Safety Camera System (SCS) Programme

Due Diligence Report

Preferred Tolling Processing System

Document Control

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Endorsements

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s 9(2)(b)(ii)

[redacted]

PURPOSE

1. The purpose of this report is to provide a recommendation on whether Waka Kotahi should proceed with the Preferred Tolling System (Tolling System) to support the infringements processing needs of the Safety Camera System Programme (SCS) predicated on the due diligence conducted on the Tolling System.

RECOMMENDATIONS

2. It is recommended that you:

Note that the outcome of the due diligence conducted on the Tolling System is that it is able to meet the SCS requirements

Note that the pricing (10 year TCO including implementation, licensing and ongoing operating costs) offered by the Vendor to deliver an integrated Tolling and SCS capability on the Tolling System provides a cost benefit in the range of s 9(2)(j) s 9(2)(j) when compared to investment in separate specialist Tolling and Safety Camera infringement processing solution.

Note that the recommendation is to proceed with the Tolling System to support SCS needs based on:

a. the outcome of the due diligence conducted on the Tolling System; and
b. the cost benefit of investment in the integrated Tolling and SCS capability on the Tolling System offered by the Vendor

Note that proceeding with the Tolling System means that Waka Kotahi accepts that SCS requirements will be met predominantly through delivering purpose-built functionality/services rather than configuration. The architectural approach proposed by the Vendor for delivering the purpose-built functionality is considered sensible for delivering current Tolling and SCS needs as well as incorporating future changes.

Endorse the recommendation to proceed with the Tolling System to support SCS needs taking into account the following noted in this report:

a. the probity review outcome (probity report attached)
b. recommendation decision criteria
c. recommendation decision considerations
d. risks
e. next steps

BACKGROUND

3. The context to this due diligence report is as follows:

a. In December 2019, the New Zealand Government adopted Road to Zero, its Road Safety Strategy 2020-2030. Fundamental to the strategy is the vision where no one is killed or seriously injured in road crashes in New Zealand.

b. In response to Road to Zero, Cabinet approved the Tackling Unsafe Speeds (TUS) initiative in in November 2019[1] which included the following:

   i. implementing a simpler and more effective regulatory framework for speed management through speed management plans

   ii. transitioning to lower speed limits around schools to improve safety and enable more kids to walk or cycle to school safely

   iii. adopting a new 'highly visible, no surprises' approach to safety cameras and speed related compliance including the transfer of safety camera operations and infringements processing functions from NZ Police to Waka Kotahi

c. NZ Police's technology systems supporting these functions are end of life and obsolete and it is necessary for Waka Kotahi to undertake requisite procurement process(es) to acquire modern, fit for purpose technology systems and services that can effectively support these functions within Waka Kotahi into the future.

d. In August 2020, a review of Tolling and TUS high level requirements identified similar/overlapping areas of functional requirements and a decision was made in consultation with the respective business owners of TUS and Tolling to issue a joint RFI to the market to seek market information on a back office processing solution that could support both the needs of Tolling and TUS.

e. A joint RFI was issued in October 2020 and market response indicated that suppliers had specialist solutions in either the road safety or tolling domains with a number of key suppliers outlining their approaches or their ability to work with Waka Kotahi to meet both Tolling and TUS requirements on their solution offerings.

f. In December 2020, as part of an IQA recommendation the TUS programme underwent a reset and was paused and decided not to participate in a joint RFP with Tolling.

g. In early 2021, the Safety Camera System Programme (SCS) was established and is tasked with transferring the ownership and operation of safety cameras (incl. mobile safety camera enforcement) and safety camera infringements processing from NZ Police to Waka Kotahi.

h. In March 2021, the Tolling Systems Replacement Project issued an openly advertised RFP for a back-office processing system and incorporated the need for the solution to be flexible and extensible to support processing and issuance of infringements including Tolling infringements as well Tolling payment notices.

i. In July 2021, as part of considering its options for a back-office infringements processing system, SCS engaged Te Hau Ora (the Waka Kotahi Digital Portfolio Office) to conduct a Strategic Options Analysis to assess similar Waka Kotahi technology platforms that were under procurement or nearing selection, to

[1] https://www.transport.govt.nz/multi-modal/keystrategiesandplans/road-safety-strategy/tackling-unsafe-speeds/more-information-on-the-tackling-unsafe-speeds-programmenew-page/

determine whether they could meet the needs of the infringements processing function that will be transferred from NZ Police to Waka Kotahi.

j. The following key considerations provided the basis for undertaking the Strategic Options Analysis before undertaking an open market procurement process for a back-office infringements processing system for SCS:

   i. the need to simplify the Waka Kotahi technology landscape and reuse of digital common functions in adherence to Waka Kotahi's key digital principles.

   ii. recognition that key technology platforms currently under procurement or nearing selection had potential functional alignment to the back-office infringements processing needs of SCS.

   iii. the need to reduce or eliminate duplication of investment in technology platforms of similar scale and cost, taking into account the significant estimated whole of life cost (WOLC) acquisition cost of s 9(2)(j) for a back-office infringements processing system required by SCS.

k. The Strategic Options Analysis found that the Tolling Processing System provides the closest alignment of functional capabilities required by SCS's back-office infringements processing and recommended further due diligence be performed on certain key functional areas to confirm whether the Tolling Processing System can meet SCS's requirements for a back-office infringements processing system.

l. Tolling has completed its selection process, confirmed the preferred vendor for the Tolling System and is in the process of commercial negotiations with the preferred vendor

m. The requisite due diligence on the Vendor's Tolling System is required to be conducted in parallel to the commercial negotiations with the Vendor to minimise impact to SCS's timeframes

n. The estimated WOLC (10 years) investment for a back-office infringements processing system is between s 9(2)(j) including licensing, maintenance, implementation and any renewals, extensions or variations.

o. The required funding will be provided from the Road To Zero Activity Class - 2021 NLTP onwards.

p. The Tackling Unsafe Speeds programme business case (PBC) provides support for the funding and delivery of SCS and was approved by the Waka Kotahi Board at its meeting on 19 August 2021.

PROBITY REVIEW

4. McHale Group have been engaged to conduct a probity review of the due diligence process and their report is included for reference in the Steering Committee papers.

RECOMMENDATION CONTEXT

5. This recommendation must be considered in context of the following:

    a. Waka Kotahi has key business and technical considerations that provide the basis for looking at an integrated technology platform that can support both SCS and the Tolling Systems Replacement Project (Tolling) and is able to support the requirements of other Lines of Business (LOBs) that may emerge in the future:

        i. the need to simplify Waka Kotahi's technology landscape and reuse of digital common functions in adherence to Waka Kotahi's key digital principles.

        ii. recognition that key technology platforms under procurement or nearing selection have potential functional alignment to SCS needs.

        iii. the need to ensure that duplication of investment in similar technology platforms is avoided taking into account the significant TCO acquisition cost for an infringements processing platform required by SCS.

        iv. realisation of benefits in streamlined contractual, service management and technology operations overheads with a single technology platform and supplier

    b. A Strategic Options Analysis conducted by Te Hau Ora (the Waka Kotahi Digital Portfolio Office) on key technology platforms that were under procurement or nearing selection, to assess their ability to meet SCS needs, found that the Tolling System provided the closest alignment of functional capabilities required for SCS's needs and recommended further due diligence be performed to confirm whether the Tolling System could meet SCS's infringements processing requirements.

    c. The endorsement of the procurement plan enabled the due diligence on the Tolling System to proceed predicated on the following:

        i. that should the due diligence process outcome show that the Tolling System can support SCS requirements for back-office infringements processing, an exemption from open advertising under the Government Procurement Rule 14.9.d(iii) – "Additional goods, services or works where a change of supplier would cause significant inconvenience or substantial duplication of costs for the agency." will be sought.

        ii. this recognises that due to the similarity in functional domains across Tolling and SCS requirements, there would potentially be inefficiencies and significant duplication of costs should an open market exercise result in a second provider.

    d. The Tolling System is a specialist tolling solution incorporating tolling processes, business rules and functionality and adapting the platform for SCS needs will be predicated predominantly on delivering purpose-built functionality rather than configuration. Generally, it is preferable to select a solution that requires configuration and keeping purpose-built functionality to a minimum.

    e. s 9(2)(j) 

f. s 9(2)(j) responded to Waka Kotahi's Request for Information (RFI) last year and while their solutions were not capable of supporting both SCS and Tolling domains, they indicated that they were willing to work with Waka Kotahi to provide the requisite functionality. Their responses indicated their thinking and approach to meeting the needs of both domains on their specialist platforms.

g. If Waka Kotahi had proceeded to a joint Request For Proposal (RFP) for an integrated technology platform to support both Tolling and SCS needs, Waka Kotahi would still have had to make a decision on options as follows:

   i. selecting a specialist tolling solution and delivering a purpose-built safety camera infringements processing capability; or

   ii. selecting a specialist safety camera infringements processing solution and delivering a purpose-built tolling processing capability; or

   iii. selecting two separate specialist SCS and Tolling technology platforms

h. Conducting due diligence on the Tolling System enabled Waka Kotahi to assess whether the TCO investment in an integrated technology platform that can meet both SCS and Tolling needs is cost beneficial against the TCO investment in separate specialist SCS and Tolling technology platforms.

DUE DILIGENCE PROCESS

6. The due diligence plan was based on undertaking a two-stage process across key functional areas in the end-to-end infringements processing process as follows:

   a. **Stage One** – due diligence on the following critical/core functional areas required for infringements processing:

Functional Area	Description
Identity	Assessment of how identity would be managed (Tolling has Accounts, SCS processing is centred around unique identity i.e. Driver License number)
Verification	Assessment of how SCS's more complex verification requirements would be handled
Case Management	Assessment of how safety camera infringements processing and issuance and subsequent lifecycle processing would be handled
Customer	Assessment of how customer interactions through the self-service portal and other channels would be handled

   b. **Stage Two** – due diligence on the remaining functional areas that were not critical or were considered well supported by the Tolling System but provided additional assurance of meeting SCS infringements processing needs

Functional Area	Description
Payments Management	Assessment of how payments would be processed and managed
Outbound Correspondence	Assessment of how outbound correspondence – notices, letters etc. would be handled

Functional Area	Description
Reporting	Assessment of how the Tolling System's reporting platform could be leveraged for SCS needs
Court File Preparation	Assessment of the court file preparation capability to support the prosecutions process

7. The due diligence stages involved the following steps:
    a. provision of detailed SCS requirements documents for each of the functional areas to the Vendor for their response and rating on ability to meet the requirements
    b. interactive sessions with the Vendor on each of the functional areas to clarify requirements and understanding of both parties on the Tolling System's capability in each functional area.
    c. provision of requirements response and pricing by the Vendor
8. It is important to note that certain changes were incorporated into the due diligence process to accommodate learnings from the Stage One due diligence process, recognising the Vendor's constraints and availability across different time zones and completing the due diligence process across the 2021/2022 Christmas / New Year holiday period. These key changes involved the following:
    a. conducting an initial due diligence session at the start of Stage One to ensure the Vendor understood the due diligence process and expected outcomes.
    b. an additional due diligence session on Architecture was agreed to be incorporated to discuss and understand the architectural approach the Vendor would take to accommodating both Tolling and SCS needs on the Tolling System.
    c. the demonstration of the Tolling System was agreed to be held after the completion of the interactive sessions. This enabled the Vendor to organise the logistics of a demonstration environment and be better placed to showcase the system and their approach to meeting SCS needs based on more detailed understanding of requirements gained through each of the interactive sessions.
    d. the Stage One due diligence process provided sufficient understanding of the ability of the Vendor's approach to delivering SCS requirements. Pursuant to PSC approval on 15 December 2021, Waka Kotahi provided the Vendor with the Stage Two due diligence requirements covering the remaining functional domains for their response and rating. Undertaking additional due diligence sessions on these remaining functional domains were considered unpractical and unnecessary due to the additional timeframe required and the level of understanding already achieved by Waka Kotahi through the Stage One due diligence
    e. on 15 February 2022, the Vendor provided an updated response with updated ratings across both Stage One and Two due diligence requirements.

DECISION CRITERIA (NON-PRICING)

9. The following non-pricing decision criteria has been used to support the due diligence outcome and recommendation.

Ability to meet SCS requirements

10. The due diligence and interactive sessions with the Vendor has demonstrated that the Tolling System has base functionality across the critical/core functional areas that can be adapted/reused for SCS needs as follows:

    a. Identity – Account Structure, Transfer of Liability, User Access

    b. Verification – Automatic Vehicle Identification Module, Optical Character Recognition (OCR) Engine, Manual Verification Interface, Verification Queue Management

    c. Customer – Self-service Portal, Enquiries, Complaints and Disputes case management, Contact Centre (infringement case level notes)

    d. Case Management – Customer Service Case Management (adapted to provide an infringement case type), Digital Asset Management, Outbound Correspondence integration with Enterprise Correspondence System, Product Configurator, Workflow Definition, Event Filtering, Audit Tools Management of case information at Account Level

11. The Vendor's ability to deliver SCS requirements on the Tolling System has also been demonstrated by the following:

s 9(2)(j)

12. The Vendor has proposed an indicative implementation timeframe of s 9(2)(j) for delivering SCS requirements which would meet SCS programme requirements, however this is subject to integrated detailed planning with Tolling and the Vendor and potential sequencing of delivery activities.

13. It is important to note that SCS requirements will be met through delivering purpose-built functionality/services in a modular way and adapting/reusing existing functionality and services of the Tolling System where applicable. This means that there will be a low level of configuration applicable to meeting SCS needs on the Tolling System.

14. The ability for the Vendor to deliver SCS requirements will require Waka Kotahi to consider:

    a. agreement on implementation design approaches identified through the interactive sessions and the demonstration of the Tolling System that will enable existing base functionality and services to be reused / adapted to support key requirements (refer Para 41)

    b. business and operational design decisions that Waka Kotahi will need to make prior to engagement with the Vendor. These decisions would have needed to be made regardless of the technology system Waka Kotahi selected (refer Para 42)

Architectural approach

15. The architectural approach proposed by the Vendor is considered sensible and appropriate to meeting both Tolling and SCS requirements and accommodation of any future LOB requirements.

16. The approach is based on the following:

    a. delivering purpose-built functionality in a modular approach and reusing/adapting relevant Tolling System functionality/services where applicable.

    b. separation of Tolling and SCS interfaces noting that Waka Kotahi's integration platform and common design pattern will be utilised

    c. delivering separate customer portals utilising the Vendor's functionality which can be integrated to a Waka Kotahi designed and developed 'One Customer' portal in the future.

17. The Vendor has articulated that the benefits of this approach ensure:

s 9(2)(j)

18. The architectural approach incorporates separation of information at the database level and across functionality and services where required. This addresses the privacy issue relating to the potential breaching of s50 of the Land Transport Management Act 2003, which prohibits the use of tolling personal information for anything other than tolling collection or enforcement.

Flexibility and extensibility

19. The Vendor has indicated that they will deliver SCS's purpose-built functionality in a way that provides for future configurability to the extent possible providing the required flexibility to meet anticipated ongoing changes in the SCS domain.

20. The demonstration of the Tolling System by the Vendor showcased areas of the functionality that have been built in a configurable manner such as:

s 9(2)(j)

21. The Vendor also indicated that they had the ability to integrate to an external Business Rules Engine but have flagged this as a future consideration at this stage.

Ongoing Support and Upgrade Path

22. s 9(2)(j) [redacted]

23. [redacted]

24. [redacted]

DECISION CRITERIA (PRICE)

25. The following pricing decision criteria has been used to support the due diligence outcome and recommendation.

s 9(2)(i), s 9(2)(b)(ii) [redacted]

s 9(2)(i), s 9(2)(b)(ii)

DECISION CONSIDERATIONS

31. The following are important considerations that must be taken into account in viewing the recommendation:

    a. contractual approach with the Vendor

        i. negotiation of better pricing recognising ongoing benefits to the Vendor in their being able to market an integrated technology platform that meets both

Tolling and Safety Cameras infringement processing capability needs to customers in jurisdictions/markets in which they operate.

ii. negotiating any benefits to Waka Kotahi in establishing them as a strategic technology partner.

iii. ensuring that the contract has mechanisms to ensure that ongoing flexibility and extensibility is ensured such that ongoing changes do not attract significant costs for Waka Kotahi

iv. ensuring that due to the nature of what the Vendor is delivering, the management of any issues/costs related to supportability/upgrade pathways are couched with some teeth for Waka Kotahi

b. domain expertise - as the Vendor is a Tolling specialist provider, the SCS business will want to ensure that the Vendor brings road safety domain expertise, industry knowledge and innovation to the table from design through implementation and then on an ongoing basis to ensure that Waka Kotahi benefits from industry and technology innovation and trends.

c. reference checks – any decision to proceed with the Vendor will require reference checks to be conducted with other customers for whom the Vendor has delivered purpose-built capability previously (especially for non-Tolling requirements)

d. co-design - Waka Kotahi will need to bring stringent co-design management and experience for the implementation to ensure the Vendor has a clear understanding of our requirements and design such that they can deliver to SCS needs

e. delivery team on-shore presence – Waka Kotahi will need to ensure that a capable Vendor delivery presence is established in New Zealand/Australia that interfaces with their off-shore based Vendor development team. This will ensure that there is clarity on requirements, design and delivery and less chance of miscommunication and impacts to project delivery.

RISKS

32. The following key risks must also be considered in viewing the interim recommendation:

Risk	Description	Mitigation
Management of implementation complexity	If Waka Kotahi does not establish an effective governance and project delivery framework to manage the complexity of implementation for two large programmes THEN it is likely that lack of effective governance and management of competing priorities and timeframes will lead to project delivery impacts and delays.	• Establishment of commensurate governance framework to ensure that risk can be managed, and the supplier has a single governance entity for liaison and management of delivery • Consideration of solution integrator that can manage the implementation complexity and own the delivery risk. • Consideration of a Waka Kotahi strategic project delivery resource framework with the experience and

Risk	Description	Mitigation
		capability to manage the implementation risk. This should also include: – Road safety domain expertise with industry knowledge and innovation to the table from design through implementation and then on an ongoing basis. – User experience specialists to ensure ease of use and operational process efficiency for SCS needs
Resource constraints	IF Waka Kotahi business and technology resource and stakeholder constraints to support the implementation for these two large programmes are not addressed THEN the project delivery may get impacted and delayed	• Ensure availability of business and technology stakeholders across both programmes are managed in an integrated manner to avoid any impacts to project delivery
Implementation timeframes	It is possible that given the implementation complexity and the need to sequence project delivery for Tolling and SCS, there may be a longer than expected delivery timeframe.	• Ensure implementation delivery timeframes for both Tolling and SCS are agreed and baselined and any impacts to NZ Police and other agency stakeholders are articulated.
Incorporation of road safety domain innovation in upgrades	Future upgrades in the Tolling System do not incorporate the ongoing innovation and advancements in the road safety domain leading to an out of date SCS capability.	• Ensure that through contractually and established relationship management/governance structure, ongoing agreed innovation and advancements in the road safety domain are tracked and incorporated in future upgrades to the Tolling System.

NEXT STEPS

33. The following key next steps will be undertaken:

    a. Reference checks to be conducted with other customers for whom the Vendor has delivered purpose-built capability previously (especially for non-Tolling requirements)

    b. Concluding commercial negotiations taking into account the considerations noted in para 30.a.

    c. Progressing an agreed management approach to address the implementation complexity.

APPENDIX A – DUE DILIGENCE PROCESS

34. The due diligence process was undertaken by Waka Kotahi to assess and confirm whether the preferred Tolling System could meet the requirements for processing safety camera infringements. The outcome of the due diligence process enables Waka Kothi to either:

    a. confirm the use of the preferred Tolling System to support SCS needs; OR

    b. proceed with finalising an open market procurement process for a back-office infringements processing platform that meets SCS requirements

35. The due diligence process involved a two-stage process as follows:

Stage One	Due Diligence
Purpose	s 9(2)(j) [redacted]

Stage One	Due Diligence
Waka Kotahi Inputs	s 9(2)(j) [redacted]

Stage One	Due Diligence
Vendor Outputs Process	s 9(2)(j) 

Stage Two	Due Diligence
Purpose	s 9(2)(j) 

Stage Two	Due Diligence
Waka Kotahi Inputs Vendor Outputs Process	s 9(2)(j)

36. The due diligence stages involved the following steps:

    a. provision of detailed SCS requirements documents for each of the functional areas to the Vendor for their response and rating on ability to meet the requirements

    b. interactive sessions with the Vendor on each of the functional areas to clarify requirements and understanding of both parties on the Tolling System's capability in each functional area.

    c. provision of requirements response and pricing by the Vendor

37. It is important to note that certain changes were incorporated into the due diligence process to accommodate learnings from the Stage One due diligence process, recognising the Vendor's constraints and availability across different time zones and completing the due diligence process across the 2021/2022 Christmas / New Year holiday period. These key changes involved the following:

    a. conducting an initial due diligence session at the start of Stage One to ensure the Vendor understood the due diligence process and expected outcomes.

    b. an additional due diligence session on Architecture was agreed to be incorporated to discuss and understand the architectural approach the Vendor would take to accommodating both Tolling and SCS needs on the Tolling System.

    c. the demonstration of the Tolling System was agreed to be held after the completion of the interactive sessions. This enabled the Vendor to organise the logistics of a demonstration environment and be better placed to showcase the system and their approach to meeting SCS needs based on more detailed understanding of requirements gained through each of the interactive sessions.

    d. the Stage One due diligence process provided sufficient understanding of the ability of the Vendor's approach to delivering SCS requirements. Pursuant to PSC approval on 15 December 2021, Waka Kotahi provided the Vendor with the Stage Two due diligence requirements covering the remaining functional domains for their response and rating. Undertaking additional due diligence sessions on these remaining functional domains were considered unpractical and unnecessary due to the additional timeframe required and the level of understanding already achieved by Waka Kotahi through the Stage One due diligence

    e. on 15 February 2022, the Vendor provided an updated response with updated ratings across both Stage One and Two due diligence requirements.

APPENDIX B – DUE DILIGENCE ASSESSMENT

38. The Vendor's response and rating to the SCS requirements provided were rated predominantly s 9(2)(j) with a scale of 'Medium'. This indicated that SCS requirements would be met through delivering purpose-built functionality/services in a modular way and reusing existing functionality/services of the Tolling System where possible. This meant that there would be a low level of configuration applicable to meeting SCS needs on the Tolling System.

Stage One Requirement Rating Results

39. The breakdown of the SCS requirements and Vendor response ratings are as follows:

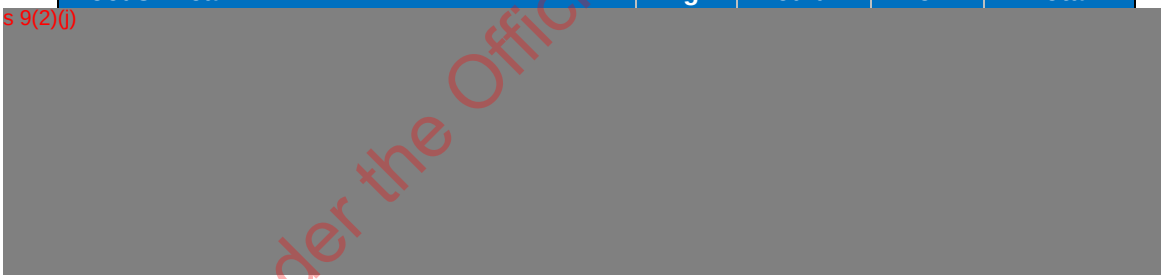
    a. Summary statistics for all Stage One due diligence requirements (Reqs.):

s 9(2)(j)

    b. Breakdown of Stage One due diligence requirements by focus area rated as 'Meets with customisation':

Focus Area	High	Medium	Low	Total

s 9(2)(j)



Note: *The above table includes 29 requirements that relate to integration with internal or external systems. Where a requirement relates to an integration, these would require customisation, even if a safety camera infringement processing system was procured from a domain specific vendor. To therefore get a more accurate picture of the scale of required customisation to support system functionality, the below table provides a view of those requirements not related to integration that require customisation.*

c. Breakdown of Stage One due diligence requirements rated as 'Meets with customisation', excluding integration:

s 9(2)(j)

40. The assessment from the interactive sessions conducted with Vendor across the Stage One key functional and technical domains are summarised into three key consideration areas as follows:

a. **Tolling System Functionality/Services Reuse** – identification of the Tolling System functionality/services that are candidates for reuse/adaption for SCS requirements

b. **SCS Implementation Design Considerations** – SCS requirements that require specific focus as part of the implementation design stage to ensure that the requisite purpose-built functionality delivered to support these requirements is fit for purpose for SCS business and operational needs

c. **Waka Kotahi Design Considerations** – Business and operational design considerations that Waka Kotahi will need to address prior to implementation, irrespective of the technology system used for SCS.

Tolling System Functionality/Services Reuse

41. The due diligence process demonstrated that the Tolling System had the following base functionality services that could be reused/adapted to meet SCS needs across each of the key critical functional or technical domains.

Ref	Tolling System Function	Reuse for SCS - Comments
	All Domains	
a	Interfaces	s 9(2)(j)

Ref	Tolling System Function	Reuse for SCS - Comments
		s 9(2)(j) [redacted]
b	Architecture	
	Identity Domain	
c	Tolling Account Structure [Reuse of platform functionality (adapted to support SCS needs)]	s 9(2)(j) [redacted]
d	Transfer of Liability [Waka Kotahi enabled interface reuse]	
e	User Access [Reuse of platform functionality]	

Ref	Tolling System Function	Reuse for SCS - Comments
	Verification Domain	
f	Automated Vehicle Identification Module (AVI) [Reuse of platform functionality (adapted to support SCS needs)]	s 9(2)(j) 
g	Optical Character Recognition (OCR) Engine [Reuse of platform functionality]	
h	Manual Verification User Interface (UI) [Reuse of platform functionality (adapted to support SCS needs)]	
i	Verification Queue Management & Quality Assurance (QA) [Reuse of platform functionality]	

s 9(2)(j)

Ref	Tolling System Function	Reuse for SCS - Comments
	Customer Service Domain	
j	Self Service Portal [Reuse of platform functionality (minor enhancement)]	s 9(2)(j) 
k	Enquiry, Complaints and Disputes case management [Reuse of platform functionality (adapted to support SCS needs)]	
l	Contact Centre Support [Reuse of integration and/or process between lines of business]	
	Case Management Domain	
m	Invoice / Toll Payment Notice [Reuse of platform functionality (adapted to support SCS needs)]	s 9(2)(j) 

Ref	Tolling System Function	Reuse for SCS - Comments
n	Case Management [Reuse of platform functionality (adapted to support SCS needs)]	s 9(2)(j) [redacted]
o	Digital Asset Management [Reuse of platform functionality]	
p	Outbound Correspondence [Reuse of integration and process between lines of business]	
q	Product Configurator [Reuse of platform functionality (adapted to support SCS needs)]	
r	Workflow Definition [Reuse of platform functionality (adapted to support SCS needs)]	
s	Event Filtering [Reuse of platform functionality (adapted to	

Ref	Tolling System Function	Reuse for SCS - Comments
	support SCS needs)]	
t	Audit Tools [Reuse of platform functionality]	s 9(2)(j) [redacted]

SCS Implementation Design Considerations

42. During the due diligence process, key implementation design considerations were identified in relation to the Vendor intended approach to supporting SCS requirements. These are detailed below and will need to be considered as part of the co-design phase with the Vendor during implementation.

Ref	Design Focus	Implementation Design Considerations
	Identity Domain	
a	Tolling Account Structure	s 9(2)(j) [redacted]
	Verification Domain	
b	Motor Vehicle Register (MVR) integration during verification	
c	Verification Processing & Queue Management	
d	Manual Verification User Interface (UI)	
e	Tolling image reference database	
f	Future external BRMS integration	

Ref	Design Focus	Implementation Design Considerations
		s 9(2)(j)
	Customer Service Do	
g	Relationship / structure of key business entities	
h	Ease of use	
i	Customer login and authentication	
	Case Management Domain	
j	Case/Account Structure	s 9(2)(j)
k	Inbound document management	

Ref	Design Focus	Implementation Design Considerations
l	Digital Asset Management (DAM)	s 9(2)(j) [redacted]
m	Infringement handling	

Waka Kotahi Design Considerations

43. In addition to implementation design considerations that are specific to how the Vendor would support SCS requirements, there are key generic Waka Kotahi design questions that will require resolution as an input into the co-design phase with the Vendor. These are detailed as follows:

Ref	Design Focus	Waka Kotahi Design Considerations
	Identity	
a	Driver licence identity (individuals / sole traders)	s 9(2)(j) [redacted]
b	Registered persons that are organisations	
c	MVR and DLR interface consolidation	
d	Identity of payer	

Ref	Design Focus	Waka Kotahi Design Considerations
		s 9(2)(j)
e	Electronic transfer of liability	
	Verification	
f	Verification business rule & data definition	s 9(2)(j)
g	Incident data retrieval	
h	Multi-vendor safety camera incident data transformation	
i	Identification of offending vehicle in incident image	
j	Chain of evidence	
k	Retrofitting ANPR to existing cameras	

Ref	Design Focus	Waka Kotahi Design Considerations
	Customer Service	
l	Contact centre support	s 9(2)(j) [redacted]
m	Customer self-service	
	Case Management	
n	Document storage	s 9(2)(j) [redacted]
o	Document template management	

Ref	Design Focus	Waka Kotahi Design Considerations
		s 9(2)(j) [redacted]
p	Court File Creation	

Architecture

Architectural approach

44. The architectural approach proposed by the Vendor is considered sensible and appropriate to meeting both Tolling and SCS requirements and accommodation of any foreseeable future LOB requirements.

45. The approach is based on the following:

s 9(2)(j) [redacted]

46. The Vendor has articulated that the benefits of this approach ensure:

s 9(2)(j) [redacted]

47. The architectural approach incorporates separation of information at the database level and across functionality and services where required. This addresses the privacy issue relating to the potential breaching of s50 of the Land Transport Management Act 2003, which prohibits the use of tolling personal information for anything other than tolling collection or enforcement, without incurring significant redesign effort.

48. The following diagram depicts the proposed combined architectural view of SCS and Tolling on the Tolling System:

s 9(2)(j)

Tolling System Demonstration

49. A three hour demonstration of the preferred tolling vendor system was conducted on December 21st, facilitated through Teams.

50. It is important to note that:

    a. the demonstration approach undertaken by the Vendor was to show relevant Tolling System functionality that would be reused/adapted to meet SCS business needs.

    b. the demonstration did not follow an end-to-end process approach but was structured to demonstrate and discuss functionality and related configurability in a logical sequence from import of events through verification, issuance and lifecycle management (including customer self-service portal).

    c. a number of scenarios and functionality that were in the due diligence process provided to the vendor could not be demonstrated, as either the functionality did not yet exist, or the time was insufficient.

51. The demonstration was split in two parts, focussing on each of the two key Tolling System components as follows:

Operational Back Office (TOS)

52. The operational back office (TOS) was demonstrated, which would manage the following key offence processing functions:

    a. import of safety camera incidents

    b. automated verification, including optical character recognition (OCR) of incident images

    c. manual verification user interface

d. intervention determination & issuance – e.g., infringement vs traffic charge vs warning

Ref	Topic	Demonstrated
a	Incident import	s 9(2)(j)
b	Configuration & Workflow	
c	Automated Verification	

Ref	Topic	Demonstrated
d	Manual Verification	s 9(2)(j) [redacted]

Commercial Back Office (BIS)

53. The Commercial Back Office (BIS) for notification and lifecycle management was demonstrated with the salient points outlined as follows:

Ref	Topic	Demonstrated
a	Account View/Structure	s 9(2)(j) [redacted]

Ref	Topic	Demonstrated
		s 9(2)(j)
b	Toll invoicing (infringement handling)	
c	Case Management	

Ref	Topic	Demonstrated
		s 9(2)(j)
d	Customer self-service	
e	Workflow configuration	

Stage Two Requirement Rating Results

54. The Vendor's response and rating to the SCS Stage Two requirements yielded slightly over half of all requirements being rated as s 9(2)(j) with a slight majority of rated as Low over Medium. There were no 'High' rated customisations in Stage Two requirements. This is likely also tied to the fact that many of the Stage Two requirements expanded on Stage One requirements, with additional detail. However, this supports the assessment that SCS requirements will be delivered through purpose-built functionality/services, as described in the Stage One due diligence section above.

55. The breakdown of the SCS requirements and Vendor response ratings are as follows:

    a. Summary statistics for all Stage Two due diligence requirements:

s 9(2)(j)

s 9(2)(g)(i)

    b. Breakdown of Stage Two due diligence requirements rated as 'Meets with customisation':

s 9(2)(j)

c. Breakdown of Stage Two due diligence requirements rated as ‘Meets with customisation’, excluding integration:

s 9(2)(j)

Stage 2 Assessment Response Summary

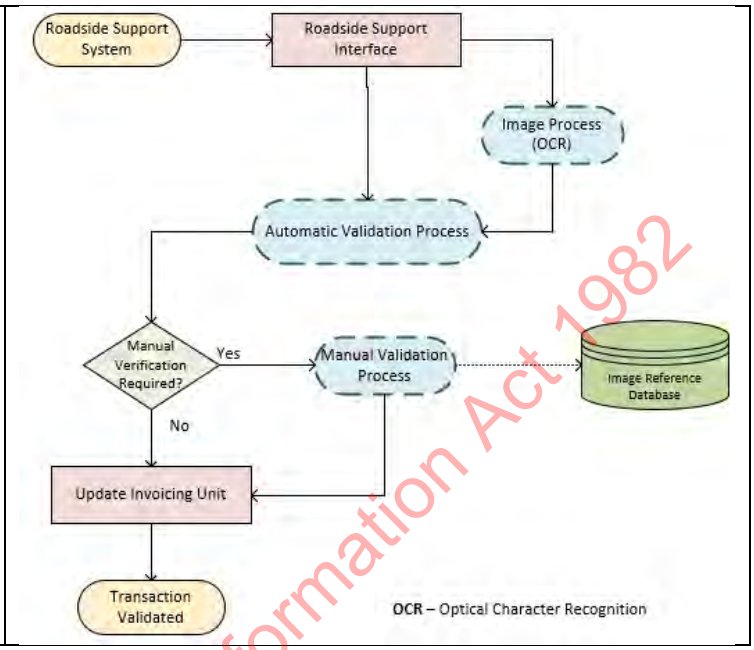
Focus area	Req. Count	Response Summary
Determine intervention	5	s 9(2)(j)
Create offence & supporting intervention	3	
Notify & remind recipient	14	
Assess compliance	3	
Adjudicate disputes & exemptions	8	
Prosecute Offence & Non-payment	10	

Focus area	Req. Count	Response Summary
		s 9(2)(j) [redacted]
Provide Customer Service	1	
Customer Service	6	
Identity	1	
Reporting & Data	16	
Manage payments	13	
Outbound correspondence	6	
Court File Prep	6	

APPENDIX C – TOLLING VS SCS VERIFICATION

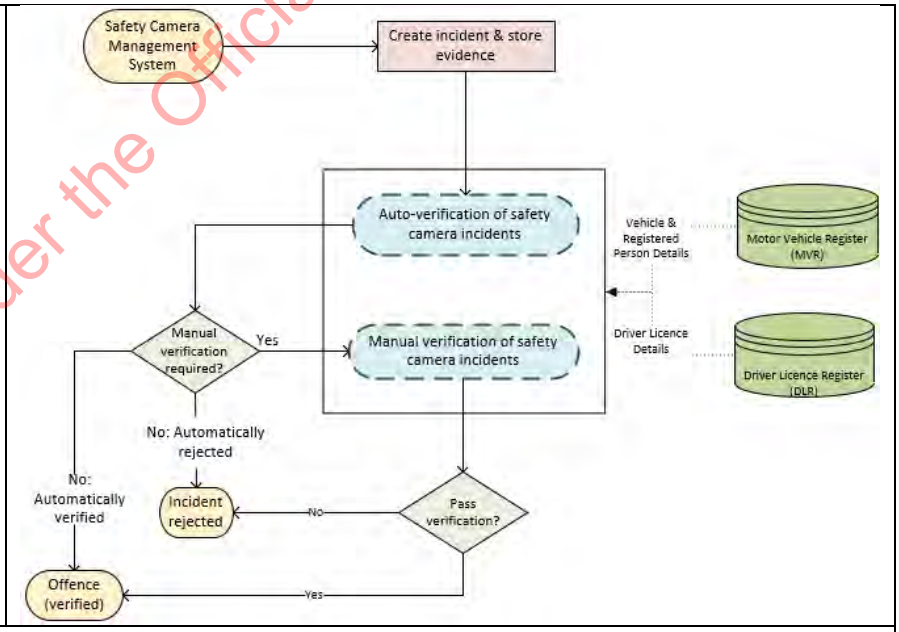
Tolling Verification

The aim of the Verification component is to verify and confirm that each toll transaction received by the Tolling System is assignable to a Vehicle Registration Plate Unit and pass. This allows the trip to be assigned to an account, trip pass or invoicing unit (awaiting payment). At the end of the verification process, all valid toll transactions will have a valid plate and vehicle class as part of their information and will be stored in the system database associated to the corresponding Toll Account or Pass.



SCS Verification

The aim of the verification component is to determine whether an incident detected by a safety camera meets the required evidential standard to be deemed an offence and all the information needed to issue a notice is available. At the end of the verification process, all incidents are either flagged as verified, so that an appropriate intervention can be determined, or rejected.



In 2018/2019 financial year, ~1.6M safety camera incidents were manually verified by NZ Police (leading to just over 1M infringements issued). Due to the high volume of incidents (and seasonal peaks when the speed threshold is reduced), it will be important to maximise the potential of automation, targeting accurate straight through processing for a proportion of incidents (once legislation enables), and minimising the number of manual verification checks before issuance by an enforcement officer (if straight through processing not possible).