



**Response to exemptions granted by the
Australian Human Rights Commission –
June 2023**

Melbourne Metropolitan Railway Network

7 June 2023

Metro Trains Melbourne Pty Ltd ABN 43 136 429 948



Contents

INTRODUCTION	4
TRANSPORT STANDARDS SECTION 2.1: UNHINDERED PASSAGE	5
Condition 1 of the exemption from the operation of section 2.1	5
Findings of Audit	5
Action Strategy	6
PREMISES STANDARDS H2.2: ACCESSWAYS	10
Condition 1 of the exemption from the operation of clause H2.2	10
TRANSPORT STANDARDS SECTION 2.6: ACCESS PATHS - CONVEYANCES	11
Condition 3 of the exemption from the operation of section 2.6	11
Condition 5 of the exemption from the operation of section 2.6	12
Condition 6 of the exemption from the operation of section 2.6	13
Number of conveyances and mode of rail travel	13
Expenditure	14
Safety procedures and staff training	14
TRANSPORT STANDARDS SECTION 2.8: EXTENT OF PATH	15
Condition 3 of the exemption from the operation of section 2.8	15
Condition 5 of the exemption from the operation of section 2.8	15
Condition 6 of the exemption from the operation of section 2.8	15
TRANSPORT STANDARDS SECTION 6.4: SLOPE OF EXTERNAL BOARDING RAMPS	17
Condition 1 of the exemption from the operation of section 6.4	17
Data mapping	17
Strategy - Raised Platform Height and Raised Boarding Pads	17
Proposed Timeframes and Expenditure	18
Safety management plan	19
TRANSPORT STANDARDS SECTION 8.2: WHEN BOARDING DEVICES MUST BE PROVIDED	20
Condition 4 of the exemption from the operation of section 8.2	20
Conveyances and mode of rail travel	21
Stations where an assisted boarding device is provided only at a single door of any conveyance	21
Information for staff and passengers	21
Safety procedures and staff training	22
Assistance measures	22
ANNEXURE 1: RELEVANT SECTIONS OF THE TRANSPORT STANDARDS AND PREMISES STANDARDS	23



APPENDIX A – ACRONYMS, ABBREVIATIONS AND GLOSSARY	26
APPENDIX B – PEDESTRIAN CROSSINGS FORMING PART OF STATION ACCESS PATHS WHERE FLANGE GAPS AT LEVEL CROSSINGS ARE IDENTIFIED AS NON-COMPLIANT	27
APPENDIX C – STATIONS WITH CURVED PLATFORMS	30
APPENDIX D – DSAPT SECTION 6.4 SLOPE OF EXTERNAL BOARDING RAMPS	32



Introduction

The Melbourne metropolitan railway network (**Network**) currently comprises:

1. 17 lines;
2. 221 stations with 497 platforms;
3. Four train types being 115 Comeng units, 72 Siemens Nexas units, 212 X'Trapolis units and 51 High Capacity Metro Trains
4. Two diesel operated Sprinter trains on the Stony Point line

Head, Transport for Victoria (**Head, TfV**), established under the *Transport Integration Act 2010 (Vic)*, is a body corporate responsible for managing the Network on behalf of the State of Victoria.

Pursuant to a Franchise Agreement – Train between Head, TfV and Metro Trains Melbourne Pty Ltd (**Metro**) dated 2 October 2017, Metro is the operator of the Network.

Metro is a member of the Australasian Railway Association (**ARA**).

On 9 June 2022, the Australian Human Rights Commission (**AHRC**) granted temporary exemptions to members of the ARA in relation to various provisions of the *Disability Standards for Accessible Public Transport 2002 (Cth)* (**Transport Standards**) and the *Disability (Access to Premises – Buildings) Standards 2010 (Cth)* (**Premises Standards**).

Metro provides this document in relation to the Network and the applicable temporary exemptions which contain reporting and strategy requirements.

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Transport Standards section 2.1: Unhindered passage

Condition 1 of the exemption from the operation of section 2.1

The temporary exemption from the operation of section 2.1 'Unhindered passage' of the Transport Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, flange gaps of up to 75mm are permitted where a level crossing forms part of an access path on existing rail premises or existing rail infrastructure, subject to the following conditions:

1. the ARA member concerned conducts an audit of flange gaps at existing crossings against s 2.1 of the Transport Standards and cl H2.2 of the Access Code in the Premises Standards and provides a written report to the ARA and the Commission within 12 months setting out:
 - (a) the findings of the audit, including identifying each station where a level crossing forms part of an access path and, for each location, the nature of the non-compliance and the mode of rail travel
 - (b) a strategy demonstrating the proposed actions for remedy in each location identified in the audit by:
 - i. eliminating the flange gaps with a suitable product
 - ii. reducing the flange gaps to a maximum horizontal width of 55mm, or
 - iii. phasing out by grade separation
 - (c) the proposed time frames for the remedy in each location, and
 - (d) the proposed expenditure to remedy each location,so that the member may achieve compliance with the Transport Standards by the end of the exemption period

Findings of Audit

A desktop audit of existing datasets identified each station where a pedestrian level crossing forms part of an access path and, for each location, the nature of the non-compliance. The methodology used to prepare this audit utilises a collation of all available data from the Level Crossing Management System (LXM) as of April 2023 and from internal Metro departments to understand the outstanding non-compliances with the exemption. The full report of identified pedestrian crossings forming part of station access paths is documented in **Appendix B**.

Action Strategy

- (A) Elimination of Flange Gaps with Suitable Product and Reduction of Flange Gaps to a maximum horizontal width of 55mm

Background

VeloSTRAIL is a rubber panel pedestrian crossing system that eliminates the flange gaps. VeloSTRAIL is similar to the previously used PedeSTRAIL, the key difference is a compressible, replaceable rubber flangeway element that fills the flangeway gap between the rail profile and level crossing surface, which provides the gap-free solution.

In 2018, Metro has installed the VeloSTRAIL 47 at Keon Parade, Keon Park for trial and monitoring and is currently still in-service. It was reported that the grease-resistant wear parts were effective at keeping wheel flange lubrication away from the surface groove, however it caused grease deposition on the underside of the panel. Further site inspections identified that the renewed flangeway elements showed excessive signs of deterioration caused by rail lubrication and had to be replaced.

In April 2023, the VeloSTRAIL 47 was provisionally approved to be installed at the Diamond Creek and Montmorency pedestrian crossings. Metro is closely monitoring a slip resistance non-compliance due to the adoption of the VeloSTRAIL gap filler. In accordance with Metro's standards, in areas with pedestrian access the minimum slip resistance classification of P5 or R12 is to be achieved as per AS 4586. The slip resistance will be monitored as part of the trial and further investigation will be undertaken with the manufacturer. The provisional type approval of the VeloSTRAIL 47 expires June 2024 with several trial success criteria addressing the flangeway element deterioration and accumulation of railway lubrication. At the conclusion of the trial period, an evaluation report to assess the product's performance based on the trial success criteria will be reviewed as part of the type approval process. It is noted that there is no known product is available on the market that both minimises the flange gap and has a compliant slip resistant rating.

Strategy and Limitations

The VeloSTRAIL system supports a maximum train traversing speed of 120km/h. The Network supports regional passenger railway services which exceed these limits and currently would not allow for installation of this product. This limitation would not allow the product to be suitable at the following pedestrian crossings:

Table 1 Pedestrian Crossing on Rail Line Speed >120km/h

Pedestrian Crossing	Access to Station
Waratah Street, Altona	Seaholme Station
Pier Street, Altona	Altona Station
Maidstone Street, Altona	Westona Station
Old Calder Highway, Diggers Rest	Diggers Rest Station
Down end of Platform Craigieburn, Craigieburn	Craigieburn Station

As of May 2023, there is also currently no fully type approved product to remove or minimise flange gaps on the Network. Locations nominated for VeloSTRAIL installation trial shall be risk assessed with consideration given to availability and suitability of parts on curves of less than 350m, proximity to



rail lubricators and potential vandalism. Upon full type approval of the product, it is recommended for Department of Transport and Planning (DTP) to review the options proposed and initiate a formal development process as the next step to address flange gaps on pedestrian access paths. Any type approval may include conditions which will not allow for the product to be installed at all pedestrian crossings. Individual sites will be assessed for suitability.

Table 2 Proposed timeframes and expenditure for the Flange Gap Product Solution

Proposed Strategy Actions ⁽¹⁾	Proposed Timeframe	Estimated Expenditure
Joint inspection by installer and infrastructure maintainer	Every 3 months until June 2024	-
Type Approval Evaluation Report based on Trial Success Criteria	Within 6 months after the trial period	-
Installation of suitable flange gap reduction product - 1no. location over 2 tracks	Within 2 years of contract award, or otherwise agreed in project contract.	\$ 105,000 ⁽²⁾⁽³⁾

Note:

(1) Listed actions may only be completed in the listed order.

(2) Proposed cost does not include occupation cost.

(3) Proposed cost is indicative and for guidance only, subject to change.

(B) Phase out by Grade Separation

Metro is a member of the Victorian Railway Crossing Safety Steering Committee (VRCSSC) and the subgroup Railway Crossing Safety Delivery Group (RCSDG), continues to support Victorian Railway Level Crossing Safety Strategy and the associated action plans.

The flange gap non-compliance may be phased out by grade separation which has in most recent years been combined with the building of a new rail-under or rail-over station with new accessible pathways. Metro recognises grade separation to be the only fully compliant solution to flange gaps forming part of an access path.

Metro as a key stakeholder and alliance delivery partner in all Level Crossing Removal Projects (LXRP) within the Melbourne Network has successfully delivered 65 level crossing removals as part of the LXRP program. Metro will continue to deliver the following pedestrian crossings removals which have been committed for grade separation.

Table 3 List of Pedestrian Crossings within the LXRP wider Scope of Works

Pedestrian Crossing, Suburb	Access to Station	Delivery Timeframe	Expenditure
Glen Huntly Road, Glen Huntly	Glenhuntly Station	By 2023	\$507 million; Packaged with Glen Huntly Road and Neerim Road LXRP scope
Main Street, Pakenham	Pakenham Station	By 2024	\$844 million; Packaged with Main Street, McGregor Road and Racecourse Road LXRP scope
UeoP Pakenham, Pakenham			
Keon Parade, Keon Park	Keon Park Station	By 2025	\$277 million; Packaged with Keon Parade LXRP scope
Alameda St/Bethell Ave, Parkdale	Parkdale Station	By 2025	\$450 million; Packaged with Warrigal Road and Parkers Road LXRP scope
Parkers Road, Parkdale			
Up end of Platform East Ringwood, Ringwood East	Ringwood East Station	By 2025	\$572 million; Packaged with Dublin Road, Coolstore Road and Cave Hill Road LXRP scope
Down end of Platform East Ringwood, Ringwood East			
Up end of Platform Croydon, Croydon	Croydon Station	By 2025	
Kent Avenue, Croydon			
Webb Street, Narre Warren	Narre Warren Station	By 2025	\$259 million; Packaged with Webb Street LXRP scope
Barkly Street, Brunswick	Jewell Station	By 2030	To be packaged by LXRP

Pedestrian Crossing, Suburb	Access to Station	Delivery Timeframe	Expenditure
Union Street, Brunswick			
Albert Street, Brunswick	Brunswick Station	By 2030	To be packaged by LXP
Victoria Street, Brunswick			
West Street, Brunswick	Anstey Station	By 2030	To be packaged by LXP
Albion Street, Brunswick			
Highbury Road, Highett	Highett Station	By 2030	To be packaged by LXP
Station Street, Seaford	Seaford Station	By 2030	To be packaged by LXP
McDonald Street, Mordialloc	Mordialloc Station	By 2030	To be packaged by LXP
Bear Street, Mordialloc			
Anderson Street, Yarraville	Yarraville Station	By 2030	To be packaged by LXP
Hudsons Road, Spotswood	Spotswood Station	By 2030	To be packaged by LXP

Grade separation of the pedestrian crossings forming part of a station access path not listed in Table 3 above may be achieved by:

- Installation of pedestrian overpass
- Installation of pedestrian underpass

The proposed timeframes and expenditure are heavily reliant on the scope included in the grade separation of the pedestrian crossing.

Scope of Works	Proposed Timeframe	Estimated Expenditure
Pedestrian Overpass Solution (Bridge & ramps, no lifts)	Within 2 years of contract award, or otherwise agreed in project contract.	\$15 million - \$25 million (2)(3)(4)(5)
Pedestrian Underpass Solution	Within 2 years of contract award, or otherwise agreed in project contract.	\$20 million - \$35 million (2)(3)(4)(5)

Note:

(2) Proposed cost does not include occupation cost.

(3) Proposed cost is indicative and for guidance only, subject to change.

(4) Proposed cost does not include owners' costs (land acquisition, other Owner Development costs etc).

(5) Proposed cost does not include rail systems, track and electrical networks scope of works.

Premises Standards H2.2: Accessways

Condition 1 of the exemption from the operation of clause H2.2

The temporary exemption from the operation of clause H2.2 'Accessways' of the Premises Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, flange gaps of up to 75mm are permitted where a level crossing forms part of an accessway on existing rail premises or existing rail infrastructure, subject to the following conditions:

1. the ARA member concerned conducts an audit of flange gaps at existing crossings against s 2.1 of the Transport Standards and cl H2.2 of the Access Code in the Premises Standards and provides a written report to the ARA and the Commission within 12 months setting out:
 - (a) the findings of the audit, including identifying each station where a level crossing forms part of an accessway and, for each location, the nature of the non-compliance and the mode of rail travel
 - (b) a strategy demonstrating the proposed actions for remedy in each location identified in the audit by:
 - i. eliminating the flange gaps with a suitable product
 - ii. reducing the flange gaps to a maximum horizontal width of 55mm, or
 - iii. phasing out by grade separation
 - (c) the proposed time frames for the remedy in each location, and
 - (d) the proposed expenditure to remedy each location, so that the member may achieve compliance with the Premises Standards by the end of the exemption period

Metro's response to the above condition 1 is set out in the Transport Standards section 2.1 of this report.

Transport Standards section 2.6: Access paths - conveyances

Condition 3 of the exemption from the operation of section 2.6

The temporary exemption from the operation of section 2.6 'Access paths – conveyances' of the Transport Standards (set out in annexure 1) contains the following conditions:

For a period of 5 years, an access path is only required at a single door of existing rail conveyances, subject to the following conditions:

...

2. within 12 months of the grant of this exemption, the ARA member utilising this exemption installs signage in close proximity to the primary boarding point to notify passengers with mobility disability how access can be achieved through an alternative entry point, with staff assistance if required
3. the ARA member utilising this exemption reports to the Commission within 12 months of the exemption confirming the completion of the installation of the signage

...

Metro has consulted passengers in relation to the information they need to assist them with boarding different train types. Passengers requested that, at first instance, information be provided in relation to the location of the primary boarding point. If an alternative boarding point is required for a particular service, a staff member will greet the passenger at the primary point, and provide information about the alternative boarding point.

The nominated platform boarding point is identified at most stations by a floor decal showing the International Symbol for Access. Floor decals at the entrance of most platforms direct passengers to the nominated primary boarding point.



Decal directing passengers to the primary boarding point



Decal identifying the primary boarding point

Station staff are available at some locations to answer passenger queries. Each platform is fitted with a passenger intercom button to the closest control centre. This means passengers who are unsure of boarding processes at unstaffed stations can also speak to a staff member.

Condition 5 of the exemption from the operation of section 2.6

The temporary exemption from the operation of section 2.6 'Access paths – conveyances' of the Transport Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, an access path is only required at a single door of existing rail conveyances, subject to the following conditions:

...

5. the ARA member utilising this exemption provides a written strategy to the ARA and the Commission within 12 months of this exemption to demonstrate how the member intends to provide access paths between the entrance of a conveyance and the allocated spaces and other essential facilities for passengers with disabilities, including the relevant mode of rail travel, its proposed time frames for actioning this strategy, and proposed expenditure for that action so that the member may achieve compliance with the Transport Standards by the end of the exemption period

With Metro's current operating model, the driver is the sole operator of the train. Allocated spaces are provided from the first door of the first carriage, at intermittent points and at the last door of the sixth carriage. The operational demands of network service and punctuality do not allow for the driver to deploy a ramp for the entire length of the train. To maintain operations, additional staffing would be required at each platform on the Network. With over 500 platforms on the Network, this would require an operating cost of \$740 million per annum. This is not a desirable strategy as it does not achieve independent travel over time.

Metro has introduced a platform standard which achieves accessible boarding as far possible to allow clearance requirements to prevent platform/conveyance collisions and general maintenance tolerances. These tolerances are required to ensure that the Network can cater for the different train types, which includes freight.

While the standard, which includes rubber platform gap fillers, has proven to achieve independent boarding, it does not meet the prescribed tolerances within the Transport Standards. The driver remains available should any passenger require assistance. Metro has been progressively upgrading platforms to meet the standard.

Table 4 Strategy actions for improved access paths - conveyances

Scope of Works	Notes	Proposed Timeframes	Estimated Expenditure
(A) Raised platform height & installation of platform gap fillers throughout the length of platform (per platform)	Cannot be installed at curved platforms due to platform strike risk. Refer to Appendix C for full list of stations with curved platforms.	Within 2 years of contract award, or otherwise agreed in project contract.	\$445,000 ⁽²⁾⁽³⁾
(B) New Station Rebuild (station with 2no. platform)	For stations with curved platforms, new platform and track alignment required to	Within 3 years of contract award, or	\$50 million - \$80 million ⁽²⁾⁽³⁾⁽⁵⁾

Scope of Works	Notes	Proposed Timeframes	Estimated Expenditure
	achieve compliance with Metro standard	otherwise agreed in project contract.	
(C) Installation of platform gap fillers throughout the length of platform (per platform)	Only at platforms with existing compliant platform height.	Within 2 years of contract award, or otherwise agreed in project contract.	\$120,000 ⁽²⁾⁽³⁾

Note:

(2) Proposed cost does not include occupation cost.

(3) Proposed cost is indicative and for guidance only, subject to change.

(5) Proposed cost does not include rail systems, track and electrical networks scope of works.

Condition 6 of the exemption from the operation of section 2.6

The temporary exemption from the operation of section 2.6 'Access paths – conveyances' of the Transport Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, an access path is only required at a single door of existing rail conveyances, subject to the following conditions:

...

6. the ARA member utilising this exemption provides reports to the Commission every 12 months from the date of this exemption setting out the member's progress toward providing access paths between the entrance of a conveyance and all allocated spaces and facilities for passengers with disabilities, including:
 - (a) the number of conveyances over which this exemption is claimed and the relevant mode of rail travel
 - (b) the actual expenditure incurred in implementing the strategy in the previous 12 months, expressed as a dollar figure and as a percentage of total budget, and
 - (c) the safety procedures and staff training in place to ensure the safe and timely evacuation of people with disability from conveyances in the event that evacuation is required, including in the event of an emergency, and

Number of conveyances and mode of rail travel

Metro is the operator of Melbourne's metropolitan rail network. Metro claims this exemption over all the conveyances it operates.

As at May 2023, this included 115 Comeng units, 72 Siemens Nexus units, 212 X'Trapolis units. These trains are primarily operated in service as two coupled units, i.e. as six-car trains. Metro also operates 51 HCMT units, 34 of which are currently in service, as well as two diesel Sprinter trains on the Stony Point line.



Expenditure

Details of expenditure to deliver strategy will be provided for the period of June 2023 – June 2024 to align with condition 5.

Safety procedures and staff training

Evacuations are rare, and the specific circumstances of an incident will guide the staff response and interaction with emergency services. Emergency management procedures support staff decisions.

In limited circumstances, Metro or emergency services may decide to evacuate passengers at a non-platform location. Decisions to detain passengers require a careful assessment of the specific circumstances of an incident, and consideration of the assistance required by all impacted passengers. Metro is reliant on the advice of emergency services in an emergency situation.

In a non-emergency situation, Metro will firstly prioritise moving the train to a platform to enable alighting. If the train is unable to be moved, Metro will wait for assistance from emergency services before detaining non-ambulant passengers.

When detaining takes place at a station platform, Metro staff members can provide direct assistance in a manner similar to a normal station stop, provided doors are operational. If doors are not operational, the consideration will be similar to non-platform incidents, and emergency services may assist.

Frontline staff are trained in detaining and emergency response as applicable to their roles.

Transport Standards section 2.8: Extent of path

Condition 3 of the exemption from the operation of section 2.8

The temporary exemption from the operation of section 2.8 'Extent of path' of the Transport Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, an access path is only required at a single door of existing rail conveyances, subject to the following conditions:

...

3. the ARA member utilising this exemption reports to the Commission within 12 months of the exemption confirming the completion of the installation of the signage

Metro's response to the above condition 3 is set out in the section 2.6 of this report.

Condition 5 of the exemption from the operation of section 2.8

The temporary exemption from the operation of section 2.8 'Extent of path' of the Transport Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, an access path is only required at a single door of existing rail conveyances, subject to the following conditions:

...

5. the ARA member utilising this exemption provides a written strategy to the ARA and the Commission within 12 months of this exemption to demonstrate how the member intends to provide access paths between the entrance of a conveyance and the allocated spaces and other essential facilities for passengers with disabilities, including the relevant mode of rail travel, its proposed time frames for actioning this strategy, and proposed expenditure for that action so that the member may achieve compliance with the Transport Standards by the end of the exemption period

Metro's response to the above condition 5 is set out in the section 2.6 of this report.

Condition 6 of the exemption from the operation of section 2.8

The temporary exemption from the operation of section 2.8 'Extent of path' of the Transport Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, an access path is only required at a single door of existing rail conveyances, subject to the following conditions:

...

6. the ARA member utilising this exemption provides reports to the Commission every 12 months from the date of this exemption setting out the member's progress toward providing access paths between the entrance of a conveyance and all allocated spaces and facilities for passengers with disabilities, including:
 - (a) the number of conveyances over which this exemption is claimed and the relevant mode of rail travel



- (b) the actual expenditure incurred in implementing the strategy in the previous 12 months, expressed as a dollar figure and as a percentage of total budget, and
- (c) the safety procedures and staff training in place to ensure the safe and timely evacuation of people with disability from conveyances in the event that evacuation is required, including in the event of an emergency, and

Metro's response to the above condition 6 is set out in the section 2.6 of this report.

Transport Standards section 6.4: Slope of external boarding ramps

Condition 1 of the exemption from the operation of section 6.4

The temporary exemption from the operation of section 6.4 'Slope of external boarding ramps' of the Transport Standards (set out in annexure 1) contains the following conditions:

For a period of 5 years, for existing rail conveyances, where the relationship between the platform and rail carriage means that an external board ramp can only be provided at a gradient greater than 1 in 8 and less than 1 in 4, ARA members are not required to provide staff assistance in ascending or descending the ramp, subject to the following conditions:

1. within 12 months of the exemption, the ARA member utilising this exemption undertake data mapping of all stations and stops state-wide to identify the relevant locations where an external board ramp can only be provided at a gradient greater than 1 in 8 and less than 1 in 4 and provide to the Commission:
 - (a) a report setting out its findings from the data mapping, including identifying the locations at which an external board ramp can only be provided at a gradient greater than 1 in 8 and less than 1 in 4 and the relevant mode of rail travel
 - (b) a written strategy on how platforms can be improved at nominated boarding points on a case-by-case basis, including time frames for action and planned expenditure for the improvements, and
 - (c) a safety management plan addressing the safety procedures and staff training in place to ensure the safe and timely evacuation of people with disability from conveyances at these locations in the event that evacuation is required, including during an emergency

Data mapping

This data mapping identifies the stations at which an external board ramp can only be provided at a gradient greater than 1 in 8 and less than 1 in 4 and the relevant mode of rail travel. Metro maintenance inspection data available as of April 2023 was used to inform whether compliance for this requirement has been met for each station.

The data mapping is based on the height of the platform at boarding point and the carriage floor height of the Siemens type train running on the Northern Group, Central Group and Caulfield Group stations, and the Comeng type train for the Burnley Group and Clifton Hill Group stations. There are 79 platforms where boarding ramp slopes of 1 in 8 or better cannot be achieved, the full list is documented in Appendix D. The gradient is improved for the X'Trapolis and HCMT train types, which have lower carriage floor heights.

Strategy - Raised Platform Height and Raised Boarding Pads

Using a calculation of the vertical height difference of the train and platform, as well as the length of portable boarding ramps, Metro identified minimum works required to achieve a 1 in 8 gradient across platforms on the Network.

For new or upgraded stations, platform height standards will prevent any ongoing non-compliances. This ensures better alignment between platform heights with train floor heights.

For locations identified via data mapping, a solution requires the re-sheeting, re-surfacing, re-tactiling and any required line marking and coping for each platform.

Introduction of raised boarding pads (RBP) and platform gap fillers on various stations on the Network in the recent years has facilitated the development of independent boarding for passengers using wheelchairs, allowing independent access to trains without the provision of a ramp.

Installation of RBPs may prohibit some V/line services travelling through these locations due to the change in clearances which platform strikes. Speed restrictions may also be required to be imposed on Heritage and V/line running lines which will impact on timetables and scheduling, causing restrictions by delaying services.

Metro has completed platform works and made platforms compliant through several ongoing projects:

- Platform Gap Mitigation Project
- Better Stations
- Annual Infrastructure Renewal Works

Identified locations which do not allow for a 1 in 8 portable ramp or better are available for passengers on the [Accessibility Guide on the Metro website](#).

The following stations are currently in project delivery for station upgrade works:

- Clifton Hill
- Croydon
- Essendon
- Glen Huntly
- Glen Waverley
- Lalor
- Macleod
- Merri
- Moonee Ponds
- Pakenham
- Ringwood East
- Thornbury
- Victoria Park

Proposed Timeframes and Expenditure

Stations being completed or proposed level crossings removal projects were also removed from the list to be costed but for, stations (where to the best of our Metro SME's knowledge), the proposed gap to compliance has not or is not envisaged to be met in the future as part of the known scope. The costed solution has been based on the construction of a platform height to achieve a compliant ramp gradient based on previous costings. This solution requires the re-sheeting, re-surfacing, re-tactiling, line marking and coping for each platform and may require track realignment.

Table 5 Strategy actions for improved external boarding ramp

Scope of Works	Proposed Timeframe	Estimated Expenditure
Installation of raised boarding pad (per platform)	Within 2 years of contract award, or otherwise agreed in project contract.	\$200,000 ⁽²⁾⁽³⁾
Platform Resurfacing (per platform)	Within 2 years of contract award, or otherwise agreed in project contract.	\$325,000 ⁽²⁾⁽³⁾

Platform Resurfacing & track realignment (2 no. platforms and full pit renewal)	Within 2 years of contract award, or otherwise agreed in project contract.	\$3.3million - \$5.5million ⁽²⁾⁽³⁾
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Note:

(2) Proposed cost does not include occupation costs.

(3) Proposed cost is indicative and for guidance only, subject to change.

Safety management plan

Evacuations are rare, and the specific circumstances of an incident will guide the staff response and interaction with emergency services. Emergency management procedures support staff decisions.

In limited circumstances, Metro or emergency services may decide to evacuate passengers at a non-platform location. Decisions to detain passengers require a careful assessment of the specific circumstances of an incident, and consideration of the assistance required by all impacted passengers. Metro is reliant on the advice of emergency services in emergency situations.

In a non-emergency situation, Metro will firstly prioritise moving the train to a platform to enable alighting. If the train is unable to be moved, Metro will wait for assistance from emergency services before detaining non-ambulant passengers.

When detaining takes place at a station platform, Metro staff members can provide direct assistance in a manner similar to a normal station stop, provided doors are operational. If doors are not operational, the consideration will be similar to non-platform incidents, and emergency services may assist.

Frontline staff are trained in detaining and emergency response as applicable to their roles.

Transport Standards section 8.2: When boarding devices must be provided

Condition 4 of the exemption from the operation of section 8.2

The temporary exemption from the operation of section 8.2 'When boarding devices must be provided' of the Transport Standards (set out in annexure 1) contains the following condition:

For a period of 5 years, a manual or power assisted boarding device is only required at a single door of an existing rail conveyance, subject to the following conditions:

...

4. any ARA member utilising the exemption provides a report to the Commission and the ARA within 12 months of the grant of this exemption on:
 - (a) the number of conveyances over which this exemption is claimed, including the relevant mode of rail travel
 - (b) the number of stations where an assisted boarding device is provided only at a single door of any conveyance consistent with this exemption
 - (c) the measures taken to ensure that staff and passengers are adequately informed of:
 - i. the doors of rail conveyances at which boarding devices are available, and
 - ii. the equivalent access measures available, including how passengers can signal for assistance from staff at the equivalent access location
 - (d) the safety procedures and staff training in place for the safe and timely evacuation of people with disability from conveyances at locations where an assisted boarding device is only provided at a single door of a conveyance in the event of a need to evacuate, including an emergency, and
 - (e) measures taken to ensure that assistance is provided to passengers at each station at all times the railway is operating, whether by the driver of the conveyance or by ensuring sufficient staff are available at stations to assist passengers through the deployment of the assisted boarding device, the number of staff at each station and the roles in which they are employed, and the planned and actual expenditure incurred in implementing these measures, expressed as a dollar figure and as a percentage of total budget

Conveyances and mode of rail travel

Metro claims this exemption over all the conveyances it operates.

As at May 2023, this included 115 Comeng units, 72 Siemens Nexus units, 212 X'Trapolis units. These trains are primarily operated in service as two coupled units, ie as six-car trains. Metro also operates 51 HCMT units, 34 of which are currently in service, as well as two diesel Sprinter trains on the Stony Point line.

Stations where an assisted boarding device is provided only at a single door of any conveyance

Metro Trains' network includes 221 stations.

The first set of passenger doors on the front carriage of the train is the primary boarding point for all Metro Trains, regardless of the station. Metro staff members can provide direct assistance at that door, which may include deploying a boarding ramp.

If an alternative boarding point is required - for example, because all wheelchair accessible spaces adjacent to the first door are already in use - the Metro staff member will greet the passenger at the primary boarding point, and assist them to the alternative boarding point. The Metro staff member will then provide direct assistance at that door. Again, this may include deploying a boarding ramp at that door. The location of the alternative boarding door differs depending on train type.

Information for staff and passengers

Metro has consulted passengers in relation to the information they need to assist them with boarding different train types. Passengers requested that, at first instance, information be provided in relation to the location of the primary boarding point. As noted above, if an alternative boarding point is required for a particular service, a staff member will greet the passenger at the primary point, and provide information about the alternative boarding point.

The nominated platform boarding point is identified at most stations by a floor decal showing the International Symbol for Access. Floor decals at the entrance of most platforms direct passengers to the nominated primary boarding point.



Decal directing passengers to the primary boarding point



Decal identifying the primary boarding point

Station staff are available at some locations to answer passenger queries. Each platform is fitted with a passenger intercom button to the closest control centre. This means passengers who are unsure of boarding processes at unstaffed stations can also speak to a staff member.

Passengers can also obtain boarding information from other sources including:



- Metro’s website (see <http://www.metrotrains.com.au/accessibility/boarding>);
- Travellers Aid Centres;
- education sessions conducted by Metro’s Community Education Unit; and
- education/confidence-building events like Try Before You Ride.

Frontline staff are trained in providing boarding information and assistance as applicable to their roles.

Safety procedures and staff training

As noted above, when detraining takes place at a station platform, Metro staff members can provide direct assistance in a manner similar to a normal station stop, provided doors are operational. If doors are not operational, the consideration will be similar to non-platform incidents discussed above, and emergency services may assist.

Frontline staff are trained in detraining and emergency response as applicable to their roles.

Assistance measures

To ensure assistance is available to passengers at each station at all times the railway is operating, Metro train drivers provide direct assistance to passengers who require boarding assistance. Conductors on the Stony Point line fulfill this role. This work is done as part of their normal employment duties. As at May 2023, Metro employed 1330 drivers.

In some cases, station staff do also provide this assistance. Metro employs over 1000 station staff, with varying numbers rostered at different stations at various days and times. They fulfill a variety of duties, such as providing customer service, selling tickets, and staffing ticket barriers.

Annexure 1: relevant sections of the Transport Standards and Premises Standards

2.1 Unhindered passage

- (1) An access path that allows unhindered passage must be provided along a walkway, ramp or landing.
- (2) An access path must comply with **AS1428.2 (1992) Clause 8.1**.

Premises	Infrastructure
except premises to which the Premises Standards apply	except airports that do not accept regular public transport services

2.6 Access paths — conveyances

- (1) Subject to subsection (3) and section 2.7, an access path that allows continuous and unhindered passage must be provided with a minimum width of at least 850 mm.
- (2) Subsection (1) applies to doorways and stairs, and between entrances, exits, allocated spaces and other essential facilities for passengers using wheelchairs and other mobility aids.
- (3) If the conveyance exists or is ordered before the commencement of this section, the minimum width may be reduced to 800 mm at any doorway restriction.

Conveyances

- Buses
- Ferries
- Trains
- Trams
- Light rail

2.8 Extent of path

- (1) An access path must extend from the entrance of a conveyance to the facilities or designated spaces provided for passengers with disabilities.
- (2) Up to 50 mm of an adjacent allocated space may be used as part of the access path.
- (3) If an access path cannot be provided, the operator must provide equivalent access by direct assistance.

Conveyances

- Buses

- Ferries
- Trains
- Trams
- Light rail

6.4 Slope of external boarding ramps

The slope of an external boarding ramp must not exceed:

- (a) 1 in 14 for unassisted access (**AS/NZS3856.1 (1998) Clause 2.1.8 (e)** (including the notes)); and
- (b) 1 in 8 for unassisted access where the ramp length is less than 1520 mm (**AS1428.2 (1992) Clause 8.4.2 (a)** and **AS1428.1 (2001) Figure 8**); and
- (c) 1 in 4 for assisted access (**AS/NZS3856.1 (1998) Clause 2.1.8 (e)**).

Conveyances

except dedicated school
buses and small aircraft

8.2 When boarding devices must be provided

- (1) A manual or power assisted boarding device must be available at any accessible entrance to a conveyance that has:
 - (a) a vertical rise or gap exceeding 12 mm (**AS/NZS3856.1 (1998) Clause 2.1.7 (f)**); or
 - (b) a horizontal gap exceeding 40 mm (**AS/NZS3856.1 (1998) Clause 2.1.8 (g)**).

Conveyances

except dedicated school
buses and small aircraft

H2.2 Accessways

- (1) An *accessway* must comply with AS 1428.2.
- (2) If an *accessway* branches into 2 or more parallel tracks:
 - (a) the ends of each track must be on the main pedestrian traffic routes; and
 - (b) the parallel tracks must have equal convenience and be located as close as practicable to the main pedestrian branch.
- (3) The minimum unobstructed width of an *accessway* must be 1.2 m, except that:
 - (a) the minimum unobstructed width of a moving walkway forming part of an *accessway* may be not less than 850 mm; and
 - (b) the minimum unobstructed width of a doorway in an *accessway* may be not less than 850 mm.

- (4) Poles, columns, stanchions, bollards and fixtures must not project into an *accessway*.
- (5) Obstacles that abut an *accessway* must have a *luminance contrast* with a background of not less than 30%.
- (6) Manoeuvring areas that allow a 180 degree wheelchair turn must comply with clause 6.2 of AS 1428.2.
- (7) A passing area must be provided at least every 6 metres along any two-way *accessway* that is less than 1 800 mm wide.
- (8) Ground and floor surfaces must comply with clause 9 of AS 1428.2 and AS 1428.1. Supplement 1 provides criteria for the selection of floor surfaces.
- (9) The requirements of subparagraph D3.3 (c) (ii) do not apply to Class 9b or Class 10 public transport buildings.

Appendix A – Acronyms, abbreviations and glossary

ARA	Australian Railway Association
DeoP	Down end of Platform
DTP	Department of Transport and Planning - The Victorian government department responsible for the delivery and planning of new and upgraded transport infrastructure and the ongoing operation and coordination of the State's transport networks.
FA	Franchise Agreement
Flange Gap	Gap between the steel rail track and the road or surrounding pavement that permits train wheels to safely travel through level crossings. Flange gaps are required at level crossings to allow a train's wheels to pass without obstruction.
HCMT	High Capacity Metro Trains
Level Crossing	An intersection where a railway line crosses a road or path at the same level.
Local Station	A Station that typically does not include staff other than Protective Services Officers in the evenings.
LXM	Level Crossing Management System
LXRP	Level Crossing Removal Project (formerly known as Level Crossing Removal Authority)
Metro/MTM	Metro Trains Melbourne
Premium Station	A Station that has passenger service staff during all timetabled operational hours and Protective Services Officers in the evenings.
RBP	Raised Boarding Pad
SME	Subject Matter Expert - An experienced person, nominated by the discipline Head of Engineering and/or Engineering Manager, who has the capability to provide expertise on a particular subject.
Network	Melbourne metropolitan railway network
Type Approval	Products installed on the Metropolitan Rail Network must be approved for use prior to being installed and commissioned. A list of products approved by MTM is detailed within the Approved Engineering Product List. If a product does not exist within the AEPL it must be approved for use by following the MTM Type Approval Procedure.
UeoP	Up end of Platform



Appendix B – Pedestrian crossings forming part of station access paths where flange gaps at level crossings are identified as non-compliant

No	Station	Train Line	Pedestrian Crossing Name	Rail Chainage	Pedestrian Crossing Description
1	Clifton Hill	Mernda Line	Ramsden St	6.42	Up Footpath
2	Merri	Mernda Line	UeoP MERRI	7.962	Footpath
3	Northcote	Mernda Line	Charles St	8.189	Up Footpath
			Arthurton Rd	9.059	Up Footpath
4	Croxton	Mernda Line	Beaconsfield Pde	9.532	Footpath
			Gadd St	9.701	Footpath
5	Thornbury	Mernda Line	Hutton St	10.551	Up Footpath
			DeoP THORNBURY	10.7	Footpath
6	Regent	Mernda Line	UeoP REGENT (Stewart St)	13.529	Footpath
			Deop REGENT (Wild St)	13.696	Footpath
7	Keon Park	Mernda Line	Keon Pde	17.442	Up Left Footpath
8	Lalor	Mernda Line	Paschke Cr	20.657	Up Left Footpath
9	Westgarth	Hurstbridge Line	Westgarth St	7.478	Up Footpath
10	Dennis	Hurstbridge Line	Victoria Rd	8.561	Down Footpath
11	Fairfield	Hurstbridge Line	Station St	9.253	Up Footpath
12	Alphington	Hurstbridge Line	Yarralea St	10.591	Up Footpath
13	Macleod	Hurstbridge Line	DeoP MACLEOD	17.786	Footpath
14	Montmorency	Hurstbridge Line	UeoP MONTMORENCY	24.668	Footpath
15	Diamond Creek	Hurstbridge Line	UeoP DIAMOND CREEK	32.574	Footpath
16	Hurstbridge	Hurstbridge Line	UeoP HURSTBRIDGE	37.825	Footpath
			DeoP HURSTBRIDGE	38.092	Footpath
17	Yarraville	Williamstown Line	Anderson St	7.624	Up Footpath
18	Spotswood	Williamstown Line	Hudsons Rd	9.125	Down Footpath
19	Seaholme	Werribee Line	Waratah St	16.21	Footpath
20	Altona	Werribee Line	Pier St	17.057	Up Footpath
21	Westona	Werribee Line	Maidstone St	18.653	Up Left Footpath
22	Keilor Plains	Sydenham Line	Ueop KEILOR PLAINS	19.521	Up Footpath
23	Diggers Rest	Sydenham Line	Old Calder Hwy	32.813	Footpath
24	Kensington	Craigieburn Line	Macaulay Rd	3.5	Up Footpath



No	Station	Train Line	Pedestrian Crossing Name	Rail Chainage	Pedestrian Crossing Description
25	Moonee Ponds	Craigieburn Line	Puckle St	6.808	Up Footpath
26	Pascoe Vale	Craigieburn Line	Gaffney St	11.338	Up Footpath
27	Craigieburn	Craigieburn Line	DeoP CRAIGIEBURN	26.176	Down Footpath - Right
28	North Melbourne	Upfield Line	Macaulay Rd	3.188	Up Footpath
29	Royal Park	Upfield Line	UeoP ROYAL PARK	5.388	Up Footpath
30	Jewell	Upfield Line	Barkly St	6.406	Footpath
			Union St	6.606	Up Footpath
31	Brunswick	Upfield Line	Albert St	7.212	Up Footpath
			Victoria St	7.414	Up Footpath
32	Anstey	Upfield Line	West St	7.785	Footpath
			Albion St	8.109	Up Footpath
33	Batman	Upfield Line	Gaffney St	11.097	Up Footpath Left (East)
34	Merlynston	Upfield Line	DeoP MERLYNSTON	12.562	Footpath Left (East)
35	Fawkner	Upfield Line	DeoP FAWKNER	13.272	Down Footpath
36	Gowrie	Upfield Line	DeoP GOWRIE	14.83	1 Footpath Left (East)
37	Upfield	Upfield Line	Barry Rd	18.755	Up Footpath
38	Narre Warren	Pakenham - Cranbourne Line	Webb St	40.609	Up Footpath
39	Berwick	Pakenham - Cranbourne Line	UeoP BERWICK	44.63	Footpath Left (Up Track)
40	Beaconsfield	Pakenham - Cranbourne Line	UeoP BEACONSFIELD	46.91	Footpath Right
41	Officer	Pakenham - Cranbourne Line	UeoP OFFICER	51.384	Footpath
42	Pakenham	Pakenham - Cranbourne Line	Main St	58.023	Down Footpath Left
			UeoP PAKENHAM	58.111	Footpath
43	Prahran	Sandringham Line	Greville St	6.67	Up Footpath
44	Ripponlea	Sandringham Line	Glen Eira Rd	9.912	Up Footpath
45	North Brighton	Sandringham Line	Bay St	13.324	Up Footpath
46	Middle Brighton	Sandringham Line	Church St	14.598	Up Footpath
47	Brighton Beach	Sandringham Line	South Rd	16.094	Up Footpath
48	Hampton	Sandringham Line	Hampton St	17.797	Up Footpath
49	Sandringham	Sandringham Line	Abbott St	19.004	Up Footpath



No	Station	Train Line	Pedestrian Crossing Name	Rail Chainage	Pedestrian Crossing Description
50	Glenhuntly	Frankston Line	Glen Huntly Rd	13.371	Up Footpath Left
51	Highett	Frankston Line	Highett Rd	20.14	Up Footpath
52	Parkdale	Frankston Line	Alameda St/Bethell Ave	25.815	Footpath
			Parkers Rd	26.015	Up Footpath
53	Mordialloc	Frankston Line	Mc Donald St	27.583	Down Footpath
			Bear St	27.802	Up Footpath
54	Aspendale	Frankston Line	Groves Street	30.411	Up Footpath
55	Seaford	Frankston Line	Station St	39.225	Up Footpath
56	Frankston	Frankston Line	Beach St	43.753	Footpath
57	Somerville	Frankston Line	Pedestrian Crossing	55.78	Standalone
58	Tyabb	Frankston Line	Pedestrian Crossing	59.904	Standalone
59	Crib Point	Frankston Line	Disney St	70.91	Down Footpath
60	Kooyong	Glen Waverley Line	Glenferrie Rd	8.201	Up Footpath
61	Tooronga	Glen Waverley Line	UeoP TOORONGA	9.514	Up Footpath
			Tooronga Rd	9.754	Up Footpath
62	Glen Iris	Glen Waverley Line	High St	11.61	Up Footpath Right
63	Riversdale	Alamein Line	Prospect Hill Rd	11.515	Down Footpath
			Riversdale Rd	11.87	Down Footpath
64	Willison	Alamein Line	DeoP WILLISON	12.239	Footpath
65	Hartwell	Alamein Line	DeoP HARTWELL	13.328	Down Footpath (Right)
66	Burwood	Alamein Line	UeoP BURWOOD	14.118	Footpath
67	Ashburton	Alamein Line	DeoP ASHBURTON	15.472	Footpath
68	Heathmont	Belgrave Line	UeoP HEATHMONT	28.023	Footpath
69	Ferntree Gully	Belgrave Line	DeoP FERNTREE GULLY	35.983	DEOP Ferntree Gully
70	Upper Ferntree Gully	Belgrave Line	Hilltop Rd	37.502	Hilltop Rd Pedestrian Down
71	Ringwood East	Lilydale Line	UeoP EAST RINGWOOD	27.754	Right Footpath
			DeoP EAST RINGWOOD	27.874	Footpath
72	Croydon	Lilydale Line	UeoP CROYDON	30.961	Footpath
			Kent Av	31.05	Footpath
73	Lilydale	Lilydale Line	UeoP LILYDALE	39	Footpath
			DeoP LILYDALE	39.15	Footpath

Appendix C – Stations with Curved Platforms

Station	Station	Station
Aircraft	Essendon	North Melbourne
Alamein	Ferntree Gully	Northcote
Albion	Flemington Racecourse	Nunawading
Alphington	Flinders Street	Oakleigh
Armadale	Glen Iris	Pakenham*
Ascot Vale	Glenbervie	Pascoe Vale
Beaconsfield	Glenhuntly*	Patterson
Belgrave	Hartwell	Richmond
Berwick	Hawksburn	Ringwood
Blackburn	Heidelberg	Riversdale
Boronia	Heyington	Rushall
Box Hill	Holmesglen	Ruthven
Burnley	Hoppers Crossing	Sandown Park
Caulfield	Jordanville	Seaholme
Chatham	Kensington	Southern Cross
Clifton Hill	Keon Park*	Stony Point
Coolaroo	Kooyong	Strathmore
Craigieburn	Laburnum	Syndal
Cranbourne	Lalor	Tecoma
Croxton	Laverton	Toorak
Darebin	Lynbrook	Tooronga
Darling	Malvern	Tottenham
Diamond Creek	Middle Footscray	Upper Ferntree Gully
Eaglemont	Moonee Ponds	Upwey
East Camberwell	Moorabbin	Watergardens
East Malvern	Mooroolbark	Werribee
East Richmond	Mordialloc	West Richmond
Eltham	Mount Waverley	Westgarth
Epping	Narre Warren	Westona



Station
Williamstown
Willison

Station
Yarraman
Frankston

* Planned accessibility upgrades

Appendix D – DSAPT Section 6.4 Slope of external boarding ramps

Report of stations where 1 in 8 slope of external boarding ramp is not achieved.

Burnley Group (Stations – Platforms)	
Glen Iris	Platform 2
Darling	Platform 2
East Malvern	Platform 1
Glen Waverley	Platform 2
Burnley	Platform 2
Burnley	Platform 4
Hawthorn	Platform 1
Glenferrie	Platform 1
Auburn	Platform 1
Auburn	Platform 2
Auburn	Platform 3
Blackburn	Platform 2
Croydon	Platform 2
Ferntree Gully	Platform 2
Upwey	Platform 1
Upwey	Platform 2

Central Group (Stations – Platforms)	
Flinders Street	Platform 7
Flinders Street	Platform 12
East Malvern	Platform 1
Richmond	Platform 2
Richmond	Platform 3
Richmond	Platform 5
Richmond	Platform 7
Richmond	Platform 8
Richmond	Platform 9

Caulfield Group (Stations – Platforms)	
Hawksburn	Platform 1
Hawksburn	Platform 2
Toorak	Platform 1
Toorak	Platform 2
Toorak	Platform 4
Malvern	Platform 4
Yarraman	Platform 1
Narre Warren	Platform 2
Prahran	Platform 1
North Brighton	Platform 1
North Brighton	Platform 2
Middle Brighton	Platform 1
Middle Brighton	Platform 2
Brighton Beach	Platform 2
Brighton Beach	Platform 3
Hampton	Platform 1
Glen Huntly	Platform 2
Mordialloc	Platform 1
Mordialloc	Platform 2
Kananook	Platform 2
Bittern	Platform 1
Mordialloc	Platform 1



Northern Group (Stations – Platforms)	
Spotswood	Platform 1
Newport	Platform 1
Newport	Platform 2
Williamstown	Platform 1
Aircraft	Platform 1
Middle Footscray	Platform 2
Tottenham	Platform 2
Flemington Racecourse	Platform 1
Kensington	Platform 1
Kensington	Platform 2
Newmarket	Platform 2
Moonee Ponds	Platform 1
Essendon	Platform 2
Essendon	Platform 3
Strathmore	Platform 1
Strathmore	Platform 2
Pascoe Vale	Platform 2
Oak Park	Platform 1
Broadmeadows	Platform 2
North Melbourne	Platform 5
Royal Park	Platform 1
Royal Park	Platform 2
Jewell	Platform 2
Anstey	Platform 1
Coburg	Platform 1
Batman	Platform 1
Gowrie	Platform 1

Clifton Hill Group (Stations – Platforms)	
West Richmond	Platform 1
West Richmond	Platform 2
Merri	Platform 1
Regent	Platform 2
Ivanhoe	Platform 2
Heidelberg	Platform 1
Watsonia	Platform 1