Industry Framework for trialling road freight Intelligent Transport Systems (ITS) and associated technologies

Cum

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BACKGROUND

The Victorian Freight and Logistics Plan was released in 2013 and provides a clear vision and a plan for ensuring that Victoria retains its status as Australia's freight and logistics capital, building for the future using our competitive strengths.



The freight and logistics sector contributed between \$19 billion and \$23 billion to Victoria's Gross State Product (GSP) in 2011, representing up to eight per cent of the Victorian economy. Because freight and logistics plays such a critical role, the efficiency of the sector's operations is a key driver of productivity throughout the broader economy. Freight and logistics efficiency not only drives direct costs for freight operators, but influences how readily these businesses can reorganise to achieve productivity improvements. Improved freight and logistics sector efficiency enables businesses across many sectors to consolidate warehousing facilities, reduce inventory costs, increase geographical market reach and create higher-value services and products.

Intelligent Transport Systems (ITS) and other associated technologies can provide significant benefits to the freight and logistics sector, by improving efficiency, reliability and safety.

The Victorian Government and VicRoads is committed to facilitating and partnering with industry to drive innovation and has developed this framework to support the research and development of new technologies.

HOW TO GET STARTED WITH A GREAT IDEA

So you have a fantastic idea that you want to trial but are unsure whether VicRoads will support it? VicRoads is always looking for innovative ways to improve efficiency, reliability and safety for freight through the use of Intelligent Transport Systems (ITS) and associated technologies. The first step is to clearly define and articulate your idea by asking "what are the benefits?".

Aligning your idea

It is important to ensure that this idea strategically aligns with the Victorian Government and VicRoads' vision. This vision has been summarised into "VicRoads Principles", which are derived from VicRoads' legislative responsibilities as well as the Freight and Logistics Plan. Appendix B contains the relevant Strategic and Technical Principles relating to freight improvement initiatives. In this attachment, guidance is provided to assist you to assess whether your idea has strategic merit and if it has the potential to provide certain benefits that support these principles. Once this is done, you will also need to consider whether there are any disbenefits and risks which could occur as a result of the trial and what mitigation measures can be used to manage these.

Progressing your idea

Once strategic alignment has been confirmed, the possible risks have been considered and a plan made to mitigate them, the next step is to determine how this initiative will be funded and whether VicRoads needs to provide resources or contribute funding. Self funded initiatives are preferred by VicRoads. If VicRoads needs to contribute resources or funding, VicRoads will undertake a problem analysis. In this analysis, VicRoads will look at the potential benefits but will also consider what the problem is that needs to be solved (in other words, determine the need for a solution). This process is undertaken to ensure resources can be committed to ideas which have the most potential to achieve benefits. This analysis is briefly summarised in Appendix C and will be undertaken by VicRoads. Once this is completed, VicRoads will then pursue securing funding. In some instances, the trial might be a great idea with strong strategic alignment, but there may not be sufficient resources or funding available for VicRoads to contribute.

If this trial has the potential to provide significant benefits and VicRoads can commit resources and has secured funding, it will partner with industry to help facilitate innovation and get the trial up and running. There may be instances where VicRoads cannot contribute funding but may still be able to provide resource support. In these cases, the initiator will need to fund the trial.

VicRoads will be assisted by Transport Certification Australia (TCA) - a national government body responsible for providing assurance in the use of telematics and related intelligent technologies, to support the current and emerging needs of Australian Governments.

Evaluating the trial

One of the key outputs of an Intelligent Transport Systems (ITS) and other associated technologies trial is to ensure that the system works. The other is to evaluate whether the trial achieved its objectives and benefits.

VicRoads may have a particular interest in assessing the outcomes of the trial to determine whether it provided the benefits it set out to achieve.

If the trial is successful and requires Government funding for a future rollout, VicRoads will be responsible for developing a business case. It is therefore important that VicRoads is engaged as a key stakeholder throughout the trial as this knowledge and involvement will play a pivotal role in developing a strong business case. The outputs of work undertaken during the evaluation of the trial will also help develop a strong business case.

If the business case is successful and funding is secured, VicRoads may undertake the necessary procurement and delivery arrangements as needed, in line with existing procurement policies.

Appendix A is a flow chart which provides an overview of this process.

Contact us

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APPENDIX A - PROCESS OVERVIEW



- **1.** Technology proposal from industry.
- 2. Refer to Appendix B.
- **3.** Self funded initiatives are preferred but if VicRoads funding is needed then a problem analysis needs to be undertaken.
- **4.** VicRoads and TCA to undertake an internal problem analysis using Appendix C.
- 5. Having undertaken Step 4, if VicRoads determines that the proposed trial has the potential to achieve significant benefits, it will support the trial subject to funding.
- 6. Prior to starting the trial, prepare an evaluation plan and create a baseline to compare and evaluate the benefits and objectives. Once this is complete, the trial can begin.
- 7. TCA on behalf of VicRoads to undertake an evaluation to determine what benefits and disbenefits (if any) were identified in the trial. Before and after trial information will need to be analysed.
- 8. If the trial was not successful, review the idea to determine whether any learnings can be used to revise the proposal.
- If the trial was successful, determine whether it will need Government funding for a larger scale roll-out or implementation.
- **10.** VicRoads to develop a business case to seek funding.
- **11.** VicRoads and TCA to develop an implementation plan.



APPENDIX B – STRATEGIC & TECHNICAL PRINCIPLES

	BENEFIT	DISBENEFIT	POTENTIAL RISKS
	IMPACT ASSESSMENT (Y/N)		& MITIGATION MEASURES
Efficient movement of people and goods throughout the transport system			
Reliable movement of people and goods throughout the transport system			
Access to residences, employment, markets, services and recreation			
Alignment with the SmartRoads Road Use Hierarchy			
Financially sustainable technology initiative (short and long term costs are self funded)			
Road Safety resulting from this initiative			
Local and community amenity			
Public transport use, walking and cycling			
Environmental sustainability			



APPENDIX B – STRATEGIC & TECHNICAL PRINCIPLES (CONTINUED)

TECHNICAL PRINCIPLES	MEET (Y/N)	IF NO, DETAIL WHY
Consistency with <i>Policy Framework</i> for ITS in Australia		
Compatibility with existing VicRoads systems & equipment		
Compatibility with other technology or systems already used in sector		
Non proprietary systems & equipment		
New proposal not yet trialled or in use in Australia		
Systems and equipment has not been previously assessed for type-approval or product acceptance by any other Australian government agency		
Long term sustainability and effectiveness		

Note: Whilst technical principles will not impact strategic alignment, VicRoads prefers that all the technical principles are met, unless there are particular reasons why they should not be met.

ASSESSMENT CATEGORY FOR ALIGNMENT OF PRINCIPLES			
STRATEGIC PRINCIPLES	ALIGNMENT		
Meets at least one strategic principle and there are no disbenefits or risks	Yes		
Meets at least one strategic principle and all disbenefits and risks are mitigated	Yes		
Meets at least one strategic principle and not all disbenefits and risks are mitigated	No, may need to contact VicRoads to discuss as it will depend on the severity of the risk		

APPENDIX C - PROBLEM ANALYSIS

STEP 1

What is the problem that needs to be solved?

STEP 2

Does solving this problem strategically align with Government and VicRoads priorities?

STEP 3

What other options can solve this problem?

Description

What is the problem that needs to be solved and what are the issues surrounding the problem? Is there sufficient evidence to suggest there actually is a problem? What are the benefits of solving the problem?

Consider relevant Government and VicRoads strategies and principles and determine whether the proposal aligns with these and can deliver their objectives

Output

An informal workshop to explore and define the problem including the benefits it can achieve

Strategic alignment between the problem and Government and VicRoads principles

Consider and analyse a range of alternative options that could solve this problem. These options should include those outside of VicRoads responsibilities A range of options listed for further exploration that may also solve this problem and deliver on these benefits

STEP 4

Is this option the most suitable option for solving the problem? Investigate and analyse all the options which can solve the problem. Evaluate the benefits, disbenefits, risks and mitigation measures for each option. Is the proposed trial the most suitable option? A decision on whether this option should be trialled