

## Response to the Reform of the Disability Standards for Accessible Public Transport: Consultation Regulation Impact Statement

### Introduction

This submission is provided in response to the consultation regulation impact statement and associated recommendations. This has been compiled by Mark Relf whom has been involved in numerous public transport projects over the past 20 years and is a person who uses a wheelchair.

In review of the reform paper and RIS it is evident that this review is the most comprehensive since the introduction of the DSAPT in 2002 for which the Taskforce is to be commended.

Equally, I commend the authors for the and deletion of references to outdated Australian Standards which has been a hangover since the early drafting days in 1994 and a focus on harmonising Part H2 of the Premises Standards with Parts D3, E3.6 and F2.4 of the Premises Standards.

However, while many references have been updated to AS1428.1 (2009) for infrastructure it is evident that gaps still exist in the areas of boarding devices, ferry gangways, stairways within trains and ferries and design of accessible on-board toilets.

While the Whole of Journey Guide is a useful inclusion to the conversation about accessible public transport it lacks any enforcement.

The reform also overlooks other critical issues for people with disabilities in terms of;

- Regional and rural transport and facilitating partnerships between commercial providers and community to achieve accessible transport.
- Real reform concerning accessibility of long distance trains and sleeping berths.
- School transport accessibility.
- Local government infrastructure links to the public transport nodes and corridors.



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# Responses to Consultation Questions

## **Gangways**

While the ambiguity of differentiating a ramp from a gangway has hampered good outcomes for people with a disability the severe lack of design and construction detail is the biggest problem. Referencing AS3962 Guideline for Marinas does not resolve the problem due to the voluntary adoption and dual application to public and private marinas. There are better guidelines at state authorities such as NSW RMS and the US Access Board.

To clarify the problems requires a regulatory approach with obvious limitations for tidal waters where extreme tidal changes exist, mainly in northern Australia.

While the review identifies a number of issues the matter of “gangways to pontoon wharves” should be completely separated from requirements for “fixed ramps” due to significant differences in environmental conditions.

With respect to matters affecting people who use a wheelchair the biggest issues are wheeling on and off the gangway, slope of the gangway, handrail/kerbrails on the gangway and other obstructions and hazards for wheelchair manoeuvring on the fixed wharf or pontoon. The following technical requirements are presented for incorporation into the DSAPT as a mandatory requirement.

## **GANGWAY REQUIREMENTS**

### **Width**

The clear width of gangways, including treadplates, shall be 1800mm, or 1500mm for gangways of less than 6 metre length.

### **Maximum slope**

The slope of a gangway is affected by various factors of tidal and wave conditions, height difference and distance between a bank, seawall or jetty with the connecting pontoon.

The slope of a gangway shall be in accordance with Table below.

### **GANGWAY SLOPE**

<b>Duration of required slope</b>	<b>Slope</b>	<b>Length</b>
For a minimum of 80% of the time	1:14 or less	For a maximum length of 25m
For a maximum of 20% of the time	1:8 or less	For a maximum length of 25m

Note 1: Where the general tidal change prevents the achievement of the slope requirements then a combination of a ramped jetty to minimise the height difference to the pontoon platform maybe considered.



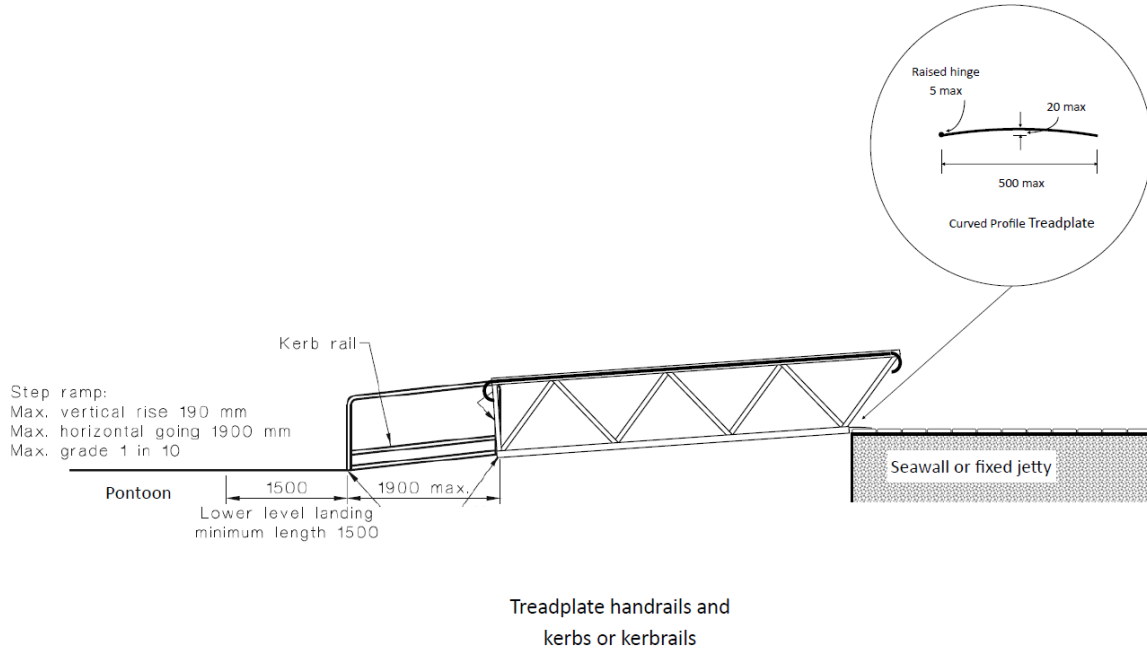
Note 2: Where extreme tidal change (greater than 3 metres) prevents the achievement of the slope requirements then a reduction in the time duration of a 1:14 slope maybe considered.

The maximum slope is the slope that would occur at a water level of CD.

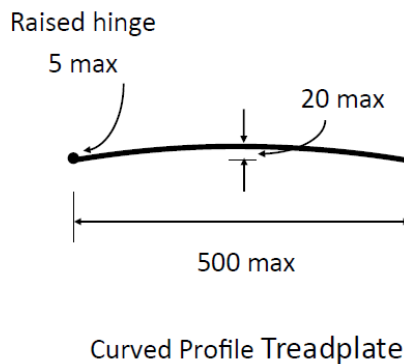
### Treadplates

Treadplates must be provided to transition from the gangway to the fixed wharf or jetty and pontoon. The maximum slope of a treadplate connected to a gangway shall not exceed 1:10 for a maximum length of 1900mm.

Where treadplates exceed 500mm in length then handrails and kerbs or kerb rails shall be provided.



Where a treadplate provides a curved profile then the profile shall not exceed 20mm in height and 500mm in length as shown below.



### Surface profile

The surface of the gangway shall provide a firm even finish complying with AS 1428.1.

Where timber boards are installed then the gaps shall not exceed 8mm and have rounded edges not exceeding a 5mm radius or a height difference two adjoining boards exceeding 5mm. where a cambered profile exists for shedding water then height variation not exceed 2mm.

Where metal grating, expanded mesh, or other material with openings or holes then the openings shall be heelgard type.

Gangways and treadplates shall have a maximum crossfall of 1:40 and be finished in a manner that avoids ponding.

There shall be no tactile ground surface indicators applied to treadplates or floating pontoon platforms. Tactile ground surface indicators applied to fixed wharves and jetties.

### Slip resistance

The walking surface shall provide a surface in accordance with AS 4586 and HB 198.

### Handrails

Handrails shall be provided on both sides of gangways with kerbs or kerbrails on both sides designed in accordance with AS1428.1 *Design for access and mobility*. The handrails shall provide tactile buttons in accordance with AS1428.4.1.

### Floating platforms/pontoons and edge safety barriers

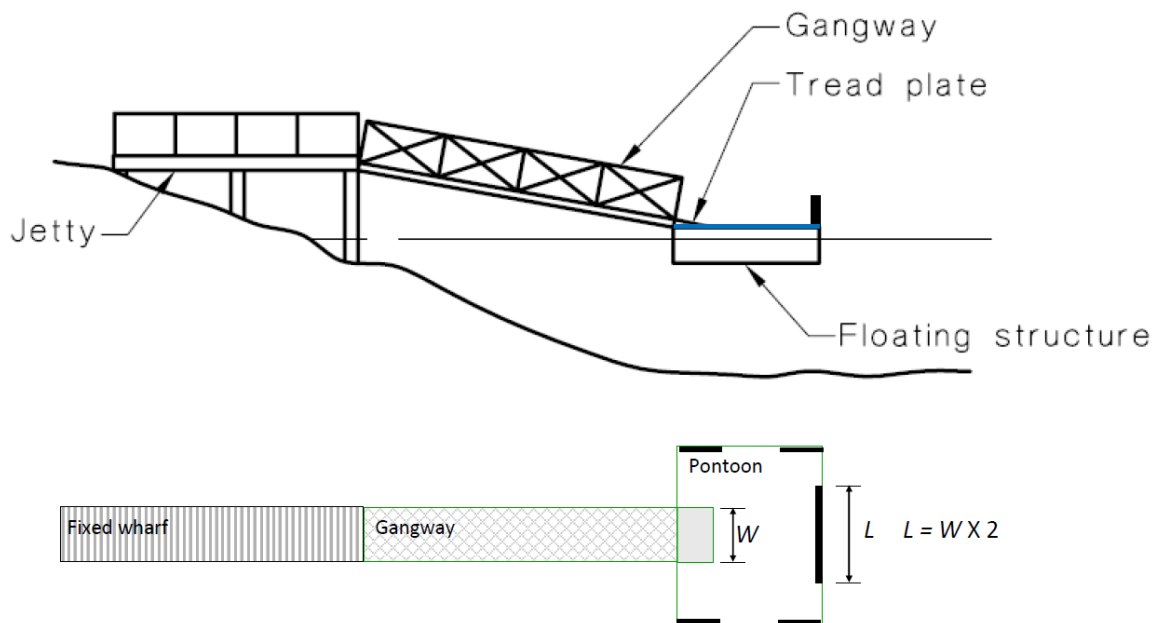
Floating platforms with connected gangways shall provide an area large enough to accommodate:

- portable boarding ramps and gangways, hoists and other boarding devices,
- queuing of expected number of users,
- wheelchair turning space at the end of a gangway and treadplate as specified by AS1428.1, and
- wheelchair turning and passing spaces as specified by AS1428.1.

### Edge safety barrier protection

To ensure adequate safety of people with disabilities floating platforms shall provide;

- a balustrade safety barrier opposite the gangway entry onto the floating pontoon which has a length double the width of the gangway,
- kerb edges of 150mm minimum height or balustrades of 1000mm minimum height along three sides covering 50% of the perimeter with the provision of 2000 to 2500 length openings at designated accessible boarding points, which could be staff operated gates.



## **Boarding Ramps**

With respect to boarding ramps the DSAPT needs to provide modal specific solutions as there is no one size fits all, even though the principles are generally the same.

### **Ferry Boarding Ramps**

Closely associated issue of gangways at ferry services and the like is the design of boarding ramps which currently references an extremely outdated and inappropriate AS3856.1.

However, the recommended text completely overlooks the vertical rise from infrastructure to conveyance with a safe gradient and other features of transition tips of the ramp, stability or portable ramps and landing areas at each end of the ramp for wheelchair manoeuvring.

Therefore it is recommended the following;

#### **Maximum slope**

- a) For a rise not exceeding 100mm a slope of 1:6 with assistance.
- b) For a rise not exceeding 150mm a maximum slope of 1:8 unassisted.
- c) For a rise not exceeding 190mm a maximum slope of 1:10 unassisted.
- d) For a rise between 190mm and 300mm a maximum slope of 1:12 unassisted.
- e) For a rise exceeding 300mm a maximum slope of 1:14 for a length of 6m unassisted.

#### **Transition Tips**

The ends of boarding ramps shall provide a 5mm maximum edge, or height difference to the landing and where hinged to the conveyance there shall be a smooth transition onto the landing or conveyance.

#### **Ramp kerbs**

Ramps of 800mm to 1900mm in length shall provide 50mm minimum height kerbs. Ramps exceeding 1900mm in length shall provide 75mm minimum height kerbs and handrails in accordance with AS1428.1.

#### **Slip resistance**

The walking surface shall provide a surface in accordance with AS 4586 and HB 198.

#### **Handrails**

Handrails shall be provided on both sides of gangways with kerbs or kerbrails on both sides designed in accordance with AS1428.1 *Design for access and mobility*.

#### **Landings**

Landing areas to access the boarding ramp shall provide 1500mm minimum length to enable wheelchair turning.

### **Bus Boarding Ramps**

Portable boarding ramps used to access buses shall comply with the above requirements. Where the ramp is attached to the vehicle and is no more than 800mm in length then the bevelled edge of the ramp and floor well shall provide a 5mm maximum vertical edge with

a 1:4 maximum slope for a 60mm maximum length.

### **Taxi Boarding Ramps**

Portable boarding ramps used to access taxis shall comply with the above requirements. Where the ramp is attached to the vehicle and is more than 800mm in length then the ramp shall provide 50mm minimum height kerbs with bevelled edge tip of the ramp and floor well shall provide a 5mm maximum vertical edge with a 1:4 maximum slope for 60mm a maximum length.

### **Tram/light rail Boarding Ramps**

Portable boarding ramps used to access trams and light rail shall comply with the above requirements.

Where the ramp is attached to the vehicle and is no more than 800mm in length then the bevelled edge of the ramp and floor well shall provide a 5mm maximum vertical edge with a 1:4 maximum slope for a 60mm maximum length.

### **Train Boarding Ramps**

Portable boarding ramps used to access trains shall comply with the above requirements.



## Other matters

### **ACCESSIBLE REGIONAL AND RURAL TRANSPORT.**

While the focus of this reform is primarily modernising the technical requirements of the DSAPT issues of accessible regional and rural transport appear to be overlooked.

There are many small towns of less than 5,000 people where there are no taxis or regular route buses which rely upon community transport groups, courtesy vans operated by service clubs and government fund school transport. However, within this diverse mix of transport providers there are often no accessible transport services or at very limited times for local residents “in the know” like weekly get togethers.

This quilt work of services usually results in isolation of many locals with a disabilities and a barrier to tourism for families and groups that includes a person with a disability.

To enable greater equity in transport for people with disabilities it is recommended that government programs be developed to unlock the potential smaller rural and regional areas to facilitate partnerships between commercial providers and community to achieve accessible transport that is demand responsive.

### **LONG DISTANCE INTERSTATE AND INTRASTATE TRAINS**

There are various examples of partially accessible intrastate trains around Australia. However, none provide a totally accessible experience that allows people who use a wheelchair to move independently between carriages or even beyond the accessible seating area.

The DSAPT or Guideline should provide design criteria for new trains with features that are accessible to people with disabilities, including the ability to access the buffet and sleeper cars, toilet and intercar gangway.

It is recommended that research be undertaken to review the various designs of on-board accessible toilets and the needs of the user group of people with physical disabilities to determine a standard or more detailed guideline for train carriages, ferries and potentially other conveyances.

### **SCHOOL BUSES**

It is noted that “dedicated school buses” are exempt from the requirements of the DDA Transport Standard. However, the rights of children with disabilities are no less important than those of adults with disabilities.

While the bus transport industry has historically put a case for exemption **it is our opinion that a total exemption for an infinite period is not consistent with the DDA** and that this part of the DDA Standard should be amended to include dedicated school buses, possibly with a longer timeframe for implementation – with a requirement for a 20% increase accessibility of the fleet every 5 years.