

TSI PRM

HS UND CR

# SCOPE

- Enhance the accessibility of rail transport for people with reduced mobility
- accessibility of the public areas of the infrastructure (including stations) controlled by the Railway Undertaking, Infrastructure Manager or Station Manager.
- Solution for problems due to the interface platform-train by an holistic perspective between infrastructure and rolling stock
- needs for evacuation in the case of hazardous situations
- only applicable to the public areas of the stations and their zones of access controlled by the Railway Undertaking, Infrastructure Manager or Station Manager
- The transport of oversized items (for example: bicycles and bulky luggage) is **not** within the scope of this TSI

# Subsystems

- **Infrastructure:** track, points, engineering structures (footbridges, tunnels, etc.), associated station infrastructure (platforms, zones of access, etc.), safety and protective equipment
- **Rolling Stock:** Structure, command and control system for all train equipment, traction and energy conversion units, braking, coupling and running gear (bogies, axles, etc.) and suspension, doors, man/machine interfaces (driver, on-board staff and passengers), passive or active safety devices and requisites for the health of passengers and on-board staff.

Infrastructure

# Functional and technical specifications

Parking facilities for PRM

Doors and single level entrances

Passenger routes, main walking routes

Floor surfaces

Tactile information

Guiding paths

Glass door and wall markings

Toilets

Furniture

Ticketing counter or vending machines / Information counters

Ticket control machines

Lighting

Visual information:

signposting, pictograms, dynamic information

# Functional and technical specifications

Spoken information

Emergency exits, alarms

Geometry of footbridges and subways

Stairs

Handrails

Ramps (max 18%), escalators, lifts, travelators

Platform heights and offsets

Platform widths and edges of platforms

Ends of platforms

Boarding aids

Level track crossings

Commercial outlets, restaurant areas

Clean, smoke-free stations

## Obstacle-free route

- An obstacle free route is a route that can be freely navigated by all categories of PRM. It may include ramps or lifts
- Stopping points for other connecting modes of transport within the station confines (eg.: taxi, bus, tram, metro, ferry etc.);
- Car parks
- Accessible entrances and exits
- Information desks or other information systems
- Ticketing facilities
- Customer assistance
- Waiting areas
- Left luggage facilities;
- Toilet facilities
- Platforms

## Platform height and offset

- CR: : 550mm and 760mm above the top surface of the running surfacerail. Tolerances on these dimensions :−35mm/+ 0mm.
- CR where tramways (e.g. Stadtbahn or Tram-Train) are intended to stop, between 300mm and 380mm is permitted. Tolerances on these dimensions: +/-20mm.
- Curves with a radius < 500m, it is permitted for the platform height to be greater or less than those specified provided that the first useable step of the vehicle complies with the envelope
- CR: platform edges positioned at 550mm and 760mm, shall meet the minimum structure gauge and the conventional value  $b_{q0}$  from the track centre parallel to the running plane shall be obtained from the formula,

$$b_{q0} = 1650 + 3750/R$$

## Specific case

- New stations with a throughput of less than 1000 passengers per day (combined total of passengers embarking and disembarking) are not required to have lifts or ramps where these would otherwise be necessary to achieve full compliance with this clause if another station within 30 km on the same route provides a fully compliant obstacle-free route. In such circumstances the design of new stations shall incorporate provision for the future installation of a lift and/or ramps to make the station accessible to all categories of PRM.
- Due to the rapid implementation plan of the Austrian authorities, for the duration of this temporary specific case, the passenger number requirements detailed in clauses 7.3.1 (Infrastructure) and 4.1.4 (operating rules for obstacle-free routes) shall only apply to infrastructure that is upgraded or renewed for stations that have an average daily passenger flow of 2000 passengers or more, combined embarking and disembarking.

## National rules

- When a new, renewed or upgraded stations with a throughput <1000 passengers a day, combined embarking and disembarking, averaged over a 12 month period, does not meet the requirements related to the lift and/or ramp aspects of the obstacle-free route requirements, National Rules shall be applied for organising the transport of wheelchair users by an accessible means between this non accessible station and the next accessible station on the same route.
- Parking facilities and tactile path
- Emergency exits and alarms
- Stairs and staircases
- Floor surface (Slip resistance)
- Dimension and equipment of toilet for wheelchair users
- Station forecourt lighting
- Visual information (signposting, pictograms, dynamic information)
- Safety information and instruction
- Ramps, escalators and travelators
- Minimum structure gauge, track gauge widening
- Level track crossing (if supervised or not)

# Rolling Stock

## Functional and technical specifications

- Seats
- Wheelchair spaces, priority seats (incl. assistance dog)
- Doors
- Lighting
- Toilets
- Clearways
- Customer information
- Height changes
- Handrails, handholds
- Wheelchair accessible sleeping accommodation
- Step position for vehicle access and egress

## Interoperability Constituents

- Passenger visual information equipment
- Boarding aids
- Pushbuttons
- Baby changing unit
- Tactile signage
- Ticket vending machines
- Standard and universal toilet modules
- Passenger information equipment (audible and visual)
- Passenger alarm devices
- During transition period ( 6 yrs), interoperability constituents not holding an EC Declaration of Conformity or Suitability for Use may exceptionally be incorporated into subsystems