National Transport Commission

Review of the Intelligent Access Program – Draft for consultation

ISBN:
Report outline

Title: Review of the Intelligent Access Program
Type of report: Draft for consultation
Purpose: For public consultation
Abstract: The paper reviews the progress of the Intelligent Access Program against the original objective. The paper also analyses the issues and opportunities that have emerged over the consultation period and proposes five draft recommendations.

Key words: Intelligent Access Program, heavy vehicle telematics, compliance and enforcement, heavy vehicle access, Heavy Vehicle National Law

Contact: National Transport Commission
L 15/ 628 Bourke Street
Melbourne VIC 3000
Ph: (03) 9236 5000
Email: enquiries@ntc.gov.au
www.ntc.gov.au
How to make a submission to the NTC

Who can make a submission?
Any individual or organisation can make a submission to the NTC.

How to submit
To make an online submission please visit the NTC homepage (www.ntc.gov.au) and select ‘Make a submission to the NTC’ from the News & Publication menu.

Alternatively, you can mail your comments to:

Att: Review of the Intelligent Access Program,
National Transport Commission,
Level 15/628 Bourke Street, Melbourne VIC 3000

Where possible, you should provide evidence, such as data and documentation, to support your views.

Publication of submissions
Unless submissions clearly request otherwise, all submissions will be published online. Submissions that contain defamatory or offensive content will not be published. The Freedom of Information Act 1982 (Cwlth) applies to the NTC.
Executive summary

In May 2013, Australia’s transport ministers requested the National Transport Commission (NTC) to undertake a review of the Intelligent Access Program (IAP).

The IAP electronically monitors the location and speed of heavy vehicles assuring road authorities that enrolled vehicles are complying with their road access conditions. Transport operators enrol in the IAP to gain better access to particular roads or to meet access conditions set by road authorities. Some transport operators may use the IAP to negotiate better road access with road authorities.

The IAP was developed by Austroads and the program has been in operation since 2009. The NTC had a specific task of developing the laws that underpin the privacy and security of the program.

The IAP is the first example of using telematics within the regulatory framework for managing heavy vehicles in Australia. The program has attracted considerable interest from overseas and has been used to develop international standards for telematics systems and services.

The review found:

- The rollout of the technically complex IAP project was well managed and the IAP is now part of the heavy vehicle regulatory landscape in Australia.
- The IAP is currently operational and available in six states: New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia.
- At July 2013 there are 2483 vehicles enrolled in the IAP compared with an estimated take-up number of 8383.
- Factors that may have contributed to lower than expected vehicle take-up numbers are: road authorities have made fewer than the anticipated IAP applications available; the introduction of concessional mass limits; enrolment costs; the demand for higher mass limits may have been overestimated; and heavy vehicle access issues on local roads.
- The estimated costs of the IAP to governments were around $203 million compared to the actual costs of around $68 million. The key factor for these lower costs is that not all states and territories have implemented the program and not all IAP applications have been used.
- The estimated benefits of the program to governments were around $107 million. The NTC was unable to calculate the actual benefits to governments due to lack of data.
- The estimated program costs to industry were around $62 million over its first five years. The actual costs to industry range from $18.8 million to $24.3 million, based on 2483 vehicles across four operational years.
- The benefits of the program to transport operators were estimated to be around $280 million. The NTC was unable to calculate actual benefits to operators. Case studies from individual companies show benefits include greater payloads and fewer trips.
- It appears that the objective of the IAP is being achieved.
- Important issues for industry are access decisions involving the IAP, and first and last mile access. Under the current arrangements, road authorities determine access conditions for heavy vehicles. For example, road authorities in New South Wales and Queensland have undertaken risk-assessment processes and have concluded that the IAP is a compliance tool that is needed to help manage vulnerable infrastructure as well as other factors. The recent establishment of the National Heavy Vehicle Regulator and new review processes in the Heavy Vehicle National Law should help to achieve better access over time.

In response to the feedback from the consultation to date, the NTC has made five draft recommendations. These recommendations focus on:
• improving available information about the IAP (recommendations 1, 3 and 5)
• ensuring changes to the IAP specification are approved by ministers (recommendation 2)
• ensuring timely re-certification decisions are made (recommendation 4).

The NTC is now seeking feedback on this report and the draft recommendations by 25 July 2014. After this date, the NTC will consider all stakeholder feedback to develop a final review paper. The final step in the review process is to submit final recommendations to the Transport and Infrastructure Council for a decision in November 2014.

**Draft Recommendations**

1. Transport Certification Australia Board reports statistics about the IAP in its annual reporting including:
   - number of vehicles enrolled in the IAP by application type and by state and territory
   - number of intelligent access conditions
   - number of kilometres travelled by enrolled vehicles and by application type.

2. Transport and Infrastructure Council approves changes to the IAP specification (with the Transport and Infrastructure Senior Officials Committee being able to approve any minor and non-contentious changes).

3. Transport Certification Australia Board makes a public version of the IAP specification available on its website.

4. Transport Certification Australia Board reviews the re-certification process to provide more certainty to service providers regarding timelines.

5. Transport Certification Australia Board publishes information about the data that operators are able to obtain from service providers.
8. References

Appendix A. Stakeholder Consultations
Appendix B. 2003 Proposal – IAP Applications
Appendix C. Intelligent Access Conditions by Application Type
Appendix D. Queensland IAP Vehicle Take-up
Appendix E. Compliance and Enforcement Sanctions and Penalties
Appendix F. Costs for Transport Operators
Appendix G. Transport Certification Australia Board of Directors
Appendix H. NTC Strategic Planning and Work Program Development Process

List of tables

Table 1. Progress report - 2003 proposal
Table 2. Implementation status by state and territory by application type
Table 3. Proposed application types and estimated vehicle take-up
Table 4. Actual vehicle take-up by specific application type, July 2013
Table 5. Actual vehicle take-up vs projected vehicle take-up (%)
Table 6. Projected IAP vehicle numbers, July 2014
Table 7. Assumptions and data required for cost and benefit assessment
Table 8. Proposed stages 1 and 2 implementation and operational cost estimates (2013 dollars)
Table 9. Costs to government – actual (2013 dollars)
Table 10. Costs to Transport operators – projected vs actual (2013 dollars)
Table 11. Draft recommendations and implementation plan
Table 12. 2003 proposal – potential IAP applications
Table 13. 2013 Intelligent access conditions by application type
Table 14. IAP vehicle numbers in Queensland, January to October 2013
Table 15. Cumulative cost to transport operators

List of figures

Figure 1. Operating model for the IAP
Figure 2. Milestones and events related to the IAP
Figure 3. Actual IAP vehicle take-up, 2009 – 2013
Figure 4. Average monthly IAP vehicle take-up growth rates, July 2012 to July 2013
Figure 5. S-curve for innovations
Figure 6. Compliance management pyramid
1. Introduction

1.1 Origin of this review

In May 2003, the Ministerial Council agreed to a recommendation from Austroads for a staged implementation of the Intelligent Access Program (IAP). This recommendation was underpinned by a 2003 Austroads feasibility report that described the costs, benefits and impacts of introducing the IAP. The program proposed the use of vehicle telematics technology, through certified service providers, to remotely monitor heavy vehicles to ensure they are complying with the agreed operating conditions and report non-compliance information to relevant road authorities.

A key implementation task was to develop the model law. The National Transport Commission (NTC) developed the model laws that gave national legal effect to the policy and operational framework for the program. Austroads developed the 2005 Regulatory Impact Statement that accompanied the model law. The Ministerial Council approved the model law in January 2006.

The IAP became formally operational in 2009 and transport companies could enrol their vehicles in the program to obtain access to the road network, where the IAP has been made a condition of access by road authorities.

In 2012, the NTC was requested to review a number of policy matters relating to the program as part of the National Heavy Vehicle Regulator’s National Industry Productivity Packages. Following this, at the NTC’s planning workshop with government and industry stakeholders held in December 2012, a review of the program was seen as a priority for NTC’s work program for 2013-14. Transport and Infrastructure Ministers approved the work program containing the review of the IAP in May 2013.

1.2 Scope of the review, process and timing

The objective of this review is to report the progress and achievement of the IAP to date and make any recommendations to improve the program. More specifically, the review seeks to:

- evaluate the effectiveness of the IAP against the intended outcomes as specified in the 2005 Regulatory Impact Statement
- discuss the various applications of the IAP as a condition for access by road authorities.

In May 2013, the NTC announced the IAP review and requested submissions from interested organisations and individuals to provide input. In June 2013 the NTC wrote to key government and industry stakeholders seeking information to inform the review. The NTC consulted with stakeholders such as transport operators and local governments to ensure the review captured a wide range of views.

Following the completion of this consultation phase, comments and submissions were analysed and used to prepare this draft report. Seventeen submissions were received. A list of the stakeholders that participated in the consultation phase is included in Appendix A.

The NTC held a workshop in December 2013 to present and discuss the preliminary findings for the review. The discussions and outputs from this workshop have been also analysed and used to help prepare this draft report.

The next step in the review process is the release of this draft report for public comment. The NTC is seeking responses to this draft report by 25 July 2014.

After this date, the NTC will consider all stakeholder comments and feedback to develop the final review paper. The final step in the review process is to submit recommendations to the Transport and Infrastructure Council for consideration in November 2014. If these recommendations are approved, the recommendations will be implemented by the relevant parties.
2. About the Intelligent Access Program

This section provides a brief description of the IAP, including the purpose of the program, its application, its operating model and the use of the non-compliance report.

2.1 What is the Intelligent Access Program?

The IAP is a compliance management tool that gives road authorities more confidence that participating vehicles are complying with the agreed conditions. The main condition is that the high risk or heavy vehicle only travels on approved roads (and does not travel on unsuitable roads or bridges). Other conditions that can be applied by road authorities include time-based conditions and a maximum speed threshold.

2.2 How has the Intelligent Access Program been used?

Under the Heavy Vehicle National Law, road authorities set the access conditions for heavy vehicles. The IAP is one of the regulatory tools available to road authorities that may be applied as a condition or a requirement when granting approvals for heavy vehicle access.

Road authorities have used the IAP as a condition of access in both mandatory and voluntary settings. For example, some road authorities have used the IAP as a mandatory condition on over-dimension and over-mass cranes (as these vehicles have been assessed as high risk to road infrastructure, particularly vulnerable bridges, culverts, tunnels and other under-road structures). There are also voluntary examples where a particular vehicle can access the road network with or without the IAP (such as over-dimension and over-mass cranes in Queensland).

2.3 How does the Intelligent Access Program work?

The IAP vehicles are monitored by in-vehicle units. IAP service providers supply these units and provide the end-to-end service required for the program. The service providers use Global Navigation Satellite System and communications technology to transmit vehicle positioning data for analysis. The program is capable of monitoring vehicle location, time and speed, as well as tampering and malfunction of the system.

Road authorities determine the type of parameters available based on the requirements of the particular IAP application. IAP application is the generic term used to describe specific uses of the IAP by road agencies. The way in which IAP is applied or the sort of IAP applications that are made available to transport operators may differ between states and territories. Further, the IAP applications also set out a set of conditions against which participating vehicles (for example, higher mass limits) are assessed for compliance.

There are stringent controls in place to protect the privacy of operators in the program for the use and disclosure of information. Further, there are limitations on the type of information that could be obtained by road authorities. This is governed by the IAP provisions in the Heavy Vehicle National Law.

2.4 Who is involved in the Intelligent Access Program?

There are four parties involved in the operating model of the IAP, each with defined roles and responsibilities (Figure 1). These are the road authorities, transport operators, Transport Certification Australia and IAP service providers. The roles and responsibilities of each party are described below.

Road Authorities

Road authorities refer to the state and territories road managers and local governments that are responsible for making decisions regarding road access. The key role for the road authorities is to determine the circumstances in which the IAP should be applied as a condition of access. The specific conditions and entitlements or the sort of IAP applications that are made available to transport operators vary between road authorities according to the needs, infrastructure management risks and transport policies of the states and territories.
Prior to 10 February 2014, the road authorities were also responsible for managing the compliance and enforcement of non-compliance breaches. It should be noted that as of 10 February 2014, the National Heavy Vehicle Regulator assumed overall responsibility for heavy vehicle compliance and enforcement activities, while the road authorities retained specific compliance and enforcement responsibilities.

Transport Operators

Transport operators refer to the person or entity responsible for controlling or directing the operations of the vehicle (Department of Planning Transport and Infrastructure SA, 2014). In this report, transport operators include heavy vehicles and cranes operators.

Transport operators enrol in the program to gain improved access or to meet specific requirements that have been prescribed by road authorities as a condition of access. Transport operators may use the IAP to negotiate enhanced access conditions with road authorities.

Transport Certification Australia

Transport Certification Australia manages the national administration of the program and the certification and audit of the IAP service providers on behalf of state and territory road authorities.

IAP Service Providers

IAP service providers are certified by Transport Certification Australia to provide monitoring system and associated services to transport operators that meet the regulatory requirements of road authorities. Transport operators can negotiate a range of other non-regulatory services with the service providers. The fees and any additional fleet management services are covered by a contract between the transport operator and the IAP service provider.

There are additional components of the system that are provided by Transport Certification Australia and road authorities to validate and action cases produced by the IAP system.

2.5 What is a non-compliance report?

A non-compliance report is generated by the IAP service provider when an operator’s vehicle does not comply with the conditions of access set by the road authority, as monitored through the IAP. Under the IAP, monitoring is for non-compliant activity. Although a vehicle is monitored continuously, the road authority is only provided data that demonstrates potential non-compliance. If an IAP vehicle is detected as being non-compliant, the IAP service provider generates a non-compliance report, which is sent to the relevant road authority. All non-compliance reports are treated on a case-by-case basis, with the relevant road authority deciding whether any further action is needed.

Queensland Department of Transport and Main Roads has indicated that it is also interested in monitoring conditions that report on correct operation of the system, generally referred to as “alarms”. The alarms are of interest at all times regardless of other monitored conditions such as route compliance.
Figure 1. Operating model for the IAP
3. Relevant National Reforms

This section provides a summary of the relevant national reforms that are related to, or have implications, for the review of the IAP.

Telematics describes the use of an in-vehicle device that forms part of a system that captures and sends information electronically (NTC, 2013a, p. 5). Telematics can be used for commercial purposes (for example measuring how a vehicle is driven and its engine performance) and regulatory purposes (for example the electronic work diary to record work and rest hours). IAP uses telematics for a regulatory purpose.

A range of reforms and telematics work is currently being developed by governments in Australia and is summarised in this section.

3.1 National Heavy Vehicle Reform

For many years governments have been working to harmonise heavy vehicle regulation. In 2009 the Council of Australian Governments agreed to establish a Heavy Vehicle National Law to govern the regulation of all vehicles weighing more than 4.5 tonnes. The National Heavy Vehicle Regulator was also established to administer the national law.

The National Heavy Vehicle Regulator began operations by administering the National Heavy Vehicle Accreditation Scheme and Performance-based standards design and vehicle approvals from January 2013. On 10 February 2014, the regulator began administering all other elements of the Heavy Vehicle National Law.

The Heavy Vehicle National Law has been passed, with some regional variations, in all Australian states and territories, except Western Australia and the Northern Territory.

The Heavy Vehicle National Law has incorporated many heavy vehicle reforms that predate it. These reforms include the IAP and also the National Heavy Vehicle Accreditation Scheme, higher mass limits, concessional mass limits and performance-based standard schemes. While road authorities have varied the ways in which they regulate and operate these schemes, it is expected the National Heavy Vehicle Regulator and road authorities will reduce the size and scope of these variations over time.

3.2 National In-Vehicle Telematics Strategy 2011

In 2011, the transport and infrastructure ministers approved and released the National in-vehicle telematics strategy [for] the road freight sector. Recognising that widespread use of telematics in the road freight sector will have significant safety, operational and environmental benefits, the strategy aims to:

Increase the potential for in-vehicle telematics to deliver new or greater benefits … to users and the community through a partnership between industry and government.

(NTC, 2013b, p. 3)

The benefits anticipated from the use of telematics include:

- more cost-effective freight transport, which will in turn make Australian exports more competitive and reduce the cost of goods and services to the general community
- reduced road toll due to greater safety compliance and technological developments that improve traffic flow, vehicular safety and reduce the risk exposure of vulnerable road users
- reduced energy use and vehicle emissions.

The strategy was the outcome of extensive industry and government consultation. The strategy states that the adoption of telematics by industry should be voluntary and driven by productivity incentives. The adoption of telematics will, in turn, provide governments with more effective compliance and monitoring tools. The strategy proposes a partnership approach between governments and industry, in which governments focus on delivering clear priorities, consistent and transparent standards and (where appropriate) certification of suitable technology systems.
One function of the strategy is to provide an overarching policy for all telematics applications, to ensure that compliance and enforcement practices are consistent and equitable, and do not discourage or penalise operators that use them. The strategy will therefore be used to facilitate the development of:

- a common but flexible telematics data set, based on international standards and capable of supporting multiple commercial and compliance-related applications (as they are developed)
- policy principles governing the:
  - treatment of minor breaches
  - use of telematics data for enforcement purposes
  - protection of personal and sensitive information
  - level of assurance required of particular telematics systems (based on specific compliance approaches).

### 3.3 Policy Framework for Intelligent Transport Systems 2012

Intelligent Transport Systems include any technology applied to transport and infrastructure to transfer information between systems for improved safety, productivity and environmental performance. This includes stand-alone applications such as traffic management systems, and information and warning systems installed in individual vehicles, as well as cooperative intelligent transport systems applications involving vehicle-to-infrastructure and vehicle-to-vehicle communications. IAP is an example of an Intelligent Transport System.

In 2012, transport and infrastructure ministers approved the policy framework for Intelligent Transport Systems in Australia to help guide the consistent implementation, integration and adoption of Intelligent Transport Systems across all land transport modes.

To ensure coordinated and effective deployment of Intelligent Transport Systems, and to ensure there are no undue obstacles to market-driven adoption of Intelligent Transport Systems products and services, the framework outlines two principles for governments to observe when implementing and regulating Intelligent Transport Systems initiatives:

1. Intelligent Transport Systems development and implementation must deliver demonstrable benefits to individuals, the community and business
2. The policy environment in which Intelligent Transport Systems are developed and implemented must be robust and dynamic.

In practice this means that policies and Intelligent Transport Systems should support interoperability, backward compatibility and transparency. In keeping with guidelines of the Office of Best Practice Regulation, the principles stress that regulation:

- should only be introduced when there is a demonstrated need
- is targeted to serve a precisely-defined purpose
- involves the minimum level of intervention required to deliver a regulatory objective.

The principles therefore seek to facilitate access to Intelligent Transport Systems applications and services for all users who may benefit from their use and promote data sharing to support the delivery of additional Intelligent Transport Systems solutions that benefit the wider community.

### 3.4 Compliance Framework for Heavy Vehicle Telematics

An important element of the national strategy has been the development of a Compliance Framework for Heavy Vehicle Telematics. The objective of the framework, developed by the NTC, is to provide certainty in national policy on the use of telematics data to improve compliance and enforcement purposes. By increasing certainty and consistency in national policy, the framework is intended to encourage industry to adopt telematics and help provide better road safety, productivity and environmental outcomes. The Transport and Infrastructure Council approved the framework on 23 May 2014.

The framework incorporates 10 principles relating to: privacy, compliance and enforcement; minimum standards of telematics and regulatory efficiencies. The primary purpose is to ensure that industry and drivers understand the purpose and circumstances in which governments will access their telematics data. The framework also provides guidance on ways in which telematics
information can be used by governments to improve responsive regulation and increase the education of drivers and operators. An initial analysis of the IAP legislation, policies and practices indicates that the program is consistent with the compliance framework principles.
4. History of the Intelligent Access Program

This section provides a brief history and key events in establishing the IAP.

In 1999, the Tasmanian Department of Infrastructure, Energy and Resources completed the Intelligent Vehicle Trial to test the basic feasibility of monitoring the movement of logging trucks. Following the trial, the department started a project with other states and territories to promote the national use of the Intelligent Access Project. The project aimed to identify the technical and regulatory requirements to make the program to work. It also investigated the privacy and implementation issues and explored the policy and administrative framework necessary for such a project to operate nationally.

From 2001, the project was renamed the ‘Intelligent Access Program’ and transferred to Austroads, a government-owned agency tasked to undertake roads and traffic related research on behalf of state and territory road authorities. Austroads then commenced the IAP Feasibility Project, which included four sub-project components to explore the specific feasibility elements of the program. The sub-projects were:

- Technical Feasibility and Standards.
- Regulatory Feasibility and Implications for Jurisdictions.
- Intended Applications and Business Feasibility.
- Proof of Concept Pilots, Demonstration and Other Learnings.

The project concluded that it was feasible to implement the program. It also recommended that the implementation occur in two stages to ensure it would be manageable for all stakeholders. Stage one was intended to include establishing the functional specifications, legislative changes (including developing the model law) and determining the agency responsible for administering the program. Stage two would include the expansion of the IAP applications and the increase in the complexity and number of compliance-monitoring parameters in parallel to the development of specialist systems within jurisdictions.

In 2003 transport and infrastructure ministers endorsed the program and requested commencement of stage one implementation of the IAP. A number of implementation tasks were required including the development of the model law, which the NTC was tasked to develop. Austroads developed the 2005 Regulatory Impact Statement that accompanied the model law. Transport and infrastructure ministers approved the model law in January 2006. A detailed description of the model law follows:

The model law supports the unique operating model of the IAP by providing a robust and efficient legislative framework. It imposes important legal obligations on the Transport Certification Australia, IAP service providers and IAP auditors for the handling and disclosing of any information received through the operation of the program to ensure the protection of personal information.

The IAP adopts the highest level of privacy protection found in Australian law. The model law provides that the collection, use and disclosure of IAP information must be consistent with privacy principles and laws applying in individual jurisdictions.

Road authorities may only obtain, use and disclose IAP information for the limited purpose of enforcing the IAP and approved road transport compliance schemes and may only disclose that information to other agencies for law enforcement purposes.

Transport operators are required to take reasonable steps to inform their drivers before all journeys in IAP vehicles, that the vehicles are being monitored and that personal information cannot be used without consent for any other reason.

Obligations are also imposed on IAP service providers to report any breaches of IAP conditions or tampering to the appropriate road authorities within the specified times in the specified format.

The model law includes rigorous evidentiary provisions to allow the information that is collected to be used in a court. The IAP is supported by detailed technical and
administrative documents published by Transport Certification Australia, including the functional and technical specifications for IAP service providers and the main Deeds of Agreement by which transport operators and service providers enter the program.

The evidentiary provisions will ensure that these documents can be given legal effect through the use of certificates by Transport Certification Australia and Authorities, and that the information generated, collected and processed through the telematics technology is at evidentiary standard.

(NTC, 2006)

The IAP legislation (based on the model law) was first enacted in New South Wales and Victoria in 2006. This was followed by Queensland in 2008 and South Australia in 2009. The model law including the IAP provisions was consolidated in the Heavy Vehicle National Law as part of the National Heavy Vehicle Reform in 2008.

A key implementation task was establishing Transport Certification Australia to administer the program including certification and audit of the IAP service providers. Transport Certification Australia was officially established as a company limited by guarantee under the Corporations Act 2001 (Cwlth) on 15 August 2005. Transport Certification Australia is governed by a memorandum of understanding (MOU), a constitution and a representative board of directors appointed by the head of each of Transport Certification Australia’s member organisations. The Australian road authorities (including the Commonwealth, and each state and territory) have agreed to jointly fund Transport Certification Australia.

The IAP Feasibility Project initially expected the progression to stage two would be driven by the outcomes of stage one. However, the 2004 Auslink inter-governmental agreements (Commonwealth-New South Wales and Commonwealth-Queensland) and the decisions by Queensland and New South Wales to roll out the requirement of the IAP as a condition of access for higher mass limits vehicles, has necessitated the implementation of the IAP in a stage two setting at the program’s inception (TCA, 2013g).

In 2008, Transport Certification Australia certified the first IAP service provider and monitoring of vehicles commenced in the same year. The initial IAP applications that became operational were the New South Wales Road Train Modernisation Program and the quad axle port access scheme. Heavy mobile cranes and concrete pump trucks were the first IAP applications made available in Victoria in November 2008. The IAP became formally operational in 2009 with further IAP applications being introduced. Over the 2009/10 period, there were around 1000 vehicles enrolled in the IAP. By the end of 2010, there were five IAP service providers.

In 2012, following consultation with industry representation, New South Wales and Transport Certification Australia collaborated to introduce effective ways to increase the use of IAP. The Hon Duncan Gay, Minister of Roads and Ports in New South Wales, launched the ‘entry options’ initiative that provided ways for transport operators to have their existing in-vehicle devices assessed for use in the program. Furthermore, Transport Certification Australia introduced flexible pricing options for transport operators that have an occasional need for higher mass limits access through the IAP in New South Wales and Queensland.

As at July 2013, Transport Certification Australia reported there were 593 transport operators with a total of 2483 unique vehicles enrolled in the IAP.¹

In August 2013 Transport Certification Australia announced that IAP had expanded to incorporate the option to monitor the weight of the load on the vehicle by electronic scales. The additional feature is called IAPm.

A summary of the key milestones for the IAP are shown in Figure 2.

¹Transport Certification Australia has reported that as of April 2014, there are 2,619 vehicles with 659 transport operators participating in the program. This report has applied the vehicle take up data as of July 2013 to be comparable to the state-based data provided by road authorities. In addition, the updated data was not included in the analysis because it was provided after the near completion of this report.
Figure 2. Milestones and events related to the IAP
5. Review of the Intelligent Access Program

This section examines if the IAP has achieved its objectives as set out in the initial proposals for the program. This section has two parts.

Section 5.1 reports on the outcomes of the implementation tasks listed in the 2003 IAP Feasibility Project (referred as the ‘2003 proposal’ in the rest of this report). Over the consultation period, stakeholders have expressed interest in the outcomes of the implementation tasks and therefore the NTC has collated this information.

Section 5.2 examines the progress of the program against the intended outcomes specified in the 2005 Regulatory Impact Statement (referred as the ‘2005 proposal’ in the rest of this report). This section compares the outcomes sought in the 2005 proposal with the actual progress and outcomes of the program.

5.1 Implementation tasks - 2003 proposal

The 2003 proposal listed 10 implementation tasks for establishing the program. These implementation tasks and the status or outcome of the tasks are shown in Table 1. Transport Certification Australia and road authorities provided this information.

A key implementation task was to establish a body to administer the program. In August 2005, state and territory road authorities and the Commonwealth Department of Transport agreed to establish Transport Certification Australia to administer the program.

Transport Certification Australia was primarily responsible for four of the implementation tasks. In 2006, Transport Certification Australia developed a communication strategy (task G) and commenced training of staff from road authorities (task I). Transport Certification Australia finalised the IAP standard (task B) and certification and auditing regime in 2007 (task C). With the agreed standard and auditing regime, Transport Certification Australia could begin certifying service providers.

In January 2006, the Ministerial Council approved the model law (task E).

In 2007, Transport Certification Australia and road authorities agreed on the common formats for the intelligent access conditions and non-compliance report (task D).

The remaining three implementation tasks were the responsibility of road authorities. In 2006 the IAP applications began to be made available and road authorities began processing permits for those applications; this is an ongoing task (task F). More details of the task F are provided in section 5.2. Task J has had four of the six subordinate legislation and IAP operational guidelines developed by road authorities.
### Table 1. Progress report - 2003 proposal

<table>
<thead>
<tr>
<th>Implementation tasks</th>
<th>Completion date</th>
<th>Responsible body for implementation</th>
<th>Additional comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task A. Establish a body to administer the IAP</td>
<td>August 2005</td>
<td>State and territory road authorities and the Commonwealth Department of Transport</td>
<td>This followed a decision by the Ministerial Council in 2005 to endorse Austroads Council decision to implement the IAP, and the subsequent formation of a Committee of Members to oversee establishment of Transport Certification Australia.</td>
</tr>
<tr>
<td>Task B. Finalise the IAP standard (Transport Certification Australia calls these the IAP functional and technical specifications)</td>
<td>2007</td>
<td>Transport Certification Australia Board</td>
<td>2007 – Applications for certification as IAP Service Providers received 2008 – First IAP Service Provider announced</td>
</tr>
<tr>
<td>Task C. Finalise the certification and auditing regime (technical)</td>
<td>2007</td>
<td>Transport Certification Australia Board</td>
<td></td>
</tr>
<tr>
<td>Task D. Develop and test of the IAP common format reports: Intelligent access conditions and non-compliance reports</td>
<td>2007</td>
<td>Transport Certification Australia Board and road authorities</td>
<td></td>
</tr>
<tr>
<td>Task E. Finalise the national compliance and enforcement model law from an IAP perspective</td>
<td>January 2006</td>
<td>Ministerial Council</td>
<td></td>
</tr>
<tr>
<td>Task F. Enable applications</td>
<td>Started in 2006: an on-going task</td>
<td>Road authorities (NSW commenced pre-enrolment for HML under the IAP on 1 July 2006)</td>
<td>Completed in New South Wales. In 2008, applications using the IAP were started (to coincide with the first IAP service providers being certified by Transport Certification Australia).</td>
</tr>
<tr>
<td>Task G. Develop communication (risk management) strategy to manage stakeholder issues</td>
<td>2006</td>
<td>Transport Certification Australia Board and road authorities</td>
<td>Transport Certification Australia has managed an ongoing communications strategy for stakeholders with road authorities.</td>
</tr>
<tr>
<td>Task H. Finalise sanctions regime for the IAP (route compliance, mass management and accreditation and freight consignment identification)</td>
<td>Ongoing</td>
<td>Road authorities</td>
<td></td>
</tr>
<tr>
<td>Task I. Train jurisdictional staff</td>
<td>Started in 2006: an on-going task</td>
<td>Transport Certification Australia</td>
<td></td>
</tr>
<tr>
<td>Task J. Develop/modify subordinate legislation and development of IAP operational guidelines for:</td>
<td></td>
<td>Road authorities</td>
<td></td>
</tr>
<tr>
<td>1) Dangerous goods (route compliance, gross speed violation and freight consignment identification)</td>
<td>Not commenced</td>
<td>Road authorities</td>
<td></td>
</tr>
<tr>
<td>2) Specialised rigid vehicles (route compliance)</td>
<td>As required</td>
<td>Road authorities</td>
<td>Implemented as required by road authorities</td>
</tr>
<tr>
<td>3) Low loader (route compliance and gross speed violation)</td>
<td>Not commenced</td>
<td>Road authorities</td>
<td></td>
</tr>
<tr>
<td>4) Mass concession schemes (route compliance, gross speed violation and mass management accreditation - niche)</td>
<td>As required</td>
<td>Road authorities</td>
<td>Implemented as required by road authorities</td>
</tr>
<tr>
<td>5) Performance-based standard/innovative vehicles (route compliance, gross speed violation and mass management accreditation - niche)</td>
<td>As required</td>
<td>Road authorities</td>
<td>Implemented as required by road authorities</td>
</tr>
<tr>
<td>6) Higher mass limits (route compliance, gross speed violation and mass management accreditation - niche)</td>
<td>As required</td>
<td>Road authorities</td>
<td>Implemented as required by road authorities</td>
</tr>
</tbody>
</table>
5.2 Assessment of Intelligent Access Program – 2005 proposal

This section examines the progress of the IAP against the objectives and the identified outcomes as specified in the 2005 proposal. The assessment also makes reference to the 2003 proposal as this report provides more detailed descriptions of the initial proposal for the program compared with the 2005 proposal.

5.2.1 Implementation approach

Proposal

The 2003 and 2005 proposals outlined a two-stage approach to implementing the IAP.

Stage one established an effective framework to govern the certification and auditing of IAP service providers. The IAP applications made available at stage one were assumed to be the applications that could be easily developed, administered and enforced. The 2005 proposal assumed the analysis period of stage one was seven years. It was assumed that the full implementation period of stage one would involve two ‘implementation’ or set-up years and five ‘operational’ years. In the ‘operational’ phase, service providers would be certified and these IAP service providers would be able to offer the IAP and their services to transport operators.

The on-going implementation of IAP applications over time would continue under stage two. The 2003 proposal indicated that the progression to stage two would be considered after stage one had been successfully implemented and assessed as operationally sound. The 2003 proposal indicated that the stage two implementation and operational activities assumed a scenario in which all heavy vehicles were to be monitored for at least one IAP application and would be implemented in sub-stages over time (Austroads, 2003, p. 76).

The 2005 proposal estimated that the program needed to have a minimum of 2500 vehicles over a three-year period to be viable for at least three service providers to operate in the market.

Status of implementation

The implementation of the program progressed through stage one and two during the program’s inception in 2006. The decisions by New South Wales and Queensland governments to include the program as a requirement for higher mass limits, which was a common element of both state’s AusLink Bi-Lateral Funding Agreements reached with the Commonwealth Government, required the program to be rolled out in a stage two environment at the program’s inception.

The IAP first became available to transport operators in 2008 but was formally and fully operational in July 2009. As such, this report has assumed that the ‘implementation’ or set-up years took four years (2005 to July 2009) rather than the proposed two years for the purpose of the review. The five year ‘operational’ phase ends in July 2014.

There are currently five certified service providers for the 2483 vehicles enrolled in the program.

Key Findings

Stage two rollout of the IAP was needed at the program’s inception due to access policy decisions taken by New South Wales and Queensland.

The IAP became fully operational and available for industry in July 2009.

5.2.2 Applications of the Intelligent Access Program

Proposed

The 2003 proposal initially recommended six generic IAP applications: dangerous goods, specialised rigid vehicle, low loaders, mass concession schemes, performance-based standards and higher mass limits. Austroads developed these six applications from discussions with road authorities, peak transport bodies and trucking companies. The details on the recommended parameters to be monitored under the IAP in the 2003 proposal are detailed in Appendix B.

The 2005 proposal expanded the six generic applications to 20 specific applications.
Status of implementation

Table 2 shows the IAP applications that have been made available by the states and territories road authorities. The IAP is currently operational and available in six states: New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia.

New South Wales, Victoria, South Australia and Queensland have implemented the program for heavy vehicles access. Tasmania began using the IAP for monitoring bus movements for contract performance measurement purposes in 2014. Western Australia is in the very early stages of introducing the program and is currently operating an IAP trial for carting oversize huts from Perth to Onslow.

Of the 20 specific applications that were identified in the 2005 proposal, eight IAP applications have been made available by road authorities. Transport Certification Australia indicated that a further two applications have been indirectly made available through the introduction of the eight IAP applications. This includes the National Heavy Vehicle Accreditation Scheme mass management, and road train operation (via higher mass limits). Overall, 10 IAP applications have been implemented by state road authorities.

It is important to note that the states and territories have different uses for the IAP. In New South Wales and Queensland it has been used to allow access for higher mass and productivity heavy vehicles while managing asset sustainability and safety. Victoria has applied IAP to manage access for non-standard vehicles. It is emphasised that IAP is used only for small and niche applications in Victoria. South Australia has used the IAP for managing route access as a voluntary program. Tasmania has used IAP to monitor bus movements for contract performance purposes.

Key Findings

Ten out of the 20 specific IAP applications identified in the 2005 proposal are currently offered by state road authorities.

The IAP is currently operational and available in six states: New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia.
Table 2. Implementation status by state and territory by application type

<table>
<thead>
<tr>
<th>Generic IAP application</th>
<th>Specific IAP application</th>
<th>New South Wales</th>
<th>Victoria</th>
<th>Queensland</th>
<th>South Australia</th>
<th>Tasmania*</th>
<th>Western Australia</th>
<th>ACT</th>
<th>Northern Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous goods</td>
<td>Dangerous goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialised rigid vehicles</td>
<td>Over-dimensional and over-mass cranes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heavy tow trucks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pick and carry cranes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concrete pump trucks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rubber tracked agricultural equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low loader</td>
<td>Over-dimensional loads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low loaders</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gazetted access for low loaders &lt; 55t</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass concession schemes</td>
<td>NHVAS mass management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grain harvest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B-double operation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B-triple operation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A-B triple operation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium articulated vehicles with dog</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-based standards</td>
<td>Performance-based standards related vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher mass limits</td>
<td>Additional mass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Truck trailer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased HML network</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Road train operation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Tasmania uses the IAP for monitoring bus movements for contract performance. *Source: Transport Certification Australia, 2013"
5.2.3 Intelligent Access Program vehicle take-up

Proposed

The 2003 proposal reported that the number of vehicles in the program depended on the number of IAP applications made available by road authorities. Austroads developed scenarios to estimate the likely vehicle take-up. It was estimated that stage one would attract 4613 vehicles.

The 2005 proposal revised and estimated that the program would have attracted 8383 vehicles by the end of the operational period of stage one. The estimated take-up of the program by application types is shown in Table 3.

The NTC notes that the estimated take-up number of 8383 was for the stage one and implementation of the IAP has progressed to stage two, where it was assumed that all heavy vehicles were to be monitored for at least one IAP application time (Austroads, 2003, p. 76). The NTC has used 8383 vehicles as the estimated take-up number for the end of the operational period for the analysis below as not all IAP applications have been progressed.

Table 3. Proposed application types and estimated vehicle take-up

<table>
<thead>
<tr>
<th>Generic application type</th>
<th>Specific application</th>
<th>Take-up (vehicles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous goods</td>
<td>Dangerous goods</td>
<td>1200</td>
</tr>
<tr>
<td>Specialised rigid vehicles</td>
<td>Over-dimensional and over-mass cranes</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Heavy tow trucks</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Pick and carry cranes</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Concrete pump trucks</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Rubber tracked agricultural equipment</td>
<td>150</td>
</tr>
<tr>
<td>Low loader</td>
<td>Over-dimensional loads</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>Low loaders</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>Gazetted access for low loaders &lt; 55t South Australia</td>
<td>100</td>
</tr>
<tr>
<td>Mass concession schemes</td>
<td>National Heavy Vehicle Accreditation Scheme mass</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grain harvest</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>B-double operation</td>
<td>940</td>
</tr>
<tr>
<td></td>
<td>B-triple operation</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>A-B triple operation</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Medium articulated vehicles with dog</td>
<td>16</td>
</tr>
<tr>
<td>Performance-based standards</td>
<td>Performance-based standards related vehicles</td>
<td>917</td>
</tr>
<tr>
<td>Higher mass limits</td>
<td>Additional mass</td>
<td>1330</td>
</tr>
<tr>
<td></td>
<td>Truck trailer</td>
<td>870</td>
</tr>
<tr>
<td></td>
<td>Increased higher mass limits network</td>
<td>372</td>
</tr>
<tr>
<td></td>
<td>Road train operation</td>
<td>900</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8383</td>
</tr>
</tbody>
</table>

Source: Austroads, 2005
**Status of implementation**

In July 2013, Transport Certification Australia reported there were 593 transport operators with a total of 2483 unique vehicles in the program (TCA, 2013g). Further, Transport Certification Australia indicated that of the vehicles enrolled in the program, approximately 62 per cent have been continually enrolled for more than one year while 22 per cent of IAP vehicles have enrolled in the IAP for more than two years (TCA, 2013g). Figure 3 shows the total number of vehicles in the program over time.

The updated information provided by Transport Certification Australia indicates that as of April 2014, there are 2619 vehicles with 659 transport operators participating in the program. The updated data is not included in the analysis in this report because it was provided after the completion of the analysis. Further, this report has applied the vehicle take up data as of July 2013 to be comparable to the state-based data provided by road authorities.

**Figure 3. Actual IAP vehicle take-up, 2009 – 2013**

![Graph showing vehicle take-up from 2009 to 2013](image)

*Source: Transport Certification Australia, 2013g*

Table 4 shows the actual vehicle take-up by the states that have implemented the program and by application type. Road authorities have provided this information. The number of IAP vehicles in Tasmania has been derived from Transport Certification Australia’s submission.

The total number of vehicles from the state-based data is 2904 vehicles. There is a difference between the Transport Certification Australia (2483 vehicles) data and the state-based data in the reported vehicle take-up. The reason for the difference is the state-based data is from different time periods compared with the Transport Certification Australia data. Further, the state-based data is likely to include vehicles that have been enrolled in multiple states. This is further discussed in section 6.6.

Table 4 shows that New South Wales and Queensland have the largest number of IAP vehicles with 50 per cent and 33 per cent of the total vehicles fitted with the IAP respectively. It also shows that the application types of higher mass limits and over-dimensional and over-mass cranes have the largest number of IAP vehicles with 51 per cent and 33 per cent respectively. It should be noted that Victoria applies IAP to a small proportion (around five per cent) of performance-based standard vehicles. This includes high productivity vehicles (>26 metre and 68.5 tonnes) and vehicles that comply with the quad axle trailer policy.
Table 4. Actual vehicle take-up by specific application type, July 2013

<table>
<thead>
<tr>
<th>Specific application type</th>
<th>New South Wales (1)</th>
<th>Victoria (2)</th>
<th>Queensland (3)</th>
<th>South Australia (4)</th>
<th>Tasmania (5)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-dimensional and over-mass cranes</td>
<td>483</td>
<td>227</td>
<td>247</td>
<td></td>
<td></td>
<td>957</td>
</tr>
<tr>
<td>Concrete pump trucks</td>
<td>Included in others</td>
<td>Included in over-dimensional and over-mass cranes</td>
<td>Included in over-dimensional and over-mass cranes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-double operation</td>
<td>Included in higher mass limits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-triple operation</td>
<td>Included in higher mass limits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-B Triple operation</td>
<td>Included in higher mass limits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium articulation vehicles with dog</td>
<td>Included in performance-based standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-based standards</td>
<td>108</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>123</td>
</tr>
<tr>
<td>Higher mass limits</td>
<td>823</td>
<td>609</td>
<td>49</td>
<td></td>
<td></td>
<td>1481</td>
</tr>
<tr>
<td>Others</td>
<td>39</td>
<td>106</td>
<td>198</td>
<td>49</td>
<td></td>
<td>343</td>
</tr>
<tr>
<td>Total</td>
<td>1453</td>
<td>242</td>
<td>962</td>
<td>49</td>
<td>198</td>
<td>2904</td>
</tr>
</tbody>
</table>

Source:
(1) Transport for New South Wales, 2013 – as at 30 June 2013
(2) VicRoads, 2013 – as at 1 August 2013
(3) Queensland Department of Transport and Main Roads, 2013 – as at 31 July 2013
(4) Department of Planning Transport and Infrastructure SA, 2013, – as at December 2012
(5) Transport Certification Australia, 2013g – as at July 2013

Table 5 compares the actual numbers of vehicles enrolled in the program in July 2013 with the estimated take-up numbers in the 2005 proposal. Note that July 2013 represents the fourth operational year of the IAP while the estimated take-up number of 8383 was for the fifth operational year. Assuming that the estimated take-up number should be adjusted to take into consideration July 2013 being the four-fifths of the five year operational period, the adjusted estimated take-up number for July 2013 is 6706 (4/5 x 8383). Table 5 shows that the program has achieved around 40 per cent of the estimated take-up number.

Table 5. Actual vehicle take-up vs projected vehicle take-up (%)

<table>
<thead>
<tr>
<th>2013 vehicle take-up</th>
<th>After 5 operational years (8383 vehicles)</th>
<th>After 4 operational years (6706 vehicles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2483 (1)</td>
<td>30%</td>
<td>37%</td>
</tr>
<tr>
<td>2904 (2)</td>
<td>35%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Notes:
(1) Transport Certification Australia submission
(2) Collated from submissions from New South Wales, Queensland, Victoria and South Australia

The program uses intelligent access conditions. These are permits granted by road authorities that contain the access conditions and parameters to be monitored. Transport Certification Australia has indicated that a single vehicle may operate under one or more intelligent access condition(s) as the IAP allows operators to enrol or de-enrol the permits. For instance, a vehicle may have separate intelligent access conditions for higher mass limits or performance-based standard scheme access entitlements. As of July 2013, there were 3319 intelligent access conditions that
have been issued for the 2483 unique vehicles enrolled in the program. The breakdown of the intelligent access conditions by application types is provided in Appendix C.

Discussion

The estimated vehicle take-up in the 2005 proposal was based on predictions at the time. Transport Certification Australia’s submission said [road authorities] have driven demand for the IAP – albeit at a significantly slower pace than anticipated in the 2005’ (TCA, 2013g). Road authorities often have many policy reforms and operational programs they would like to introduce and limited resources to do so. These factors may have contributed to the lower than anticipated vehicle take-up.

Feedback from stakeholders indicated that other policy decisions may also have affected the lower vehicle numbers in the IAP. Transport Certification Australia argued that the introduction of concessional mass limits in 2006 has resulted in the lower demand for higher mass limits in New South Wales and Queensland. The introduction of the concessional mass limits was not initially anticipated in the 2005 proposal. The projections would have been lower if concessional mass limits was considered in the initial proposals.

Transport operators may find that concessional mass limits provides them with the extra mass above general mass limits that accommodates their needs. In addition, New South Wales consulted with transport operators and reported that about 20 per cent of the state’s freight task is mass-constrained (Transport Roads & Maritime Services, 2012). Therefore the demand for extra mass by industry may have been over-estimated in the 2005 proposal.

Industry stakeholders argued that the costs associated with the set up and operation of the IAP are considered a cost burden for transport operators. The Crane Industry Council of Australia (2013) indicated that ‘the cost of setting up and the ongoing running cost of the IAP appear to many members as a cost burden, not offset by the promised benefits’. Similarly, the Australian Trucking Association (2013) argues ‘the administrative burden is too high for much of the industry’. The Australian Trucking Association conducted a survey with 60 industry members, with costs associated to the capital and administration of the IAP being cited as a key factor for the respondents who have not participated in the program.

In addition, some industry stakeholders stated that participation in the IAP does not resolve the issue of first and last mile access because operators are often unable to gain access via local roads into sites. For instance, an Australian Trucking Association member operator has indicated that ‘[f]ar too many places won’t give access to higher mass limits loads that are within 200 metres of a higher mass limits approved road … to enter silo sites’ (Australian Trucking Association, 2013). A submission from the Australian Livestock and Rural Transporter Association and the Livestock and Bulk Carriers Association of New South Wales have also reported that ‘while state roads in New South Wales have seen a significant increase for higher mass limits access, the local first and last mile supply chain links are still a key stumbling block to achieving optimal efficiency’ (ALTRA & LBCA 2013).

In the joint submission by the Australian Livestock and Rural Transporter Association and the Livestock and Bulk Carriers Association indicated there is the perception that the IAP has been marketed to transport operators with the incentive to gain first and last mile access; however, there is a perception that local governments do not seem to support the program and it has not delivered improved higher mass limits access on local roads. Consultation with local governments has indicated that councils are generally supportive of greater access for restricted heavy vehicles; however, there is often infrastructure constraints (due to vulnerable roads and bridges) and the lack of funding to maintain the local road networks. This is further discussed in section 6.3.
5.2.4 Growth rates of vehicle uptake

This section examines the growth rates of vehicles in the IAP that may inform the likely number of IAP vehicles at the end of the program’s fifth operational year (July 2014) and over the longer term.

Monthly take-up growth rates

Transport Certification Australia provided the average vehicle take-up trends over a 12-month period from July 2012 to July 2013. The data indicates the following:

- Between July 2012 and March 2013, there was an average of 20 vehicles per month enrolled in the IAP
- Between April 2013 and June 2013, there was an average of 45 vehicles per month enrolled in the IAP
- Over the month of July 2013, there were 64 vehicles that enrolled in the program.

A summary of the average growth rates is shown in Figure 4.

Figure 4. Average monthly IAP vehicle take-up growth rates, July 2012 to July 2013*

*The graph depict average vehicle take-up rates over specific period and not monthly take-up rates

*Source: Transport Certification Australia, 2013g

The NTC has applied the average growth rates to estimate the likely IAP vehicle numbers by July 2014. Three scenarios are considered in the analysis based on the average growth rates as shown in Table 6. It is estimated that by July 2014, the number of vehicles enrolled in the IAP will be in the
range of 2723 to 3251 - that is between 32 and 39 per cent of the estimated IAP numbers from the 2005 proposal.

Queensland has also provided state-based data showing the growth rates of IAP vehicles over a 10-month period between January and October 2013. This data is presented in Appendix D.

### Table 6. Projected IAP vehicle numbers, July 2014

<table>
<thead>
<tr>
<th>Scenario</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average monthly vehicle take-up</td>
<td>20</td>
<td>45</td>
<td>64</td>
</tr>
<tr>
<td>Total new take-up after 12 months</td>
<td>240</td>
<td>540</td>
<td>788</td>
</tr>
<tr>
<td>Forecast of total IAP vehicles at July 2014</td>
<td>2723</td>
<td>3023</td>
<td>3251</td>
</tr>
<tr>
<td>Percentage of total estimated vehicles (8383 vehicles)</td>
<td>32%</td>
<td>38%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Source: Transport Certification Australia, 2013g

An approach to estimate the level of future demand for the IAP beyond 2014 is to apply the S-curve approach. The S-curve, as shown in Figure 5, represents the rates at which new ideas, technology and other innovations are adopted.\(^2\) In the S-curve, the initial stage of adoption is typically slow. This is followed by a rapid growth period (also known as exponential growth) as awareness of the innovation increases and creates more demand. As the market becomes saturated or the demand for the product becomes stagnant, the growth slows and levels out at maximum penetration. The introduction of technology or innovations such as mobile phones and seat-belts are known to follow such a trend over time. If it is assumed that the adoption of the IAP is to follow the S-curve, it might be possible to estimate the level of future demand for the IAP beyond 2014.

The first question is to determine the position of the IAP along the S-curve as the program currently stands. When comparing Figure 3 showing the IAP vehicle uptake with the S-curve in Figure 5, it could be inferred that the IAP numbers might be around the initial stage of growth. The average monthly take-up as shown in Figure 4 illustrates that the IAP vehicle numbers are beginning to progress into the rapid growth period. Therefore the IAP appears to still be in the growth phase.

### Figure 5. S-curve for innovations

The second question is to determine the point of maximum penetration that represents the potential level of vehicle take-up over the longer term. If it is possible to address this question, then it might be possible to determine how far along the S-curve that the IAP has progressed.

\(^2\) The S-curve is also called the logistics function in mathematics.
A method to estimate the level of vehicle take-up over the long term is to apply the New South Wales assessment that 20 per cent of the freight task is mass constrained in the state. If this assessment is to apply to the articulated fleet nationally and assuming the operators of these vehicles wishes to use the IAP for accessing additional mass, then the long term vehicle number is 12,794.\(^3\)

However, the NTC does not have any estimates of vehicles (by type) that may enrol in the IAP over the long term. While the NTC has an estimate of up to around 12,800 vehicles that are mass constrained, but the number of volumetric-constrained and performance-based standard vehicles that are likely to participate in the IAP in the long term is unknown.

Ultimately, the longer term numbers depend on a range of factors such as access arrangements and policies set by road authorities, and the costs and benefits for industry participating in the program.

5.2.5 Compliance and enforcement approach

Proposed

The proposed sanction model for the IAP follows the approach of the Road Transport Reform (Compliance and Enforcement) Bill (2003). The proposed sanction model for the IAP included a pyramid of actions that ranged from warning letters for minor breaches, escalating to suspension and ultimately cancellation of operators’ participation in the IAP. This approach is similar to the compliance management pyramid that is shown in Figure 6. Appendix E provides a more detailed description of each sanction in the pyramid.

Status of implementation

Queensland, Victoria and New South Wales have employed similar models to the pyramid outlined above where the focus is on education and assisting operators to be informed and to comply with the requirements of the program. Road authorities have indicated they take a risk-based approach with all non-compliance reports filtered and analysed and further action is only taken when multiple breaches have occurred (and are proven to be valid) by the same vehicles.

It should be noted that actions that have triggered the non-compliance reports do not necessarily mean that the vehicle has breached the access conditions. For instance, an IAP-approved vehicle travelling in close proximity to, but not crossing, a restricted bridge may trigger a non-compliance report.

---

\(^3\) Twenty per cent of 63,971 (40,342 of single trailer 6 axle rig + 3209 of B-double < 9 axle rig + 20,420 of B-double/triple 9 axle rig and above) Note that the 2003 proposal used the potential fleet size for articulated vehicles as 62,500.
New South Wales cited the compliance management pyramid as the preferred approach to manage non-compliance reports where the intention is ‘to use the information to assist operators to comply with the requirements of the IAP and reduce the number of non-compliance reports triggered by operators and their drivers’ (ALRTA & LBCA, 2013). This approach drives greater compliance to access conditions and therefore improved safety outcomes. It is reported that recidivist behaviour results in visits by authorised officers to inform and educate the operators. If improvements are not observed an improvement notice may be issued. New South Wales indicated that operators who are willing to enrol in the program are assumed to be more compliant and non-compliance reports can be appropriately treated by providing information and feedback.

Victoria has reported that actions such as warnings and providing information to operators have reduced the number of non-compliance reports across the IAP vehicles and improved compliance with permits.

The Department of Transport and Main Roads Queensland also follows the compliance management pyramid, ‘with information as a first step, followed by assisting operators and drivers to comply. If the driver or operator does not show a commitment to improvement in compliance then enforcement is undertaken’ (Queensland Department of Transport and Main Roads, 2013). In Queensland, the program has been used to improve speed compliance in monitored vehicles. When speeding breaches are recorded, operators are initially issued with educational letters and are reminded of their obligations under the agreed intelligent access conditions. The operators with higher risk profiles receive follow-up visits or meetings with compliance officers. This approach has contributed to a substantial reduction in recorded speeding breaches by the IAP vehicles. Queensland reported that the number of severe speeding events for IAP vehicles has decreased by 94 per cent over the period from July 2011 to March 2013 (Queensland Department of Transport and Main Roads, 2013).

It should be noted that road authorities have not used the IAP to target high-risk operators or used as an additional enforcement tool to identify breaches unrelated to the access conditions.

**Key Findings**

Road authorities using the IAP have consistently applied the sanction model proposed in the 2005 proposal.

Road authorities are focused on education and on assisting operators to become fully compliant with the intelligent access conditions. There is no evidence that the IAP has been used as an additional enforcement tool (for example to issue infringements).
5.3 Assessment of the costs and benefits of the Intelligent Access Program

This section sets out the assessment of the costs and benefits analysis based on assumptions from the 2003 and 2005 proposals.

In summary, the methodology for assessing the costs and benefits involved:

- comparing, from stakeholder consultation and research, the actual costs and benefits of the IAP with the estimates in the 2003 and 2005 proposals
- identifying, where possible, the impacts from the productivity, safety, environmental and regulatory efficiency perspectives that the program has achieved over the evaluation period
- supplementing the analysis with qualitative discussion of actual experiences both from the operators’ and road authorities’ perspectives.

The NTC has used quantitative and qualitative information provided by the stakeholders over the consultation period in this assessment.

5.3.1 Qualification of method

The assessment compares the estimated cost and benefits of the IAP to the actual costs and benefits of the program where data is available. There is a lack of data in many cases. For example, the 2005 proposal assumed that with increased mass and a greater network available for IAP vehicles, operators would benefit from significant productivity gains (for example, greater mass carried and fewer vehicle kilometres travelled) resulting in operational savings. However, the NTC was not able to obtain the kilometres travelled by vehicles using different IAP applications and non-IAP vehicles. In addition, the 2005 proposal assumed that IAP vehicles were expected to operate more safely therefore reducing the crash costs of participating vehicles. This requires comparisons of actual crash rates of IAP and non-IAP vehicles, which is not readily available. Where the overall benefits cannot be calculated, the NTC has used available information that describes or quantifies the benefits at a company or vehicle level.

An overview of the assumptions and the data required to undertake the cost and benefit assessment is provided in Table 7.

For the benefits to governments (section 5.3.3) and industry (section 5.3.5), benefits calculations are based on the projected number of vehicles in stage one.

Note that all dollar figures used in this section have been adjusted to 2013 dollars for consistency. The NTC used the Australian Bureau of Statistics consumer price index to adjust the dollar figures in the 2003 and 2005 proposals to 2013 dollars.
Table 7. Assumptions and data required for cost and benefit assessment

<table>
<thead>
<tr>
<th>Description of benefits</th>
<th>Required data</th>
<th>Data availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road authorities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall infrastructure</td>
<td>Reduction in</td>
<td>Not available</td>
</tr>
<tr>
<td>savings</td>
<td>kilometres</td>
<td></td>
</tr>
<tr>
<td></td>
<td>from the use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of IAP vehicles</td>
<td></td>
</tr>
<tr>
<td>Overall emissions</td>
<td>Reduction in</td>
<td>Not available</td>
</tr>
<tr>
<td>reductions</td>
<td>kilometres</td>
<td></td>
</tr>
<tr>
<td></td>
<td>from the use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of IAP vehicles</td>
<td></td>
</tr>
<tr>
<td>Overall crash cost</td>
<td>Crash rates of</td>
<td>Not available</td>
</tr>
<tr>
<td>savings</td>
<td>IAP vehicles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>compared with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>non-IAP vehicles</td>
<td></td>
</tr>
<tr>
<td>Transport operators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall productivity</td>
<td>Reduction in</td>
<td>Not available</td>
</tr>
<tr>
<td>gains</td>
<td>kilometres</td>
<td></td>
</tr>
<tr>
<td></td>
<td>from the use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of IAP vehicles</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of costs</th>
<th>Required data</th>
<th>Data availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road authorities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport Certification Australia implementation cost</td>
<td>Contributions by road authorities to Transport Certification Australia</td>
<td>Available from Transport Certification Australia’s annual reports</td>
</tr>
<tr>
<td>Internal operational costs including</td>
<td>Number of staff employed</td>
<td>Available from road authorities</td>
</tr>
<tr>
<td>issuing intelligent access conditions, non-compliance reports and route assessments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport operators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment procurement</td>
<td>Cost of in-vehicle unit plus installation</td>
<td>Available from Transport Certification Australia and the Australian Trucking Association survey</td>
</tr>
<tr>
<td>Service provider and monitoring fees</td>
<td>Monthly service provider fees</td>
<td>Derived from Transport Certification Australia and the Australian Trucking Association survey</td>
</tr>
</tbody>
</table>

5.3.2 Costs to governments

Proposed

The estimated costs for stages one and two are based on cost assumptions in the 2003 and 2005 proposals. Austroads assumed that all eight states and territories would introduce the program and all identified applications would be made available by the end of the operational period. The estimated costs are provided in Table 8.

Transport Certification Australia costs for stage one included the costs to establish the functional specifications, develop the certification and auditing rules for IAP service providers and establish the organisation. The road authorities’ cost associated with stage one included finalising the sanction regime, developing the legislation and training staff.

Stage two was assumed to include an expansion of IAP applications and an increased number of parameters to be monitored under the program. This resulted in increased administrative effort to maintain and update IAP information due to the assumption that the IAP networks would be expanded with more complex operating conditions being implemented. Road authorities were also likely to require specialist systems to assist and automate a number of tasks that were associated with managing IAP applications and non-compliance reports, which would result in increased costs for road authorities’ IAP operations.

Overall, estimated government costs totalled to $203 million over a seven-year period (see Table 8).
Table 8. Proposed stages 1 and 2 implementation and operational cost estimates (2013 dollars)

<table>
<thead>
<tr>
<th>Description</th>
<th>Stage 1 ($m)</th>
<th>Stage 2 ($m)</th>
<th>Total ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TCA</td>
<td>Road authorities</td>
<td>TCA</td>
</tr>
<tr>
<td>Implementation cost</td>
<td>2.0</td>
<td>1.4</td>
<td>10.5</td>
</tr>
<tr>
<td>Operational cost</td>
<td>3.9</td>
<td>6.2</td>
<td>67.9</td>
</tr>
<tr>
<td>Total</td>
<td>5.9</td>
<td>7.6</td>
<td>78.4</td>
</tr>
</tbody>
</table>

Sources: Austroads, 2003; 2005

Status of implementation

Table 9 shows the actual costs that road authorities have contributed to the program. This is based on information from Transport Certification Australia’s annual reports.

The actual costs also included road authorities’ implementation costs and staff training. The road authorities’ cost estimates were derived from the road authorities’ feedback on the number of full-time equivalent staff who were involved in managing the program. It does include any costs associated with developing or acquiring specialist systems to manage the IAP processes as the data was not provided to the NTC.

The government costs over the last eight years are well below the initial projected costs as not all states and territories have implemented the program and not all identified applications have been used.

Transport Certification Australia (2014) has indicated that its scope of activities for the IAP have expanded during the set-up, certification and operational phases.

In summary, the estimated cost to government to implement the IAP was $203 million, compared with the actual cost of $68.4 million over two implementation years and four operational years.

Table 9. Costs to government – actual (2013 dollars)

<table>
<thead>
<tr>
<th>Description</th>
<th>TCA ($m)</th>
<th>Road authorities ($m)</th>
<th>Total ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation cost</td>
<td>21.4</td>
<td>14.4</td>
<td>35.8</td>
</tr>
<tr>
<td>Operational cost</td>
<td>18.2</td>
<td>14.4</td>
<td>32.6</td>
</tr>
<tr>
<td>Total</td>
<td>39.6</td>
<td>28.8</td>
<td>68.4</td>
</tr>
</tbody>
</table>

Sources: Transport Certification Australia annual reports 2005-2013; NTC estimates

5.3.3 Benefits to governments

 Proposed

The 2003 proposal assumed that the IAP would result in higher level of compliance from participating vehicles. Road authorities’ compliance and enforcement systems and initiatives would become more effective therefore road authorities would gain directly from reduced compliance costs. The 2005 proposal further noted that participating vehicles were expected to be operating more safely, thereby reducing crash costs. More efficient vehicles were also expected to generate fewer kilometres leading to a reduction in emission costs.

The benefits to government were estimated to total $106.9 million based on the 8383 projected IAP vehicles, which is equivalent to approximately $12,750 per vehicle (2013 dollars) for the implementation of stage one. The 2005 proposal also noted that a considerable proportion of the estimated benefits were attributed to crash cost savings. Infrastructure savings accounted for a small proportion of the benefits to governments because heavier vehicles operating with increased network access would impose additional wear to infrastructure.
Status of implementation

In assessing the benefit for IAP vehicles, the NTC was unable to obtain any data related to compliance, emissions and fuel consumption of vehicles using the IAP. Therefore, the NTC was unable to calculate the overall safety and other benefits for IAP vehicles using a similar methodology to the 2003 and 2005 proposals.

Road authorities have reported that the IAP has been an effective compliance tool. The program has effectively reduced reported non-compliance among participating vehicles through education and communication rather than a traditional enforcement approach. Furthermore, the IAP has provided road authorities with the assurance that the right vehicle is operating on the approved network.

Queensland reported that ‘assets owners have been influenced to grant access by the application of the IAP as a condition, for e.g. the Brisbane City Council (quad axle semi-trailers) and the Port of Brisbane (PBS2B)’ (Queensland Department of Transport and Main Roads, 2013).

Road authorities have indicated that the IAP has enabled controlled access for higher productivity vehicles on the road network. Channelling high risk and heavy vehicles to appropriate routes has reduced the impact of heavy vehicles on the local community, other road users and the environment.

### Key Findings

The actual costs for governments were $68.4 million compared with the estimated cost of $203 million. The key factor driving these lower costs is that not all states and territories have implemented the program and not all IAP applications have been activated.

Transport Certification Australia has indicated that its scope of activities for the IAP have expanded during the set-up, certification and operational phases. The costs of these activities have not been passed on to the member’s organisations.

The benefits estimated in the 2005 proposal were $106.9 million. The NTC was unable to estimate the overall benefits realised from the IAP due to lack of data.

Road authorities have reported that the IAP is an effective compliance tool that provides assurance that the vehicle is travelling on permitted routes and is compliant with other agreed conditions.

#### 5.3.4 Costs to industry

**Proposed**

The cost assumptions in the 2005 proposal were derived from the 2003 proposal where a number of options were considered for operators to acquire the hardware and data services under IAP. The 2005 proposal assumed that operators’ costs were estimated to be $1600 per vehicle per year, with $900 representing service provider charges and $708 included for monitoring drivers, trailers and loads based on 2003 dollars. Transport Certification Australia has indicated that the 2005 proposal assumed that the capital costs for telematics hardware and installation were included within the monthly cost estimates. This cost estimate translates to $1900 per vehicle per year in 2013 dollars.

The total industry costs were estimated to be $61.7 million (2013 dollars).

**Status of implementation**

Table 10 compares the projected and actual costs to participate in the program for transport operators. It includes a one-off capital expenses plus set costs to acquire and install the in-vehicle units and the fees for the IAP service provider monitoring services per vehicle per year.

Two scenarios summarising actual costs to transport operators are provided in the analysis. The costs are derived based on feedback from Transport Certification Australia and an Australian Trucking Association survey of its members on the estimated costs of the program.
Transport Certification Australia has provided estimates of the retail price of telematics monitoring and IAP services. The estimates included the one-off cost of purchasing an in-vehicle unit valued at $1500 ($30 per month over a five-year period) plus an installation fee of $300 (total of $1800 one-off set up cost). The telematics monitoring, IAP services and communications fees is estimated to cost $120 per vehicle per month, which is equivalent to $1440 per year.

The Australian Trucking Association’s survey of its members indicated that the average cost to buy and install the IAP hardware is $2980 and the average fee paid for IAP monitoring and associated communications services is $1705 per vehicle per year.

Using the data provided by Transport Certification Australia and the Australian Trucking Association, the NTC estimated the total industry costs ranges from $19.8 million to $26.1 million over the five operational years (see Appendix F for the calculations).

The 2005 proposal did not include in the internal costs to transport operators associated with running the IAP. The Australian Trucking Association indicated that this is a substantial cost to businesses (Australian Trucking Association, 2013).

Table 10. Costs to Transport operators—projected vs actual (2013 dollars)

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>2005 proposal</th>
<th>TCA July 2013</th>
<th>ATA July 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-vehicle unit (one-off set up cost)</td>
<td>1900</td>
<td>1800</td>
<td>2980</td>
</tr>
<tr>
<td>Service provider &amp; monitoring fees (cost per vehicle per year)</td>
<td>1440</td>
<td>1705</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Austroads, 2003; 2005; Transport Certification Australia, 2013g; Australian Trucking Association, 2013

5.3.5 Benefits to industry

Proposal

The 2005 proposal estimated the benefits to operators at $280.3 million (2013 dollars). The benefits were assumed to be from direct productivity gains such as increased payload or improved access and compliance cost savings. Productivity gains contributed to the largest proportion of estimated benefits.

Status of implementation

The NTC was not able to obtain data to allow the overall actual benefits for operators to be calculated. As such, the NTC has used available information that describes or quantifies the benefits at a company or vehicle level.

Transporters of dangerous goods also report that participation in the IAP has encouraged them to commission new AB-triple and BA-triple combinations that have realised payload gains in excess of 35 per cent (TCA, 2013b).

Some firms hauling containers are using super B-double configurations, moving two 40-foot or two 20-foot containers per trip to resulting in 100 and 33 per cent productivity increases, respectively (TCA, 2013e). For example Wettenhall Logistics operates five super B-doubles between Dandenong and the Port of Melbourne. The company has reported 100 per cent productivity improvement achieved as a result of participating in the program (as each truck can now carry two containers rather than one container). Wettenhall Logistics has used the IAP to negotiate with local governments to gain last mile access. The company has also observed a reduced number of telephone calls from the community complaining about trucks encroaching on other vehicles as the speed limit for the B-double fleet is limited to a maximum of 90 kilometres per hour (ATN, 2013).

Bulk carrier Scott Corporation Limited has enrolled around 80 vehicles in the IAP. It is estimated that the program has made it possible to achieve an additional payload of 420,000 tonnes per year. This is reported to be equivalent to 12,500 fewer truck movements each year, therefore resulting in lower operating costs (TCA, 2013d).

In other industries such as earth moving, the IAP has allowed operators to use a wide variety of unconventional and productive combinations, including quad and quin dog trailers (TCA, 2013a).
Remondis Australia uses B-double vehicles at higher mass limits in Queensland to transport waste. The company has reported that increasing the payload by between 13.5 and 18.75 per cent (depending on the vehicle being used) resulted in 500 fewer trips each year to complete the same freight task (TCA, 2013c).

### Key Findings

The 2005 proposal estimated the costs to industry were $61.7 million. The actual costs range from $18.8 million to $24.3 million based on 2483 participating vehicles across four operational years.

The 2005 proposal estimated the benefits to operators were $280.3 million. The NTC was not able to calculate the actual benefits to operators. Case studies from individual companies show productivity benefits based on improved access, greater payload and fewer trips.

### 5.4 Assessment of the objective of the Intelligent Access Program

#### Proposal

In developing policy, a statement of the objective is provided so that it is clear what the policy is intending to achieve. This section assesses whether the IAP has met its stated objective.

The 2005 proposal stated the objective of the program:

> … is to facilitate safer and more efficient use of the national road network (that is, more tonne kilometres for a given length and condition of road) through better and more predictable compliance with road transport laws.

_Austroads, 2005_

#### Discussion

Based on the available data presented in sections 4 and 5, there is some evidence the IAP has met its stated objective. Certainly enrolled IAP vehicles have received productivity benefits by being allowed to carry more mass for a given length or improved access. In addition, state road authorities have reported that the IAP is an effective compliance tool providing assurance vehicles are meeting agreed conditions such as route and speed compliance. However, this review is unable to provide quantitative evidence that shows the improvement in safety performance of the vehicles enrolled in the IAP. Therefore, the NTC concludes it appears that the IAP has met its stated objective.

#### Key Finding

Based on available data, it appears that the objective of the IAP is being achieved.
5.5 Summary

The key points for this section are:

- The key tasks required to establish the IAP have been completed.
- Stage two rollout of the IAP was implemented at the program’s inception due to access policy decisions taken by New South Wales and Queensland.
- The IAP became fully operational and available for industry in July 2009.
- Ten of the 20 specific IAP applications identified in the 2005 proposal are currently offered by some state road authorities.
- The IAP is currently operational and available in six states: New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia.
- As of July 2013 there are 2483 vehicles enrolled in the IAP compared with an estimated take-up number of 8383.
- More than 80 per cent of the IAP vehicles are enrolled in New South Wales and Queensland.
- More than 50 per cent of the IAP vehicles are enrolled in higher mass limits.
- Factors that may have contributed to lower than expected vehicle take-up numbers are: road authorities have not made the anticipated IAP applications available; the introduction of concessional mass limits; costs of enrolling in the IAP; the demand for higher mass limits may have been overestimated; and heavy vehicle access issues on local roads.
- Road authorities using the IAP have consistently applied the sanction model proposed in the 2005 proposal.
- Road authorities are focused on education and on assisting operators to become fully compliant with the intelligent access conditions. There is no evidence that the IAP has been used as an additional enforcement tool (for example to issue infringements).
- The actual costs for governments were $68.4 million compared with the estimated cost of $203 million. The key factor for these lower costs is that not all states and territories have implemented the program and not all IAP applications have been activated.
- Transport Certification Australia has indicated that its scope of activities for the IAP have expanded during the set-up, certification and operational phases. The costs of these activities have not been passed on to Transport Certification Australia’s member organisations.
- The benefits estimated in the 2005 proposal were $106.9 million. The NTC was unable to estimate the overall benefits realised from the IAP due to the lack of available data.
- Road authorities have reported that the IAP is an effective compliance tool that provides assurance that the vehicle is travelling on permitted routes and is compliant with other agreed conditions.
- The 2005 proposal estimated the costs to industry were $61.7 million. The actual costs range from $18.8 million to $24.3 million based on 2483 participating vehicles across four operational years.
- The 2005 proposal estimated the benefits to operators were $280.3 million. The NTC was not able to calculate the actual benefits to operators due to the lack of available data. Case studies from individual companies show productivity benefits based on improved access, greater payload and fewer trips.
- It appears that the objective of the IAP is being achieved.
6. Issues and Opportunities

The previous section focused on what was originally proposed for the IAP and discussed what actually happened. This section focuses on the issues and opportunities for the IAP that emerged through submissions and consultations to date. This section has been structured based on the following themes:

- performance-based approach of the IAP
- access decisions involving the IAP
- first and last mile access
- IAP in supervisory intervention orders
- information security, ownership and privacy
- availability of usage statistics
- IAP specification
- re-certification processes
- non-compliance reports
- benefits of the IAP.

6.1 Performance-based approach of the Intelligent Access Program

There are examples in the past of developing one single device for regulatory purposes. The European digital tachograph is an example of a regulatory technology device that is hardwired to record driving hours and maximum speed and cannot be used for any other purpose. Another example is the use of regulated taxi meters.

The IAP is based on a performance-based specification that is intended to avoid prescribing a single device for regulatory purposes. This has allowed the telematics industry the flexibility and opportunity to develop innovative products that meet the required specifications and provide a range of IAP devices in the market. IAP service providers are able to customise the IAP devices with additional features for the different needs of the operators (for example, asset management and speed compliance). It was envisaged that this approach would allow cost savings to be passed on to transport operators (Transport Certification Australia, 2013g, p. 16). It should also be noted that the IAP standard and approach have been referenced as the international standard for telematics systems and services (ISO15368).

Although the performance-based approach for the IAP has attempted to mitigate the IAP being used as a single-purpose device, some operators are using the IAP as a single-purpose device. The Australian Trucking Association has indicated that many operators use the IAP as a stand-alone regulatory device and use other telematics systems for their commercial needs. Over the consultation period, industry has stated that the use of telematics for safety and compliance purposes in the private sector is ahead of the government telematics policy.

Transport Certification Australia has launched the ‘entry options’ initiative in order to address the concern that the IAP does not recognise existing telematics systems or devices employed by operators. With the initiative, Transport Certification Australia has offered to assess existing in-vehicle units against the technical and functional requirements of the IAP.

6.2 Access decisions involving the Intelligent Access Program

A key theme from the consultation period is the issue of access decisions. This issue primarily focuses on using the IAP as a condition for accessing the higher mass limits network. For example, the Australian Logistics Council commented:

A common observation made by Australian Logistic Council’s members is regarding the inconsistency as to when IAP is required. For example, in Queensland and New South Wales a certified tracking system is required to be fitted to the vehicle to participate in Higher Mass Limits. It is curious that these vehicles require such a system, yet road trains, which cause more asset damage and are less productive, are not required to have such a system fitted.

(Australian Logistics Council, 2013)
New South Wales has indicated that the IAP is a requirement for road trains in New South Wales. Further, it was noted that the road trains do not necessarily create more asset damage than vehicles operating at higher mass limits as it is related to the individual axle loadings and not the gross vehicles loadings.

The Australian Livestock and Rural Transporters Association and the Livestock and Bulk Carriers Association of New South Wales commented:

A key application of the IAP in New South Wales is as a mandatory operational requirement for transport businesses operating at Higher Mass Limit weights on New South Wales roads. The New South Wales approach is not part of a nationally consistent approach; New South Wales and Queensland are the only States that require IAP to be fitted to conventional (as opposed to special purpose) vehicles.

(ALTRA & LBCA, 2013)

The Australian Trucking Association commented:

… subdued demand for Higher Mass Limits from industry in New South Wales in recent years (despite a growing freight task) can be linked to unreasonable requirements for IAP on Higher Mass Limits vehicles that cause no additional road wear and tear and are no less compliant than B-doubles or Type 1 and 2 road trains.

(Australian Trucking Association, 2013)

New South Wales has noted that the key factor for route compliance via IAP is to protect vulnerable bridges rather than to mitigate road wear. B-doubles and type 1 road trains require the IAP to operate at higher mass limits while type 2 road trains are not eligible for higher mass in New South Wales.

It should be noted that no national access decisions about the use of the IAP were made by the Ministerial Council in 2003 or 2005. The use of the IAP as an access condition for heavy vehicles has been left to the states and territories. Therefore, it could be argued that road authorities are using the IAP as intended.

New South Wales and Queensland have made their positions clear (since about 2004) that they will require the IAP as a condition for access for higher mass limits. Transport for New South Wales (2013) stated:

The application of the IAP to these vehicles is to ensure they only travel on roads assessed as suitable and hence approved for their configuration, providing greater compliance assurance to [Roads and Maritime Services], other road managers and the wider community to sustainably manage the state’s road assets and road safety. New South Wales has old and variable infrastructure with the largest number of bridges compared to other states in Australia. [Roads and Maritime Services] has approximately 5,000 of the 14,000 bridges on all National and arterial roads in Australia. Of these 5,000 bridges, over 600 were constructed pre-1948 (before higher productivity vehicles were introduced on New South Wales roads). New South Wales local councils have the highest proportion of bridges on Australian local roads and many of their bridges are also constructed before 1948. This coupled with the fact that New South Wales is a ‘corridor state’ for road freight transport emphasises the importance of route compliance assurance.

Transport for New South Wales (2013) also stated that road authorities balance the level of intervention and impost on industry against other factors besides the condition of the infrastructure itself. These factors include:

- the potential risk posed to other users of the road (or bridge) asset
- congestion and traffic
- pollution
- safety of vulnerable road users
- urban amenity and community attitudes.

Under the current arrangements, it is the road authorities that determine access conditions for heavy vehicles. These road authorities have differing positions from the industry views expressed
above about how the IAP should be used. For example, road authorities in New South Wales and Queensland have undertaken risk-assessment processes and have concluded that the IAP is a compliance tool that is needed to help manage vulnerable infrastructure as well as other factors. These road authorities are open to considering other compliance assurance measures as long as these measures provide the same compliance assurance outcomes as the IAP.

The access issue was also described in detail in the National Heavy Vehicle Reform. This reform estimated that there are major productivity benefits for Australia if improved access could be achieved for high productivity vehicles. The creation of the National Heavy Vehicle Regulator and new review process and mechanisms in the national law were specific ways to help achieve improved access for high-productivity vehicles. The National Heavy Vehicle Regulator has recently published a national guideline for access decisions.4

The Transport and Infrastructure Council ministers approved this national guideline. Road authorities must apply this national guideline when making access decisions. In addition, the national regulator can review refusals by road authorities to ensure the decision used the process in the national guideline. The national regulator may also refer the decision for possible reconsideration by the road authority. Therefore, the National Heavy Vehicle Regulator has a key role to help enable major productivity benefits through access decisions.

The NTC is developing a new project to explore the broader issues of heavy vehicle access to the road network raised by industry submissions as part of the work program for 2014–15 to 2016–17. The new project is called ‘risk-based approach for heavy vehicle access to broader networks’. The NTC is developing a business case for the new project in consultation with industry and government stakeholders. This project was also discussed at the Industry Advisory Group meeting in May 2014.

6.3 First and last mile access

As discussed in section 5.2.3, industry stakeholders have indicated that the IAP does not resolve the issue of first and last mile access. Industry noted that ‘there is the perception that IAP has been marketed to transport operators with the incentive to gain first and last mile access. However, local governments do not seem to support the program and it has not delivered improved access (such as for higher mass limits) on local roads’.

Consultation with selected local governments has indicated that they are generally supportive of greater access for restricted and higher productivity heavy vehicles. It was also highlighted that greater access would not be granted without the assurance provided by the IAP that the right vehicles are operating on approved routes. However, local governments have cited that there are often infrastructure constraints (due to vulnerable roads, bridges and other structures) and the lack of funding to maintain the local road networks. This can prevent local governments from offering improved access on local roads.

Further, there is also a lack of information on the use of the IAP, its benefits and IAP compliance information within local government. Route assessments are currently done in an ad hoc manner and there is little collaboration between state and local governments. As such this has deterred the progress of introducing and granting an IAP-approved network more widely within local areas. NTC notes that Austroads is currently developing an online tool specifically to enable local governments to complete simple and accurate assessments of road performance against the NTC’s 2007 Network Classification Guidelines for performance-based standard routes.

The Commonwealth Department of Infrastructure and Regional Development (2014) has noted that enhanced working arrangements between the Australian Local Government Association, the National Heavy Vehicle Regulator and the road authorities could lead to faster route assessments and promote a greater understanding and ownership of the issues by local governments.

6.4 Intelligent Access Program in supervisory intervention orders

Another issue raised in industry submissions was that the IAP should be used by road authorities only to regulate the movement of special-purpose and high-risk vehicles, and for the use of the IAP

---

as a sanction for non-compliant operators. The Australian Trucking Association submission made recommendations about the overall use of the IAP:

Vehicles operating at Higher Mass Limits; Performance-Based Standards combinations; and safe, legal prescriptive combinations (including, but not only, modular B-triples and AB-triples) should travel under notices and attract no mandatory monitoring under the IAP.

IAP continues to be available for movements of high-risk vehicles, as an alternative to traditional road authority engineering supervision, and to serious or persistent offenders as directed by a court.

(Australian Trucking Association, 2013)

The livestock transport associations make similar arguments that:

The IAP’s application must be reduced to its original purpose i.e. managing specialised very heavy vehicles that pose a significant risk to sensitive infrastructure due to their unusual mass or weight distribution.

Impose the IAP on those caught breaching mass limits. IAP is provided to all Courts to be applied as part of a supervisory intervention order. This means, if an operator is found to have significant issues within their business, IAP can be mandated to monitor that business for compliance.

(ALTRA & LBCA, 2013)

Appendix E contains a description of supervisory intervention orders and how they are used as a sanction.

As discussed above, road authorities have a different position from industry about how the IAP should be used. However, it is likely that road authorities would agree that the IAP could be used as a court-imposed sanction. Courts can already use the IAP as part of a supervisory intervention order if they wish.

6.5 Information security, ownership and privacy

The issues of information security, ownership and privacy concern some stakeholders, including transport operators. These concerns relate to the diverse uses made of data collected in the IAP, and the security of that data.

Industry has stressed in submissions to the NTC that strict access and usage guidelines are of critical importance in preventing ‘government intrusiveness and unwarranted intervention through data capture in legitimate commercial activity’ and to guard against improper divulgure of ‘commercially unique and valuable’ data in a ‘cut-throat industry’ (Australian Trucking Association, 2013). As the Australian Trucking Association states:

It is important for an operator to be able to verify precisely what information is being retrieved, by whom, why, and at what times it is being captured and transmitted, with substantial grounds for review, appeal and recompense should any mismanagement or commercial injury occur from actions of any non-operator parties involved in these electronic transactions. Operators may also decide to retrieve data mined by authorities for their own separate legal and evidentiary purposes, and this should be possible on reasonable request, or if necessary under Freedom of Information laws.

The Australian Trucking Association has also sought assurances that data will be deleted after fixed periods of time, and will not be provided to inappropriate parties or under inappropriate circumstances (Australian Trucking Association, 2013).

Many of these provisions sought by the Australian Trucking Association are currently provided for in the national law. For example, the national law contains extensive provisions (see Part 7) to regulate the use and disposal of data collected in the IAP. Each of these provisions unambiguously states the rights and responsibilities of all parties in an IAP relationship, and contains sanctions and penalties if Transport Certification Australia, IAP auditors or service providers share this data with unauthorised third parties. The ‘powers, duties and obligations’ of these parties in handling and disposing of IAP information conforms to stringent privacy standards.
For example, IAP service providers are obliged to ensure the information they collect is:

- necessary
- proportionate for the purposes for which it is collected
- accurate, complete and up to date.

Service providers must ‘take all reasonable steps’ to ensure the collection of this information ‘does not intrude’ on the personal privacy of individuals to whom the information relates. Service providers must ‘take all reasonable steps to protect intelligent access information’ they collect, and publish policies for managing personal information that they hold. Providers must furnish information they hold about individuals on request, as soon as it is practicable and without cost. They must correct data errors to which they are alerted, and may only disclose information to road authorities or authorised law enforcement and associated officers who carry a warrant for its release. Operators may consent for a service provider to disclose de-identified information, but this is the only circumstance in which such information may be more broadly shared. All instances of disclosure must be recorded by service providers within a week. Non-compliance reports (and supporting information) are retained by service providers for four years. All other information held by service providers must be destroyed one year after it is collected, and non-compliance information must also be destroyed one year after it is no longer required. These provisions pertain also to Transport Certification Australia and to intelligent access auditors.

Therefore, the information collected in the IAP is made available only to operators or, in cases of non-compliance, to appropriate road and law enforcement authorities. Transport operators and their drivers are protected by provisions stipulating that personal information collected through the IAP cannot be used without consent for any reason other than enforcing compliance; operators are also obliged to ensure their drivers understand this.

In summary, the national law and regulations provide necessary and appropriate protections and guidelines on the use of data involved with the IAP.

### 6.6 Availability of usage statistics

Submissions to this review have commented that it has been difficult to evaluate whether the IAP is meeting its objectives because of a lack of data. The Australian Logistics Council (2013) stated that its members ‘would like to see greater transparency in the provision of information in relation to the IAP’. The Australian Logistics Council has therefore called for the regular release of data relating to:

- overall number of vehicles enrolled
- commodities being moved
- geographic regions involved
- number of kilometres travelled by enrolled vehicles
- tonnage of freight moved by enrolled vehicles.

Other national heavy vehicle programs such as the performance-based standards and National Heavy Vehicle Accreditation Scheme have publicly available statistics. While this review report contains data about IAP numbers and performance to date, the NTC contends that data about the IAP should be regularly released to enable interested individuals and organisations to assess the ongoing progress of the program.

As discussed in section 5.2.3, there are discrepancies in the state-based data on vehicle take-up compared with the Transport Certification Australia data. The discrepancy in the reported data highlights the need for Transport Certification Australia to consider releasing the vehicle take-up data by states and by application types to ensure data is not duplicated.

From discussions with Transport Certification Australia, not all the data that the Australian Logistics Council would like made available is actually collected through the IAP, for example, the movement of commodities type and freight tonnage of enrolled vehicles. However, readily available usage statistics such as number of IAP vehicles, number of intelligent access conditions and number of kilometres travelled by enrolled vehicles by application type will provide baseline information on the program. Therefore, the NTC recommends that Transport Certification Australia release this data in aggregate form annually.
As discussed in section 6.5, the National Heavy Vehicle Law contains strict privacy provisions to prevent disclosure of IAP data. However, the national law contains a provision that allows for the use of IAP data for research purposes (HVNL section 385(6)). Given the proposed data is combined and contains neither personal details nor location data, the NTC argues that this annual data release would be consistent with the use of IAP data for research purposes. Where the release of the data could potentially breach privacy protections – for example, where only one or two operators participate in an IAP application – then this data should not be released.

6.7 Intelligent Access Program specification

Industry organisations argued that the IAP system requirements should be public knowledge and that ‘an open standard for vehicle devices’ be used (ALTRA & LBCA, 2013; Australian Trucking Association, 2013).

The management of the IAP Functional and Technical Specification is overseen through the Transport Certification Australia Board, which consists of senior representatives nominated by the head of each member agency (current board members are shown in Appendix G).

National standards and rules are usually approved by ministers or ministerial councils. For example, the Commonwealth Minister for Transport approves standards relating to new vehicles (called Australian Design Rules) and the Transport Infrastructure Council approves the standards relating to in-service vehicles. Consultation and engagement with interested individuals and organisations in developing or updating national standards is recommended in COAG guidelines (COAG, 2007).

While the model laws for the IAP and now the Heavy Vehicle National Laws (that include the IAP provisions) are approved by the transport and infrastructure ministers, the Transport Certification Australia board approves the IAP specification. To become consistent with the COAG guidelines, the NTC recommends that the transport and infrastructure ministers approve the IAP specification. A public consultation period will also need to be included for changes to the IAP specification as specified in COAG guidelines. Given the Transport Certification Australia board typically makes two changes to the IAP specification each year, the twice-yearly meetings of the transport and infrastructure ministers should not provide any blockages for changes.

Amendments to the IAP specification that are minor and non-contentious should be considered outside the Ministerial Council to ensure the IAP remains flexible and adaptive and to promote innovation. The NTC proposes that the Transport and Infrastructure Senior Officials’ Committee should consider minor and non-contentious changes to the IAP specification. An expedited process for urgent changes to the IAP specification could be modelled on the current process for urgent changes to the national model laws.

The IAP specification is currently available on request from Transport Certification Australia. Most national standards are freely available on government websites rather than by request. Placing the IAP specification on Transport Certification Australia’s website will address calls made by the livestock transport associations to make system requirements for the IAP known to industry (ALTRA & LBCA, 2013).

A benefit of making the IAP specification publicly available is that the telematics and software manufacturers will be able to develop devices and programs to meet the standard. Transport Certification Australia (2013) estimated that there are 15,000 IAP-ready devices available in Australia from the IAP service providers, making the specification freely available may encourage a higher number of devices to be IAP-ready in the future. Truck and bus manufacturers may also wish to provide IAP-ready devices for purchase (as integrated items) with their vehicles. The NTC
concludes that making the IAP standards publicly available has potential to increase the use of the IAP.

As the NTC has noted elsewhere in this report, while some operators do not currently choose to use the IAP, a publicly available IAP specification would provide a benchmark that industry could use to ensure their telematics and compliance systems are of a high standard.

### Draft recommendations

2. Transport and Infrastructure Council approves changes to the IAP specification (with the Transport and Infrastructure Senior Officials Committee being able to approve any minor and non-contentious changes).

3. Transport Certification Australia Board makes a public version of the IAP specification available on its website.

### 6.8 Re-certification processes

In its submission, Transport Compliance Services (a current service provider) argued there are opportunities to bring down the cost of the IAP for industry by changing some requirements of its certification agreement. Transport Compliance Services commented:

> The IAP specifies an annual inspection of all [in-vehicle units] in the field and a five day turn-around for any [in-vehicle unit] malfunction repairs. A number of Transport Operators have argued that the high cost of compliance with these IAP requirements is detrimental to their business, particularly in relation to [in-vehicle unit] maintenance and repair.

> In many cases, Transport Operators running under Higher Mass Limits are operating their vehicles to maximise utilisation; requiring their Higher Mass Limits vehicles to be off the road for a mandatory inspection impacts their profitability. As [in-vehicle units] are constantly monitored remotely for faults, Transport Compliance Services believes a more pragmatic solution for both Transport Operators and regulators would be to allow audit inspections to occur every two years. Additionally, the five day turnaround for malfunctions is generally not feasible with Transport Operators, as truck usage is scheduled a week in advance, and vehicles may be in locations which are not easily accessible. A more realistic timeframe for [in-vehicle units] malfunction repair would be 3 weeks.

Transport Compliance Services, 2013

The IAP specification contains a section related to checking in-vehicle units that states that service providers:

> Shall have procedures in place to regularly check the integrity of the In-Vehicle Unit and trailer identification device security seals and report the same to the Intelligent Access Condition-issuing jurisdiction.

Therefore, the IAP specification does not specify an annual inspection of the in-vehicle unit. The specification sets a performance-based approach on how to manage the risk of tampering. It is up to service providers to propose how they will manage this risk in their certification application to Transport Certification Australia. Transport Certification Australia will assess the certification application and make a decision on whether the proposed approach articulated by the applicant meets the objectives of Transport Certification Australia and road authorities.

Transport Certification Australia’s Certification Process Guidelines also state that any IAP service provider may apply to be re-certified if they want to alter or implement new hardware, software, systems, processes or vehicle-based devices (TCA, 2013f). Therefore, service providers should use the existing re-certification procedures if they wish to change any conditions in this certification agreement. Transport Certification Australia has indicated that the board has agreed to process all re-certifications free of charge – at no cost to IAP service providers or transport operators.

---

5 IAP Functional and Technical Specifications, section 4.2.4 B4.4
Further discussions with Transport Compliance Services about its submission helped to clarify the specific issue:

Transport Compliance Services understands that making this change via the standard re-certification procedure is the preferred channel for Transport Certification Australia. In our experience, the re-certification procedure does not have a defined time limit to requests, and change approvals often require multiple discussions and requests for additional documentary evidence. This involves an additional expense of time and resources as an IAP Service Provider, and as such, we need to prioritise our re-certification requests. Transport Compliance Services sees value in improving the re-certification process to provide some time limits to requests, and providing a process to manage re-certifications that are denied.

Transport Compliance Services, 2014

Decisions by governments, like the re-certification process, typically have timelines. Timelines provide certainty to applicants that a decision will be reached by a given date. A recent review into dangerous goods recommended a timeline for decisions by governments be introduced where a timeline was previously absent (NTC, 2013c).

Transport Certification Australia said that the time taken to process a re-certification request depends on factors such as: the extent of the change and whether a rectification process to be initiated; and the preparedness of the IAP service provider to submit all documentation and other information necessary for the re-certification to be processed.

The NTC recommends that Transport Certification Australia reviews the re-certification process to provide more certainty to service providers for timelines.

### Draft recommendations

4. Transport Certification Australia Board reviews the re-certification process to provide more certainty to service providers regarding timelines.

### 6.9 Non-compliance reports

From the consultation undertaken for this review, there was some confusion in the heavy vehicle industry about whether operators and drivers can obtain information from their IAP service provider about any instances of non-compliance with the terms of an intelligent access condition.

While operators and drivers cannot get access to the non-compliance reports sent to the road authorities (which is specified in a particular format), service providers can provide other information about instances of non-compliance such as whether the truck is permitted on the road it is currently on. Depending on the system used, service providers may be able to provide this information directly to the driver of the truck. The operator needs to discuss this with his or her service provider. If this information was not specified to be provided in the contract between the operator and the service provider, then the contract may need to be updated and there may be some additional cost.

To help reduce current levels of confusion about this issue, the NTC recommends that Transport Certification Australia publish and publicise the non-compliance information that operators can obtain from their service providers.

### Draft recommendations

5. Transport Certification Australia Board publishes information about the data that operators are able to obtain from service providers.
6.10 Benefits of the Intelligent Access Program

Section 5 discussed the benefits specified in the 2003 proposal and 2005 proposal as well as describing examples of actual benefits for governments and industry.

Road authorities have applied the IAP as an access condition. When road authorities decide to use the IAP as an access condition for an innovative vehicle that has been approved through the performance-based standards process, should the calculations of productivity benefits be assigned to the performance-based standards program or the IAP? It could be argued that the benefits should be assigned to the performance-based standards program because it is the mechanism to facilitate use of safe and high-productivity vehicles.

The IAP is placed on the vehicle after the performance-based standards process and approval and therefore it can be argued that the IAP is not responsible for the benefits of these safe and high-productivity vehicles. On the other hand, it can be argued that without the IAP as an access condition, the road authorities would not allow the safe and high-productivity vehicle to be used on the roads. As such, the IAP is an important part of the decision for the road authority and some of these benefits should be credited to the IAP.

The benefits for the higher productivity vehicles in the 2003 and 2005 proposals are credited to the IAP. Rather than assigning these benefits only to the IAP, these benefits should be assigned to the suite of reforms that allow access for these vehicles to the roads. This is the approach that the National Heavy Vehicle Reform used to estimate the benefits from improved heavy vehicle access.

6.11 Other issues

The Crane Industry Council of Australia indicated it has:

… adopted a strong and supportive position on the IAP since its development and introduction initially in Victoria in 2008 … However, based on member feedback, [its] view is that the IAP promised benefits have yet to be realised to any significant degree and IAP is generally seen to have been under-delivered for our industry. Promised benefits such as electronic mapping, improved access and permits, lower business running costs etc have yet to be achieved.

Crane Industry Council of Australia, 2013

The matter of electronic mapping and improved access and permits are operational issues for the National Heavy Vehicle Regulator and road authorities to resolve. There has been some recent progress on these issues. For example, crane operators will not require a permit to travel on or around 700 roads in greater Melbourne.6 In addition, VicRoads is working on an approved network for two- and three-axle terrain cranes and a rural crane network for regional Victoria, which are expected to be finalised by the end of 2014. VicRoads has developed a user-friendly online map that can be quickly updated as additional roads are approved for inclusion in the gazetted network for these cranes.

At the workshop held in December 2013, industry members emphasised the need for governments to provide electronic tools for drivers that help them comply with road laws. Examples included speed compliance, route compliance and information about bridge height restrictions. The NTC notes there are commercially available products that can provide this information (for example, satellite navigation devices marketed for trucks). The NTC has also captured this industry proposal as a candidate project for consideration as part of the NTC’s annual strategic planning and work program development process (Appendix H contains a more detail about this process). Another industry proposal from this workshop was that further research is needed into the purchasing decisions and trends of industry for telematics devices. The NTC has also captured this proposal as a candidate project.

---

7. Next steps

The NTC is seeking submissions from interested parties about this report and the draft recommendations by 25 July 2014.

After this date, the NTC will consider all stakeholder comments and feedback to develop the final review paper. The final step in the review process is to submit the recommendations to the Transport and Infrastructure Council for a decision in November 2014. If these recommendations are approved, the recommendations will be implemented by the relevant parties. Table 11 contains the draft recommendations and the draft implementation plan, noting the parties responsible for implementing each draft recommendation.

The NTC has not specified when the draft recommendations will be implemented by the Transport Certification Australia board. During the consultation phase for this report, the NTC will have further discussions with Transport Certification Australia about the timing for these tasks. The final recommendations to the Transport and Infrastructure Council will include specific dates.

Table 11. Draft recommendations and implementation plan

<table>
<thead>
<tr>
<th>Draft recommendation</th>
<th>To be implemented by</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transport Certification Australia Board reports statistics about the IAP in its annual report including:</td>
<td>Transport Certification Australia Board</td>
<td>To be confirmed</td>
</tr>
<tr>
<td>• number of vehicles enrolled in the IAP by application type and by state and territory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• number of intelligent access conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• number of kilometres travelled by enrolled vehicles and by application type.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Transport and Infrastructure Council approves changes to the IAP specification (with the Transport and Infrastructure Senior Officials’ Committee being able to approve any minor and non-contentious changes).</td>
<td>Transport and Infrastructure Council to consider this recommendation</td>
<td>November 2014</td>
</tr>
<tr>
<td>3. Transport Certification Australia Board makes a public version of the IAP specification available on its website.</td>
<td>Transport Certification Australia Board</td>
<td>To be confirmed</td>
</tr>
<tr>
<td>4. Transport Certification Australia Board reviews the re-certification process to provide more certainty to service providers for timelines.</td>
<td>Transport Certification Australia Board</td>
<td>To be confirmed</td>
</tr>
<tr>
<td>5. Transport Certification Australia Board publishes information about the data that operators are able to obtain from service providers.</td>
<td>Transport Certification Australia Board</td>
<td>To be confirmed</td>
</tr>
</tbody>
</table>
8. References


Australian Livestock and Rural Transporter Association (ALRTA) and Livestock and Bulk Carriers Association of NSW (LBCA) 2013, Response to NTC Review of the Intelligent Access Program Information Request, received 2 September 2013.


Commonwealth Department of Infrastructure and Regional Development 2014, email communication, 21 May.


Department of Infrastructure, Energy and Resources Tasmania 2013, Response to NTC Review of the Intelligent Access Program Information Request, received 22 August 2013.

Department of Planning Transport and Infrastructure SA 2013, Response to NTC Review of Intelligent Access Program Information Request, received 22 August 2013.


Mainroads Western Australia 2013, Response to NTC Review of Intelligent Access Program Information Request, received 18 October 2013.


National Transport Commission (NTC) 2013a, Compliance Framework for Heavy Vehicle Telematics, NTC, Melbourne.

National Transport Commission (NTC) 2013b, National In-Vehicle Telematics Strategy: The Road Freight Sector, NTC, Melbourne.


Transport Certification Australia 2014, email communication, 16 May.


Appendix A. Stakeholder Consultations

The NTC sent letters to the states and territories seeking information to inform the review. The agencies that provided responses were:

- Department of Infrastructure and Regional Development (Commonwealth)
- Department of Infrastructure, Energy and Resources, Tasmania
- Department of Planning, Transport and Infrastructure, South Australia
- Department of Transport and Main Roads, Queensland
- Roads and Maritime Services, New South Wales
- Transport Certification Australia
- Transport for New South Wales, New South Wales
- VicRoads, Victoria.

Feedback was also sought from industry stakeholders. The organisations that made formal submissions were:

- Australian Livestock and Rural Transporters Association (ALRTA) and Livestock and Bulk Carriers Associations (LBCA) – joint submission
- Australian Logistics Council
- Australian Trucking Association
- Crane Industry Council of Australia
- Ctrack
- Pinpoint Communication
- Transport Compliance Services
- Victorian Crane Association
- Vsouthern Pty Ltd.


In addition to the submissions, the NTC also spoke with the following local governments and other organisations to further understand their views about the IAP:

- Moore Plain Shire
- Gilgandre Council
- Parkes Shire Council
- Penrith City Council
- Kalari
- Local Government and Shire Associations of New South Wales
- Victorian Transport Association
- Wettenhall Logistics.
## Appendix B. 2003 Proposal – IAP Applications

### Table 12. 2003 proposal – potential IAP applications

<table>
<thead>
<tr>
<th>Generic application</th>
<th>Proposed parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous goods</td>
<td>Route compliance</td>
</tr>
<tr>
<td></td>
<td>Freight consignment identification</td>
</tr>
<tr>
<td></td>
<td>Gross speed violation</td>
</tr>
<tr>
<td></td>
<td>Driver identification</td>
</tr>
<tr>
<td>Specialised rigid vehicles</td>
<td>Route compliance</td>
</tr>
<tr>
<td>Low loaders</td>
<td>Route compliance</td>
</tr>
<tr>
<td></td>
<td>Gross speed violation</td>
</tr>
<tr>
<td>Mass concession schemes</td>
<td>Route compliance</td>
</tr>
<tr>
<td></td>
<td>Mass management accreditation</td>
</tr>
<tr>
<td></td>
<td>Gross speed violation</td>
</tr>
<tr>
<td>Performance-based standard</td>
<td>Route compliance</td>
</tr>
<tr>
<td></td>
<td>Mass management accreditation</td>
</tr>
<tr>
<td></td>
<td>Gross speed violation</td>
</tr>
<tr>
<td>Higher mass limits</td>
<td>Route compliance</td>
</tr>
<tr>
<td></td>
<td>Mass management accreditation</td>
</tr>
<tr>
<td></td>
<td>Gross speed violation</td>
</tr>
</tbody>
</table>
Appendix C. Intelligent Access Conditions by Application Type

Table 13. 2013 Intelligent access conditions by application type

<table>
<thead>
<tr>
<th>Generic application</th>
<th>Specific application</th>
<th>NSW</th>
<th>Qld</th>
<th>Vic.</th>
<th>SA</th>
<th>Tas.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialised rigid vehicles</td>
<td>Over dimensional and over mass cranes</td>
<td>480</td>
<td>247</td>
<td>227</td>
<td></td>
<td></td>
<td>953</td>
</tr>
<tr>
<td>Concrete pump trucks</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Mass concession schemes</td>
<td>B-double operation</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>B-triple operation</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>AB-triple</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Medium articulated vehicle with dog</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>78</td>
</tr>
<tr>
<td>Performance-based standard</td>
<td>PBS-related vehicle</td>
<td>17</td>
<td>76</td>
<td></td>
<td>15</td>
<td></td>
<td>106</td>
</tr>
<tr>
<td>Higher mass limits</td>
<td>Increased higher mass limits</td>
<td>1173</td>
<td>609</td>
<td></td>
<td>51</td>
<td></td>
<td>1833</td>
</tr>
<tr>
<td></td>
<td>network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Non-standard freight vehicles</td>
<td>33</td>
<td></td>
<td></td>
<td>198</td>
<td></td>
<td>231</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3319</td>
</tr>
</tbody>
</table>

*Source: Transport Certification Australia, 2013*
Appendix D. Queensland IAP Vehicle Take-up

The total vehicle numbers in the IAP in Queensland have increased by 169 vehicles or 21 per cent over the 10-month period.

Table 14. IAP vehicle numbers in Queensland, January to October 2013

<table>
<thead>
<tr>
<th>IAP application</th>
<th>Total vehicle numbers</th>
<th></th>
<th>Percentage increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January 2013</td>
<td>October 2013</td>
<td></td>
</tr>
<tr>
<td>Higher mass limits</td>
<td>526</td>
<td>640</td>
<td>22%</td>
</tr>
<tr>
<td>Special purpose vehicle</td>
<td>207</td>
<td>231</td>
<td>12%</td>
</tr>
<tr>
<td>IAP mass</td>
<td>55</td>
<td>77</td>
<td>40%</td>
</tr>
<tr>
<td>Non-standard freight vehicle</td>
<td>25</td>
<td>34</td>
<td>96%</td>
</tr>
<tr>
<td>Total</td>
<td>813</td>
<td>982</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: Department of Transport and Main Roads, 2013
Appendix E. Compliance and Enforcement Sanctions and Penalties

Improvement notices

An improvement notice may be issued by an enforcement officer where there are reasonable grounds for believing that a person either has, or is contravening a road transport requirement or standard applying to a heavy vehicle or is likely to contravene the requirement or standard. This is an important sanction that has the potential to be applied in an educative and proactive manner.

Formal warnings

A formal warning may be issued for a minor breach where the officer believes the person took all reasonable steps to prevent the breach and was unaware of the breach.

An authority may decide to withdraw the formal warning and bring other proceedings instead. Withdrawal of the formal warning might occur when the authority learns that the person against whom it was issued has a poor compliance history. It could also be withdrawn if additional evidence comes to hand that suggests the breach was more serious or was committed intentionally.

Infringement notices

An infringement notice may be issued as an alternative to court proceedings for a less serious offence. An infringement penalty is proposed to be set at around 20 per cent of the value of the maximum monetary penalty that could be imposed by the court for the applicable offence. The infringement penalty for a body corporate is no different from that for an individual.

A record of the infringement notice may be used to help a court determine whether a person is a systematic or persistent offender for the purposes of making either a supervisory intervention order or prohibition order (see below).

Fines

A fine will be available as a court-imposed penalty for any road transport offence.

The Road Transport Reform (Compliance and Enforcement) Bill (2003) provides that the maximum available fine for a corporation should be five times higher than that applicable to an individual. This will not mean that a court will impose an actual fine that is five times higher for a corporation. Instead, it will allow a court to apply a higher fine to a corporation than it would to an individual where the circumstances of the offence and the financial and other circumstances of a corporation warrant the higher fine.

The fines nominated in the Bill are indicative maximum fines only. They are intended as a guide to road authorities in setting appropriate maximum monetary penalties for these offences in their own legislation.

Commercial benefits penalties

The commercial benefits penalty is intended to deter those who seek to obtain an unfair competitive advantage by contravening the road transport law. This penalty may be up to three times the amount calculated to be the commercial benefit that was, or would have been, derived from the offence. In making its calculations, the court may consider the value per tonne per kilometre of the goods, the distance over which the goods were carried, or were to be carried, and the benefit received or to be received from committing the breach.

This innovative penalty does not have a precedent in other areas of regulation. It has been designed by the NTC to tackle offenders who are reaping benefits from abusing the road laws.

Supervisory intervention orders

A supervisory intervention order may be made by a court only upon application of the prosecutor or a road authority and only against a person who is found by the court to be a systematic or persistent offender. This order is intended to improve the person’s compliance performance and
the court must consider the likelihood of the order achieving this aim when deciding upon whether to make the order.

A supervisory intervention order may direct the offender to:

- undertake acts to improve compliance, such as retraining or re-assigning staff, appointing a compliance auditor, obtaining expert advice, implementing operational changes or publishing compliance reports
- report or disclose information on compliance enforcement
- conduct specific operations subject to the direction of the authority.

The order cannot extend beyond one year. Any costs associated with implementing the order will be the responsibility of the person against whom the order is made. The order may be made either instead of any other penalty or in addition to any other penalty other than a prohibition order.

Orders affecting a driver’s licence or vehicle registration

The court may suspend for a specified period or cancel the registration of any heavy vehicle of which the offender is the registered operator. This will have effect even if the order is made in a road authority other than the one in which the heavy vehicle is registered. An offender may be disqualified from becoming a registered operator for a specified period not exceeding five years.

The court may also modify, suspend for a specified period or cancel a heavy vehicle driver licence or disqualify an offender from obtaining a heavy vehicle driver licence for a specified period not exceeding five years. The powers to affect registration and licences will generally be reserved for serious offences.

Prohibition orders

In the rare case of a systematic or persistent offender for whom no other penalty will be adequate, the Bill empowers a court to prohibit the offender from any involvement in road transport for a specified period of time.

As with the supervisory intervention order, a prohibition order may only be made by a court upon the application of the prosecutor or a road authority and only against a person who is found by the court to be a systematic or persistent offender.

Compensation orders

A compensation order is not strictly a sanction or penalty, but its consequences operate to similar effect.

Such an order requires an offender who has been found guilty of a road law offence to compensate a road authority for loss or damage to any road infrastructure caused or contributed to by a road law offence. The order may only be made if the court is satisfied on the balance of probabilities that the loss or damage was suffered as a result of the offence in respect of which the court has found the offender guilty.
Appendix F. Costs for Transport Operators

The analysis is based on the following assumptions:

- The staging of the IAP vehicle take-up over the five operational years is based on information provided by Transport Certification Australia.
- The cost estimates are provided by Transport Certification Australia and the Australian Trucking Association.

Table 15. Cumulative cost to transport operators

<table>
<thead>
<tr>
<th>Year</th>
<th>IAP vehicle take-up</th>
<th>Cost to transport operator Using TCA data</th>
<th>Cost to transport operator Using ATA data</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1,000</td>
<td>$1,440,000</td>
<td>$1,705,000</td>
</tr>
<tr>
<td>2011</td>
<td>1,500</td>
<td>$2,160,000</td>
<td>$2,557,500</td>
</tr>
<tr>
<td>2012</td>
<td>1,992</td>
<td>$2,868,480</td>
<td>$3,396,360</td>
</tr>
<tr>
<td>2013</td>
<td>2,483</td>
<td>$3,575,520</td>
<td>$4,233,515</td>
</tr>
<tr>
<td>2014</td>
<td>3,023</td>
<td>$4,363,120</td>
<td>$5,154,215</td>
</tr>
<tr>
<td>Subtotal (service provider &amp; monitoring fee)</td>
<td>$14,397,120</td>
<td>$17,046,520</td>
<td></td>
</tr>
<tr>
<td>Subtotal (in-vehicle unit)</td>
<td>$5,441,400</td>
<td>$9,008,540</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$19,838,520</td>
<td>$26,055,130</td>
</tr>
</tbody>
</table>
Appendix G. Transport Certification Australia
Board of Directors

Mr Steve Golding, Independent TCA Director / Chairperson
Mr David Spence, Department of Infrastructure, Energy and Resources (Tas.)
Mr Michael Sutton, Department of Infrastructure and Regional Development (Commonwealth)
Mr Trent Rusby, Department of Planning, Transport and Infrastructure (SA)
Mr Nicholas Papandonakis, Department of Transport (NT)
Mr Salvatore Petroccitto, Department of Transport and Main Roads (Qld)
Mr Brett Phillips, Justice and Community Safety Directorate (ACT)
Mr Des Snook, Main Roads Western Australia (WA)
Mr Peter Wells, Roads and Maritime Services (NSW)
Mr George Mavroyeni, VicRoads (Vic.)

Appendix H. NTC Strategic Planning and Work Program Development Process

For more information on this process, see NTC 2014.

<table>
<thead>
<tr>
<th>June - September</th>
<th>September - November</th>
<th>November - May</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic direction setting</strong></td>
<td><strong>Pipeline definition, categorisation, and prioritisation</strong></td>
<td><strong>Balancing, pipeline and work program development</strong></td>
</tr>
</tbody>
</table>
| - Review and confirm prioritisation and balancing guidelines, (including categories and work streams) | - Review reform pipeline  
- Candidate generation - identify all potential candidate projects from existing candidate list, internal sources, surveys, reports, reviews and from government and industry  
- Collect information on proposals and categorise  
- Run initial prioritisation on each work stream  
- Seek industry and government input to prioritisation  
- Develop indicative list of prioritised projects  
- TISOC and the Transport and Infrastructure Council endorsement of project proposals, business cases for new projects | - Review work program delivery to confirm programming impacts and finalise available funding envelope  
- Program candidates against available indicative funding envelope  
- Stakeholder engagement on draft work program and strategic plan  
- Rebalance as needed  
- Seek TISOC and Transport and Infrastructure Council approval  
- Publish Strategic Plan and 3 year Work Program  
- Concluding communications |

Stakeholder engagement