# Station Elements

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>Station</td>
</tr>
<tr>
<td>B2</td>
<td>Underpass</td>
</tr>
<tr>
<td>B3</td>
<td>Platform</td>
</tr>
<tr>
<td>B4</td>
<td>Overpass</td>
</tr>
</tbody>
</table>
Introduction

It is clear that railway stations must be functional, but they also should be more than a mere instrument for satisfying a basic need. They also have to demand aesthetic and emotional demands. Rail Baltica and their Regional Stations must use its chance of meeting such demands.

Additionally, the importance of offering the customer an aesthetic experience has either been underestimated, or simply disregarded so far, although it is a fundamental requirement if customers are to gain confidence in the system to be built in the three Baltic states. The overall design, the interior appointment and, of course, the architecture of station buildings as aesthetic space to be experienced is essential for the exit of Rail Baltica system.

In the long term, the Rail Baltica shall be associated with an improvement in the living of Baltic citizens and Regional Stations shall be the visible identity of a new system crossing Estonia, Latvia and Lithuania, and connecting the main European cities with the Baltic capitals through their regions. Rail Baltica shall work as a sophisticated customer system that shall lead to a new culture of railway travel with its own identity.

The identity of the Regional Stations shall be clear and must become a recognizable brand item. Arriving in a station shall be a pleasant stage of a pleasant trip. The station shall ensure, for arriving and departure passengers, a clear sequence of spaces and elements.

For the usability and public acceptance of the station, functionality is important. If the railway station’s aesthetic characteristics and atmosphere are to be attraction points, then normal transportation operations must be discreet. The railway station needs also to be an important architectural element, but this seems to have been forgotten. When the rail was developed in several countries around the world in the beginning of the 19th century, the Regional Stations was not only the identity of the rail line, but also the main connection between the far population and the main centres and capitals. The station was not only a vital link for each town and village to its wider locality, region, and state, it was also the meeting place. The regional railway station as a permanent architectural manifestation has not just been important for customers entering it but it has also been the centre of urban life. The regional stations were developed with a country identity but mainly with the regional or local identity. The regional station was the first welcome building when passengers arriving and it was clear that was designed to identify one region, sometimes with local architecture, regional elements, identifiable materials as hand painted tiles, local stone, local wood, pitched roofs, colours etc.

The long tradition of the railways shall be emphasized with modern contemporary architecture for the regional stations and to add a landmark as a lantern that guides passengers through Baltic landscape, peaceful and calm.

Customer habits shall be integrated in the design of the stations and the work done with the stakeholders can help the passengers to identify with the design of the stations. The aim of the Regional Station is a combination of functional efficiency and meaning. On one side, there is the building engineering, how to build, how to protect, how to organize, how it is working, how it operates but on the other side, there is the soul of the final object that need to give meaning and identify to the subject; and the idea is to use the history of the three countries and to express them in terms of a single identity and to have the passenger to participate in its function, feeling the building and the chosen approach.

The station as a house was the design approach during the history of regional stations in several countries and also in the Baltic states as references images in First Interim Report Traditional domestic Baltic architecture and the station as a home for commuters is the design approach to develop three options of design. The design is based on the principles of overall unity and diversity of individual elements.

The new railway station is designed as a consistently unified space to be experienced, satisfying every customer’s demand of it. The new concept of regional stations, expressed in the presented three options, is essentially determined by four factors: quality, economy, customer and identity. This will be achieved by a unified brand architectural image with permanent features and structures through the three states and about them keeping the identity of each. An architecture worthy of preservation, as well as local colour, gives a distinct personality to each railway station.
Station

B1.1 Station Classification
B1.2 International Station
B1.3 Regional Station
B1.4 Modular Strategy
B1.5 Growth Strategy
B1.6 Layout
B1.7 Design
B1.8 Structure
B1.9 Facade
B1.10 Floor
B1.11 Walls
B1.12 Ceiling
B1.13 Roof
B1.14 Signage and wayfinding
B1.15 Furniture
B1.16 Equipment
During peak hours the volume of the passengers rises. Based on the volume of passengers for days have been defined four types of station, each one with specific characteristics.

### Station classification

#### Volume of the passengers (person medium day)

<table>
<thead>
<tr>
<th>Type</th>
<th>Station Type</th>
<th>Volume of Travelers</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE 1 - International</td>
<td>Main Station</td>
<td>International Station</td>
</tr>
<tr>
<td>TYPE 2 - Landmark</td>
<td>Medium Station</td>
<td>&lt; 600 PMD</td>
</tr>
<tr>
<td>TYPE 3 - Basic</td>
<td>Small Station</td>
<td>&lt; 300 PMD</td>
</tr>
<tr>
<td>TYPE 4 - Platform</td>
<td>Essential Station</td>
<td>&lt; 150 PMD</td>
</tr>
</tbody>
</table>

#### Peak hours

![Graph showing daily variation for passengers travelling from the station and to the station](chart)
### Station classification

**Minimum Requirements**

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
<th>TYPE 3</th>
<th>TYPE 4</th>
<th>MINIMUM DIMENSIONS</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTERIOR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>All stations according to PRM TSI requirements</td>
</tr>
<tr>
<td>Advertisement</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td></td>
<td>-</td>
<td>As a revenue, advertisement shall be considered only in Type I and Type II. Other stations Type to be analysed if required.</td>
</tr>
<tr>
<td>Art</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>Please refer to Art chapter</td>
</tr>
<tr>
<td>ATM’s</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>-</td>
<td>Minimum one per station in Station box near TVM</td>
</tr>
<tr>
<td>Benches</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>For Type I,II and III</td>
</tr>
<tr>
<td>Branding</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>Please refer to Branding chapter for all elements mandatory to have branding</td>
</tr>
<tr>
<td>Canopy</td>
<td>●</td>
<td></td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>Minimum 100m</td>
</tr>
<tr>
<td>Cleaner’s Room</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>5,0x4,0m²</td>
<td>In station type I shall be according to size station.</td>
</tr>
<tr>
<td>Clock</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>Minimum one per platform</td>
</tr>
<tr>
<td>Controller’s Staff Room</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>5,0x4,0m</td>
<td>Furniture shall be provided for staff. Equipped with a safe</td>
</tr>
<tr>
<td>Elevators</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>Shall wheel chair dimension</td>
<td>In type IV only if it is impossible to provide a ramp according to PRM TSI regulation</td>
</tr>
<tr>
<td>Escalator</td>
<td>●</td>
<td></td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>Only for station Type I</td>
</tr>
<tr>
<td>Debris Room</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
<td>2,0x2,0m</td>
<td>Near Cleaning Room</td>
</tr>
<tr>
<td>First Aid Room</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
<td>4,0x3,0m</td>
<td>In station Type II this room can be part of the Police / Security room</td>
</tr>
</tbody>
</table>
## Station classification

### Minimum Requirements

<table>
<thead>
<tr>
<th>Interior</th>
<th>Room Type</th>
<th>Dimensions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>In station Type II this service can stand in the Ticket Office</td>
</tr>
<tr>
<td>Luggage Room</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>A room to store equipment and supplies</td>
</tr>
<tr>
<td>Baggage trolley</td>
<td>-</td>
<td>4,0x2,0m</td>
<td>-</td>
</tr>
<tr>
<td>Operation Room</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>In station Type II this service can stand in the Ticket Office</td>
</tr>
<tr>
<td>Passenger's Toilet</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>-</td>
</tr>
<tr>
<td>Public Information System</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>Minimum 1 per platform</td>
</tr>
<tr>
<td>Recycle Bins</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>Minimum 2 per platform</td>
</tr>
<tr>
<td>Refuse Room</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>-</td>
</tr>
<tr>
<td>Retail</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>In Station Type II, this room can be together with First Aid Room</td>
</tr>
<tr>
<td>Security Room</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>-</td>
</tr>
<tr>
<td>Police Room</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>-</td>
</tr>
<tr>
<td>Signage</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>-</td>
</tr>
<tr>
<td>Station Building</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>-</td>
</tr>
<tr>
<td>Ticket Office</td>
<td>-</td>
<td>4,0x3,0m</td>
<td>-</td>
</tr>
</tbody>
</table>
## Station

### Station classification

#### Minimum Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Priority</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ticket Vending Machine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Tourist information desk/office</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>One in each station</td>
</tr>
<tr>
<td>Speakers</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>Staff Toilet Changing Room</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>5,0x3,0m, 1 toilet &amp; 1 washbasins for female toilets; 1 toilets &amp; 1 urinals &amp; 1 washbasins for male and according to PMR regulation.</td>
</tr>
<tr>
<td>Shelter</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>Underpass Overspass</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>Waiting Area</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>5,0x4,0m²</td>
</tr>
<tr>
<td>Check-in barriers</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>Waste Paper Basket</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>Train carriage positioning indicators at platforms - potentially including crowding-level information about</td>
<td>●</td>
<td></td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>Integrated travel information systems at platforms</td>
<td>●</td>
<td></td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>Meeting points indicated by clocks or information/ advertisement towers</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>High quality restroom areas (i.e. including personnel, shower facilities and toiletries selling)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
</tbody>
</table>
# Station classification

## Minimum Requirements

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTERIOR</strong></td>
<td></td>
</tr>
<tr>
<td>Charging positions/ towers</td>
<td>Minimum 20 units and according to forecast passengers to Type I</td>
</tr>
<tr>
<td>Food and beverages courts and retail areas</td>
<td>Should be present in the main station as well as, in smaller dimension, at platforms</td>
</tr>
<tr>
<td>Entertainment/ advertisement systems</td>
<td>Minimum 3 units and according to forecast passengers to Type I</td>
</tr>
<tr>
<td>Drinkable water fountains</td>
<td>In both main stations and close to platforms</td>
</tr>
<tr>
<td><strong>EXTERIOR</strong></td>
<td></td>
</tr>
<tr>
<td>Bike Parking (covered)</td>
<td>Minimum 2 units and according to forecast passengers to Type I</td>
</tr>
<tr>
<td>Bus Stop Shelter / Storage</td>
<td>Minimum 1 unit per station. Mid/long term storage, size depending on the demand forecast and size of the station.</td>
</tr>
<tr>
<td>Bike path</td>
<td>From entrance to platform</td>
</tr>
<tr>
<td>Bike Car Station</td>
<td>Numbers of electrical station depending on the demand forecast and size of the station.</td>
</tr>
<tr>
<td>Car Parking</td>
<td>Minimum to 6 to 20 cars and according to forecast passengers station Type I</td>
</tr>
<tr>
<td>Electrical Car Station</td>
<td>Minimum 3 units and according to forecast passengers station Type I</td>
</tr>
<tr>
<td>Furniture</td>
<td>To consider benches and litter bins</td>
</tr>
<tr>
<td>Kiss &amp; Ride</td>
<td>3 to 5 cars and according to forecast passengers in Type I</td>
</tr>
<tr>
<td>Taxi Stop</td>
<td>Minimum 3 cars and according to forecast passengers in Type I</td>
</tr>
</tbody>
</table>

*Note: The table above outlines the minimum requirements for various elements at Rail Baltica stations. The symbols (● ● ● ●) represent the number of units or the level of provision, and the notes provide additional context for each requirement.*
### Station classification

**Suggestion for Future Station Development**

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
<th>TYPE 3</th>
<th>TYPE 4</th>
<th>MINIMUM DIMENSIONS</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERIOR</td>
<td>Areas with public functionalities</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>Provision of areas with public (business oriented) functionalities. e.g. shared offices, meeting rooms, conference areas etc.</td>
<td></td>
</tr>
<tr>
<td>INTERIOR</td>
<td>Areas with public functionalities</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>Provision of areas with public (business oriented) functionalities. e.g. for art exhibitions, music performances, etc.</td>
<td></td>
</tr>
<tr>
<td>INTERIOR</td>
<td>Kids' playground area</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>One for each station in the main area. Size depending on the size of the stations.</td>
<td></td>
</tr>
<tr>
<td>INTERIOR</td>
<td>Smoking glass rooms</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>One per station</td>
<td></td>
</tr>
</tbody>
</table>
## Station classification

### Air to Rail Integration

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
<th>TYPE 3</th>
<th>TYPE 4</th>
<th>MINIMUM DIMENSIONS</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baggage belt</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Check-in desks</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Area for sorting bags, loading into any transfer container, storage area for container</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>All areas must be isolated from public access areas</td>
</tr>
<tr>
<td>Transfer route from sorting bags area to platform</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>No public access at either end, or along route</td>
</tr>
</tbody>
</table>

### HSR freight services

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
<th>TYPE 3</th>
<th>TYPE 4</th>
<th>MINIMUM DIMENSIONS</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space for parcels deliveries</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Space for parcels storage and handling</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Station classification

TYPE I - International Station / Terminal Station
An International Station is a large station that shall be fully staffed with multiple facilities and for multiple transit services. Located in the centre of the main capitals of the three Baltic states, is an element that changes the city.

TYPE II - Regional Station II
This station is composed of the station building and the platform. Minimum facilities: bigger waiting space, toilets, retail/cafe, additional operation rooms and rooms for the staff. There is a possibility to extend this station by adding more commercial space. 6 shelters on the platform.

TYPE III - Regional Station III
This station is composed of the base station building and the platform. Minimum facilities: smaller waiting space, toilets, operation rooms and rooms for the staff. 4 shelters on the platform.

TYPE IV - Regional Station IV
This type of the station is composed of the platform and shelters. No other facilities are required. The station remains unstaffed. 2 shelters on the platform.
Station classification

1.1 Station

Designed elements that can be applied to the existing stations

HERITAGE BUILDING

NO HERITAGE BUILDING

SIGNAGE

FURNITURE

LIGHTING

BRANDING IMPLEMENTATION
International Station

**Elements implemented:**

- All of the designed elements

**New Building**

**Existing Building**

**Heritage Building**

  - Signage

**No Heritage Building**

  - Signage
  - Furniture
  - Lighting
  - Branding Implementation
International Station

Heritage Building

Noted
Images present examples of implementation of designed elements on existing stations.

Before

After
International Station

New Building

Images present examples of implementation of designed elements on new international stations.
Regional Station

Elements implemented:

- All of the designed elements
- Signage
- Furniture
- Lighting
- Branding Implementation

Heritage Building


No Heritage Building


International Station

New Building

Existing Building
Rail Baltica modular design approach was to divide stations into types depending on an amount of daily passengers.

Station Basic consists of station building and the platform as well as all minimum station facilities. It was designed for average number of passengers.

Station Landmark is composed of the base station building and the platform. Consists of station building and the platform, minimum facilities as well as additional space such as bigger waiting space, cafe space.

Station Plus is composed of the station building and the platform. Consists of station building and the platform, minimum facilities, bigger waiting space, retail/cafe and additional commercial space.

Modular design brings several advantages such as reduced capital requirements and economies. Modularity is especially advantageous when the scale and scope of the project are relatively large. In such cases, it is a practical and economic option. Through modularity Rail Baltica can achieve various designs, while achieving low-cost for development.
Based on several analysis and also on the medium number of passengers per day, four type of station have been define:

Type 1: International Station
Type 2: Landmark Station
Type 3: Basic Station
Type 4: Platform Station (no building, only shelters)

The scheme illustrates how, starting from the basic, a station can growth choosing to expand toward the Landmark station or the Basic Plus.

The maximum possible expansion will allow reaching the Landmark plus station.
Coloured Standing Seam Metal roof
Laminated Wood
Timber ribs
Wood baffels
Vertical Steel Building Frame
Double Grass with Steel fins
Legend
1. Staff Room
2. Police
3. Control Room
4. Ticket office
5. First Aid
6. Toilets
7. Master
8. Staff Toilet
9. ATM
10. TVN
11. Waiting Zone
12. Ticket Validation Zone
13. Platform

Rail Baltica Station Elements

Station

Layout

Basic
Legend
1. Staff Room
2. Police
3. Control Room
4. Ticket office
5. First Aid
6. Toilets
7. Master
8. Staff Toilet
9. ATM
10. TVN
11. Waiting Zone
12. Ticket Validation Zone
13. Platform
1. STAFF
2. POLICE
3. SECURITY
4. TICKETS
5. FIRST AID
6. TOILETS
7. MASTER
8. TOILET

---

Legend
1. Stairs to the Platform
2. Stairs to the Station
3. Storage Room
4. Main Underpass Route
5. ATM
6. TVN

---

Layout
Basic with Direct Access to the Underpass
Station

Layout

Basic Plus

- Coloured Standing Seam Metal roof
- Laminated Wood
- Timber ribs
- Wood baffles
- Vertical Steel Building Frame
- Double Grass with Steel fins
Legend
1. Storage Room
2. Police
3. Control Room
4. Ticket office
5. First Aid
6. Toilets
7. Master
8. Staff Room
9. Staff Toilet
10. Waiting Zone
11. ATM
12. TVM
13. Ticket Validation Zone
14. Platform
Coloured Standing Seam Metal roof
Laminated Wood
Timber ribs
Wood baffels
Vertical Steel Building Frame
Double Grass with Steel fins
Legend
1. Staff Room
2. Police
3. Control Room
4. Ticket office
5. First Aid
6. Toilets
7. Master
8. Staff Toilet
9. TVM
10. ATM
11. Waiting Zone
12. Ticket Validation Zone
13. Platform
14. Main Route
15. Information Desk
16. Retail zone
Coloured Standing Seam Metal roof
Laminated Wood
Timber ribs
Wood baffels
Vertical Steel Building Frame
Design

Typical Basic Station Scenario

Note: Images must be considered are only for reference.
Design

Typical Landmark Station Scenario

Note: Images must be considered are only for reference.
Design

Typical Landmark Plus Station Scenario

Note: Images must be considered as only for reference.
Station

Structure

Identity Matrix

<table>
<thead>
<tr>
<th>Structure</th>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material

Geometry

Modularity

Color

Vegetation
Structure

Concept Design

Sub-Structure

Main Structure

Support Structure
Station

Structure

Concept Design

Noted
Image above shows the station structure from the interior.
**Structure**

**Geometry**

Timber Ribs

- size: 20 x 7.5 cm
- module of every 40 cm

Timber Ribs

- size: 35 x 10 cm
- module of every 90 cm
Station

Structure

Geometry

Steel Support Building Frame Type I

Steel Support Building Frame Type II

Steel Support Building Frame Type III
Facade

Identity Matrix

<table>
<thead>
<tr>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facade</td>
<td>🌿</td>
<td>△</td>
</tr>
</tbody>
</table>

Material
Geometry
Modularity
Color
Vegetation
Design of the station’s walls refers to the traditional Baltic constructions utilizing the same materials but differs in form using baltic waves as a direct inspiration behind parametric design.

### Pictures

Image from left:
- Image 1 - Credits: SBS Engineering
- Image 2 - Credits: pixabay.com
- Image 2 - Credits: wikipedia.org
Facade

Geometry

E1 Elevation from platform

E2 Elevation from the entrance
Facade

Geometry

E3 Elevation from the left side

E4 Elevation from right side
Geometry of the facade is created by the shape of the roof. Module used as a design principle is 1.8 m.

**E1 Elevation seen from platform**

**E2 Elevation seen from the entrance**

**E3 Elevation**
The shape of the elevation is defined by spline curve with the control points A, B, C, D, E, F with following coordinates.

- From A': $A_x = [-0.36; 17.70]$
- From B': $B_x = [-1.1; -1.83]$
- From C': $C_x = [0.0; 11.85]$
- From D': $D_x = [-0.99; 0.93]$
- From E': $E_x = [-0.34; 6.23]$
- From F': $F_x = [-1.43; 3.82]$
- From G': $G_x = [0.0; 3.45]$

Geometry - Platform Elevation

H1 = 10.3 M  H2 = 4.5 M  H3 = 7.7 M  H4 = 3.4 M  H5 = 5.2 M  H6 = 3.45 M

H6 = 3.45 M
The shape of the elevation is defined by spline curve with the control points A, B, C, D, E, F with following coordinates.

From A': A_X,Y = {-0.36; 17.70}
From B': B_X,Y = {-1.1; -1.83}
From C': C_X,Y = {0.0; 11.85}
From D': D_X,Y = {-0.99; 0.93}
From E': E_X,Y = {-0.34; 6.23}
From F': F_X,Y = {-1.43; 3.82}
From G': G_X,Y = {0.0; 3.45}

From A': A_X,Y = {-0.44; 14.62}
From B': B_X,Y = {-0.98; -1.50}
From C': C_X,Y = {0.0; 9.99}
From D': D_X,Y = {-0.66; 0.44}
From E': E_X,Y = {-0.60; 5.83}
From F': F_X,Y = {-1.66; 3.82}
From G': G_X,Y = {0.0; 3.45}

H1 = 8.7 M  H2 = 3.9 M  H3 = 6.5 M  H4 = 2.8 M  H5 = 4.7 M  H6 = 3.45 M  H6 = 3.45 M
The shape of the elevation is defined by points A, B and following coordinates.

From A': \( A_{X,Y} = \{-0,36; 17,70\} \)

From B': \( B_{X,Y} = \{-1.1; -1,83\} \)

From C': \( C_{X,Y} = \{0.0; 11,85\} \)

From D': \( D_{X,Y} = \{-0.99; 0,93\} \)

From E': \( E_{X,Y} = \{-0,34; 6,23\} \)

From F': \( F_{X,Y} = \{-1.43; 3,82\} \)

From G': \( G_{X,Y} = \{0.0; 3,45\} \)

From A': \( A_{X,Y} = \{0,0; 3,50\} \)

From E': \( E_{X,Y} = \{0,0; 3,50\} \)

H1 = 3.45 M  H2 = 3.45 M
Facade

Materials

Steel vertical ribs

Glass
This type of alternative material strategy is used to decrease environmental impacts, such as energy usage, during the life-cycle of the station.

**Facade**

**Alternative Material Strategy**

- **Glazing**
- **Glazing + Metal Cladding**

Metal cladding
Facade

Alternative Material Strategy

This type of alternative material strategy is used to decrease environmental impacts, such as energy usage, during the life-cycle of the station.

Metal cladding

Glazing

Glazing + Metal Cladding
Facade

Branding Implementation

Glazed wall branding example
Module 1.8 m

Note
For Rail Baltica visual identity instruction, please refer to Visual Identity Guidebook
## Floor

### Identity Matrix

<table>
<thead>
<tr>
<th>Material</th>
<th>Geometry</th>
<th>Modularity</th>
<th>Color</th>
<th>Vegetation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FLOOR

<table>
<thead>
<tr>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Given the dense woodland nature of the Baltic countries, much of traditional architecture centres around timber. For centuries was the material for houses and villages as a natural resource. These structures are very simple with some unique architectural details such as the Landmark forms of the gabled roofs.

The floor design refers to the traditional materials, underlining the connection between the three countries but also emphasizes the idea of using sustainable materials.
Terrazzo, which is widely used in commercial environments for its durability, should use an additive such as carborundum to make it more slip resistant. The slip resistance of a floor in service is dependent upon the nature of its surface. It is important to recognise that this can change over time and in use. Generally resin terrazzo flooring is not inherently slippery in the dry but the combination of very smooth floors and hard smooth heel or sole material can be slippery. Typically a terrazzo surface with some carborundum (Silicon carbide) content has the abrasive powder distributed through the depth of the tiles decorative surface which once ground exposes the grains which enhance the materials slip resistance.

Light gray terrazzo
Floor

BOH Geometry and Materials

Epoxy Resin
By applying the colors of the three countries to the epoxy floor on the back of the rooms of the house, designers can apply the identity of the country to this architectural element.
In order to make it accessible and reachable in a broad sense, a station should be designed so that it is usable for all. Regulations and guidelines are found in both national and EU directives. For people with disabilities, a well thought-out, integrated environment with few obstacles to ease and independence of movement in the environment is crucial. In addition to creating an integrated environment, stations and transfer points in their basic functions, construction and design should comply with the requirements and regulations regarding disabilities that society imposes on a station’s function and physical design.

Tactile paths are one of the main important elements to ensure to all passengers an easy use of the station areas.

Based on the information that must be communicate to blind people, a specific tactile tile must be used.

Six are the main codes that should be used:
1. Straight
2. Stop / Danger
3. Crossroads between 3 or 4 roads
4. Turn 90°
5. Attention important service
6. Feasible danger

Note
Source: dascenzi.it
Material and color
Tactile should be easy to detect due to the high visual contrast with the floor. Light grey color was used to ensure this contrast with terrazzo black floor. Due to the rubber material, the tiles are non-slip even in moist conditions, they are wheelchair-friendly and eliminate the tripping hazard. The tiles are glued onto existing floors or surfaces without damaging them.

Tactile warning strip
Tactile warning strip are placed in dangerous place such as stairs, elevators and streets. Warning strip will be placed also at the platform edge.

Tactile guide path
Lead visually travellers from the arrival zone to the platform and in all the other function of the public external area of the station.

Light grey rubber
Station

Wall

Identity Matrix

<table>
<thead>
<tr>
<th>Material</th>
<th>Geometry</th>
<th>Modularity</th>
<th>Color</th>
<th>Vegetation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rail Baltica Station Elements
Design of the station’s back of house walls is elegant and efficient.

Design of the station’s back of house walls to the traditional Baltic constructions utilizing the same materials but differs in form using baltic waves as a direct inspiration behind parametric design.

Pictures
From left
Image 1 - Credits: SBS Engineering
Image 2 - Credits: pixabay.com
Image 3 - Credits: wikipedia.org
Front of house Internal wall system cladding

Note
For Rail Baltica visual identity instruction, please refer to Facade chapter.
Wall

Geometry

Front of house Internal wall system cladding
Front of house Internal wall system cladding utilises wooden panels, ceramic tiles and plaster.

Materials

Laminated wooden panels

Back of house wall finishes:

Plaster with paint finish

WCs wall finishes:

Ceramics tiles 15 x 60 cm
Wall

Branding Implementation

Wooden panels allow easy implementation of the branding as well as installation of the Signage.

Note
For Rail Baltica visual identity instruction, please refer to Visual Identity Guidebook
## Identity Matrix

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceiling</td>
<td><img src="image1" alt="Material" /></td>
<td><img src="image2" alt="Geometry" /></td>
<td></td>
</tr>
<tr>
<td>Modularity</td>
<td><img src="image3" alt="Modularity" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetation</td>
<td><img src="image4" alt="Vegetation" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td><img src="image5" alt="Color" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td><img src="image6" alt="Geometry" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td><img src="image7" alt="Material" /></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ceiling

Station

Rail Baltica Station Elements

Page 63

ARCHITECTURAL, LANDSCAPING AND VISUAL IDENTITY DESIGN GUIDELINES FOR RAIL BALTICA

RBDG-MAN-031B
Ceiling

Concept Design

The roof and ceiling is an important element of the construction. The proportions between the building’s walls and the roof height are very important. Traditionally, the roof takes an exceptional place in building construction and its construction has been allocated about two-thirds of the total building height. Traditional buildings were either covered by a tent roof, a double pitch roof, or a double pitch roof with hip ends. Design of the station’s roof refers to the traditional Baltic constructions utilizing the same materials but differs in form using baltic waves as a direct inspiration behind parametric design.

Traditional house

Baltic Sea

Pictures
From left
Image 1 - Credits: SBS Engineering
Image 2 - Credits: wikipedia.org
Wooden soffit
size - 200 x 40 mm
regular module of 80 mm
Ceiling

Lighting

Incorporated into wooden soffit

Continuous LED light
### Roof

**Identity Matrix**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof</td>
<td><img src="image" alt="Roof Icon" /></td>
<td><img src="image" alt="Color Icon" /></td>
<td><img src="image" alt="Vegetation Icon" /></td>
</tr>
</tbody>
</table>

**Material**

**Geometry**

**Modularity**

**Color**

**Vegetation**
Point A is generated from the cut of the side plane at an angle of 82°

Point B is generated from the cut of the side plane at an angle of 82°

Point C is generated from the cut of the side plane at an angle of 82°

Point D is generated from the cut of the side plane at an angle of 82°
Roof

Geometry

R1 East elevation

α = 82°
Roof

Geometry

Top of the roof
Elevation line

R2 West elevation

α = 82°
A standing seam roof is among the most durable and maintenance-free type of any metal roof. Standing seam roofing provides additional energy reduction benefits and can be installed easily, in many instances over the existing roofing material.

Metal roof requires no or very little maintenance over the years and is able to withstand substantial wind pressure. It also offer fire resistant properties and will not collapse due to heavy water or snow loads. The metal reflects the sun’s rays, which in turn reduces heat transfer so it will lower cooling costs in summer.
Roof

Identity Approach

Designers will ensure to apply the country identity through the color on the roof of the station.
Passenger Information
Station must have an accessible and legible design for passenger information and wayfinding which requires minimal signage and are well integrated with their surroundings. The philosophy underlying signing and passenger information at stations should be that of clarity, consistency and coherence in order to guide people through the stations in a steady, convenient and safe manner helping to ensure station users have a positive, stress-free experience. This philosophy supports a well-planned and well laid out station, and is integral to its design.

Information is a fundamental requirement for a positive passenger experience. Information can serve multiple uses including: rail services, station and facility opening hours, maps of the local area and information for interchange modes. Information should be delivered across the full range of media including audio, visual and tactile to meet with the needs of all interchange facility users.
Signs must be positioned where people need them most. These locations are generally route decision points, such as entrances, exits and junctions. Decision point signs normally provide directional information to way out routes, inter-modal transport connections, platforms and key facilities. Integrated wayfinding minimises physical obstructions to movement and helps station users.

**General rules are:**

- Design wayfinding to be seamless to help passengers move between different locations, using all modes of transport in one continuous journey.
- Design routes to be simple and legible requiring minimal signing by integrating spatial planning, lighting and surface finishes alongside other building elements such as public art and landscaping.
- Wayfinding signage must always take visual priority over other information and its view must always remain unobstructed from key reading directions.
Signs shall be placed perpendicular to sight lines.

For signage design please refer to Book G.

Legend
- Identification Sign
- Directional Sign
- Information Sign
- Main pathway
**Furniture**

**Furniture for station**

Modular seating systems for public areas could be provided. Solutions could be made with individually shaped wood slats that can be joined to form a range of seating configurations and to have its own design.

The modular furniture shall be made to fit any space. Customized furniture will include workstations and device chargers, which aim to improve customer satisfaction and sales and to be used in Stations Type I and Type II.

The furniture must provide railway seating comprising durable materials in ergonomic, durable and sustainable designs and shall enhances public spaces by providing them with identity, meaning and function.
Furniture

Technical Details

Front View

Side View
Furniture

Technical Details

Front View

Side View
Although many passengers have tickets when they arrive at the station, they should be able to buy tickets, renew their monthly card, download discount cards or collect paper tickets. Ticket machines should, therefore, be provided at type I, type II, type III and type IV stations. The biggest stations should also house a staffed ticket booth for selling tickets manually.

Ticket vending machines should be placed so that they do not interfere with either traveller flows or the flow of the general public through the passage. Ticket vending machines for different operators must be coordinated so that their function is clear, and they must be consciously designed.
Underpass

B2.1 Matrix
B2.2 Concept Design
B2.3 Layout
B2.4 Materials
Identity Matrix

<table>
<thead>
<tr>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underpass</td>
<td>🌊</td>
<td>🏛️</td>
</tr>
</tbody>
</table>
Designers, considering specific site conditions, can define and select the best type of underpass to use to connect the platforms with the station building and the urban context.

**Concept Design**

- **TYPE A**: Connection Building / Platform
- **TYPE B**: Connection Urban Surrounding / Platform
- **TYPE C**: Connection Platform / Platform

![Diagram of Underpass Types](image-url)
Underpass

Layout

Type A Overview
Underpass as all other Station elements refers to the traditional materials from Baltic countries, underlining the connection between the three countries but also emphasizes the idea of using sustainable materials. Its logical shape allows to commute easily between different platforms.
Underpass

Layout

Type B Overview

In most cases, platform connections under railway tracks also involve a connection between the parts of the city/community located on different sides of the railway. Properly located and designed, a passage under the tracks can provide a natural and comfortable link that, in many cases, also provides a transit route for cyclists. Passage location has a significant impact on station function. A central location along the platform will shorten travellers' walking times to the right carriage on the train. How the interior of a passage is designed plays a significant role in how it is perceived as both a station entrance and a city thoroughfare.
Rail Baltica Station Elements

Underpass

Layout

Type B

Legend
1. Platform Walkway
2. Tracks
3. Underpass entrance
4. Elevator
5. Platform
6. Ramp

Flow of passengers
As the passage under the tracks can be the first interaction with a station, it is important for it to be designed in a way that contributes to a positive and welcoming 'first contact'. Through judicious use of materials and lighting, as well as elements of artistic inspiration, the passage can give travellers the best possible first impression and give a station and the town/city a distinct identity.

**Note**
Plan of station with underpass inside the building is at page 18.
Layout

Longitudinal Section
Underpass

Layout

Route

Legend
1. Platform
2. Tracks
3. Underpass entrance
4. Elevator

Flow of passengers
- Underpass Floor
- Elevator

10 m distance

31.6m length
Rail Baltica Station Elements

Underpass

Layout

Underpass level

Legend

- Elevator
- Staircase entrance

Metal Cladding Lift
Laminated wood
Light Grey Concrete
Walkway Dark Grey Concrete
Light Grey Concrete
Rail Baltica Station Elements

Underpass

Layout

Cross Section

Tracks

Upper slab
according structural design

~200 cm

min. 300 cm

Wakable tunnel
min. 300 cm till the finished ceiling surface

Foundation slab
according structural design
Note
Dimensions are only for reference. If local regulation provides different dimensions, designers have to follow that instruction.
Note
Dimensions are only for reference. If local regulation provides different dimensions, designers have to follow that instruction.
Rail Baltica Station Elements

Underpass

Materials

Overview

Coloured Standing Seam Metal Roof

Panoramic Glass enclosure

Light Grey Concrete

Walkway Dark Grey Concrete

Metal Cladding

Light Grey Concrete

Laminated wood

Walkway Light Grey Concrete
Platform

B3.1 Matrix
B3.2 Layout
B3.3 Floor
B3.4 Shelter
B3.5 Lighting
B3.6 Signage and Wayfinding
B3.7 Furniture
B3.8 Universal Design
### Identity Matrix

<table>
<thead>
<tr>
<th>Material</th>
<th>Geometry</th>
<th>Modularity</th>
<th>Color</th>
<th>Vegetation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Platform

**Matrix**

**Identity Matrix**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underpass</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The platform floor is an important part of a station’s spatial layout. The floor should have a pleasing overall design and help passengers understand how the platform should be used. It should include protective zones from the track area and guide paths.

All floor surfacing should be even, firm and non-slip. The platform floor should have a well-maintained impression and must be installed with care.

Simple concrete slabs provide higher quality, longer durability and lower maintenance costs than an asphalted surface. Concrete slabs should have straight, not bevelled edges. Adaptation to fixtures such as poles etc. by cutting plates, should be taken into consideration in the material selection.
The platform is divided into different zones. On the platform, pedestrian areas and furniture zones can determine whether the platform roof is supported by one or two pillars. Pedestrian areas must include guides in order to assist people who are visually impaired.

A buffer zone gives the traveller a clear warning that they are close to the tracks. Buffer zone width is determined by the highest speed of passing trains.

The boundary between the platform and the surrounding area is must be clear. This could be done by the installation of a wall or canopies in the boundary. Towards the tracks, there must always be a safety zone with a tactile warning line.
The boundary between the platform and the surrounding area is often vague. This boundary must be made clear in terms of liability and safety issues and brought into specific relief. This could be done by the installation of a wall or canopies in the boundary. Such measures shall, inter alia, ensure that no vehicle accidentally runs onto the platform, with the risk of falling down onto the track. They also act as control tools, making the traveller flows between the platform and the surrounding area clear.

Safety zone, safety line, buffer zone and walking zone must be designed with dimensions indicated in the drawing. Furniture zone dimensions may be reduced dependent on forecasted passenger flow and type of the station. In cases when furniture zone dimensions are decreased, furniture and shelters must be placed in platform pockets.

Material and color
Tactile should be easy to detect due to the high visual contrast with the floor. Light grey colour was used to ensure this contrast with dark grey floor. Concrete tiles should be non-slip even in moist conditions, they should be wheelchair-friendly and eliminate the tripping hazard.
Overview

Legend

- Stainless metal
- Concrete
The image shows the location of tactile routes on the platform and the division of the platform paving and tactile marking. Tactile route is provided along the whole length of the platform.

Legend

- Light Grey Concrete Tactile tiles
- Dark Grey Concrete platform paving

Platform

Floor

Tactile
The platform is a space where travellers can stay for shorter or longer periods of time. Platform floor must help the traveller understand how the platform is to be used. It must include a safety zone in relation to the track area and guide paths for the visually impaired.

A floor should provide a pleasant experience must be able to satisfy the basic requirements for safety and accessibility. A design that uses a few good materials can contribute to a good entity and a facility that lasts over time and is optimised for efficient operation and maintenance.

Note
The platform floor must be designed according to all safety and accessibility requirements, whilst being a well-designed and coherent surface.
Number of shelters on the platform is designed to fit the maximum number of passengers at the same time at the peak hours.

Station Type II: 6 shelters on the platform.
Station Type III: 4 shelters on the platform.
Station Type IV: 2 shelters on the platform.

Identity Matrix

<table>
<thead>
<tr>
<th>Number of Shelters</th>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelter</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Shelters must be available at all stations. Waiting areas may be located adjacent to the platform connection from passages above or below tracks. This makes the waiting area the point at which the traveller interacts with the platform.

Standalone waiting areas on platforms must be transparent, provide space for wheelchairs and be designed, illuminated and furnished to provide a warm and welcoming impression. All categories of traveller must be able to use these waiting areas throughout the day and to feel comfortable.

Shelters on platforms must be designed to provide open and unheated protection against rain and wind. Shelters must be transparent in order to allow travellers to see into the shelter and to see the platform and arriving trains. Shelters may have openings to the tracks, to the middle of the platform, or both, depending on the width of the platform and how flows and other furniture are organised.

The areas should be well illuminated to create a sense of security and overview. Shelters must be constructed in dimensions strong enough.
Shelters must be available in different sizes, depending on the size of the station. The smallest shelters can consist of a canopy with two glass panels on the sides, while the larger ones should be wider and have glass-panelled walls on several sides.

Shelters are designed on the module of 120cm and can be adjusted by adding or subtracting 120cm module.
Shelter

Geometry

Front View
Shelter

Geometry

Side View
Shelter

Identity Approach and Branding Implementation

Finishing 1 - Estonia

Finishing 2 - Latvia

Finishing 3 - Lithuania

Note

For Rail Baltica visual identity instruction, please refer to Visual Identity Guidebook.
Lighting on platforms must be designed with safety and to make the platform easier to navigate for people who are visually impaired. In addition, well-designed lighting and illumination may help to create a positive impression of a station environment.

Lighting and illumination can actively promote spatial experience on the platform. Good general lighting brings together the various zones of the platform. Different functions and areas can be highlighted using supplementary lighting.
Lighting

Position Strategy

Light Placement
Lighting

Geometry

Isometric View

Front View

Side View
Signs on platform
Platform signs include: platform signs, multi-train displays with real time information, station name sign, track number signs, direction signs as well as loudspeakers and clocks.

Overview

Picture
1. Station name
2. Platform sign
3. Multi-train display
4. Directional Signage
5. Track number sign
6. Informational boards
Signs on platform
It is important for the signs to be allocated in the best possible way in the limited space of the platform in order to ensure safety and accessibility. The flow of the passengers on the platform heavily depends on the location of the overpass and lifts and how many entrances are there.
Furniture

Bench Position Strategy

Platform

Bench
Furniture

Bench

- Oak wood finishing
- Steel support

Dimensions:
- 240 cm / 355 cm
- 70 cm
Furniture

Geometry

Front View

Side View
The designed station must be fully accessible to everyone. This includes people with reduced mobility as well as:

- People moving on wheelchairs,
- People with other physical limitations,
- Visually impaired people,
- People with the elderly and children.

Station design must allow safe and collision-free movement inside the building and in its immediate surroundings. The building should also meet the highest requirements regarding the safety of travellers and clients of the Rail Baltica.

**Rules of accessible design:**
A) Full adjustment of the facility and its surroundings to be used by persons with reduced mobility should be assumed
B) At the station building, special parking spaces for the disabled should be provided with provision of manoeuvring space
C) Access to the building and platforms should have an obstacle-free route
D) Both in the building, as well as access to the platforms, tactile routes for the visually impaired should be provided
E) Use as appropriate possibility of a non-threshold door
F) Ticket office should be equipped with counter tops with reduced height of 80-90 cm for the wheelchair users and low-height people
G) Braille inscriptions should also be used in public areas marked with information boards.

### Universal Design

**Rules of Universal Design**

1. Usability for people with different immobility
2. Flexibility in use
3. Simplicity
4. Clear communicated information
5. Tolerance for errors
6. Comfortable use without effort
7. Size and space suitable for access and use
8. Equality perception
Universal Design

Tactile Position Strategy

Image illustrates tactile routes on platform and overpass. Tactile route is provided along the whole length of the platform and along the overpass.

Legend

- Tactile path on the overpass
- Tactile path on the platform
Universal Design

Tactile tiles

Note
For tiles dimensions please refer to pag. 50

Pictures
From left:
Image 1 - Credits: Shutterstock
Image 2 - Credits: caesar.it
Image 3 - Credits: visulsystems.com
Image 4 - Credits: tacpro.com.au
Note
The scheme illustrates an example on how to combine the different tactile tiles.
Source: dascenzi.it
Each LVE tactile path, in order to work in the best way as a multisessional guide for blind people, must be mapped.

The mapping consists in assigning to each TAG RFG, placed under the pavement, several useful information for the user as the signalling of a danger, a service and any other specific information to every design requirement. The mapping can also be done later than the installation of the tactile path.

LVE technology provides rapid vocal information on the surrounding environment. In this way, the user, through the connection system with the smartphone / tablet and the bluetooth earphone, is correctly and analytically informed of the entire environmental context.

It is also possible to transmit voice messages that provide simple information, such as:
- presence of crossings;
- pedestrian crossings;
- travel guidelines;
- any points of interest.

Furthermore, the voice messages, allow the transmission of even more elaborate information, such as:
- news on means of transport;
- presence and information on museums, archaeological excavations, historic centers etc;
- information on public facilities (universities, schools, hospitals, etc.).

**Note**

Source: dascenzi.it
Overpass

B4.1 Matrix
B4.2 Concept Design
B4.3 Layout
B4.4 Materials
B4.5 Structure
Matrix

Identity Matrix

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>C</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overpass</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material
Geometry
Modularity
Color
Vegetation

Elevator / structure core
Overpass
Stairs / Ramps
Overpass as all other Station elements refers to the traditional materials form Baltic countries, underlining the connection between the three countries but also emphasizes the idea of using sustainable materials. Its dynamic shape take inspiration from Baltic sea, simulating the flow of waves and people.

Pictures
From left:
Image 1 - Credits: SBS Engineering
Image 2 - Credits: pixabay.com
Image 3 - Credits: lithuania.blogas.lt
Rail Baltica Station Elements

Layout

Overview

B4.3

Overpass Layout

Overview
Rail Baltica Station Elements

Overpass

Layout

Route

Picture
1. Platform Walkway
2. Tracks
3. Overpass access
4. Elevator
5. Platform

Flow of passengers
Overpass

Layout

Functional Layout

![Functional Layout Diagram]

Note
Dimensions are only for reference. If local regulation provides different dimensions, designers have to follow that instruction.
Materials

Overview

Stairs should be easy to find, obstacle-free, non-slip and comfortable to walk on. Contrast markings, guide rails, width, tactile markings and signage should comply with Systra regulation. The guttering should be seen as an integral part of the stairs and the selected materials should harmonise with other materials on the stairs.
Materials

General Layout
Main steel supporting structure
Inside lift core

Steel supporting structure
to support 25m span

Steel brackets connecting
to the main steel structure
inside the core

Note
Image illustrates a preliminary structural proposal.
Dimensions are only for reference.
4.5 Overpass

Structure

- Led lighting strip behind the handrail
- Handrail
- min 160cm
- min 670cm from the tracks level

**Note**
Image illustrates a preliminary structural proposal.
Dimensions are only for reference.
ARCHITECTURAL, LANDSCAPING AND VISUAL IDENTITY DESIGN GUIDELINES FOR RAIL BALTICA

RB Rail AS