

TMR response to the independent review by PinnacleQM ‘Camera Detected Offence Program seatbelt demerit review’

February 2024

Control sheet

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Branch(es)	Land Transport Safety and Regulation (LTSR) Information Technology Branch (ITB)	
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1. Executive summary

Background and context

The Queensland Road Safety Strategy 2022-31 commits to set Queenslanders on a path towards the Department of Transport and Main Roads (TMR) vision of zero road fatalities and serious injuries by 2050. The Camera-Detected Offence Program (CDOP) is an integral part of managing the implementation of the road safety program in Queensland, as it funds prioritised behavioural interventions and infrastructure programs and initiatives.

The addition of mobile phones and seatbelt offences to the CDOP program in late 2021 was designed to reduce fatalities caused specifically by two of the 'Fatal Five' - distraction (by mobile phones) and failure to wear a seatbelt by utilising cameras to detect illegal driving behaviour and issue infringement notices. The 'Fatal Five' behaviours (drink and drug driving, distraction and inattention, speeding, fatigue, and failure to wear a seat belt) are known to be the major behavioural contributory factors to road trauma. The CDOP program is broader than mobile phones and seatbelts, it also includes detection of speed offences, driving unregistered or unlicensed and failure to stop at red lights.

The Transport Registration and Integrated Licensing System (TRAILS) suite released in 1996 is the core system for managing Queenslanders' identity, traffic offence history, vehicle registration and licensing. If a driver is detected committing a traffic offence, such as those detected through the CDOP, the offence code is entered into TRAILS and an infringement notification is issued using customer identity information contained in TRAILS. When changes are made to policy that require changes to offence codes maintained in TRAILS (for example, the launch of camera-detected mobile phone and seatbelt offences, or annual changes to the value of penalty points as a result of indexation), business requirements and specifications are documented by the Land Transport Safety and Regulation (LTSR) branch and passed to the Information Technology Branch (ITB) for processing and update to TRAILS.

The CDOP is jointly managed by TMR, Queensland Police Service (QPS) and Queensland Treasury's Queensland Revenue Office (QRO).

TMR recently identified a discrepancy that has resulted in double demerit points being applied incorrectly to camera-detected passenger seatbelt offences. This issue impacted camera-detected passenger seatbelt offences from 1 November 2021 to 31 August 2023. There were 1,842 drivers impacted by this discrepancy. Once identified, steps were taken by TMR to rectify the discrepancy. For offences issued from 1 September 2023, double demerit points are no longer being applied to camera-detected passenger seatbelt offences.

Objectives and scope

This independent review was undertaken to understand the cause of the incorrect system configuration that resulted in the incorrect application of double demerit points for passenger seatbelt offences captured by the cameras between 1 November 2021 and 31 August 2023.

In addition, the review assessed the risks and mitigating controls in place to ensure correct creation and update to fines and demerit point penalties in the TRAILS and other relevant systems for CDOP offences in accordance with legislation.

Refer to **Appendix A** for further information on the scope and approach for this engagement and **Appendix B** regarding the key stakeholders interviewed.

Conclusion

On 30 August 2023, TMR discovered double-demerits had been incorrectly applied to camera-detected seatbelt offences under the condition when a driver had a conviction for a seatbelt offence in the preceding 12 months, and this second offence related to a passenger not wearing a seatbelt. In all cases, the driver was caught committing the offence for driving with a passenger not wearing a seatbelt and both the offence and fine were correctly applied. The system correctly applied

demerit points, but incorrectly applied double demerits for a subsequent camera-detected seatbelt offence within a 12-month period.

Based on findings of this review, the issue was introduced when the road rules and driver regulations for repeat seatbelt offences were incorrectly transcribed into the Project Business Requirements Specification (BRS), failing to notice that double demerits are only to be applied to front-seat passengers under the age of 16. Adjudication of camera detected offences cannot make the distinction of age. Once the requirement was incorrectly defined in the BRS, the project implemented the mistake according to defined TMR project processes and procedures.

Once the issue was discovered internally by TMR on 30 August 2023, TMR was able to deploy a fix under proven emergency release processes within 48 hours on 1 September 2023. The fix consisted of:

- a. End dating the passenger seatbelt offence codes to prevent those offences detected after 1 September 2023 from re-occurring.
- b. Setting the end date for those offence codes to be earlier than the commencement date for repeat offences, so that any as-yet un-finalised seatbelt offences within the preceding 12-months could not retrospectively trigger the incorrect addition of the breach double demerits.

TMR management response

TMR agrees with the report issued by PinnacleQM and has provided responses to each issue identified in Section 2 and Business Improvements in Section 3.

TMR acknowledges that whilst there are significant processes and governance in place to support policy translation and software implementation, the complexity of policies and application to a vast range of customer scenarios has been the primary contributing factor for this issue. In addition, TMR is committed to the ongoing modernisation of the key supporting technology solutions and leveraging best-practice automation capabilities where appropriate to streamline and provide additional assurance in testing practices. TMR have committed to undertake a number of actions to address the recommendations:

- Development of an agency wide governance and assurance model for the setting, amending, and removing of penalties (including fines and demerit points), which will be utilised for all penalty changes, either made as part of an

ICT project or as part of BAU operations. This new governance and assurance process can then be built into the governance of digital, ICT and ICT enabled initiatives through the ICT Portfolio Management Framework.

- Leveraging the traceability model provided as part of this review, LTSR ICT enabled projects involving regulatory or Legislative change requirements will be modified to capture traceability of legislative requirements through to system design, build and release. In the interim, acceptance criteria for verifying regulatory changes in TMR systems will also be reviewed in order to streamline and enhance transparency with the goal of moving toward a future full traceability model.
- TMR will work with the Office of Parliamentary Counsel and other relevant agencies to embed policy development approaches that support designing legislation that is simple.
- ITB will develop an extended testing strategy for the wider Registration and Licencing System (RnLS) and core TRAILS systems in line with plans for RnLS modernisation. The new testing strategy will capture the desired approach to testing all ICT changes and outline the overall approach, recommended tools and critical role of policy officers. The consideration of a centralised test management platform and automation will be considered in the context of recommended tools.

2. Details of issues

2.1 Improved Governance and Traceability of Regulations

RECOMMENDATION

Observations/Recommendations

What did PinnacleQM find and what did they recommend?

RECOMMENDATION PRIORITY 1

The touch point between LTSR policy business stakeholders and Mobile Phone and Seatbelt Technology (MPST) project translating the regulations into IT specification has been recognised as the cause of this issue.

TMR needs to broaden peer reviews and define, implement, and enforce an improved governance framework and standards so that traceability of regulatory documentation through IT business specifications, and ultimately into mapped test cases. This governance framework for creating and amending fees and demerits should include specific focus on ensuring that cross referencing is rigorously and consistently applied, and that planned stakeholder reviews are completed. This will provide LTSR with greater visibility of the implementation of regulations into IT systems.

Management response(s)

What will management do to address the risk/ opportunity?

Action Owner(s) and due date(s)

Who will deliver the action(s), and by when?

- 1 TMR will develop an agency wide governance and assurance model for the setting, amending, and removing of penalties (including fines and demerit points). This model will include standard templates to ensure all relevant considerations are made and seek an independent peer review. General Manager level approval is proposed prior to any system changes being implemented, including new, amended or removed offence codes. This process will be used for all penalty changes, either made as part of an ICT project or as part of BAU operations.
- 2 ICT project documentation to be updated to incorporate above penalties governance and assurance model.
- 3 LTSR ICT enabled project requirements process to be modified to capture traceability of legislative requirements through to system design, build and release. For each requirement that has a link to legislation, this should include identification of legislative reference, copy of relevant legislative text, and plain English description of the intent of the legislation.
- 4 TMR currently takes a portfolio management approach to the governance of digital, ICT and ICT enabled initiatives. Depending on the outcomes from the governance framework and standards review (Actions 1-3), changes may need to be incorporated into the ICT Portfolio Management Framework moving forward.

Action 1

General Manager, LTSR
Due date: 30 December 2024

Action 2

General Manager, LTSR
Due date: 30 December 2024

Action 3

General Manager, LTSR
Due date: 30 December 2024

Action 4

Chief Information Officer, Corporate
Due date: 3 months after delivery of the outcomes from Actions 1-3. Expected date 31 March 2025.

2.2 Simplification of Regulations

RECOMMENDATION

Observations/Recommendations

What did PinnacleQM find and what did they recommend?

RECOMMENDATION PRIORITY 1

The road rules, driver regulation and policies have evolved over time. These regulations have been amended to the current versions over many iterations. While changes to regulations follow a 10-year re-write process, interim and ad-hoc changes are also applied. A suite of inter-related regulatory documents now exists with many cross-references to other documents in the suite. It can be difficult to interpret one clause in one document without recourse to another document. The 2021 re-write introduced an extra level of complexity when the numbering in one document was updated so that references had the same or similar numbering to cross-referenced documents.

It is recommended that TMR undertake ongoing policy development with the aim of it informing legislative change that is accessible and avoids unnecessary complexity. This could include:

- developing decision tables to supplement/simplify the articulation of the rules and their conditions.
- reducing the level of ambiguity, complexity within the current documentation where possible
- significantly reducing where possible, the need for document links cross referencing reference information and documentation within defined rules.

Management response(s)

What will management do to address the risk/ opportunity?

Action Owner(s) and due date(s)

Who will deliver the action(s), and by when?

- 1 TMR will embed policy development approaches that support designing legislation that is as simple and easy to understand as possible.
- 2 TMR will work with the Office of Parliamentary Counsel and other relevant agencies to ensure legislation is as simple and easy to understand as possible.

Action 1

General Manager, LTSR
Due date: 1 July 2024

Action 2

General Manager, LTSR
Due date: Ongoing from 1 July 2024

2.3 Traceability Model

RECOMMENDATION

Observations/Recommendations

What did PinnacleQM find and what did they recommend?

RECOMMENDATION PRIORITY 1

The expertise of the LTSR policy team should be leveraged to build a traceability model effectively defining LTSR Acceptance Criteria to verify future regulatory changes as implemented into TMR IT systems as part of future UAT activities.

The traceability model should use decision tables so complex regulatory and business logic is easier to understand and review across different TMR business units. This would allow greater chance mistakes and discrepancies to be discovered.

TMR has an opportunity to create a traceability model for every motoring offence within the road rules and driver regulation using the latest AI automation platforms to execute a defined baseline of the road rules and regulations against the wider RnLS and core TRAILS systems. This would ensure that LTSR acceptance criteria can be verified on-demand against any major or minor system release. This could be executed automatically by the AI automation platform in different environments and any deviations from the traceability model would be visible to all TMR stakeholders.

Management response(s)

What will management do to address the risk/ opportunity?

Action Owner(s) and due date(s)

Who will deliver the action(s), and by when?

- 1 LTSR projects involving regulatory or Legislative change will develop acceptance criteria for verifying the regulatory change in TMR systems in a manner that is easier to understand, which will be retained for future use as an incremental process toward a future full traceability model. TMR will leverage the traceability model recommended by Pinnacle.
- 2 ITB to develop an extended testing strategy for the wider RnLS and core TRAILS systems in line with plans for RnLS modernisation. The new testing strategy will capture the desired approach to testing of all ICT changes and outline the overall approach, recommended tools, critical role of policy officers, and so on. The consideration of a centralised test management platform and automation will be considered in the context of recommended tools and will be subject to a business case.

Action 1

General Manager, LTSR
Due date: 1 July 2024

Action 2

Chief Information Officer, Corporate
Due date: 30 December 2024.

3. Details of process improvement opportunities

Priority 1 process improvement opportunities	IMPROVEMENT OPPORTUNITY
<p>Observations/Recommendations <i>What did PinnacleQM find and what did they recommend?</i></p> <p>3.1 Test Design Specification and Test Coverage Create a formal mapping of the legislative offence rules into a centralised test management platform within the Test Design Specification. This allows tests to be created and tracked against the offence rules and conditions. This approach ensures TMR has closed all the gaps between IT change and planned legislation updates.</p> <p>3.2 Tactical Automation (System Testing) Create an automated test pack that uses no code, low maintenance for testing of systems and the offence code conditions. Ensure that extended coverage is available with the use of boundary and negative conditions and a representative production data set in the test environment. This allows existing TMR permanent and contract test resources to execute tests automatically without needing any technical skills.</p> <p>3.3 Strategic Automation (Business Rules, Regression, Integration, and Business Acceptance) Create and maintain an automated regression pack that uses a no code, low maintenance solution. This pack should include strategic RnLS and MPST systems and processes. It should be able to execute all the tests within hours and available to TMR project and BAU teams upon demand.</p>	<p>IMPROVEMENT OPPORTUNITY PRIORITY 1</p>
<p>Management response(s) <i>What will management do to address the risk/ opportunity?</i></p>	<p>Action Owner(s) and due date(s) <i>Who will deliver the action(s), and by when?</i></p>
<p>ITB to develop an extended testing strategy for the wider RnLS and core TRAILS systems in line with plans for RnLS modernisation. The new testing strategy will capture the desired approach to testing of all ICT changes and outline the overall approach, recommended tools, critical role of policy officers, and so on. The consideration of a centralised test management platform and automation will be considered in the context of recommended tools and will be subject to a business case.</p>	<p>Chief Information Officer, Corporate Due date: 30 December 2024</p>

Priority 2 process improvement opportunities

IMPROVEMENT
OPPORTUNITY

Observations/Recommendations

What did PinnacleQM find and what did they recommend?

IMPROVEMENT
OPPORTUNITY
PRIORITY 2

3.4 Optimisation and Efficiency

Investigate, define, and implement project optimisation, efficiency improvements. There are several areas where significant time, effort and budget savings can be made in accelerating quality outcomes within TMR project delivery. These include, but are not limited to:

- Use of intelligent automation.
- Rationalise the test environment stack (use Dev and representative integrated environment only).
- Apply automation for production data creation, scaling, and obfuscation.
- Automate tests for (ST, SIT, E2E Business Processes, UAT, Non-Functional, Security and Performance). Run them all in a single cycle, and automated execution for defect retest and regression cycles.

3.5 Traceability of Legislation and IT Business Specifications

Subject to feasibility, ensure all legislation and offence rules are logged within a centralised platform and that the Test Design Specification and test coverage is mapped against these ready for project testing.

3.6 Include LTSR Policy Representatives in UAT

Ensure that the relevant LTSR policy team is included, or is represented, within User Acceptance. Future steps can be taken to capture LTSR acceptance criteria.

3.7 Project Time Risks

Project teams at TMR must have the authority to raise concerns and challenge deadlines for high-risk projects, ensuring they can secure backing from the steering committee and top-level stakeholders. It is crucial that project timelines and schedules are clear and open to scrutiny throughout the delivery process to guarantee the successful execution of projects in alignment with TMR's established frameworks and methodologies.

When these escalations have been made, as there were in the MPST program, ongoing management of the risks should be paramount to the steering committee members and suitable acceptance criteria and quality gates are in place and monitored whenever it is necessary for a project to seek exemption from established delivery governance and processes, and especially when pre-approvals are granted so that implementation timeframes can be achieved.

3.8 Requirements Management

There is a need to improve the Requirement Management traceability process within project delivery. In this instance all project requirements that use external document links directly to the target information. The use of Requirements traceability matrixes (RTM) and/or Compliance Traceability Matrix (CTM) should be mandatory on all projects, especially those driven by legislative change or where impacts, such as suspension action, could be applied to customers.

3.9 Maturity Assessment

The INsight assessment that this report was created for focused upon a high level 'Current AS IS' maturity position for Seatbelt Offences within MPST. This at a high level looked at the IT delivery process, teams and the consistency of the rule's documentation, and IT delivery process for the area of Seatbelt Offences.

There is a need and value to TMR in conducting a scoped work package that will review the 'AS IS' delivery maturity levels across the wider program. The engagement would work with internal teams to defined and document a clear and achievable vision of the improvements required to achieve a target 'TO BE' delivery maturity level. To ensure that this improved delivery Target state is achieved, this work package would also require to set out a clear 'HOW TO' Transformation Roadmap. It will be this work package that enables TMR to define and agree the improvements and transformation journey required.

- Assessment of the current 'AS IS' for the RnLS program.
- Definition of a 'TO BE' Target IT Delivery Maturity.
- Definition of a 'HOW TO' roadmap.

In conducting this work package, it will be critical to align the 'TO BE' target vision, and the 'HOW TO' transformational journey to TMR's IT Strategy for 2024 and beyond. There is potential to include this improvement opportunity in the development of the new ICT strategic plan.

3.10 User Acceptance

Consider the definition and implementation of a formal UAT solution addressing:

- UAT test coverage, being mapped to business users' acceptance criteria.
- Optimise/ minimise business user effort, improve visibility and traceability, whilst maximising test coverage using Automation, so that UAT tests can be run multiple times.
- Automated UAT tests can then be included as part of a formal structured regression pack.

3.11 Test Design and Test Coverage

Ensure that seatbelt policy rules along with its boundary and negative test conditions are included within the automated test packs. Ensure that these assets are maintained and kept in line with ongoing and future legislation changes.

3.12 Test Automation Proof-of-Value

With reference to other recommendations relating to efficiency and automation, it is recommended that TMR begins the tactical workstream through a pilot program for an automation service should be created with the MPST project systems scope. The scope of the service would be to create, maintain and execute automation tests 'ON DEMAND'. Using a service approach would improve delivery consistency, retain TMR system knowledge and mitigate against team retention issues.

3.13 TMR Centralised Test Governance Team

The MPST project should involve the ITB central test team in assurance and governance within project delivery. Simply reviewing plans and reports does not ensure that the right testing is being conducted. In an agile high volume change environment, these leaders and specialist need to have the capacity to play a more pro-active role in project delivery. This should include, provide guidance and support to the project teams, along with providing the enterprise tools, and maintain script assets for future reuse.

3.14 Project Time Constraints

The MPST project conducted formal IT project planning and scheduling resulting in a 2-year project to be delivered in 12-14 months. Consideration should be given to the achievability of project schedules.

Deploying new technologies within challenging and potentially unattainable timelines will always introduce project delivery and quality outcome issues.

3.15 Consistency of Delivery

To improve quality and controls TMR should consider running all project and BAU changes through a single pipeline from development, into a representative integrated test environment and then into production. With the use of automation and formal regression packs this approach would help ensure that ALL IT changes are consistently delivered, using the optimal approach for improved coverage and delivery risk mitigation.

3.16 Improve MPST Project Agility

Apply automation to the creation of project functional testing, integration, and end to end business process automation. Automation can be used to baseline TMR systems useability performance and support the automation of all TMR system technologies within their landscape. Test cycles can be varied in length and remove the dependency on needing 3-4 weeks duration to complete a single test cycle. This helps remove test execution from the project critical path and can provide the MPST project with schedule contingency within project system testing. Multiple concurrent automation execution streams can significantly provide the MPST project with flexibility and to scale throughput to many times the capacity of the current manual testing regime.

3.17 Identify Change Issues

There are many technology and business change items associated with each MPST project release and dependencies exist across data, transactions, and systems. The objective of regression testing is to identify undesired outcomes resulting from one of these changes. It is recommended that TMR considers an Automated Regression Testing Service that can be enabled for Quarterly project releases, BAU testing, and ON DEMAND requirements with the objective to execute a full regression cycle within 1 business day.

3.18 Other Automation Opportunities (Test Environments, Test Data etc.)

Look to apply automation for the creation and scaling of test data, environments, and other areas of the project delivery process to mitigate the risks of time constraints for critical path project activities, and potentially for continuous integration/continuous delivery (CI/CD) for the modern technology aspects of the MPST project scope.

3.19 Delivery Efficiency

Look to apply automation that uses no code solutions, these are low effort to create and maintain and offer lower cost of ownership and significantly higher returns on investment. The effort resources spend conducting test execution can be saved, or used to increase test coverage, or shorten delivery cycles.

3.20 Application Modernisation

TMR recognises the increasing technical debt and technology risks associated with the business-critical TRAILS legacy application. TMR has previously attempted to replace the legacy TRAILS system, but this has not been progressed due to a combination of significant business risk and costs. This ongoing and increasing technical debt and business risk cannot be resolved by inaction. TMR needs to investigate, define, and document a business case for the replacement of the old legacy TRAILS system. At present, this technology is holding TMR back in adopting new technologies and delivery practices. In conducting this work package, it will be critical to align the proposed technology solution with TMR's IT Strategy for 2024 and beyond.

3.21 Increase Value from Service Providers

TMR established a panel of external providers within ITB in conjunction with the BAU test governance business unit. The TMR Test Manager believes little value is obtained through this arrangement and projects turn to the local contractor market for resources. The TMR Test Manager suggests that a single provider would achieve greater value than the current panel arrangement. The TMR Test Manager wishes to incentivise this service by having retention KPI's and metrics for service delivery.

3.22 Test Strategy Framework

Implement an Enterprise-wide Test Strategy Framework for consistent delivery across the MPST project. Enable this within the Lifecycle and Test Management Platform so that all the teams have access to it.

Configure the platform workflows so that the defined best practices are followed, and potentially other projects are consistently delivering quality outcomes.

3.23 Lifecycle Management

TMR should consider the use of a Lifecycle Management tool. This provides end to end traceability and management of requirements, epics, user stories, acceptance criteria, certification requirements against test coverage, automated script libraries, defect management, test execution, reporting, and dashboards. This has also been identified by the TMR Test Manager and is aligned to their analysis.

3.24 Resourcing

The current TMR resourcing model relies on the use of local contractors to provide skills and capability, with flex scalability over and above the permanent TMR team. This model is inherently flawed, as acquired knowledge leaves TMR as soon as the project is finished, and the contractors return to market for their next role. TMR, as part of a formal knowledge acquisition and retention strategy, should select and utilise a local company to provide a Service. This local team will provide a core team, and flex upon demand which supports TMR with its capacity challenges. In addition, knowledge is then retained by both TMR permanent and service core teams. This service would provide the skills required to plug current TMR gaps in capacity and expertise, and the flex capacity supports and enables TMR to respond to its challenging project timelines.

3.25 Current Test Automation Cannot Support TMR Technologies

Investigate, define, and implement a robust enterprise automation solution that can automate and test all the technologies across the TMR system landscape from legacy mainframe, client server to the newer web, APIs, and mobile apps. The automation platform needs to be able to run unmanned testing upon a 24/365 basis if required. Automation allows for the significant reduction of effort and time to conduct key project delivery activities. This solution can be used to address the challenges and issues faced by TMR around items not being conducted, due to people capacity or a shortage of time available.

3.26 Knowledge Retention

TMR should investigate, define, and implement a program that is focused upon proactive project delivery knowledge acquisition and retention. This could include:

- Share documentation repositories.
- Defining key project roles and standards as part of a formal standardised delivery models.
- Structured knowledge acquisition and knowledge share tools and processes.
- Cross training of project team members.
- Use of Service Providers to provide flex project team capability, over the use of contractors that leave with their knowledge at the end of the project.
- Centralised testing and training systems that retain the knowledge with asset, and 'How we do it' information for project teams.

Management response(s)*What will management do to address the risk/ opportunity?***Action Owner(s) and due date(s)***Who will deliver the action(s), and by when?*Responses to 3.4, 3.5, 3.6, 3.10, 3.11, 3.12, 3.13, 3.15, 3.16, 3.17, 3.18, 3.19, 3.22, 3.23, 3.25:

- 1 ITB to develop an extended testing strategy for the wider RnLS and core TRAILS systems in line with plans for RnLS modernisation. The new testing strategy will capture the desired approach to testing of all ICT changes and outline the overall approach, recommended tools, critical role of policy officers, and so on. The consideration of a centralised test management platform and automation will be considered in the context of recommended tools and will be subject to a business case.

Action 1

Chief Information Officer
Due date: 30 December 2024

Responses to 3.7

- 2 LTSR projects will continue to raise and escalate timeframe related risks where they exist for all projects.
- 3 A review of current processes and governance arrangements for projects exempted from established delivery governance will be undertaken with the CSSR Portfolio Management Office.
- 4 TMR currently takes a portfolio management approach to the governance of digital, ICT and ICT enabled initiatives. The ICT Portfolio Management Framework will be reviewed to ensure the ongoing management of risk, suitable acceptance criteria and quality gates are in place and monitored and the process to seek exemption from established delivery governance and processes is known.

Action 2

General Manager, LTSR
Due date: 30 June 2024

Action 3

General Manager, LTSR
Due date: 30 June 2024

Action 4

Chief Information Officer
Due date: 30 June 2024

Response to 3.8

- 5 TMR currently takes a portfolio management approach to the governance of digital, ICT and ICT enabled initiatives. The ICT Portfolio Management Framework will be reviewed to ensure the management of requirements are in place.

Action 5

Chief Information Officer
Due date: 30 June 2024

Response to 3.9

- 6 TMR is currently developing a new ICT Strategic Plan and Future State Architecture in consultation with the organisation. (An architectural roadmap for Registration and Licencing Systems has already been established and a modernisation plan is in development).

Action 6

Chief Information Officer
Due date: 30 December 2024

Management response(s)*What will management do to address the risk/ opportunity?***Action Owner(s) and due date(s)***Who will deliver the action(s), and by when?*Responses to 3.14

- 7 Projects will utilise current processes to formally plan and schedule projects. A governance process has been implemented whereby if there is a misalignment between required delivery timeframe and the project schedule, the associated risk will be escalated to Divisional Portfolio Boards.
- 8 TMR currently takes a portfolio management approach to the governance of digital, ICT and ICT enabled initiatives. The ICT Portfolio Management Framework will be reviewed to ensure the management of risks and issues are in place.

Action 7

General Manager, LTSR

Due date: Complete

Action 8

Sandra Slater, Chief Information Officer

Due date: 30 June 2024

Response to 3.20

- 9 TMR is currently developing a new ICT Strategic Plan and Future State Architecture for the organisation. (An architectural roadmap for Registration and Licencing Systems has already been established and a modernisation plan is in development).

Action 9

Chief Information Officer

Due date: 30 December 2024

Response to 3.21

- 10 TMR will conduct a review of the Testing As-a-service panel arrangement.

Action 10

Chief Information Officer

Due date: 30 September 2024

Response to 3.24

- 11 ITB to conduct a review of the current Testing As A Service panel arrangements.

Action 11

Chief Information Officer

Due date: 30 September 2024

Response to 3.26

- 12 TMR currently takes a portfolio management approach to the governance of digital, ICT and ICT enabled initiatives. The ICT Portfolio Management Framework will be reviewed in terms of project delivery, including a workshop with project personnel to identify improvement opportunities, to ensure the established knowledge management approaches and supporting platforms are fit for use.

Action 12

Chief Information Officer

Due date: 30 June 2024

4. Appendix A - Terms of Reference

Department of Transport and Main Roads (TMR) Internal Audit Terms of Reference – Camera-Detected Offence Program Infringements



Background

The Queensland Road Safety Strategy 2022-31 commits to set Queenslanders on a path towards the Department of Transport and Main Roads (TMR) vision of zero road fatalities and serious injuries by 2050. The Camera-Detected Offence Program (CDOP) is an integral part of managing the implementation of the road safety program in Queensland, as it funds prioritised behavioural interventions and infrastructure programs and initiatives.

The addition of mobile phones and seatbelt offences to the CDOP program in late 2021 was designed to reduce fatalities caused specifically by two of the 'Fatal Five' - distraction (by mobile phones) and failure to wear a seatbelt by utilising cameras to detect illegal driving behaviour and issue infringement notices. The 'Fatal Five' behaviours (drink and drug driving, distraction and inattention, speeding, fatigue, and failure to wear a seat belt) are known to be the major behavioural contributory factors to road trauma. The CDOP program is broader than mobile phones and seatbelts, it also includes detection of speed offences, driving unregistered or unlicensed and failure to stop at red lights.

The Transport Registration and Integrated Licensing System (TRAILS) suite released in 1996 is the core system for managing Queenslanders' identity, traffic offence history, vehicle registration and licensing. If a driver is detected committing a traffic offence, such as those detected through the CDOP, the offence code is entered into TRAILS and an infringement notification is issued using customer identity information contained in TRAILS. When changes are made to policy that require changes to offence codes maintained in TRAILS (for example, the launch of camera-detected mobile phone and seatbelt offences, or annual changes to the value of penalty points as a result of indexation), business requirements and specifications are documented by the Land Transport Safety and Regulation (LTSR) branch and passed to the Information Technology Branch (ITB) for processing and update to TRAILS.

The CDOP is jointly managed by TMR, Queensland Police Service (QPS) and Queensland Treasury's Queensland Revenue Office (QRO).

TMR recently identified a discrepancy that has resulted in double demerit points being applied incorrectly to camera-detected passenger seatbelt offences. This issue impacts camera-detected passenger seatbelt offences from 1 November 2021 to 31 August 2023. It is estimated around 1,842 drivers are impacted. Once identified, steps were taken by TMR to rectify the discrepancy. For offences issued from 1 September 2023, double demerit points are no longer being applied to camera-detected passenger seatbelt offences.

Review objectives

This independent review will be undertaken to understand the cause of the incorrect system configuration that resulted in the incorrect application of double demerit points for passenger seatbelt offences captured by the cameras between 1 November 2021 and 31 August 2023.

In addition, the review will assess the risks and mitigating controls in place to ensure correct creation and update to fines and demerit point penalties in the TRAILS and other relevant systems for CDOP offences in accordance with legislation.

Key risks

The key risk relevant to this internal audit is the incorrect application of fines or other penalties associated with offences detected by camera under the CDOP program.

Project code: 2324-MR-08

DMS reference no: 110/1686

Approach

1. Through discussion and workshops with key personnel, walkthrough and document the end-to-end process to issue an infringement notice and associated demerit points for an offence detected by camera under the CDOP program.
2. Document risks and mitigating controls in place to ensure correct creation and update to fines and demerit point penalties in the TRAILS and other relevant systems for CDOP offences in accordance with legislation.
3. Assess whether offence fines and associated demerit point penalties are accurately reflected in the TRAILS in accordance with legislation.
4. Assess the adequacy of governance processes including assessment of the formalised pathways and approvals through and design of governance bodies related to the development and approval of project requirements for TRAILS offence updates (including specifications).
5. For the CDOP project changes made to the TRAILS in November 2021, to capture seatbelt and mobile phone offences, review the following:
 - Understand project documented requirements (including business requirements to update TRAILS) as documented when the CDOP was expanded to include mobile phones and seatbelts in November 2021.
 - Assess whether documented project requirements were in accordance with legislation.
 - Review project test coverage against project requirements (and specifications).
 - Document the systems landscape, the project test documentation, the test process, the project test environments and data.
 - Review project delivery information.

At the end of fieldwork, a report will be prepared summarising any findings or opportunities for improvement.

Estimated timetable

Commence fieldwork	Finalise fieldwork	Draft report to management	Final report
13/09/2023	13/10/2023	20/10/2023	27/10/2023

Key stakeholders and review team

Review sponsor(s)	Sally Stannard A/Director-General
Management contact(s)	Tracy O'Bryan, Deputy Director-General, Corporate Geoff Magoffin, Deputy Director-General, Customer Services, Safety and Regulation Joanna Robinson, General Manager, LTSR Nicole Downing, A/Executive Director (Policy, Safety Regulation), LTSR Daniel Kaden, A/Director, Licensing Automated Vehicles & Registration, LTSR Adam Higgins, Director, Program Delivery Unit, LTSR Sandra Slater, Chief Information Officer, ITB Matthew Hodder, A/Executive Director, Technology, ITB Kylie Warlow, Corporate Counsel, Governance Branch Michelle Scott, Assistant Commissioner, QRO Paul Campbell, Director Mobile Phone and Seatbelt Technology, QRO
Internal Audit team members	Samara Dowling, A/Chief Auditor Timothy Van Gool, A/Director, Internal Audit Pinnacle consulting services

Acknowledgement

Throughout this review Internal Audit will comply with the Public Service Commission's Code of Conduct and adhere to the mandatory elements of The Institute of Internal Auditors' International Professional Practices Framework; those elements are the Core Principles for the Professional Practice of Internal Auditing, the definition of internal auditing, and the International Standards for the Professional Practice of Internal Auditing.

Internal Audit appreciates your support and the cooperation of your staff as we work together.

S. Dowling

Samara Dowling
Acting Chief Auditor

Review sponsor approval

As the sponsor, I confirm that I understand and agree with the above stated Terms of Reference.

Sponsor name and title	Signature	Date
Sally Stannard A/Director-General, TMR	Approved by email on 12/09/2023	12/09/2023

5. Appendix B - Key stakeholders interviewed

Full name	Role / Title	Branch
Joanna Robinson	General Manager, Land Transport Safety and Regulation (LTSR)	LTSR
Sandra Slater	Chief Information Officer	ITB
Daniel Kaden	A/Director, Licensing Automated Vehicles & Registration	LTSR
Matthew Hodder	A/Executive Director – Technology (IT Branch)	ITB
Josef Bourke	Executive Director – Business (IT Branch)	ITB
Tony Kulpa	Executive Director, Performance (IT Branch)	ITB
Adam Higgins	Director (Program Delivery)	LTSR
Simon Hicks	A/ Executive Director (Heavy Vehicles and Prosecutions)	LTSR
Samantha Gibson	Manager	LTSR
Dallas Wooley	Project Manager	ITB
Linda Perry	Business Analyst	IMD
Dr Eike Bernhard	Director (Business Solutions Delivery)	ITB
Hiren Patel	Java Lead Analyst	ITB

Full name	Role / Title	Branch
Melissa Kennedy	A/Senior Advisor (Procedures)	LTSR
Nicole Downing	A/Executive Director (Policy, Safety Regulation)	LTSR
Tapan Shah	Program Manager	ITB
Nicholas Mackay	Manager (Road Rules & Emerging Technology)	LTSR
Greg Coombes	Principal Lead Analyst	ITB
Jeanine Richardson	Test Analyst	ITB