

Response to the Australian Infrastructure Audit

October 2015

Supplementary Submission by Roads Australia to Infrastructure Australia

Introduction

The purpose of this document is to supplement an earlier submission delivered by Roads Australia to Infrastructure Australia regarding the Infrastructure Audit.

In 2015, the harmonisation of standards with respect to technical specifications across jurisdictions, was voted by Roads Australia Board members as one of the nation's top policy priorities.

This supplementary document discusses harmonisation and the standardisation of technical specifications in the context of practicality, value for money, alignment to Australian Standards and best practice, and appropriateness for both hard dollar and D&C contracts.

This document also provides a priority list of technical specifications to be standardised and/or harmonised nationally, compiled by Roads Australia members to optimise outcomes in the procurement, delivery, operation and maintenance of Australia's road infrastructure assets.

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Harmonise data and technical standards across jurisdictions where possible

Roads Australia supports moving towards standardised and/or harmonised data and technical specifications within and across jurisdictions, where possible and practicable, to optimise the use of existing infrastructure assets, drive innovation and to reduce the cost of infrastructure.

In fact, following a Roads Australia Board workshop and policy alignment session with road agency representatives in early 2014, it was agreed in the Communique to prioritise and consider:

standardisation and harmonisation of technical specifications and procurement, where possible, including incentives, insurance and materials.

Roads Australia recognises the practical difficulties in achieving a national policy framework – or indeed standardisation – across all jurisdictions, and as such, has begun to explore this within its membership (through the workings of its Capacity Chapter).

Consistent technical standards to reduce the cost of infrastructure

A 2014 National Roads Australia survey asked members to review technical specifications in terms of practicality, value for money, alignment with Australian standards and best practice, appropriateness for both hard dollar and D&C contracts, and areas for harmonisation.

Specifications are practical, but there are a few less practical areas

Respondents to the survey agreed that overall technical specifications were seen to be practical for today's road industry, however there are a few less practical areas such as pavements, material specifications, traffic control of road worksites and road furniture.

Specifications provide value for money, but there are areas for improvement

Most survey respondents also agreed that specifications provide value for money, but there is room for improvement, and asphalt and bitumen sealing, road furniture and material specifications are areas to focus on.

Good alignment with Australian Standards, but there are areas that could be better

Most respondents felt that current technical specifications align with current Australian standards and best practice, however, better alignment could be achieved in road works, pavements, asphalt and bitumen sealing, road furniture and material specifications.

Appropriateness for hard dollar and D&C contracts

About half of respondents said technical specifications are appropriate for both hard dollar and D&C contracts.

Areas for harmonisation

The main areas respondents suggested for harmonisation are general conditions and forms of contract, asphalt specifications and sealing, road pavement materials, traffic control, roadside barriers and hardware.

General comments from industry regarding technical specifications

Respondents also commented generally that:

- It's difficult to incorporate new products and materials, including those already recognised by European and American National Standards e.g. road safety barrier and pavement innovation
- New products must meet Australian standards, but these are not uniformly applied across jurisdictions
- New technologies and best practice works are not recognised in master specifications
- Lack of harmonisation around road furniture specifications drives up manufacturing cost
- Specifications are too prescriptive which limits innovation, and
- Performance-based specifications should be considered.

Priority list of technical specifications for standardisation and/or harmonisation

Since the survey, a series of workshops were held in 2014 across Australia with public and private sectors members to identify a priority list of technical specifications that could be harmonised and/or standardised.

The priority list, acknowledged by the Roads Australia Board, includes:

- Addressing safety concerns across the supply chain in the deployment of road safety barriers
- Standardising road line marking across Australia (including safety regarding mobile road worksites, and retro-reflectivity)
- Traffic control at road worksites; and
- Asphalt and pavement specifications.

RA continues to implement the priority list

In 2015, the harmonisation of standards with respect to technical specifications across jurisdictions, was voted by Roads Australia Board members as one of the nation's top policy priorities.

As a result, Roads Australia, together with Austroads, is currently facilitating the implementation of the standardisation and harmonisation of technical specifications in road safety barriers, road line marking and traffic control at road worksites. Asphalt and pavement specifications are the next priority areas.

Roads Australia will continue to consult road authorities to identify an ongoing pipeline of technical specifications to review for standardisation and/or harmonisation.

At the RA Board Workshop in 2015, members also identified varying procurement practices in different regions and states, the inconsistencies of contract documentation and the cost and time saving that a national approach could provide.

Going forward, Roads Australia continues to consult road authorities and associated bodies to review delivery mechanisms across Australia and to identify specific actions to pursue the possible harmonisation of procurement practices and standardisation of common contracting arrangements.

National standards to optimise the national network

Continuing to develop and evolve data and technical standards to embrace innovation, acknowledge best practice and provide best public value are vital to the efficiency and effectiveness of both new and existing road assets across Australia.

A number of key goals shared by state road authorities include improving road safety, reducing congestion, optimising the performance and available capacity of existing transport infrastructure, enhancing mobility in a multi-modal transport chain, increasing travel time reliability, improving the efficiency of logistic operations, reducing energy use and diminishing the environmental impact of road transport.

Common consensus across a national priority set of critically important data and technical standards can assist to:

- Provide evidence to inform future budgets across the whole life of road assets
- Improve and provide a more informed assessment of road asset investment decision options
- Assist to lower the cost of road construction, and to retrofit existing road infrastructure
- Provide more informed approaches to improve road asset management and performance
- Provide a basis for industry to invest in skills crucial to maintaining the national network; and
- Improve the safety of road workers and road users.

Roads Australia understand the complexities and resources required to establish a standard and to incorporate ongoing continuous improvement, however, early indications of the potential benefit cost ratios are strong.

A strategic business case developed by Austroads for the creation and implementation of harmonised road asset data standards to improve asset investment and management approaches indicates a potential benefit cost ratio of between 5 and 22 through the adoption of a harmonised road asset data standard, with national benefits between AU\$60million - AU\$120million per annum.

Data sets that could be considered as part of a national set of data and technical standards to be shared across jurisdictions include:

- Inventory of Australia's road network assets (include access to telecommunications, information technology and energy assets)
- Maintenance and renewal costs, mapped to weather data and climate change indicators
- Road safety – applications proven to improve road infrastructure and reduce road accidents
- Current demand, indicating availability potential of existing road infrastructure assets
- C-ITS – applications proven to improve capacity/reliability of existing road infrastructure assets
- Infrastructure condition data (establish an ongoing and historical archive)
- Infrastructure performance, linked to GDP and Liveability indices
- Network access limits and requirements, to help identify priority grants to increase capability/capacity of corridors of national significance
- Road classifications across the national network, including critical freight corridors; and
- Customer service performance (level of service provided).

Going forward, Roads Australia are well-positioned to investigate these key themes within its membership via the Capacity and Network Reliability Policy Chapters.

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Bold = RA Board Member

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