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Managing surface friction in Queensland - An Industry Response

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Presentation

• Background
• Industry developments
• Industry actions
• Industry action outcomes
• Observations
• Conclusions
Background

- Accidents and public concerns
- Troutbeck & Kennedy Report
- Policy and information
- Queensland specifications & standards

**Recommendation 22.**

It is recommended that the Department of Main Roads consider a 24-month warranty period for skid resistance performance and surface condition in addition to a 12-month warranty against adverse rutting and other characteristics.
Industry Developments

- Commercial drivers
- Changed environment
Industry Actions

1. Wait for TMR – test device / correlations
2. QPS test method validation – Vericom
3. Seek network level models on QTMR data
4. SEQ Ramp data for asphalt characterisation
5. Performance based products – long term
6. Individual project level <24 month data
7. QTMR sets safety standards, AAPA follows
8. Maintenance interventions for skid recovery
Industry Actions

1. Wait for TMR – test device / correlations
Industry Actions

2. QPS test method validation – Vericom

Instrument Set Up in Vehicle (Dual axis bubble levels)

Early Curve (Dry)
3. Seek network level models on QTMR data

Skid resistance performance for Spray Seal (2007 Data)
Industry Actions

4. SEQ Ramp data for asphalt characterisation
5. Performance based products – long term

Recommendation 18.

It is recommended that the Department of Main Roads further develop a performance based specification for asphalt surfacings.
Industry Actions

6. Individual project level <24 month data
7. QTMR sets safety standards, AAPA follows

<table>
<thead>
<tr>
<th>Posted Speed</th>
<th>Minimum Austroads Sand Patch Texture Depth $^1$ (Test Method AG:PT/T250) (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 80 km/h</td>
<td>Seal 14mm+ 1.1 SMA+, OGA, UTFC</td>
</tr>
<tr>
<td>&gt; 60 km/h and ≤ 80 km/h</td>
<td>Seal 10mm+ 0.4 DGA, SMA, OGA, UTFC</td>
</tr>
<tr>
<td>≤ 60 km/h</td>
<td>Seal NA DGA, SMA, OGA, UTFC</td>
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*Note 1. These are minimum values; higher values could provide a longer period before an intervention is required. This is to be part of the whole-of-life assessment.*
8. Maintenance interventions for skid recovery
Industry Action Outcomes

1. Skid resistance test device
   - Vericom – used in Qld courts
   - Roughly linked to network level analysis

2. Network level analysis
   - Budgetary tool for network seals status
   - Insufficient data for asphalt surfacings

3. Surfacings characterisation
   - Delayed to human resource constraints
   - Has potential for maintenance planning
   - Expected to identify better performing surfacings
Observations

Skid resistance principles must be understood

Lesson 1 “Everyone involved in skid resistance must be adequately trained and educated in the principles”

Skid resistance at any cost can be very expensive

Lesson 2 “All performance requirements must be optimised, not just maximising skid resistance properties to the exclusion of others”
Conclusion

- Sharing expertise & learnings is needed
- AAPA members have played their part
- Management requires reliable data collection
- Long term data must come from QTMR / Regions
- Available & accessible skid test gear required
- Incentives to improve skid properties?
- Performance based / proprietary products