



OUTCOMES AND ANALYSIS REPORT

**Roads Australia Technical Specifications and Procurement
Roadshow
Wednesday 30 April 2014
SYDNEY**

Breakout Session 1 – Technical Specifications

Breakout Session 2 – Procurement



Aims and objectives

Following the Roads Australia board workshop and policy alignment session with road agency representatives in early 2014, it was agreed as part of the Communique and outcomes to prioritise and consider:

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

The technical specifications and procurement roadshow workshops is the first step to begin the conversation with road agencies, Austroads, ARRB, Standards Australia and RA member companies.

The aim and objectives of these workshops is to involve all relevant players within the industry to provide feedback and real life examples to consider which technical specifications could be standardised and/or harmonised to drive innovation, reduce the cost of infrastructure and work collaboratively across jurisdictions.

The first workshop in Sydney is the beginning of a series of roadshow workshops across Australia that will form the basis for an end-of-year report to Austroads and State Agency representatives for consideration of standardisation and harmonisation of technical specifications across jurisdictions where possible.

Roads Australia is undertaking this initiative in collaboration with all relevant players in the industry and looks forward to feedback from all parties. The outcomes and analysis report from each of the sessions will become a 'living document' for feedback.



Breakout Session 1 – Technical Specifications

Key themes identified in groups

- Roadside barriers/wire rope safety barriers/temporary barriers
- Traffic management/control at worksites
- Asphalt specifications
- Pavement specifications
- Signage
- Recycled/warm asphalt

<p>Question 1</p> <p>With regard to the survey results this morning, please provide a list of specifications in order of your priority that could be standardised and/or harmonised?</p> <p>Do you think any specifications have been left off the survey?</p>	<p>Group 1 Traffic control of worksites Standardisation of safety barriers for final design Standardisation of characteristics of pavements materials (wet/dry) Standard conditions of contract (noting state specific legislative requirement) Standardise asphalt / spray seal</p>
	<p>Group 2 Asphalt specifications Roadside barriers Traffic management Noise walls specifications</p>
	<p>Group 3 Value for Money: <ul style="list-style-type: none"> - Bridges (B80 concrete spec) - Pavements - Earthworks (R44 and 3051 could be merged between states) - Variation in concrete mix design, cement content between states - Proving of concrete mix design, testing for long term durability - Whole of Life requirements – durability, requirements and testing Safety/Human Factor: <ul style="list-style-type: none"> - Need to consider priorities for safety specs – i.e. roadside furniture and barriers </p>
	<p>Group 4 Heavy duty asphalt specification <ul style="list-style-type: none"> - Where specifications differ, there should be uniformity of specs across border within say a 50km zone Materials Assessment Process</p> <p>The major omission from the survey is consideration of the basic structure of specifications across states Within D&C contracts there is great variation and interpretation by contractors</p>
	<p>Group 5 Asphalt – consistency between States Pre-cut concrete pipes – consistency between States Wire rope safety fence – consistency between States</p>



	<p>General conditions – to set base line and allow for innovation Standard specification – more innovation to add value & ECI</p> <p>Group 6 Pavement materials Traffic management / control at worksites Earthworks</p> <p>Group 7 RMS R11 Pavements (RMS 82, 83, R116, R71, R73, R75) & Bridges (B80) Material Specifications covered by Australian Standards: <ul style="list-style-type: none"> - Overlapping specs – roads, rail , council - Drainage - Bitumen supply - Signage - Barriers - Roadside furniture - Pipes </p> <p>Group 8 QLD & NSW <ul style="list-style-type: none"> - MRTS70 & B80 (concrete specs) - Road safety barriers </p> <p>Group 9 Traffic control – should be standardised, experience for the road user General Conditions / specs – significant opportunity to harmonise Asphalt / bitumen specs The NATA accreditation was missing from the survey – lack of profitability</p>
<p>Question 2</p>	<p>Group 1 R44 – select fill (onsite production) Vs 3071 (import select) Concrete pavement specification</p>



<p>Are there any clear areas/examples where duplication and/or over prescription of a technical specification could be eliminated? Please list the spec and/or example.</p>	<p>Group 2 Roadside barriers: <ul style="list-style-type: none"> - AS 3845 - Austroads part 6 - State specific specs Traffic management: <ul style="list-style-type: none"> - G10 - Austroads - Local guidelines e.g. Workers on foot - AS/NZS Standards Asphalt Specs: <ul style="list-style-type: none"> - R116 (individual state specs) - AS/NZS - Aus. spec - International specs </p> <p>Group 3 Overprescribed <ul style="list-style-type: none"> - Focus on performance based specs, but difficult to apply this to material based specs. </p> <p>Group 4 <ul style="list-style-type: none"> - Road authorities consider the proliferation of lengthy specs has arisen from lack of performance by suppliers/contractors - Good performance/compliance within the existing system to be demonstrated to (enhance the movement to performance based contracts) avoid more duplication and over prescription </p> <p>Group 5 Asphalt – R116</p> <p>Group 6 Temporary traffic management could be readily standardised as vehicle fleets are similar across states Pavements/earthworks – local materials can be suitable when used with local knowledge, therefore specifications can be more performance based E.g. Colour of wire rope barriers; WA is galvanised; other states are white, green or powder coating</p>
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	<p>Group 7 Rail – SPM 123; ARTC 029 Reinforced soil walls Traffic control</p> <p>Group 8 Road barriers (base metal thickness and length/post spacings)</p>
<p>Question 3</p> <p>Can you provide an example/s of where proven technology/materials from international jurisdictions has taken a lengthy amount of time in the approvals process? And provide suggestions to fast track the process.</p>	<p>Group 1 Diamond grinding Rapid set concrete International arrow boards – who to go to the get approval</p> <p>Group 2 New product assessments For example noise wall technology (aluminium absorbent) is proven in Europe/Asia/America and has taken more than 12 months to get introduced (testing program):</p> <ul style="list-style-type: none"> - Reduce validity testing on products that have been proven overseas - Harmonisation across States to ensure testing only occurs once. <p>Group 3 Recommendations:</p> <ul style="list-style-type: none"> - Central Australia approval - Recognition of overseas testings and approval - Accreditation not longer than 12 months <p>Examples:</p> <ul style="list-style-type: none"> - Quick moveable barrier - MBT truck is rolling work zone – used in USA (approval just through 4 years) - Pavement lights - Bridge expansion joints (waterproofing an issue) additional drainage required

	<p>Group 4 The absence of a formal system of assessment/acceptance of innovative products is a barrier (for national introduction)</p>
	<p>Group 5 Temporary barriers:</p> <ul style="list-style-type: none"> - Plastic barriers (approved in the US); 3 years for approval in NSW and requires separate state by state approval <p>Fast track approvals:</p> <ul style="list-style-type: none"> - States to accept international standards that meet Australian standards - Many US standards are privately sponsored - Will of Road Authorities to standardise and agree
	<p>Group 6 Wire rope guardrail system currently delayed due to re-evaluation process</p>
	<p>Group 7 Bolts Steel Post tensioning concrete Bitumen</p>
	<p>Group 8 Road safety barriers – Australia is generally known as the hardest country to take new products.</p>
	<p>Group 9 Warm mix asphalt</p> <ul style="list-style-type: none"> - Was a lengthy process to implement/approve - Lack of validation in Australian environment <p>Recycled Asphalt</p> <ul style="list-style-type: none"> - As above - Reluctance to include recycled material in some states <p>Pavement lights on Victoria Road upgrade (o/s technology)</p> <ul style="list-style-type: none"> - Approvals took 2 years despite RMS pushing approval in Alliance (would not have been achieved under D&C)

<p>Question 4</p> <p>Where has it been difficult to innovate or get approval for new and/or recycled materials? Please provide suggestions to overcome any current barriers.</p>	<p>Group 1 Rap into asphalt (2 years limit increase from 15% up)</p> <p>Group 2 Difficult to introduce recycle pavement materials at a national level due to different source material/test Requirements from state to state for example:</p> <ul style="list-style-type: none"> - C&D materials - Glass materials - SLAG materials <p>Group 3 Polymetal crystallites – coloured surfacing for bus lanes/cycle lanes Non-standard products – contractors are reluctant to use as agencies won't sign off</p> <ul style="list-style-type: none"> • to overcome this consider adopting a standard Australia central approval board <p>Group 4 Environmental issues are a factor.</p> <p>Group 5 Industrial waste as road pavements Use of technology Move to industry verification of products</p> <p>Group 6 Pavement materials (200km of unique materials)</p> <ul style="list-style-type: none"> - 12 years for technical people responsible for specifications to get interested - Overseas it takes 3 to 6 months to get approvals for new products - Australia is required to get the product approved 6 times <p>Group 7 Aggregate sand Increase of % of recycle materials</p> <ul style="list-style-type: none"> - Asphalt - Road base - Side roads
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	<p>- Cycle ways</p> <p>Group 9 Recycled Asphalt – crushed (recycled) glass for pipe surrounds</p>
<p>Question 5</p> <p>Do you think that pavement specifications could be standardised across jurisdictions? And if so, why?</p>	<p>Group 1 Yes – terminology standardisation (SMZ/type A/DGB/CLI/2.1) Yes – performance characteristics (wet/dry & CBRs) Consolidated technical notes (across States)</p> <p>Group 2 Yes, they could be standardised heading towards a performance based system, taking into account the local conditions/requirements/supply.</p> <p>Group 3 Yes – essentially the same product and made up of the same elements. Yes – asphalt Granular products – may be harder Performance based with dispensations?</p> <p>Group 4 Yes – given the appropriate specification framework mentioned in Question 1.</p> <p>Group 6 Yes – people move between states and from overseas. Cherry pick the best, start with the easy ones. E.g. Wire rope posts</p> <p>Group 7 RMS R71 Harmonising technology Uniform criteria/mix of “equal products” across states</p> <p>Group 9 Standardisation results in lower industry costs Different specs currently required different testing equipment (for asphalt and bitumen)</p>



	<p>Standardisation results in improved quality as no need to change mindsets Improves resourcing efficiently of plant and people</p>
<p>Question 6</p> <p>Do you think performance based specifications would provide better Value for Money?</p>	<p>Group 1 Yes. More innovation, particularly design innovation. Better value from quarries – to match resources.</p> <p>Group 2 Yes, where feasible, a performance based specification can allow the flexibility to innovate and deliver VfM. Note that there is concern that not all specifications lend themselves to performance based setting.</p> <p>Group 3 Needs to acknowledge WoL costs Depends on the spec – roadside furniture is a good example for performance based spec</p> <p>Group 4 Yes – refer framework issue noted in Question 1.</p> <p>Group 6 Yes, however, how do you measure the performance? What is the Value for Money? Warrant performance in a meaningful way.</p> <p>Group 7 Yes – where appropriate WoL cost</p> <p>Group 8 Yes – performance specifications leads to more innovation and better value Skills in SRAs are diminishing (retiring), there is less people with the expertise to enforce and draft prescriptive specifications Performance specifications transfers risk to supplier. Relies on expertise of suppliers/contractors so consultation process in developing/standardisation process is important.</p> <p>Group 9 Yes – but only if they are standardised</p>



	Need a process to fast track approval of the innovation to meet performance requirements
<p>Question 7</p> <p>Other comments/suggestions for inclusion</p>	<p>Group 1 Allocate an agency to make the harmonisation.</p> <hr/> <p>Group 2 Standardise the colour of wire rope posts (limit number of colours) Standardise the guard rail system (e.g. Height of posts/w-beam) Standardise asphalt specifications</p> <hr/> <p>Group 6 Contracting Strategies, e.g. More innovation in Alliances Influence of urban design – “standardisation”</p> <hr/> <p>Group 8 Should we be looking to international standards where applicable and provides best practice? Need stricter adherence to Australian Standards. SRAs often “do their own thing” over and above Australian Standards Method of harmonisation needs to be a partnering between all stakeholders to an agree outcome.</p> <p>Group 9 Implement standardisation / harmonisation down to local government level These group are making recommendations based on limited information – treat with caution Focus on low hanging fruit – gain momentum Needs leadership above technical areas to implement successfully</p> <p><u>Best Practice</u> Aus. Spec</p> <ul style="list-style-type: none"> - Drive to harmonise specs across local government - Can road agencies learn from this framework? <p>Victoria Road base material spec (performance based)</p>



Breakout Session 2 - Procurement

Key themes

- Dual ECI in QLD is successful and slowly being adopted by other states
- Too many addenda
- Open, honest and specific feedback very useful
- Non-price criteria feedback is sanitised and limited in scope
- Generally feedback after close of tender is robust and helpful
- Standard of documentation is generally good, however, it is not always provided at the beginning of the process
- Involving suppliers and consultants at design stage will provide better value for money
- More transparency as to the evaluation criteria and weighting
- Consideration of pre-qualification for consultants similar to the contractors, and
- Consider models such as Alliances.

<p>Question 1</p> <p>Please provide an example/s of the where you think the briefing/interactive process UP TO the close of tender/ROI has and has not worked well. Please identify the State.</p>	<ul style="list-style-type: none"> • Dual ECI in QLD is very successful and is slowly being adopted by NSW (WC2NH) and other states • Positive guidance sessions in NSW (Oxley Highway) generally very positive when client is open and honest <p><u>Negative</u></p> <ul style="list-style-type: none"> • High number of addendums and late addendums without extension of time • RMS positive guidance sessions work well provided appropriate people are represented • Only one tender received – conditions too onerous <ul style="list-style-type: none"> - Dandenong grade separation - Worrell Creek to Nambuka (project did not proceed) • Tender addendums received close to close of tender – difficult to keep up to date and digest and assess risk and price. • Another issue is when established timeframes are not followed. • RMS – OH2K, number of technical changes to requirements late in tender period did create challenges, particularly around drainage requirements. • NSW – interactive process needs to be truly interactive – not one way. • Needs very competent people on both sides and will to be transparent • North Connex is perhaps a good example of good process but needs improvement. • Regional group of councils in NSW. Group for a joint tender for asphalt. • NSW – process is very resource intensive for contractors, i.e. costly. We need to run separate teams just to prepare for sessions. Also, process tends to be one way, i.e. we present, but don't get feedback we can use.
<p>Question 2</p> <p>Please provide an example/s of the where you think the briefing/feedback process AFTER the close of tender or ROI including (where appropriate) the tender debrief has and has not worked well? Please identify the State.</p>	<ul style="list-style-type: none"> • When feedback is specific, open and honest it is very good • When it is vague it is not beneficial • Concrete R3222 – won the job, but confirming offer was used but not allowed on site after • R73 – old spec was approved but was not allowed to be used on site • After tender there are often numerous queries. Needs to be timely – lag causes problems. • M1 – M2 Sydney shortlisting completed quickly and was good. • NSW – all debriefs have very limited value the way they are structures as price is not usually discussed. • All non-price criteria feedback is often very sanitised and limited in scope. • Generally feedback after close of tenders is robust and very helpful in the consulting space. Open feedback on differentiators helps the learning process for improvement.

	<ul style="list-style-type: none"> • NSW debriefing always too sanitised and of limited value • NSW – probity constraints also seems to excessively hint what can be discussed, could see willingness of government to provide guidance.
<p>Question 3</p> <p>In the last 12 months how would you rate the level and standard of tender documentation used in each State? Please be specific and list examples.</p> <p>Rating out of 10 0 = poor 10 = excellent</p>	<ul style="list-style-type: none"> • Once the process or call for Tenders has started don't change the assessment criteria or the selection process • Generally ok – sometimes ambiguous (i.e. SWTC-structures on OH2K) • Biggest issue is release of incomplete tender documents at the start of the process and late release of addendums. • NSW – from technical point of view they are good. Rated 8 out of 10 • North Connex – mandatory functional requirements set, positive as not over specified but much more work for tenderers • Road Agencies (TfNSW & RMS) better than other agencies • NSW – the standard of documentation is usually very good, rated 8-9 out of 10. • However, it is not all provided at the start of a tender which significantly increases cost of tendering and reduces opportunity for innovation for the client. • NSW – 8, tender documents usually have a significant level of detail. Only comment is the way the info is organised and presented. Consider GIs platforms. • NSW – rated 5 out of 10 • QLD – rated 5 out of 10 • VIC – rated 5 out of 10 • The three states are good, but more work is needed. • Tender documentation (this applies to all agencies) is getting worse. The projects are getting bigger but the level of documentation is reducing. Also endless addenda during the tender period makes keeping up to date with tender documentation a major problem.
<p>Question 4</p> <p>Do you feel the assessment and award of contracts could be streamlined and/or fast tracked? Please be specific and list examples.</p>	<ul style="list-style-type: none"> • Yes – design only seems to be getting more lengthy, first EOI and then RFT. Doubles up on workload, should shortlist from the Panel and spread work around • Suggest standardising the tender documents and setting page limits and standardising assessment criteria. • Involving suppliers at design stage. Suppliers are able to inform specifics on available materials in the region and help to get the specifications and materials aligned. If the guidelines are standardised it will be easier for contractors and suppliers to allocated resources. • The example of shortlisting quickly was considered good practice. • Small decision making committees – tech committer and evaluation



	<ul style="list-style-type: none"> • Certainty in award dates – preferable. • Assessment of tenders should be more consistent and more transparent. • Every project appears to have different criteria. • NSW – ROI process for consultant shortlisting could be streamlined. E.g. Albion Park Rail Bypass – EOI was a proposal minus costing. Re-tendered via shortlist with repeating a lot of ROI information after significant info shared with shortlist. • Yes, North Connex is a good example of a PPP procurement model and timeline • Yes. Current/traditional tender model/process is out of date in context of major \$100 million/billions projects with only two major Australian players. • Yes • Yes, government needs to be more transparent as to what the evaluation criteria and weighting is. At the moment it's a guessing game. This also applies to what constitutes value for money.
<p>Question 5</p> <p>Other comments/suggestions</p>	<ul style="list-style-type: none"> • Standardisation of contract models and procurement methods across states • E.g. ECI stands for something different in every state. • All States – pre-qualification processes for consultants should be modified so that pre-qualification status approved and should automatically ensure acceptance in another (i.e. same as for contractors) • Bring back Alliances – but take lessons from history.