



Towards common European criteria on accessibility of the built environment:

Outcomes of Mandate M/420

# Technical performance criteria and specifications: FprCEN/TR 17621

Monika Klenovec, PT Leader Soren Ginnerup, PT







## FprCEN/TR 17621 is a Technical Report

### This implies:

- is not a European standard with requirements; no obligation at national level!
- informative content (,state of the art' examples); technical criteria show example(s) to fulfil the functional requirements / recommendations of EN 17210 (with same structure)
- Figures show examples of ,good practice' reflecting ISO 21542,
   ENs or solutions in different countries
- is not a stand-alone document and to be used alongside with the EN
- alternatively to be replaced by national standards / regulations etc.









## Sources of information

- a) Main source of information: **ISO 21542** (2011/2020)
- b) Additional sources include (referenced):
  - ENs on Railway Applications for Infrastructure
  - Other specific ENs and product related ENs
  - National standards
  - Guidance on a specific matter





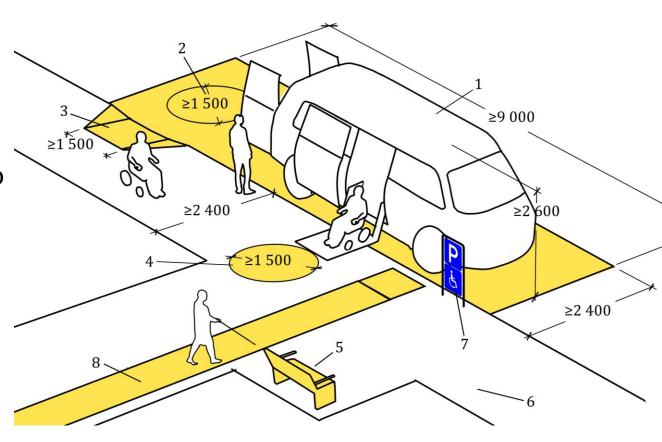




## FprCEN/TR 17621, example descriptive key texts

#### **Boarding points example:**

- 1. minibus or taxi
- 2. manoeuvring space for rear entry or exit using lift or ramp
- 3. kerb ramp, provision of TWSIs according to national regulation, if relevant
- 4. manoeuvring space for side entry or exit using lift or ramp
- 5. seating for pedestrians waiting
- 6. footway
- 7. designated parking or taxi signage
- 8. tactile walking surface with guiding pattern



### Accessibility in the built environment



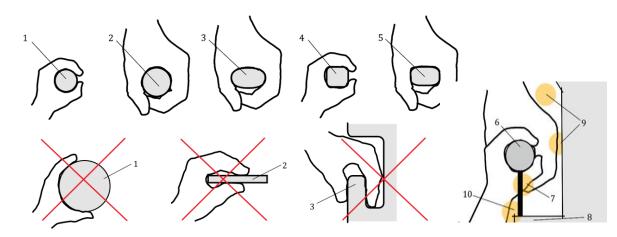




## **10.3 Handrails – EN 17210 versus FprCEN/TR 17621**

#### **10.3.5** Profile of handrails

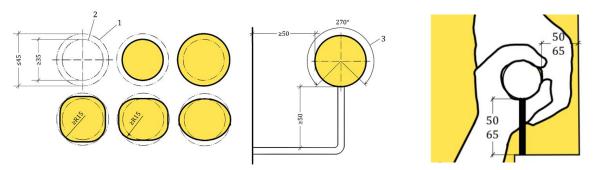
- a) The size and profile of the handrail shall allow easy grip for adults and children.
- b) Handrails shall have a surface which provides adequate resistance to hand slippage and does not cause damage or injuries to user's hands.....



Examples of handrail profiles suitable for adults and children

#### 10.3.5 Profile of handrails

- a) A rounded or elliptical profile that can be inscribed into a 45 mm circle, and subscribed to a 35 mm diameter circle, with a radius of the rounded edges minimum 15 mm.
- b) Handrail surface with smooth finish and no sharp edges, that facilitates the grip and sliding of the hand....



Examples of handrail profiles, support and clearance

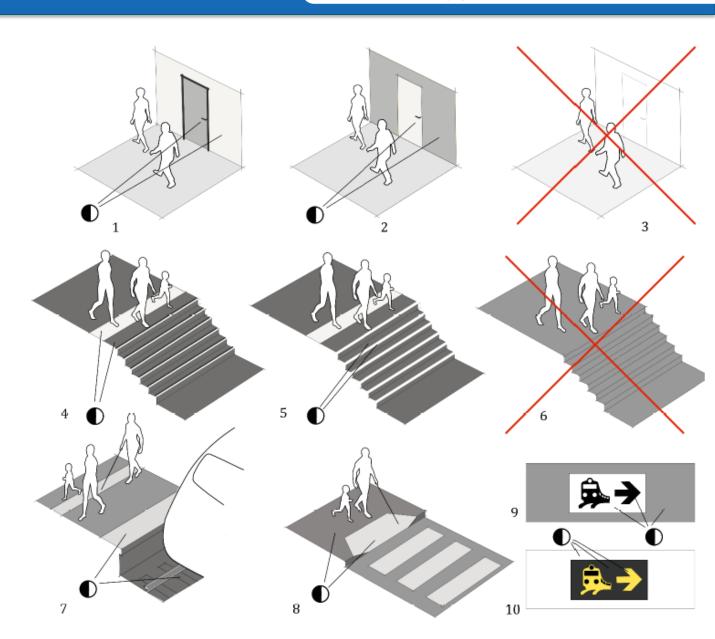






# FprCEN/TR 17621 general examples, visual contrast

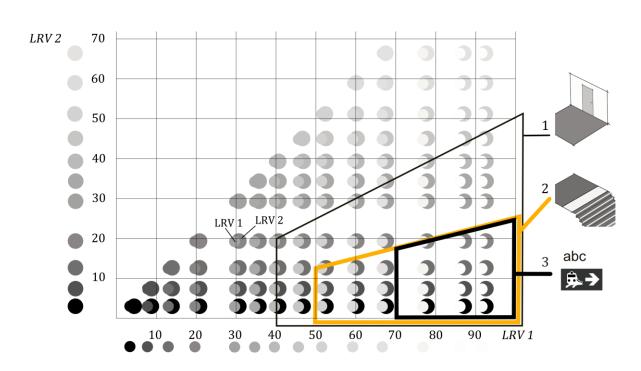
Examples of elements requring medium and high visual contrast for detectability and/or legibility







## FprCEN/TR 17621 detailed examples, visual contrast



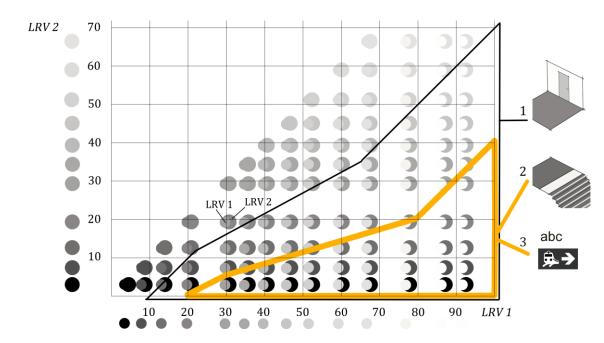


Diagram of accepted values for visual contrast, Michelson formula (ISO 21542)

Diagram of European Railway infrastructure accepted values for visual contrast, composite formula (EN 16584-1)

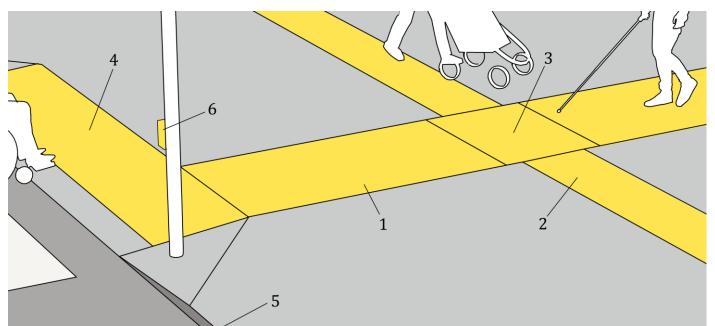
### Accessibility in the built environment



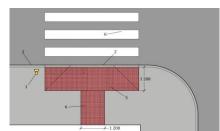


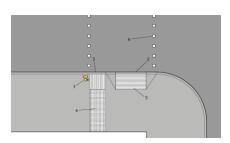


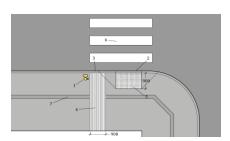
# FprCEN/TR 17621 general and detailed examples, pedestrian crossings

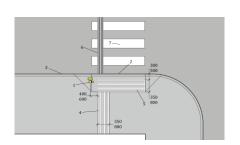


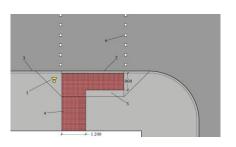
Example general use of tactile walking surface guidance and attention

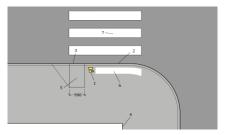


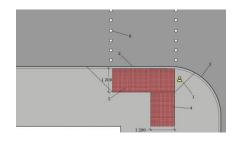












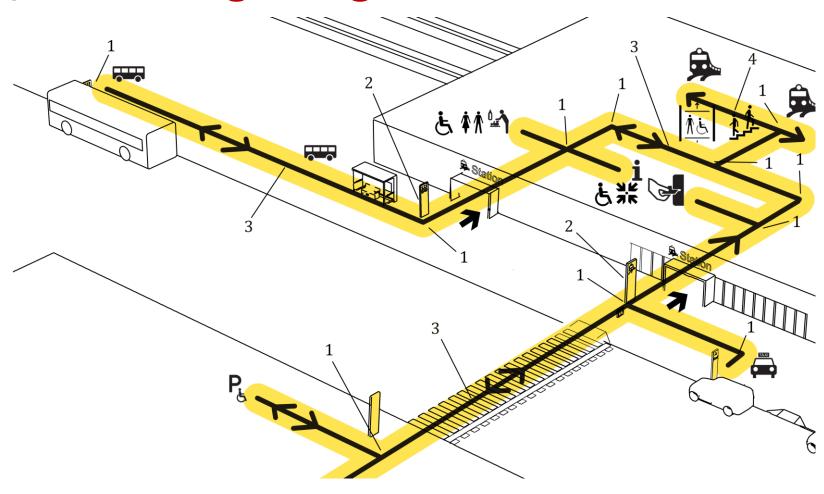
Miniatures showing 7 layout examples from different countries, Annex B







## **FprCEN/TR 17621** guiding to relevant standards

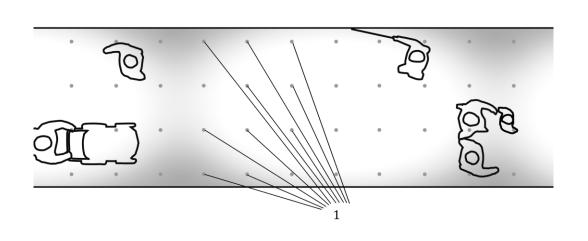


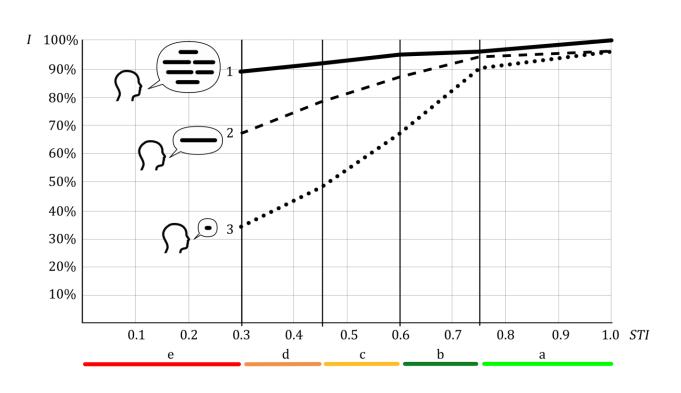
Wayfinding and railway infrastructure: EN 16584-2





## FprCEN/TR 17621 guiding to lighting / acoustic standards





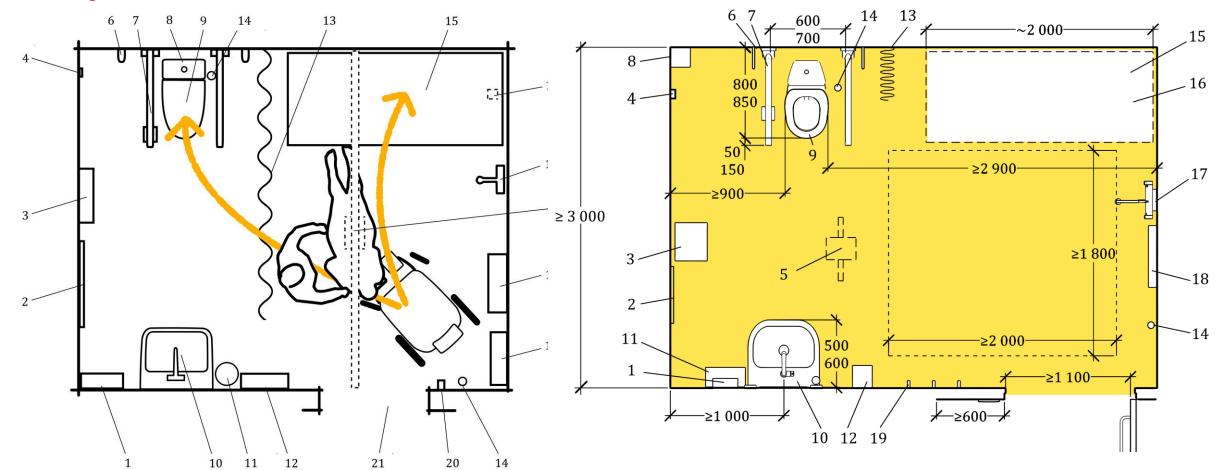
Lighting levels and uniformity: EN 12464-1

Acoustics and speech intelligibility: EN 60268-16





## Example information EN 17210 versus FprCEN/TR 17621



Example functionality of a changing places facility, EN 17210 © 2021 CEN – all rights reserved

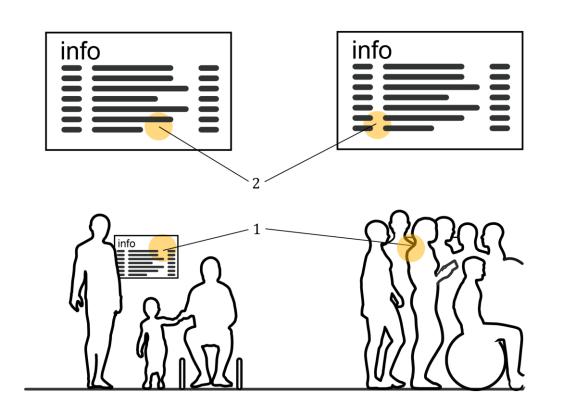
Example dimensions and details of a changing places facility, FprCEN/TR 17621

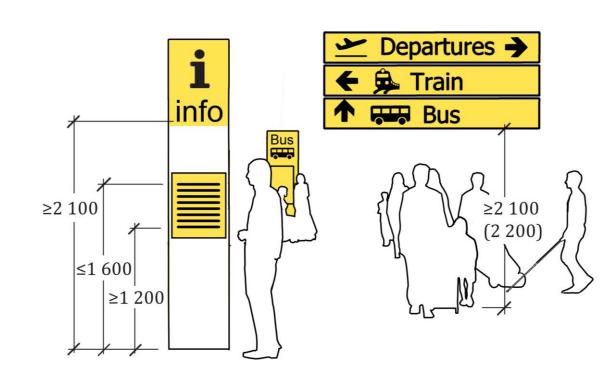






## Example of EN 17210 versus FprCEN/TR 17621





Example of screens at different heights, EN 17210

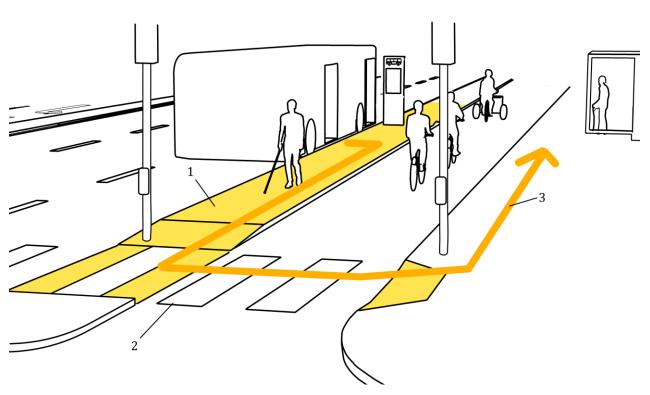
Example of placement of signage, including dimensions, FprCEN/TR 17621





## Bus stops, bicycle lanes and safety for vision impaired

 Example of accessible route to and from bus shelter, footway and bus stop platform via controlled pedestrian crossing, FprCEN/TR 17621



#### **Example of bus stop along bike lane**

- 1. bus stop platform separated from footpath by bike lane
- 2. pedestrian crossing connected to bus stop platform
- route to and from bus stop shelter via pedestrian crossing





## Standardization documents are not enough!

Further implementation of accessibility & design for all criteria in the built environment by public procurement, architects, facility managers and building legislation is needed – based on prEN 17210

# Thanks for your attention! Questions?

Contact: CEN/CENELEC JTC 11 Secretariat via Fernando Machicado Martin <fmachicado@une.org>

Let's make a society of all ages and diversities a reality in an accessible diversities a reality environment!

Abilities of people change from childhood to old age and vary substantially among individuals.