. FSQ has done a good job at grouping the recommendations under corporate and biology and then mapping them to themes. **Attachment 13** provides a high-level overview and links the interdependencies of the recommendations, but the DNA Review have assessed that it does not provide enough detail to monitor, track, and determine the progress of the recommendations.[515]

7.3.4 Current FSQ process to complete and close recommendations

900. In order to provide advice as to best practice around implementing Inquiry recommendations, it has been necessary for the Reviewers to understand:

(a) Who is responsible for progressing and implementing the recommendations. The Reviewers note that the responsibility has changed over time as the organisational structure of FSQ has changed; and

(b) The process currently used to complete and close a recommendation.

901. The process for closing a recommendation is for the recommendation owner to write a closure report summarising how they have met the recommendation. The DNA Review has not seen any documents which detail what a closure report should contain. The closure report is then endorsed by the appropriate forum discussed below.

902. The Interim DNA Advisory Board (the **Board**) operated May 2023 (TOR established) until 30 June 2024 to provide strategic oversight of the reforms. The Board's TOR states its function as:[516]

> *"Overseeing the prioritisation and implementation of recommendations from the Commission of Inquiry and functioning as a central register for managing recommendation status, including recommendation approval, closure and variation."*

903. At the time the Board was functioning, the process was for owners of each recommendation to compile closure reports when they believed they had completed implementation of the recommendation. The closure reports would be reviewed by the Interdepartmental Coordination Committee (**IDCC**) and then the Director Generals Steering Committee (**DGSC**) before going to the Board. The IDCC and DGSC are not technical committees with members who have subject matter expertise, and the DNA Review notes that there are many Inquiry recommendations that involve operational and technical complexities. As a result, the first opportunity for these recommendations to be evaluated by scientific experts occurred only at the Board level.

904. The FSQ Act established the Forensic Science Queensland Advisory Council (the **Council**). The Council was established under the Department of Justice and Attorney-General with the appointment of 11 members on 13 August 2024. The DNA Review

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[515] DNA Review Request #13A.3 FSQ Visualisation (corporate and biology)
[516] Forensic Science Queensland interim Advisory Board, Terms of Reference, May 2023.

notes that the Council's TORs[517] do not explicitly state that the Council is responsible for endorsing the recommendation closure reports, rather, the handover of the Board's functions to the Council implies that this is a role of the Council.

905. At the DGSC meeting held on 26 August 2024, the members agreed:[518]

> *That the IDCC and DGSC should be stood down, with the appropriate process moving forward being: the Forensic Services Steering Committee to review and approve recommendation closure reports; recommendations would then be put before the Advisory Council for endorsement.*[519]

906. This reflects the current arrangements where provisionally completed recommendations are reviewed and approved by the Forensic Services Steering Committee (**FSSC**) and subsequently presented to the Council for formal closure.

907. The FSQ Act allows for the Director of FSQ to establish committees to provide advice to FSQ. In October 2024, FSQ established the FSSC and its TOR note:

> *"The FSSC will also endorse the completion or variation of COI recommendations (noting that implementation of COI recommendations is led by different agencies including FSQ, QPS and Forensic Medicine Queensland) to ensure central agency consideration and advice, prior to the FSQ Advisory Council."*[520]

908. The FSSC TOR go on to state that decisions will be passed when two thirds of the FSSC members agree. QPS have not accepted the TOR in its current form on the basis that the FSSC does not have the authority to make decisions under the FSQ Act and only has the authority to provide advice. QPS informed the DNA Review that in May 2025 they requested the TOR to be amended to reflect this[521]

909. The FSSC minutes from the meeting held on 12 December 2024 note:

> *"At its final meeting, DGSC discussed the need to maintain central agency oversight of CoI recommendation implementation and decided the FSSC would be the appropriate forum for this. The initial purpose and scope of the FSSC was therefore expanded to incorporate this function…"*
>
> *"[Redacted] agreed that it could be seen as a conflict of interest if FSQ is endorsing its own paper, and suggested papers could be endorsed by consensus instead of formal voting.*
>
> *[Redacted] said FSQ would consider amendments to the Draft FSSC TORs in light of members' feedback."*

910. The DNA Review is of the opinion that the above statement indicates that stakeholders were concerned that the FSSC, which is chaired by FSQ is 'endorsing' their own work

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[517] Forensic Science Queensland Advisory Council, Terms of Reference, 30 September 2024.
[518] DNA Review information request 44.2 'DGSC minutes from Feb to Aug 2024', page 25. Directors-General Steering Committee, "Government Reform Arising from the Commission of Inquiry into Forensic DNA Testing Queensland, summary of decisions and actions" 20 February 2024.
[519] Directors-General Steering Committee, Government Reform Arising from the Commission of Inquiry into Forensic DNA Testing Queensland, summary of decisions and actions from the meeting held on 20 February 2024.
[520] DNA Review information request 35 ' 35.01 DRAFT FSSC Terms of Reference' and '35.03 DRAFT FSSC Terms of Reference – QPS edits (May 2025)'.
[521] Acting Commissioner Shane Chelepy APM "Letter to Dr Kirsty Wright, DNA Review" 14 March 2025, and 35.01 DRAFT FSSC Terms of Reference' and '35.03 DRAFT FSSC Terms of Reference – QPS edits (May 2025)'.

to progress to the Council for closure of the recommendations. As noted above QPS have provided feedback on the draft FSSC TORs to FSQ, which are yet to be accepted.

911. Between May 2023 and August 2024, the Board endorsed 43 closure reports (covering 65 recommendations) based on the closure reports that had been approved by the IDCC and DGSC.

912. The DNA Review requested information regarding the process and procedures that the Board and the Council used to close the recommendations. The DNA Review asked if there is a risk and issue register, and was advised that:[522]

> *"FSQ interim Advisory Board did not keep a formal issues/risk register. Any issues and risks raised by members were recorded in meeting minutes and that risk and/or issues registers for the FSQ Advisory Council have not yet been established."*

913. The DNA Review also asked if the Board or the Council has any strategic documents, planning documents, or forecasting documents or data in relation to implementation of the Inquiry recommendations and reforms.[523] The DNA Review were advised that:

> *"The secretariat of the Advisory Council keeps a reference document listing all COI recommendations, their status, and when each recommendation was considered by the Board and/or the Council. This document is updated as and when implementation progress is made, and regularly provided to the Council members. This document has previously been shared with the Reviewer (on 20 December 2024)."*

914. The DNA Review requested any policy, governance documents, terms of reference generated by, or relating to, the Board or the Council.[524] The DNA Review were advised that:

> *"Handover documents by FSQ interim Advisory Board and its subcommittees (Forensic Justice Advisory Sub-Committee and Forensic Medical Examinations Advisory Sub-Committee) to the Advisory Council providing summaries of work undertaken and considerations for future."*

7.3.5 Achieving the intent of the recommendations

915. The Reviewers believe that achieving the purpose of each recommendation and meeting organisational strategic objectives should be the priority. The DNA Review has assessed the closure report template and at least 10 completed and closed recommendations and upon that review have observed that some have been implemented without the purpose of the recommendation being met (e.g. Recommendation 15). There are also other recommendations where the understanding of the purpose of the recommendation is not consistent between organisations (e.g. Recommendation 1). There are also other in progress recommendations where FSQ should not implement a recommendation (e.g. Recommendation 66) until a critical internal issue is resolved, otherwise the purpose of the recommendation will not be met.

916. The DNA Review has concerns about Inquiry recommendations being closed without meeting their required purpose. Section 4.8 of this Report (FSQ DNA Testing

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[522] DNA Review Request 4 'risk and issues' FSQ 16 December 2024.
[523] DNA Review Request 5 'risk and issues' FSQ 16 December 2024.
[524] DNA Review Request 6 'risk and issues' FSQ 16 December 2024.

Thresholds) discusses the closure of Recommendation 15 (closed on 14 February 2024), despite the Board recommending further experimentations. The purpose of recommendation 15 was to determine at what point can DNA no longer be detected in samples (limit of detection) to set a cutoff point (DNA threshold) where DNA samples will not be sent for DNA testing because it is very unlikely that they will contain any detectable DNA.

917. Recommendation 15 (closed):

> *"The laboratory should within 6 months complete a full and appropriate validation to identify the true limit of detection (LOD) of Quant Trio and Quant Studio 5. For Quant Trio, the validation should include testing the ability to detect DNA over a range of concentrations where each dilution series has 10 to 20 replicates to allow the LOD to be set at the concentration at which DNA is detected less than 95% of the time. The validation should be:*
>
> *performed by a scientist with formal qualifications or established expertise in both experimental design and statistics; and*
>
> *externally reviewed by an eminent Australian or international expert before it is implemented by the laboratory."*

918. This raises concerns about FSQ's failure to conduct critical experimentations to validate the Limit of Detection (**LOD**) when establishing the DNA threshold, which was set too high. The DNA threshold was set at 0.0006 µg/uL, despite FSQ having data demonstrating that DNA profiles could be generated at lower concentrations. Further, the Board had recommended additional critical experiments, which were not carried out by FSQ prior to closure of Recommendation 15. Despite this, the Board endorsed the closure of Recommendation 15. FSQ advised the DNA Review that they have not yet completed these validation experiments.[525] The DNA Review notes that this raises doubts over the reliability of other experiments being conducted by FSQ, their internal endorsement process, and the closure of other recommendations without fully achieving their intended outcomes.

919. Recommendations 9 and 10 relate to FSQ communicating the LOD to end users, but these recommendations remain outstanding. FSQ assessed these recommendations as a low priority and linked the interdependency to training recommendations and not Recommendation 15 (Attachment 14) The DNA Review assesses that Recommendations 9 and 10 are interdependent of Recommendation 15 and there would have been a very light training need. The impact of implementing the LOD should have been communicated to end users prior to closure of Recommendation 15. This would have provided end users the opportunity to understand the LOD and the new DNA threshold and the risks that they were accepting prior to Recommendation 15 being implemented.

920. Recommendation 9 (outstanding):

> *The laboratory should provide written and video information and the opportunity for discussion to the QPS and other participants in the criminal justice system explaining the threshold and the way it affects the processing of DNA samples.*

[525] DNA Review interview with FSQ Research and Innovation staff

921. Recommendation 10 (outstanding):

> *The laboratory should have written and video information explaining the threshold and the way it affects the processing of DNA samples publicly available on its website.*

922. FSQ noted that these recommendations were not considered a high priority compared to the backlog reduction, FSQ needs to balance providing staff resources dedicated to reducing the backlog against staff resourcing for the reform. Section 4.8 of the DNA Review report (FSQ DNA Testing Thresholds) notes that the DNA threshold was set too high due to FSQ not conducting critical validation experiments. This resulted in DNA samples, that potentially contained DNA, not being sent for full analysis and DNA profiles not being generated. [redacted]

923. If QPS, and other end users were informed of the risks associated with accepting the new DNA threshold and given the opportunity to discuss with FSQ forensic biologists to understand what it meant for case work, criminal investigations and the criminal justice systems, in the opinion of the DNA Review, it would have given the end users the opportunity to question if the DNA threshold was appropriately set, and would have improved communication between FSQ and end users. As this did not occur, the end users were not given this opportunity.

924. At the 12 December 2024 FSSC meeting, it was discussed:

> *"…samples at or below the LOD threshold would be halted after quantitation. The case manager will review the sample and have full discretion to continue samples to DNA profiling or additional testing as part of the case management workflow.*
>
> *[Redacted] noted that implementation of the LOD and LEV offers a range of operational efficiencies for FSQ and the broader criminal justice system."*

925. The LOD threshold was discussed at the FSSC meeting, however the issue of samples below the threshold containing DNA was not discussed. End users were not provided with sufficient information to understand the complex technical issue of the LOD threshold. Instead, the focus was placed on 'efficiencies' for FSQ and the broader criminal justice system. Furthermore, QPS was not provided with sufficient information to be informed of the impact that the new DNA threshold would have (which should have been fulfilled if Recommendations 9 and 10 were completed). QPS stated that:[526]

> *"Seems we have FSQ wording updates, but we don't actually get informed on what they mean."* and
>
> *"Can you please provide us with some information behind this? I am really just chasing to 'humanize' the true meaning behind it all."*

926. Another example where FSQ are not meeting the purpose of the recommendations is Recommendation 1. The purpose of this recommendation relates to the split model between QPS and FSQ which determines which organisation conducts screening and evidence recovery from crime scene items to identify and sub-sample biological samples for DNA testing.

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[526] DNA Review Information Request # 54.5 'QPS LOD wording e-mail', February 2025.

927. Recommendation 1 (in progress) provides:

> *"Queensland Health* [now FSQ] *should engage in consultation with the QPS and other participants in the criminal justice system, and decide, whether the operating model will remain split in its current form between QPS and the laboratory or will be divided in some other way."*

928. To address Recommendation 1, FSQ held a strategic two-day workshop ('strategic conversation') from 30 April to 1 May 2024. Attendees at the workshop informed the DNA Review that the workshop did not address the split model but focused on the entire DNA service delivery for Queensland. FSQ stated the outcome of this workshop was the establishment of the FSSC to further address this recommendation.[527] QPS advised the DNA Review that:

> *"The QPS and FSQ seem to have differing views of what Rec 1 requires and what the purpose of the workshop was.*
>
> *The QPS holds the view that Rec 1 is limited to what agency is responsible for DNA screening and subsampling.*
>
> *FSQ seems to hold a view that Rec 1 is much wider and covers all aspects of forensic service delivery in Queensland including governance. The QPS does not share this view."*[528]

929. This example suggests the purpose of Recommendation 1 is not consistent between FSQ and QPS, which will likely impact its successful implementation. The DNA Review notes that the purpose of Recommendation 1 is the 'split model' related to DNA evidence recovery.

930. The following are examples where a recommendation should not be implemented until a critical issue is resolved.

931. Recommendation 65 (in progress):

> *"The laboratory should apply to NATA to broaden the scope of its accreditation to be assessed against Australian Standards 5388.1-4."*

932. FSQ has noted that the resources required to increase the scope of accreditation is 1 FTE staff member for the quality team. In theory, the DNA Review team agrees with Recommendation 65, as forensic science laboratories across Australia are transitioning to AS 5388 1-4 (which are being adapted into ISO standards). However, there are significant quality issues that have been uncovered during the DNA Review (DNA contamination, insufficient staff training and staff competency issues, insufficient proficiency testing, use of unvalidated / unverified techniques in casework, poor experimental design of validation / verification studies, and lack of risk and issues process). These serious quality issues and risks need to be addressed as a priority before increasing the scope of FSQ's accreditation can even be considered. The DNA Review recommends delaying the implementation of Recommendation 65 until the serious quality and significant quality issues are resolved.

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[527] DNA Review information request 'Attachment 2 – FSQ Outcome and Next Steps Report for Strategic Conversation'.
[528] QPS e-mail communication to the DNA Review, June 2025.

933. Recommendation 66 (outstanding):

> *"The laboratory should implement full blinding in proficiency testing so that scientists do not know they are testing a proficiency test sample [sic]."*

934. FSQ advised that further FTE staff resources and funding would be required to implement blind proficiency testing. The DNA Review Team were informed by FSQ that forensic biologists undertake annual proficiency testing, but the staff have not received the results of their proficiency tests since 2023.When court reporting DNA scientists prepare witness statements, they have to state that their last 'successful' proficiency test was 2023 (about 90% of staff have not received their 2024 proficiency testing results, therefore they do not know if they were proficient in 2024).[529]

935. The DNA Review assessed this as an unusual and unacceptable practice for proficiency testing in a forensic laboratory. The DNA Review suggests that before Recommendation 66 can be addressed, the forensic biology proficiency testing needs to be brought up to date and the current proficiency testing program maintained to an acceptable standard before blind proficiency testing is actioned. If forensic biology is not able to demonstrate that they can manage the current proficiency testing program, the DNA review assesses it is very unlikely that Recommendation 66 will be achieved.

7.3.6 Reform Best practice for the implementation of recommendations

936. The DNA Review has investigated how the implementation of recommendations arising from the two Women's Safety and Justice Task Force (**WSJTF**), 'Hear her Voice' reports (2022) and the independent Commission of Inquiry into QPS responses to domestic and family violence (2022) ('**QPS Inquiry'**) has been overseen and managed. Implementation of these recommendations (numbering 355 in total) is overseen by the Office of the Independent Implementation Supervisor (**OIIS**).[530] The OIIS had an Independent Implementation Supervisor and staff who were extensively evaluating the implementation of these recommendations.

937. The WSJTF and QPS Inquiry was conducted in 2021/2022 about the same time as the Sofronoff Inquiry. No such full-time office was established to oversee the implementation of the Inquiry reforms, nor has any dedicated FSQ reform strategy or team been established to manage the significant change.

938. The OIIS approach provides a good case study for best practice implementation oversight and evaluation of the Queensland Government's response to reform recommendations arising from the WSJT and the QPS Inquiry. The OIIS approach is multi-layered to address individual recommendations, but also to review the progress of recommendations across the system. This is a systems approach, to help ensure that the recommendations are meeting their purpose and organisational objectives.

939. The OIIS conducts deep dives into the individual recommendations to highlight examples of best practices and innovation. Furthermore, biannual reports were provided to the Attorney-General and Minister for Justice and Minister for Integrity, the Minister for Child Safety and the Prevention of Domestic and Family Violence and the Minister for Police and Community Safety. The reports are also made publicly available. The purpose of the reporting is for oversight of the progress and adequacy of the

[529] DNA Review interview with FSQ staff members.
[530] https://www.oiis.qld.gov.au/

Queensland Government's response to the recommendations.[531] The DNA Review assessed this process as a robust reform process that provides the right balance of oversight without being overly bureaucratic to hinder progress and innovation.

940. By way of comparison, the Inquiries have 123 recommendations and the OIIS has 355 recommendations to implement and in two years have assessed a total of 121 recommendations.

941. The DNA Review analysed the OIIS best practice model and the current practices to implement the Inquiry recommendations, and noted that FSQ does not have the following processes and procedures in place that the OIIS did:

(a) **Monitoring of individual recommendations:** The OIIS monitored the individual recommendations and set milestones, including final milestones.

(b) **Deep dives:** There is no group currently conducting post-implementation deep dives. The DNA Review assessed that it would be beneficial for FSQ to conduct a mid-cycle deep dive for each recommendation to review if it is on-track, is meeting the intent, needs to adjust course, or needs additional resources. This is also a mechanism to discuss the progress of the individual recommendations with end users during their life cycle and not just at the closure of the recommendation.

(c) **Reporting:** OIIS produced progress reports every six months, which provide details about the progress of the recommendations. This includes the adequacy of implementation of selected recommendations, selected deep dive discussions, and findings regarding implementation of the recommendations across the system. These are invaluable learnings that promote continuous improvement which could benefit implementation of outstanding recommendations.

942. FSQ produces progress reports that are also published publicly, however, the DNA Review is of the opinion that they do not provide sufficient detail of the implementation of the recommendations and do not include post-implementation evaluation.[532] The DNA Review is of the view that incorporating implementation and monitoring of recommendations during the life cycle, along with conducting deep dives, would enhance FSQ's reporting. This would provide further transparency and capture lessons learned to further improve the implementation processes. This could also raise public awareness and confidence in forensic science in Queensland.

7.3.7 Inquiry Recommendations Way Forward

943. In section 5.11 of this Report (FSQ Program Management), the DNA Review discussed collaboration with FSQ to develop a draft Portfolio, Program, and Project Management (3PM) model and Program Management Office. The DNA Review with FSQ recommends that the Inquiry recommendations should be managed as a project of work under a 3PM model, with appropriate governance established (section 5.12 Systems Approach to Governance), including proper oversight and a dedicated change manager appointed. The role of the change manager would be to guide FSQ through the significant reform and changes that the organisation is undergoing. The change manager would focus on the staff's wellbeing to help them through the change and

[531] Office of the Independent Implementation Supervisor (ISS), Office of the Independent Implementation Supervisor, visited 1 June 2025.
[532] https://www.fsq.qld.gov.au/commissions-of-inquiry

lower resistance to change and change fatigue. It also includes ensuring that the reform and change aligns to the organisational strategy, objectives, and purpose

944. An FSQ project manager and change manager (two FTE staff) should be appointed to manage the Inquiry recommendations. The DNA Review has recommended that in the FSQ organisational structure that the change manager reports to the Health and Wellbeing manager and the reform project manager a separate role as part of the Program Management Office. Under a project management structure, each recommendation is managed as a work package with the establishment / identification of:

(a) **Set the purpose** – clear and concise purpose of each recommendation needs to be articulated and agreed between FSQ and all stakeholders;

(b) **Responsible office** – the person assigned to complete the task;

(c) **Prioritisation** – of recommendations to be completed.

(d) **Interdependencies** – to determine priorities and efficient management of resources

(e) **Risk and issues** – to identify mitigation and control strategies to manage risks and issues;

(f) **Establish timeline** – start date and how many days it will take to complete the task;

(g) **Resources** – estimates of FTE, cost, non-financials required;

(h) **Integrated Project Team** – to engage stakeholders and end-users, and the appropriate organisations and personnel;

(i) **Milestones** – articulate the deliverables;

(j) **Reporting** – determine the reporting deliverables and to whom;

(k) **Continuous monitoring** – to determine if the progress is on track or requires additional resources, needs to be paused etc; and

(l) **Metrics of success** – refer to next section (Metrics of success);

(m) **Closure of the Recommendations** – the closure report should clearly articulate how the actions have met the intent, the metrics of success, met the organisational objectives, and add value to FSQ and Queensland's DNA service delivery. Only when all criteria have been met should the recommendations be endorsed for closure.

(n) **Reporting** to the public to restore trust and enhance transparency to improve the community's' confidence in forensic science in Queensland.

945. The DNA Review suggests that independent reviewers should be appointed to oversee the establishment of the intent, progress, and the closure of the recommendations. A key role for the independent reviewers is to provide oversight of deep dives into the recommendations with the FSQ project team, which is comprised of the relevant end users. These deep dives should occur during the project life cycle, including at the initiation, mid-point, and closure milestones. The independent reviewers are slightly

different to the OIIS model which is an independent office. An example of how the independent reviewers could work is similar to the Australian Government Department of Defence Contestability. The Contestability Divisions role is to independently review, and challenge proposals and decisions related to Defence capabilities. The purpose is to ensure that they align to organisational strategy and are an effective and efficient use of resources. The aim is to ensure informed decision making, transparency and accountability. The questions that are asked include "is this the right thing to do" and "are we doing the right thing".[533]

7.3.8 Metrics of success

946. Metrics of success are quantitative or qualitative measures to help evaluate if an organisational objective or goal has been achieved. To develop metrics of success, the organisation needs strategic objectives to be measured against. If an organisation is undergoing reform, such as FSQ, then the purpose of the recommendations needs to be clearly articulated so that the metrics can measure if the recommendations have achieved their intended purpose or if they have had unintended consequences. This assists the organisation to know when a recommendation can be closed off. The high-level questions to be answered include:

(a) Has the organisational objective been met and to what level have these objectives been accomplished?

(b) Has the criminal justice system objective been met?

(c) Are the relevant stakeholders/end users satisfied with the outcome of the recommendation?

(d) Will implementation of the recommendation unintentionally negatively impact a stakeholder/end user?

(e) Can the organisation maintain preparedness to undertake business as usual?

(f) Can the organisation be sustained during a critical incident?

(g) Has the purpose of the recommendation been achieved?

(h) Will closing off the recommendation have unintentional consequences on the organisation, stakeholder or end user i.e., will the organisation be negatively affected and not achieve its objectives?

(i) Will closing off the recommendation help to restore trust in forensic science in Queensland for victims and the community?

947. Depending on the recommendation to be assessed for closure, will depend on if qualitative or quantitative metrics, or a combination of both are used.

Recommendation 26	**26.1** FSQ should establish a project ('CoI Reforms Project') to manage implementation of the remaining CoI recommendations.

[533] Australian Government "Contestability in the Public Sector" Contestability in the Public Sector | Department of Finance accessed 25 June 2025

	26.2 An Integrated Project Team should be established to monitor each stage of the project life cycle from initiation, mid cycle, closure, and post-implementation review. The Integrated Project Team should consist of the FSQ CoI Reforms Project Manager, relevant end users, relevant independent forensic science experts, and where appropriate a member of the DoJ Expert Team.
Intent and desired end state	**Intent:** The reforms project and Integrated Project Team will ensure the intent of the Inquiry recommendations are met and they are completed in a timely and efficient manner. **Desired End State:** All Inquiry recommendations are completed and meet the intent of the recommendations.

7.4 Resources required to deliver the reforms

7.4.1 Summary

948. FSQ, and its predecessor QFSS have undergone two Inquiries that made 123 recommendations. To address TOR 5, this section provides advice to Government about what resources are required to deliver the reforms.

949. The DNA Review sent a request to FSQ, QPS, and QH asking for them to provide information relating to the 'in progress' and 'outstanding' recommendations and the resources needed to complete these recommendations (refer to **Attachment 13**).

950. QPS are waiting for FSQ to conduct DNA profiling on swabs that QPS collected during their validation study for Recommendation 80.[534] The government announced the DNA outsourcing[535] on 22 May 2025, which should free up resources for FSQ to reassign and train staff to undertake validation studies and provide assistance to QPS.

951. Queensland Health have completed their final two recommendations (95 and 96) and are progressing to formal closure.[536]

952. FSQ own the majority of the remaining Inquiry recommendations. The DNA Review assessed the responses to the resources required to address the Inquiry recommendations and identified the following themes:

(a) Facility upgrades;

(b) Historical case review and DNA re-testing;

(c) Forensic Register enhancements;

(d) Training and education; and

(e) Governance.

[534] Information provided by QPS.
[535] https://statements.qld.gov.au/statements/102595
[536] DNA Review Information Request 74 'OCMO RESPONSE – Forensic Science Queensland (IR74)'.

953. FSQ has not been managing implementation of the reforms as a project of work, therefore, the time, cost, and resources required to complete the reforms collectively and individually, has not been determined.

7.4.2 Facility upgrade Requirements

954. To address the reforms FSQ is requesting new facilities and upgrades to existing facilities for DNA evidence recovery, a dedicated innovation and research laboratory, and a bone laboratory. Below is the DNA Review's assessment of FSQ resource requirements.

955. Recommendation 1 (in progress):[537]

> *QH [now FSQ] should engage in consultation with QPS and other participants in the criminal justice system, and decide, whether the operating model will remain split in its current form between QPS and the laboratory or will be divided in some other way.*

956. FSQ has requested a new $450M facility and centralised exhibit examination, FSQ has noted that QPS cannot transfer exhibit management to FSQ until they have appropriate facilities.[538] The DNA Review held several meetings with QPS on the new DNA service delivery model (see Chapter 5 A Modernised Holistic DNA Service Delivery Model for Queensland). QPS advised they have dedicated DNA evidence recovery laboratories in each region state-wide. QPS further notes that generally, they perform the collection of evidence, evidence recovery, and coordinate the delivery of samples in tubes to FSQ for DNA processing. This division of responsibility remains in place and it is the preference of the QPS is to expand their responsibility for DNA evidence recovery, not to transfer this function to FSQ.[539]

957. To address Recommendation 1, FSQ organised and led a strategic workshop (30 April to 1 May 2024) to review the operating model for forensic DNA delivery in Queensland. The DNA Review was informed by attendees at the strategic workshop there was little discussion on the split model (as per Recommendation 1).[540,541] QPS noted:

> *"The QPS and FSQ seem to have differing views of what Rec 1 requires and what the purpose of the workshop was.*
>
> *The QPS holds the view that Rec 1 is limited to what agency is responsible for DNA screening and subsampling.*
>
> *FSQ seems to hold a view that Rec 1 is much wider and covers all aspects of forensic service delivery in Queensland including governance. The QPS does not share this view.*
>
> *The QPS expected that the split in the DNA testing continuum was to be discussed at the workshop which did not occur to any great extent. When the QPS attempted to draw the conversation to this topic, the facilitators kept taking it back to the broader topic of forensic service delivery. As result, none*

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[537] Sofronoff, W., "Final Report Commission of Inquiry into Forensic DNA testing in Queensland" 13 December 2022
[538] Jessica van Vonderen "Forensic Science Queensland director Linzi Wilson-Wilde calls for new $450m DNA lab" ABC News, 24 September 2024
[539] Queensland Police Service "DNA Service Delivery Model Discussion Paper." Report 2025
[540] Outcome Report and Next Steps Strategic Conversations – Review of the Operating Model for Forensic Service Delivery in Queensland, 30 April to 1 May 2024.
[541] Interviews with attendees of the Strategic Conversation

of the real issues that relate to Rec 1 were discussed and there was no decision made, or even a preferred position developed. Most of the QPS attendees left confused by the process and the purpose to the group exercises in general."

958. Following the strategic workshop, FSQ also drafted a report titled 'Outcomes Report and Next Steps Strategic Conversations', which is yet to be circulated to participants (refer to Section 5.12 – Systems Approach to Governance). The only outcome was the establishment of the FSSC. QPS notes:

> *"QPS notes that this was not what was discussed at the strategic conversation and did not meet the intent of Recommendation 1 to discuss the split model."*[542]

959. The key issues are there has been no agreement on the split model (QPS undertakes a majority of DNA evidence recovery and sub-sampling and delivery of samples to FSQ in a tube for DNA analysis and profiling), and QPS has informed the DNA Review that they intend to continue with evidence recovery which is supported by the DNA Review. The DNA Review considers that this greatly reduces the need for FSQ to have a new $450 million facility (but does not alter the need for dedicated laboratory space discussed below).

960. This is especially pertinent to have the split in the DNA service delivery model agreed as over the next two years the DNA samples will be outsourced to external service providers, while FSQ focuses on eliminating the 'started cases backlog',[543] undertaking validation/verification studies, addressing quality management issues, implementing risk management processes, undertaking the historical case reviews, and training staff.

961. Recommendations 22 (in progress) and 28 (in progress) relate to the FSQ Research and Innovation team undertaking validation/verification studies. FSQ notes that the resources needed to complete these recommendations is a dedicated innovation laboratory to avoid competing with operational laboratory space. The DNA Review team agrees that the Research and Innovation team requires its own dedicated laboratory space to prevent working in the same laboratory as casework and competing for resources which are prioritised against BAU. Dedicated laboratory space will mitigate the risk of the innovation team unintentionally contaminating the operational laboratory with DNA from experiments.

962. Recommendation 109 (outstanding):

> *The laboratory must conduct a project to determine the optimal method for DNA extraction from bone samples and validate and implement that method for use in bone case work.*

963. Recommendation 110 (outstanding)

> *In addressing the recommendations within this section, the laboratory should engage with external service providers who have expertise in bone processing for guidance on the best practice bone sampling methods and protocols that maximise the recovery of DNA profiles from bone samples.*

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[542] Information provided to the DNA Review by QPS.
[543] The 'started backlog' are DNA samples submitted to FSQ which have commenced testing, but have not been completed.

964. FSQ has noted that this is contingent on new facilities, however, bone processing requires only a small footprint, and the DNA Review suggests that efforts should be made to implement this in the current facility.

965. The DNA Review notes that the two-year outsourcing model approved by the government on 22 May 2025 will provide FSQ with the time required to validate the bone methodology.

7.4.3 Historical Case Review

966. The Historical Case Review (refer to Chapter 6 on FSQ Historical Case Reviews for an in-depth discussion) was established as a result of the Inquiries due to concerns with DNA samples that required review and possible re-testing. In progress recommendations numbered 13, 44, 45, 46 and 105 all relate to the historical case review of major crime cases and sexual assaults since 1 January 2012 that need to be retrospectively reviewed.

967. Recommendation 117 mandates a system for allowing accused individuals or their lawyers to request further DNA testing or analysis relating to cases impacted by the Inquiries. Since early 2023, the Board (which has now been closed and handed over its role to the Council) and one of its sub-committees, the Forensic Justice Advisory Sub-Committee (**FJASC**), had commenced devising an appropriate model to satisfy the purpose of Recommendation 117. This work now sits with a working group comprised of members of the Council with legal backgrounds and members from ODPP, Legal Aid Queensland, QPS, DJAG and FSQ, established on 25 October 2024, to address Recommendation 117.

968. The working group suggested issuing a publicly accessible communique outlining accused persons' rights under existing laws to request pre-trial directions for further material that may be warranted within the context of their case in the interests of justice, such as further DNA testing, which would then provide a basis to close Recommendation 117. Those mechanisms are available for an accused to request DNA testing via the *Criminal Code 1899* (Qld) section 590AA and the *Justices Act 1886* (Qld) section 83A, respectively. The working group also observed that the Supreme Court of Queensland's 'Practice Direction Number 14 of 2024' could also potentially facilitate further testing.

969. The working group noted that, if those existing mechanisms were used under the *Criminal Code 1899* (Qld) and the *Justices Act 1886* (Qld) respectively, the financial responsibility of re-testing DNA samples would generally be on the State, rather than the accused.

7.4.4 Forensic Register Enhancements

970. The Forensic Register is the FSQ Laboratory Information Management System (**LIMS**), which is specialised software designed to manage the laboratory workflow. Changes to the forensic register are an ICT project and under DoJ policy need to be managed as a program/project of work (refer to Section 5.11 on FSQ Program Management). For in progress recommendations numbered 38, 40, 41, 42 , 60, 63, 64, 114, 116 and 118 FSQ have requested enhancements to the Forensic Register, which will require significant cost and time. The DNA Review team agrees that there is a need for enhancements to the Forensic Register, however FSQ needs to provide the government with a business case with Rough Order of Magnitude (**ROM**) costs, schedule, and risk assessment for the enhancement program.

7.4.5 Training and Education

971. The FSQ Training team sits under the Quality Assurance Team. However, post the 2022 and 2023 Inquiries FSQ has not made significant advancements in training. The NATA 2024 audit stated that the competency-based training at FSQ that had previously been introduced has not yet had the desired effect because they are still having the same issues.[544]

972. Recommendation 77 (in progress):

> *The laboratory should implement Team and Individual Performance and Development Key Performance Indicators within the laboratory which focus on scientific best practice, quality and values of the laboratory.*

973. FSQ noted that the resource requirement to meet this recommendation is enhancement of the Forensic Register to access data on staff performances, i.e., how many DNA samples are processed by teams and individuals. FSQ further notes that they need to take into account staff well-being given current operational pressures before formalising and implementing key performance indicators (KPIs).

974. The purpose of Recommendation 77 is "*scientific best practice, quality and values"* and not KPIs of the output of the scientists. The DNA Review suggests that FSQ needs to take into consideration the staffs' well-being, organisational culture, and staffs' career development. If FSQ takes a cultural and staff development approach, then enhancement to the Forensic Register is not the priority and this recommendation can be addressed with a non-technical solution.

975. The DNA Review suggests that the resources which are needed to address Recommendation 77 are a change manager (refer to Section 5.11, FSQ Program Management) to ensure staff wellbeing during organisational change and the reform process, change in organisational culture (refer to Section 5.12 – Systems Approach to Governance), and development of team and individual KPIs that flow from the FSQ strategy and align with the Queensland government work level standards.

976. Recommendation 120 (in progress) relates to FSQ working with end users to provide education and understanding on DNA reporting. FSQ has noted that it requires resources for training projects within the Quality Assurance Team. The DNA Review agrees that there needs to be an in-house training project that is adequately resourced (refer to Section 5.11 - FSQ Program Management).

7.4.6 Governance

977. Recommendation 104 (in progress):

> *"Queensland Health [now FSQ] should create and implement a policy that outlines the appropriate level of decision-making for a particular type of class of decision, to ensure that proposed changes made within the laboratory are briefed to the appropriate level…."*

978. FSQ note that it has established a range of frameworks which go towards implementation of this recommendation including, project approval and implementation framework. Further steps include, risk appetite statements, development of a change

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[544] National Association of Testing Authority Report on Assessment (NATA), Forensic Science Queensland, September 2023

management manual, and a new eQMS system (quality management system software).

979. The DNA Review notes that FSQ is implementing these initiatives in isolation and has not established a governance process for decision-making (refer to Section 5.12 – Systems Approach to Governance). Furthermore, project approvals have been established without project management structures (see section 5.11 - FSQ Program Management), risk appetite statements have been drafted without risk management process (Section 5.12.12 - Risk and Issues Management), and quality management systems are not sufficiently addressing major quality non-conformance and issues. This is a siloed approach and will not achieve the reform and organisational objectives (Section 5.12 – Systems Approach to Governance).

7.4.7 Conclusion

980. The DNA Review has assessed the FSQ response to resources required to complete the outstanding recommendations (Attachment 13). We assess that the key issue regarding resourcing reforms is that the reforms are not being run as a project of work by FSQ. Section 5.11 (‘Program Management’) recommends that FSQ manages the reforms as a project to ensure that they are managed through their life cycle. The DNA Review has worked with FSQ to develop a draft organisational structure to support implementation of a Program Management Office PMO (section 5.11 - FSQ Program Management) which could support the establishment of such a project.

Attachment 13 Resources Required to Deliver Reforms – Provided by FSQ.

Forensic Science Queensland

FSQ Response to Review Request #77

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
1	QH should engage in a consultation with the QPS and other participants in the criminal justice system, and decide, whether the operating model will remain split in its current form between QPS and the laboratory or will be divided in some other way.	In progress	• FSQ held a Strategic Conversation in April/May 2024 to initiate discussions amongst criminal justice system stakeholders regarding the forensic science operating model in Queensland. • FSQ established the Forensic Science Steering Committee to ensure ongoing collaboration amongst key stakeholders in the consideration of matters that may impact the forensic science operating model in Queensland. • FSSC were briefed on outcomes of the Strategic Conversation and QPS has advised it will provide further input/feedback on these outcomes to inform the FSSC's consideration of the operating model moving forward. • Most recently, the FSSC and FSQ Advisory Council endorsed a variation to Recommendation 4 which implements a case management model and addresses the division of responsibilities between FSQ and QPS in this regard. • Based on current resourcing, the division of responsibilities will remain much the same for the foreseeable future. However, the FSSC provides an ongoing mechanism for the operating model to be scrutinised to ensure any opportunities to improve the forensic science service delivery model in Queensland are considered and implemented as appropriate. • FSQ believes best practice is for all biological screening and sub sampling of exhibits to occur at FSQ, however currently FSQ does not have sufficient laboratory space or resources. • FSQ also believes that all Forensic Chemistry exhibits should be examine at FSQ.	Unknown.	New FSQ facility and staff to centralise exhibit examination.	New FSQ facility to centralise exhibit examination. QPS support – currently it would be unreasonable to request QPS transfer exhibit examination to FSQ as FSQ does not currently have sufficient resources or laboratory footprint.	None.	Low
4	The laboratory should, within three months, implement a case management approach for Major Crime (including cold cases), which includes:	~~In progress~~ Complete (pending approval)	• FSQ and QPS have developed a workflow for case management that balances the responsibilities and capabilities of both agencies. The FSQ Advisory Council endorsed this workflow via a variation to part (a).	May 2025	None.	While the initial draft of this SOP was outsourced, there is still a significant body of work to finalise the SOP (and associated SOPs) internally. It can be	Finalisation and publication of the Case Management SOP is high priority and must be completed when	High

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
	a. appointing a reporting scientist as case manager to each case upon receipt of samples at the laboratory; b. obtaining sufficient case context from the QPS for the purpose of devising a fit-for-purpose examination strategy and case managing the case; c. conferring discretion upon the case manager to devise a fit-for-purpose examination strategy for the samples received in the case, including a triage or staged approach if appropriate; d. conferring discretion upon the case manager in relation to all aspects of the case prior to the release of results, including re-working, re-testing, re-interpretation, advising the QPS that a sample should be sent to an external provider for testing that is not currently available at the Queensland laboratory (including Y-STR) and requesting the QPS submit additional samples for testing; and e. the case manager reviewing the whole of a case before any final result is reported to the QPS or the criminal justice system (with the potential for a different approach to interim results reported with appropriate caveats).		• The final component to implementation of Recommendation 4 is publication of the new Case Management SOP. • RTI International was engaged by FSQ to develop an initial draft of the Case Management SOP. • RTI provided FSQ with a draft and FSQ is now working to finalise and publish the SOP. • Given this SOP was initially outsourced, FSQ will need to determine if the SOP requires external review prior to publication or will be subject to internal audit post implementation. • FSQ is also conducting a review of existing SOPs to ensure consistency with the new Case Management SOP.			challenging for internal staff to find time to dedicate to SOP development/ review amongst BAU, addressing NATA findings and other reform projects/work.	NATA returns to conduct a reassessment of Forensic Biology, which is expected to be 29-30 May 2025.	
5	The laboratory should establish distinct fit-for-purpose workstreams for all types of casework it receives. The workstreams should be developed by reference to scientific best practice, the recommendations in this report, and in consultation with the QPS and other	In progress	Per Recommendation 4.	Per Recommendation 4.	Per Recommendation 4.	Per Recommendation 4.	Per Recommendation 4.	High

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
	participants in the criminal justice system.							
6	The workstream for Priority 1 and Major Crime (including cold cases) should include at least the elements identified in recommendation 4.	~~In progress~~ Complete (pending approval)	Per Recommendation 4.	Per Recommendation 4.	Per Recommendation 4.	Per Recommendation 4.	Per Recommendation 4.	High
9	The laboratory should provide written and video information and the opportunity for discussion to the QPS and other participants in the criminal justice system explaining the threshold and the way it affects the processing of DNA samples.	Not yet started	Progression of this recommendation is linked with Recommendation 10 which was initially contingent on having the infrastructure (video equipment etc) and a platform to publish written and video content. Now that video equipment has been procured and the FSQ website established, this project is awaiting the requisite resources to develop and produce the written and video content.	Once resourcing is provided to the training team, it is anticipated this work could be completed within 12 months.	The BCFSC#4 in development advocates for an adequately resourced training function within the Quality Assurance Division whose role would include the development of outward facing training/education packages/materials.	The main impediment to implementation of this recommendation is resourcing. FSQ's education and training function which sit within the Quality Assurance Division, the current resources of which have been focussed on other major priorities such as establishing a robust Quality Management System and Accreditation.	FSQ is currently providing information and training to its stakeholders through other mechanisms. As such, this recommendation (and related recommendations) is considered an improvement to currently processes and not a high priority (and compared to backlog reduction).	Low
10	The laboratory should have written and video information explaining the threshold and the way it affects the processing of DNA samples publicly available on its website.	Not yet started	Per Recommendation 9.	Per Recommendation 9.	Per Recommendation 9.	Per Recommendation 9.	Per Recommendation 9.	Low
11	The laboratory should change its standard operating procedures for the retraction or changing of results so that those procedures: a. provide suggested wording for a change in result that is caused by a difference of opinion, including an explanation that a difference of opinion is an expected and not irregular occurrence in the practice of forensic DNA analysis; and b. removes the suggested wording of "unintended human error", except for cases where that	In progress	• The FSQ Quality Manual provides overarching guidance on resolving differences of opinion. • Relevant SOPs have been identified as requiring amendment to address part a. and b. of Recommendation 11. • These SOPs are already under review and close to finalisation.	May 2025	None.	It can be challenging for internal staff to find time to dedicate to SOP review amongst BAU, addressing NATA findings and other reform projects/work (although these SOPs are nearing finalisation).	None.	Low

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	wording is true, for example where a result is released against the wrong sample or with a typographical error.							
12	The laboratory should, after such a change is implemented, provide written and video information and the opportunity for discussion to the QPS and other participants in the criminal justice system about a change in result due to difference of opinion, including an explanation that a difference of opinion is an expected and not irregular occurrence in the practice of forensic DNA analysis.	In progress	• While preliminary content has been produced commensurate with related recommendations such as recommendations 11 and 37, content suitable for publication is yet to be developed. • Some consultation with stakeholders has occurred in the context of recommendation 37 (via development of a new Statement of Witness template), but further consultation will need to occur during the development of written and video content for stakeholders.	Per Recommendation 9.	Per Recommendation 9.	Per Recommendation 9.	Per Recommendation 9.	Low
13	The Queensland Government should, within 12 months, retrospectively review the following categories of cases to determine which cases or samples should be subject to further testing, analysis or interpretation: a. Priority 1 or Major crime cases that include a sample or samples reported as "DNA Insufficient for Further Processing" since 2018; and b. Major crime cases (including cold cases) received by the laboratory since 1 January 2012 that have fallen outside the QPS-defined "hot jobs" and "major incidents" categories such that they did not receive holistic case management.	In progress	• FSQ, QPS and ODPP have worked collaboratively to develop a legal-led case review process and a set of historic case review (HCR) principles (published on the FSQ website) to underpin the review of historic cases impugned by the Sofronoff and Bennett Commissions of Inquiry. • FSQ is preparing a Standard Operating Procedure (SOP) to guide the historic scientific review of referred cases in line with the findings and recommendations made by the Sofronoff and Bennett Inquiries. It is expected this SOP will be available by April 2025. • The SOP is part of a suite of documentation being prepared to support consistent, quality-focussed processes and practises within HCR. • FSQ is exploring avenues to expedite the review of historical cases, including through outsourcing arrangements. To build FSQ's capacity to carry out historical reviews, the Historical Case Review Team recruited a scientific manager, team leader for outsourcing and capacity development, two part-time and one full-time senior forensic biologists. These positions are temporary and currently funded to 30 June 2025. The Historical Case Review Team's scientific roles are expected to further increase in 2025, reflecting its role both in accrediting and training external scientists to bolster FSQ	• Based on a current estimate of 10,000 case being referred to FSQ for scientific review and utilising outsourcing and additional FTE for the HCR team, FSQ estimates the HCR cases referred for scientific review will equate to approximately 3-4 years' worth of casework. Four years allows for sufficient time for procurement processing, recruitment, onboarding and training of scientists, and progression of cases from initial ODPP or QPS review to FSQ.	• FSQ's ability to complete the HCR is heavily contingent on ODPP and QPS performing the initial review and referring cases to FSQ for scientific review in a consistent, timely manner. • HCR involves appropriately vetted scientists from contracted FSPs remoting into FSQ's IT systems to perform case management, including DNA profile interpretation, under FSQ's ISO/IEC 17025 accreditation. Additional funding is required to	• Recruiting sufficient, appropriately qualified and experienced case managing scientists to perform the internal components of HCR is likely to be extremely challenging given a shortage of experienced forensic scientists in Australia and globally. • HCR is expected to be a challenging body of casework due to the extended period involved (2007-2023), the myriad issues identified that led to impugned results, and the bespoke approach required to characterise and remediate these issues for each referred case, including problem-solving gaps and barriers as they	• The review of historic cases is a high priority for all agencies involved, including FSQ. • The priority assigned to this work acknowledges the impact on victims of crime. • FSQ is determined to expedite the review of historic cases to the extent possible, without compromising the integrity of the process and balancing other operational priorities.	High

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			capacity and conducting the reviews of historical cases. • There are two delivery mechanisms for conducting HCR scientific reviews: firstly scientific reviews are conducted by inhouse scientists, or secondly the scientific reviews are conducted by outsourcing scientists. Noting if in-house scientists are used for HCR, then outsourcing staff will need to be utilised to support BAU work. These options are currently being considered and that should be factored when considered the information on the subsequent columns.	• Based on FSQ's ongoing recruitment attempts, engagement with international FSPs and government recruitment and onboarding requirements, FSQ assess that it is not feasible to complete HCR in any time less than 3 years, with 4 years recommended to ensure sufficient time for onboarding and training of both internal and external FTE.	ensure FSQ has sufficient budget to cover these support costs. • Ongoing funding beyond June 2025 to support recruitment of internal scientific and administrative staff. • Fit-for-purpose limited CMS (currently under development).	present through the process. This may be difficult for external scientists to grapple with in the absence of specific applicable historical experience. • Expectation management, such that external stakeholders clearly understand the restrictions of HCR remediation versus undertaking any and all work to advance a case using modern/more advanced technology and processes. • FSQ is currently in the process of developing a limited case management system (CMS), separate and in addition to Forensic Register (FR) (not a replacement), that will allow FSQ to have greater autonomy over its case management data (albeit only in a limited form). Delivery of this system is still several months away, however, the implementation timeframe for this system is still significantly shorter than timeframes required to update the FR.		
17	If the newly validated limit of detection is lower than 0.001 ng/µL, the laboratory should	In progress	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	High

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	undertake a retrospective review of all samples with a quantitation value between the original limit of detection implemented from the Quant Trio validation in 2015 and newly validated limit of detection for retesting. That review should be conducted in accordance with the principles and method developed in recommendation 14 (operating model and workflow number to be inserted Part 2.2).							
22	The laboratory should carry out additional statistical work in relation to the validation reports for the 3500xL and QIAsymphony instruments to address the issues raised in sections 6.1, 6.2, 6.4, 6.5, 6.6, 12.0 and 13.0 of Dr Duncan Taylor's report.	In progress	• FSQ conducted a preliminary assessment of the work required to implement this recommendation given the 3500xL and QIASymphony will ultimately be replaced. • FSQ identified that the additional statistical work identified in Sections 6.1, 6.2, 6.4, 6.5, 6.6 of Dr Duncan Taylor's report could be addressed in the current 3500xL re-validation. This project is expected to be finalised by 30 June 2025. • Section 12 of Dr Duncan Taylor's report, i.e., around storage of lysate, could be addressed as part of the robotics validation. • Section 13 of Dr Duncan Taylor's report could be addressed as part of the validation of bone processes once bone testing resumes at FSQ.	While the 3500xL project will address 6.1, 6.2, 6.4, 6.5 and 6.6, sections 12.0 and 13.0 are contingent on other work that will occur at a later date. FSQ is seeking advice around completing this work on the QIAsymphony SP Instrument, or on the new platforms.	A dedicated Innovation laboratory would greatly assist in progressing this work and avoid competing with operational laboratory space.	Many of the validation projects relevant to this recommendation have been heavily contingent on resourcing in the Innovation Division. Further, Innovation's limited resources have been diverted to prioritising NATA accreditation projects.	This recommendation is considered a lower priority as the 3500xLs and QIASymphony will be replaced following their validation. Preliminary assessment indicates risks to the reliability of results in the interim is low. Further, the report of Dr Duncan Taylor stated there was no evidence to suggest unreliable DNA profiles were being produced.	Medium
25	The laboratory should consider installing a certified biohazard safety cabinet within the Evidence Recovery area.	In progress	• While initially planned to coincide with the forensic biology laboratory refurbishment, FSQ is exploring options to procure and install a ductless Biohazard Safety Cabinet (BSC). • See also response to rec 27 below.	July 2025	FSQ still needs to procure the BSC.	If the ductless BSC was to be installed in the absence of the laboratory refurbishment, then FSQ would need to identify a suitable space for installation.	Implementation of new good lab practice in forensic biology SOP will require that exhibits where there is a risk of airborne DNA contamination should be examined in a BSC.	Medium

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							There is not currently a BSC in Evidence Recovery.	
27	The laboratory should amend its standard operating procedure to require the separation of likely high yield and likely low yield items in the Evidence Recovery area.	In progress	• To fully implement this recommendation refurbishment of the laboratory is required. • The laboratory refurbishment project is being led by Health Infrastructure Queensland in the Department of Health, with FSQ as the client. This project is currently in the design phase, with detailed designs under consideration by FSQ. A tender process will follow to select a suitable supplier to undertake the refurbishment. While it is expected the refurbishment works will commence in the latter half of the 2025 calendar year, completion of the refurbishment will be contingent on the successful supplier's timeframe, as quoted in the tender process. In the interim FSQ has assigned a dual purpose laboratory for the processing of reference samples and preparation of extraction controls, with dedicated benches for each process and only one process performed at any one time. • FSQ has also ordered a new fridge for storage of control material. • FSQ has requested new bench locations in the FR. • Comments have also been added to relevant SOPs to implement this interim approach.	Current expected completion of this recommendation is 30 June 2026	As per refurbishment plan.	Refurbishment of laboratory dependent on detailed plans following consultation between FSQ and vendor/supplier. Limited footprint available for smaller laboratory spaces.	FSQ has implemented strategies toward completion of this recommendation to the extent possible within the current footprint of the laboratory – refurbishment is required to fully implement	Medium
28	The laboratory should complete a project investigating alternate procedures to the scraping method for recovery of biological material and adopt the most effective procedure.	In progress	• A Griffith University (GU) Honours student has been engaged to perform a project to look at validation of different methods of evidence recovery under the supervision of GU and FSQ staff. • A Project Proposal has been prepared and approved. • ~~The laboratory work is nearing completion and is expected to be finalised by June 2025.~~ • ~~Implementation of the validated methods will follow.~~ • The project is now complete and FSQ is in the process of adopting the findings.	December 2025	A dedicated Innovation laboratory would greatly assist in progressing this work and avoid competing with operational laboratory space.	None at this time.	While findings will be implemented as soon as possible, scraping as an evidence recovery technique has been paused (excision, tapelifts and swabs continue to be employed).	Medium
32	The laboratory should consider:	Not yet commenced	Implementation of this recommendations requires two large validation projects and are awaiting	TBA – waiting advice on the acquisition of	TBA	None	To be addressed as per standard	Low

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	a. the validation and consistent use of the variable number of contributors feature in STRmix to assist in the interpretation of profiles where a single number of contributors cannot be assigned; and b. the validation and use of FaSTR DNA to assign the number of contributors to a profile.		sufficient scientific resources within the validation team to commence, which are currently assigned to more priority innovation projects.	newer versions of STRmix			quality improvement measures	
33	The laboratory should review its wording of results in both the Forensic Register and formal witness statements to adequately explain the way the number of contributors was arrived at by the reporting scientist, and the strength of the evidence available to add a contributor.	Substantially implemented pending Forensic Register change	At its 22 May 2025 meeting the FSQ Advisory Council reopened Recommendations 33 and 119, and confirmed that these recommendation should instead be reported as 'Substantially implemented pending Forensic Register (FR) changes'. The Interim Advisory Board previously closed Recommendations 33 and 119 with a note that the FR elements were yet to be implemented. However, at its 4 February 2025 meeting Council decided that any recommendation with an FR component should remain open until they have been fully implemented, using an implementation status of 'Substantially implemented pending FR change' as appropriate. The Council was silent on reopening Recommendations 33 and 119 at this time. FSQ supported the position that these recommendations be reopened as both expressly require FR changes.				Priority is low as FSQ is able to effectively implement this recommendation in the absence of the FR change via the new Statement of Witness template, Annexures and drafting guidelines	Low
36	The laboratory should consider the validation and use of: a. expanding the models currently used in STRmix to include additional stutter types, including the modelling of double back stutter; b. adopting a policy whereby DNA profiles are read on plate reading software to the limit of detection but analysed in STRmix at the limit of reporting (using the inbuilt feature of STRmix which	In progress	Part a. - Per recommendation 32 Part b. - Per recommendation 32 Part c. - completed as part of the validation of Y-Filer (per Recommendation 40). Completion of this recommendation is contingent on new version of STRmix	TBA – waiting advice on the acquisition of newer versions of STRmix	TBA	None	To be addressed as per standard quality improvement measures	Low

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	ignores peaks below the limit of reporting); and c. using the Y-chromosome quantitation and autosomal quantitation value from Quantifiler Trio to determine whether to carry out Y-STR analysis on SAIK swabs.							
38	The laboratory should: a. require all reporting scientists interpreting profiles be competent in genotyping and plate reading and, for any reporting scientists presently without competency, have those scientists complete their competency; b. regularly roster all staff competent in plate reading to perform that task; c. consider amending DNA interpretation standard operating procedures to require reporting scientists to interpret DNA profiles using the GeneMapper-IDX software as opposed to PDF copies of electropherograms; d. introduce policy within the standard operating procedures requiring recording of the reasons for all decisions made in the official case record on the Forensic Register, including by facilitating Forensic Register upgrades necessary to enable this function; e. introduce a regular court monitoring program where reporting scientists' evidence is observed and reviewed by a more senior scientist for the purpose of quality management; and f. adopt a 'blind review' policy in relation to the second reviewer of a DNA interpretation, including facilitating Forensic Register	In progress	• Part a. and b. - The training pathway has been updated to ensure genotyping and plate reading is compulsory for reporting scientists. A gap analysis has been performed to identify existing reporting scientists that need to complete this competency. Reporting scientists already competent in plate reading are currently rostered to perform this task. • Part c - is considered complete. All case managing scientists have access to a Genemapper license via a booking system. • Part d – Guidance is provided in SOP 33773 regarding making notes re relevant decisions made in the case. Further guidance will be provided, including minimum expectations in the case management SOP due by May 2025. Part d – Guidance is provided in SOP 33773 regarding making notes re relevant decisions made in the case. Further guidance will be provided, including minimum expectations in the case management SOP due by May 2025. While the FR is able to (and does) currently capture this information, is it dispersed in multiple locations within the FR and there is no ability to easily obtain a summary of this information. As such, future FR enhancements may be explored to provide a more intuitive function for the recording of decisions. • Part e is considered completed having implemented the Court Testimony Monitoring Program as outlines in FSQ's Quality Manual. • Part f – requires significant FR enhancement. Consideration to be given to whether this is limited to number of contributors only or whether this includes STRmix analysis, reworks etc. Project working group required to consider	Part d – May 2025 Part f – TBA (likely mid 2026 or longer)	Part f – project working group, FR enhancements	Significant changes to FR are required – this will incur significant cost and time. A [redacted] is being developed for this.	None	Low

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	changes to ensure such 'blind review', which prevents a reviewer from seeing the first scientist's interpretation, or who the first scientist is, prior to the second scientist's review.		individual elements and identify changes required.					
40	The laboratory should take all necessary steps to achieve the validation and implementation of Y-STR testing as a matter of urgency, with the aim of validating and implementing the technology within 6 months.	In progress	• Validation of Y-Filer is complete. • An implementation plan has been developed and implementation activities are well underway. • Yfiler Plus Kits and Low-TE buffer have been procured. • FSQ has developed Workflow Diary (WFD) with all macros for manual processing, outside FR. This macro is currently being tested. • Development of relevant Standard Operating Procedures is underway and most are substantially completed. Completion pending testing of WFD where relevant. • Development of a LR calculation sheet complete. Test plan in development. • Development of training materials is substantially complete and currently undergoing quality review. • Some training/information sessions have been delivered to staff. Further training is required. • The addition of YSTR to FSQ's Quality Assurance Database (elimination database) is required. An information sheet to inform relevant staff/visitors of this process is currently undergoing legal review. Workflows and system to retain and search relevant profiles are yet to be developed. • The final component of implementation of YSTR testing at FSQ is to communicate this new testing capability to external stakeholders. Guidance in terms of when FSQ will test versus when ESR will test and the differences between those processes (different stats, databases, etc) – noting FSQ has been communicating with/educating its stakeholders regarding YSTR testing in light of outsourcing arrangements.	• Implementation of YSTR testing at FSQ using FR is expected by 30 June 2025. • Manual implementation is expected by 30 April. • Forensic Science Steering Committee and FSQ Advisory Council endorsement to close this recommendation (and associated recommendations 41 and 42) must follow and will be contingent on meeting dates.	• FSQ will require additional resources to implement the net FR enhancement for profile interpretation. • It should be noted that the implementation of YSTR testing at FSQ is likely to increase the caseload (in the additional interpretation and reporting requirements) of case managers, where a backlog already exists. • FSQ will retain its outsourcing arrangements for YSTR testing to minimize the initial impacts of implementation.	• The FR YFiler Plus implementation project is only for analytical phase. Additional FR enhancements are required for the profile interpretation section. • The YFP analytical project is linked to the QPS lift and shift. Both are in testing phase and has undergone delays due to bugs and issues. • In the interim, FSQ is developing a temporary, manual solution to implement YSTR testing.	FSQ recognises the importance of offering YSTR testing and sought to provide this service through an outsourcing arrangement as a matter of priority.	High
41	Within two months of implementation of Y-STR testing, the laboratory should conduct a review of sexual assault	In progress	Per Recommendation 40. Y-STR testing (albeit at ESR) is routinely considered for major crime casework, particularly for sexual violence matters. Training has been conducted by	Per Recommendation 40.	Per Recommendation 40.	Per Recommendation 40.	Per Recommendation 40.	High

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	investigation kit workflows to integrate the use of Y-STR testing. This review should cause all relevant standard operating procedures to be updated and published to reflect use of this technology in sexual assault casework at the laboratory.		ESR and internally regarding considerations for Y-STR testing and a standalone SOP developed which provides further guidance.					
42	The laboratory should provide training to staff regarding use of Y-STR testing in sexual assault casework in accordance with updated standard operating procedures.	In progress	Per Recommendation 40 and 41.	Per Recommendation 40.	Per Recommendation 40.	Per Recommendation 40.	Per Recommendation 40.	High
44	The laboratory should, within 12 months, retrospectively review sexual assault cases in the following categories to determine which should be subject to retesting or re-analysis: a. Cases received by the laboratory since 1 January 2017 to the time Y-STR testing is available in the laboratory which did not undergo Y-STR testing; b. Cases received by the laboratory since 1 January 2012 that have fallen outside the "hot jobs" and "major incidents" categories such that they did not receive holistic case management; c. Cases processed by the laboratory between 1 January 2008 and 8 August 2016 where spermatozoa was not identified on the evidence recovery slide for a sample, and the laboratory did not perform further testing on the sample; d. That review of cases should be conducted in accordance with the principles and method set out in Recommendation 14 (Section 2.2, Operating model and workflow).	In progress	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	High

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45	The laboratory should, within 6 months, retrospectively review all results of SAIK swabs which have been reported to the QPS or in a formal witness statement as originating from three or more people in the previous 12 month period, and current unresolved sexual assaults cases, and for each result: a. review the reasoning behind the attribution of the number of contributors; and b. if, upon review, it is determined that the profile should have been reported as originating from a different number of contributors than the number that was reported, the laboratory should re-analyse and re-report the amended result in an addendum statement.	In progress	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	High
46	The laboratory should, based on the above review conducted pursuant to Recommendation 45, determine whether over-estimation of the number of contributors in sexual assault cases has occurred systemically. If systemic overestimation is established: a. all stakeholders in the criminal justice system should be notified of the issue in a sufficiently detailed way to identify whether a particular case may have been affected, as discussed in this chapter; b. the laboratory should offer to review the attribution of number of contributors for any sample in any type of case where parties to cases in the criminal justice system believe an overestimation may have occurred; and	In progress	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	High

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	c. if, upon review, it is determined that the profile should have been reported as originating from a different number of contributors than the number that was reported, the laboratory should re-analyse and re-report the amended result in an addendum statement.							
50	The laboratory should review its quality management system against any framework (or similar) developed by ANZPAA NIFS within three months of its release.	Not yet commenced	• FSQ is currently awaiting completion and release of the ANZPAA NIFS quality management framework. • Once released, FSQ will conduct a gaps analysis against its Quality Management System (QMS) and implement any necessary changes to align with the national framework.	The timeframe for implementation of this recommendation is contingent on the release of the ANZPAA NIFS framework. However, once this framework is released, it is expected FSQ will be able to meet the three-month timeframes imposed by the Commission of Inquiry to align its QMS.	None at this time	As this work will be undertaken by FSQ's Quality Assurance Division, depending on the timing of release of the ANZPAA NIFS framework, it may be challenging to dedicate adequate resources to this body of work given the resources required to respond to the upcoming NATA Reassessment.	Once the ANZPAA NIFS framework is released, this recommendation will be implemented as a high priority given the assigned three-month timeframe.	High
60	The laboratory should implement a system, including through amendment of standard operating procedures and the Forensic Register, whereby a peer reviewer of a profile interpretation is randomly allocated so that scientists are unable to select whose work to review.	In progress	• FSQ has implemented some practices to ensure random allocation of major crime case files. • These practices still need to be embedded in SOPs which is currently under development. • ~~The case management SOP due for completion by end of May will provide some guidance regarding allocation.~~ • The now published case management SOP reflects the practice of random allocation of peer reviewers. • External assistance is being provided to review and update SOPs and TMs relating to peer review. • Commensurate changes in FR will also need to be considered and implemented, if required.	30 June 2025	FR enhancements will assist in allocation of cases and improve allocation at end of testing rather than incrementally (currently after profile interpretation and before report preparation). Management of cases at case level is difficult with FR. Additional system is being developed but requires support and	• FSQ is currently in the process of developing a limited CMS, separate and in addition to FR (not a replacement), that will allow FSQ to have greater autonomy over its case management data (albeit only in a limited form). Delivery of this system is still several months away, however, the implementation timeframe for this system is still significantly shorter than timeframes required to update the FR to fully satisfy	None.	Low

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					resources from DOJ ICT.	multiple FR recommendations including FR elements of Recommendation 60		
63	The laboratory and the QPS should reach agreement with bdna to ensure that the laboratory can readily access data and perform data mining tasks appropriate for its functions within the Forensic Register, on its own initiative, by laboratory staff and at any time.	In progress	• Functionality within the FR that will allow FSQ to readily access meaningful data is still to be developed. • FSQ has held initial discussions with bdna about the types of data FSQ will need to readily and routinely access. However, FSQ is reliant on bdna advice to ensure the data FSQ can access is a reliable and comprehensive representation of the information contained within the FR. • FSQ is currently in the process of developing a limited CMS, separate to FR, that will allow FSQ to have some information regarding case management data. • However, the CMS is only a short-term fix as it will require additional administrative effort from FSQ to maintain a second system, and regular transfer of data from the FR.	Delivery of the CMS is still several months away, however, the implementation timeframe for this system is still significantly shorter than timeframes required to update the FR. It is intended that a small cohort of FSQ staff will be utilising the newly built limited CMS in the latter half of 2025, but FR updates are required as the long-term solution.	The CMS project has been delayed due to limited internal FSQ resources. FSQ is currently recruiting a Principal ICT Officer to add an additional, dedicated resource to this project. FR enhancements will come at an additional cost.	• The FR is limited in its ability to provide meaningful data that can be mined and measured. Significant updates would be required to FR to be able to perform this function. • FSQ has experienced significant delays in bdna actioning requests for FR changes or corrections to system issues. • FSQ experiences ongoing difficulty progressing priority FR changes and obtaining quotes from bdna in a timely manner. • In addition, bdna has significantly increased the pricing schedule for its services which has effectively quadrupled the cost of some projects. FSQ does not currently have the budget to fund all of the required FR changes. • Additionally, bdna are currently focused on a number of other high priority FR enhancements to implement other recommendations and these must take precedence.	The limited CMS is being progressed as a high priority to enable FSQ to readily access data and measure its performance. FR enhancements to complete this recommendation is a lower priority, while bdna focuses its limited capacity on higher priority FR enhancements.	High

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						• FSQ is developing a limited CMS as an interim solution.		
64	The laboratory, in collaboration with their stakeholders, should identify a framework within which the quality of results and the output of the laboratory can be measured using data. That framework should include consideration of the proportion of certain types of samples that return useable profiles (for example, blood, semen, saliva, SAIK samples), turnaround times for both NCIDD uploads and comparing to reference samples.	In progress	• FSQ has some raw data relevant to this recommendation having requested this from bdna (as at 8 March 2025), noting that data regarding NCIDD upload times was not requested this time around. • FSQ is yet to develop an established framework relevant to Recommendation 64. This requires FSQ, in consultation with its stakeholders, to decide what information is required for laboratory benchmarking (ie. a list of focused questions that can be obtained from the data, whose answers will provide the most pertinent information for strategy development). • In order to develop such a framework, FSQ should have ready access to relevant data (instead of having to request this data from bdna). This is closely linked to the FR enhancements required for Recommendation 63 in order to mine and measure data relevant to the quality of results and output.	The timeframe for completion of this recommendation is contingent on bdna's capacity to implement the requisite FR enhancements.	FR enhancements will come at an additional cost.	• The FR is limited in its ability to provide meaningful data that can be mined and measured. Significant updates would be required to FR to be able to perform this function. • FSQ has experienced significant delays in bdna actioning requests for FR changes or corrections to system issues. • FSQ experiences ongoing difficulty progressing priority FR changes and obtaining quotes from bdna in a timely manner. • In addition, bdna has significantly increased the pricing schedule for its services which has effectively quadrupled the cost of some projects. FSQ does not currently have the budget to fund all of the required FR changes. • Additionally, bdna are currently focused on a number of other high priority FR enhancements to implement other recommendations and these must take precedence.	FR enhancements to complete this recommendation is a lower priority, while bdna focuses its limited capacity on higher priority FR enhancements.	Low
65	The laboratory should apply to NATA to broaden the scope of its	In progress	• ~~FSQ is awaiting the publication of the ISO 21043 series of international standards for~~	The timeframe for completion of this	Increase in the Quality team,	NATA as the accrediting body will need to do a gap	Once the new ISO is published, FSQ	High

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
	accreditation to be assessed against Australian Standards 5388.1, 5388.2, 5388.3, 5388.4.		~~forensic science, which will replace the AS5388 series.~~ • ~~In October 2024,~~ [redacted] ~~and~~ [redacted] ~~attended the ISO TC272 meeting to progress international standards ISO21043 parts 1-5. All country member comments for parts 1, 3, 4, and 5 were resolved and the standards have now progressed to publication. ISO 21043 part 2 is already published, so the full set of ISO 21043 parts 1-5 will be available in 2025. The committee also worked on comments related to a review of ISO 21043 part 2, and voted to commence a review of the manufacturing standard for consumables used in DNA analysis ISO 18385.~~ • The ISO 21043 series has now been published. • ~~Following publication of the new standards,~~ FSQ will need to purchase these new standards. • Once purchased FSQ will take a Quality team member offline to conduct a gap analysis of currently processes and procedures to the requirements of the new ISOs. • FSQ will then need to develop and processes and procedures to treat the gaps. • Only then will FSQ be in a position to apply to become accredited against the new ISOs.	recommendation is contingent on the publication of the new ISO21043. Following publication, FSQ anticipates it will take approximately 12 –18 months from the time the new ISOs are published, until it is ready to apply for accreditation against this standard.	potentially multiple additional FTE required.	analysis comparing 17025 and new standard to identify new accreditation requirements as a result of the new standards, and how to assess these. Staffing levels (currently only 2 permanent + 1 temporary FTE) and the ability to prioritise this work over other organisational priorities placed on us, including Rec 50 which is likely to commence very shortly as well, and any recommendations from the two FSQ reviews.	will treat this recommendation as a high priority as it is seeking to establish itself as a world leading forensic laboratory.	
66	The laboratory should implement full blinding in proficiency testing so that scientists do not know they are testing a proficiency test sample.	Not yet commenced	• FSQ is awaiting an ability to implement full blind proficiency testing within the FR and an increase in scientific capacity.	The implementation of blind proficiency testing program will need to be a phased approach. The introduction of a similar program at Houston Forensic Science Centre occurred over a period of many years.	Additional funding is required to introduce this program. The magnitude of this cost is unknown at this time. FSQ will also need to stand up a dedicated new team to run this program. The similar team at Houston Forensic Science Centre consists of 6 FTE. This team will also require a	• FSQ has experienced significant delays in bdna actioning requests for FR changes or corrections to system issues. • FSQ experiences ongoing difficulty progressing priority FR changes and obtaining quotes from bdna in a timely manner. • In addition, bdna has significantly increased the pricing schedule for its services which has effectively quadrupled the cost of	The priority for this recommendation is low as it is quite resource intensive and FSQ needs to focus on its foundational processes before moving into this innovative space that no other forensic laboratory in Australia has yet been able to deliver or achieve.	Low

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
					commensurate operational budget to product the blind tests.	some projects. FSQ does not currently have the budget to fund all of the required FR changes. • FSQ does not have sufficient resources to support this initiative and will need a dedicated team.		
77	The laboratory should implement Team and Individual Performance and Development Key Performance Indicators within the laboratory which focus on scientific best practice, quality and the values of the laboratory.	In progress	• FSQ has implemented Expectation Agreements for individual staff. While these do not necessarily stipulate specific KPIs, they set out the performance expectations of each individual. • FSQ is currently able to access and monitor some performance data using the FR with respect to DNA interpretation and review however not enough to implement a proper performance reporting system. • Team performance for FMEK screening is also closely monitored using manual processes. • In order to formalise KPIs at the team and individual level, there is a need for a cultural shift across FSQ. FSQ will take a consultative approach to developing KPIs for individuals and teams in order to overcome this. But FSQ must have regard to the impact on staff wellbeing given current operational pressures before formalising and implementing KPIs. • KPIs will need to measure performance by balancing quality and output. • Once the KPIs are developed, FSQ must ensure it is able to readily access this data whether it be via the FR or the limited CMS currently under development.	The timeframe for completion of this recommendation is heavily contingent on FR enhancements and/or implementation of a full CMS.	If FR enhancements are required to facilitate ready access to data, this will incur an additional cost.	• FSQ has experienced significant delays in bdna actioning requests for FR changes or corrections to system issues. • FSQ experiences ongoing difficulty progressing priority FR changes and obtaining quotes from bdna in a timely manner. • In addition, bdna has significantly increased the pricing schedule for its services which has effectively quadrupled the cost of some projects. FSQ does not currently have the budget to fund all of the required FR changes.	FSQ is measuring its performance to the extent possible, including in areas experiencing backlogs - DNA profile interpretation and review and FMEKs. The development and implementation of formalised KPIs is a medium priority for FSQ, noting the current operational pressures on staff and cultural shift required to implement KPIs at the team and individual level.	Medium
104	Queensland Health should create and implement a policy that outlines the appropriate level of decision-maker for a particular type or class of decision, to ensure that proposed changes made within the laboratory are briefed to the appropriate level. This policy should include that consultation, collaboration and	In progress	FSQ has established a range of frameworks which go toward implementation of this recommendation including: - Project Approval Requirements framework which outlines a standardised approach to project methodology and specifies the approval process for projects. - Implementation Framework which is designed to ensure new systems operate effectively to support forensic science service delivery in Queensland	The procurement of a new eQMS is required to navigate the DoJ ICT procurement pathways – it is anticipated this will take 12-24months (including implementation)	Need to identify and procure a new eQMS.	The DoJ ICT procurement process is challenging and will take time.	This is considered a high organisational priority and FSQ has already stood up an eQMS working committee to progress this work.	High

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
	contribution occur by at least the Management Team of the laboratory, the Executive Director, persons with oversight of the quality management and a working knowledge of the laboratory when providing advice to the Deputy Director-General, Director-General, or other person in line management of the managers of the laboratory. The policy should be reflected in the laboratory's change management standard operating procedure. If the advice relates to a technical process, the briefed materials should include consideration of the scientific risks and benefits of the proposal and any other options, and refer to any data or investigation which may underpin the decision.		justice system. This is achieved by ensuring those responsible for implementation activities consider various impacts with a multi-divisional lens, including compatibility with existing workflows, any implications for throughput, cost effectiveness and legislative requirements Further steps to complete this recommendation include: - finalisation of a Risk Appetite Statement for FSQ - development of an FSQ Change Management Manual -Implementation of new eQMS with a dedicated change management module					
105	The laboratory should conduct a retrospective review of positive control extraction batches processed by the MultiProbe® II instrument to determine if this extraction method was performing sub-optimally, and if so, the period of time in which a sub-optimal method was used and whether there is utility in retesting or re-analysing any potentially affected samples.	In progress	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	Per Recommendation 13.	High
~~108~~	~~The laboratory should engage with external staff who deal with bone samples regularly, including mortuary staff, and facilitate the addition of such staff to the laboratory's elimination database in order to effectively discover any past or future contamination.~~	~~Complete (pending approval)~~ Closed	~~All internal actions have been taken to complete this recommendation. The only outstanding action is to finalise the completion report and progress through the Forensic Science Steering Committee and FSQ Advisory Council for endorsement to close.~~	~~While this recommendation is considered internally completed, closure will be contingent on when the next FSSC and FSQ Advisory Council meetings will be held. At this time is it expected the next FSSC meeting (15 April 2025) and the~~	~~None~~	~~None~~	~~This recommendation is expected to be closed in May 2025 following FSQ Advisory Council endorsement.~~	~~Closed~~

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
				~~FSQ Advisory Council (May 2025).~~				
109	The laboratory must conduct a project to determine the optimal method for DNA extraction from bone samples and validate and implement that method for use in bone case work.	Not yet commenced	• This recommendation requires the resumption of bone testing at FSQ which is currently contingent on a new facility. Following construction of a new facility, FSQ will need to: - design and conduct a project to identify and validate the optimal method for DNA extraction from bone samples, including engagement with external service providers who have expertise in bone processing per Recommendation 110. - develop an implementation plan to operationalise the optimal method.	Timeframes are heavily contingent on construction of a new facility but is not expected prior to December 2029.	Queensland Health have engaged Deloitte to develop a master plan for a new facility. Once a master plan is developed QH will need to seek the necessary funds to construct a new facility.	• The current laboratory is not fit for purpose to reintroduce bone testing. A streamlined business case for a new forensic facility will be submitted for cabinet consideration. Opportunities to resume bone testing were considered and may be achievable with refurbishment of the forensic biology laboratory. • However, adding work to the already strained resources of the laboratory is not preferable at this time. FSQ has outsourcing arrangements currently in place for bone testing, which mitigates the risks associated with FSQ not being able to provide this service 'in-house'. Resumption of bone testing is therefore considered a lower priority and should await a new fit-for-purpose facility which will provide the ideal setting for resumption of bone testing.	• Resumption of bone testing is considered a lower priority (in light of outsourcing arrangements) and should await a new fit-for-purpose facility which will provide the ideal setting for resumption of bone testing.	Low
110	In addressing the recommendations within this section, the laboratory should engage with external service	Not yet commenced	Per Recommendation 109.	Per Recommendation 109.	Per Recommendation 109.	Per Recommendation 109.	Per Recommendation 109.	Low

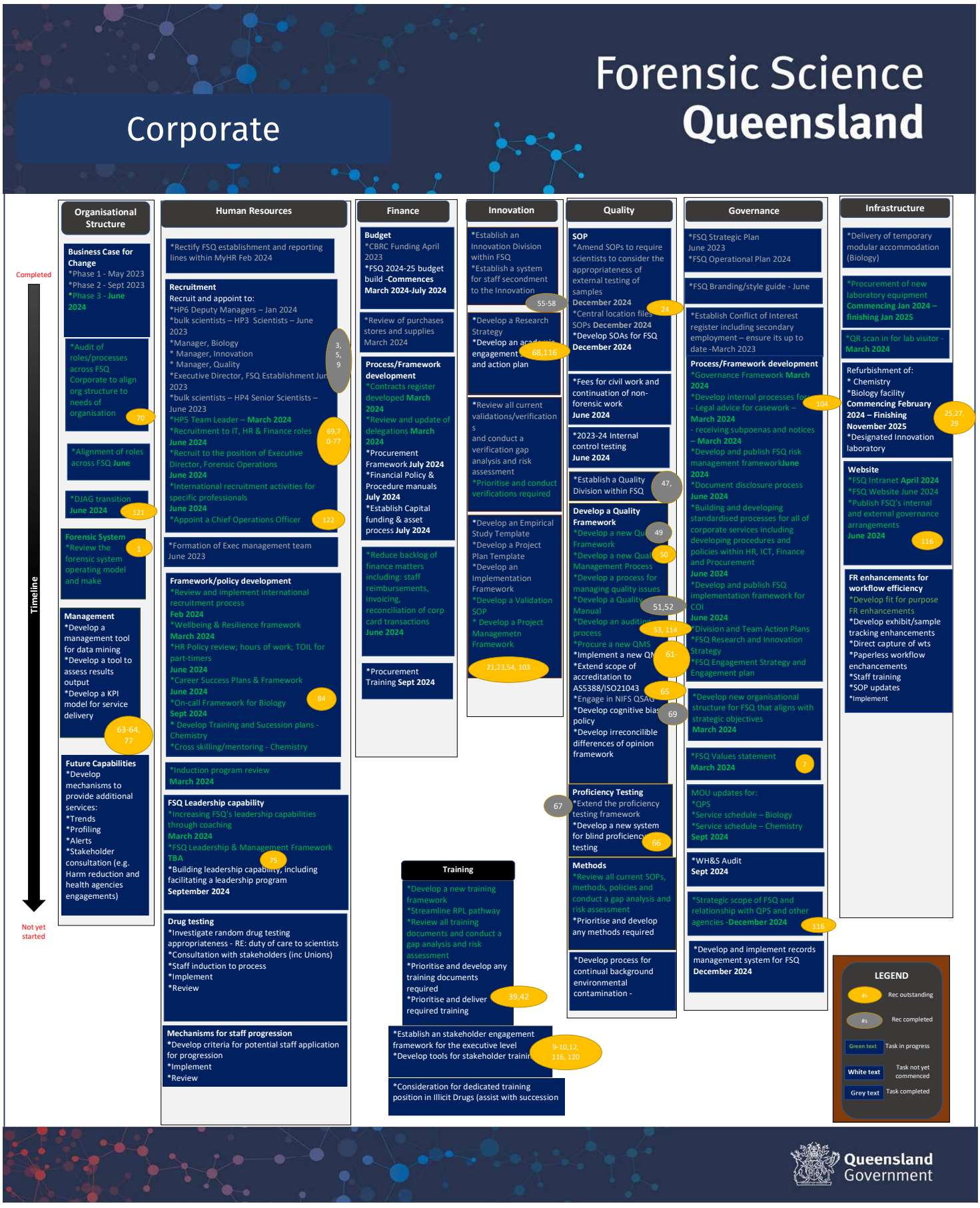
Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
	providers who have expertise in bone processing for guidance on the best practice bone sampling methods and protocols that maximise the recovery of DNA profiles from bone samples.							
114	The laboratory should review the Standard Operating Procedures for case management in order to ensure the following documentation is included in case files: a. Detailed information as to what samples were affected by quality incidents and any decision-making as to rework and reporting of results b. Batch and batch quality information such as the performance of positive and negative controls c. Quantitation results and quality flags for case samples and extraction controls	In progress	• The FSQ Quality Manual defines a case file to include all information captured in the FR. This includes information about samples affected by quality incidents and decisions as to rework and reporting of samples; batch and batch quality information such as the performance of positive and negative controls; quantitation results and quality flags for case samples and extraction controls. • A process needs to be developed to guide the provision of these details when a case file is sent external to FSQ. Information contained in multiple screens. FSQ preference is that a summary document is generated as an FR output which details this information and can be readily provided to stakeholders.	30 December 2026 (for summary output from FR)	FR enhancement – funding and dedicated FTE at FSQ to develop enhancement requests.	Lower priority for FR enhancement.	Lower priority for FR enhancement.	Low
116	The laboratory should develop collaborative relationships with all stakeholders in the criminal justice system including the QPS, ODPP, Legal Aid Queensland, ATSILS, victim advocacy groups, and defence solicitors and barristers (including through the Bar Association of Queensland and the Queensland Law Society and other organisations as appropriate). Relationships should be developed at both the executive and practitioner level and include: a. At the executive level, collaboration in developing the strategic direction of the laboratory, whole-of-justice system management and performance monitoring and joint projects and research;	In progress	• FSQ is represented across a range of governance bodies with other criminal justice system stakeholders at both the executive and practitioner level. • FSQ has also worked closely with QPS to develop a case management model that balances the capacity and capabilities of each agency (see Recommendation 4) • To complete this recommendation, FSQ will work with its criminal justice system stakeholders to develop performance criteria to measure performance. FSQ's ability to measure performance will be contingent on its ability to readily access data via the FR or CMS. • FSQ also intends to establish an ongoing education program for its criminal justice system stakeholders to solidify the relationship at the practitioner level.	The timeframe for completion of this recommendation is heavily contingent on the extent of FR enhancement required to support FSQ's ability to monitor and report on performance. While FSQ does this to the extent possible currently based on FR data it is able to readily access, The timeframe for completion of this recommendation is also contingent on FSQ's capacity to	Any FR enhancements required to readily access performance data will come at an additional cost.	• If FR enhancements are required to develop and measure performance criteria - FSQ has experienced significant delays in bdna actioning requests for FR changes or corrections to system issues. • FSQ experiences ongoing difficulty progressing priority FR changes and obtaining quotes from bdna in a timely manner. • In addition, bdna has significantly increased the pricing schedule for its services which has effectively quadrupled the cost of	As many of the critical groups and relationships have already been established that go toward completion of this recommendation, the remaining actions, while important, are of a lower priority as FSQ focuses on its internal core business practices.	Low

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
	b. At the practitioner level, collaboration in case management and examination strategy setting, joint learning and development opportunities and performance monitoring of practitioners within the laboratory and stakeholders agencies.			develop a package of educational materials for its stakeholders (including those specified in Recommendations 9, 10 and 12)		some projects. FSQ does not currently have the budget to fund all of the required FR changes.		
118	The laboratory should change its reporting practices to: a. review all reportable results and develop qualifying and contextual statements based on paragraph 61 to 71 of the report of Dr Kogios and Ms Baker and forensic service best practice; b. standardise the reporting of 'unknown' DNA profiles through policies introduced to the standard operating procedures and training, and consider adopting the use of STRmix mixture-to-mixture feature to analyse unknown profiles; c. reduce the number of categories used in reporting of results by reviewing and removing categories from the Forensic Register; d. include tables, visual aids and verbal equivalents (as well as numerical likelihood ratios) throughout statements; and e. take steps towards implementing source level reporting (attribution of body fluids to DNA results) by collaborating with the QPS about possible implementation pathways.	In progress	• A revised Forensic Biology Statement of Witness template, annexures and drafting guidelines were developed and implemented completing components of rec 118. Further work is still required as follows: • Part a – the following findings in the Dr Kogios and Ms Baker report still require addressing: - FR update required to auto generate statement of witness including reporting lines. Quote obtained from bdna April 2025 for this work and is with FSQ senior management for budgeting consideration. - Case management SOP is being updated to ensure consistent approach and wording to reporting of unknown profiles. Mixture searching is pending ability to obtain download from NCIDD. In development with ACIC. Other mixture searching tools to be implemented with DBLR implementation. - work to rationalise result lines and develop FR enhancement user story in progress. - verbal equivalency scale has been implemented. Annexures include visual aids and tables to support comprehension of results. Further education and discussion to develop consistent approach to source attribution in progress at FSQ. - mechanism to disseminate service delivery model information to stakeholder to be developed - ongoing work involving staff training and stakeholder engagement - Staff upskilling and training required for FSQ to provide more meaningful biological source reporting. This will involve significant work within forensic biology.	Given the multiple elements to this recommendation and that all elements must be complete to close the rec, estimated completion date is December 2026	FR enhancement – funding and dedicated FTE at FSQ to develop and finalise improvements required and then to develop FR enhancement requests.	Resourcing and time e.g. to rationalise result lines. This will impact QPS who use result lines to input into a dashboard. Significant cost and FR enhancement required to update result lines and statement templates.	High priority	High

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
			- Need to ensure any relevant SOPs are consistent with Number of Contributor reporting and result lines. FR needs to be updated to reduce result lines. • Part b - STRmix mixture-to-mixture feature requires validation and implementation. Training as part of the implementation of the new statement template to include reporting of 'unknown' profiles. • Part c – FR amendment still required. • Part d – Complete. • Part e - Broader piece required to be able to perform more meaningful biological source reporting yet to be commenced. This will involve significant work within forensic biology and sits outside of the statement and annexures scope of work.					
119	The laboratory should review its reporting standard operating procedures and suggested wording contained therein and make amendments to ensure the language it uses in the Forensic Register and in formal witness statements accurately describes the true situation of the testing that has been conducted on the sample in plain English.	Substantially implemented pending Forensic Register change	At its 22 May 2025 meeting the FSQ Advisory Council reopened Recommendations 33 and 119, and confirmed that these recommendation should instead be reported as 'Substantially implemented pending Forensic Register (FR) changes'. The Interim Advisory Board previously closed Recommendations 33 and 119 with a note that the FR elements were yet to be implemented. However, at its 4 February 2025 meeting Council decided that any recommendation with an FR component should remain open until they have been fully implemented, using an implementation status of 'Substantially implemented pending FR change' as appropriate. The Council was silent on reopening Recommendations 33 and 119 at this time. FSQ supported the position that these recommendations be reopened as both expressly require FR changes.				Priority is low as FSQ is able to effectively implement this recommendation in the absence of the FR change via the new Statement of Witness template, Annexures and drafting guidelines	Low
120	The laboratory should ensure the QPS, Office of the Director of Public Prosecutors, defence barristers and solicitors (including through the Bar Association of Queensland and the Queensland	In progress	• FSQ has facilitated several collaborative training activities with its criminal justice system stakeholders over the course of 2024. • A revised Forensic Biology statement of witness template, with new drafting guidelines, and separate annexures for each type of testing	Refer to recommendation 9 in relation to the production of written and video	The BCFSC#4 in development advocates for an adequately resourced training function within the	The main impediment to implementation of this recommendation is resourcing. FSQ's education and training function sit within the	FSQ is currently focusing on its inward training program, and conducting some	Low

Rec #	Rec wording	Rec status	A & B) What remains to be implemented	C) What is the timeframe	C) What additional resources, if any, are needed	D) Please note any major impediments	E) Please provide any priorities attached to implementation	Priority Low/Med/ High
	Law Society and other organisations as appropriate) and other participants in the criminal justice system understand the meaning of the results it reports by: a. collaborating with those participants in developing accurate wording that is understood by all stakeholders; b. educating those participants as to the processes and reporting practices of the laboratory through training sessions; and c. maintaining an ongoing and regular education program for participants who join the criminal justice system and foresee interacting with DNA evidence.		performed within the Forensic Biology Division, in consultation with its criminal justice system stakeholders. • FSQ also developed a 'Forensic Biology summary of results' which is a significant enhancement of the services it offers to its criminal justice system stakeholders in the delivery of results and is designed to enhance comprehensibility of the Forensic Biology results. • To complete this recommendation, FSQ needs to develop an ongoing, regular education program for its criminal justice system stakeholders.	educational materials. FSQ would like to eventually attend induction programs for its criminal justice system stakeholders, however, this will be some years away.	Quality Assurance Division which would have a role outward facing training and education packages/materials.	Quality Assurance Division and its resources have been focussed on other major priorities such as establishing a robust Quality Management System and Accreditation.	stakeholder training as required. Further enhancements to outward focused training will only be commenced once internal foundational processes have been strengthened and embedded.	
122	As soon as practicable, Queensland Health should appoint: a. a chief executive officer, who is eminent in the field of forensic DNA analysis, to lead the reform of the laboratory; b. an advisory sub-committee, constituted by at least three eminent scientists in the field, who will give expert guidance and support to the chief executive officer; and c. a chief operations officer to lead the administrative management of the laboratory.	In progress	Part a. - completed Part b. - completed Part c. - awaiting formal appointment of the Deputy Director, Forensic Operations (DDFO). The recruitment process has been finalised and the selection report has been prepared and approved by the panel. It should be noted, however; that FSQ had an acting Chief Operations Officer from January 2023. This role was subsequently split into the DDFO and Deputy Director, Forensic Establishment (DDFE) roles which continue to be filled via acting arrangements.	June 2025	None	FSQ is awaiting amendments to the FSQ Act so that the contract can be progressed with the successful applicant of the DDFO role and the DDFE (renamed in the BCFC#4 to the DD Corporate Operations) role can be advertised.	The establishment of an interim model to manage and oversee the laboratory operations was treated a high priority following the Sofronoff Commission of Inquiry. This model has existing since early 2023, but this recommendation was finalised as the COO role (or equivalent) has not been formally appointed.	High

Attachment 14 Implementation of Reforms - FSQ Planning Document



Forensic Biology

Forensic Science Queensland

High Priority

Timeline

Low Priority

Cases Received

Case Information
*FR changes
2,3

Redesign SAIK
*Redesign kit contents
*Validate new swabs
*Validate FTA cards
*Develop new forms
*Stakeholder training
*Develop FSQ SOP
*Staff training
*Implement
*6 month review
86-89, 91-94

Outsourcing
*Procurement process
*Develop SOP
*Train external staff
*Audit process
*Train additional staff
* External assistance for developing FSQ frameworks

Case Management
*Establish working group and meetings
*Define workflows and roles
*Develop SOPs
*Implement
4, 41,11

Evidence Recovery

Technical Review

Blood - Hemastix
*Validate
*Develop SOP
*Staff training
*Implement

FMEK Introduction (replacing SAIK)
*Develop exam SOP
*Fingernail swab verification
*Staff training
*Implement
59

Spermatozoa
*Develop SOP
*Staff Training
*Implement
59

Examination Strategy
*Develop SOP
*Staff training
*FR changes
*Implement
4

Examination workstreams
*Define streams
*Develop SOPs
*Staff training
*Define and set up lab areas
*Implement
5,6,41

Sampling Methods
*Define project
*Attract Honours project student
*Conduct project
28

Blood - Hematrace
*Validate
*Develop SOP
*Staff training
*Implement

Semen - p30
*Validate
*Develop SOP
*Staff training
*Implement

Crimelite
*Validate
*Develop SOP
*Staff training
*Implement

Saliva
*Validate RSID
*Develop SOP
*Staff training
*Implement

AP
*Validate
*Develop SOP
*Staff training
*Implement

Analysis

Extraction | Quantitation | Amplification/CE | Interpretation

Technical Review

Lower Elution Volume
*Validate QIA Symphony
*Validate Maxwells
*SOP
*FR changes
*Staff training
*Implement
20

Limit of Detection
*Validate
*SOP
*FR changes
*Staff training
*Implement
7, 15,16
8

YSTR
*Validate YFiler
*Develop SOP
*FR changes
*staff training
*Implement
43,40, 36

DNA Interpretation Guidelines
*Develop guideline
*Staff training
*Implement
*FR Changes
31,34, 38,118
60

CORE II Tips
*Verification
*SOP
*FR changes
*Staff training

Limit of Effective Profile
*Validate
*SOP
*Staff training
*Implement

Proflex
*Validate
*Update SOP
*Staff training
*Implement
19,30

Plate Reading
*Develop SOP
*Staff training
*Procure IT
*Implement
36,38

Extraction Efficiency
*Verify QIA Symphony blood
*Verify QIA Symphony trace/saliva
*Verify Maxwell FSC Semen
*Verify Maxwell 16 blood
*Verify Maxwell 16 trace

Electrophoresis
*Validate
*3500xL C reverification
*Develop SOP
*Staff training
*Implement
22

Interpretation Software
*Audit Genemapper licences
*Audit STRmix licences
*Procure additional licences
*Procure IT
*Staff training
*Implement
36

Extraction changes
*Validation statistics
22
*Negative control SOP
26
*Implement

Sequencing
*Procure SeqStudio Flex
*Validate
*Develop SOP
*Staff training
*Implement

Model Maker
*Validate
*Develop SOP
*Staff training
*Implement
18

Extraction workstream
*Define streams
*Verify methods
*Develop SOPs
*FR changes
*Staff training
*Implement

STRmix v2.11
*Validate
*Develop SOP
*Staff training
*Implement

STRmix VarNoC
*Validate
*Develop SOP
*Staff training
*Implement
32

Extraction Robotics
*Procure robots (Tecan Fluent 1080)
*Installation, contamination testing, optimise script
*Validate (Prepfiler)
*Develop SOP
*Staff training
*FR changes
*Implement

FaSTR
*Validate
*Develop SOP
*Staff training
32

Source Level Attribution
*Validate
*Develop SOP
*Staff training
*Implement
118

Bone Analysis
*Develop and validate an extraction method for b
*Staff Training
*Implement
107, 109-110

DBLR
*Validate
*Develop SOP
*Staff training
*Implement

Case Assessment

Case assessment
*Develop SOP
*Staff training
*FR changes
*Implement
4,24,43

Case assessment Sexual Assault cases
*Develop SOP
*Staff training
*FR changes
*Implement
43

Interpretation Blind Review
*Develop SOP
*FR changes
*Staff Training
*Implement
38,60

Elimination Database
*Mortuary staff training
*Develop SOP
*Implement
108

Reporting

Statements
*Develop new interim report
*Develop new format court report
*Develop SOP
*Staff training
*FR changes
*Implement
11,31, 33,37,

Statement Annexures
*Develop annexure blood
*Develop annexure semen
*Develop annexure saliva/trace
*Develop annexure DNA analysis
*Develop annexure paternity testing
*Staff training
*FR changes
*Implement
33, 118

Court Monitoring
*Develop SOP
*Staff training
*Implement
38, 116

Case Review

Case Review Process
*SOP
*Staff training
*Implement
13,14, 17,44-46,105
106

Court Monitoring
*Develop SOP
*Staff training
*Implement
38

LEGEND

#s — Rec outstanding
#s — Rec completed
Green text — Task in progress
White text — Task not yet commenced
Grey text — Task completed

Prioritise listed on this action plan may change to reflect dynamic operational needs.

Items may be commenced or completed prior to a 'higher priority' item due to influences such as delays in procurement process and resourcing constraints

Queensland Government

Chapter 8: Conclusions

8. Conclusions

8.1 An opportunity for change

981. The DNA Review engaged with many experts across the DNA service delivery system, and victim advocate and support services. There was strong motivation across all organisations to develop a best practice DNA service delivery framework and improve outcomes for victims and the Queensland community. There is a very high level of expertise and dedication across the system which can be leveraged to develop and implement the necessary changes identified in this report.

982. The historical case review has demonstrated a number of successes to date, with over 20% of samples undergoing further scientific analysis providing useable profiles, when none were originally obtained. While FSQ has not completed any historical case reviews for cases referred by ODPP or QPS (only those with court dates), the DNA Review believes many cases could be assisted or resolved by the historical case review once it commences at FSQ. The DNA Review has identified significant improvements which could support the FSQ historical case review process and enable its completion to best practice.

983. An opportunity exists through the state government's DNA Review to make a generational change, however, significant transformation is needed. It is essential a systems approach is taken to develop, implement, and manage Queensland's new DNA service delivery framework. Changes to the whole system governance of DNA service delivery, FSQ governance, and the FSQ organisational structure are three essential changes which will provide the platform needed to deliver a modernised, holistic DNA service delivery framework.

984. The recommendations in this Report aim to support the Queensland Government's policies for Faster Justice for Victims, Safer Communities, and Fewer Victims of Crime.

Schedule 1 - Glossary

Abbreviation/Acronym/Term	Meaning
3PM or Portfolio, Program, and Project Management	Aligns Portfolio, Program, and Project Management to achieve organisational strategic objectives
Accuracy	Accuracy refers to how close the experimental measurements are to the true value. In relation to DNA it is: the degree to which the DNA results correctly reflect the true genetic profile of the sample tested
Alleles	Pieces of DNA information comprising a DNA profile.
BAU or Business-as-usual	Business-as-usual being the usual operation of a company or an organization.
Bennett Inquiry	Commission of Inquiry to examine DNA Project 13 concerns (commissioned 5 October 2023 to 17 November 2023)
Board	Interim DNA Advisory Board
Cold case homicides	These are active re-opened homicide investigations that are considered a priority by QPS and just as important as current matters.
CoI	Commission of Inquiry
Commission of Inquiry	A formal investigation, typically conducted by a government body or a judge, to inquire into and report on matters of public interest.
Coroners Act	*Coroners Act 2003* (Qld)
Council	The DNA Advisory Council
Crime Scene Samples	For the purpose of this report, crime scene samples refer to samples collected from the crime scene testing from the crime scene or sub-samples from evidence for the purpose of DNA testing. In Queensland these samples are collected predominantly by the police
DJAG	Department of Justice and Attorney-General

Abbreviation/Acronym/Term	Meaning
DLT	Director's Leadership Team
DNA	Deoxyribonucleic acid, the molecule that carries the genetic information to form an organism.
DNA amplification	A process that increases the number of copies of a specific DNA sequence, which can be achieved using a process such as polymerase chain reaction (PCR).
DNA Backlog	An accumulation of DNA samples that have not yet been tested, analysed or reported within a timeframe required by the police and courts.
DNA contamination	DNA contamination is introduced into laboratories from unknown sources (such as laboratory surfaces, instruments, people, or other samples), which can unintentionally be introduced into crime scene samples.
DNA Evidence	The collection, testing, analysis and reporting of biological samples (DNA) that have been recovered from crime scenes or from individuals (personal samples or victim samples).
DNA extraction	The process of isolating DNA from cells or tissue.
DNA Negative control	In context of this report, a sample used in the DNA testing process (such as a DNA extraction, and DNA amplification) that does not contain any DNA and as such should not produce a DNA profile. If the negative control produces a DNA profile during the experiment it is due to contamination (possible sources include laboratory, personnel, or a DNA sample).
DNA outsourcing	Obtaining DNA testing services by contract from an external supplier.
DNA profile	A unique pattern of DNA that can be used in forensic science to assist in the identification of suspects, victims, and unknown deceased.
DNA Review	The independent review requested by the Government into operational matters at FSQ. This includes seven terms of reference broadly covering the historical case review, implementation of the commissions of inquiry reforms, and an analysis of FSQ service delivery.

Abbreviation/Acronym/Term	Meaning
DNA service delivery	The system of interdependent processes from the collection of DNA at the crime scene to the presentation and evaluation of DNA evidence in the courts.
DNA testing threshold	Used in many forensic biology laboratories as a decision point on whether to fully test crime scene evidence DNA samples, or not to proceed to testing as it is unlikely that there is enough DNA to obtain a DNA profile.
DPC	Department of Premier and Cabinet
DPP	Department of Public Prosecutions
DSTG	Defence Science and Technology Group
DVConnect	DVConnect provides the Queensland-wide domestic and family violence helplines https://www.dvconnect.org/
Efficiency	The ability of a DNA laboratory to process samples in a timely and resource-effective manner, without compromising quality.
End-to-end outsourcing	Outsourcing of complete DNA testing services to external service providers. Includes all steps of testing from extraction of DNA to the reporting of results.
End users	The users of the forensic DNA services provided by Forensic Science Queensland. Including the victims of crime and their families, police, coroner, and courts.
Exculpatory	Evidence that supports a defendant is not guilty.
FTE	Full Time Equivalent
FMEK	Forensic Medical Examination Kit
Forensic Biology	The forensic science discipline that involves the analysis of biological samples, including but not limited to DNA.
Forensic Sciences	The application of scientific methods and techniques to matters under investigation by a court of law.

Abbreviation/Acronym/Term	Meaning
Forensic Services	The application of scientific methods of testing and analysis, and scientific interpretation
FRISC	Forensic Research and Innovation Steering Committee
FSQ	Forensic Science Queensland
FSQ Act	*Forensic Science Queensland Act* 2024 (Qld). The new statutory framework to ensure high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland.
FSSC or Forensic Science Steering Committee	Provides for system-wide oversight of the forensic science service delivery workflow in Queensland and the impacts on the Queensland justice system and the effective coordination and accountability in the management of forensic services across stakeholder agencies.
FSSA	Forensic Science South Australia
HCR or Historical case review	A case is considered to be within scope as a 'historical case review' case if it is a 'major crime' case, as defined by set QPS crime type categories, and if the DNA results were reported between 1 September 2007 and 30 April 2023.
IAB	Interim DNA Advisory Board
ICT	Information Computing, and Technology
Incremental innovation	Continuous improvement of existing processes, products and services e.g. of process or products, optimising existing processes and procedures or a product line extension. Analogy: motor car industry - maintenance and development of new models, using existing car-model technologies to build from and to improve on; each new model has been incrementally improved on from the previous model. In other words, incremental innovation has improved on the original model car.
Inculpatory	Evidence that supports a defendant's guilt
Inquiry	A reference to both the Sofronoff Inquiry and Bennett Inquiry

Abbreviation/Acronym/Term	Meaning
Innovation	For the purpose of this review, advancements in technology and methods used to detect, record, collect, analyse, and report evidence in criminal investigations, enhancing accuracy and efficiency
Innovation networks	A group of agents (team, stakeholders, individuals, etc) that connect to share knowledge, resources and ideas to foster innovation. Networks can exist in a single organisation, or across multiple entities including external partners and stakeholders
Internal audit	An FSQ internal audit conducted by the FSQ Research and Innovation team (announced 5 October 2023 and findings released 19 November 2023)
ISO/IEC	International Organisation for Standardisation and the International Electrochemical Commission
ISO/IEC 17025 (2017)	International standard that outlines the general requirements for the competence of testing and calibration laboratories. The standard that currently most forensic laboratories around the world are accredited to.
Issue	A realised risk, meaning a risk that has accentuated and is negatively impacting the objective of an organisation
Joyful Heart	United States of America based organisation who provides advocacy and education to improve society's response to sexual assault, domestic violence, and child abuse
Justices Act	*Justices Act 1886* (Qld)
Likelihood ratio	Compares how well the DNA evidence supports a proposition that the crime scene DNA came from a nominated person rather than from someone else
LIMS or Laboratory Information Management System	A software system that helps laboratories manage samples, data, and workflows.
Linear model	A simplified view of how innovation happens, suggests a sequential, step-by-step process from basic scientific research to commercialisation (or implementation /operationalisation). This model essentially sees innovation as a one-way-street, with science-leading to technology and then to economic growth. Earlier model

Abbreviation/Acronym/Term	Meaning
	and overtaken by innovation systems model – thought to be more modern in approach
LOD or Limit of Detection	The smallest concentration of DNA that can reliably be detected in a sample.
Magistrates court	The Magistrates Court is the first level of the Queensland Courts system. Most criminal cases are first heard in this court in some form.
Major crime	A serious offence against a person, such as homicide (murder, manslaughter), aggravated assault, and rape.
MOU or *Memorandum of Understanding*	A written agreement between two or more parties that outlines a framework for future collaboration or a general understanding of their intentions. MOUs are often not legally enforceable.
Mock sample	A simulated version of a real sample.
NATA or National Association of Testing Authorities	Australia's leading accreditation body, recognised by government to assess organisations. NATA accredits organisations to perform testing and inspection activities to a National or International standard.
National Criminal Investigation DNA Database	Australia's national DNA database, which holds more than 1.7 million DNA profiles from crime scenes, convicted offenders, suspects, volunteers, items belonging to missing persons and unknown human remains.
NCIDD	National Criminal Investigation DNA Database
NIST	National Institute of Standards and Technology
Not started backlog	These are major crime and volume crime cases that FSQ has received but have not started processing.
ODPP or Office of the Director of Public Prosecutions	Queensland's independent prosecuting authority (statutory authority)
OIIS or Office of the Independent Implementation Supervisor	Established to support the Independent Implementation Supervisor to oversee the implementation of the Queensland Government response to the Women's Safety and Justice Taskforce recommendations and the Independent Commission of

Abbreviation/Acronym/Term	Meaning
	Inquiry into Queensland Police Service responses to domestic and family violence.
P1 or Priority 1 DNA Samples	Crime scene DNA samples from violent unresolved offences which have been nominated by the Queensland Police Service (QPS) for priority testing within days.
P1.5	Priority 1.5 DNA sample. A high priority major crime DNA sample that requires testing within 3 weeks.
PMO	Program Management Office
Person Samples	DNA samples collected (under legislation) from swabbing inside the mouth of suspects or victims, used in DNA testing and compared to DNA taken from crime scene samples.
Police Powers Act	*Police Powers and Responsibilities Act 2000* (Qld)
Project 13	Related to the failed introduction of robotics in 2007 into the Forensic Biology laboratory to extract DNA from crime scene samples by the Queensland Health Forensic and Scientific Services (QHFSS).
QAF	FSQ Quality Assurance Forum
QHFSS	The former Queensland Health Forensic and Scientific Services
QHSS	Queensland Health and Scientific Services
QPS	Queensland Police Service
Quality management system	A quality system that ensures that services consistently meet end users' needs and requirements. In forensic science a quality management system consists of accreditation to the required standard by an external agency, validation/verification of standard methods, and proficiency testing of staff.
Reforms	Implementation of the Inquiry recommendations.
Reliability	The consistency and reproducibility of results when an experiment or measurement is repeated under the same conditions.

Abbreviation/Acronym/Term	Meaning
	In relation to DNA it is: the consistency and dependability of DNA testing results over time and across different conditions or operators.
Rape	A serious sexual offence involving penetration of another person without the other person's consent. It can be any form of penetration of the vulva, vagina, anus, or mouth without consent.
Reporting scientist	A forensic scientist who has been trained to a standard to write witness statements for court and testify to present expert evidence/opinion in a court of law.
Reviewers	The DoJ appointed three reviewers with relevant availability, expertise and experience to answer the TORs, being Dr Kirsty Wirght, Dr Lauren Wilson and Alison Sears
R&D or Research and Development	Systematic, creative work aimed at increasing scientific knowledge and applying it to create new products, processes, or technologies. It encompasses both basic research (exploring fundamental principles) and applied research (solving specific problems)
Risk	The effect of uncertainty of an organisation of achieving an objective.
Risk assessment	A systematic process that involves identifying, analysing, and evaluating risks to achieve organisational objectives
SAIK	Sexual Assault Investigation Kit
Sample	A small part or quantity intended to show what the whole is like.
Sexual Assault	Any unwanted sexual behaviour, done without the person's consent. It can include unwanted kissing and inappropriate sexual touching. It can also include forcing another person commit to an act of gross indecency, or making a person see it.
SLA or Service Level Agreement	An agreement between a service provider and end user that defines the level of service expected
SMT or Senior Management Team	The FSQ Director and senior managers that comprise the decision makers for FSQ.

Abbreviation/Acronym/Term	Meaning
Sofronoff Inquiry	Commission of Inquiry into Forensic DNA Testing in Queensland (commissioned 13 June 2022 to 13 December 2022)
STRMix™	Software that allows forensic biologists to analyse, interpret and investigate DNA profiles, including DNA mixtures, more efficiently and effectively
System	A group or set of related or associated things perceived or thought of as a unity or complex whole.
SoS or System of Systems	A collection of independent systems that work together to achieve an outcome that is more than the sum of the parts.
Standard operating procedure	A document that provides detailed, step-by-step instructions for performing a specific task, ensuring consistency and efficiency across an organization.
Started cases backlog	These are major crime cases (including rape kits where testing has commenced), volume crime cases, and coronial cases FSQ has received and started processing, but have not completed testing.
Supreme Court Practice Directive 14	A Supreme court directive requiring experts to disclose any limitations or uncertainty affecting the reliability of results including the scientific validity of expert evidence.
Tapelift	A method used to recover DNA from crime scene evidence using sticky tape.
TOR	Terms of Reference
Transformational Leadership	Style of leadership which inspires and motivates their followers to achieve extraordinary results and develop their full potential. Goes beyond traditional management by fostering a shared vision, promotes innovation and personal growth
Unidentified human remains	In relation to the DNA Review: these are skeletal human remains involved in active QPS Missing Person or Coronial investigations that require evaluation and DNA testing to enable identification

Abbreviation/Acronym/Term	Meaning
Upper Court	Refers to the Supreme Court in the States and Territories, which is the highest court with responsibility for criminal, civil and appeals.
Validation	The experimental process of ensuring that a method, technique or instrument is accurate, reliable, repeatable and fit for purpose in its intended environment.
Verification	Confirming that the findings or results obtained through a specific method, technique, or instrument from a procedure that has been used in another laboratory remain fit-for-purpose in its intended environment.
Volume crime	A minor offence typically involving property such as burglary, theft, or car theft.
WHS	Work Health and Safety

Schedule 2 –Terms of Reference

Attachment 1

TERMS OF REFERENCE

REVIEW OF FSQ

The State of Queensland, acting through the Department of Justice, appoints Dr Kirsty Wright to conduct a review of Forensic Science Queensland (FSQ) as outlined within this Terms of Reference (ToR) document.

Note: A second reviewer will be later appointed under this instrument.

BACKGROUND

The Queensland Government has committed, through its '*The First 100 Days*' document, to begin a review into FSQ as an election commitment to be delivered upon in its first week of Government.

It is of vital importance that FSQ, as the State-run DNA laboratory, holds the confidence of the Queensland community and as an organisation that is able to effectively deliver justice for victims by ensuring the delivery of high quality, reliable, independent and impartial forensic services for the administration of criminal justice in Queensland, consistent with the *Forensic Science Queensland Act 2024* (Qld).

This review will inform the Queensland Government about the status of reform implementation initiatives, with a view to ensuring the efficiency and integrity of FSQ's operations and strengthening the criminal justice system's capacity to deliver justice for victims of crime.

Commission of Inquiry Recommendations – Implementation
To date, FSQ (and its predecessor, Queensland Forensic and Scientific Services) has undergone two Commissions of Inquiry, conducted less than 12 months apart. The two Commissions of Inquiry were:

- Commission of Inquiry into Forensic DNA Testing in Queensland (Sofronoff Inquiry) (commissioned 13 June 2022 to 13 December 2022); and
- Commission of Inquiry to examine DNA Project 13 concerns (Bennett Inquiry) (commissioned 5 October 2023 to 17 November 2023).

The two Commissions of Inquiry have led to the need for FSQ to implement 126 recommendations. These 126 recommendations are comprised of:

- 3 recommendations made by the Sofronoff Inquiry under an 'interim report' delivered 15 September 2022; and
- 123 recommendations made by the Sofronoff Inquiry under its 'final report' delivered on 13 December 2022.

The Bennett Inquiry also made two recommendations which have been treated as detailed extensions of recommendation 105, from the Sofronoff Inquiry, and have, therefore, been added as part of, and not in addition to, the overall count of 126 recommendations.

Progress to date in relation to the 126 recommendations is as follows:

- 67 recommendations are completed and closed;
- 10 recommendations are provisionally completed and are awaiting presentation to the FSQ Advisory council for formal closure;

- 38 recommendations are in progress[1] (the 'In progress' recommendations); and
- 11 recommendations are yet to commence implementation[2] (the 'outstanding' recommendations).

Historical Case Review

A case is considered to be within scope as a 'historical case review' case if it is a 'major crime' case, as defined by set QPS crime type categories, for which DNA samples had results reported by the Forensic Biology division of Queensland Forensic and Scientific Services or its successor, FSQ, between 1 September 2007 and 30 April 2023.

There is an estimated 41,077 major crime cases received during the time period outlined above for historical case review.

This total includes some cases that are still active before the courts, cases which were previously active before a court but have since been either discontinued or finalised, and cases which were subject to criminal investigations but never progressed to formal court proceedings.

FSQ, QPS, and the Office of the Director of Public Prosecutions (ODPP), have developed a set of historical case review principles which broadly outline how historical cases will be reviewed. Under these principles, cases will first be subject to a form of 'Initial Review', consisting of either:

- 'ODPP legal-led case reviews', in which historical cases which are or were active before a court will be holistically reviewed by the ODPP; or
- 'QPS probative-led case reviews', in which historical cases that did not progress to formal court proceedings will be holistically reviewed by the QPS.

In both types of Initial Review, the ODPP or QPS, respectively, will consider whether any of the DNA samples for a historical case should be subject to a further scientific review. This decision will be based upon a consideration as to whether there is a prospect of either a new charge or changes to a historical case's outcome, as well as the interests of any victims and their support networks.

Historical cases identified as requiring further review will then be forwarded to FSQ for scientific review. During these scientific reviews, FSQ will consider whether, and what, further testing, analysis or interpretation is appropriate in the individual circumstances of each case. The scientific reviews will be guided by best practice principles and any relevant case-context information made available to FSQ.

Backlogs

Backlogs have been present at FSQ (and its predecessor, the Forensic Biology division of Forensic and Scientific Services), to varying degrees for over a decade. These backlogs worsened during the Sofronoff and Bennett Commissions of Inquiry due to a drop in productivity at the laboratory and staff shortages.

FSQ's current Service Level Agreement with the Queensland Police Service (QPS) specifies a turnaround time goal of ten working days for reference samples. FSQ is not currently meeting this turnaround time for most of the cases that it processes, but has maintained a five-day turnaround time for Urgent, 'Priority 1', cases.

Since June 2023, and as of 18 October 2024, FSQ has engaged 21 external scientists across five external forensic service providers to assist with DNA profile interpretation and review. This has resulted

[1] This refers to recommendations: 1, 4, 5, 6, 11, 12, 13, 22, 25, 27, 28, 36, 38, 40, 41, 42, 44, 45, 46, 60, 63, 77, 80, 81, 95, 96, 104, 105, 108, 112, 113, 116, 117, 118, 120, 122, 123 and interim report recommendation 2.

[2] This refers to recommendations: 9, 10, 17, 32, 50, 64, 65, 66, 109, 110 and 114.

in the equivalent of adding 7.6 FTE to FSQ's capacity. A further three providers have been engaged and are soon to commence casework for FSQ.

As of 18 October 2024, external scientists had completed work on 13,900 samples and carried out reviews of results for 7,347 samples. Most of this work has been on volume (property) crime due to QPS initially agreeing to outsourcing only of volume crime cases to international forensic service providers (FSPs). This decision has since been reviewed and QPS has now agreed to these international FSPs commencing work on major crime (crimes against the person). FSQ has commenced transitioning the international providers to work on major crime cases.

SCOPE

This review should consider and make recommendations in relation to:

1. Identifying what remains to be implemented for the 38 'in progress' recommendations;
2. Providing advice as to 'best practice' for completing the implementation of the 38 'in progress' recommendations;
3. Providing advice as to 'best practice' for implementing the 11 'outstanding' recommendations;
4. Providing advice as to availability of any options that may be able to assist FSQ with the historical case review process;
5. Providing advice as to the resourcing required to efficiently and effectively deliver the reforms outlined in items 1-4;
6. Provide advice to government on options that may be available to FSQ to enhance and improve efficiency, accuracy and reliability of service delivery in forensic DNA testing and analysis;
7. Provide advice to government on the development and implementation of a framework for the future delivery of forensic DNA testing and analysis, ensuring alignment with best practices, stakeholder needs, and public confidence;
8. Providing advice as to the appropriateness of the verification and validation of scientific methods framework implemented by FSQ post the Sofronoff Inquiry;
9. Reviewing the current backlog of samples for testing and advising of any opportunities that may exist to implement amendments to, or supplement current backlog strategies to assist in, reducing backlog numbers in a more expedient manner;
10. Providing advice as to whether the current systems relating to provision of witness statements, or advice, to the QPS or the Courts could benefit from amendment to ensure cases can progress with optimal speed;
11. Identifying whether any delays, or backlogs, at FSQ, are impacting active police investigations and/or public safety;
12. Providing advice as to whether the absence of the provision of some testing services at FSQ (e.g. provision of testing in relation to bone samples) is causing delays in cases requiring such expertise;
13. Providing advice as to whether the scientific processes at FSQ are impacting upon its service delivery and the veracity of the results being reported; and
14. Providing advice as to the impact of the FSQ Advisory Council on FSQ, having regard specifically to the scientific processes of FSQ.

ROLE OF REVIEWERS

Dr Wright has been engaged to inquire and report on items 1-7 inclusive under the heading "Scope" in this document.

The second reviewer will be engaged to inquire and report on items 8-14 inclusive under the above heading "Scope" in this document.

The Reviewers are engaged to conduct their reviews, and subsequently prepare their reports, independently of one another.

Dr Wright, and the second reviewer, are engaged to undertake their respective reviews pursuant to contractual arrangements.

CONSULTATION

The Reviewers can consult with key stakeholders including the ODPP and QPS and any other person or organisation the Reviewer considers appropriate and relevant. This consultation must be targeted to specific stakeholders/persons/organisations and cannot involve a general call for submissions from members of the public.

Information will be provided by FSQ, to the Reviewers, in a de-identified format to ensure adherence to confidentiality obligations.

ASSISTANCE DURING THE REVIEW

The Department of Justice will provide the necessary resources, and assistance, to support the Reviewers in undertaking their reviews. Such assistance will include, but not be limited to, assistance with receiving documents from FSQ and de-identification of such information.

In the event that the Reviewers encounter any issues during the conduct of their review, such issues can be raised, in the first instance, with the Department of Justice team providing support to the Reviewers.

The Reviewers are also able to escalate any issues or concerns directly with the Office of the Attorney-General and Minister for Justice and Minister for Integrity, at any time.

REPORT OF REVIEWER

The respective reviews are to be completed within six (6) months from the date of this Terms of Reference document, and a final report provided, by each Reviewer, to the Attorney-General and Minister for Justice and Minister for Integrity.

HUMAN RIGHTS ACT 2019

The Reviewers are public entities and must comply with the *Human Rights Act 2019* (Qld) in conducting the review.

Dated the 13th day of December 2024

Brigita Cunnington
A/Director-General
Department of Justice

Schedule 3 – List of Documents Considered

The DNA Review requested and analysed over 1,400 documents provided by FSQ, QPS, the ODPP, the Interim DNA Advisory Board, and the FSQ Advisory Council under the broad categories listed in Table 15 and Table 16 below.

Table 15 DNA Review Requests for information from FSQ, the ODPP, the Interim DNA Advisory Board, and the FSQ Advisory Council

Request No	Request description
1A	Minutes from all Interim DNA Advisory Board meetings, including sub-committees
1B	Minutes from all FSQ Advisory Council meetings, including sub-committees
2A	All COI recommendation closure reports received by the Interim DNA Advisory Board
2B	All COI recommendation closure reports received by the FSQ Advisory Council
3A	All stakeholder reports and briefings received by the Interim DNA Advisory Board meetings, including sub-committees *This includes reports from external scientific experts who conducted reviews on FSQ processes, and any other briefings submitted*
3B	All stakeholder reports and briefings received by the FSQ Advisory Council meetings, including sub-committees *This includes reports from external scientific experts who conducted reviews on FSQ processes, and any other briefings submitted*
4	Query if there is an issues register or risk register used by the Interim DNA Advisory Board, or FSQ Advisory Council. If there is, please send those through too.
5	Query if the DNA Advisory Board or FSQ Advisory Council has any strategic documents, planning documents, or forecasting documents or data in relation to implementation of the COI recommendations and reforms. If there is, please send through.
6	Please send any policy documents generated by, or relating to, the DNA Advisory Board or FSQ Advisory Council
7	Please send any governance documents or terms of reference relating to the DNA Advisory Board or FSQ Advisory Council.
8	FSQ organisational chart (including historical case review team). Please include number of staff for each team / role and employment level (eg HP6, HP7, etc).

Request No	Request description
	Include all external consultants (anonymized) that are currently assisting, administrative and support staff.
9	Include role descriptions for each position in the organisational structure (copies from original job advertisements is fine).
10A	*Outsourcing agreements:* If available, the FSQ strategic plans and forecasting relating to the outsourcing strategy.
10B	*Outsourcing agreements:* All executed MoUs and contracts with external providers (govt and private). This should include cost and details of service.
11A	*Historical case review processes, prioritisation and evaluation criteria. If available:* The scientific review process.
11B	*Historical case review processes, prioritisation and evaluation criteria. If available:* The criteria used to include cases in the scientific historical case review.
11C	*Historical case review processes, prioritisation and evaluation criteria. If available:* The criteria used to guide the scientific review of triaged historical cases (after DPP and QPS review) for further analysis.
11D	*Historical case review processes, prioritisation and evaluation criteria. If available:* The criteria used within FSQ to prioritise historical cases for: (i) scientific review; and (ii) testing.
11E	*Historical case review processes, prioritisation and evaluation criteria. If available:* Any standard operational procedures and policies specific to the scientific historical case review.
11F	*Historical case review processes, prioritisation and evaluation criteria. If available:* The average time to conduct a scientific review of historical cases. Is there a difference depending on offence type?
12A	*Historical cases scientific review*: The total number of cases to date requiring scientific review.
12B	*Historical cases scientific review:* The total number of cases where the scientific review has commenced but has not been completed.

Request No	Request description
12C	*Historical cases scientific review:* The total number of cases where the scientific review has commenced and has been completed. Please include outcomes of testing (new results, no change etc).
12D	*Historical cases scientific review:* The total number of cases where the scientific review has not commenced.
12E	*Historical cases scientific review:* The total number of cases where the review has been completed and samples are awaiting completion of testing and reporting (including statement provision).
13A	*Management and planning documents, if available:* Strategic planning and business planning document/s relating to how to address the current case backlog, historical case reviews and testing, COI recommendations, business improvement, and DNA service capability expansion.
13B	*Management and planning documents, if available:* Raw data and analysis relating to projections for completion of the current case backlogs, historical case reviews and testing, and ongoing and projected business as usual.
14A	*DNA service delivery documents, if available:* Risks and issues logs and reports (including those from project management) since January 2023.
14B	*DNA service delivery documents, if available:* Management strength, weakness, opportunities and threat analysis compiled since January 2023.
14C	*DNA service delivery documents, if available:* Metrics currently used by management for planning and monitoring service delivery.
14D	*DNA service delivery documents, if available:* All issues / hot topics briefs associated with FSQ DNA service delivery since January 2023.
15A	*Costings and budgets, if available:* Detailed costings for DNA profiling service by sample type (case work and reference).
15B	*Costings and budgets, if available:* *Average cost of processing major crime cases (by offence type).*

Request No	Request description
15C	*Costings and budgets, if available:* Average cost of processing volume crime cases.
15D	*Costings and budgets, if available:* Detailed budget for last financial year.
15E	*Costings and budgets, if available:* Detailed budget for current financial year.
15F	*Costings and budgets, if available:* Detailed budget forecasts for next three financial years.
16	The business case for the new DNA lab, and any other business cases submitted since January 2023.
17	All FSQ policies developed in relation to the historical case review, DNA reforms, and current DNA service delivery.
18	All reports from external or internal experts who have reviewed FSQ processes.
19	The full NATA accreditation report from 2024, and any FSQ responses.
20A	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of cases and samples received and not completed: (i) Major crime (by offence type); (ii) coronial / missing person; (iii) volume crime; (iv) person samples.
20B	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Time ranges for major crime cases received by FSQ and: (i) evidence recovery completed and reported; (ii) analytical processes completed and awaiting profile interpretation; (iii) case completed including NCIDD upload; (iv) average TAT for major crime cases (from receipt to results released and NCIDD upload complete). Please provide by quarter from January 2022.

Request No	Request description
20C	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Time ranges for volume crime cases received by FSQ and: (i) analytical processes completed and awaiting profile interpretation; (ii) case completed including NCIDD upload (iii) average TAT for volume crime cases (from receipt to results released and NCIDD upload). Please provide by quarter from January 2022.
20D	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of FMEKs received by FSQ: (i) awaiting completion of evidence recovery and reporting of screening tests to QPS; (ii) awaiting completion of reporting results to police; (iii) awaiting statements requested by the court; (iv) awaiting NCIDD upload and matching reports completion.
20E	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Time since FMEKs received by FSQ and: (i) completion of evidence recovery and reporting of screening test to QPS; (ii) completion of DNA profile reporting; (iii) NCIDD upload and match reports completed. (iv) average time to process SAIKs / FMEKs by quarter since January 2022 (from receipt to results reported, NCIDD upload and match report completed).
20F	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of samples awaiting profile interpretation (all case types), and the time range of how long they have been awaiting profile interpretation.
20G	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of samples awaiting NCIDD upload and completion of match reports (all case types).
20H	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of cases awaiting reporting (including intelligence reports and statements) and case completion (by major crime and volume crime).
20I	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of cases awaiting a court statement.

Request No	Request description
20J	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of samples awaiting completion of analysis by an external laboratory (including those tested with technology not available at FSQ).
20K	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Average testing TATs for samples analysed by external laboratories (including those tested with technology not available at FSQ): (i) major crime (by offence type); (ii) volume crime; (iii) coronial / missing person.
20L	*Figures for current case backlogs (cases not completed that are not part of the historical case review). If the data is not available, FSQ can state, not available.* Number of cases and samples sent for outsourcing: (i) major crime (by offence type); (ii) coronial / missing person; and (iii) volume crime.
21	New and replacement DNA technology. If available, management and planning documents relating to the implementation of new DNA technology or replacement DNA technology (include anticipated dates of implementation), and review of new or replacement technology.
22A	*ODPP historical case review documents, if available:* The historical legal review process.
22B	*ODPP historical case review documents, if available:* The criteria used to undertake the historical legal review. Please include any relevant policies that support the review.
22C	*ODPP historical case review documents, if available:* The criteria used to prioritise the historical legal review of cases. Please include any relevant policies that support prioritisation.
22D	*ODPP historical case review documents, if available:* The communication strategy between the ODPP and the complainant. Include how, when, and what information is provided to complainants, and the specific complainant support procedures and policies used by the ODPP for the review if available.
22E	*ODPP historical case review documents, if available:* The number of historical cases reviewed by the ODPP to date (by month and offence type if available). The number of cases waiting legal review by the ODPP (by offence type if available).

Request No	Request description
22F	*ODPP historical case review documents, if available*: The number of historical cases recommended for scientific review or DNA testing to date by the ODPP (by offence type if available).
22G	*ODPP historical case review documents, if available:* The number of cases not recommended by ODPP for scientific review or DNA testing (by offence type if available). Are reasons for closure captured, and if so, please provide by category and count if available.
22H	*ODPP historical case review documents, if available:* The average time or time range to conduct an historical legal review. Is there a difference depending on offence type?
22I	*ODPP historical case review documents, if available:* Forecasting figures to complete the historical legal reviews.
22J	*ODPP historical case review documents, if available:* The number of full-time staff undertaking historical legal reviews.
22K	*ODPP historical case review documents, if available:* If relevant, the estimated shortfall of full-time staff required to undertake the historical legal reviews.
22L	*ODPP historical case review documents, if available:* Organisational chart for the historical legal review team, including who they report to within the ODPP.
23	The reports from the two external scientists (from Tasmania and Western Australia) who conducted technical reviews on FSQ processes (see Board notes for 3 Aug 2023). These reports were submitted to the DNA Advisory Board.
24	If available, any documented procedures for evaluating and closing Inquiry recommendations by the Interim DNA Advisory Board and FSQ Advisory Council. If available, any other procedures or policies relating to the implementation or closure of Inquiry recommendations.
25	A copy of the FSQ LOD validation report for their quantitation instruments (relating to Recommendation 15).
26	A copy of all Ernst and Young reports.
27	All backlog updates and presentations provided by FSQ to the Interim DNA Advisory Board and FSQ Advisory Council (eg backlog summary ppt provided to the FSQ Advisory Board on 30 Sep 2024).

Request No	Request description
28	Operational workload updates
29	Backlog figures by month since January 2022 (by Volume Crime and Major Crime)
30	Samples completed by month since January 2022 (by Volume Crime and Major Crime)
31	A copy of the FSQ Research and Innovation Team's in-depth review of scientific processes.
32	Number of samples reworked by month since January 2022 and reasons for rework.
33	Number of NCIDD uploads by month since January 2022.
34	Hemastix validation report
35	A copy of the Forensic Steering Committee TORs, membership and all other governance documents.
36	A copy of the Forensic Steering Committee's minutes for all meetings held.
37	FSQ Case Management SOP
38	FSQ DNA Profile Interpretation SOP
39	Number of profiles interpreted by outsourced options and number of profiles interpreted by FSQ staff per month since outsourcing commenced.
40	The current DNA Interpretation SOP
41	Data from the external review conducted in 2023 of the technical section relating to the differences in yields between the Maxwell and QIASymphony extraction platforms to enable a quantitative understanding of the yield difference.
42	The total number of samples in the 'on hold' list.
43	All agenda papers from the Interim DNA Advisory Board and the FSQ Advisory Council.
44	All minutes from the Director Generals Steering Committee (Govt Reform Arising from the COI into Forensic DNA Testing in Qld).

Request No	Request description
45	Closure reports for Recommendations 8, 31, and 34. These are recommendations that are listed as 'in progress' in the DJAG database, but FSQ have advised are provisionally closed.
46	The Project#244 report (for reduced extraction volumes).
47	All Statement Appendices currently being used.
48	The training program and competency requirements for case reporting scientists for major and volume crime.
49	Could FSQ please identify which positions on the organisational structure are new positions since 1 Jan 2023. Provision of position numbers would be sufficient given they align to the same position numbers on the organisation structures previously provided in IR#*.
50	What number and percentage of samples retested as part of the historical case review resulted in a useable profile, when one was not originally obtained?
51	The total number samples related to the historical review backlog that were tested in 2023 and 2024.
52	If known, how many FMEKs in the current backlog (FMEKs not started) relate to child victims or victims with impairments?
53	Provide dot points for the following 'outstanding' and 'in-progress' Inquiry recommendations. A) What remains to be implemented for the 38 'in-progress' recommendations. B) What is required to implement the 11 'outstanding' recommendations. C) What is the timeframe for implementation of the 'outstanding' and 'in-progress' recommendations. C) What additional resources, if any, are needed to implement the 'outstanding' and 'in-progress' recommendations. D) Please note any major impediments to implementing 'outstanding' and 'in-progress' recommendations. E) Please provide any priorities attached to the implementation of 'outstanding' and 'in-progress' recommendations if they exist, and if so, the justification for the priority. Note: I only require FSQ to respond to recommendations they are responsible for. If this information is not already available, I can provide FSQ with 2.5 months to complete this IR.
54	Please provide the wording used to report samples found to be below the LOD for intelligence reports and court statements (including any explanations contained with the appendix of statements).
55	Please provide the final report for Projects 246, 256, and 257.

Request No	Request description
56	How many cases involved in the historical case review are awaiting scientific review and testing by FSQ? This should include cases which have progressed through either the DPP or QPS historical review and have been referred to FSQ.
57	What is the demographic of complainants of cases involved in the historical review? This includes sex, adult / child, ethnicity, metropolitan or regional. If unknown, is it possible to obtain this information, and if so, what categories of information are available?
58	Please confirm if there is a difference in training requirements for case reporting scientists in Major Crime and Volume Crime. If yes, please fully outline this and provide any supporting documents. Are there any impediments to Volume Crime scientists being allocated Major Crime cases to either: a) assist; or b) report and provide testimony?
59	How many FMEKs can FSQ fully process each month (from receipt to link reporting) if a 3 week TAT was required?
60	Please provide the following information about the FMEKs sent to ESR for testing: a) What testing was requested and what testing has been completed; b) where are the FMEKs currently located; c) issues surrounding importing the FMEKS into Australia from New Zealand; d) all continuity information (date and locations) of the FMEKs from FSQ sending them to ESR to until present day.
61	I am seeking the inventory list for the contents of each FMEK currently at FSQ which have not commenced testing (nearly 700 FMEKs). That is, how many swabs have been used in the kit, and what other items the kit contains.
62	How many major crime cases are in the current case backlog which are unstarted (excluding FMEKs)?
63	A copy of any data or reports relating to the post implementation review of the LOD implementation.
64	A copy of the most recent Working for Qld staff survey results, including any presentations of the results provided to staff.
65	Please provide a small summary for the Inquiry recommendation 117. B) What is required to implement Rec 117? C) What is the timeframe for implementation of Rec 117? C) What additional resources, if any, are needed to implement Rec 117? D) Please note any major impediments to implementing Rec 117.

Request No	Request description
66	Figures from the ODPP dashboard detailing the ODPP Current Register: a) the number of all matters currently on the ODPP DNA Register; b) the number of matters requiring DNA on the priority list; c) the number of matters requiring DNA listed for trial/ hearing; d) the number of matters requiring DNA due for review; e) of a) to d) the number of these relate to a 21AK hearing (a criminal proceeding with an affected child witness); f) of a) to d) the number of these that relate to accused remanded in custody and the time ranges these accused have been in custody; g) the anticipated dates for scheduling trials / hearings based on DNA testing delays on lists and categories outlined in a) to e).
67	A copy of the 'Extraction Efficiency of Semen' report.
68	Could FSQ please provide a copy of their Y-led workflow validation /verification studies for sexual assault samples. This should include their verification / validation project plan /proposal, and the final validation / verification report. Could this please be provided by COB Wednesday.
69	I would like to clarify if FSQ has agreed to facilitate the release of DNA case files to QPS. The Cold Case Investigations Team (CCIT) in particular would find this extremely helpful to commence as soon as possible. This would require recovery of the hard copy case file from a filing cabinet, printing of the FR records, or retrieval of AUSLAB records in a small number of cases. This is all possible for FSQ, and I understand FSQ have multiple Records Officers (ie non-scientists) that can facilitate this. Can you please confirm that FSQ can commence releasing this information to CCIT immediately? Can you please confirm if FSQ will release data (eg quant data) outside of the FR upon QPS request? ***Additional context:*** DoJ sought a view from QPS who responded with the following: From time to time the QPS have sought case information including QuantTrio data to assist with sample selection for further work or alternative testing by another laboratory. This is generally sought by the Cold Case Investigation Team. This information has been provided on request which has been very helpful. Moving forward, the QPS would seek for this information to be automatically available to appropriate members for this purpose, however this would require an enhancement to the Forensic Register. Dr Wright is seeking advice as to whether there is any impediment to the current arrangement remaining in place or to the future development to the Forensic Register to facilitate the automatic access to the information. Dr Wright's response to QPS's response was: In addition, I am seeking written confirmation from FSQ that they will release the quant data, and any complete DNA case file or case file information requested by QPS ongoing, and this will be provided in a timeframe requested by QPS given a reasonable timeframe is provided. I can then include this resolution to the current issue in my report.

Request No	Request description
70	Request documents presented to the DNA Review by the FSQ Historical Case Review Team during the focus group.
71	Could I please request a copy of the NATA Interim Report from their latest re-assessment of FSQ?
72	Can FSQ provide any case studies showing the success of their re-testing / re-interpretation for cases involved in the historical case reviews that is suitable for release publicly? I would also like these cleared by QPS.
73	The DNA Review requests the Business Continuity Plan (BCP) for each relevant division for DNA service delivery including: • BCP for all critical instruments for the DNA work flow; • BCP for ICT, including the forensic register; and • BCP for facilities and infrastructure.
74	The DNA review requests information in relation to the DNA Commission of Inquiry (CoI) Recommendations that remain to be completed #95 and 96 (or any other that QH have ownership or are working on). Could you please address the following questions: • What remains to be implemented? • What is the status of the Recommendation (in-progress or out-standing/yet to be started) • What is the priority of the recommendations? • Are there any implements, risks or issues to implementation? • Any additional resources required to complete the recommendations? • Estimated timeline for completion?
75	Could FSQ please provide a summary of the outcomes of the 'FMEK sprint'. Specifically the findings relating to the screening and microscopy results vs Y quant values and profile success. I would also like a summary of any agreed actions arising from these results.
76	Can FSQ please send a copy of the draft Program Management document that was discussed at the meeting on the 13th June 2025.
77	Could FSQ please send any documentation relating to managing the CoI recommendations, specifically but not limited to: • Program prioritisations: and interdependencies, although they have information regarding what recommendation cannot start until another recommendation has been completed; • Planning plan: for each recommendation; • Risk management plan: identification of risk and issues, to implement mitigation/controls; • Work breakdown structure: including requirements, go/no go;

Request No	Request description
	• Communication plan: to engage with stakeholders specifically regarding any changes and issues; and • Project schedule: timeline, milestones, decision points. FSQ provided the table in response to IR 53. In relation to the priorities, could FSQ please provide the prioritisation as high, medium or low. Recommendation 122 notes that FSQ is waiting for changes to the FSQ Act. Can FSQ please elaborate the exact wording of the changes to the Act that they are waiting for and who is the accountable officer to make the changes? Has FSQ conducted any deep dives on the recommendations? Either before starting to address them, to ensure that the intent is clear, you have the right resources, planning, and funding? Or at the end to write the closure report? Or after the closure to develop lesson learned for the other recommendations?
78	Could FSQ please advise why the end date of 30 April 2023 was chosen for the historical case review. That is, what evidence was there that cases processed from 1 May 2023 onwards could be considered reliable and not affected by issues reported by the 2022 CoI, and therefore not require a scientific review?
79	Request for any information FSQ has on their investigation into the contamination issue. As much information as possible would be greatly welcomed.

Table 16 Information DNA Review Requests for information from QPS

Request No	Request description
QPS-1	Volume Crime Triage Policy
QPS-2	Any agreements, contracts or MoUs QPS has entered into with FSQ for DNA service provision.
QPS-3	Total number of DNA samples in the 'on hold list' by major crime and volume crime.
QPS-4	Number of DNA samples added to the 'on-hold' list by month since January 2023
QPS-5	Average turn around times for FSQ DNA testing by month from January 2022 (for Major Crime and Volume Crime).
QPS-6	The number of DNA samples submitted by month to FSQ since January 2022 for Volume Crime and Major Crime and person samples.
QPS-7	The total number of cases submitted by month to FSQ for Volume Crime and Major Crime since January 2022.

Request No	Request description
QPS-8	The average number of DNA samples submitted to FSQ per case for Volume Crime and Major Crime per year since January 2022.
QPS-9	Total number of P1 samples submitted by month since January 2022.
QPS-10	The total number of P1 samples submitted since the recent agreement with FSQ to fully test all P1 samples, and the total number of these P1 samples that when fully tested provided a useable profile.
QPS-11	If available, forecasting of how many samples (Volume Crime and Major Crime) and cases will be submitted to FSQ each year over the next 5 years based on current submission policies.
QPS-12	QPS historical DNA Review. If available, documents relating to: a) The QPS historical case review process. b) Policies related to the QPS historical case review. c) The criteria used to undertake the QPS historical reviews. d) The criteria used to prioritise the QPS historical reviews. e) The number of cases reviewed by QPS to date (by month). f) The number of cases recommended for DNA testing. g) The number of cases not recommended for DNA testing. h) The average time taken to conduct the QPS historical review. Is there a difference depending on offence type? i) Forecasting figures for the QPS historical case reviews (case reviews each year). j) The number of full-time staff undertaking QPS historical reviews. k) The shortfall of full-time staff undertaking QPS historical reviews. l) All available measures of success / metrics for historical cases. m) The communication strategy with the complainant. Include how, when, and what information is provided to complainants, and complainant support procedures and policies. n) Organisational chart for the historical review team, including who they report to within the QPS.
QPS-13	All policies related to QHFSS / FSQ DNA service provision including QPS DNA testing specifications and service requirements.
QPS-14	A copy of the report 'Failure to test unsolved crime' presented to the DNA Advisory Board. Mentioned in Board minutes.
QPS-15	NCIDD link figures for each jurisdiction over last 4 years.
QPS-16	Repeat offenders' data-how many offences since a given offence. (from LP and DNA). Range and average.
QPS-17	Could I please get a copy of the map that outlines the borders for each RCC area.

Request No	Request description
QPS-18	Could I please get the number of samples / exhibits that were transported from the regions (not close to Brisbane, ie requiring airwing etc) for the last year, and if available, the frequency of those transfers.
QPS-19	Any metrics that can indicate the workloads of the FCs.
QPS-20	Crime statistics for the number of unsolved sexual assaults over the last 4 years for regions and Qld.
QPS-21	Of the untested FMEKs, please provide a count of how many are in the following categories: a) victim-child; victim-impaired capacity; c) victim-vulnerable person; and d) victim-child with impaired capacity. Does QPS have a policy for requesting DNA testing priority for victims in these categories?
QPS-22	Of the ~41,000 cases included in the historical case review, please provide any information that relates to victim demography, offence type, and offence location (by region is fine if available).
QPS-23	Could I please obtain some anonymised examples of unresolved violent sexual offences from the Sexual Crimes Unit to include in a proposal for the DNA Review.
QPS-24	Of the matters identified by the courts as being finalised, how many cases or samples were further reviewed by QPS and found not to have needed DNA testing? What time period did this group of cases cover?
QPS-25	Could you please advise how many samples or cases were halted at FSQ for testing after the triaging (manual data matching exercise) was conducted with DPP and QPS? Over what time period did these case / sample submissions relate to?