2026

CUSTOMER INFORMATION PLATFORM

USER HANDBOOK FOR INTERNAL USERS

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VERSION	AUTHOR	DATE	CHANGES
0.1	Christoph Bonelli EVOLIT	2024-04-18	Initial draft
0.2	Jerónimo Padilla (RNE)	2024-06-25	Based on the CIP DG meeting from May 2024. Added CIP Roles Description chapter and general review.
0.2	Jerónimo Padilla (RNE)	2025-01-20	Updated Text Module Chapter
0.4	Christoph Bonelli (EVOLIT)	2025-05-02	Amendment Chapter Statistics in Corridors Information, Enhancements considering CR05, CR16
0.5	Christoph Bonelli (EVOLIT)	2026-05-11	Amendment chapters 8.1.6 (Map Tools), 9.1.2 (Node details) and 10 (ETC information): CR19 Corridors Node Management
0.6	Christoph Bonelli (EVOLIT)	2026-06-08	Amendment chapter 8.1.6 (Map Tools for Corridors): CR24 Corridor Section Management — selection of future-active segments with automatic "Expected Line" section type, overlap-segment disambiguation, display of existing sections and PLCs during section editing, frontend prevention of non-adjacent segment selection and end-only deselection, handling of zero-length (technical) segments (manual and automatic), and map legend additions. Section-type note added to chapter 9.2.2 (Section details).

Contents

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1 Introduction

This document is intended to describe the use of the CIP as a functional part of the Railway Information System (RIS). All CIP-specific functions are detailed. All additional functions, such as user and role management or the management functions for the base topology, are described in the RIS manual.

2 System Access

CIP is accessible to the public without registration through the following URLs

- Staging (for test purposes): https://cip-stage.rne.eu
- Production: https://cip-online.rne.eu and https://cip.rne.eu

Management of the information displayed in CIP is done in the RIS application by Corridor administrators and IM experts. The respective URLs for the different environments are:

- Staging (for test purposes): https://ris-stage.rne.eu/
- Production: https://ris-online.rne.eu/

3 Login / Logout and Change Password

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3.1 Precursor

RIS implements a Single Sign-On approach were access to all RNE applications are manage using RNE Active Directory. This approach takes away the authentication of the user from the RIS, simplifying the credentials management and removing the need of having one set of credentials per application. The authentication (what the user can do in the application) remains at RIS level.

The process to request a new account in RIS should start by filling the following registration form. If the user is requesting management access to CIP data, the CIP section should be selected. Once received the request by the RIS Help Desk, the email account will be invited to RNE Active Directory, and the user created in RIS system with the requested rights.

3.2 Login

The login therefore will take place using the user company email and password. Normally, if the user is automatically logged in by means of his work account, he/she will be logged in on his device. In case this user deviates from the account set up in RNE's active directory (AD) the user will be directed to the AD login screen where can either use a proposed account or in case it is not listed, chose other account.

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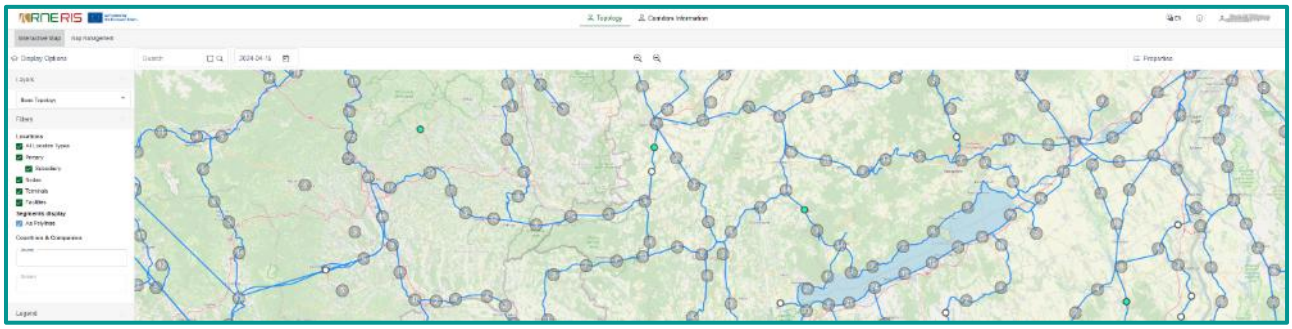
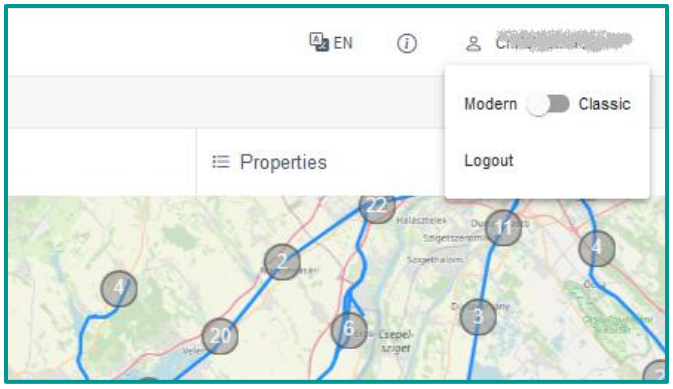
3.3 Logout

In RIS-CIP you will see always in the upper right corner your account under which you launched the application



Clicking on your user you get an option to logout.



Logout will redirect you to the RNE AD Login screen (see above)

3.4 Change Password

If the user forgets his password, the user's company IT department should be contacted. With the implementation of Single Sign-On approach, passwords are no longer stored or manage by RNE.

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4 CIP Roles Description

4.1 Overview of Roles

RIS allows roles to be freely defined and assigned to users. Each role is based on assigned permissions. The bellow image shows the different permissions relate to CIP that are included in the roles management and can be assigned to specific roles. It corresponds to the Corridor Information section menu, so roles can be created with different purposes. Also, a user can have more than one role.

CIP

Privileges	VIEW	EDIT	EXPORT
	☐	☐	☐
Node	☐	☐	☐
Terminal	☐	☐	☐
Documents	☐	☐	
Projects	☐	☐	☐
Information Documents	☐	☐	
Text Modules	☐	☐	☐
Re-routing Lines	☐	☐	☐
ETCS Status	☐	☐	☐

4.2 RFC/Country Restrictions per User

In the user settings, the corridors and countries that the users have active restrict the roles that might have assigned. This way, if a user has an assignment to a specific RFC, then all the permissions are related to that corridor. The same approach is used to restrict permissions based on the countries assigned to the user.

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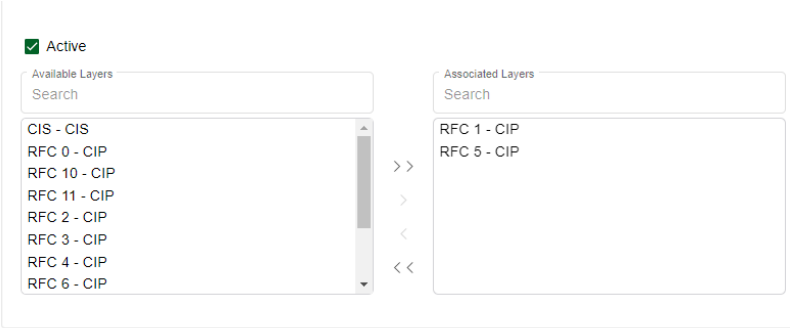

4.3 Specific Roles for CIP

The following roles have been created to manage corridor information in RIS:

Corridor User. A User assigned with this role can access and manage the Information Documents,

Documents, Text Modules, Projects and ETCS Status belonging to the RFCs that has assigned in his user profile.

Corridor Re-Routing: A User assigned with this role can access and manage the ICM Re-routing options and also has a read-only access to the records related to the Map Administration and Line Properties.

Corridor Admin: A User with this role can create new nodes and terminals and manage the Information Documents, Documents, Text Modules, Projects and ETCS Status belonging to the RFCs that has assigned in his user profile. This user has also a read-only access to the records related to the ICM Re-routing options.

Section Admin: A User with this role can create sections in the topology for the RFCs and countries that has assigned in his user profile. Can also view and export the rest of the topology (locations, tracks and segments)

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5 Language

The application shows at the top right a language symbol. Currently, the application provides English as system language. Further languages may be provided in future.

6 RIS-CIP navigation logic

The RIS-CIP application is structured, clear and menu-driven. Which functions are visible via the respective menu items depends on the permissions as CIP user. For the sake of simplicity, the screenshots resulting from the assignment of all CIP-related rights are shown below.

The menu is structured in the following functional groups:

- Topology: Contains all functionalities that are provided to access the base topology, predominantly presented in the map and to manage the rail-freight corridors within the map.
- Corridors Information: contains all specific functionalities of rail-freight corridors that are not topology related.

7 Notification panel

Notification panel is displayed whenever an action is performed in RIS. Of the action is successful, the notification panel is green, if the input in the user interface is not sufficient to carry out the action correctly the notification panel is orange; if the action is not successful or any error occurs during its execution, the notification panel is red.

e.g.

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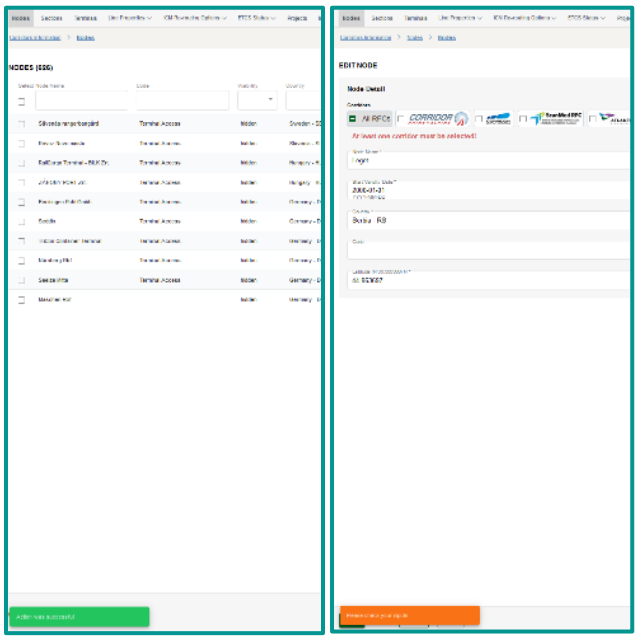

8 Topology

This is the presentation part of the base topology and the corridors in map form. The base topology forms the basis of the corridors, is a prerequisite for managing sections of the corridors and can therefore be displayed on the map or in tabular form.

A general overview of the topological logic, the dependencies of entities to each other (macro- and mesoscopic layer) and also the impact of introduction of tracks and also time dimensions to entities (by means of validity periods) is summarised in the document “Topological Model and Data Model RIS – Validity Periods”.

8.1 Interactive Map

An important representation in RIS is the interactive map. This shows the topological model in various forms, which can be set using the selection on the left-hand side.

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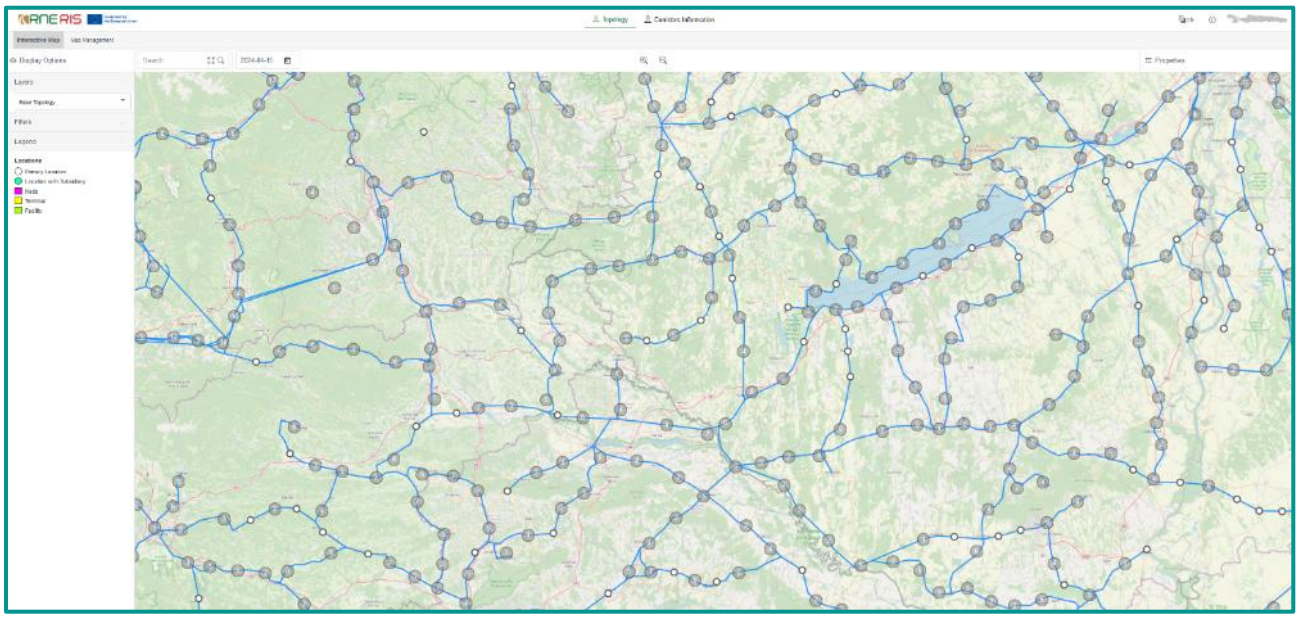

The interactive map is structured as follows:

- Central part: shows the map (derivative of open street map as background) with the topological entities selected, respectively.
- Display options: Shows different display options or possibilities to show or hide different entities.
- Search: searches for names of entities in the topological network
- Date: shows the date on which the network is to be displayed. E.g. a date in the past shows the network as it existed in the past; a date in the future, showing the network as it is currently stored in the system for the future. This allows for future-planned entities to be displayed as well.
- Map Tools - Centrally at the top in the middle:
  - +/-: Zoom in / out in the map
- Properties: shows properties of a selected entity

8.1.1 Showing the Base Topology

The user can select the network that should be presented on the map. Base Topology (selected in the section Layers of “Display options”) shows the network of segments connected to each other and respective. The base topology is the underlying network for all layers and therefore the same for all layers.

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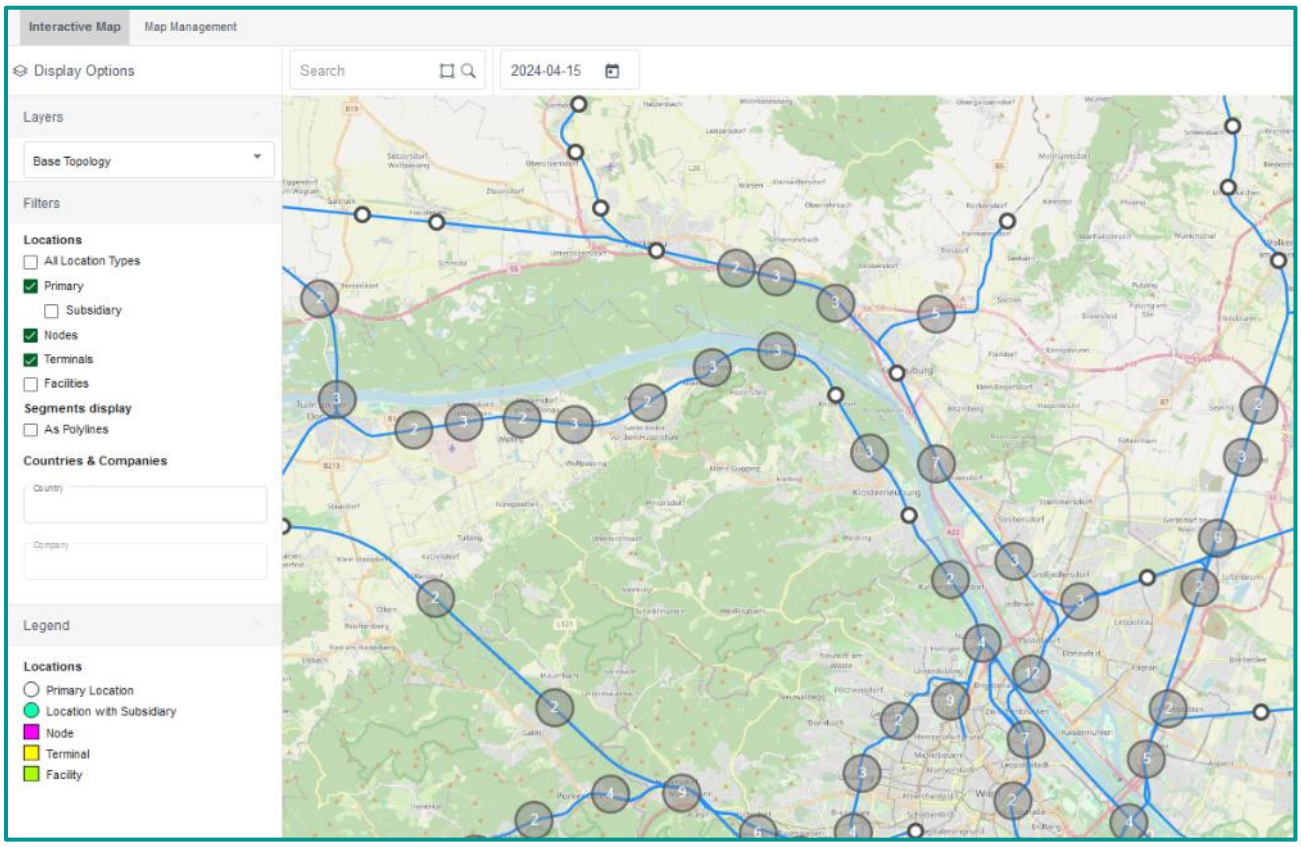
Interactive Map
Map Management
Display Options
Search
2024-04-15
Layers
Base Topology
Filters
Locations
All Location Types
Primary
Subsidiary
Nodes
Terminals
Facilities
Segments display
As Polylines
Countries & Companies
Country
Company
Legend
Locations
Primary Location
Location with Subsidiary
Node
Terminal
Facility

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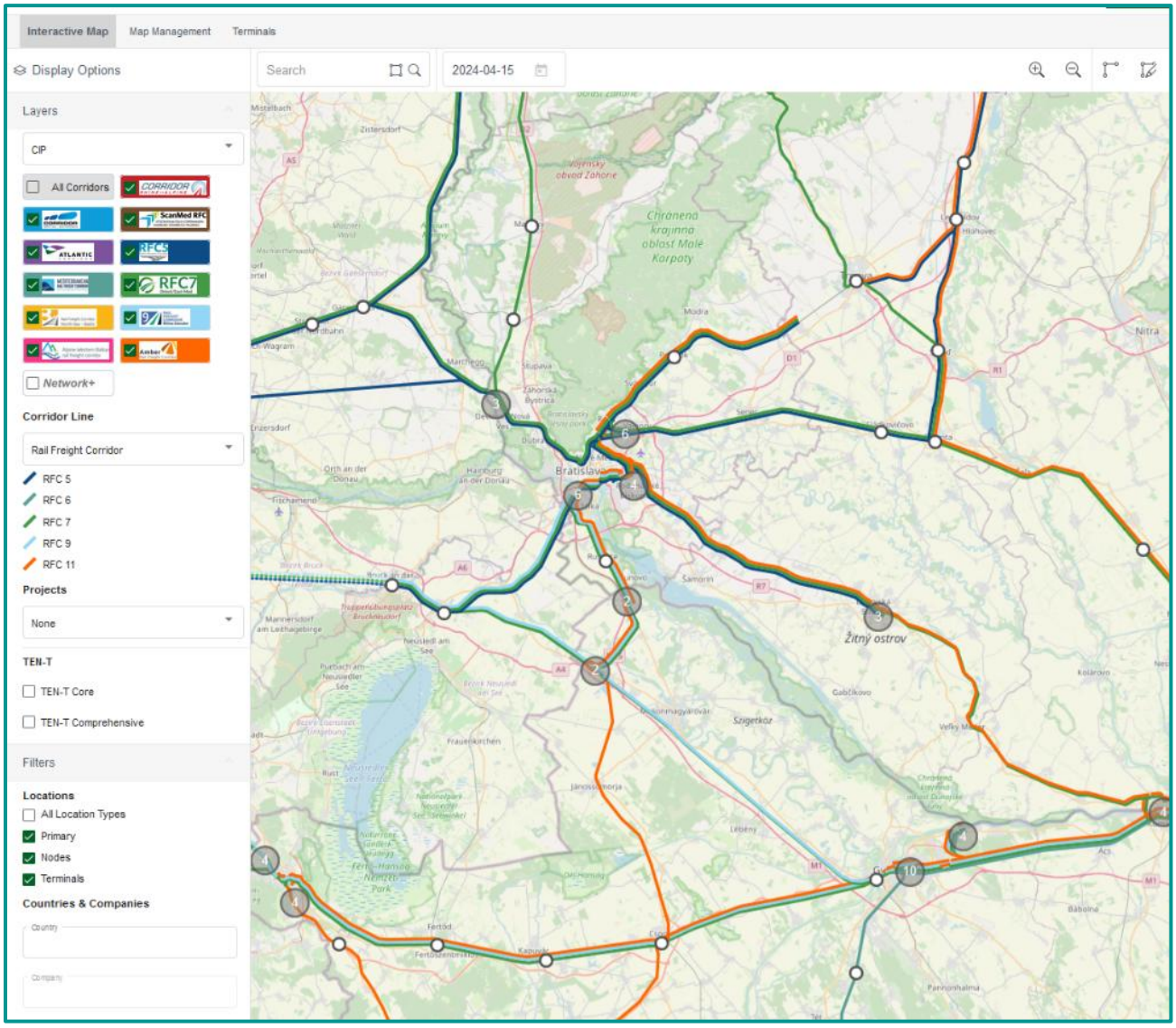
8.1.2 Showing the Rail freight Corridors

However, if you select the CIP layer, you can select one or more Rail Freight Corridors for presentation on the map.



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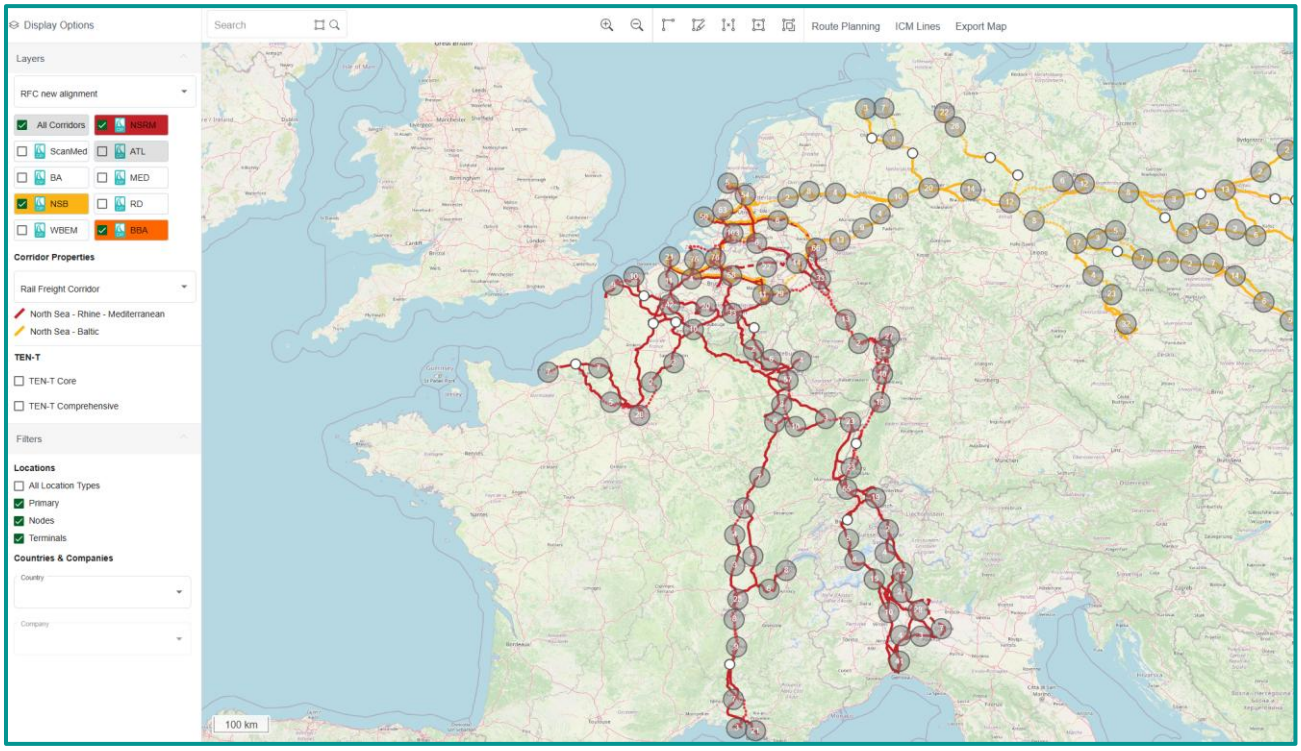
8.1.3 Showing European Train Corridors (ETCs)

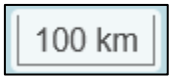
A new group of corridors can be selected in the interactive Map menu (chose **RFC new alignment**).

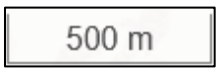


8.1.4 General map functionalities

8.1.4.1 Zoom, Zoom level, and coordinates

By means of the 2 central icons and , the map can be zoomed in and out. The same can be achieved using the mouse-wheel.

The current map scale can be read off the km scale, which is permanently displayed on the map in the lower left corner. For example low zoom level: 

and for high zoom level: 

In the lower right corner the user sees steadily the actual longitudinal and lateral coordinates of the mouse arrow: 

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8.1.4.2 Auto-selection on hover

If you move the mouse over an object on the map, it is automatically selected and highlighted. At the same time, the name of the object appears as a tooltip.

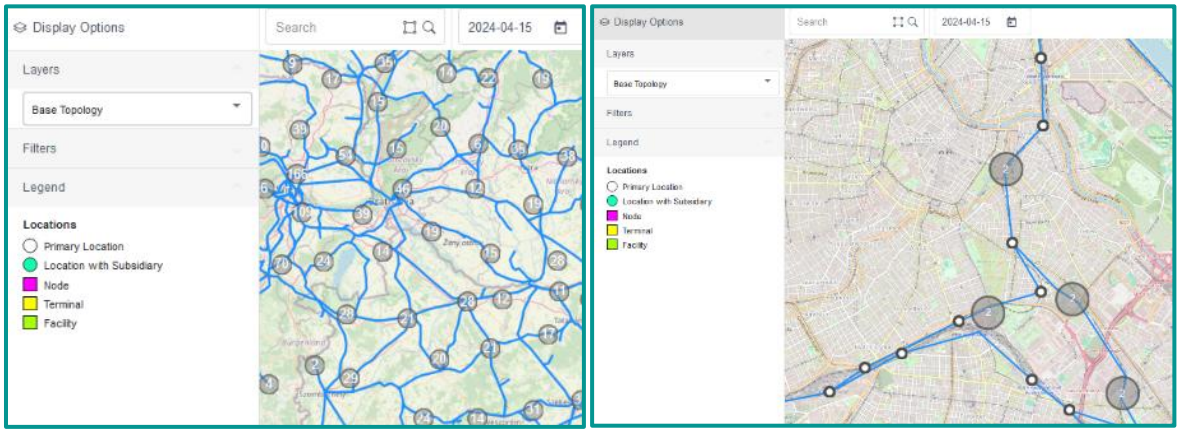
Here are 2 different examples:

1. auto-selection of a section

2. auto-selection of a location

8.1.4.3 Grouping

Dependent on the zoom level, locations are too narrow are grouped in one icon showing the number of elements grouped together:



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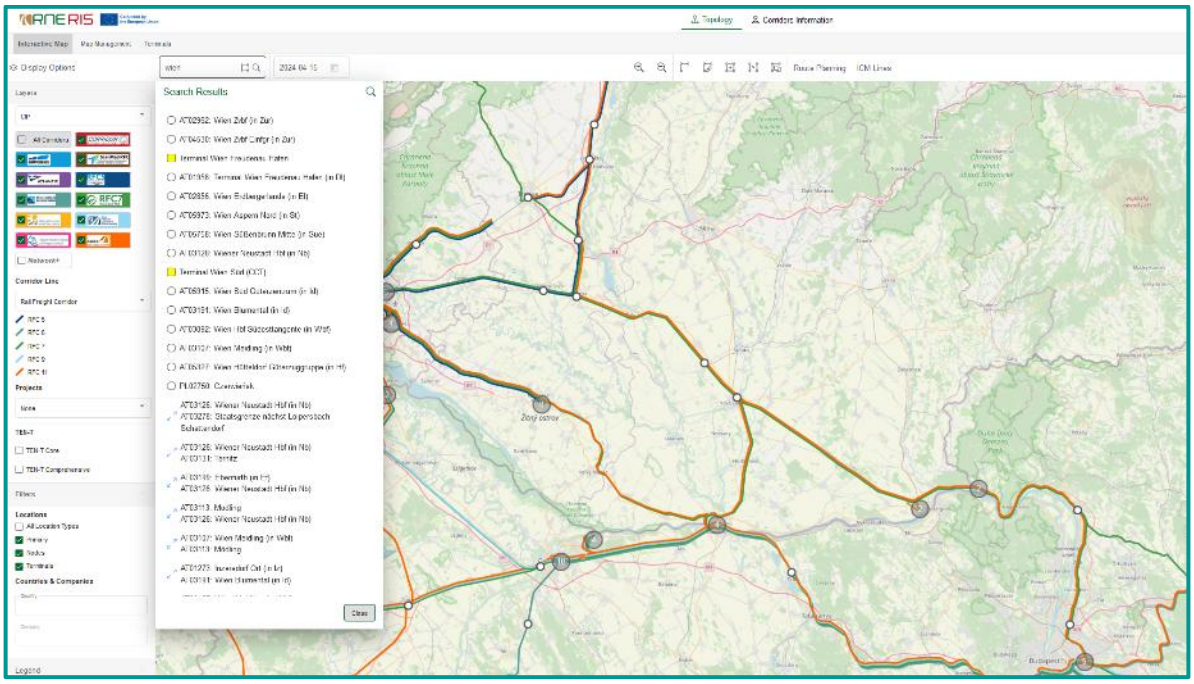
8.1.4.4 Search for objects

The application can search for the names of objects. A case-insensitive search is performed for the word part of the search string. Depending on whether base topology or rail-freight corridors are shown the search result will show the user different found objects (locations and segments for base topology, locations, and sections for rail-freight corridors). In the following the functionalities are described with regards to the presentation of rail-freight corridors.

There are 2 types of searches:

1. global search by means of icon : regardless of the map section, all locations and all sections assigned to the selected corridors are searched for:



2. Local search by means of activation of icon : all locations and all sections assigned to the selected corridors are searched for the actual map section.

- In this case the result must be empty as Vienna is outside the map section.
- Note: if you searched locally and you want to go back to global search you have to deactivate the icon.

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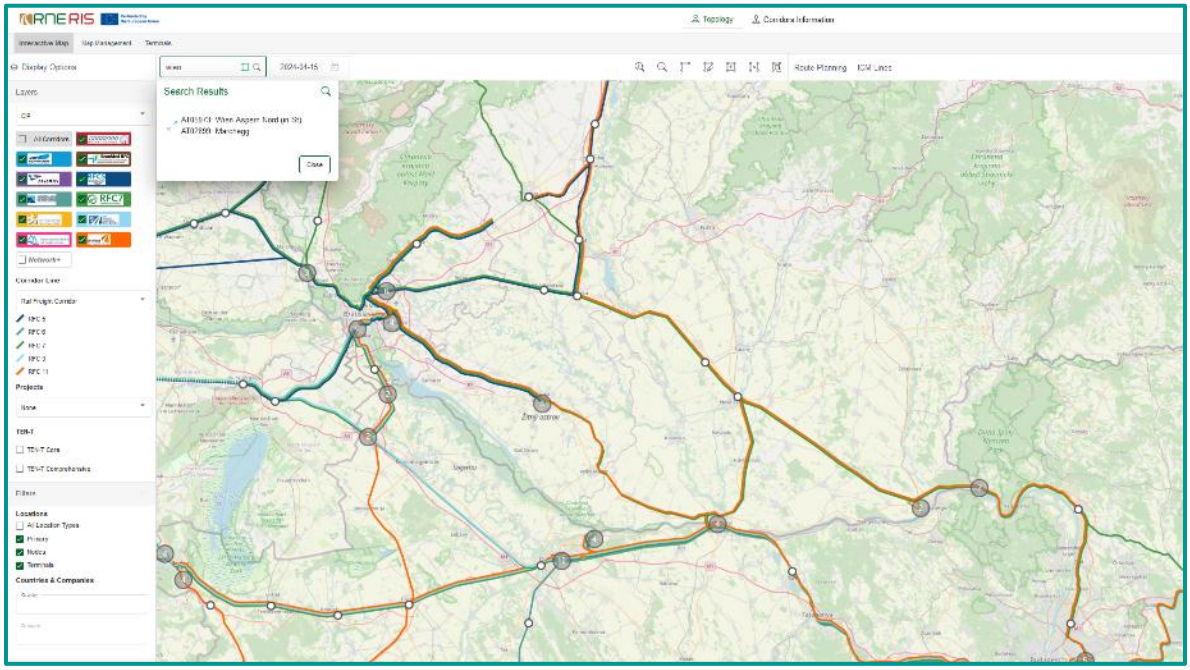

As mentioned above, the search result depends on the selected corridors. If you search for Vienna globally, but no corridor is selected that runs through Vienna, there will also be no search result.

Note: the search results panel can be moved to any other position with the mouse so that the map section behind it becomes visible. This is done by dragging the mouse pointer to the upper area of the search panel.

8.1.4.5 Jump to object

It is possible to jump directly from the search result to the object, whereby the map display is zoomed accordingly.

If you jump from the above example to the location “Terminal Wien Freudenau Hafen”, for example, the application shows the following map section:

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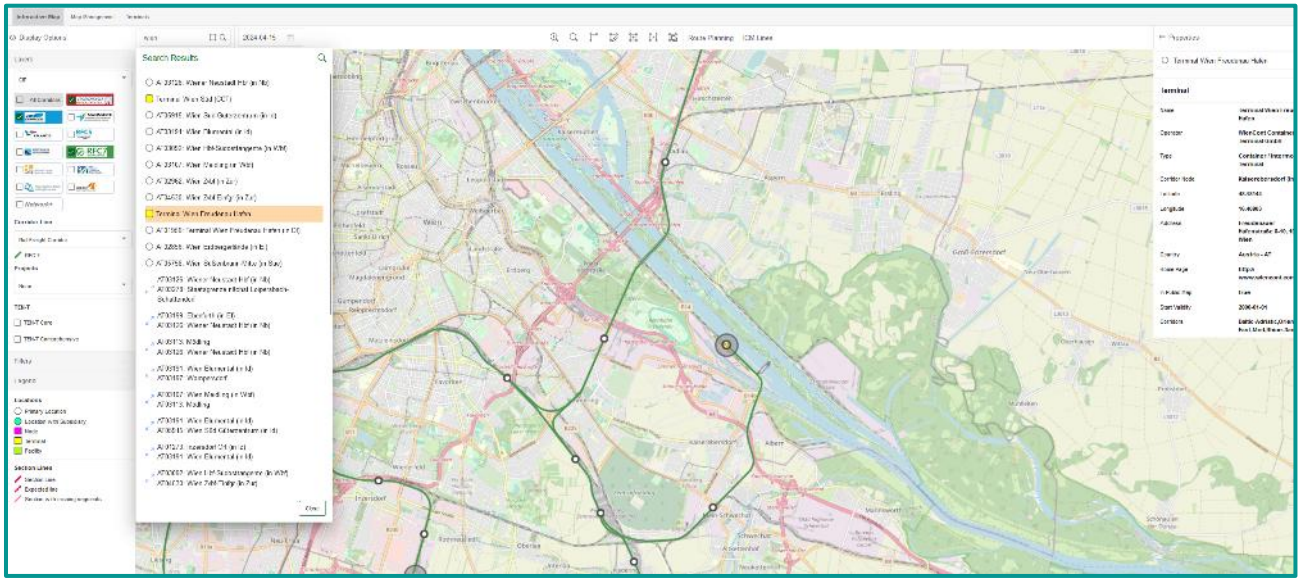
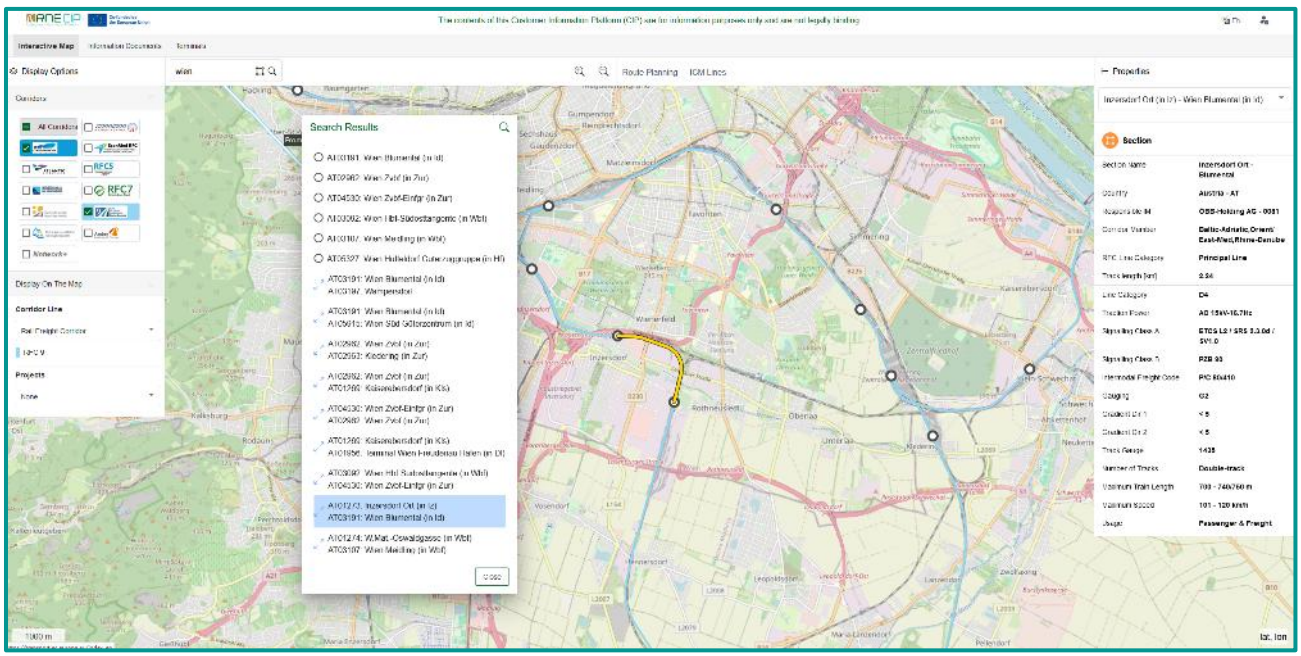


The map is centred to the selected location, zoomed in, the location is highlighted in the search result and is highlighted in the map, and the properties panel is opened showing the properties of the location.

Another example is if you select a section of the search result. In this example the Section from Ebenfurth to Wiener Neustadt Hbf is selected and the application shows the following:



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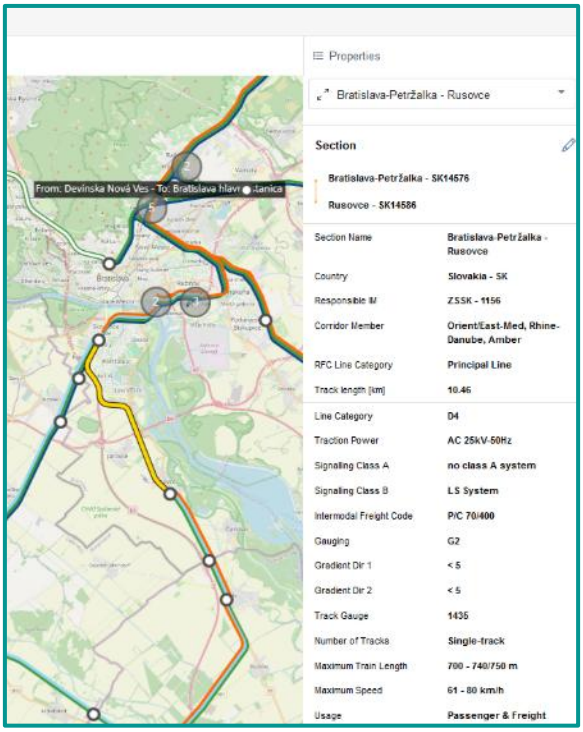
Also, here the section of the search result is highlighted in the result set, the map is centred to the section and zoomed in. The section is highlighted in the map and the properties panel shows the properties of the selected section.

8.1.4.6 Selection of objects and its properties

All objects in the map shown can also be selected directly with the mouse. The application then behaves in the same way as when selecting via the search result: the selected object is highlighted, and the properties are displayed on the right.

Selection of a section:



The edit Icon leads directly to the detail data dialogue of the section (see below). Another example is the selection of a location in the map:

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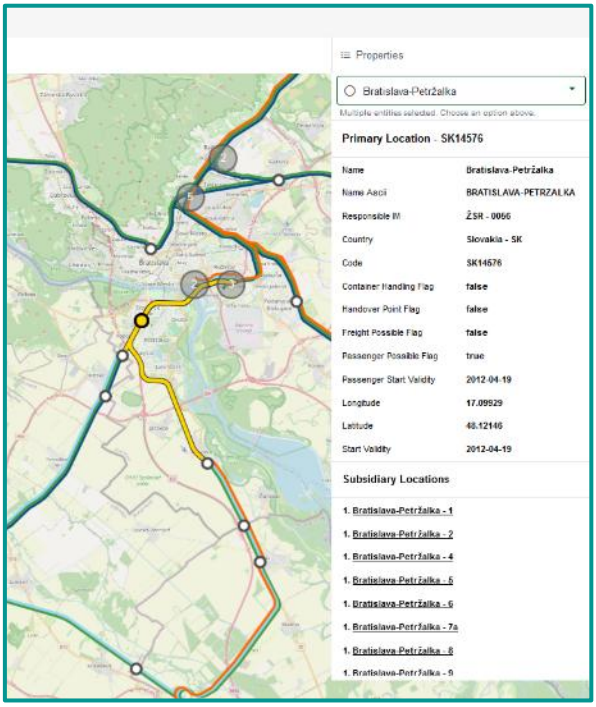

The object type and a corresponding identification of the object are always shown in bold.

The following cases are possible:

- Location that is a Primary Location: The type is Node, the identifier is the primary location code.
- Location that is not a Primary Location: The type is Node, no identifier is shown in this case
- Terminal: The type is Terminal, no identifier is shown in this case
- Section: The type is Section, no identifier is shown in this case

Above the shown properties the user can select between entities adjacent to that selected.

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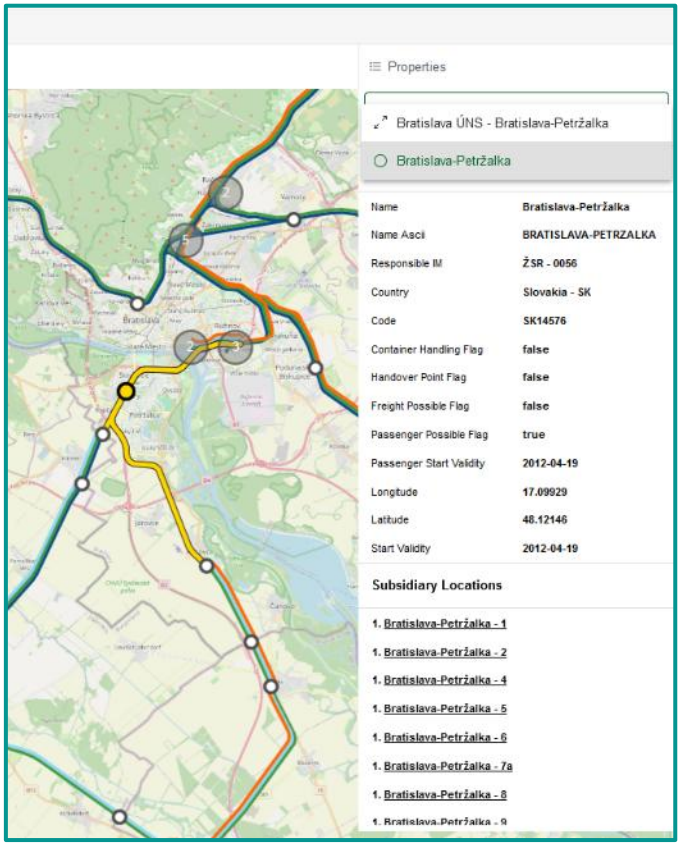

Here, the selected location and its connected section are shown and can be selected. Changing the selected entity will update the displayed properties, accordingly.

8.1.5 Display functions and options for the corridors

8.1.5.1 Redirection to corridor pages

Via the corridor selection, which is displayed in the left panel, you can jump directly to the website of the respective corridor. This is done by clicking on the corridor icon to the right of the respective check box:

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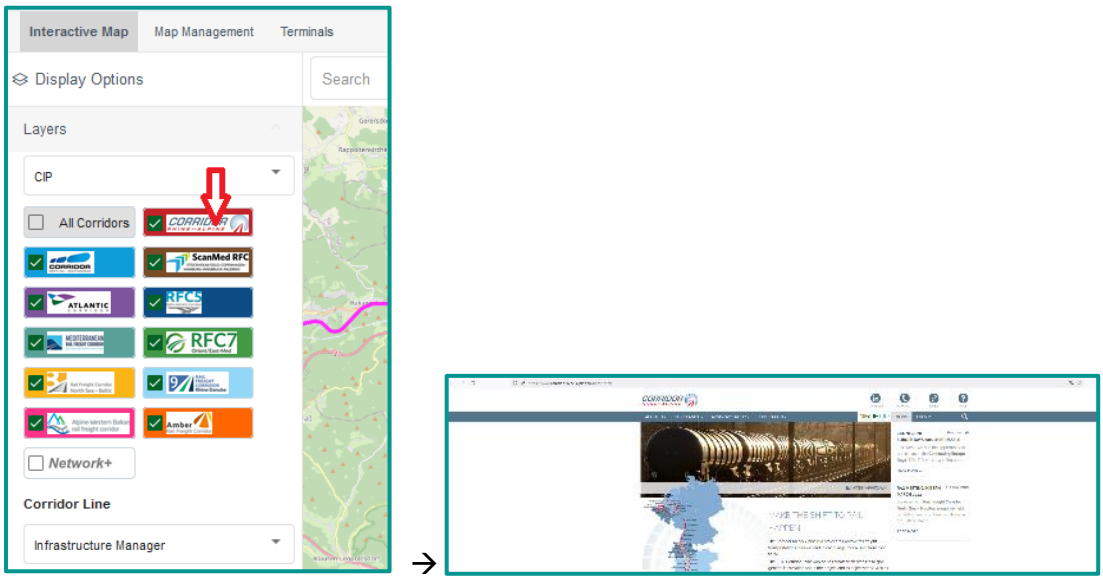

8.1.5.2 Selection of corridors

In the upper part of the left panel, the corridors can be selected, respectively. The selected corridors are shown in the map in different colours where the standard view displays the corridors in specific colours:

Corridors that share sections are displayed in parallel according to their colour so that the complete route of each corridor can be seen.

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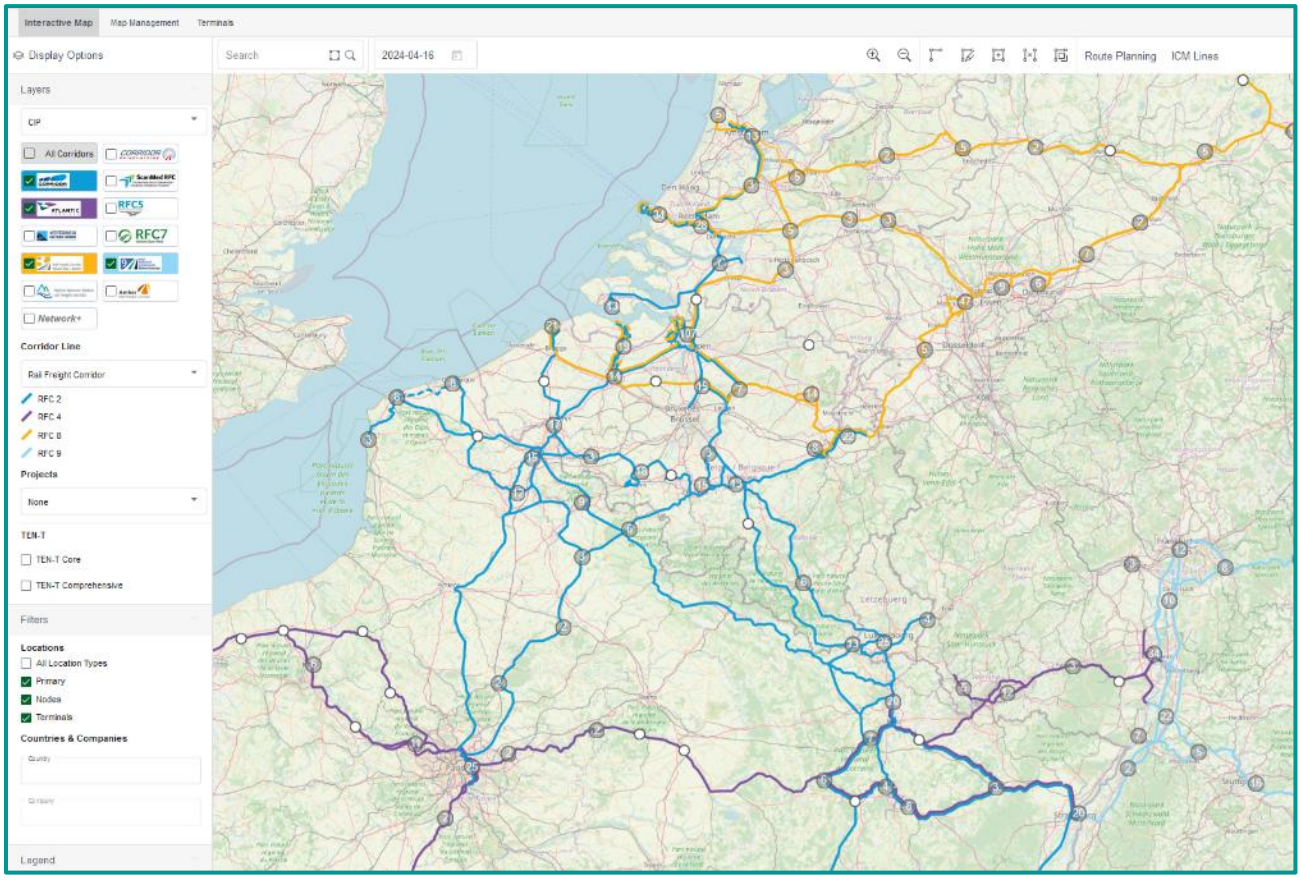
8.1.5.3 Corridor details

The selection for Filters is located below the corridor selection. If it is not already visible, simply click on the title "Filters" and the selection will be expanded



The user can select whether, in addition to the corridor route, the locations (nodes) that are assigned to the corridor or terminals that are assigned to the corridor should also be displayed on the map. In the example below, these are not selected, so the corridors are shown as routes without nodes

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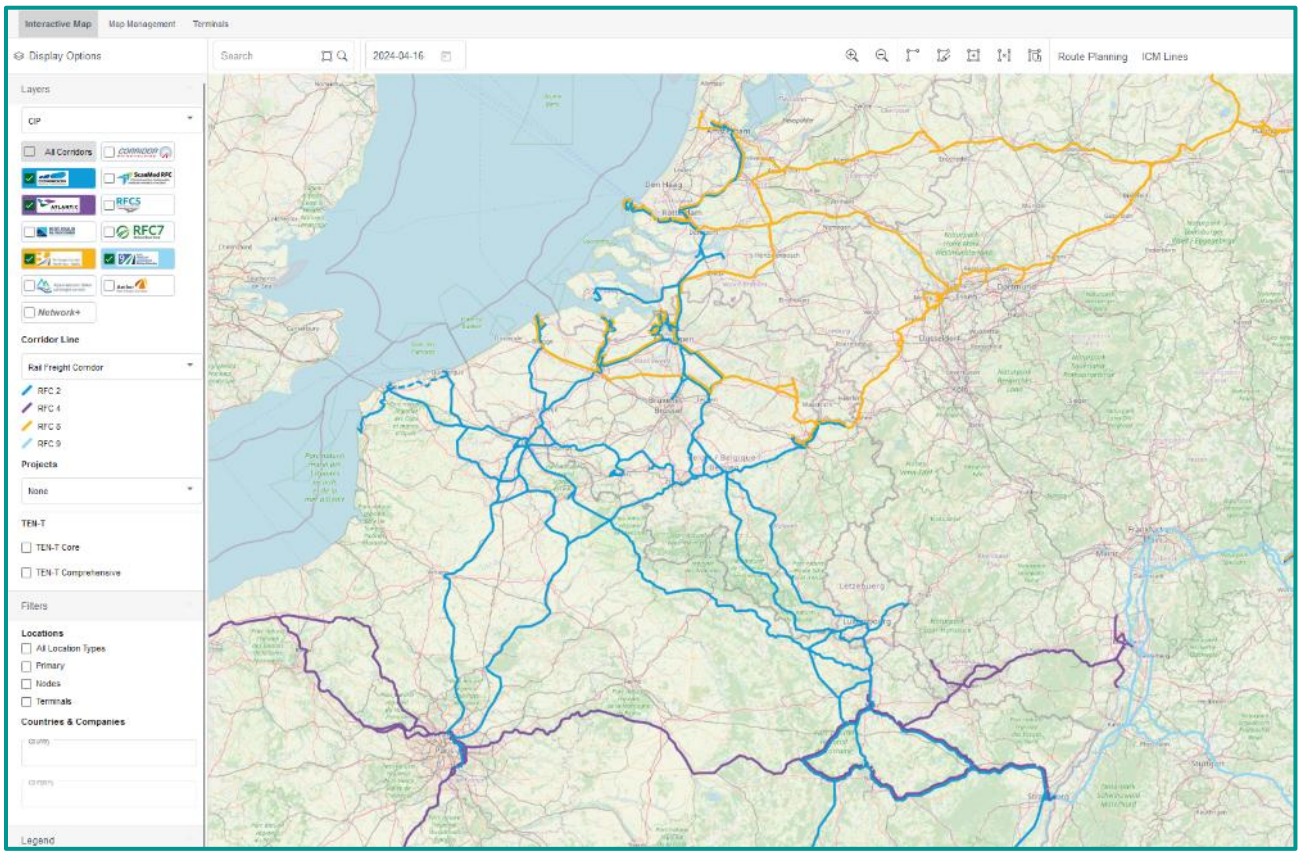

You can also filter for a country or a specific company. If the above example is restricted to Belgium, the user sees the following

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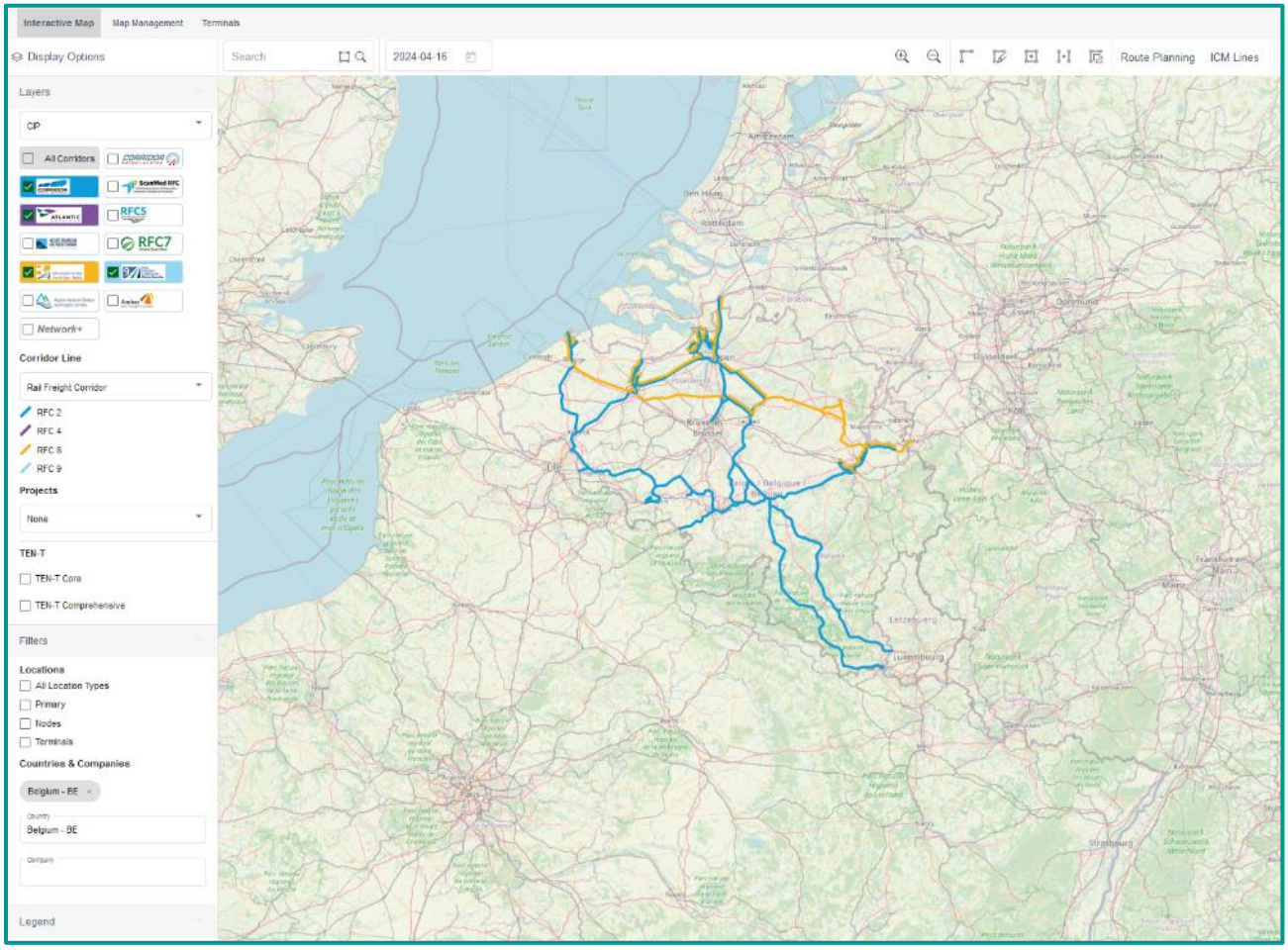


8.1.5.4 Corridor visualisation for different line properties

Below the selection of corridors, you can choose between different display formats for the corridors.

By default, "Rail Freight Corridor" is selected, which means that each selected corridor is displayed on the map in its specific corridor colour.

However, there are also other options for selecting specific corridor parameters that should be reflected in the display on the map.

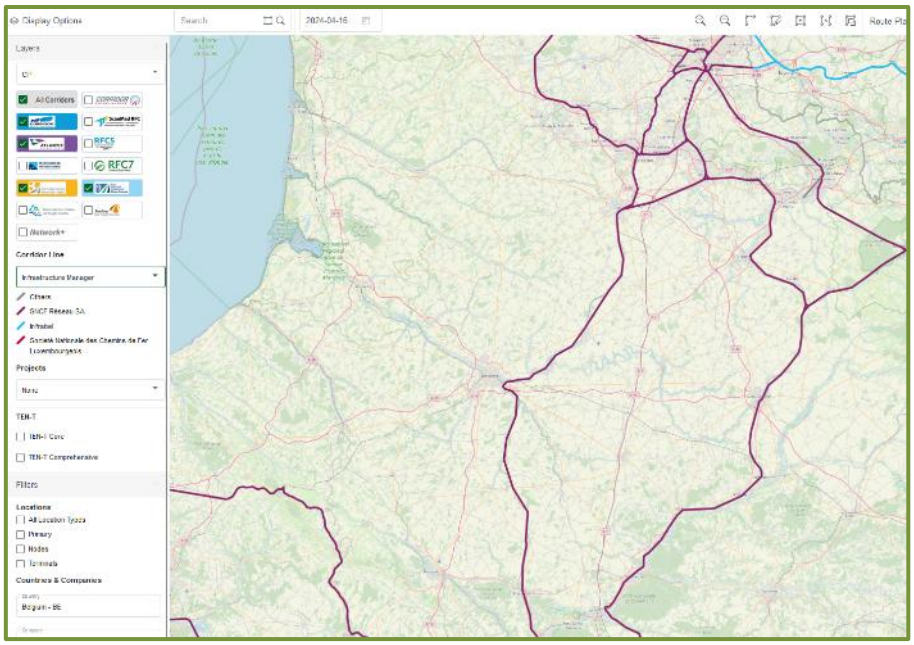
The next after the standard selection is Infrastructure Manager. This selection means that the sections of all selected corridors are displayed on the map in different colours, depending on which Infrastructure Manager is responsible for them.

Colours correspond to corridors:

Colours correspond to responsible IM:

Below the selection of how corridors shall be displayed on the map you can also see different legends. On the left, the legend shows the corresponding corridor designation for each colour. On the right, the legend for each colour shows the corresponding responsible IM.

Note that the legend changes dynamically depending on what is visible on the map. For example, if I show a much smaller area of the map in the example above right, the responsible IMs shown are reduced according to those that can be found on the map section:



The following different forms of presentation can be selected:

- Rail Freight Corridor: Default view
- Infrastructure Manager
- RFC Line Category

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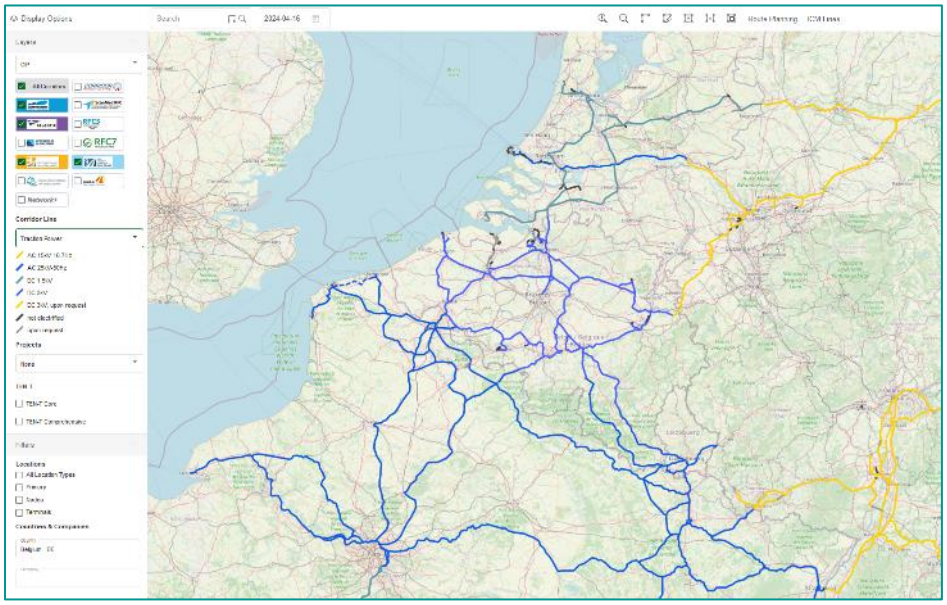
- Line Category (Load Model)
  - Traction Power
  - Signalling Groups
  - Intermodal Freight Code
  - Gauging
  - Gradient Dir. 1
  - Gradient Dir. 2
  - Maximum Train Length
  - Number of Tracks
  - Maximum Speed
  - Usage
  - Track Gauge
  - ETCS Build Status
  - ETCS Deployment Type
  - ETCS System Version
  - ETCS Operational Level

If Traction Power is selected as an example, the sections of the selected corridors are displayed in different colours according to their electrification:



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8.1.5.5 Ten-T Core and Ten-T Comprehensive Network

In addition to the corridors, the Ten-T Core and the Ten-T Comprehensive network can also be displayed. Please note that functionalities intended for corridors (e.g. routing, display of properties, etc.) cannot be applied to the Ten-T network. The next 2 screenshots show these networks and below them the corresponding legend for the network.

Ten-T Core:

Ten-T Comprehensive:

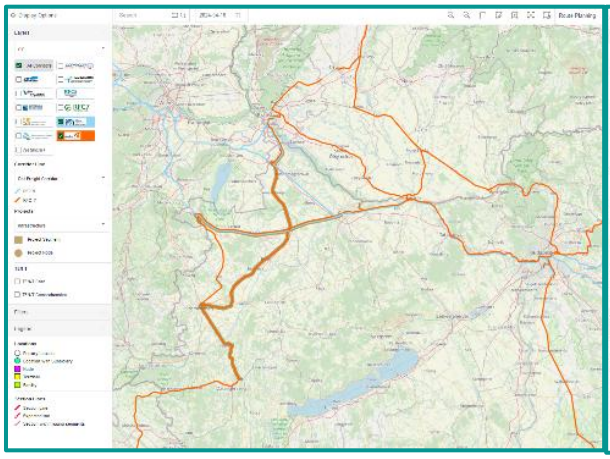
8.1.5.6 Display Corridor Projects

3 different types of projects are managed in the system: Infrastructure, ETCS and Radio System.

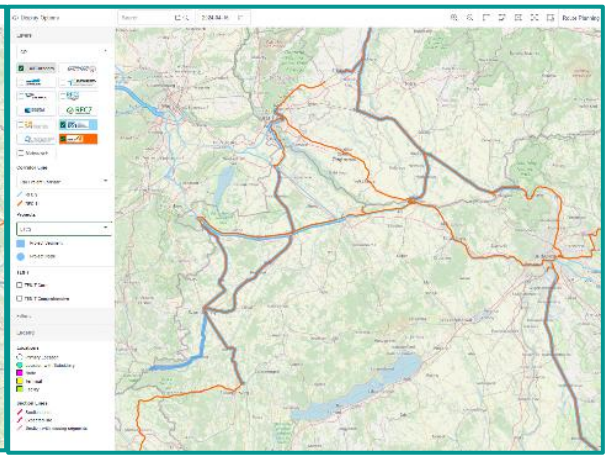
The projects can relate to sections of corridors but also to locations themselves.

If you select the display of one of the project types, the corridor sections affected by a project are highlighted in a different colour:

Infrastructure projects along Corridor 9&11:



ETCS Projects along Corridor 9&11:



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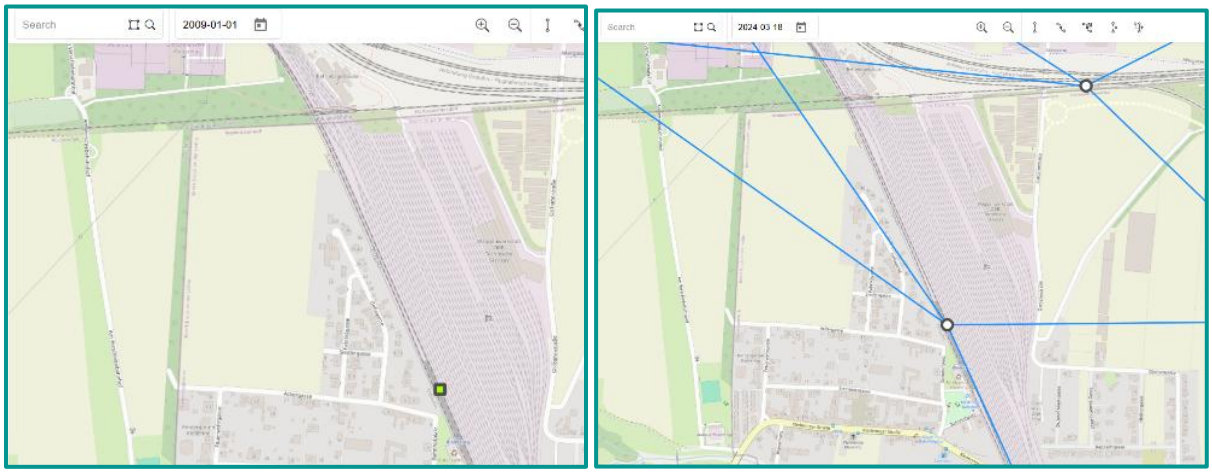
8.1.5.7 Date

The date field is set default to today and defines the date for which the network shall be shown on the map. As described in the document "Topological Model and Data Model RIS – Validity Periods" all entities have a validity period in which the current data of the entity are valid. Outside a given validity period the entity might exist with different set of data or even does not exist. E.g. today a station might not exist but maybe by 1st January 2025. Thus, this entity is not found if the date is set to 2024, but it is found if the date is set to a date in 2025. By means of this field the user can do a time travel through the topology in the past and also in the future.

Example: the primary location "Kledering" is existing in the system as valid from 1.1.2013. Before, this location is not existing in the system. Left, date is set to 1st Jan 2009. Only Kledering as service facility is available in the system, but not as primary location. Later, today, Kledering is already created as primary location and connected to other primary locations with segments.



8.1.6 Map Tools for Corridors

The user can manipulate corridors' sections by means of these tools. The changes to the sections are made for the selected corridors and are applied to all other corridors which share the same section as the selected one. The functions are:

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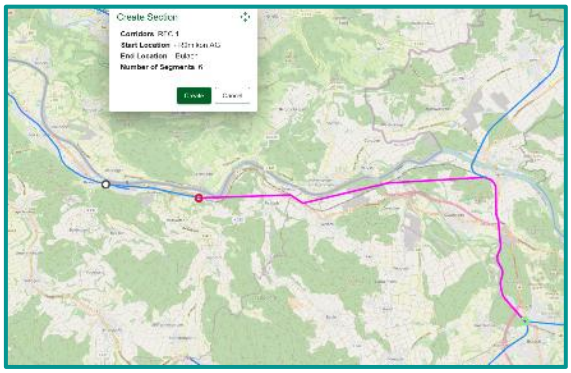
Create Section: if a user selects this tool the map switches to the display of segments. To provide spatial context, the lines of existing corridor sections and the Primary Locations (PLCs) remain visible while the tool is active; they are drawn beneath the selectable segments with a slight offset from their real position, in lighter shading, and cannot themselves be selected. The user can select adjacent segments that the user wants to group into a new section that shall be part of the selected corridors (note: if you select e.g. corridor 9 and 10 and you create a new section on the map this section will automatically be assigned to corridor 9 and 10). Only segments that are directly connected to the current selection can be added — non-adjacent segments can no longer be selected:



The red circle represents the starting point of the section and the green circle the current end point. The section can be extended by adding a further section next to the green circle. The validity period of the segment is defined as the latest start date of all segments in the section and earliest end date of the segment in the section.

When deselecting segments, only the segments at the two ends of the section can be removed; a segment that is connected on both sides cannot be deselected, as this would break the continuity of the section.

Edit Section: a user can select a section and add or deselect a group of adjacent segments of the section. By means of this tool a section can be shortened or extended to either side. As with Create Section, only directly connected segments can be added, and only the segments at the two ends of the section can be deselected.

Selecting future-active segments (Expected Line sections): In addition to currently active segments, the Create Section and Edit Section tools allow the selection of segments that only become valid in the future. To work with them, set the map display date to a future date (e.g. 01.01.2027) before opening the tool. Future-valid segments are drawn as a dashed grey line and change to magenta once selected.

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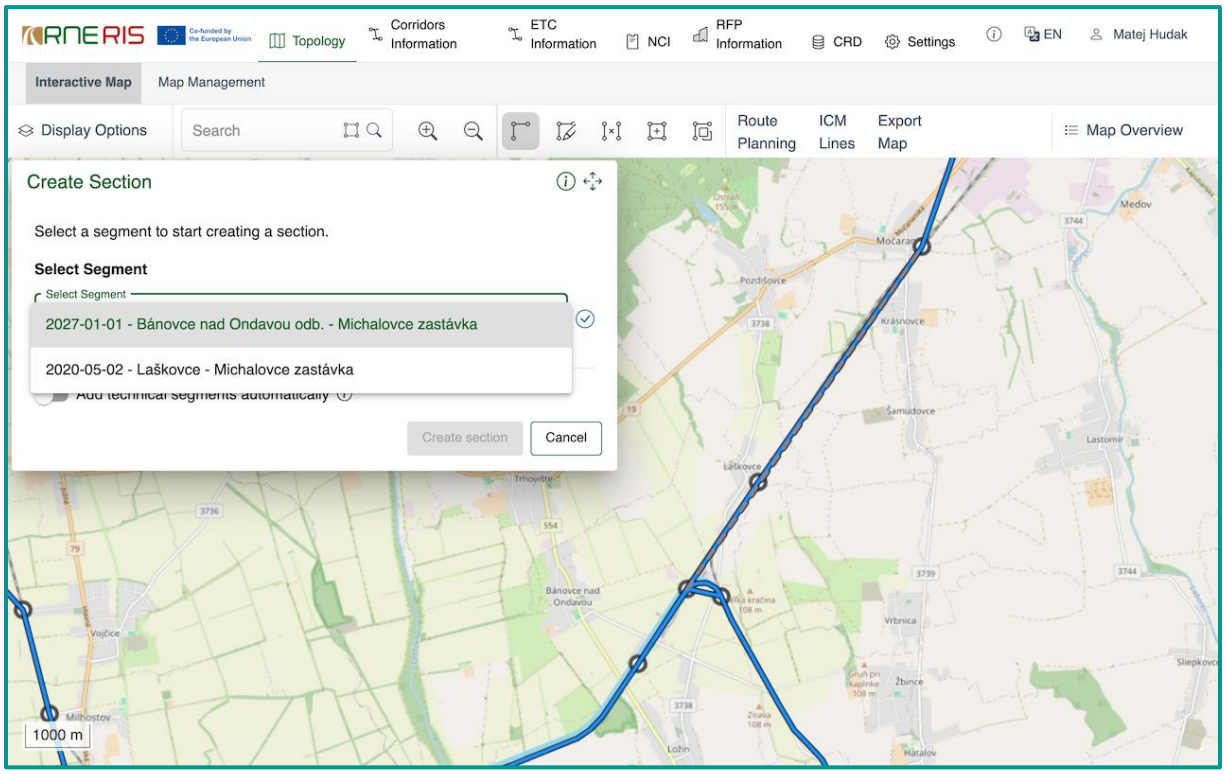
Where a current segment and a future segment overlap, clicking opens a dialog listing the available segments; the user selects the intended one and confirms with the check button. Deselecting an overlapping segment works in the same way via the dialog.

Any section that contains at least one future-active segment or location is automatically assigned the section type Expected Line. Once the involved segments or locations become active, the section remains an Expected Line until a Corridor Administrator explicitly changes its type in the Section details (see chapter 9.2.2).



The dialog listing the overlapping current (2020-05-02) and future (2027-01-01) segments before confirmation

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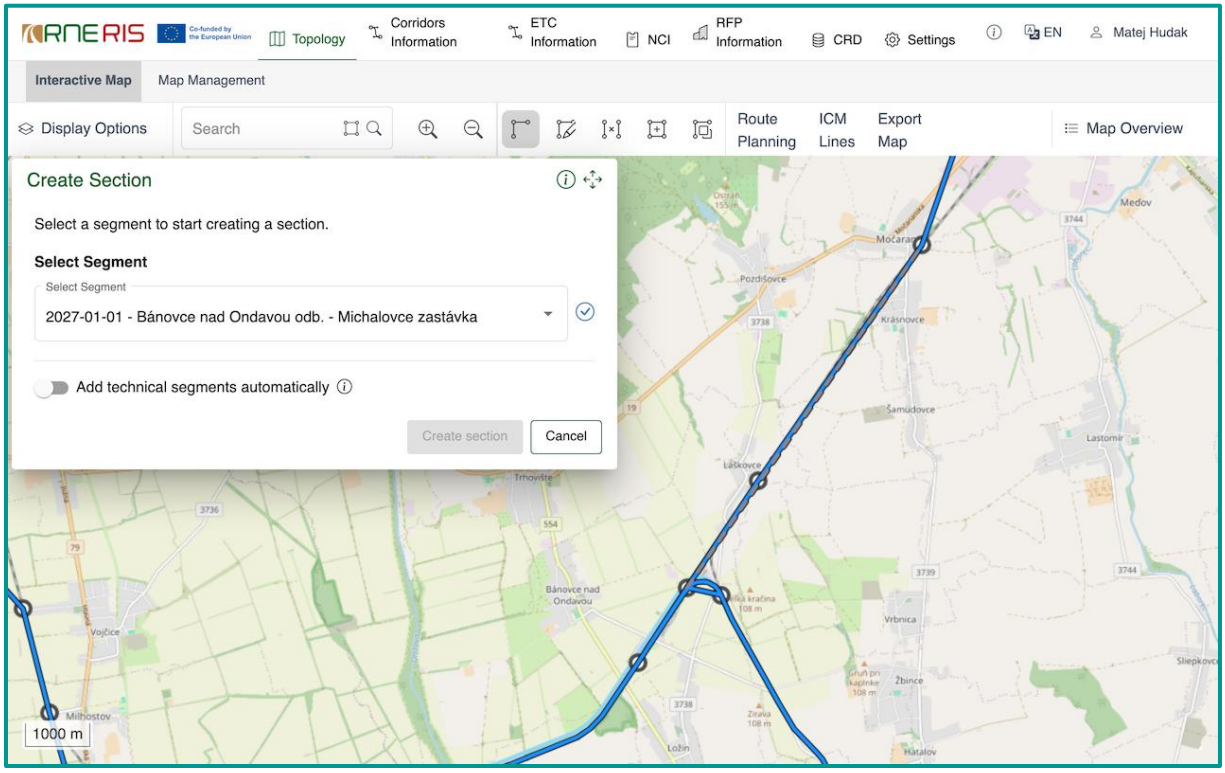
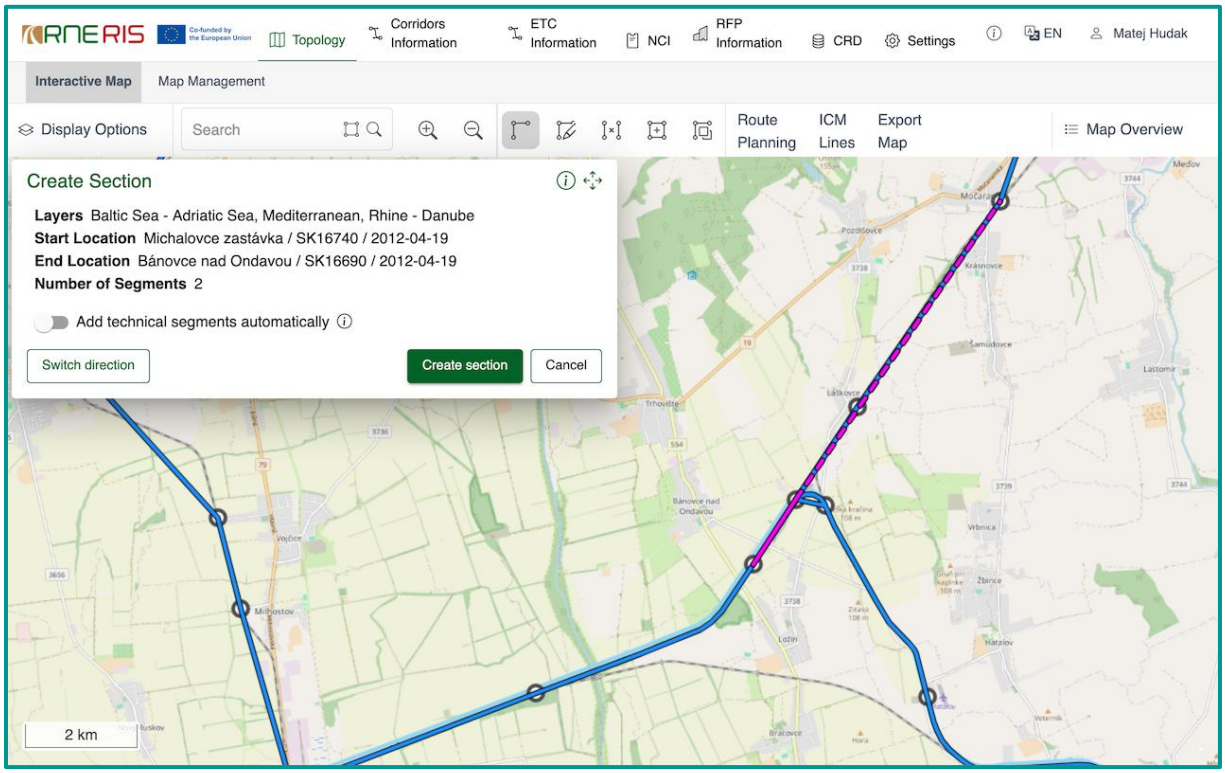


The future segment chosen in the dropdown and confirmed via the check button



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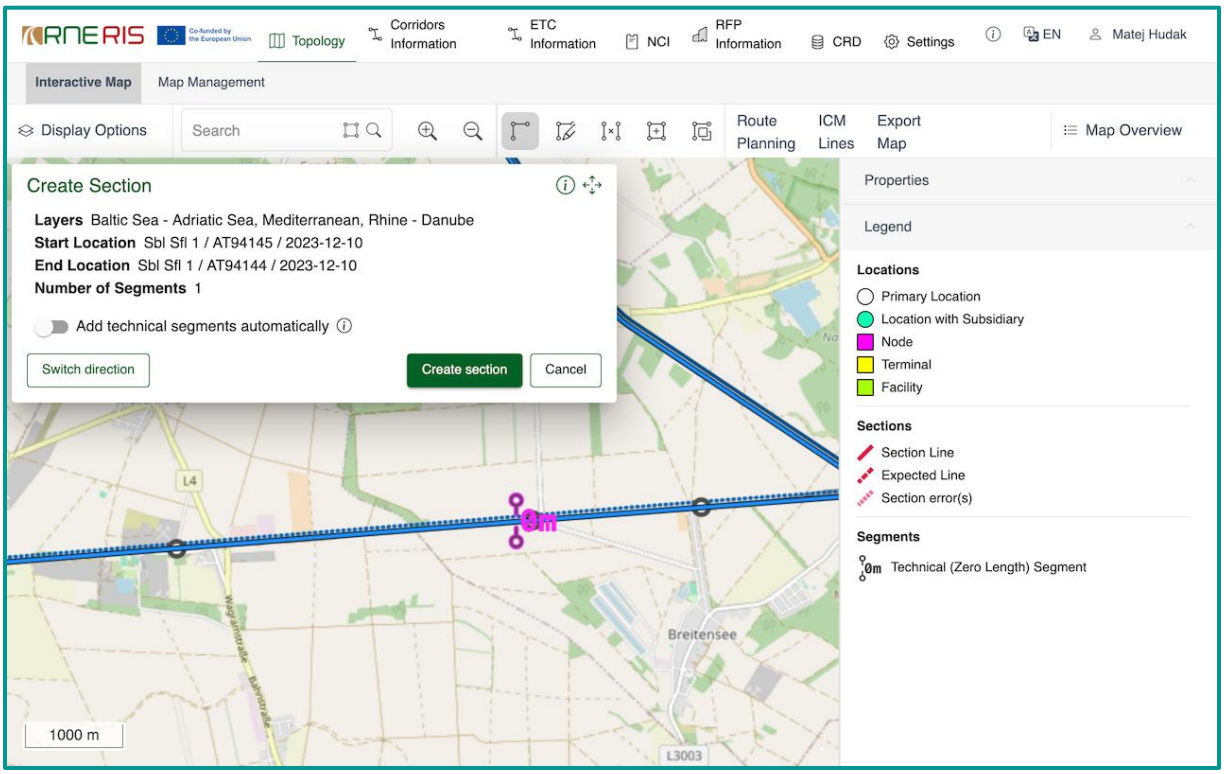
The selected future segments rendered in magenta on the map, with the Create Section summary (2 segments, "Switch direction", "Create section")

Zero-length (technical) segments: At borders, segments may connect locations that share identical coordinates, resulting in segments of effectively zero length that are otherwise hard to see even at maximum zoom. These are shown with a dedicated 0 m icon, which is also described in the Legend panel on the right (under "Segments → Technical (Zero Length) Segment").

Such segments can be handled in two ways:

- Manual selection: click the 0 m icon directly to select or deselect the technical segment. The change is reflected in the dialog and the section can be saved.



- Automatic selection: enable the "Add technical segments automatically" toggle in the dialog. When a segment neighbouring a zero-length segment is then selected, the zero-length segment is added automatically and a short notification (snackbar) confirms

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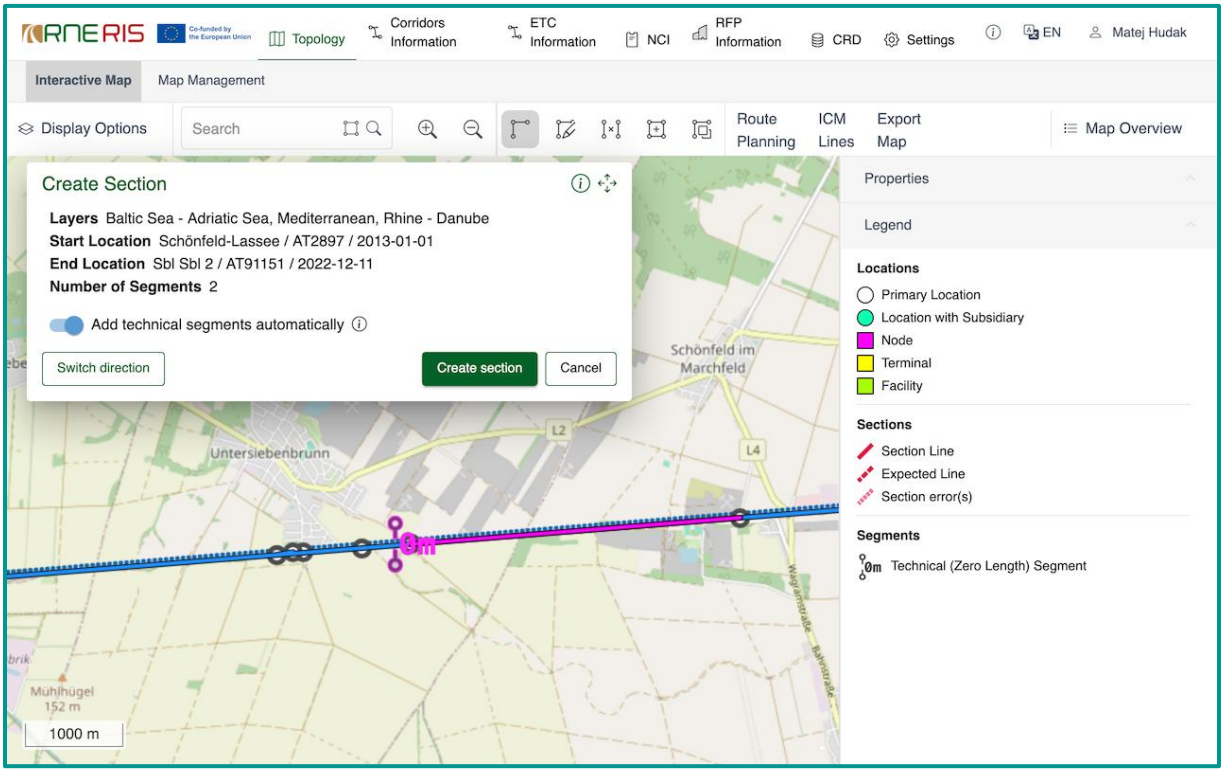
the automatic addition.



Map legend: While the section tools are active, the right-hand Legend panel explains the symbols in use, including the Section Line and Expected Line styles, the Section error(s) indicator, and the Technical (Zero Length) Segment icon.

Combine Section: a user can select 2 adjacent sections and perform this function. The end date of the 2 sections will be set to yesterday and one new section combining the 2 selected sections will be created with current start date. The node that was connecting the 2 combined sections is automatically made inactive (its end date is set to yesterday and its visibility is set to "hidden"). This is the inverse behaviour of the Split Section tool, where the split point becomes a new node.

Split Section: a user can select a section, define a location at which the section is split and split the section into 2 new ones. The original section's end date is set to yesterday and the start date of the 2 new created sections is set to current date. If the split point is a Primary Location that is not yet a CIP node, a new CIP node is automatically created from this Primary Location.

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8.1.7 Route Planning

RIS-CIP has a high-performance route planning function along the corridors. You can simply set a start and end point on the map with the mouse and have the route calculated.

The coordinates of the set start and end points are displayed in the dialog panel opened with activating route planning functionality. The start and end points do not have to be exactly on one of the selected corridors. The application automatically searches for the nearest location on a corridor and uses this for the route calculation.

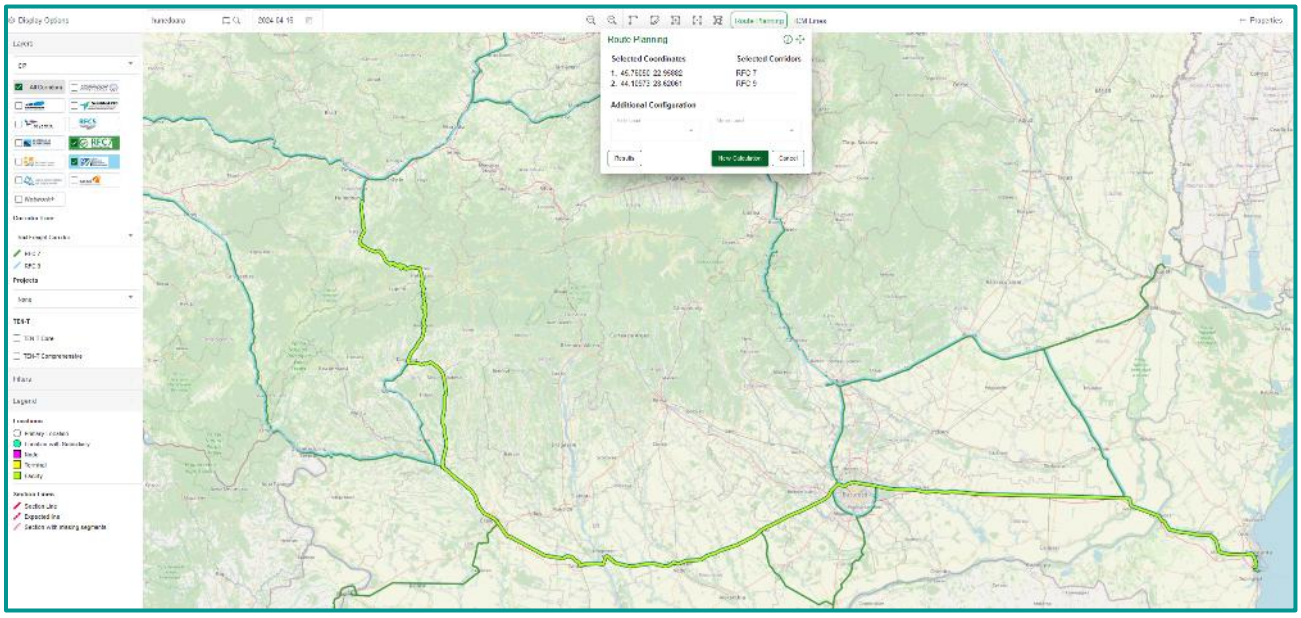
In addition to searching for the shortest route between a start and end point without restrictions, the search can also be restricted with two constraints:

- Axle load (selection by classes in tons)
- Meter load (selection by ton categories)

Example:

In the below picture a route between Hunedoara and Porta Alba was calculated without restrictions.

The result is a route as highlighted in light green on the map. The calculated route is green throughout, which means that the route is possible.



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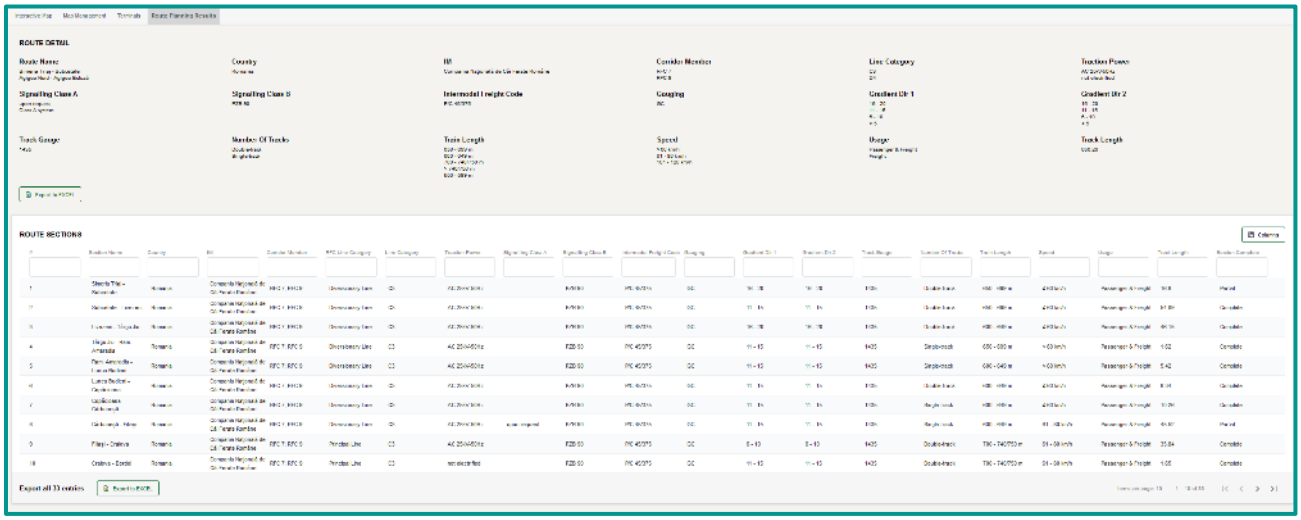
Once the route has been calculated and displayed on the map, you have the option of calculating a new route, cancelling the calculation, or viewing the details under "Results". If you select Results, you get a detailed summary of the route calculation:



The route parameters and the summary of the properties of the individual lines that make up the entire route are summarized in detail in the header. The lower part lists all sections and their details from which the calculated route is formed.

The next example shows the same route calculation, but now with restrictions for axle and meter load. In this case the route is also calculated, the proposed route is different though. Furthermore, parts of the route are shown in yellow. These are lines of the route not sufficiently designed to be compliant with requested axle or meter load.

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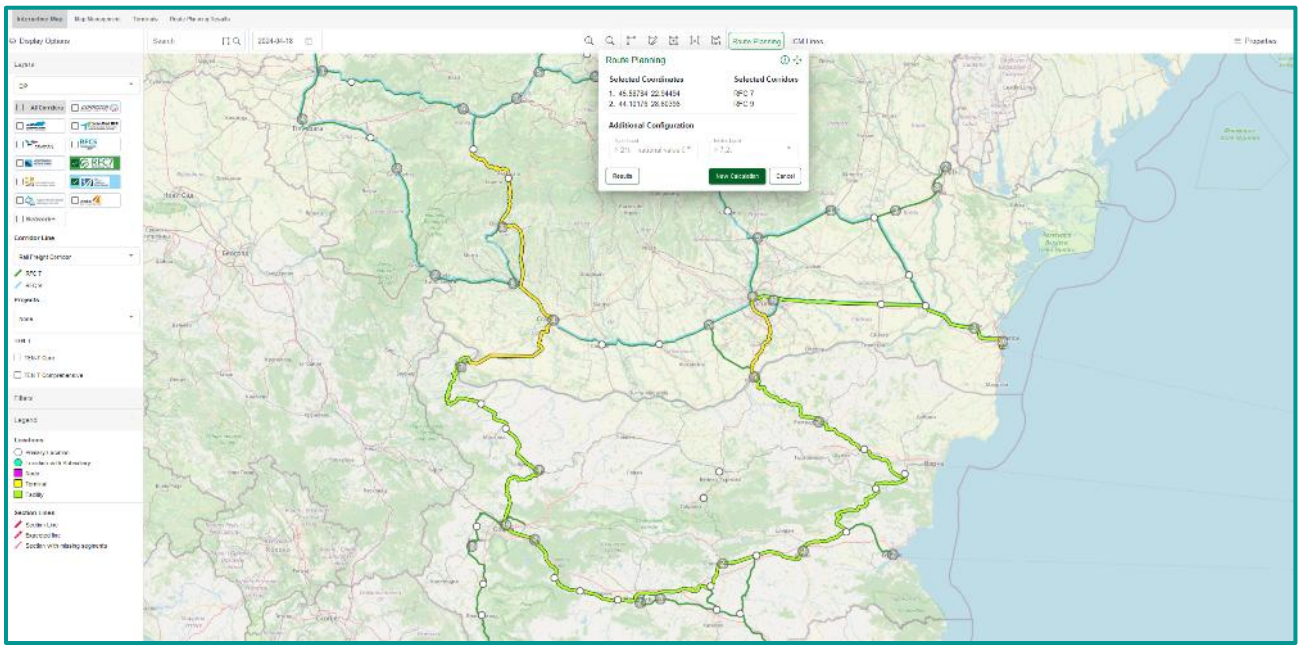

The following table shows the rules for the routing restrictions regarding axle (#x1) and meter load (#x2) in tons.

LINE CATEGORY	EXPRESSION
A	#x1 <= 16 and #x2 <= 5
B1	#x1 <= 18 and #x2 <= 5
B2	#x1 <= 18 and #x2 <= 6.4
C2	#x1 <= 20 and #x2 <= 6.4
C3	#x1 <= 20 and #x2 <= 7.2
C3L	#x1 <= 20 and #x2 <= 7.2
C4	#x1 <= 20 and #x2 <= 8
C4/CE	#x1 <= 20 and #x2 <= 8
CM2	#x1 <= 21 and #x2 <= 6.4
CM3	#x1 <= 21 and #x2 <= 7.2
CM4	#x1 <= 21 and #x2 <= 8
D2	#x1 <= 22.5 and #x2 <= 6.4

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D3	#x1 <= 22.5 and #x2 <= 7.2
D4	#x1 <= 22.5 and #x2 <= 8
D4L	#x1 <= 22.5 and #x2 <= 8
E4	#x1 <= 25 and #x2 <= 8
E5	#x1 <= 25 and #x2 <= 8.8
national category	false

A route of a certain category can be used (green highlighted) if the selected ton load corresponds to or exceeds the tons specified in the "Expression" column. If the field remains empty, there is no restriction on the parameter. National Category: If a restriction parameter is chosen, the line of category “national category” is never compatible to the route request.

8.1.8 ICM-Lines and Re-Routing Options

If you select ICM lines, the ICM lines on the selected corridors are highlighted in colour on the map. These corridor sections are managed in Re-Routing Options in the Menu Corridor Information.

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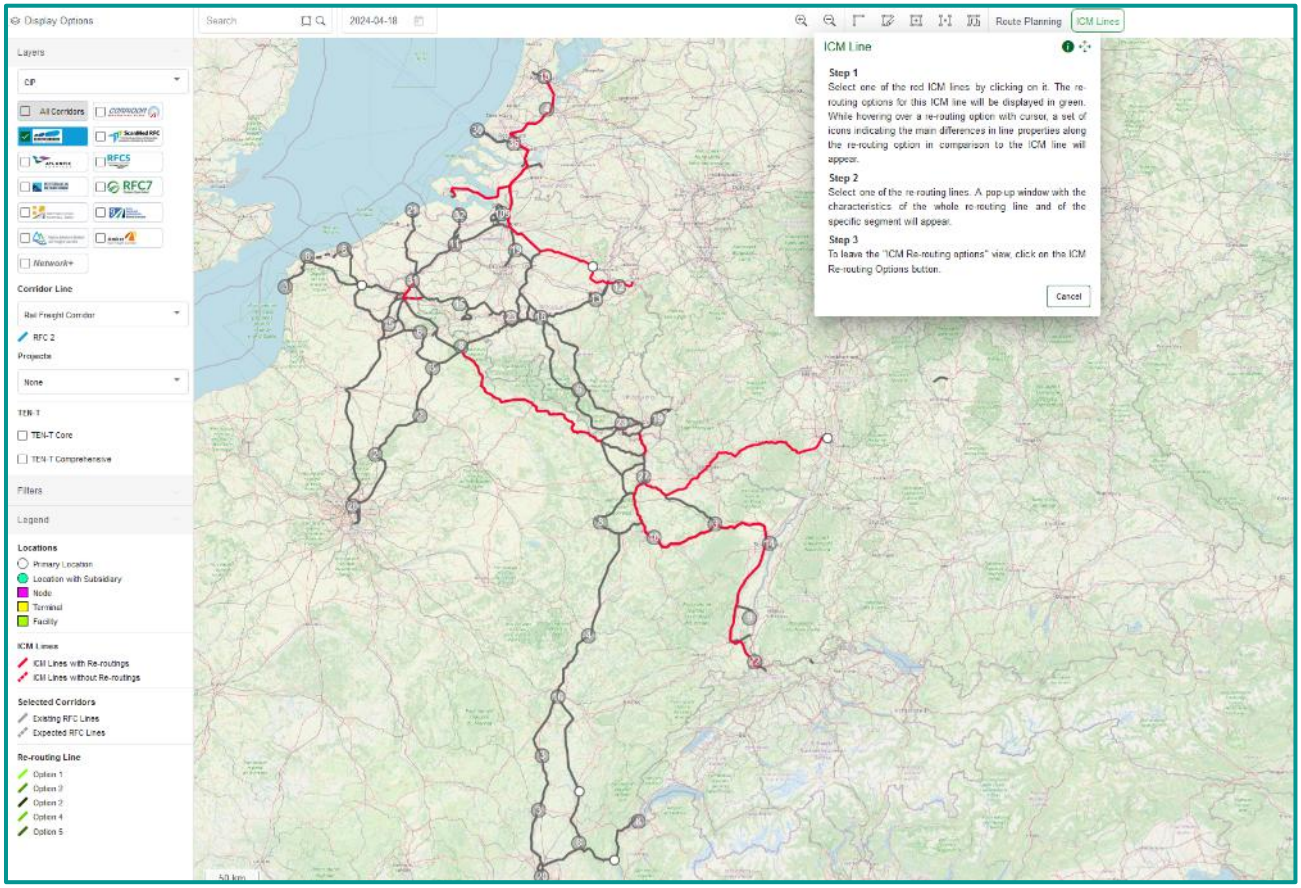
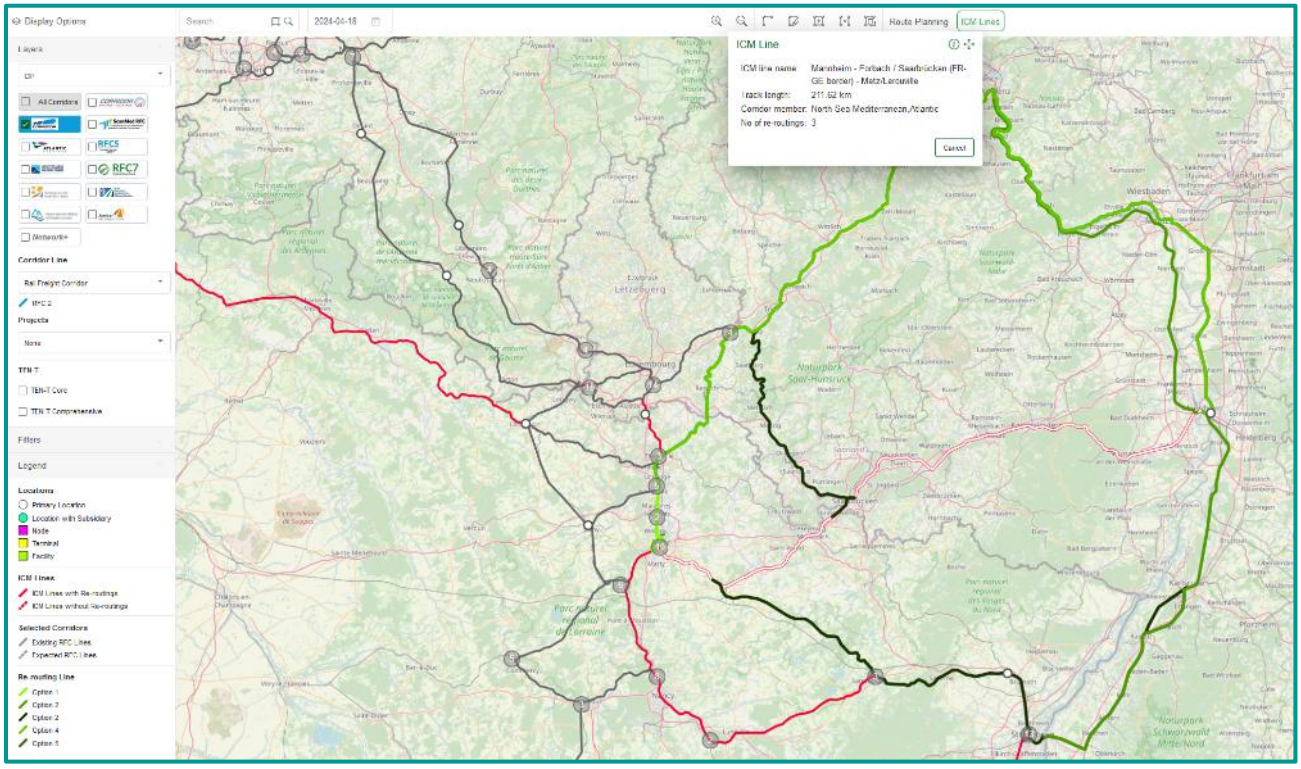


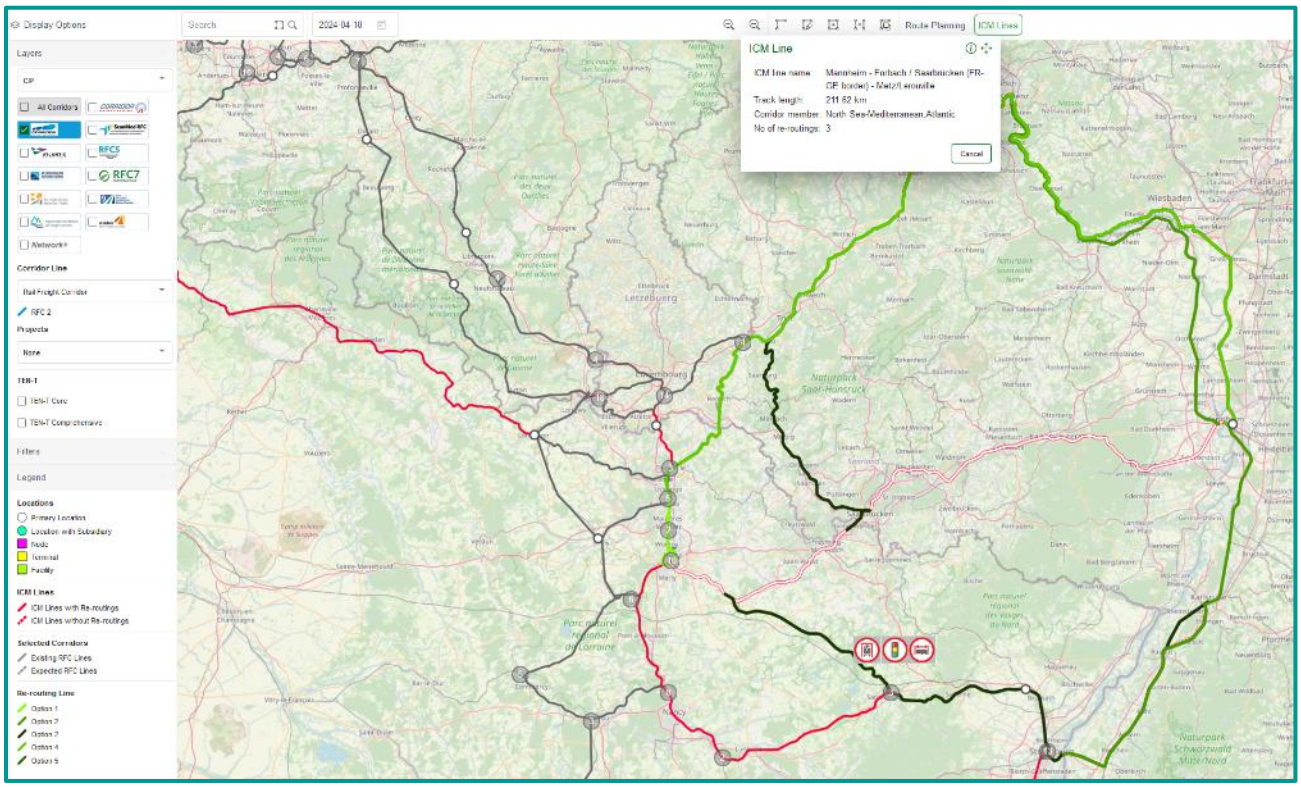
If an ICM line is selected, it is displayed with a coloured border and the associated re-routing options are displayed in other colours (in this example 3)

PUBLIC

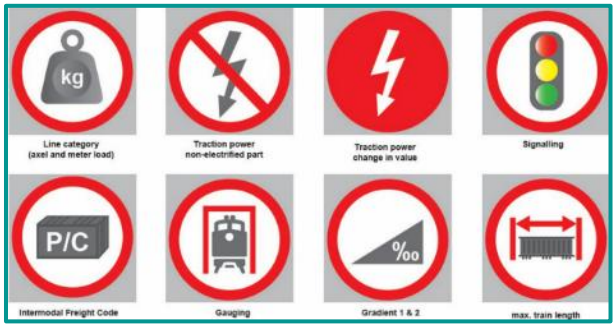


While hovering over a re-routing line, the application provides the user with hint on eventual differences in the relevant section properties to the ICM Line to which it is assigned.

PUBLIC



The possible icons to show those differences are:



If you select a routing option with the mouse, its properties are displayed on the right-hand side under Properties.

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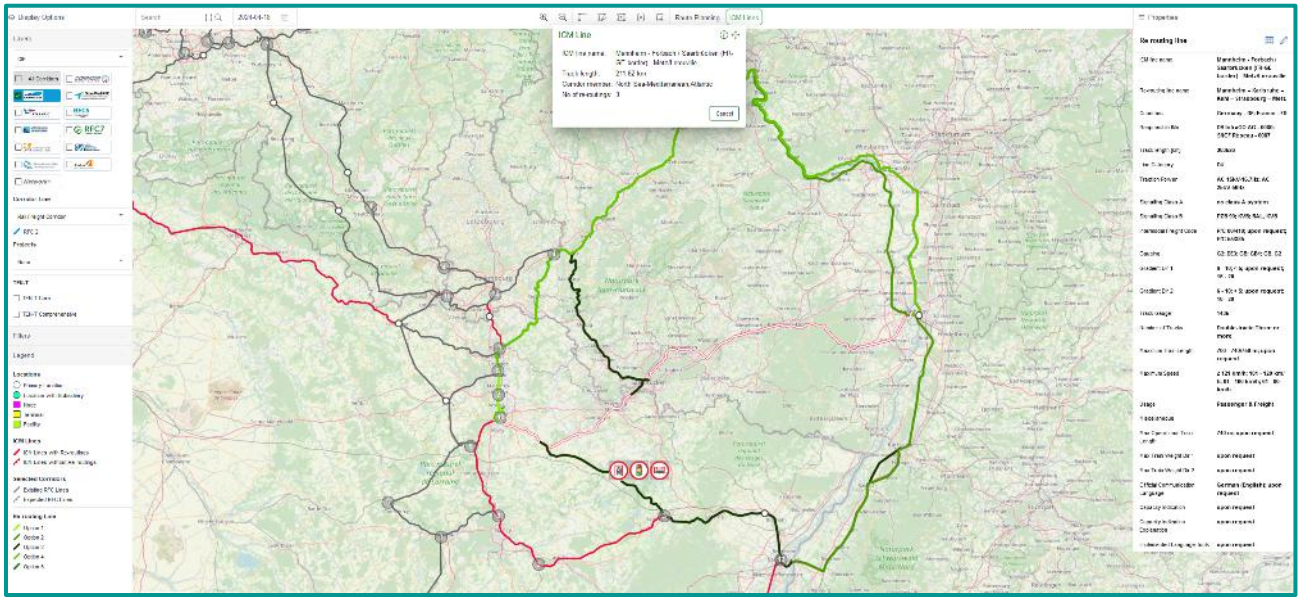
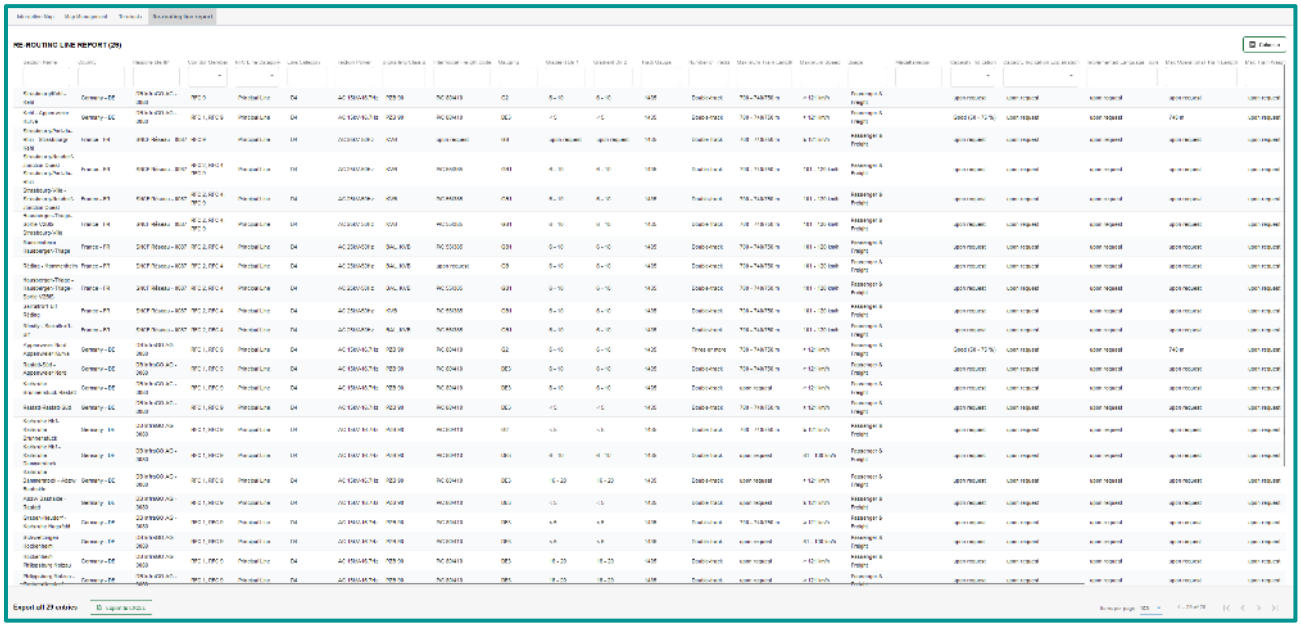


The spreadsheet icon takes you to the detailed data of the re-routing option. These show the individual section properties that the re-routing option contains in tabular form



By means of the Excel export button the content of the grid can be exported for further treatment.

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8.2 Map Management

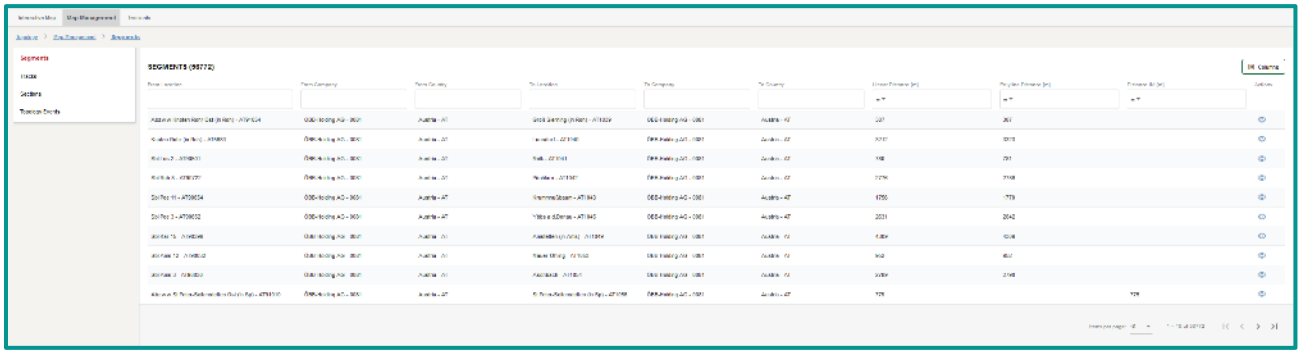
In this section, the user can display the tabular overviews of the objects in the base topology. Without the appropriate rights, the user cannot change the topological data here.

The CIP-related data is managed via the main menu item Corridors Information

8.2.1 Segments

8.2.1.1 Overview of segments

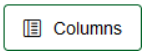
This overview shows the segments that are managed in the RIS application's base topology. The overview also contains the segments that are generated via map tools.



Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down). Paging size can be changed in the lower right corner.

Actions



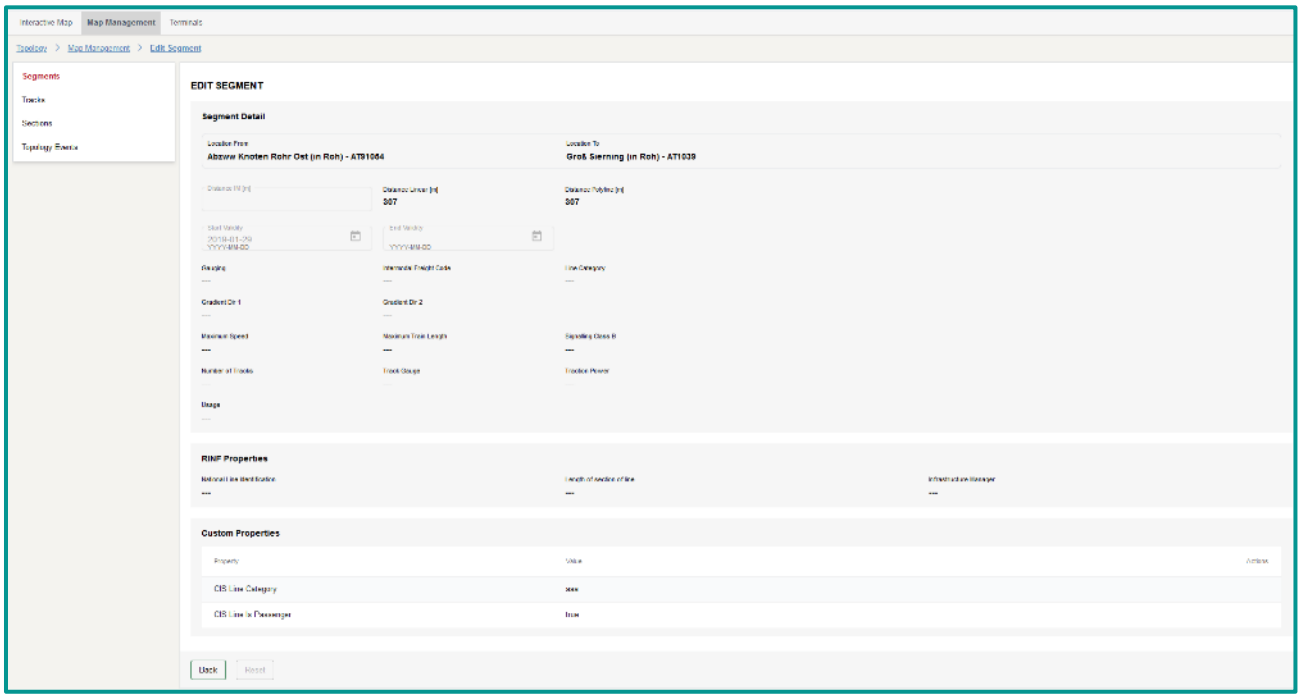
a column selector is opened by means of which the shown columns can be changed.


Show: Opens the detail dialogue by means of which data are shown in detail

PUBLIC

8.2.1.2 Segment details

You can open the detailed data of the segment via the “show” icon in the overview. The properties of a segment are aggregated data of track properties of the segment that are assigned to this segment.

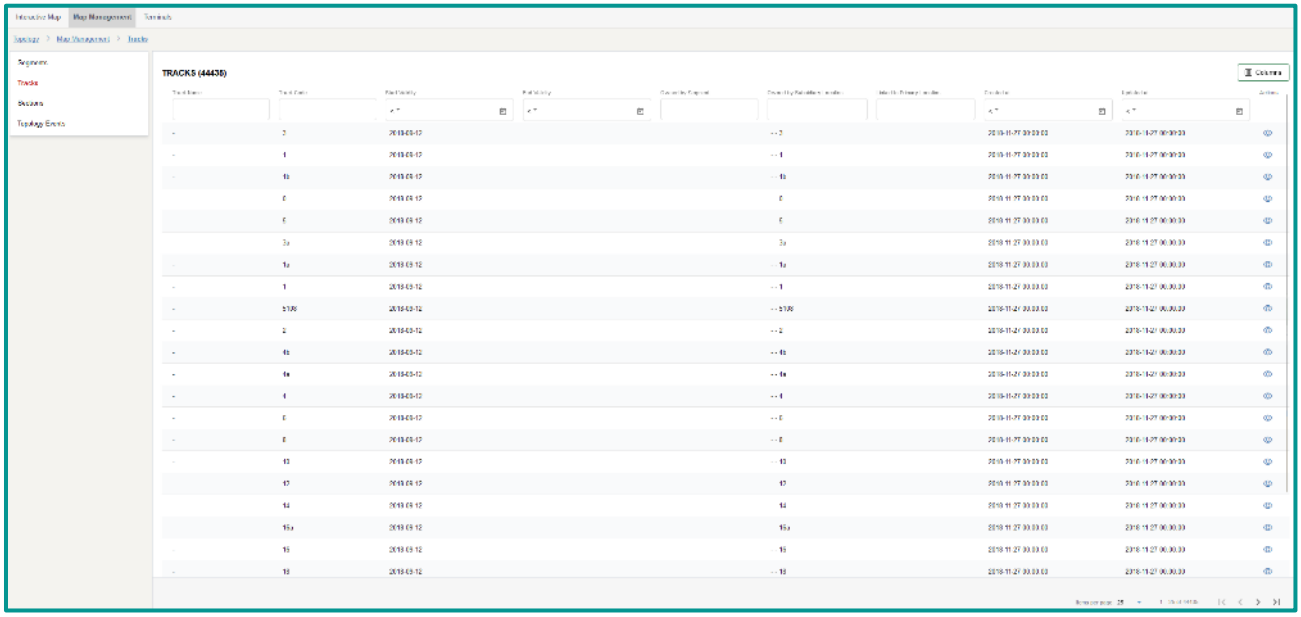


8.2.2 Tracks

8.2.2.1 Overview of tracks

All tracks that are managed in RIS are displayed in the overview. Both tracks that are assigned to a segment and tracks that are assigned to a Subsidiary Location and therefore Primary Location are displayed.

PUBLIC



Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down). Paging size can be changed in the lower right corner.

Actions

Columns a column selector is opened by means of which the shown columns can be changed.

Show: Opens the detail dialogue by means of which data are shown in detail

8.2.2.2 Track details

You can open the detailed data of a track via the show icon in the overview. Fields like RINF Track ID refers to corresponding RINF data and indicates that this track or data of this track were transferred from RINF to RIS. In the middle section, the user sees links of the track to tracks of the from-location to tracks of the to-location. The same principle applies to tracks from Primary Locations. Here, the user can see the link of the track to tracks from adjacent segments in the same way.

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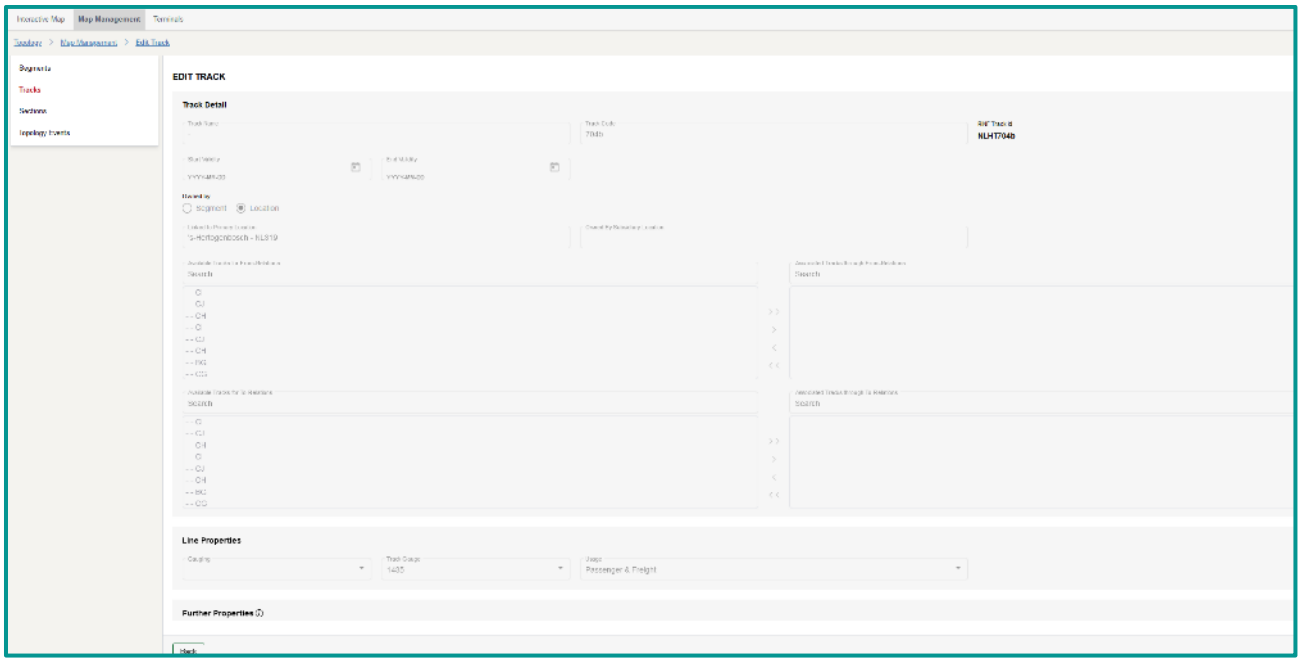
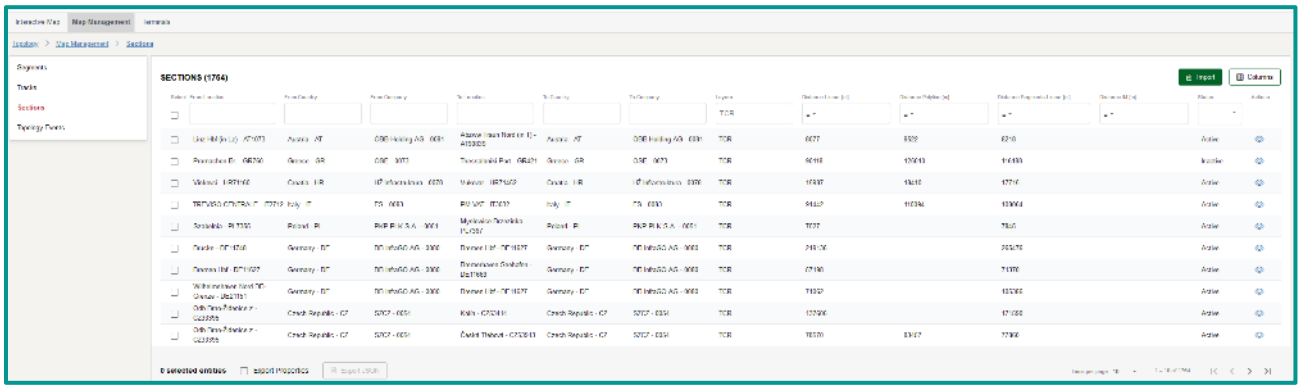
This represents the topological network at track level.



8.2.3 Sections

8.2.3.1 Overview of Sections

All sections that are managed in RIS are displayed in the overview. This means that sections that have the same segments grouped together can occur several times. The only difference is that they belong to different layers. The filtering for a specific layer can be done in the overview.



Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may

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contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down) Paging size can be changed in the lower right corner.

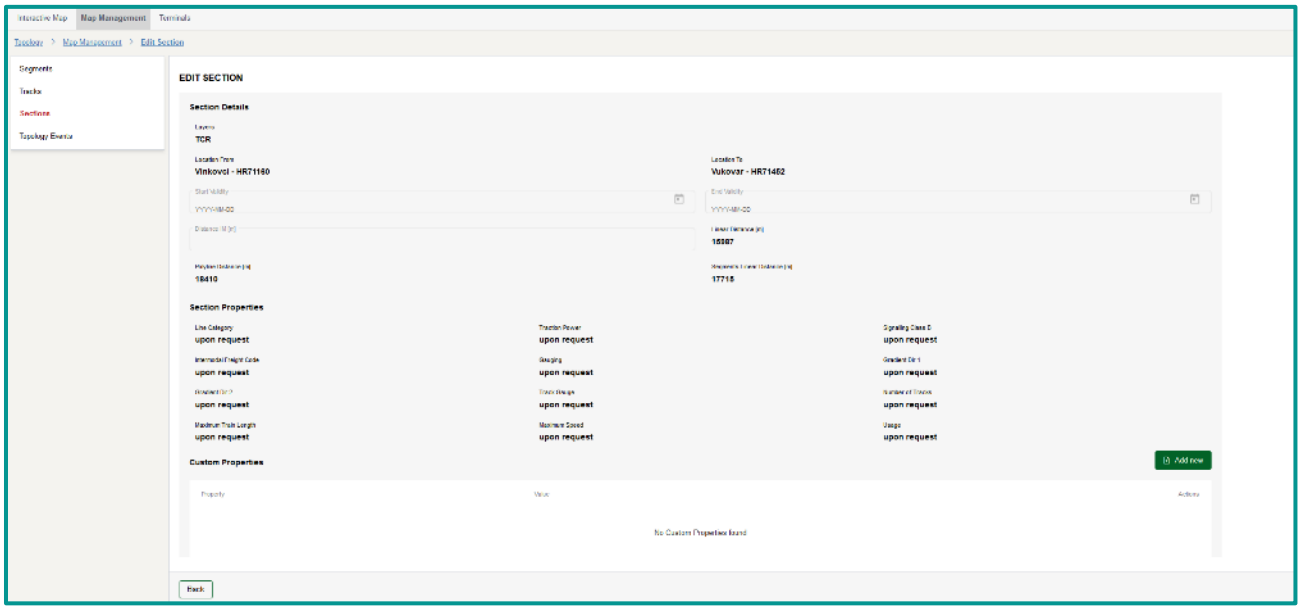
Actions

Columns a column selector is opened by means of which the shown columns can be changed.

Show: Opens the detail dialogue by means of which data are shown in detail

8.2.3.2 Section details

You can open the detailed data of a section via the show icon in the overview. Depending on the privilege, the user can change the detailed data of the section. The section properties ultimately originate from the aggregation of the track properties.



8.2.4 Topology events

This overview shows the chronological sequence of changes to the topological network.

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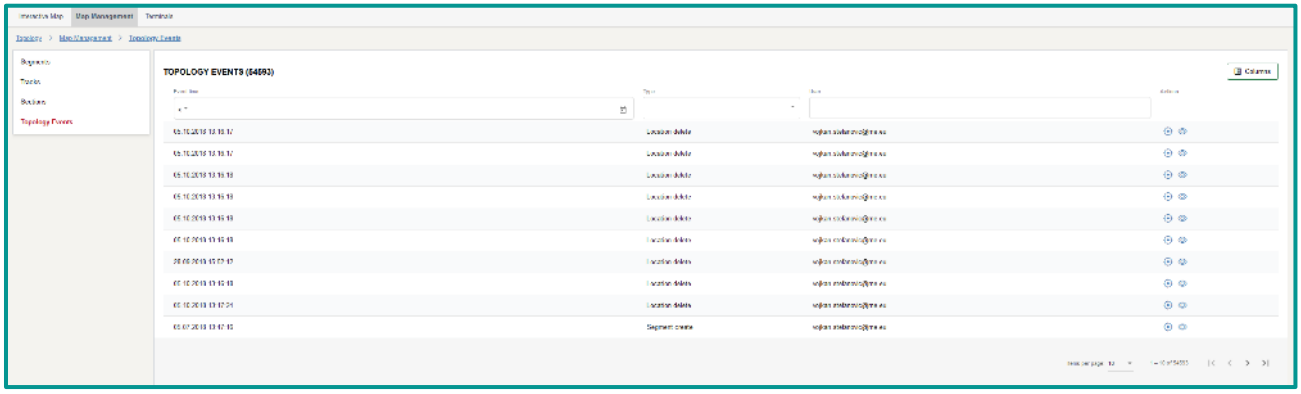


The following events are tracked:

- Location create, modify, delete
- Section create, modify, delete, split, combine
- Segment create, modify, delete, split, combine
- Track create, modify

Filter / Sorting / Paging

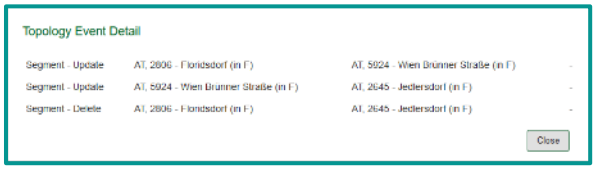
Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date).Sorting can be done by means of clicking on the header (lexicographical sorting up or down). Paging size can be changed in the lower right corner.

Actions

Columns a column selector is opened by means of which the shown columns can be changed

Show details:

Clicking this icon more details are shown that are linked to this event. E.g. when a segment was split the user gets the following detailed information



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8.2.5 Terminals

This is the same view as described below under the topic corridors information

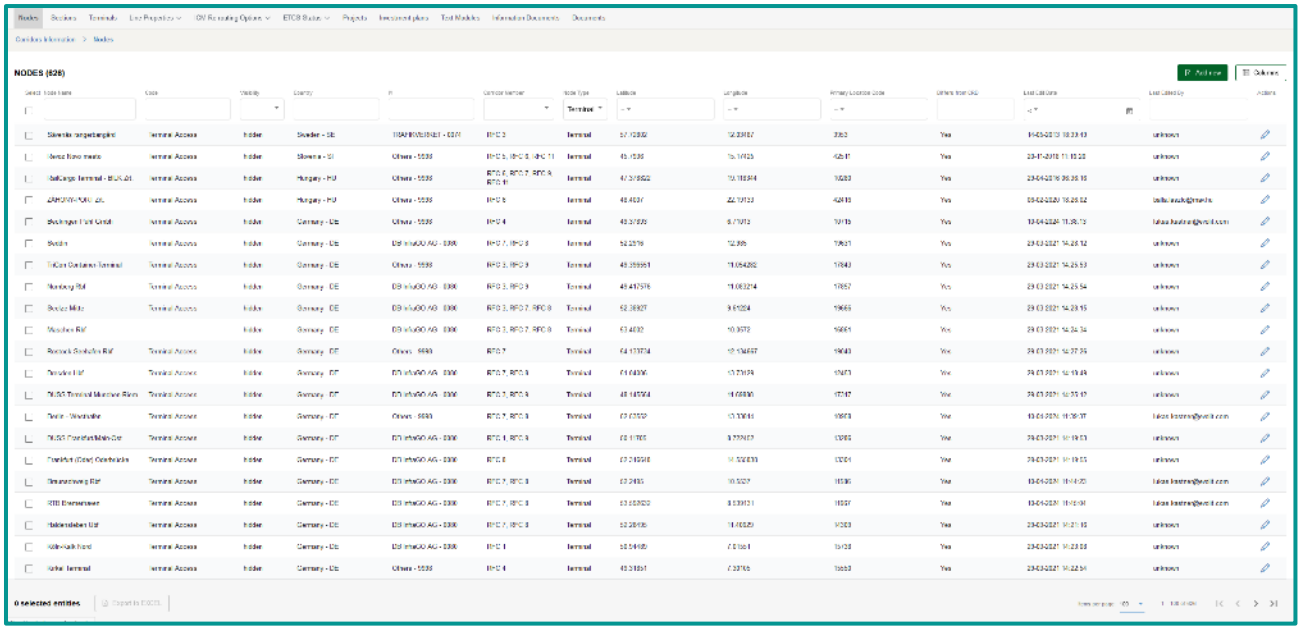
9 Corridors Information

All CIP-relevant information and user functions are managed in this main menu. In this chapter we will describe them in detail.

9.1 Nodes

9.1.1 Overview of Nodes

This overview shows all relevant locations for CIP apart from terminals. These are all primary locations on the one hand, but also specific locations that do not yet have an assigned primary location. This allows, for example, a location to be created for a corridor before it is published as a primary location. Nodes that are no longer assigned to any corridor are flagged as inactive and are not shown on the map. Their visibility is automatically set to "hidden".



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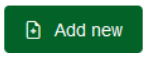
Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date).

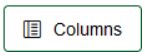
Sorting can be done by means of clicking on the header (lexicographical sorting up or down)

Paging size can be changed in the lower right corner.

Actions



a new node can be created; opens the node details dialogue.



a column selector is opened by means of which the shown columns can be changed.


Edit: Opens the detail dialogue by means of which data can be edited

9.1.2 Node details

Existing nodes can be edited, or new nodes can be created via the detail screen. The dialogue is used to define all node-specific data and to assign the node to corridors. Compared to previous versions, a node is now an independent topological entity which may optionally be linked to a Primary Location (CRD). Data such as name, coordinates and code may differ from the underlying Primary Location and are used for the display on the map when the CIP layer is selected. This allows the location to be changed on the map for better visibility or increased accuracy without having to change the CRD data.

Creation of node

Node can be created by two ways. The way is selected at the beginning of node creation.

- Fill data manually - All node-specific data is filled manually with no reference to a Primary Location.
- Create from Primary Location - Node is created from Primary Location and linked to it. In this case, user must select primary location from the list. The list contains only Primary Locations which are active or will be active in the future, and there is no node linked to them. After the selection and confirmation, primary location data is prefilled in the node detail form.

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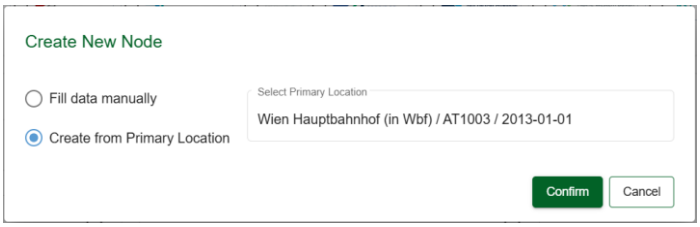


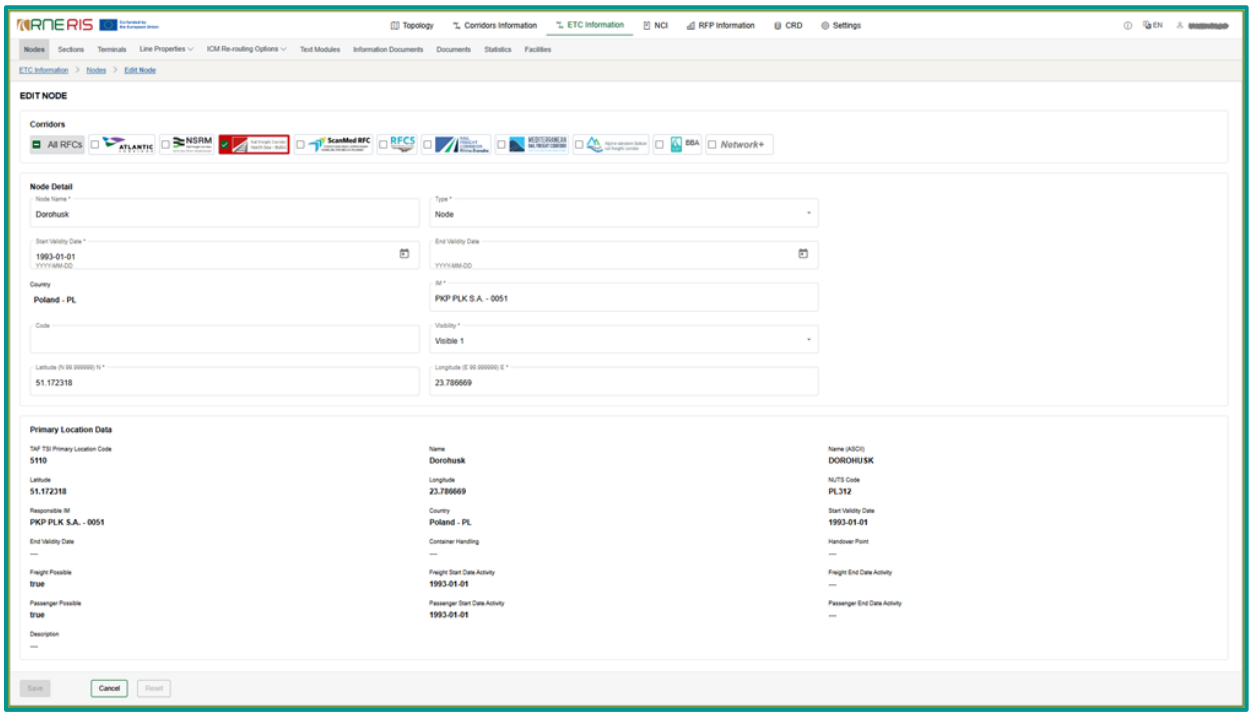
Editable header fields

The following fields of a node can be edited directly in the detail dialogue:

- **Country**: country of the node which is not linked to Primary Location. Otherwise, country is inherited from linked Primary Location and cannot be edited.
- **IM**: responsible Infrastructure Manager.
- **Start Validity Date** and **End Validity Date**: validity period of the node. The validity period can only be edited by a user who has editing rights for all corridors the node currently belongs to.

The remaining attributes (name, type, code, coordinates, visibility, corridor assignment) can be edited as before, subject to the user's permissions.

If a Primary Location is assigned to the node, the data of the Primary Location is displayed in the lower (read-only) part of the dialogue, for reference.



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Visibility: Visibility values define in which map scale you can see the node (with different map scale, different nodes are visible):

- hidden - the node will not be visible in the map view.
- Visible 0 - should be used for CIP nodes of even lesser than local relevance, e.g. switches in bigger railway junctions.
- Visible 1 - should be used for CIP nodes of local relevance.
- Visible 2 - should be used for CIP nodes of regional relevance.
- Visible 3 - should be used for CIP nodes of major relevance.

When a node becomes inactive (see below), visibility is automatically set to "hidden".

Corridor assignment and deactivation of a node

A node can belong to zero or multiple corridors. The user may modify the list of corridors the node is assigned to, provided he has editing rights for all corridors that the node currently belongs to, as well as for any corridor being added.

Two ways to deactivate a node:

- **Setting an End Validity Date**: providing an end date to the node makes it inactive. Node becomes inactive on the next day after provided end date.
- **Removing the node from all corridors**: if the user unselects all corridors and saves, a confirmation dialogue ("Are you sure?") is shown. Upon confirmation, the node is automatically made inactive, its end date is set to yesterday and its visibility is set to "hidden".

Cascading effect on sections

When a node becomes inactive, independently of the reason, the sections connected through it are automatically updated:

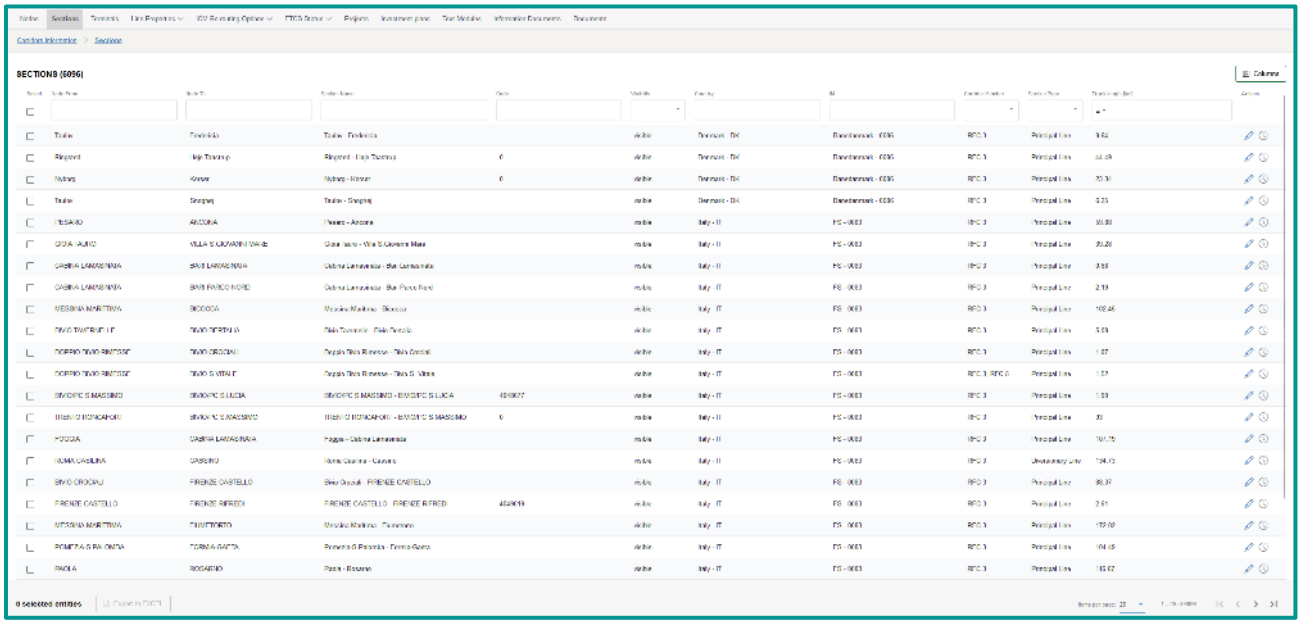
- If the node is an intermediate node between two sections (e.g. section A–B and section B–C connected through node B), both sections are deactivated (end date set to yesterday) and a new section A–C is created with start date today, excluding B. If further sections are affected by this change, the same process is repeated.
- If the inactive node is connected to only one section, that section is deactivated as well by setting its end date.

PUBLIC

9.2 Sections

9.2.1 Overview of sections

All sections contained in one of the corridors are listed here.



Visibility:

- hidden - the section will not be visible in the map view.
- Visible – the section will be visible in the map view.

Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down) Paging size can be changed in the lower right corner.

Actions

Columns a column selector is opened by means of which the shown columns can be changed.

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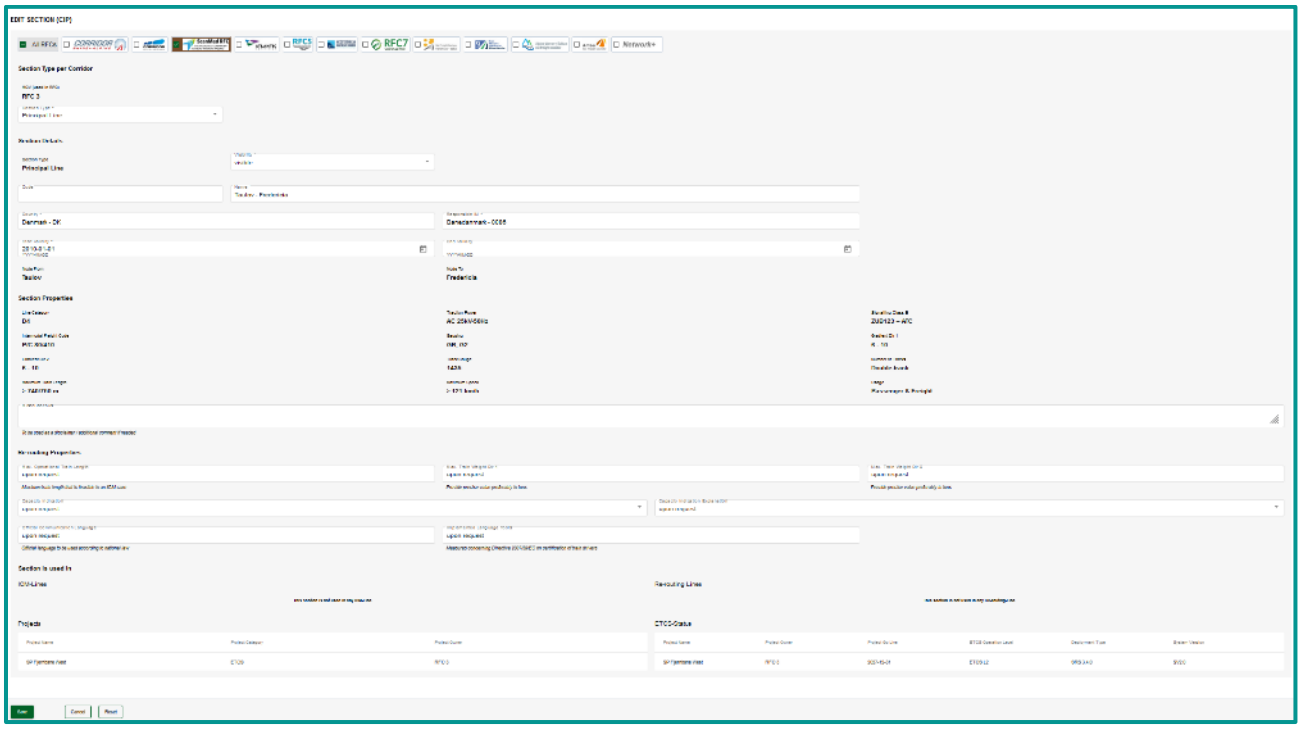
 Edit: Opens the detail dialogue by means of which data can be edited

 Set inactive: An active section can be set inactive by means of setting the end-date of the section to yesterday. Triggering this function opens a dialogue, where the user gets an end date proposed (default=yesterday). The user is allowed to change the end date and set it individually.

9.2.2 Section details

In contrast to the detail screen in Map Management, the assignment of sections to corridors and various CIP-specific parameters such as section type, visibility and CIP name are set here. Sections that were created from future-active segments or locations carry the section type “Expected Line”. This type is assigned automatically at creation and is retained even after the underlying segments become active; it can be changed here manually by a Corridor Administrator when the section is no longer to be treated as an expected line. In the middle part, the already known aggregated properties of the underlying tracks of the segments that the section contains are displayed. These cannot be changed at section level (combined property of the tracks). Special re-routing information of the section is managed in the lower part.

The last block shows whether the section is used in overarching structures: ICM lines, re-routing lines, projects, ETCS projects.



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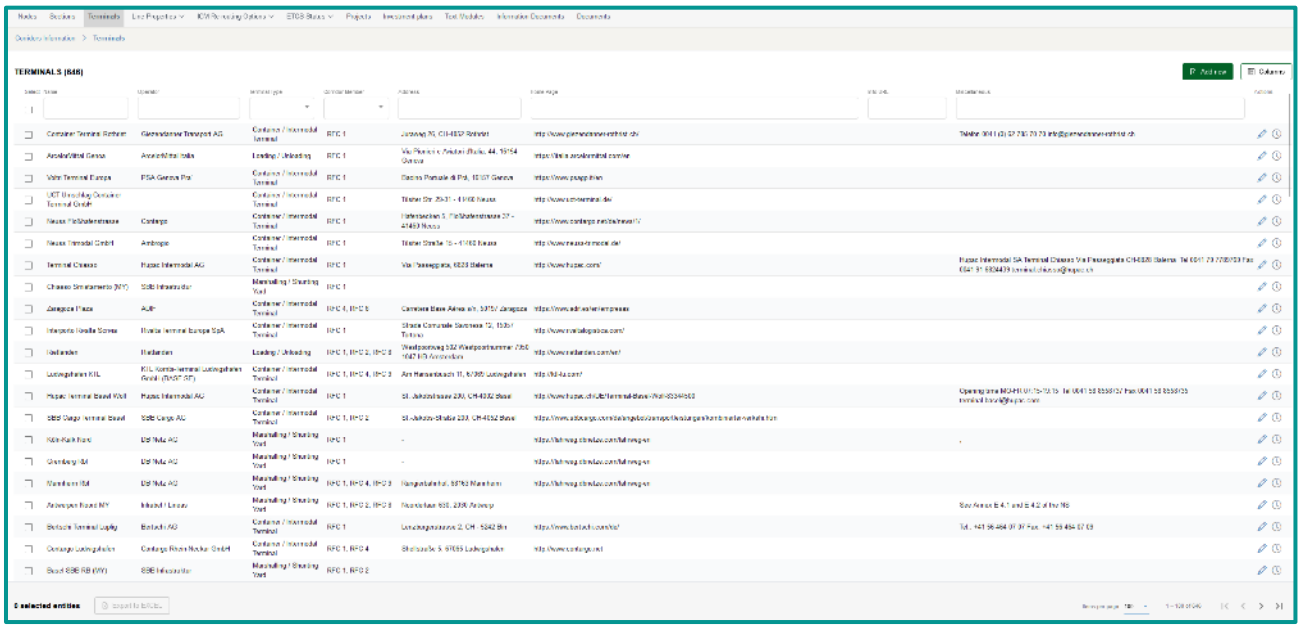
9.3 Terminals

9.3.1 Overview of Terminals

Terminals are locations that are currently only managed within CIP. These are independent of other locations such as CIP nodes, primary or subsidiary locations and service facilities.



Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down). Paging size can be changed in the lower right corner.

Actions

Add new a new terminal can be created; opens the node details dialogue.

Columns a column selector is opened by means of which the shown columns can be changed.

Edit: Opens the detail dialogue by means of which data can be edited

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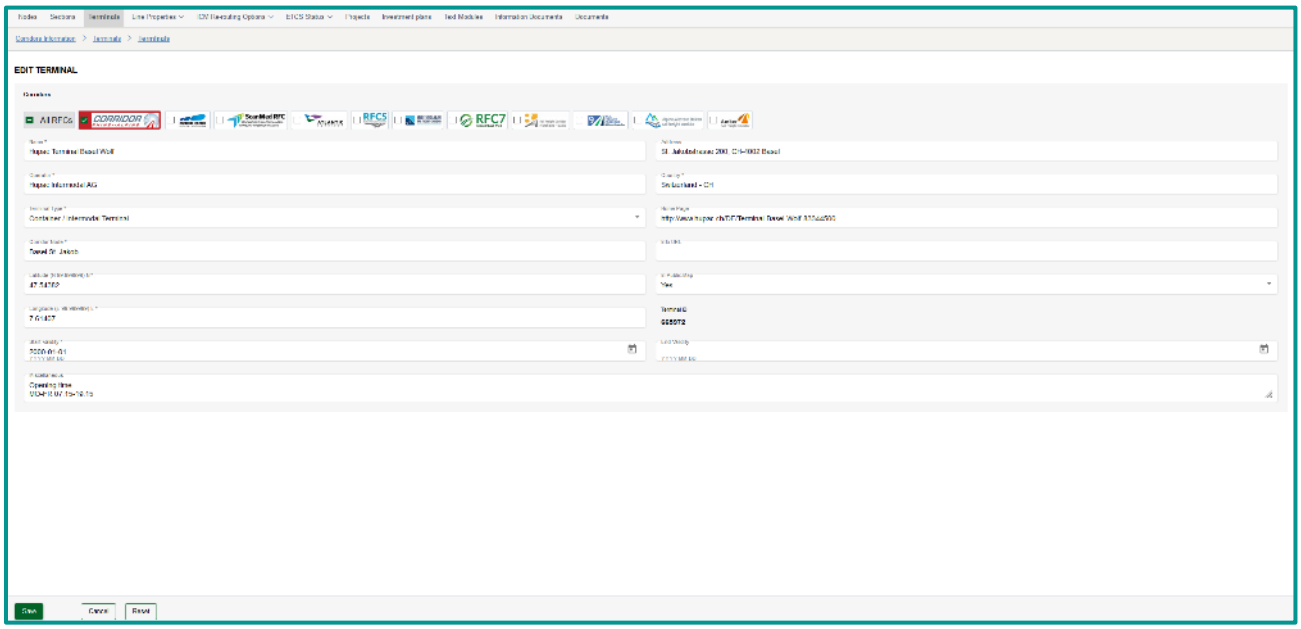
 Set inactive: An active node can be set inactive by means of setting the end-date of the terminal to yesterday. Triggering this function opens a dialogue, where the user gets an end date proposed (default=yesterday). The user is allowed to change the end date and set it individually.

9.3.2 Terminal details

The terminal is assigned to CIP corridors in this dialogue. Terminal-specific data can also be edited.



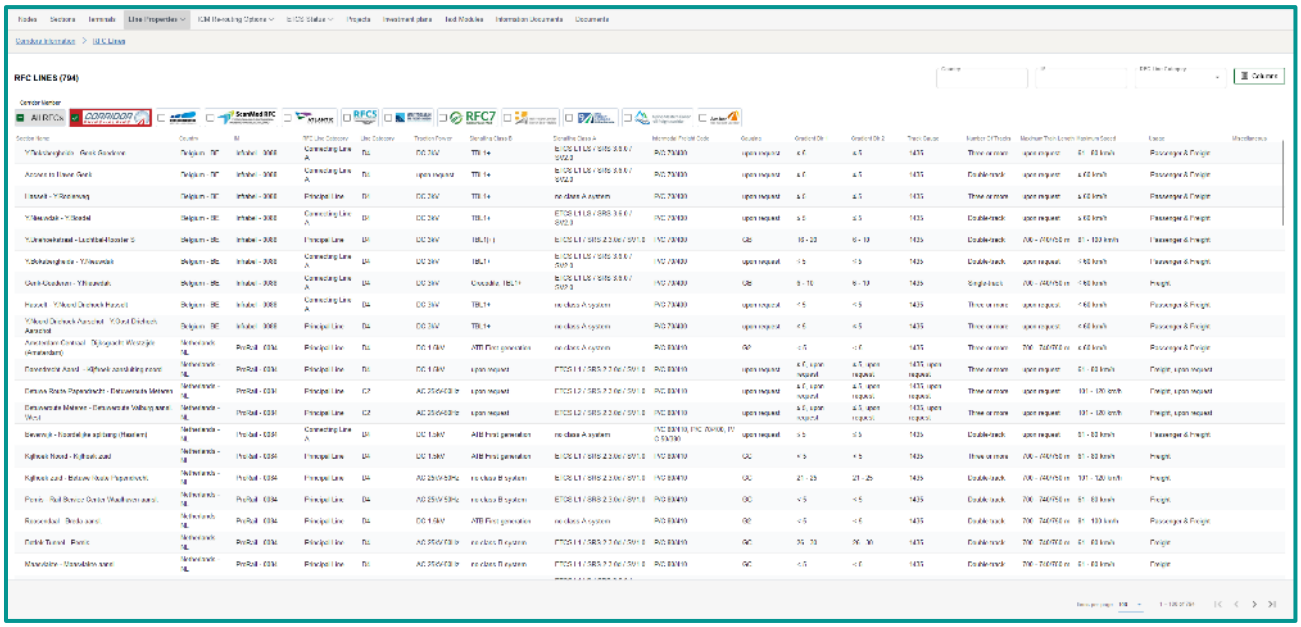
9.4 Line Properties

When managing line properties, a distinction must be made between corridor overview and the network+ overview. Both displays are used to clearly display the sections and their line properties.

9.4.1 Corridor overview

The overview is structured in such a way that the corridors for which the line properties can be displayed can be selected directly above the table. It is also possible to restrict the display to a specific country or a responsible IM that is assigned to the section according to CIP section

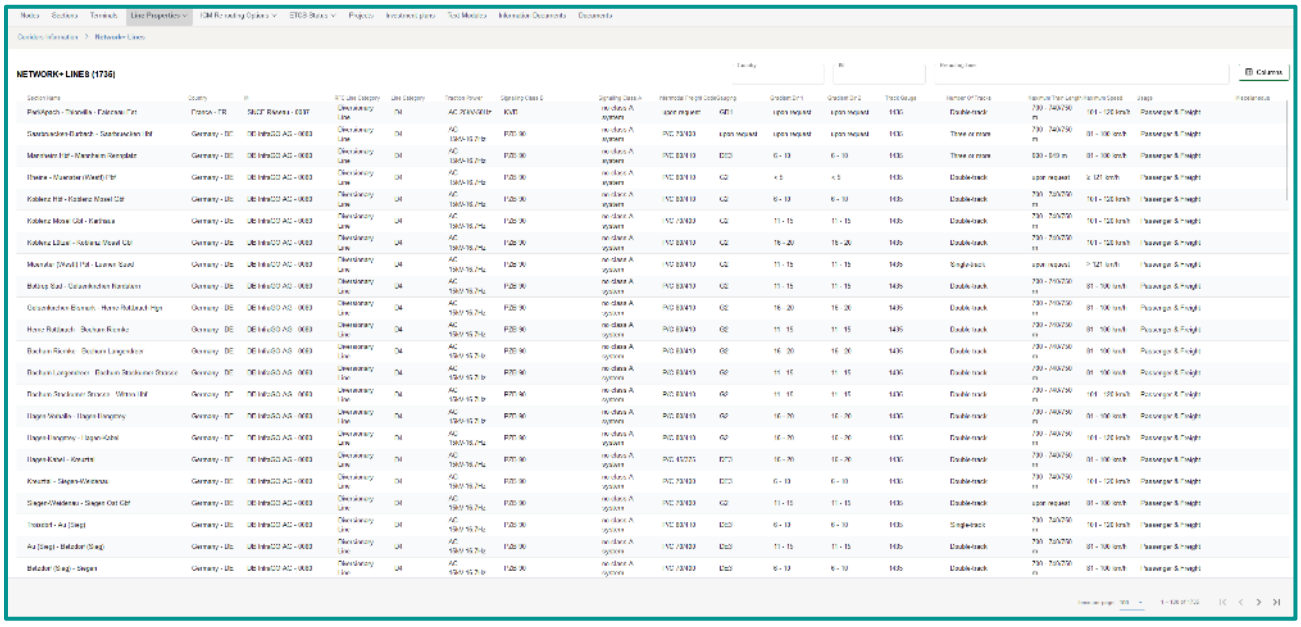
management. A third option is to filter for a specific section type (e.g. only show sections with “Principal Line” value as type).



9.4.2 Network+ overview

Similar to the corridor overview the line properties of sections of the network+ network are displayed.

Instead of filtering on section type the filtering can be done by re-routing lines.



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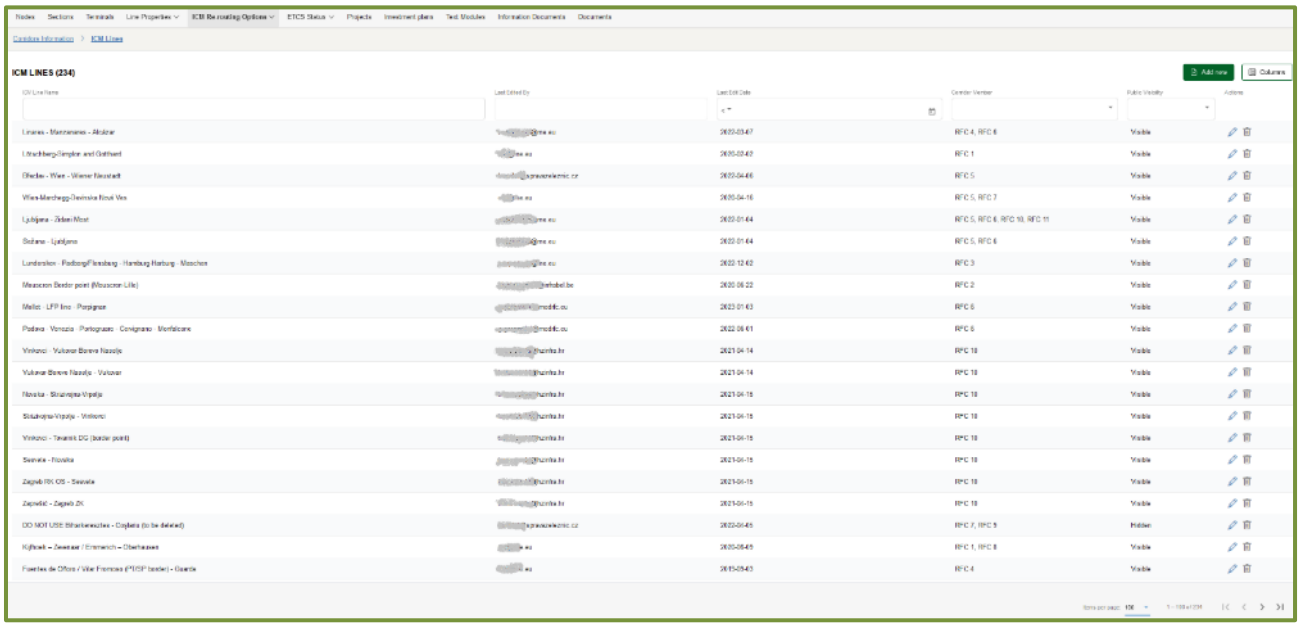
9.5 ICM Re-Routing Options

9.5.1 ICM-Lines

9.5.1.1 Overview of ICM lines

Overview of all ICM lines administered in the system and their assignment to corridors



Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down). Paging size can be changed in the lower right corner.

Actions

Add new a new ICM-line can be created. A detail dialogue is opened

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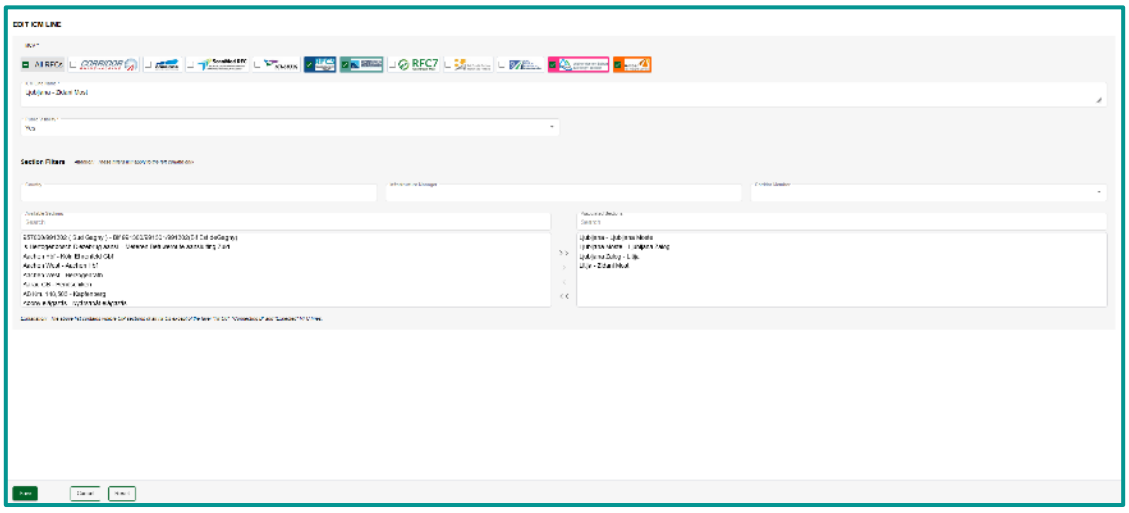
Columns a column selector is opened by means of which the shown columns can be changed.

Edit: Opens the detail dialogue by means of which data can be edited

Delete: Let the user delete this entity.

9.5.1.2 ICM Line details

The details of an ICM line essentially consist of the name, the assignment to corridors and a selection of the sections of the selected corridors that affect the ICM line.



9.5.2 Rerouting Lines

9.5.2.1 Overview of re-routing lines

The overview of re-routing lines grouped by ICM lines. This allows the user to see all re-routing options for an ICM line.

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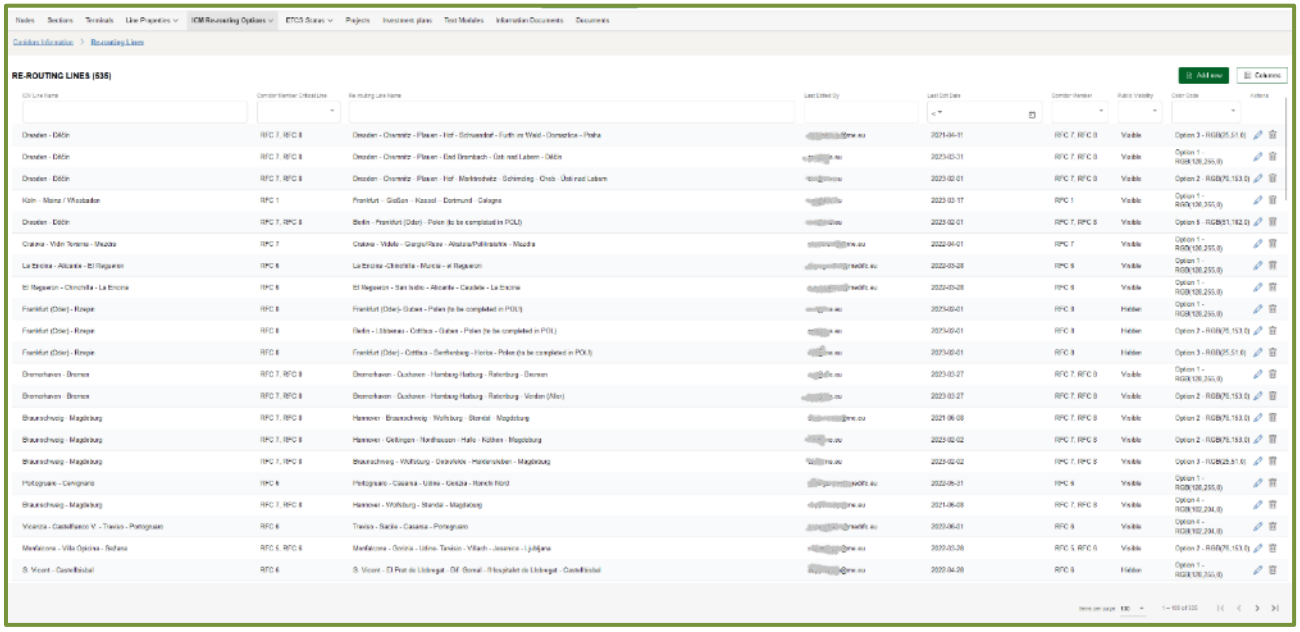

Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down). Paging size can be changed in the lower right corner.

Actions

Add new a new Re-Routing line can be created. A detail dialogue is opened

Columns a column selector is opened by means of which the shown columns can be changed.

Edit: Opens the detail dialogue by means of which data can be edited

Delete: Let the user delete this entity.

9.5.2.2 Re-routing line details

The detailed view of a re-routing line allows the user to assign it to corridors and, crucially, to compile the alternative route via a selection of sections. It is not possible to change the assignment to the associated ICM line. The selection of the ICM line for which the alternative route

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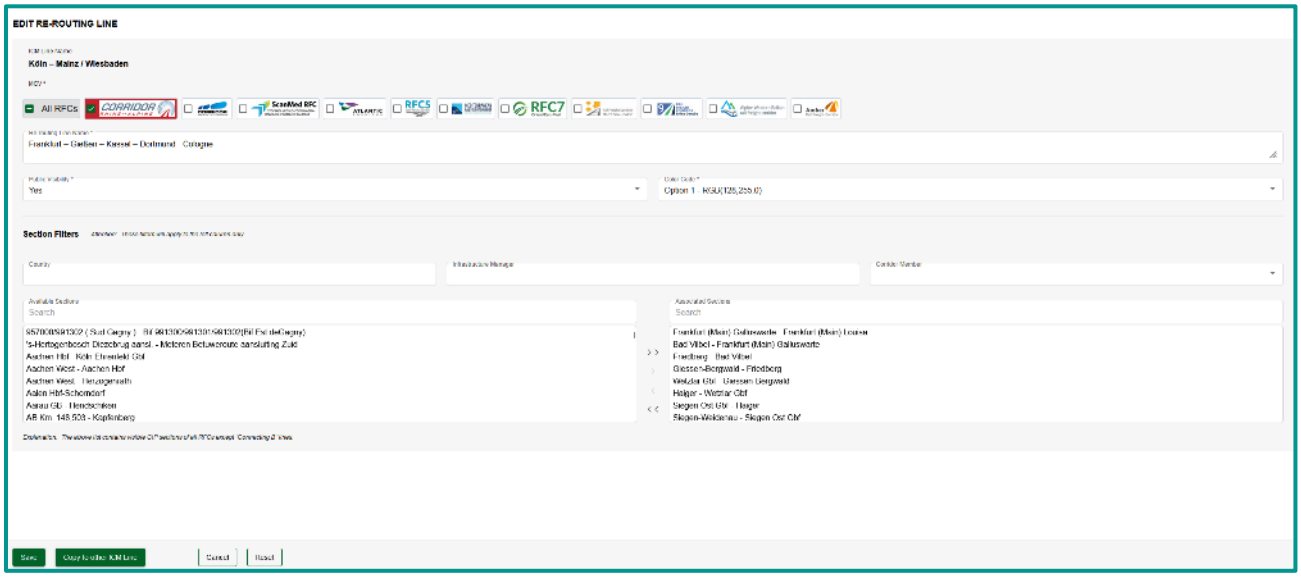
option is to be created takes place when creating a new re-routing line. However, the user can copy an existing re-routing line to another ICM line. The colour selection enables the colour representation of the re-routing line on the map to be determined.



9.6 Projects

9.6.1 Overview of Projects

Here the user can see an overview of all projects in connection with the corridors. The projects refer to infrastructure, ETCS and radio system projects. Information on which corridors are affected and which corridor manager is responsible for the project is also displayed in the overview by default.

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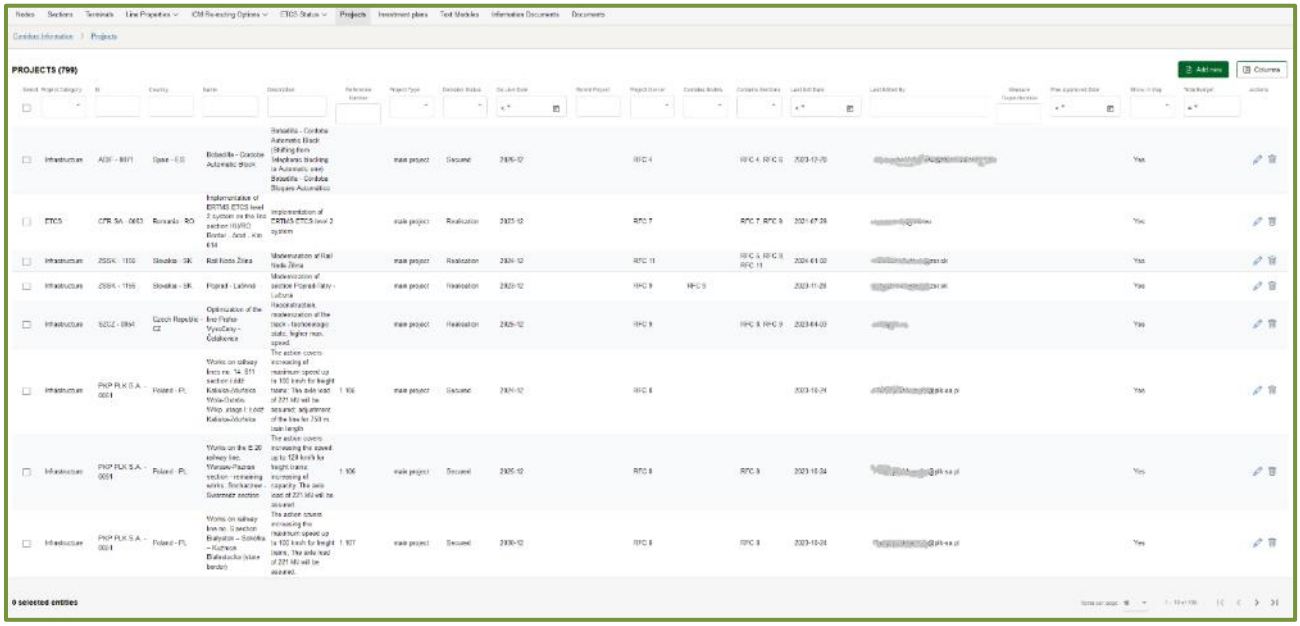

Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date).

Sorting can be done by means of clicking on the header (lexicographical sorting up or down)

Paging size can be changed in the lower right corner.

Actions

Add new a new project can be created. A detail dialogue is opened.

Columns a column selector is opened by means of which the shown columns can be changed.

Edit: Opens the detail dialogue by means of which data can be edited

Delete: Let the user delete this entity.

9.6.2 Project details

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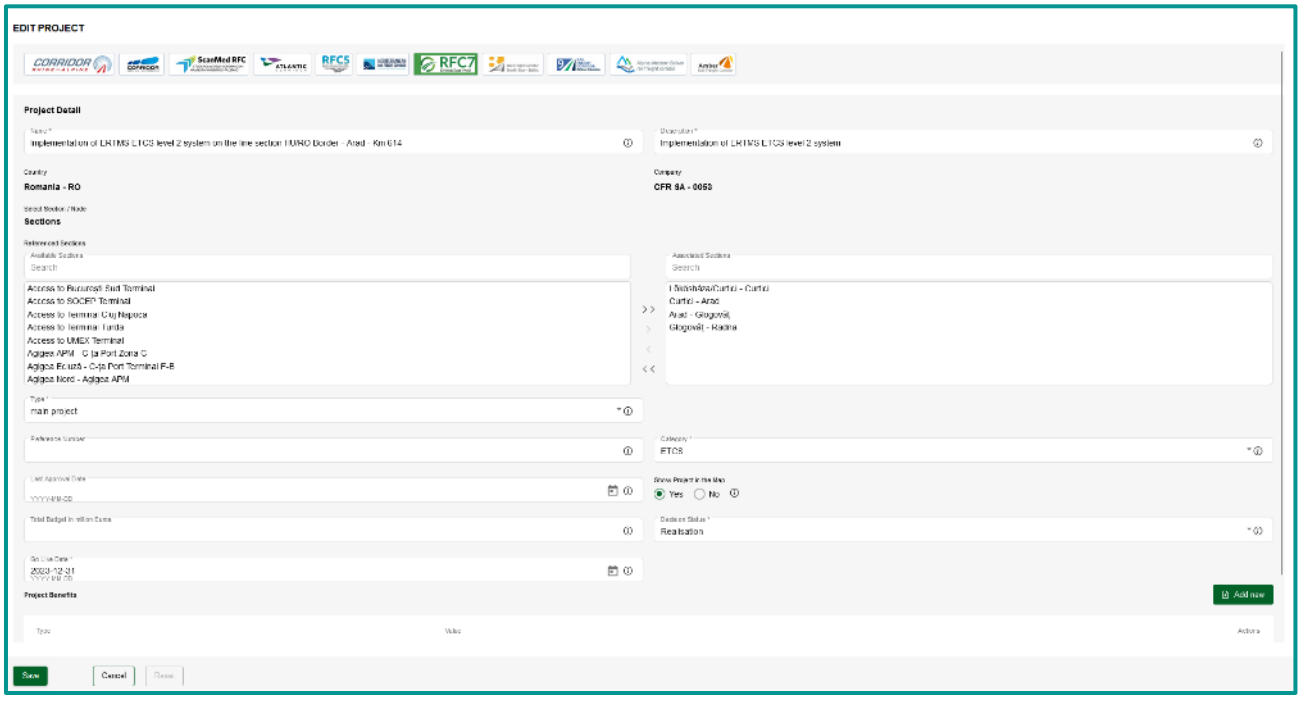
In the detail dialog, you can either create a new project or manage an existing project.

The central part is the assignment of the sections that are affected by the project.



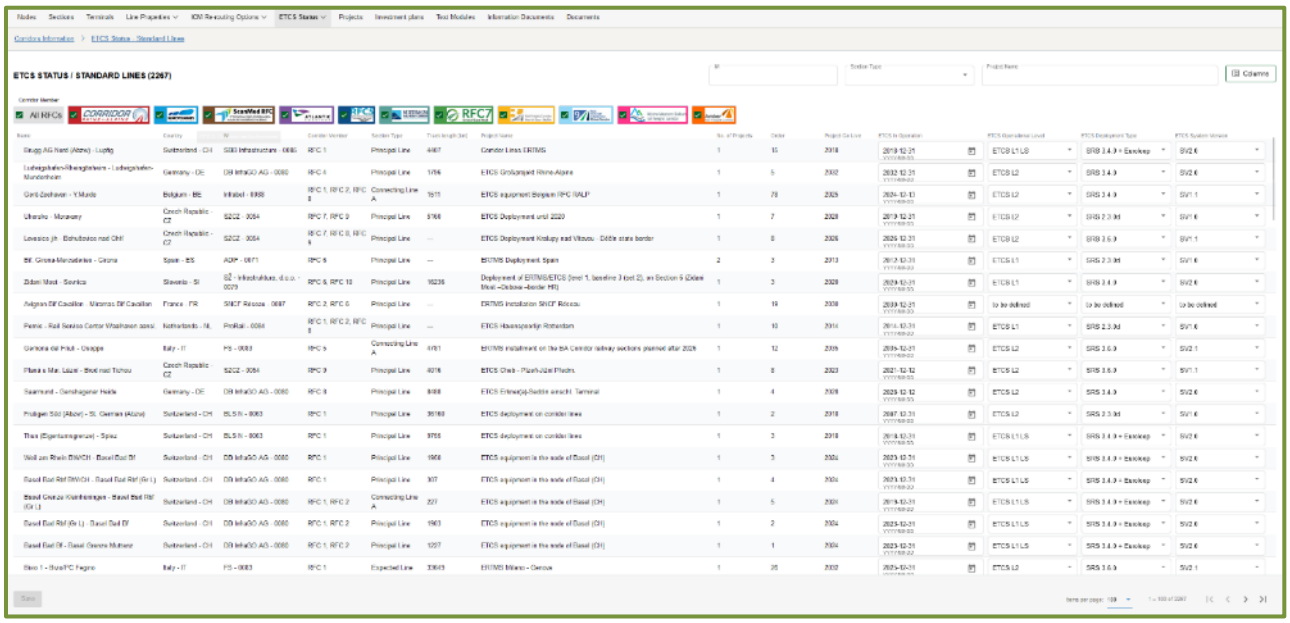
Action Add benefit:

The type of project benefit (e.g. quality, interoperability) and a description can be added to the project via a dialog. It is possible to assign several benefits to a project.

9.7 ETCS Status

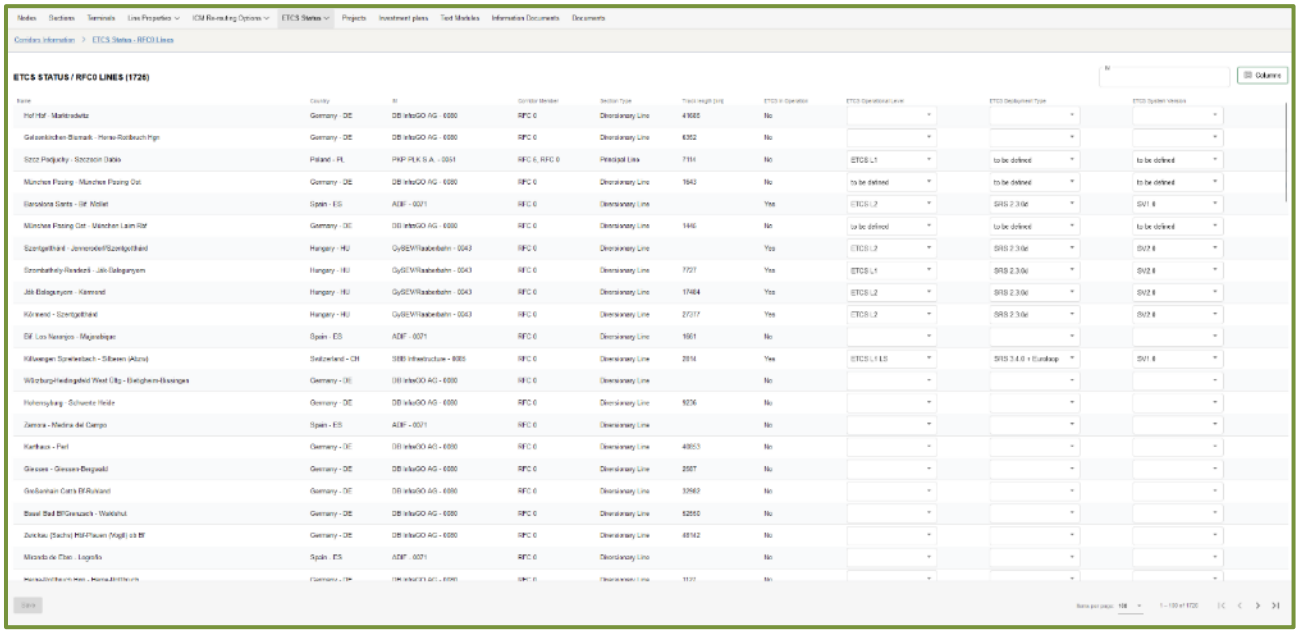
9.7.1 Standard Lines

This overview shows all projects of category=ETCS that are assigned to one of the corridors except RFC0. The display does not contain any other information than in the project detail data itself. Only specific ETCS information is displayed here, which can also be changed directly in the tabular view without having to go to the project details.



9.7.2 RFC0 Lines

This overview is essentially the same as that of the standard lines but is limited to projects of the category of “ETCS” that are assigned to the RFC0 corridor.



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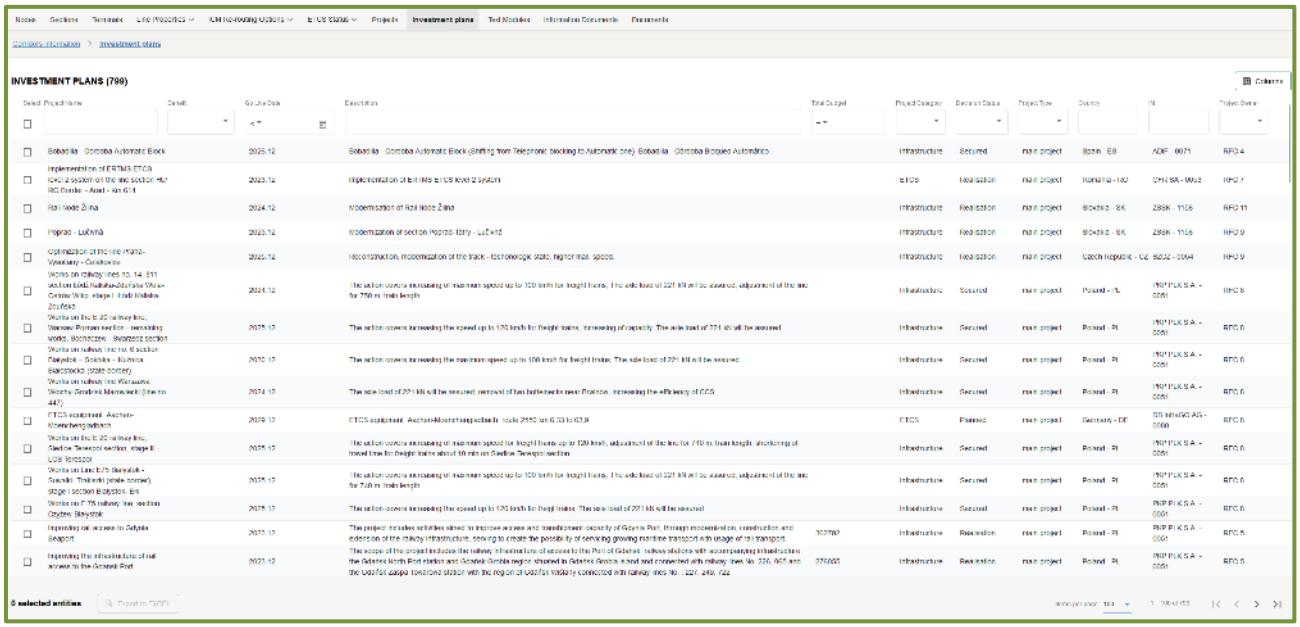
9.8 Investment plans

This is an overview of the projects from the perspective of the estimated project budgets. Project data cannot be changed directly in the overview; it is primarily used to sort and filter projects according to various criteria.



9.9 Text Modules

9.9.1 Overview of Text Modules

This is the overview of the text modules for structuring and describing the Information Documents

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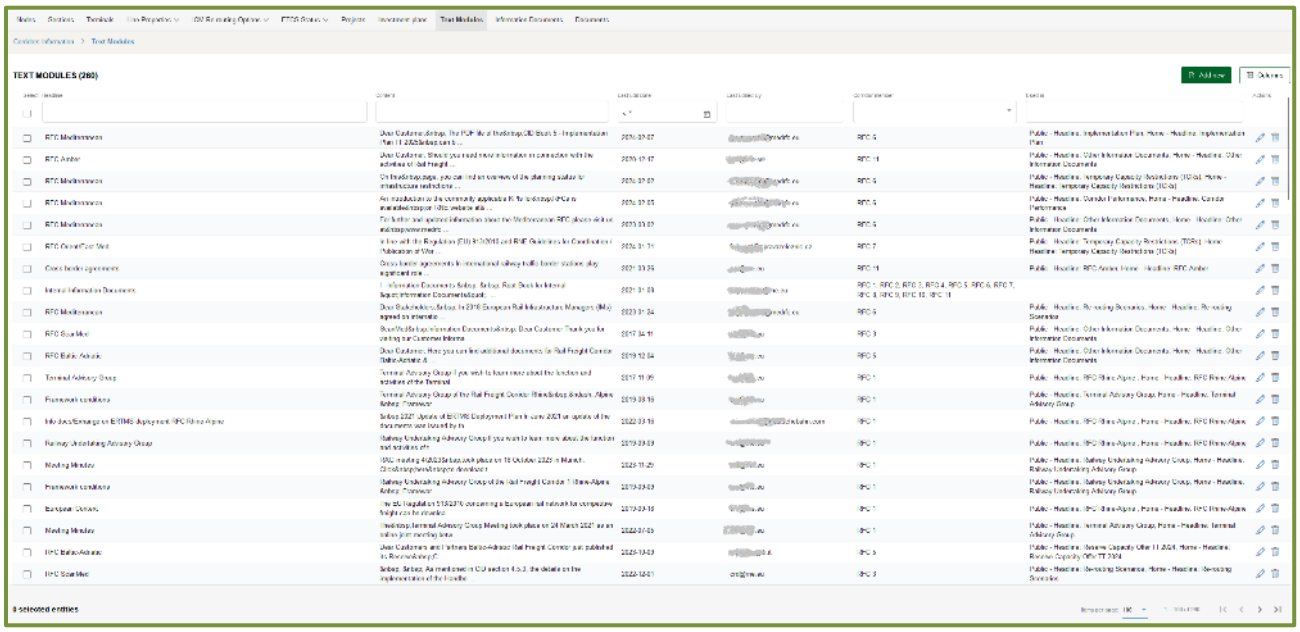


Filter / Sorting / Paging

Filter can be set directly below column headers. In text or composite fields, the application searches for all records that contains case-insensitive the typed-in characters. Other types may contain controls in the left part where logical operators can be set (e.g. all dates that are greater than a selected date). Sorting can be done by means of clicking on the header (lexicographical sorting up or down). Paging size can be changed in the lower right corner.

Actions

Add new a new text block can be created. A detail dialogue is opened.

Columns a column selector is opened by means of which the shown columns can be changed.

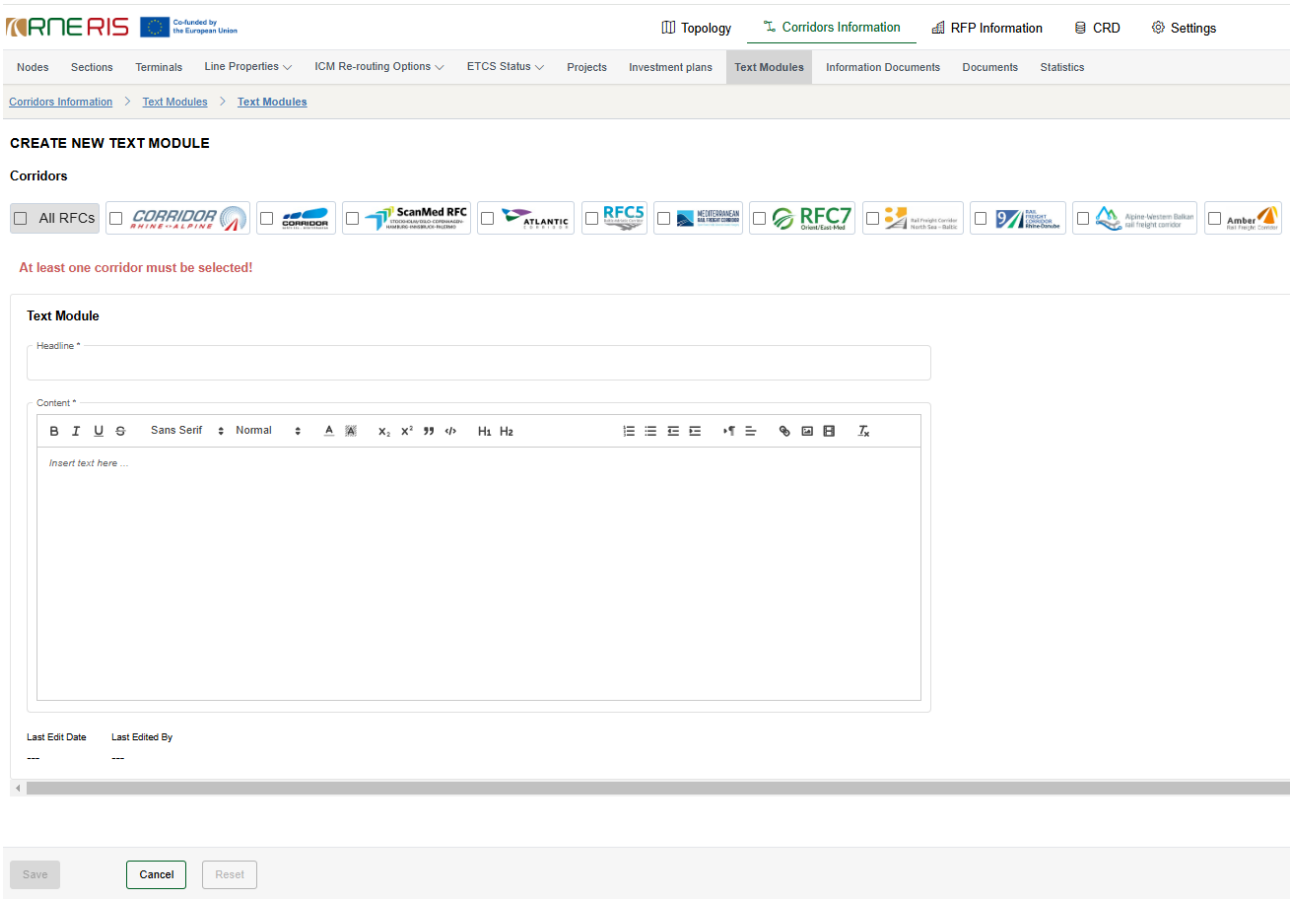
Edit: Opens the detail dialogue by means of which data can be edited

Delete: Let the user delete this entity.

Export to EXCEL selected text blocks can be exported to an Excel-file

9.9.2 Add new Text Module

By clicking Add new, you are adding a new text module. First assign it to the Corridor, provide a Headline and a content. Once it is completed, and before the Text Module can be assigned to a book, it is required to Save it first.



9.9.3 Text Module Details

If you edit a text module or create a new one, a detail dialog opens to enter the data of the text module. The central part of the dialog is an HTML editor which can be used to create the text in a graphically appealing way, including images, links, etc. The assignment to specific corridors or books is also carried out in this dialog window.

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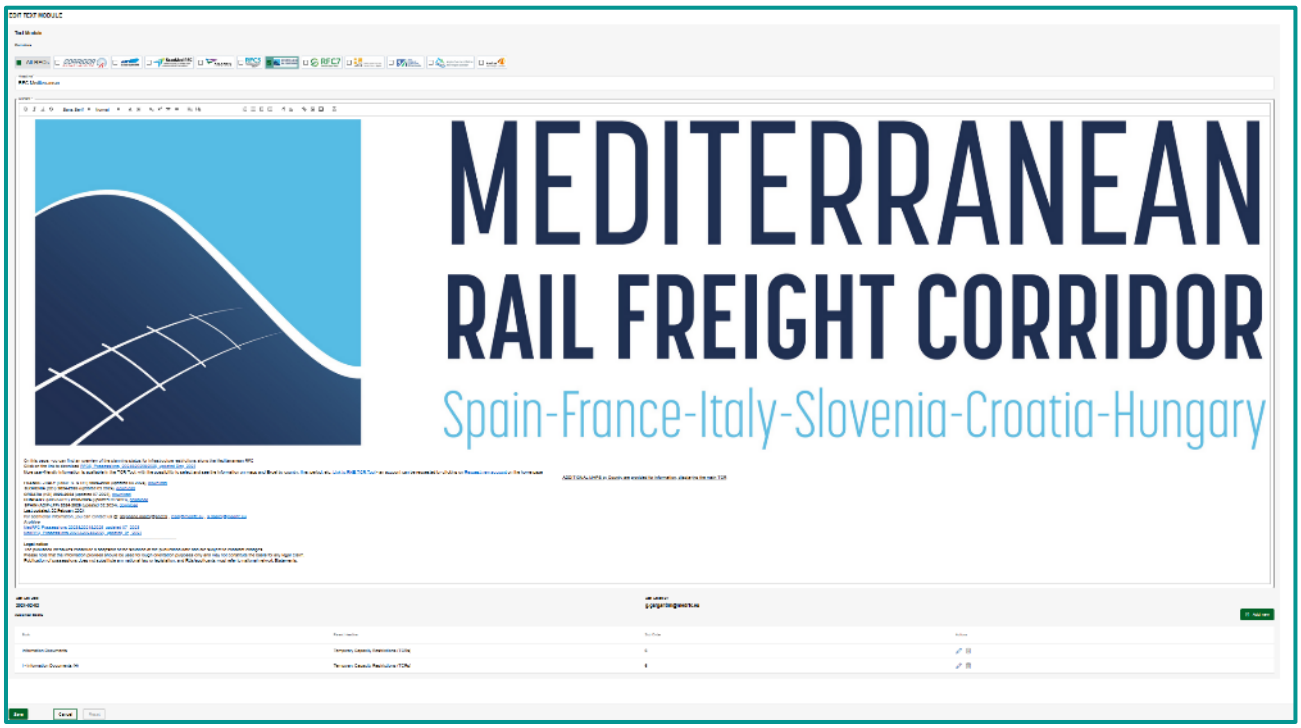
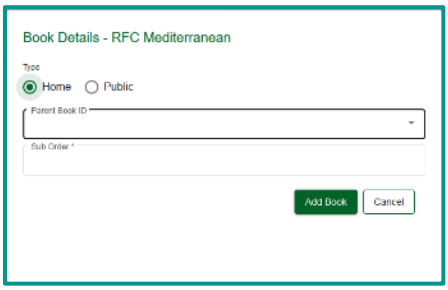


9.9.4 Assignments to books

Editing a created assignment or creating a new assignment (“add new”) opens a dialogue, by means of which the text module can be assigned to it:



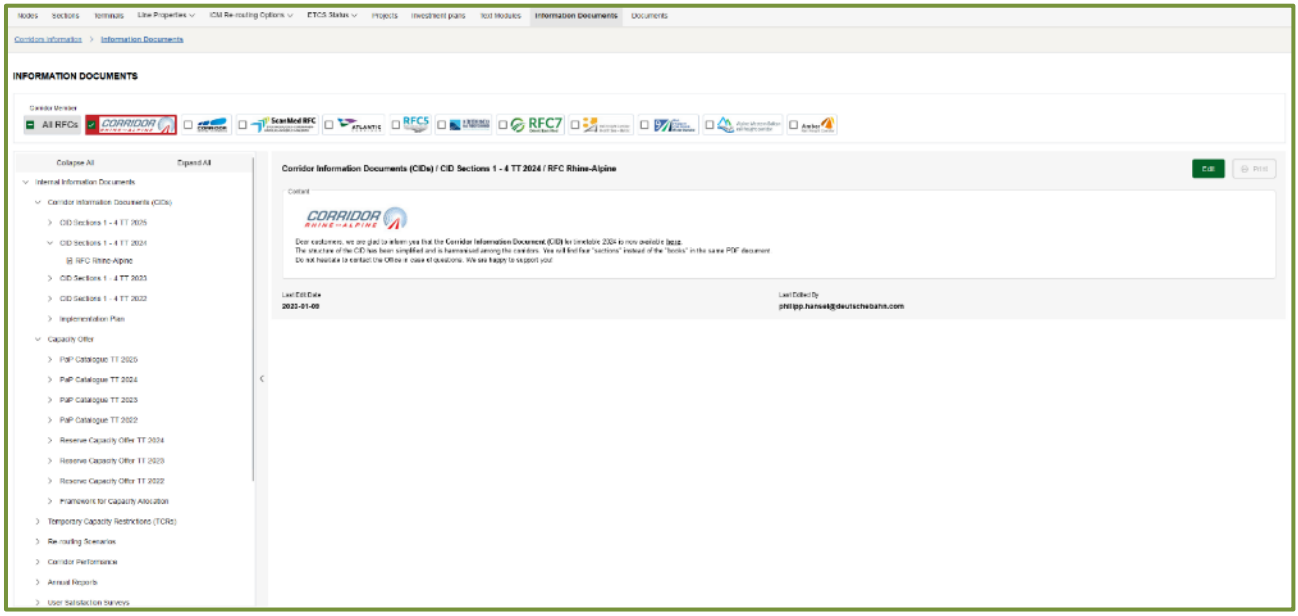
The user may differentiate an assignment to public or internal book, respectively. In the upper example, the text module was assigned to both public and internal book which is shown by the 2 entries. If the assignment is to a public book, it will be displayed in the public presentation lay-out of CIP. If Home is selected, it will only be displayed internally in Corridor Information section in RIS.

The Parent Book ID assigns the text module as a chapter of the book or assign it to another text module already contained in the book, thus creating a subchapter of this module. The Sub Order defines the display order of the current text module within the book. You can steer the hierarchy of the text modules shown under the parent document by using an index.

9.10 Information Documents

This section shows the corridor information structured in books. This hierarchical information tree is made up of the text modules and their assignment to books. By selecting specific corridors, the information tree can be restricted to corridor-specific information. In the bottom left-hand section, the information tree is organized hierarchically by book. As soon as a book is selected, the corresponding assigned text module is displayed on the right.

If you want to edit the text module, the application automatically jumps to the detailed view of the text module where the changes can be made.



9.11 Documents

Like Information Documents, corridor-specific documents can be managed in the application.

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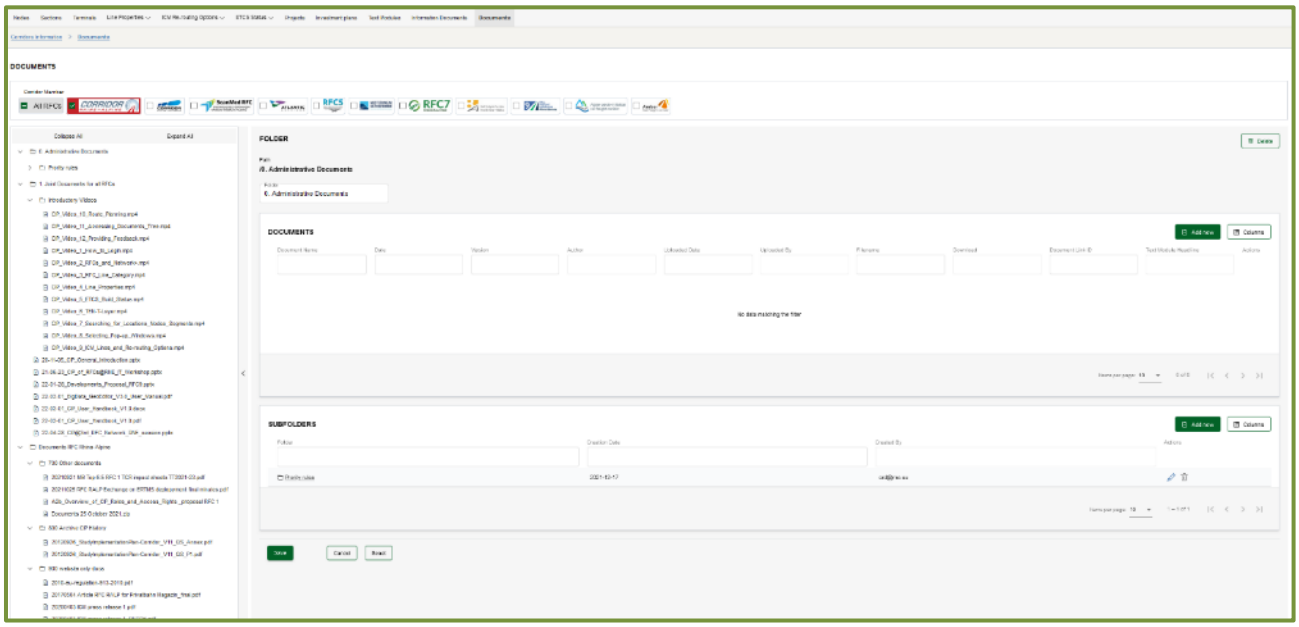
9.11.1 Overview of documents

Here too, organisation of documents is carried out using a hierarchical folder structure, which can be adapted or extended in the application. The corridor specific folder and also its documents can be shown and hidden by selection of respective corridors.



In the above example you can see the organization of the first Chapter: “Administrative Documents”. This chapter does not directly contain any documents but a subfolder. Both the directly assigned documents and subfolders are depicted in the right part of the screen. New documents can be added or deleted from this folder. The same for subfolders: new subfolders can be created or deleted from the currently selected folder.

9.11.2 Document details

If you select a specific document the detail of a document is shown

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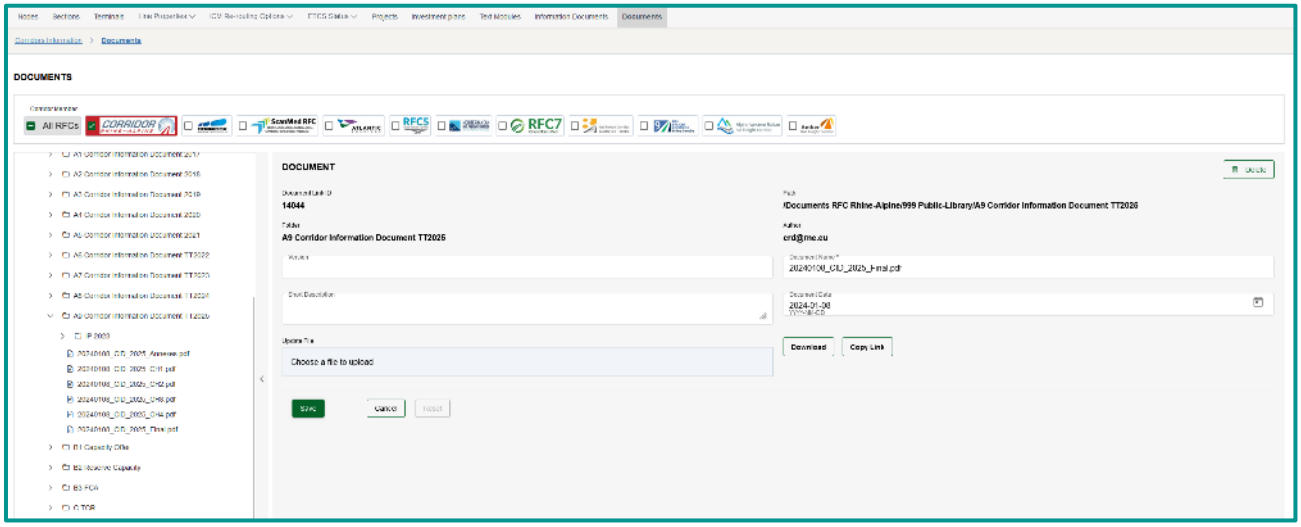


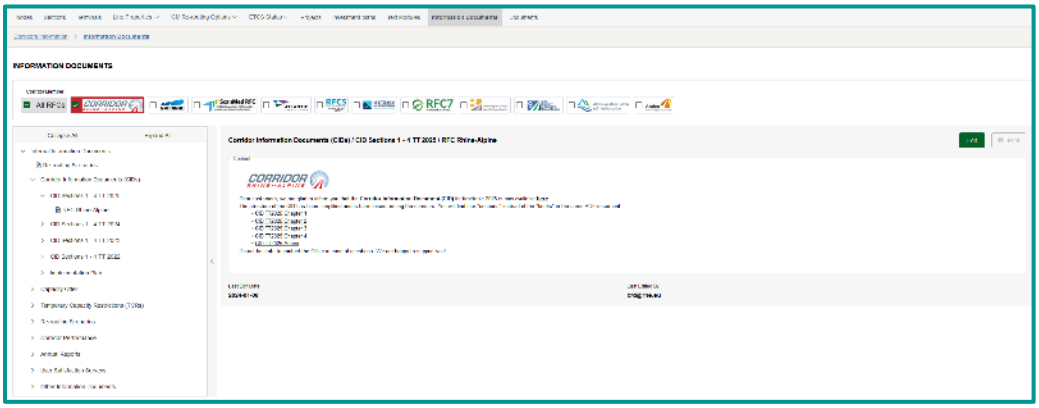
The user can adapt metadata and update the respective document.

9.12 How to publish a document?

Documents from the Documents area can be published in Information Documents via hyper-links.

This is done as follows:

1. Open Document Details screen as described in the previous chapter. Press Copy link
2. Goto Information documents and open the respective section. Right to that the data are shown as represented to public users:



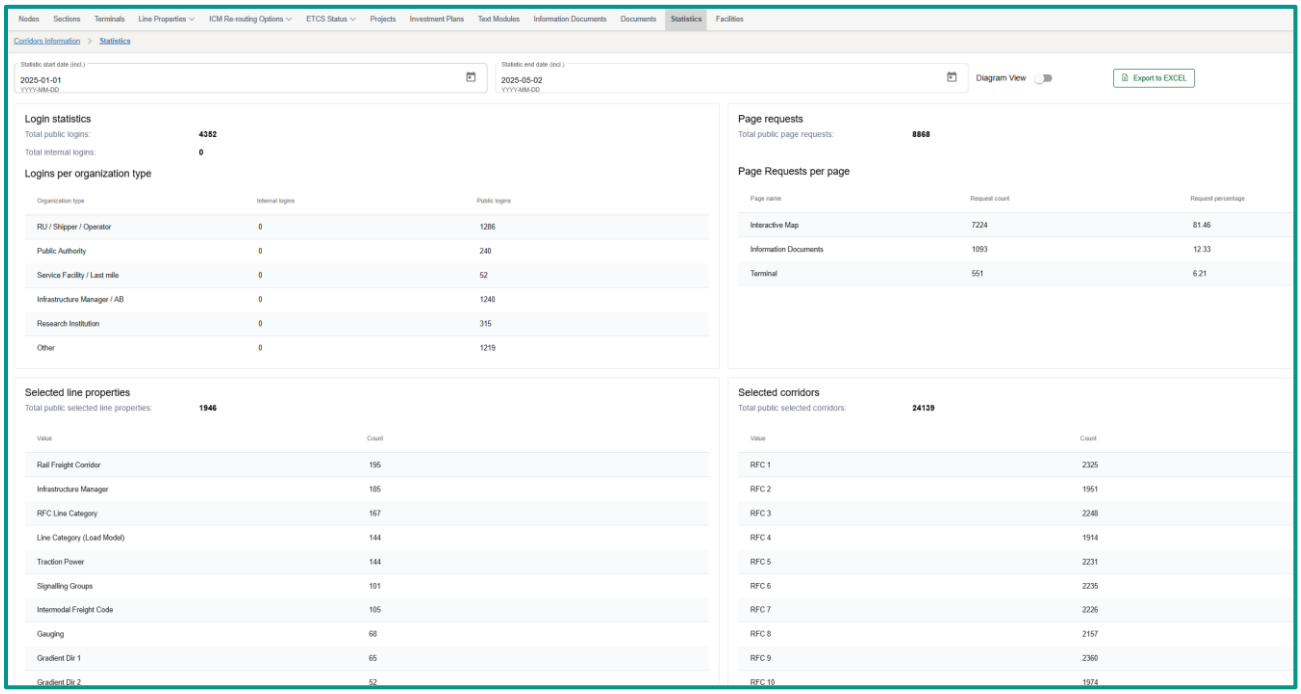
3. Mark the text to which you want to add the hyperlink.

4. Press the Link-Symbol and paste the link you copied before in the document details screen by means of CTRL-V on the keyboard
5. Save the Text

The document should be downloaded on clicking on the respective link of the text.

9.13 Statistics

This menu shows an overview of different KPIs of CIP-usage, like login-frequencies, page requests, which line properties where selected the most, etc.



9.14 Service Facilities

9.14.1 General

It is possible to assign Service Facilities to CIP Public Map. It allows authorized users (typically corridor administrators) to manage which service facilities appear in the public CIP map.

9.14.2 Display of Service Facilities in the Public Map

- **Activation**: A new toggle labelled "Show Service Facilities" is available in the left-hand side menu
- **Visualization**:

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- Facilities are displayed with type-specific icons (e.g., maintenance, loading areas).
- When activated, all facilities are shown on the map with name and location.

- **Interactive Behaviour**:
  - Hovering over a facility displays a tooltip with its name and type.
  - Clicking on a facility opens a detailed panel on the right with more information.

9.14.3 Grid View: Managing Service Facilities

Access via Menu: Corridors Information → Service Facilities

- A new grid lists all **active** service facilities available for assignment to Public Map.
- Access to this grid is restricted by user role (e.g., Corridor Admin).
- Grid features:
  - Sorting, filtering, and paging
  - Filtering by: *Visible in Public CIP (Yes/No)*
  - Full-text search (by name, type, operator, etc.)
  - Export to Excel (reflecting the current filter state)

9.14.4 Assigning Facilities to CIP Corridors

Action: "Show/Hide Facility in Public CIP Application"

- Each row in the grid comprises this action button (visible only to authorized users).
- Clicking this button opens a dialog: The visibility in Public CIP Application can be turned on / off

10 ETC information

ETC information is structured in the same way as Corridors Information but currently covers the management of ETC nodes and ETC sections, which can be managed independently of Corridors Information.

Creating an ETC node from an existing Primary Location

When a new node is created from the ETC Information section, the user may either define the node from scratch or create it from an existing Primary Location. In the latter case the Country, IM, name and coordinates are pre-filled with the values of the selected Primary Location, and the new ETC node retains a reference to it (the Primary Location data is then shown in the read-only lower part of the detail dialogue, as described in chapter 9.1.2).