



## **PBS Review Project**

Bulk Tanker Day  
2 September 2022



# Agenda

1. PBS Marketplace
2. Generic Tyre
3. PBS 2.0

# PBS Marketplace

## Phase 1 – implementation phase

- Frontal Swing completed
- Working with Jurisdictions to finalise agreement to Pavement Horizontal Loading (PHL)
- Amendments to PHL and Dynamic Stability Under Braking standards to be progressed in one package: one implementation date, one set of transitional provisions.

## Phase 2 – review commenced

- Review of Low Speed Swept Path and Tail Swing standards
- Potential amendments to ADR re width to be considered
- Development of Options Paper, that will seek feedback on stakeholders’ preferred approach to review, nearing finalisation.

Phase 1 (Implementation)	Phase 2 (Review commenced)	Phase 3	Phase 4
<ul style="list-style-type: none"> <li>•C8: Frontal Swing (FS)</li> <li>•A2: Pavement Horizontal Loading (PHL)</li> <li>•C16: Directional Stability Under Braking (DSUB)</li> </ul>	<ul style="list-style-type: none"> <li>•C7: Low Speed Swept Path (LSSP)</li> <li>•C9: Tail Swing (TS)</li> </ul>	<ul style="list-style-type: none"> <li>•C11: Static Rollover Threshold (SRT)</li> <li>•C12: Rearward Amplification (RA)</li> <li>•C13: High Speed Transient Off-tracking (HSTO)</li> </ul>	<ul style="list-style-type: none"> <li>•C1: Startability</li> <li>•C2: Gradeability (A, B)</li> <li>•C3: Acceleration Capability</li> </ul>

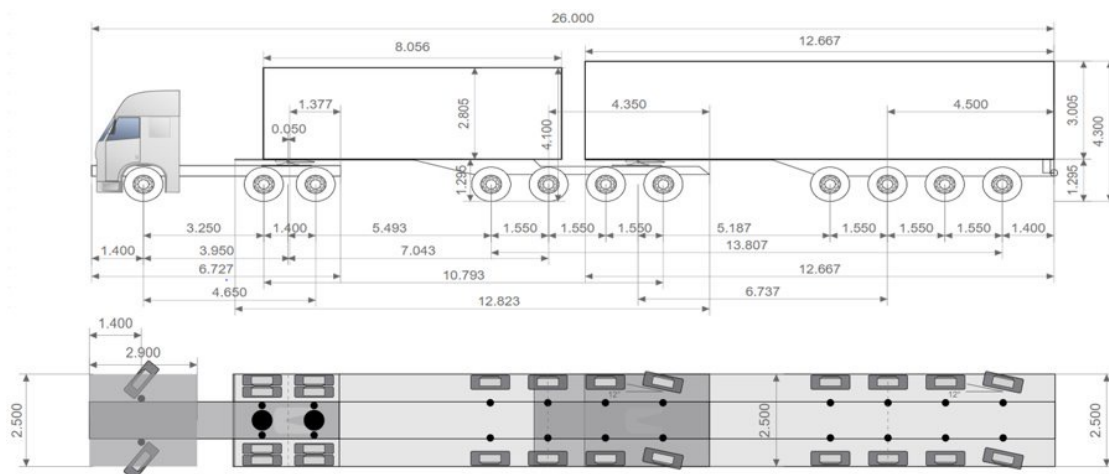
# Generic Tyre Data

- Technical evaluations and supporting activities have been completed
- Load Indices defined by range – rated load is mid-range value
- Standard has been drafted – all inputs required for assessment have been specified
- Implementation and transition provisions being finalised
  - Simplified tables in DAs and VAs - Tyre size, tyre configuration, load index range
  - No requirement to immediately amend existing VAs – operational advice to manage transition
  - Existing VAs will be amended to reflect new arrangements when updated for other reasons.
- Commencement date to be advised, extensive communications to follow.

Generic Tyre Dataset	Load Indices	Rated Load (kg)	Rated Load (N)	Vertical Stiffness (kN/m)
1	128-132	1900	18633	642
2	132-136	2120	20790	681
3	136-140	2360	23144	725
4	140-144	2650	25988	777
5	144-148	3000	29420	840
6	148-152	3350	32852	902
7	152-156	3750	36775	974
8	156-160	4250	41678	1064
9	160-164	4750	46,582	1154
10	164 +	5300	51,975	1253

# Worked example: Quad axle B-Double

## Information from PBS Assessors



Axle Group	Mass (t)	Tyre Size	Tyre Configuration	Load Index Range	Generic Tyre Dataset
Steer	6.5	295/80R22.5	Single	148-152	6
Drive	17	11R22.5	Dual	144-148	5
Trailer Group 1	27	385/65R22.5	Single	156-160	8
Trailer Group 2	27	385/65R22.5	Single	156-160	8
GCM	77.5		-		

## Future Design and Vehicle Approvals

### Approved tyre options

#### Steer –

- 295/80R22.5 (Load Index Range 148-152, single configuration)

#### Drive –

- 11R22.5 (Load Index Range 144-148, dual configuration)

#### Trailer –

- 385/65R22.5 (Load Index Range 156-160, single configuration)

Retread tyres are only permitted on the drive and trailer axles.

For the relevant axle position, fitted tyres must fall within the specified load rating range.

Tyres listed herein are specific for PBS application number VXXXXXX.

A different list of tyres will apply for other combination types and different PBS application numbers.

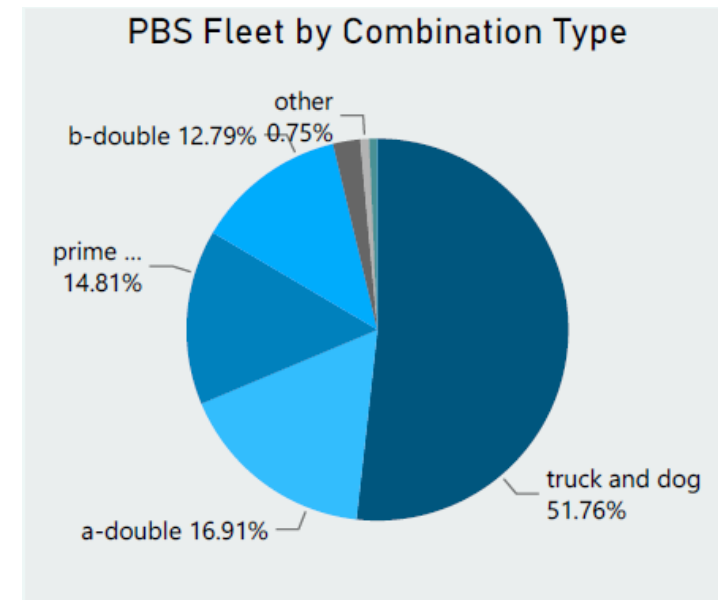
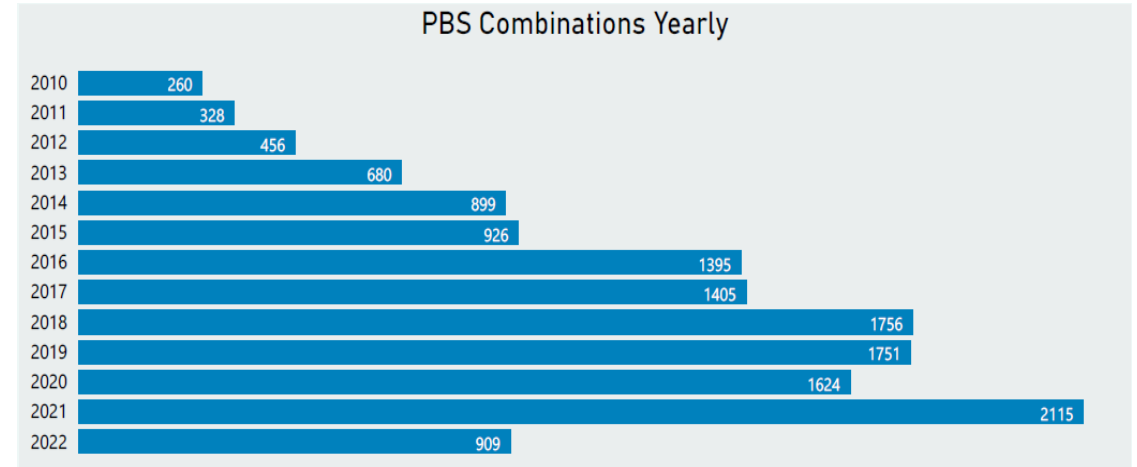
# PBS 2.0

## PBS 2.0 Project

- Established to reform and modernise the PBS Scheme
- Aims to deliver greater flexibility, enable continued innovation and to reduce the regulatory and administrative burden on the NHVR, industry and road managers.

## Discussion Paper

- Articulates NHVR's vision for the PBS Scheme
- Three options canvassed – covering a wide opportunity range
- Preferred Option explored in further detail
- Currently being finalised for formal consultation (Sept 2022)
- Formal consultation period to include range of feedback options/opportunities.



# Potential components: Standards Framework

## Background

- Other than the current PBS Marketplace Review (in progress), little change to standards since inception
- PBS scheme conceived as an innovation 'test bed'.

## Discussion Paper Proposal

- Accelerated process to ensure that PBS vehicles remain at the forefront of innovation
- Dynamic management of standards
  - Proactive process for proposals to be made, tested/evaluated and implemented
  - Enhanced advisory mechanisms
  - Tiered approach to amendment processes commensurate with risk
- Potential for 'interim' standards to temporarily test new technologies
  - Governance aspects, decision-making and risk
  - Transition to the PBS scheme.



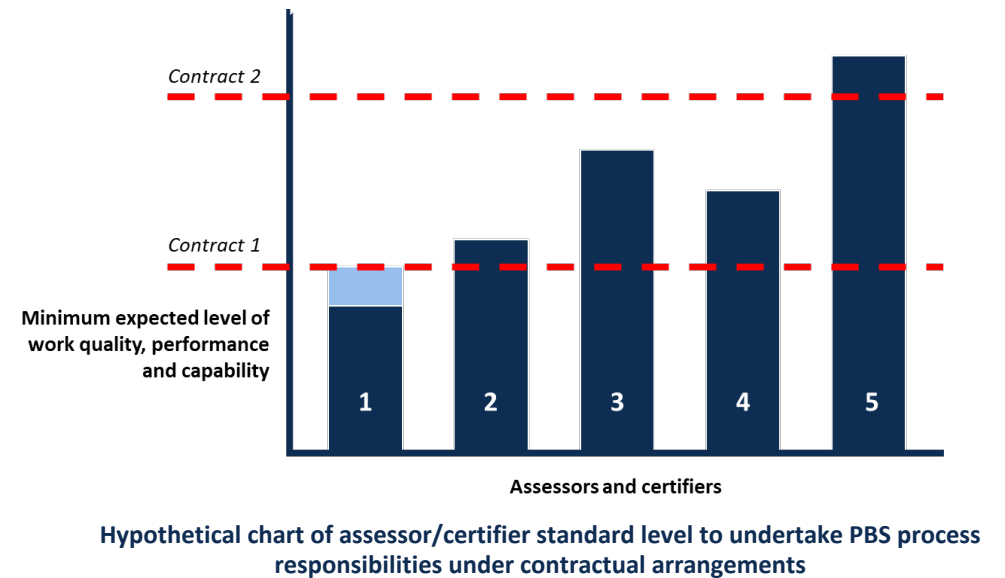
# Potential components: Assurance Framework

## Discussion Paper Proposal

- Expansion of role of assessors, certifiers and manufacturers
  - Consolidate and expedite end-to-end PBS approval processes
  - Requires robust audit and assurance processes – including new ‘rules’ and supporting agreements
  - Increased ‘minimum’ requirements to undertake additional responsibilities – increased assurance processes
  - Additional responsibilities determined commensurate with the activity and risk.
- Requires processes to be digitised via NHVR portal.

## Benefits

- Enhance the development of capability and capacity, over time, to support scheme processes
- Increased competition in PBS marketplace – fostering increased innovation.

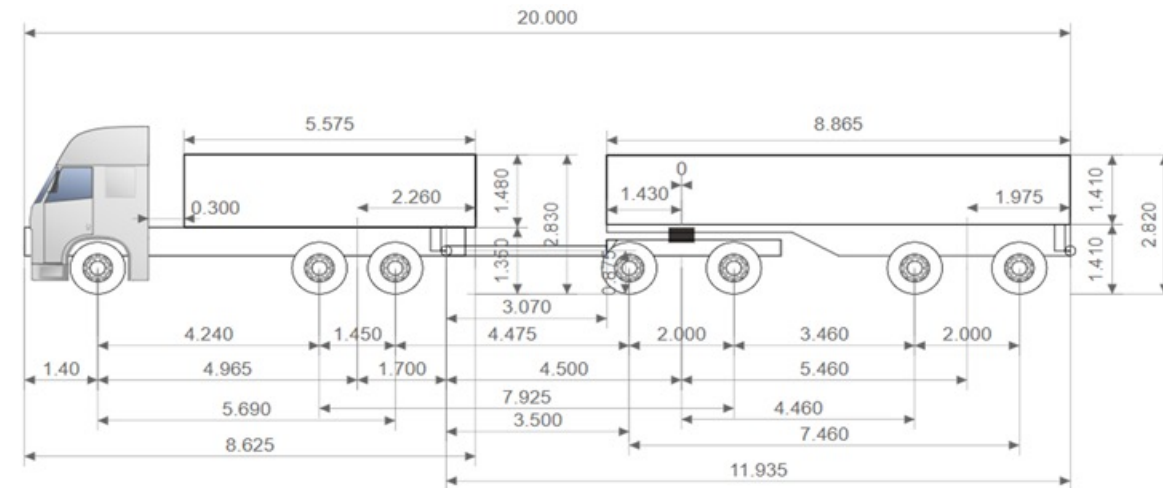




# Potential components: Access and Transition Framework

## Discussion Paper Proposal

- Improved Access under a 'Template' approach
  - Reimagines the idea of 'blueprint' vehicles previously published on NHVR website
  - Common vehicles matched to appropriate networks under Notice - coupled to form a Template
  - Template approach reduces upfront entry costs while providing certainty of access (only a VA required).
- Transitioning 'mature' vehicles out of PBS fleet
  - Methodology and approach to determine readiness for transition
  - Introduces idea of a 'High Performance Fleet' (HPF) with a 'HPF Library' to provide contemporary governance.



## Desired state

- Conceptually, a 'life-cycle' from entry to exit.

# Questions?



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<https://www.nhvr.gov.au/road-access/performance-based-standards/pbs-review-project>