Customer Information Platform
User Handbook for Internal Users
Version 1.0

VERSION	AUTHOR	DATE	CHANGES
0.1	Miloslav Kogler, Senior RFC Manager	2018-06-19	First consolidated draft of the handbook combining individual chapters elaborated by the members of a dedicated taskforce
0.2	Miloslav Kogler, Senior RFC Manager	2018-08-23	Updates of points 4.1.1.2 & 6.2 based on the conclusions of CIP Dev. Group on 21st/22nd June 2018 concerning visibility of nodes and storing and naming of documents in CIP
0.3	Miloslav Kogler, Senior RFC Manager	2019-01-16	Introduction of point 2.3.2 Route-finding functionality along with a general update of chapters 2, 3, 4 and 5 and removal of older comments to the chapter 6.
1.0	Miloslav Kogler, Senior RFC Manager	2012-03-01	General review and update pursuant to the new user interface and functionalities

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1 Customer Information Platform (CIP)

The Customer Information Platform (CIP) is an interactive, Internet-based information tool. By means of a Graphical User Interface (GUI), CIP provides precise information on the routing, terminals, specific track properties and infrastructure investment projects, as well as ICM lines and their re-routing options of the participating Rail Freight Corridors (RFCs).

At the request of several RFCs, RailNetEurope (RNE) took over the ownership, hosting and maintenance of the CIP from the Corridor Rhine-Alpine (RFC 1), thereby enabling it to evolve into a multi-corridor tool providing harmonised information and communication processes. RNE shall further develop the CIP according to the decisions of the CIP Change Control Board (CCB) and following the approval, if necessary, of the RNE General Assembly (GA).

At the moment, CIP displays information on railway infrastructure in 26 European countries, covering the network of all 11 RFCs: Rhine-Alpine, North Sea-Mediterranean, Scandinavian-Mediterranean, Atlantic, Baltic-Adriatic, Mediterranean, Orient/East-Med, North Sea – Baltic, Rhine-Danube, Alpine-Western Balkan and Amber. As of 2021, several Infrastructure Managers decided to have their entire railway network covered in CIP.

1.1 CIP Change Control Board (CCB)

RNE has established the CIP CCB as a decision-making body of the participating RFCs (CIP-Users). Each CIP-User and RNE nominate one representative to the CIP CCB. Each CIP-User representative and RNE have one vote. Remaining RFCs were invited to join the CIP CCB with a status of an observing member and become CIP-Users at a later point in time.

1.1.1 Rights of the CIP CCB and approval of developments

The CIP CCB has a mandate of RNE GA as the highest decision-making body of RNE to decide about further developments of the CIP. Therefore, the CIP CCB makes a final approval for the development of change requests placed by the CIP-Users, RNE Managing Board and RNE GA.

The decisions to be taken require unanimous voting of the nominated members to the CCB. If a development is not commonly agreed, based on the above rule, any CIP-User has the possibility to request a development if there will be no negative impact on the other CIP-Users.

1.1.2 Meetings/members/skills required

Meetings of the CIP CCB:

- Two times a year (one in March/April and the other one in September/October);
- If required, additional physical meetings or telcons can be scheduled in-between;
- Chaired by RNE Chief Information Officer, substituted by RNE Senior RFC Manager.

Members required:

- CIP User representatives (one per CIP-User);
- CIP Project Managers (optional);
- Representatives of remaining RFCs (as observers);
- RNE Chief Information Officer;
- RNE RFC Senior Manager;
- RNE Joint Office Managers (optional).

The CIP CCB members may also send a substitute to the CIP CCB meetings, who has the required skills described below:

- Basic knowledge of the CIP Tool and their RFC's product and service portfolio;

- Representing their own RFC's opinion and ability to approve or reject a change proposal/change request on their behalf;
- Management skills about budget planning and IT project on a European level.

1.1.3 Responsibilities/tasks

- Specifying the details regarding the transfer, the quality, the format and the time of data import in CIP;
- Organising the data collection and management for CIP within their RFC;
- Collecting the RFC opinion for decision points;
- Defining further development of CIP;
- Approving or rejecting change requests concerning CIP;
- Deciding about proposed measures to the implemented CIP system in operation with a view to technical and financial feasibility, practicability and development priorities;
- Budget steering;
- Supervising the roll-out plans and budget frames;
- Being the single point of contact regarding RFC/RNE issues in relation to CIP;
- Escalation level in case of issues which cannot be solved by the CIP Development Group;
- Checking the KPI related to CIP development projects and Service Level (performance);
- Taking part in surveys about the user-friendliness and general usability of CIP.

1.2 CIP Development Group

The CIP Change Control Board (CCB) has established the CIP Development Group as an implementation body of the participating RFCs (CIP-Users). Each CIP-User and RNE nominates one representative and optionally one substitute to the CIP Development Group. Remaining RFCs are invited to join the CIP Development Group with a status of an observer. IM representatives can participate in the work of the CIP Development Group as observes.

Objectives of the CIP Development Group approved by the CIP CCB include:

- Implementation of decision addressed to the Development Group by CCB;
- Submitting proposals and recommendations for further development of CIP to the CCB;
- Analysing of customer's feedback to the use of CIP;
- Coordinating the promotion of CIP and sharing of best practices;
- Quality assurance of CIP contents (data, documents, etc.).

The CIP Development group usually meets 3 times a year, regular telcons are held in-between (every 2nd / 3rd week).

1.3 CIP User Handbook

This handbook comprises a collection of specific descriptions of dedicated functionalities and features of the CIP. It was created with the aim to provide a useful tool for administration and usage of CIP by its internal users.

This handbook describes the actual state of play of CIP. With introduction of new functionalities and features to the CIP, this handbook will need to be updated accordingly. The responsibility for keeping this handbook up-to-date shall rest with the RNE RFC Senior Manager in charge of coordinating further developments of CIP. Any inconsistencies in the contents of this handbook with regard to the actual state of play of CIP shall be reported by the internal users of CIP via e-mail to support.cip@rne.eu.

1.4 CIP Info page and CIP application Uniform Resource Locators (URLs)

RNE has established and maintains a dedicated CIP Info page. The CIP application itself has been installed and is accessible in two independent environments: productive and test.

As for the URLs directing to the CIP Info Page and to CIP application's login masks, the following domain name system is in place in line with RNE's policy applying to all IT tools in its portfolio:

- http://cip.rne.eu/ and https://cip.rne.eu/ both point to the **CIP Info page** available under http://info-cip.rne.eu
- http://cip-online.rne.eu/ and https://cip-online.rne.eu/ both point to the **CIP productive environment login mask** available under https://cip.rne.eu/apex/f?p=212:65.
- http://ciptest.rne.eu and https://ciptest.rne.eu both point to the **CIP test environment login mask** available under: https://ciptest.rne.eu/apex/f?p=212:65;

In addition, RNE has also set-up the following CIP-specific domain name system:

- http://www.cip.rne.eu/ and https://www.cip.rne.eu/ both point to the **CIP Info page** available under http://info-cip.rne.eu;
- https://cip.rne.eu/apex/f?p=cip:65:::::P65_CORRIDOR:1 and
- https://cip.rne.eu/apex/f?p=cip:65:::::P65_CORRIDOR:2 and
- https://cip.rne.eu/apex/f?p=cip:65:::::P65_CORRIDOR:3 etc., all point to the **CIP productive environment public login mask of the specific RFC**, in this case of RFCs Rhine-Alpine, North Sea-Mediterranean and Scandinavian-Mediterranean;
- https://cip.rne.eu/apex/f?p=212:101:::::P101_CORRIDOR:4 and
- https://cip.rne.eu/apex/f?p=212:101:::::P101_CORRIDOR:5 and
- https://cip.rne.eu/apex/f?p=212:101:::::P101_CORRIDOR:6 etc. all point to the **CIP productive environment internal login mask of the specific RFC**, in this case of RFCs Atlantic, Baltic-Adriatic and Mediterranean.

Several of the above links were made use of on the website of RNE as well as on the websites of participating RFCs to navigate the users to the CIP Info Page and to the CIP productive environment public login mask.

2 General Structure of CIP

2.1 Introduction

There are two environments of CIP which have been established during the implementation phase: the **CIP Productive** and the **CIP Test** environment.

Both environments have the same structure but serve for different purposes: The Test environment is used by internal users and has been developed for testing of new functionalities or features intended for later implementation in the Productive environment. After successful testing of a new functionality or feature by the CIP Development Group, this shall be transferred to the Productive environment by the IT Supplier in coordination with RNE.

However, if any content of CIP is to be changed, this has to be done directly in the productive environment, in order to make it immediately available for the external users. That concerns changes of such content, as for example:

1. Creating, editing, deleting of nodes/segments/terminals (see Chapter 4.1);
2. Changing of corridors' GIS DATA (see Chapter 4.3);
3. Changing of Projects, ETCS parameters (see Chapters 5.2 and 5.3);
4. Changing of content within the Information Documents tab (see Chapter 6.2);
5. User assignments (see Chapter 3).

In order to keep content of both environments of CIP equally, regular alignments take place and are executed by the IT Supplier. In other words, all the content of the Test environment will be overwritten by the content of the Productive environment during the alignment process. The date and time of the alignment has to be set by RNE in coordination with the IT Supplier. Members to the CIP Development Group receive an e-mail with notification about the alignment prior and after the process from the IT Supplier, with information about the intension and results of the alignment.

2.2 General layout

The following subchapters describe the user interface and functionality of CIP as developed according to inputs and requirements by the participating CIP-Users.

2.2.1 Log-in

The application can be accessed through the CIP Info page maintained by RNE (http://info-cip.rne.eu/) by clicking on the CIP Logo or through the links provided on the websites of individual RFCs. The user will be redirected to the login mask of CIP Productive environment. External (public) users are asked to select the button corresponding to their user group for logging-in to the application. This information will be used for statistical analysis in the regular CIP usage monitoring report.
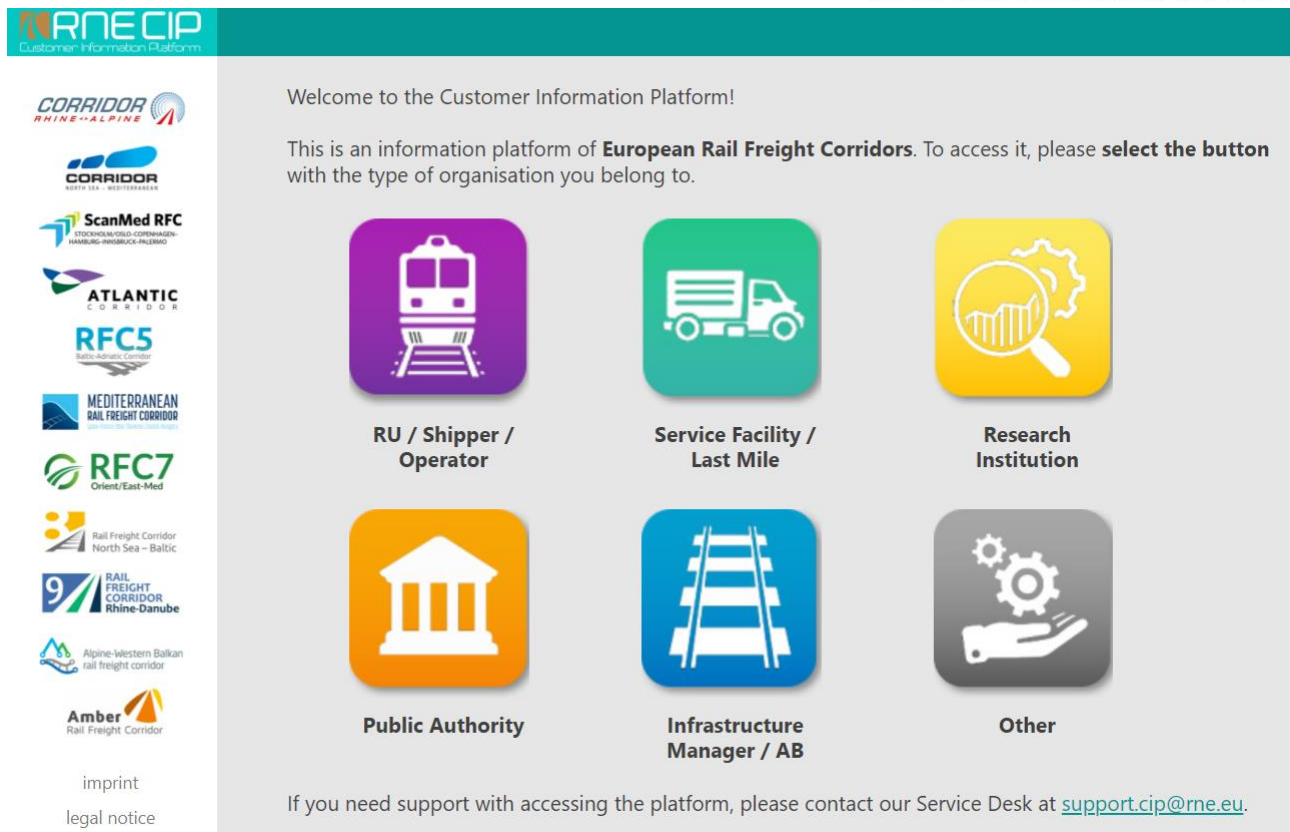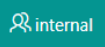
Figure 2.1: The Login Mask – External (public) users

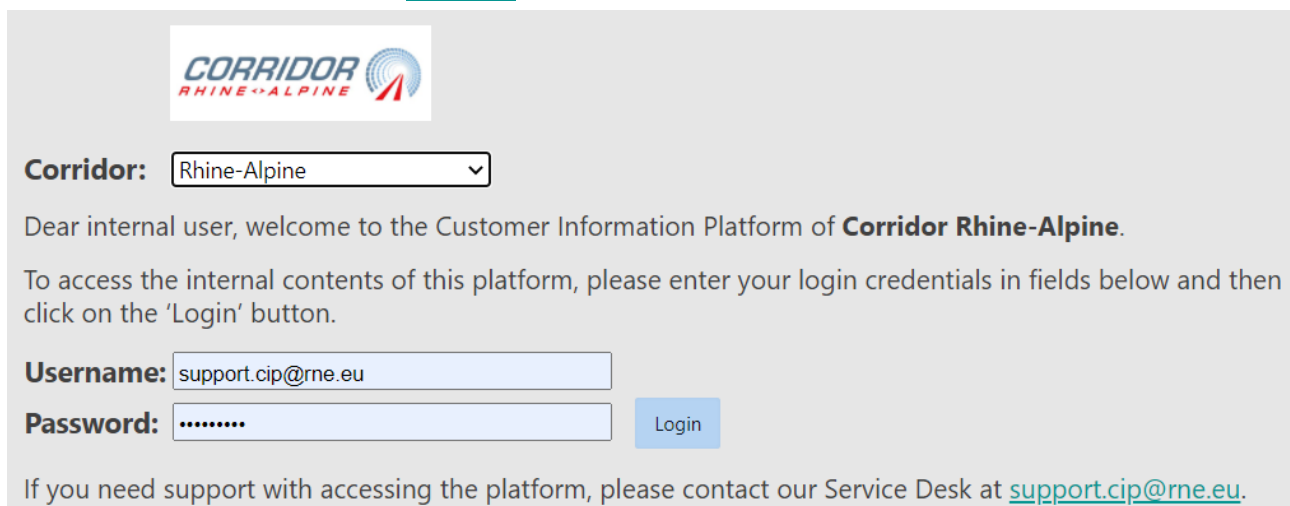Internal users have to click on 🐵 internal to access the internal login mask:

Figure 2.2: The Login Mask – Internal users

For accessing the application internally, a user has first to be assigned by the **Administrator** of the concerned Corridor (typically by the Development Group member) as a new internal user of CIP. That means, that the Administrator creates a new user in CIP and saves his entry in the CIP user database. To do that, the new user needs to provide the Corridor Map Administrator with his e-mail address, which will be used as "username" for logging-in to CIP.

For the initial log-in the internal user has to choose the corresponding corridor and enter his credentials in the fields "Username" and "Password". After clicking on the **Login** button, the user logs into the application. To avoid penetration by robots in case of incorrect access data inserted, a

warning message is displayed and the user has to wait for a specific period of time before attempting to log in again.

After a successful internal log-in, the **Public Map** page of the application will be displayed from which it is advisable to navigate to the Internal area by clicking on ⌂ located in the navigation pane on the left-hand side of the screen.

On the top of the screen in the middle the information about the logged in RFC and user's e-mail address, which the internal user used for logging-in in CIP, can be seen.

After logging-in to CIP the internal user can change his/her password. To do that, he/she needs to click on the ⚲ Change password icon, which can be found in the upper right corner of the user interface (next to which the **Logout** link is also displayed). An internal user should not share his/her login credentials information with any other user, as every change conducted within his/her session might be traced.

By clicking on **Logout**, the user logs out from the application.

For accessing the Test environment, the internal user needs to click on the following link:

https://ciptest.rne.eu/apex/f?p=212:65

The log-in procedure to the Test environment is the same as that for the Productive environment.

2.2.2 Public and internal area, administration

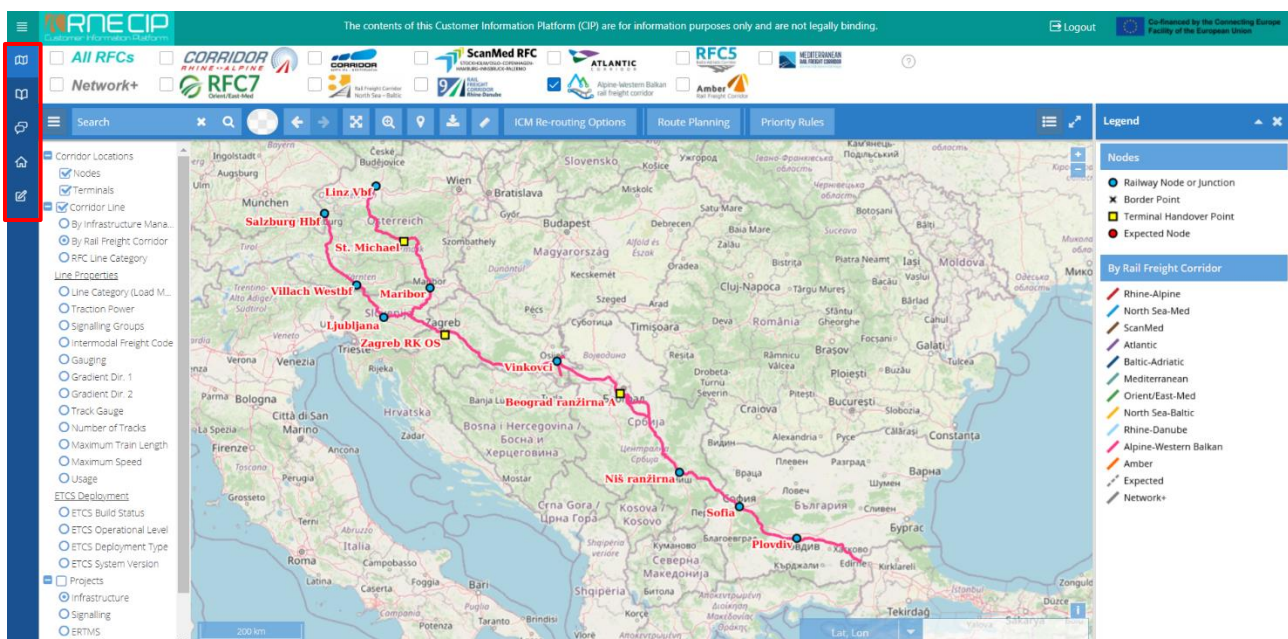After the successful log-in an internal user will see the starting page of the application:

Figure 2.3*: The starting page of the application – Public/Map Page*

The general layout of the application interface consists of five main sections (**Interactive Map, Information Documents, Feedback, Internal** and **Administration**), each defined by a specific icon in the navigation pane on the left-hand side of the user interface. The main sections **Internal** and **Administration** consist of several sub-sections, each of them also defined by a specific icon.

The sections **Interactive Map, Information Documents** and **Feedback** are displayed equally to external (public) users of the application as well as to its internal users. The sections **Internal** and **Administration** and all their sub-sections are available only to the internal users of CIP. Thus, the sections Internal and Administration would never be visible to the public (external) users.

The availability of the main sections and their sub-sections may vary depending on the access rights, which are derived from the user roles assigned to each internal user individually. Some sections or sub-sections might be visible to some users and hidden to others. Access, view and edit options for specific sub-sections of the application may also vary according to the roles assigned to the user.

In the upper part of the screen logos with links to external websites are displayed. A click on the RNE CIP logo redirects the user to the CIP Info page maintained by RNE, whereas another one redirects him/her to the webpage of the DG MOVE of European Commission and finally behind the logo of each Corridor, there is a link redirecting the user to the website of that specific RFC.

2.2.3 Public Sections

2.2.3.1 Interactive Map

After a successful internal login to CIP, the Interactive Map of the public area will be shown to the user by default. That is, how a map with all its content appears for any public user. However, unlike the public users, who would by default see all RFC displayed in the map, for an internal user only the corridor, which has been chosen during the login procedure, will be shown by default. If an internal user in the next step switches to the "Internal" area, he/she will see the Interactive Map of internal area (Internal Map).

Both interactive maps contain the most relevant information concerning the topology of the corridor, such as the Nodes, Segments and Terminals, as defined within the Map Administration tab under the Internal section. Further information concerning the Line Properties, ETCS Deployment, Projects and TEN-T Network can be displayed as well.

Both maps consist of a **Map area** positioned in the centre of the screen with the toolbar located immediately above it, **Options** region located to left of the Map area, **Legend** region located to right of the Map area and a region with the **Multi-Corridor-View** functionality on top.
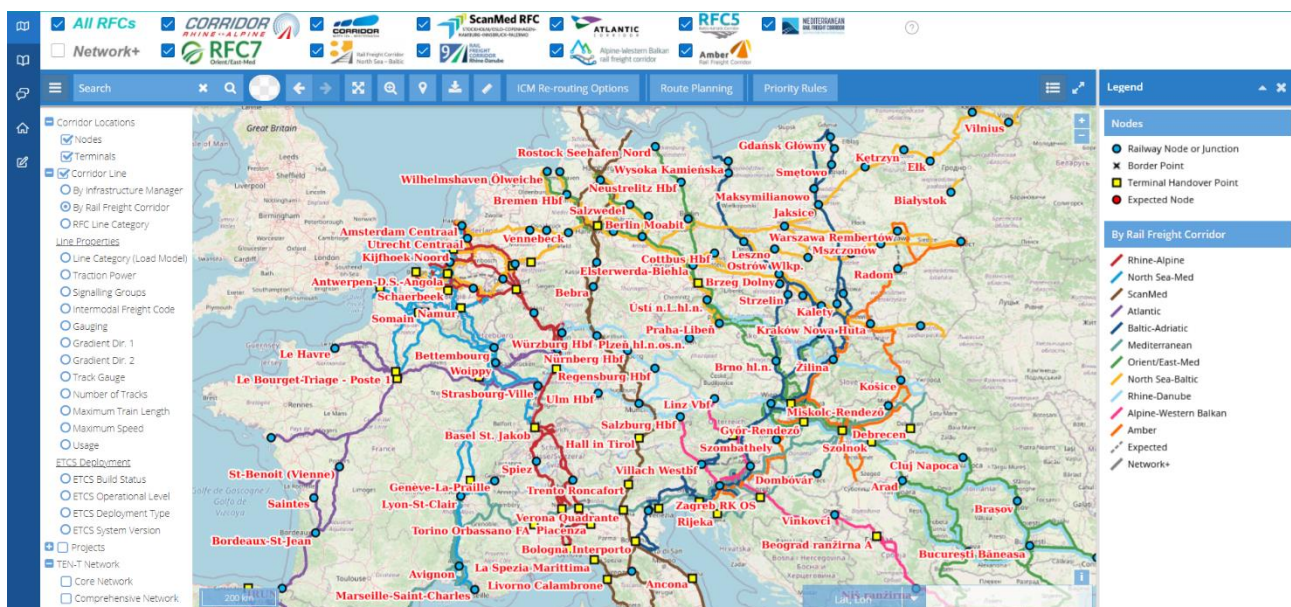

Figure 2.4: Public Interactive Map

The **Map area** is located in the centre of the screen and features a background map along with the selected layers. It shall display all the data that might be interesting for the users. Immediately above the Map area, a toolbar is visible.

The search field [Search] is available in the left side of the toolbar and enables the user to search for locations, CIP nodes and CIP segments by typing in the name of these objects.

Suggestions matching the inserted search term will appear while the user is entering the search term into the field, allowing him to select any of the suggestions. Selecting any of the search results triggers the map to zoom in to the selected object. The selected location would be also marked in the map until the user presses the *'Clear search'* marked as "x".

The icon ⬤ **Switch background** enables the user to switch between a plain background and the OpenStreetMap. Clicking on the icon will change the background of the Map area.

Clicking on one of the arrows ← → will set the map to the previous or next view.

A click on the icon ⛶ **Fit to all RFCs**, will cause the map to return to the default position and zoom level.

To **Zoom in/out** the map, the user can either click on one of the corresponding icons + and − located in the upper right corner of the Map area or the icon 🔍 **Zoom to rectangle** in the toolbar or use his/her mouse wheel.

The 📥 **Export map** icon triggers a download of the map area in a PNG format.

The ✎ **Measure** icon provides to the user access to the functionality to set-up and measure above the map area specific shapes such as the circle, rectangle, polygon and line.

Clicking and holding the left mouse button enables the user moving the map in a specific direction.

Additionally, a single right click on an any point of the map will trigger a pop-up enabling the user to determine the geographical coordinates along with the address of the point he/she has clicked on.

In the lower left corner of the Map area the actual scale is displayed while the coordinates of the specific point where the cursor is currently placed above the map area are displayed in its lower right corner.

The **Options** region is located on the left side of the Map area. It displays the available map layers that can be displayed and is used to steer the combination of layers to be shown in the Map area.

On top of the layers available to the public users, in the Internal area the user can also select to display a topological view of the corridor lines instead of geometries, to display objects assigned to Corridor layers in Big Data as well as the objects redlined by any of the internal users.

The **Legend** region is located on the right side of the Map area. It functions as a common legend presenting the symbols displayed in the map and explaining the meaning of these symbols.

The **Multi-Corridor-View** functionality is situated in a separate region above the Map area and on top of the toolbar. It enables the users to steer which corridors would be displayed in the Map area.

Figure 2.5: *Multi-Corridor-View functionality*

2.2.3.2 Information Documents
Via the Information Documents section, the RFCs display all their documents which are desired to be available to the external (public) users. The Information Documents page consists of a **Tree structure** region, a **Pages** region and the **Multi-Corridor-View** functionality.

2.2.3.3 Feedback
Via the Feedback section, the CIP users can provide their feedback and/or share their experience with using the application and/or provide suggestions for its further improvement to RNE either by filling in a short questionnaire or a blank form.

2.2.4   Common buttons

Within the application, there are several buttons that maintain a generally consistent functionality.

The user can expect that these buttons perform the same logical operation within the context of the page on which it is displayed.

The buttons **Back**, **Create**, **Apply Changes** and **Delete** will perform an operation when pressed that generally is consistent within the application.

2.2.4.1 Back Button / Back to Book Button

By pressing the Back button, the user is redirected to the previous section/page.

If the user is on a specific edit page, pressing the Back button redirects him/her to a main page where the general records are displayed usually in the form of a report or a tree hierarchy.

If on a detail page, pressing the Back button will cancel any changes made by the user that have not been saved.

An exception appears when a user with an **Administrator** role enters a text module in the Information Documents area by pressing the **Edit** button. If such user opens a text module for editing, he/she can see the **Back** button but also a **Back To Book** button. By entering the text module, the user has left the area on Information Documents, therefore he/she has to press the **Back To Book** button in order to return to the Information Documents. The **Back** button will direct the user to the Test Modules in the Admin area. Users that have no access to the Administration Area will receive an error message for the time being.
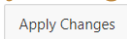
2.2.4.2 Create Button

The Create button creates a new record within the context of the current area of the application. Before a record can be created, certain input fields must be filled in with data. This is because certain fields are mandatory, and others are optional depending on the type of record. Mandatory fields are marked accordingly with a red star (*).

In case the user attempts to create a new record without first completing all mandatory fields, record creation is not completed, and the user is informed about the missing fields. An invalid type of input data will also trigger a message displaying which input data are invalid.

After successfully creating a new record, the details of the new record, as entered by the user, will be immediately displayed and the option to edit the new record would become available. A relevant message will inform the user accordingly.

A **Create** button might also appear on an Interactive report, placed next to the **Actions menu** button, usually named in a pattern such as '*Create New Record'*. A click on this button will not instantly create a new record but will redirect to the record detail page where the data for the new record can be inserted.

2.2.4.3 Apply Changes Button

Clicking the Apply Changes button will perform an update on the data contained within the current working record. Any changes made by the user will overwrite previous data.

A warning will be displayed, if the user attempts to redirect to another page without first committing to any changes made. Another warning pops up in case of missing or invalid input data while attempting an update.

After successfully committing to any changes made, the record is displayed to the user with the current changes applied. Another message informs the user that the procedure was successful.

2.2.4.4 Delete Button

Clicking the Delete button will perform a delete action on the current record.

Depending on the current working area of the application, a delete action of a record may delete any other records depending on the current record, for example deleting a main Project will cause sub-projects to be deleted too. The user is informed accordingly and a confirmation message is displayed.
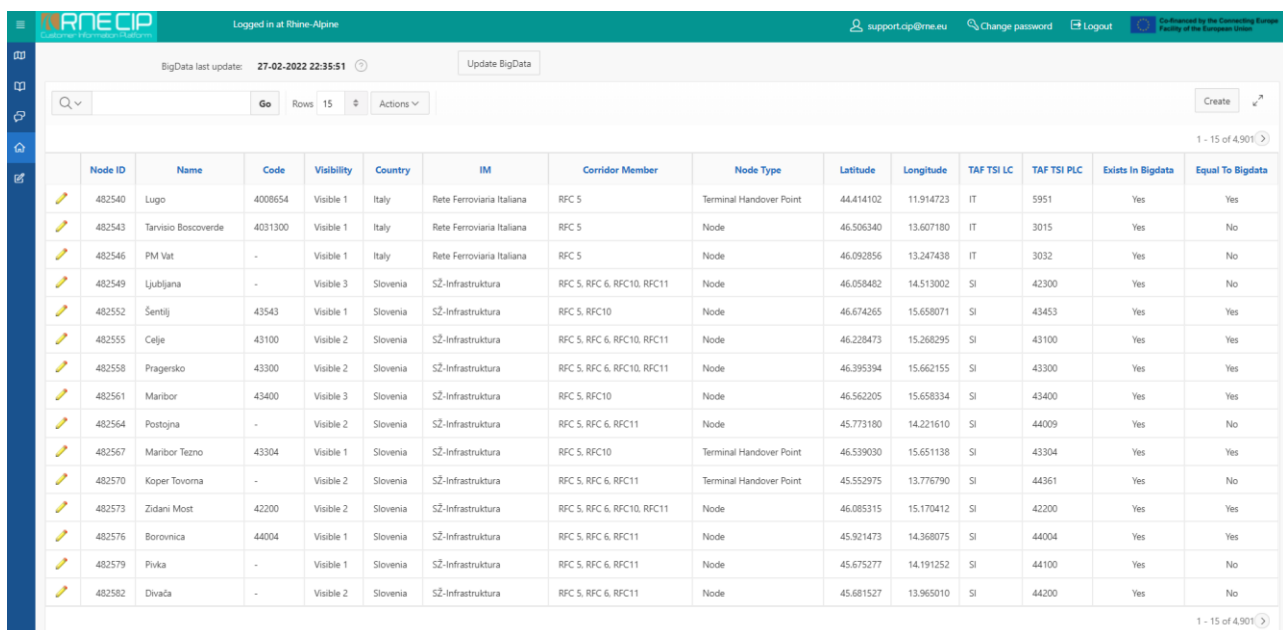
Performing a delete action on a record will redirect the user to the previous main page. A message will inform the user that the delete action was successful.

In some cases, the system protects connected data and will refuse to execute the delete action. An error message will pop-up and inform the user about the conflict.

2.3 Dynamic functions

2.3.1 The Interactive report

The **Interactive report** is used within the application in order to display data in form of a report containing records. In most cases, data displayed within a report are of the same type and contain the same attributes. Each row of the report stands for a different record and each column of the report represents a different attribute of a record.

Figure 2.6: Example of the Interactive report

An Interactive report provides the user with search function, which enables to search for a specific record. After typing-in in the **Search field**, the user has to click **"Go"** button to start the search process. There is also a possibility to select a column for searching in. That can be done by clicking on the icon [Q˅] and choosing the required column.

Next to the *"Go"* button, the maximum number of rows, which would displayed on the current page of the interactive report, is indicated. Changing that number of rows can be performed by selecting them in the **"Rows"** field.

Most of the actions, which are available within the interactive report, can be performed by clicking on the **"Actions"** menu button next to the *"Rows"* field above the Interactive Report. Clicking on the Actions button triggers a menu to appear from which relevant functions can be performed:

1. Choosing the **"Select Columns"** action will open a window, where it can be selected, which columns (attributes) of the records will be visible within the report.

2. Choosing the **"Filter"** action will open a window, where the user can apply filters on a column or a row of the report in order to narrow its results.

3. Following functions combined under the **Format** action, can be performed by the user:

   • **Sorting** of the report columns;

   • **Highlighting** of specific rows (records) or columns (attributes);

   • **Creating charts** for representation of all or specific data contained within the report. The chart will be generated by selecting in the opened window Chart type, Label as well as Value and Function with Sort order;

   • **Compute**, **Aggregate** and **Group by** of report results.

4. Choosing the **Save Report** action will save current settings of the report. A report can also be reverted to a previous setting (**Flashback**) or reset to the default setting (**Reset**). If private settings have been configured and saved, an extra field is shown. Private settings can be deleted by pressing the grey x to the right of the overview on top of the report.

5. The report in Excel or PDF format can be downloaded by choosing **Download** action.

By selecting a specific record in the Interactive report, the data for the selected record can be viewed and edited. To do so, the user needs to trigger the edit object page by clicking on the icon ✎ available in front of each editable record of the report. By doing so, the user will be redirected to the edit object page where actions as editing and deleting of the record can be performed.

To create a new record which will be displayed within the report, the user needs to click on the **"Create"** button to the right of the *"Actions"* menu button of the Interactive report. By doing so, the user will be redirected to a new edit object page where various attributes of the new record can be inserted and saved.

Apart from the Interactive report, static reports are also available within the CIP application. The general layout and purpose of a static report is the same as the one of Interactive reports, though lacking the various interactive functions.

2.3.2 Route-planning functionality

The Interactive Map provides CIP users with a quick overview of corridor routes and the relevant line property along these routes. By choosing any of the line property available in CIP, different values applicable to this property will be displayed in the map and distinguished by distinct colours. In this way, CIP users may obtain information on a single line property.

If a user is interested in running a train from a specific origin to a specific destination along the routing of corridors mapped in CIP, it is also useful to obtain all relevant line properties for a dedicated route. In CIP, it is possible to find a route between a specific origin and destination and to request an overview of all the line parameters of this specific route.

To do this, a user has first to go to the Interactive Map and click on the **"Route Planning"** button:
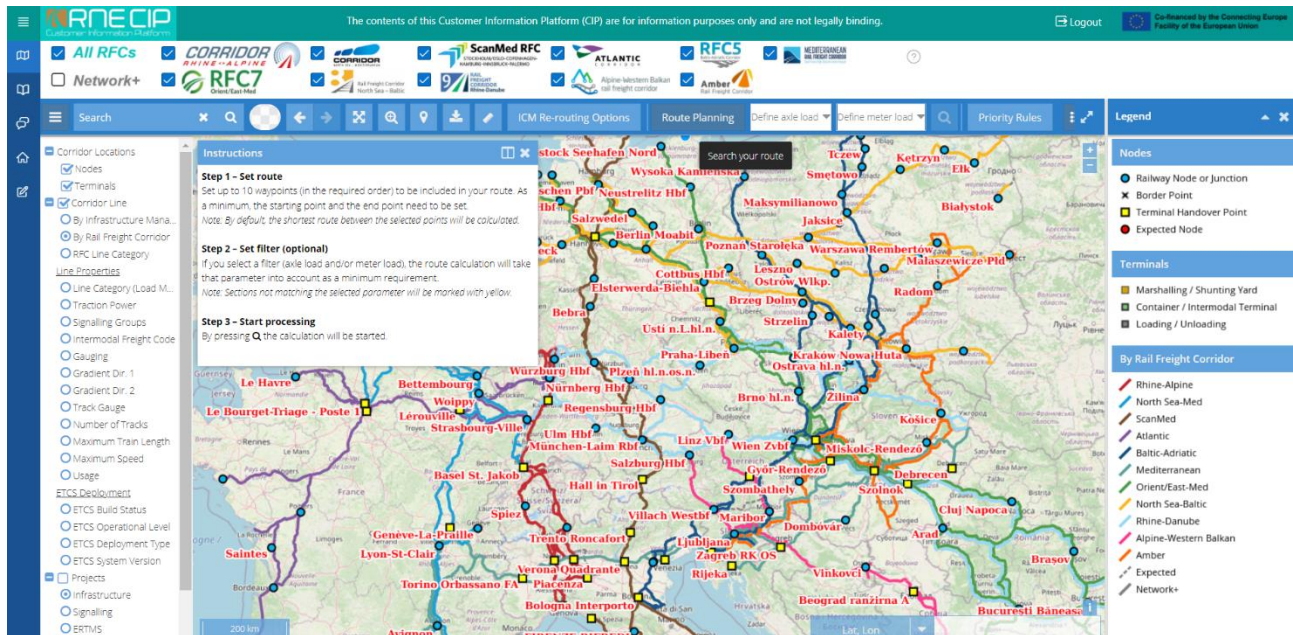
Figure 2.7: Triggering the route-planning functionality

Clicking on the [Route Planning] **"Route Planning"** button triggers the display of two additional drop-down menus along with the icon for launching of the search and a pop-up window with instruction how to proceed. By selecting this pop-up window with instructions, a user can either move it over the screen to a place where it doesn't bother him/her or close it.

The route-planning functionality can be then used by following the next three steps:

Step 1 – Set route:
Set up to 10 waypoints (in the required order) to be included in your route. As a minimum, the starting point and the end point need to be set. Setting up the way points is done by clicking on the nodes that are important for your train run.
Note: By default, the shortest route between the selected points will be calculated.

Step 2 – Set filter (optional):
If you select a filter (axle load and/or meter load), the route calculation will take that parameter into account as a minimum requirement.
Note: Sections not matching the selected parameter will be marked with yellow.

Step 3 – Start processing:
By pressing [Q] the calculation will be started.

The shortest route meeting user's request will be displayed in the map and coloured in green and eventually also in yellow. The portions of the route coloured in green match the filtering option(s) selected by the user. The portions of the route coloured in yellow do not match the filtering option(s) selected by the user and would only apply in case there is no other (even longer) possibility for connecting the selected waypoints while meeting the selected filtering option(s).

In addition to displaying of the requested route in the map, a new pop-up window "Route Grouping / Routing Segments" will appear in which all the line segments of the requested route and on the values of their relevant line properties can be found. In this pop-up window, the also track length of individual line segments as well as of the entire route can be found.
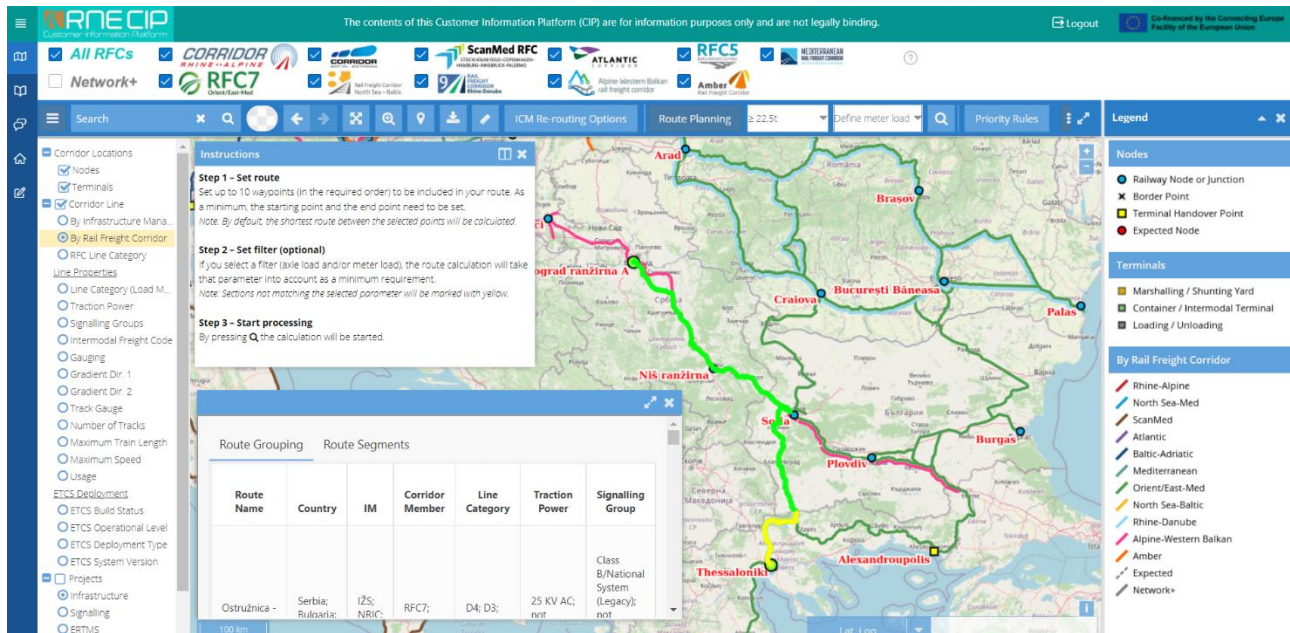
Figure 2.8: Route-planning functionality: Display of the requested route.

The "Route Grouping / Routing Segments" pop-up window can be further moved over the screen, and its size can be adjusted according to the preferences of the user or it can be closed.

Under the "Actions" menu button, additional functionalities such as the selection of columns and downloading of the report are available to the internal as well as to the public users of CIP.

Figure 2.9: Route-planning functionality: Report on the route details.

By taking the above steps, a CIP user can eventually obtain a file in Excel or PDF format containing all the segments along the requested route and the values of relevant line parameters. *Note: Segments which were only partially required for the requested route are marked in yellow.*

2.3.3 Tree hierarchical structure

The "tree hierarchical structure" is an element to organise and publish dedicated information documents in a structured and joint manner.

The hierarchy can be expanded or collapsed by clicking on the **Expand Tree** or **Collapse Tree** buttons, respectively. Clicking upon a record will redirect the user to a detail page where the more specific information and the documents attached to it can be administrated.

Figure 2.10*: The tree hierarchical structure displaying records*

2.4   Documents

The **Documents** sub-section can only be accessed by internal users and it contains all the internal documents, which are stored in CIP by an RFC. These documents are individual, depending on the RFC, which has been used for logging in in CIP. The internal users can access this sub-section via the **Internal** section. The Documents page contains a tree hierarchical structure that contains numerous document records.

On top of the above, the Documents sub-section also contains a dedicated folder "Joint documents for all RFCs", the contents of which are maintained by RNE and would typically include a latest version of this User Handbook, joint materials for promotion of CIP and similar documents. Finally, further documents relevant for the administration of CIP contents, such as the PDF files containing Priority rules in operation applicable to individual infrastructure managers may also be stored here.
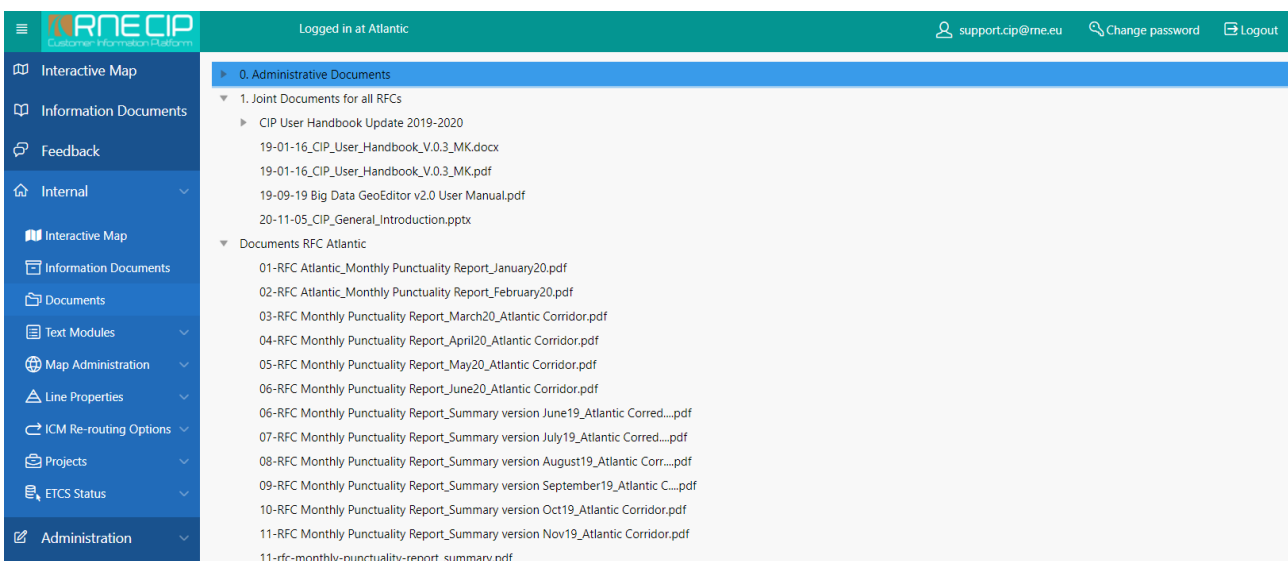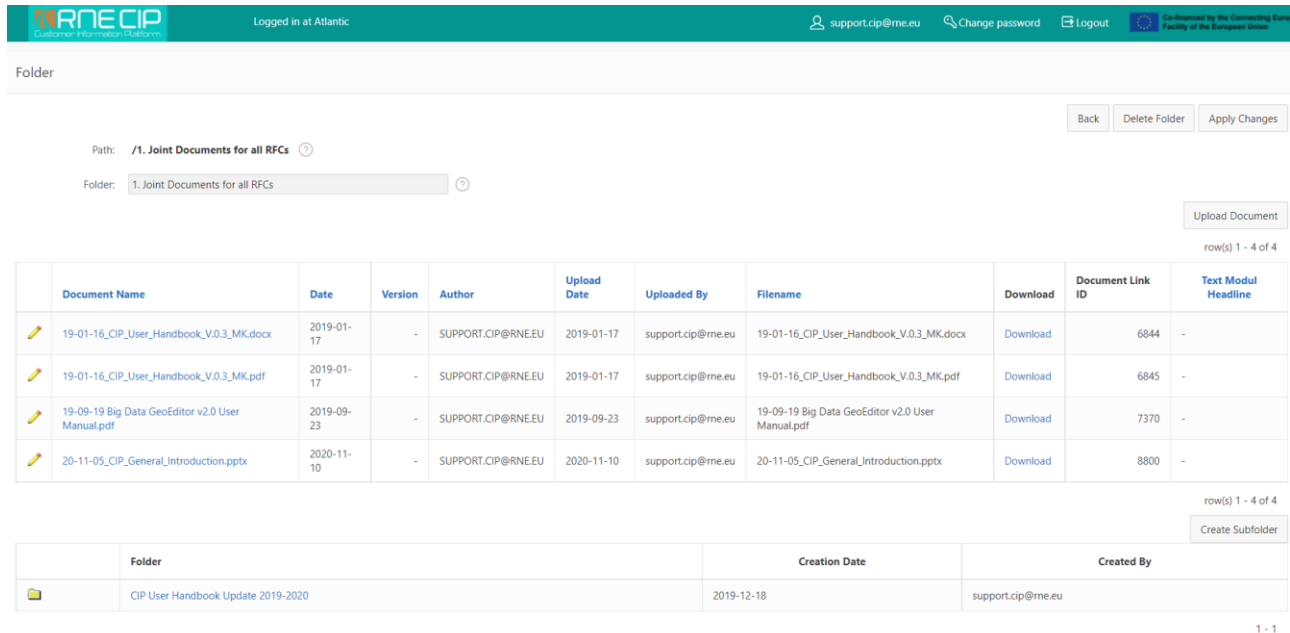

Figure 2.11: *The Documents sub-section of RFC Atlantic with the tree hierarchical structure*

There are two kinds of records: **Folders** and **Documents** in sub-section of CIP. A Folder may contain Documents as well as Subfolders. Subfolders in turn may contain other Subfolders and Documents. A Document can exist only within a Folder. To expand a folder, click on the " ▶ " symbol next to the corresponding name of the folder. To view the details of a folder or a document, simply click on the folder or document name.

Clicking on a folder will redirect the user to the Folder Details page.

*Figure 2.*11*: The Folder Details page displaying documents uploaded along with a sub-folder.*

In this page the user can edit the name of the folder, upload or edit one or more documents, create a subfolder of the current folder or delete it along with the subfolders and documents it contains.

On the upper left side of the Documents page the path to current folder is shown. To edit the name of the folder, the user should alter the existing name in the **Folder** field and click on the **Apply Changes** button. There is also the option to upload documents from an external source. By clicking on the **Upload Document** button the Document Upload page will be displayed:
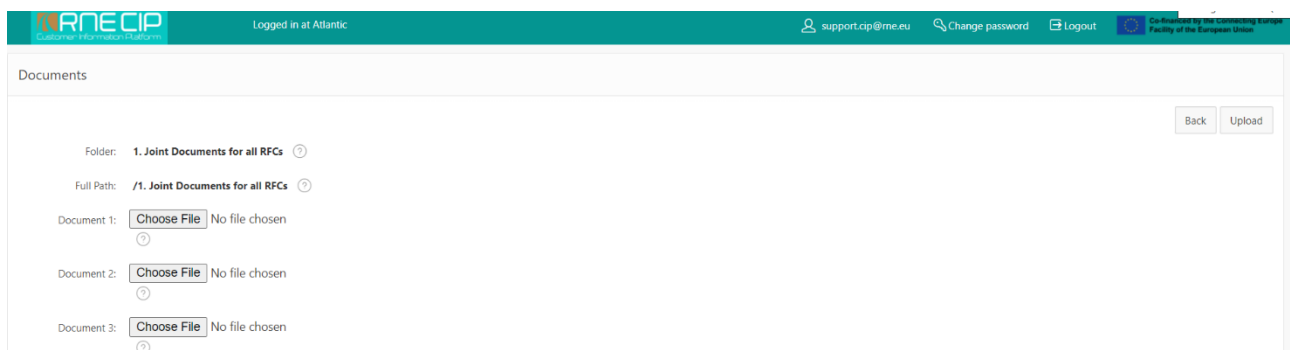
*Figure 2.*12*: The Upload Document page for uploading of documents from an external source.*

On this page it is possible to upload up to 10 Document files by simply clicking on the **Choose File** button next to each Document field and choosing the file to be uploaded from a local directory. The uploaded file can be in format of a .pdf, .doc, .txt, etc. On top of the area, the Folder along with the Full Path to the folder to which the documents will be uploaded are displayed. Once all of the desired files are chosen, the upload can be triggered by clicking on the **Upload** button.

To edit or delete an uploaded document, the user first of all needs to go back to the page of the relevant Folder. In the Documents sub-region of this page, a report on the documents contained within the current folder is displayed. By clicking on the edit icon 🖉 displayed in front of the record of each document, the user is redirected to the Document Details page:
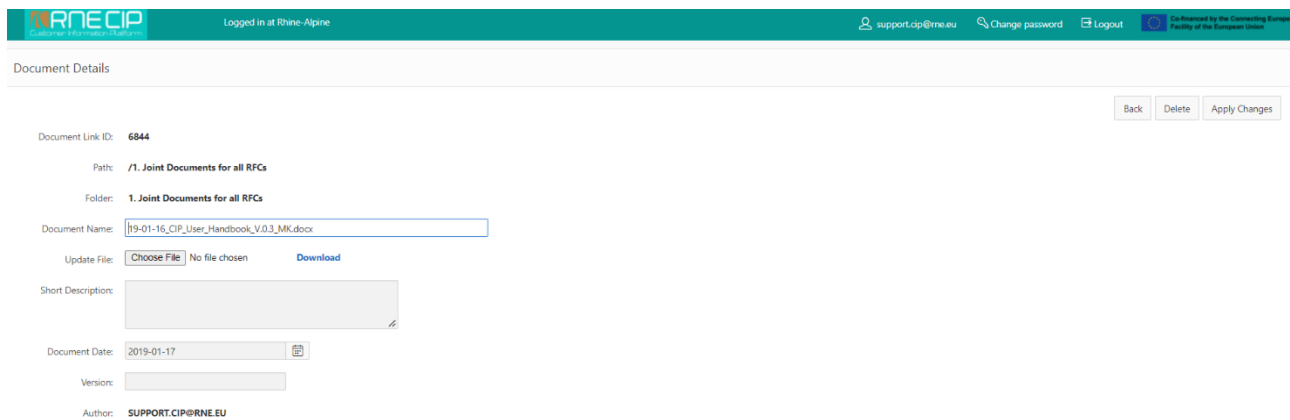
Figure 2.13*: The Document Details page*

On that page such information as the document link ID, path to the document, document name, short description, document date, version and author is displayed. However, the short description and version do not have to be filled in by the user.

To edit the name of the document, the user should alter the existing name in the Document Name field and click on the **Apply Changes** button.

There is also the option to update the file of the document, which can be done by clicking on the **Choose File** button. This will replace the existing file will a new one, and also trigger an update of the name of the file. Updating of the file with its filename has no impact on the document name. The document name can be changed by the user manually.

By clicking on the Download link, which is located next the Choose File button, it is possible to download and save the current Document in a local, user-defined directory.

Clicking on the Back button will redirect the user to the previous Folder page.

In the Subfolders region of a Folder, a report on all subfolders existing within the current folder is displayed. The editing of each subfolder can be performed by clicking on the symbol 📁 displayed to the left of the record of each subfolder, which navigates to the page of that specific subfolder.

Figure 2.14*: The Subfolder region displaying all the subfolders of current folder*

Clicking on the **Create Subfolder** button will display a page where the name of the new subfolder can be defined. After entering the name, a click on the **Create** button will generate the new subfolder and will direct the user to the Folder page of the newly created subfolder.
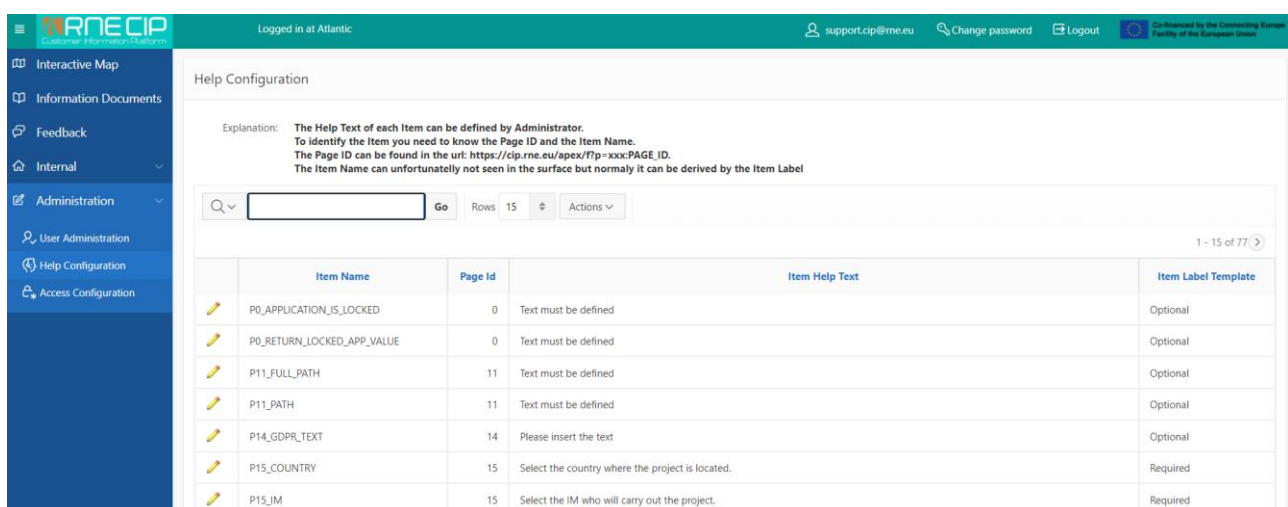
Figure 2.15*: The creation mask of a subfolder*

2.5   Help configuration

The **Help Configuration** which can be found under the section **Administration** contains an interactive report of all the help text items used throughout the CIP application. The term **"Item"** stands for every single input field, select list, text area, date select field and other type of field that is used for input and display of the various data managed within the CIP application.

The purpose of this sub-section is to help the CIP administrator with defining the help texts for each of the items used within the application. These help texts would appear when a user clicks upon the ⓘ label of the item 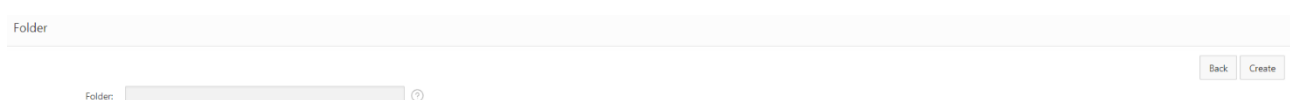to provide the user with a general direction on the type or the context of the data that is displayed or should be inserted in the respective item.

The interactive report of the Help Configuration contains the Item Name, the Page Id of the page to which an item belongs, the Item Help Text defined for each item (default text: "Text must be defined") and the Item Label Template ("Optional" or "Required"):

Figure 2.16*: The Help Configuration interactive report*

Although both Item Name and Page Id are internal application codes, an Explanation text above the report shall provide sufficient information to the administrator on how to identify both Item Name and Page Id used within the application. In most cases, the internal Item Name corresponds to the Item Label text as used on each page.

The functionalities (Search, Rows, Actions etc.) commonly available for every interactive report are also available on this sub-page.

To edit the Help text of a field, the administrator clicks on the edit ✏ icon displayed in front of each record of the Interactive report. The Help Text edit form will then appear displaying the **Item Name** and **Help Text** of the selected item. By inserting a text within the Help Text field and clicking on the Apply Changes button the help text related to the selected item will be updated. Clicking on the Back button will return the user to the Help Configuration sub-page.

3   User Administration

The **User Administration** is available only for users with an Administration role under the section **Administration** and is dedicated to setting-up and maintaining the accounts of internal CIP users. Accordingly, within this sub-section, the administrators can: create user account, assign users with user roles with specific access rights, reset the password or perform different actions like filtering or creating reports on the user accounts of internal users.

The User Administration section displays all the internal users and their details. In case of searching for a user the data can be filtered via the Search field. The functionalities (Search, Rows, Actions etc.) commonly available for every interactive report are also available on this sub-page:

Figure 3.1*: The User Administration interactive report*

3.1   Creation of new CIP user account

As an administrator, in order to create a new user account, click on the [Create User] button.

If you are creating a new internal user account it is recommended to inform the user concerned that the acceptance of RNE's GDPR text will be required before the first login, to which the user will have to agree.

3.1.1   User details

Fill in the relevant fields – filling in the fields marked with * is obligatory. It is recommended to assign the **Administrator role** only to the Development Group members.

Figure 3.2*: The User Details page*

Each internal user has to be assigned to one or more RFCs by ticking the relevant box(es) in the MCV region located on top of the User Details page. Assigning a user to a specific RFC provides the user with the access to and eventually also the control of the records related to that specific RFC depending on the user roles assigned to this very user.

3.1.2 User roles and access rights

An overview of all user roles and their access rights in CIP is displayed in the table following the description of individual roles.

The **Support** function is assigned to responsible representatives of RNE and the IT supplier, who supports other internal users, therefore they have the access rights to the entire application.

1. Administrator: A user with this role can create new user accounts and manage them and can also access and manage the Information Documents, Documents, Text Modules, Projects and ETCS Status belonging to the RFC, for which this user has logged in to the CIP. This user has also a read-only access to the records related to the ICM Re-routing options.

2. Corridor Map Admin: A user assigned with this role obtains access to all records related to the Map Administration and Line Properties of all corridors in CIP and can maintain the information related to these objects in all countries involved in the RFC, for which this user has logged in to the CIP. This user has also a read-only access to the records related to the ICM Re-routing options.

3. Country Map Admin: A user assigned with this role obtains access to the records related to the Map Administration and Line Properties belonging to the country which was set for this user in the attribute "Country Map Admin" and can thus maintain the information related to these objects. This user has also a read-only access to the records related to the ICM Re-routing options.

4. Internal: A User assigned with this role can access and manage the Information Documents, Documents, Text Modules, Projects and ETCS Status belonging to the RFC, for which this user has logged in to the CIP.

5. Re-routing Admin: 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.

A **Public** access is provided to the external (public) users of CIP enabling them to access and view the contents of the sections Interactive Map, Information Documents and Feedback.

Combined roles: Two or more roles can be combined in order to provide the user with the rights assigned to these roles. This can be by achieved e.g. by combining the roles "Administrator" and "Corridor Map Admin" or the roles "Country Map Admin" and "Internal".

Name of Role:	Main Tab	Interactive Map	Information Documents	Feedback	Internal (no contents of ist own, redirects to 'Interactive Map')				Map Administration (no contents of ist own, redirects to 'Nodes')				
1st Sub Tab					Interactive Map	Information Documents	Documents	Text Modules					
2nd Sub Tab								RFC-specific Disclaimer	Nodes	Segments	Terminals	Nodes BigData only	Segments BigData only
Support (RNE & Fichtner)		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Administration (CIP Dev. Gr.)		YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO
Corridor Map Admin		YES	YES	YES	YES	YES	READ-ONLY	NO	YES	YES	YES	YES	YES
Country Map Admin		YES	YES	YES	YES	YES	READ-ONLY	NO	FILTERED	FILTERED	FILTERED	YES	YES
Re-routing Admin		YES	YES	YES	YES	YES	READ-ONLY	NO	READ-ONLY	READ-ONLY	READ-ONLY	READ-ONLY	READ-ONLY
Internal		YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Public		YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
Roles can be combined => Priority:		1. YES	2. FILTERED	3. READ-ONLY	4. NO								
Examples for combined roles:													
Administration' and 'Corridor Map Admin'		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country Map Admin' and 'Internal'		YES	YES	YES	YES	YES	YES	NO	FILTERED	FILTERED	FILTERED	YES	YES

Figure 3.3: Overview of all user roles and their access rights in CIP – Part 1

Name of Role:	Main Tab	Internal (no contents of ist own, redirects to 'Interactive Map')							Administration (redirects to 'User Administration')		
1st Sub Tab		Line Properties (redirects to 'RFC Lines')		ICM Re-routing Options (redirects to 'ICM Lines')		Projects	ETCS Status (redirects to 'Standard Lines')		User Administration	Help Configuration	Access Configuration
2nd Sub Tab		RFC Lines	Network+ Lines	ICM Lines	Re-routing Lines	Investment Plan	Standard Lines	RFC 0 Lines			
Support (RNE & Fichtner)		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Administration (CIP Dev. Gr.)		NO	NO	READ-ONLY	READ-ONLY	YES	YES	YES	YES	YES	NO
Corridor Map Admin		YES	YES	READ-ONLY	READ-ONLY	READ-ONLY	READ-ONLY	READ-ONLY	NO	NO	NO
Country Map Admin		FILTERED	FILTERED	READ-ONLY	READ-ONLY	READ-ONLY	READ-ONLY	READ-ONLY	NO	NO	NO
Re-routing Admin		READ-ONLY	YES	YES	YES	READ-ONLY	READ-ONLY	READ-ONLY	NO	NO	NO
Internal		NO	NO	NO	NO	YES	YES	YES	NO	NO	NO
Public		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Roles can be combined => Priority:		1. YES	2. FILTERED	3. READ-ONLY	4. NO						
Examples for combined roles:											
Administration' and 'Corridor Map Admin'		YES	YES	READ-ONLY	READ-ONLY	YES	YES	YES	YES	YES	NO
Country Map Admin' and 'Internal'		FILTERED	FILTERED	READ-ONLY	READ-ONLY	YES	YES	YES	NO	NO	NO

Figure 3.4: Overview of all user roles and their access rights in CIP – Part 2

Saving user account: When all details including the assignment of MCV, Roles, Email and Password are completed all changes have to be saved by clicking on the [Create] button.

3.2 Editing user accounts and resetting the password for internal CIP users

CIP user's account can be edited and password can be reset via CIP user account. In order to edit account or change password, please edit the user record by clicking on the edit ✎ icon displayed in front of each user account record.

To confirm changes to the user account, click on the [Apply Changes] button.

To confirm changes the user Email or Password, click on [Change Email/Password] the button.

3.3 Internal User and RNE's general declaration concerning collection and processing of personal data

The interface for internal CIP users was adapted accordingly in order to be complaint with the provisions of General Data Protection Regulation. Therefore, when a new internal user logs in to the CIP for the first time, he/she will be presented with RNE's general declaration concerning collection and processing of personal data, to which the user will have to agree.

I AGREE

I have read the RNE privacy notice and agree to the processing of my personal data by RNE according to the GDPR (General Data Protection Regulation) and Austrian Data Protection Act (DSG).

I agree that RNE can send to my email address the CIP-related messages (e.g. newsletter)

You can withdraw your consent at any time. In this case please contact us at support.cip@rne.eu.

Figure 3.5: RNE's general declaration concerning collection and processing of personal data.

A record about such agreement (when, by which user and to which version of the declaration) is stored in the CIP database. Accounts of new or existing users not agreeing with the declaration will be deactivated and their personal data removed from the CIP database. The same applies to the existing users of CIP who are inactive, i.e. not logging in to the CIP and agreeing to the declaration for a certain period of time.

4   Map Administration

To properly display the routing of RFCs in the Interactive map of CIP, the relevant information has to be inserted into the application first. This chapter provides information on how this can be done.

4.1   Building up the map

The routing of the corridors is built up by defining of nodes, segments and terminals. For building up of the Interactive map, entering of these objects and their attributes into the database of CIP is required. To do this, an internal CIP user with the relevant user rights has to enter the **Map Administration** sub-section of CIP, which is available under the section Internal.

Within this sub-section, the internal user can choose if he/she wants to access the Nodes, Segments, Terminals, Nodes only in BigData or Segments only in BigData. In case of no specific choice made by the user, upon clicking on the Map Administration, the user is directed to Nodes:
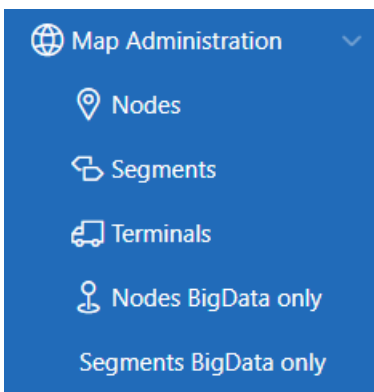

Figure 4.1: Structure of the Map Administration sub-section

4.1.1   Administration of nodes

After entering the page 'Nodes', the Interactive report on Nodes will be shown to the user:

	Node ID	Name	Code	Visibility	Country	IM	Corridor Member	Node Type	Latitude	Longitude	TAF TSI LC	TAF TSI PLC	Exists In Bigdata	Equal To Bigdata
✎	482540	Lugo	4008654	Visible 1	Italy	Rete Ferroviaria Italiana	RFC 5	Terminal Handover Point	44.414102	11.914723	IT	5951	Yes	Yes
✎	482543	Tarvisio Boscoverde	4031300	Visible 1	Italy	Rete Ferroviaria Italiana	RFC 5	Node	46.506340	13.607180	IT	3015	Yes	No
✎	482546	PM Vat	-	Visible 1	Italy	Rete Ferroviaria Italiana	RFC 5	Node	46.092856	13.247438	IT	3032	Yes	No
✎	482549	Ljubljana	-	Visible 3	Slovenia	SŽ-Infrastruktura	RFC 5, RFC 6, RFC10, RFC11	Node	46.058482	14.513002	SI	42300	Yes	No
✎	482552	Šentilj	43543	Visible 1	Slovenia	SŽ-Infrastruktura	RFC 5, RFC10	Node	46.674265	15.658071	SI	43453	Yes	Yes

Figure 4.1: Interactive report on Nodes

4.1.1.1 Defining nodes

Nodes are the cornerstone of map administration in CIP and a pre-condition for setting-up of segments, connections to terminals, etc. It is recommended to define nodes whenever:

- a. there is an intersection with another railway line;
  (a feeder line joins the RFC or an outflow line leaves the RFC)
- b. there is a connection (handover point) to a terminal;
  (loading/unloading of goods or a marshalling yard)

c. there is a change in any of the line properties used in CIP;
(this doesn't apply to the change of gradients)
d. there is a change in the ETCS deployment (existing or planned);
e. the location is otherwise deemed as relevant for the RFC, e.g. as a
- relevant parking location for freight trains in case of a contingency,
- start and/or end of the infrastructure investment project,
- handover station next to the state border, etc.

As a general requirement to enable the mapping with other IT tools via RNE's Big Data, for each node there needs to be a location in Central Reference Database (CRD) with a defined Primary Location Code (PLC).

There are different types of nodes in CIP:
- Node: This is just the ordinary situation of a regular node;
- Terminal: This is in general not to be used when defining a node. It will be assigned automatically (as a hidden node whenever a new terminal is defined). This is needed in order to establish a segment connecting the terminal with the terminal handover point;
- Terminal Handover Point: The place where the formation of trains can be changed, in most cases also the point where trains start or end their journey, coming from or heading to a loading/unloading facility;
- Cross Border Node: The point where the corridor routes crosses a border. It was agreed to refer to the RINF border points with their EU codes. The official list of the RINF border points can be found in the Table 6 : List of border points of the RINF Application Guide;
- Expected node: Node that is expected to become part of the corridor in the future.

4.1.1.2 Creating nodes
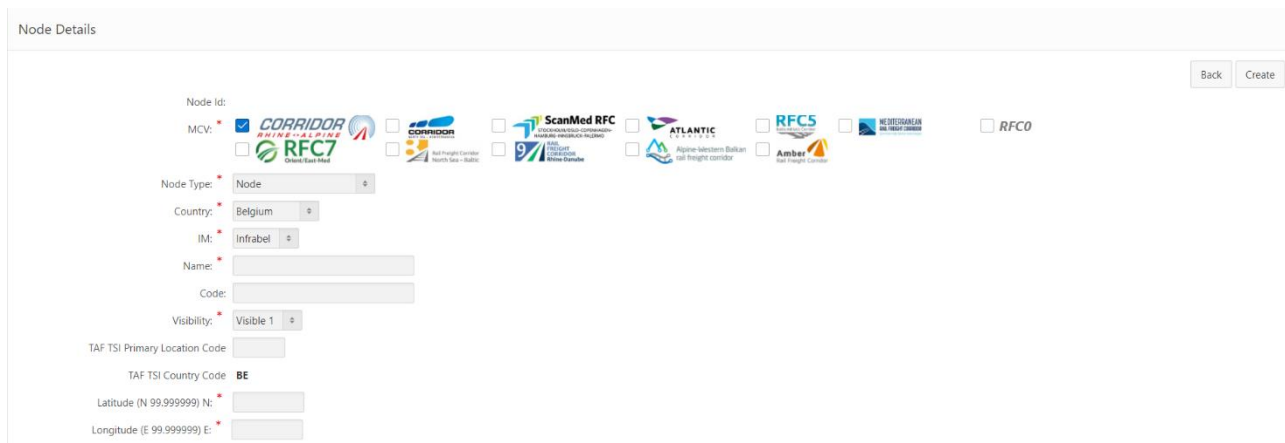In order to create a node, in the Interactive report on Nodes click on the [Create] button:

Figure 4.2: Node Details page

Now fill in the requested information as follows:

MCV: Select all the corridors to which the node belongs, please notify other corridor administrators if necessary;

Node Type: Select the type of the node;

Country: Obvious, only the type cross border node needs the value other;

IM: Only for the nodes that are managed by an Infrastructure Manager participating to the Management Board of an RFC;

Name: The official name of the node which is known in the Common Reference Database (CRD);

Code: This is open for a national code, could be the national abbreviation;

Visibility: Visibility values define in which map scale you are able to see the node (with different map scale, different nodes are visible):
hidden - the node will not be visible in the Interactive map
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;

TAF TSI Primary Location Code: The PLC code by which this node is known in the CRD;

TAF TSI Country code: Country where the node is situated (''other'' for cross border nodes);

Latitude (99.99999): Geographic coordinate specifying the nodes north-south position;

Longitude (99.99999): Geographic coordinate specifying the nodes east-west position.

Don't forget to click on the Create button after filling in the template to save the entered values.

Explanation how to choose visibility level and in which way this influences the map view:

In the maximum zoom out scale you only see the nodes that are in visibility level 3. Names of these nodes are only visible if they do not overlap with another name.

After zooming in you can see step by step popping up more information (the nodes that are in visibility level 2, then 1 and finally also 0). More names appear and of course the nodes get more and distance to one another. In the most detailed view overlapping will rarely happen.

4.1.1.3 Editing and deleting nodes

Once a node is created it is possible to edit the information of the node by clicking on the edit icon displayed in the Interactive report on Nodes in front of the record of each node.

Here you will also have the possibility to check whether the name and geographical coordinates of this node in Big Data is the same as in CIP. If you are convinced that the information available in Big Data information is more accurate, by pushing the button it is possible to replace the CIP values of the node by the corresponding Big Data Copy BigData values.

After changing the values, don't forget to click on the Apply Changes button to save your changes.

To delete a node, click on the Delete button.

Be aware of the fact, that it is only possible to delete a node that is assigned to just one corridor. In case of a node assigned to multiple corridors, such node has to be first reassigned just to a single corridor by using the Apply Changes button before it can be deleted.

It is also not possible to delete a node that is used as from node or to node in a segment. If you try to delete such node, an error message will pup-up.

4.1.2   Administration of segments

The segments constitute links between adjacent nodes and are therefore the main building blocks of the corridor routing. It is possible to add attributes to the segments and to fill in these attributes with specific values. These values would be then displayed to the users via the Interactive map.

After entering the page 'Segments', the Interactive report on Segments will be shown to the user:

Figure 4.3: Interactive report on Segments

4.1.2.1 Creating segments

In order to create a segment, in the Interactive report on Segments click on the [Create] button:

Figure 4.3: Segment Details page

Now fill in the requested information as follows:

MCV:	Select all the corridors to which the segment belongs, please notify other corridor administrators if necessary;
Segment Type:	For each corridor select the segment type in that specific corridor.
Segment Details:	
Country:	In which country the segment is located. The choice can be made only out of the countries of the RFC in which you logged in;
IM:	Which IM is managing the segment. The possible national IMs are in the list. Make the choice or select other;
From Node:	Choose the from node of the segment out of the list;
To Node:	Choose the to node of the segment out of the list;
Name:	Automatically filled in after the choosing the nodes, can be modified;
Code:	This is open for a national code;

Visibility: Visible or hidden;

Don't forget to click on the [Create] button after filling in the template to save the entered values.

4.1.2.2 Editing and deleting segments

Once a segment is created it is possible to edit the information of the segment by clicking on the edit ✏ icon displayed in the Interactive report on Segment in front of the record of each segment. If doing so, the following Segment Edit page would appear:
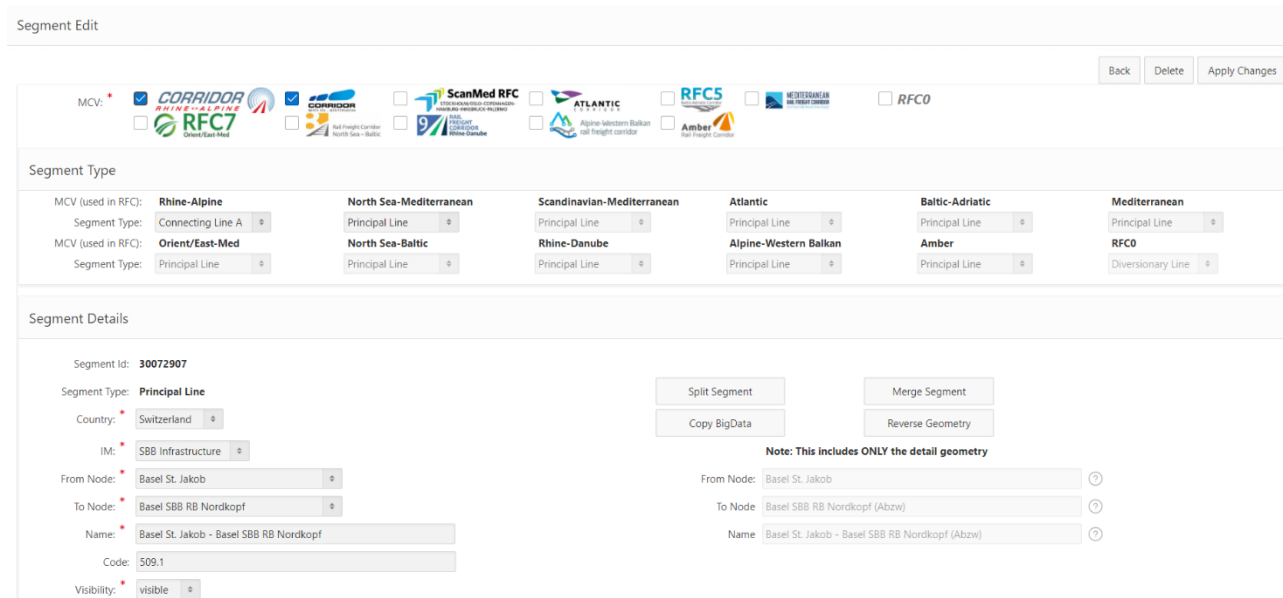

Figure 4.4: Segment Edit page – Part 1

In this page, you can trigger a split of the segment at an existing node located along the detailed geometry of the segment or merge the segment with an adjacent one.

In case of **splitting**, the detail geometry of the segment will be split at the selected node into two parts with both new segments inheriting the line properties, assignment to projects, ETCS Deployment, ICM-Lines and Re-routing Options of the former segment. The split will only be executed if the selected node is located within a distance of 10 meters from the detail geometry of the former segment. The splitting is also possible only at nodes which are assigned to the same Country, IM and Corridor as the segment that is to be split.

In case of **merging**, the detail geometry of the selected neighbouring segment will be merged to the actual segment and the selected neighbouring segment itself will be deleted. Line Properties, assignment to Projects, ETCS Deployment, ICM-Lines and Re-routing Options of the actual segment will remain unchanged. The merging is also possible only for segments which are assigned to the same Country, IM and Corridor.

In this page you can also decide to copy from Big Data the detailed geometry of the segment.

In this page, the CIP support can also reverse the geometry of the segment, by which the order of multiple lines with different colours displayed for the segment in case of the Map Theme By Rail Freight Corridor as well as in case of multiple re-routing options would be reversed.

In the lower part of the segment edit page you can enter and change Segment Properties as well as the Re-routing properties of this relevant segments. After changing the values, don't forget to click on the [Apply Changes] button, to save your changes.

Segment Properties

Line Category	Traction Power	Signalling Class B	Intermodal Freight Code	Gauging
D4	15 KV AC	Euro-Signum/Euro-ZUB (P44 per ET	P/C 80/405	EBVO3
22,5 t axle load, 8,0 t meter load		National System (Legacy)		

Gradient Dir 1	Gradient Dir 2	Track Gauge	Number of Tracks	Maximum Train Length
6 - 10	6 - 10	1435 mm	Double-track	700 - 740/750 m
5 < Gradient <= 10	5 < Gradient <= 10			Best case scenario which may not be guaranteed under all operational conditions

Maximum Speed	Usage	Miscellaneous
61 - 80 km/h	Passenger & Freight	upon request
Technical speed of the line applicable for the freight traffic		To be used as a disclaimer / additional comment if needed

Re-routing Properties

Max. Operational Train Length	Max. Train Weight Dir 1	Max. Train Weight Dir 2	Capacity Indication	Capacity Indication Explanation
upon request	upon request	upon request	upon request	upon request
Maximum train length that is feasible in an ICM case	Provide precise value preferably in tons	Provide precise value preferably in tons	Default if no data is available	Default if no data is available

Official Communication Language	Implemented Language Tools	
upon request	upon request	
Official language to be used according to national law	Measures concerning Directive 2007/59/EC on certification of train drivers	It may take up to 1 hour for a modification of any line property to be reflected in the Re-routing Line displayed in the Interactive Map.

Figure 4.5: Segment Edit page – Part 2

Finally, in the bottom part of the segment edit page you can observe in which ICM Lines, Re-routing Options, Projects and ETCS the segment is involved:

Segment is used in

ICM-Lines

ICM Line Name ↑≡	Corridor Member
Metz - Strasbourg - Basel	RFC 2

1 - 1

Re-routing Lines

Re-routing Line Name ↑≡	Corridor Member
Valence-Lyon-Ambérieu-Bourg en Bresse-Dijon-Besançon-Belfort-Mulhouse-Basel Grenze (CH)	RFC 6
Valence-Lyon-Mâcon-Châlon-Dijon-Culmont Chalindrey-Toul-Nancy-Sarrebourg-Strasbourg-Mulhouse-Basel Grenze (CH)	RFC 6

1 - 2

Projects

Project Name ↑≡	Project Category	Project Owner
Corridor Lines ERTMS	ERTMS	RFC 1

1 - 1

ETCS-Status

Project Name ↑≡	Project Owner	Project Go Live	ETCS Operation Level	Deployment Type	System Version
Corridor Lines ERTMS	RFC 1	2018-12-31	ETCS L1 LS	SRS 3.4.0 + Euroloop	SV2.0

row(s) 1 - 1 of 1

Figure 4.6: Segment Edit page – Part 3

To delete a segment, click on the [Delete] button.

Be aware of the fact, that it is only possible to delete a segment that is assigned to just one corridor. In case of a segment assigned to multiple corridors, such segment has to be first reassigned just to a single corridor by using the [Apply Changes] button before it can be deleted.

It is also not possible to delete a segment if the segment is assigned to a project or provided with ETCS-related information.

4.1.3   Administration of segment properties

Once a segment is created in CIP, it is possible to add information about the values of the segment properties. The regular segment properties are Line Category, Traction Power, Signalling Class B, Intermodal Freight Code, Gauging, Gradient Dir 1, Gradient Dir 2, Track Gauge, Number of Tracks, Maximum Train Length, Maximum Speed, Usage and Miscellaneous.

The values which can be entered for these properties are provided in Annex 1 to this Handbook.

There are also further segment properties which might be applicable in case the segment is involved in a Re-routing option. These are the Max. Operational Train Length, Max. Train Weight Dir 1, Max. Train Weight Dir 2, Capacity Indication, Capacity Indication Explanation, Official Communication language and Implemented Language Tools.

The values which can be entered for these properties are provided in Annex 2 to this Handbook.

4.1.3.1 Mass upload of segment property values

In the upper right corner of the Interactive report on Segments, the `CSV Import` button is available.

This provides the possibility to import a CSV file with numerous segment properties in one action.

Be aware of the fact, that it is only possible to import properties of segments that are part of the corridor to which you have logged into.

How to make the sample csv Import-File:

Please find below a fragment of a csv import file for corridor properties and consider that:

- The first line is not necessary but provides for a better readability;
- UNIT and COMMENT columns are optional and do not need to be provided

Such a file can be first created in Excel, and then while saving the file, saved in a CSV format.

It is vital that the from node and to node values, that identify the corridor nodes, are identical to those defined in the existing CIP Segments. This is due to uniqueness of key values in the system.

Also type and value have to be identical to the segment properties and their values in defined CIP.

FROM_NODE	TO_NODE	TYPE	VALUE	UNIT	COMMENT
Basel St. Jakob	Basel SBB RB Nordkopf	Line Category	D4		
Basel St. Jakob	Basel SBB RB Nordkopf	Traction Power	15 KV AC		
Basel St. Jakob	Basel SBB RB Nordkopf	Intermodal Freight Code	P/C 80/405		
Basel St. Jakob	Basel SBB RB Nordkopf	Gauging	EBVO3		

Figure 4.7: Example of a CSV import file

Once the file is saved you can go on by pushing the import button. The following screen pops-up:

Figure 4.8: CSV selection page

- First search for the file that you want to import in your local directory by clicking on the Choose File button. After selecting the CSV file, its name will appear in the File Name field;
- Be sure that the separator used in CSV file is filled in properly, '#' needs to be changed to ';'
- Then click on the `Next >` button.

Check in the column mapping row if all the values are the same as in the second row. If not, change the value in the first row to equal the second row. Then click on the 'Next' button and then again on the 'Next' button and the finalise the action by clicking on the 'Finish Import' button.

4.1.3.2 Editing more property values in one editing session

Choose the Line properties sub-section available within the Internal section.

Figure 4.9: Multiple line properties edit page (RFC Lines)

Under the page 'RFC Lines' all segments belonging to the logged in RFC would be shown by default whereby under the page 'Network+ Lines' all segments belonging to the 'RFC 0 layer' and any of the Countries involved in the logged in RFC would be shown.

In the next step, it is possible to set some filters, namely the Country, IM and RFC Line category in order to limit your view to those segments, the line properties of which you would like to work with.

Now multiple changes of the segment properties can be performed. Before leaving the edit page, don't forget to click on the Apply Changes button to save your changes.

4.1.3.3 Editing property values one by one

Editing of segment property values one by one is possible via the Segment Edit page as described in detail in Chapter 4.1.2.2 of this Handbook.

4.1.4 Administration of terminals

After entering the page 'Terminals', the Interactive report on Terminals will be shown to the user:

Figure 4.10: Interactive report on Terminals

4.1.4.1 Defining terminals

In CIP a terminal is a facility where trains can be loaded or unloaded.

It is specific type of node, which is defined differently, as the information in CIP regarding the terminals is also different from the regular nodes and contains additional information.

There are different kinds of terminals. At the moment, we distinguish the following terminal types:

- Marshalling / Shunting Yard;
- Container / Intermodal Terminal;
- Loading / Unloading.

4.1.4.2 Creating terminals

In order to create a terminal, in the Interactive report on Terminals click on the [Create] button:
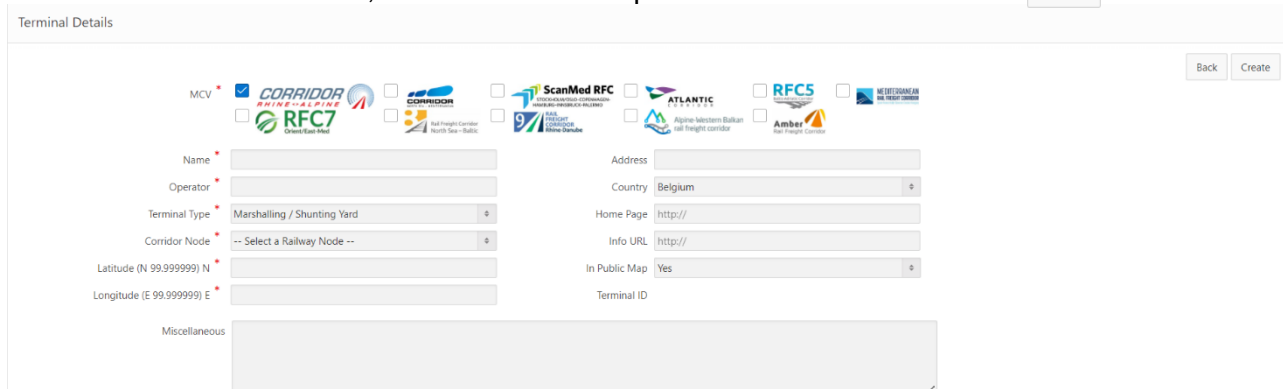
Figure 4.11: Terminal Details page

Now fill in the requested information as follows (mandatory fields are marked with *):

MCV:	Select all the corridors to which the terminal belongs, please notify other corridor administrators if necessary;
Name:	Insert here the official name of the terminal;
Operator:	Insert here the official name of the entity operating the terminal;
Terminal Type:	Select from the dropdown list the most suitable option;
Corridor Node:	Select here the Corridor Handover Point from which the terminal can be reached or the last corridor node before the terminal;
Latitude (99.99999):	Geographic coordinate specifying the terminals north-south position;
Longitude (99.99999):	Geographic coordinate specifying the terminals east-west position;
Address:	Enter the postal address of the terminal;
Country:	Select the country where the terminal is located;
Home Page:	Add the internet address of the home page of the terminal;
Info URL:	Add the terminal template link provided by the terminal / IM;
In Public Map:	Select 'Yes' or 'No' to steer the appearance of the terminal to public users;
Miscellaneous:	Add here any other relevant information related to the terminal.

Don't forget to click on the [Create] button after filling in the template to save the entered values.

Be aware that when creating a terminal, the application also automatically creates a hidden node of the type "Terminal" with the same name and coordinates as the terminal itself along with a

segment of the type "Connecting line B" with the name Access to 'name of terminal', which connects the newly created terminal with its Terminal Handover Point.

4.1.4.3 Editing and deleting terminals

Once a terminal is created it is possible to edit the information of the terminal by clicking on the edit icon displayed in the Interactive report on Terminals in front of the record of each terminal.

After changing the values, don't forget to click on the `Apply Changes` button to save your changes.

To delete a terminal, click on the `Delete` button.

Be aware of the fact, that the neither the hidden node of the type "Terminal" nor the segment of the type "Connecting line B" would be automatically deleted. Hence, you'll have to delete them separately, first the segment and then finally the node.

4.2 Detail geometry

When new segments are created in CIP, in the first step they would be displayed in the Interactive map in a topology oriented representation. This means that the segments will be displayed on the map as straight connections between the nodes.

Since it is desired to visualise the segments above the OpenStreetMap background following the real routing of the tracks, there is a need to define detail geometry of each segment. Once this is achieved, the geographic location of the routes within the network, connecting the nodes, would be displayed as real geometries following the location of the tracks:
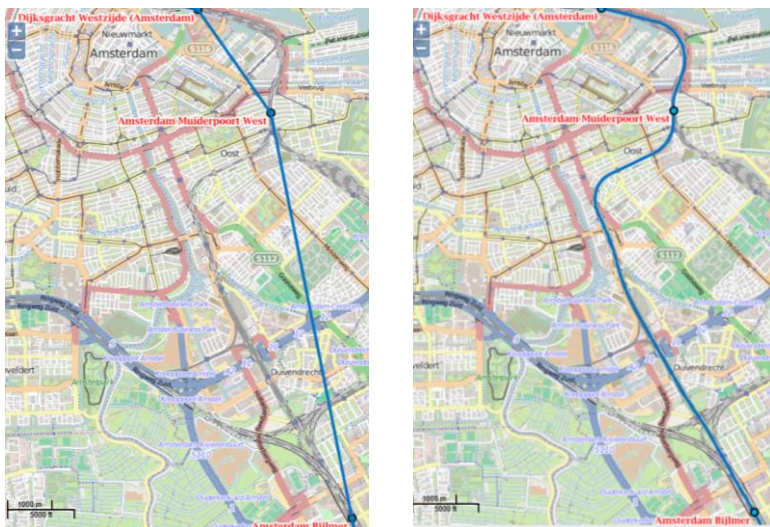

Figure 4.12: Difference between the topology-oriented and geometry-oriented representations

Moreover, the detail geometry is used for calculating the 'Track length' of CIP segments.

For importing the detail geometries into CIP in form of a GML file, the support of RNE and its IT supplier is needed. The internal users can obtain detailed information on the contents and format of such GML file and/or request the import of their GML files via the e-mail: support.cip@rne.eu.

Importing of the detail geometries of individual segments from RNE's BigData is possible via the Segment Edit page as described in detail in Chapter 4.1.2.2 of this Handbook.

Finally, the CIP Support is also able to establish the detail geometries for segments for which it is not yet available in RNE's Big Data or in the database of the infrastructure managers concerned, such as the Expected Lines which are yet to be constructed or Connecting Lines to the terminals.
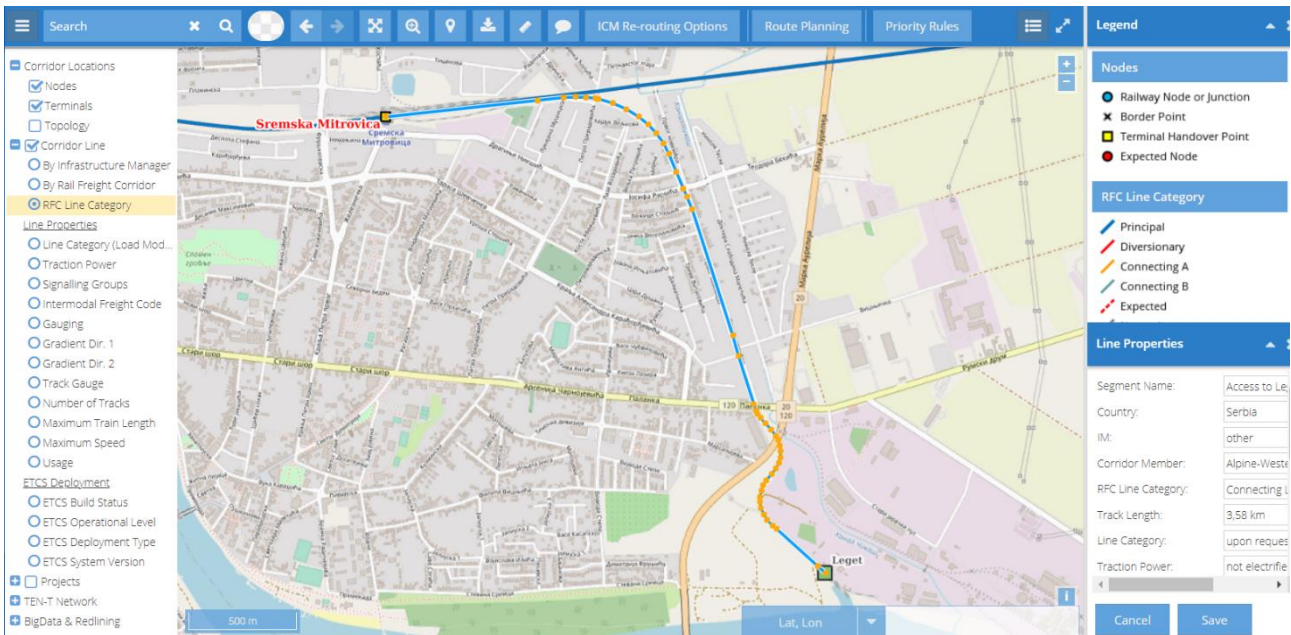
Figure 4.13: Setting-up of a detail geometry by a CIP Support for a Connecting Line to a terminal

4.3 Harmonisation of overlapping sections

Be aware of the fact, that in case of overlapping sections between several corridors, the nodes, segments and terminals in the overlapping areas have to be harmonised among these corridors. In any case, it shall be avoided that different information would be delivered for the same objects.

4.4 Management of changes in the Interactive map

If changes to the display of a corridor in the Interactive map are necessary, please inform the corridor administrator about this as such changes might have to be communicated first with the other members of the corridor, in order to arrive on a common approach.

Also, be aware of the fact, that a corridor administrator would receive an automated notification via e-mail in case of any change impacting the display of his/her corridor in the Interactive map.

5   Projects, ETCS Status

5.1   General Overview

Rail Freight Corridors are obliged to periodically review an investment plan, which includes details of indicative medium and long-term investments into the infrastructure along the corridor. This plan shall include a) a list of the projects foreseen for the extension, renewal or redeployment of railway infrastructure and its equipment along the freight corridor and the relevant financial requirements and sources of finance and b) a deployment plan relating to the interoperable systems along the freight corridor. The Internal area is designed to manage the information about the Projects and the ETCS Status. Beyond this, the information related to Projects and the ETCS Status is also visualised in the Interactive Map, which on one hand supports the fulfilment of the legal obligation to publish the investment plan and on the other hand makes the information on infrastructure development and the ETCS deployment available to the relevant stakeholders, in particular to the railway undertakings. The option to visualise the information on the ETCS deployment in the map is conditioned by the insertion of an ERTMS Project as a first step.
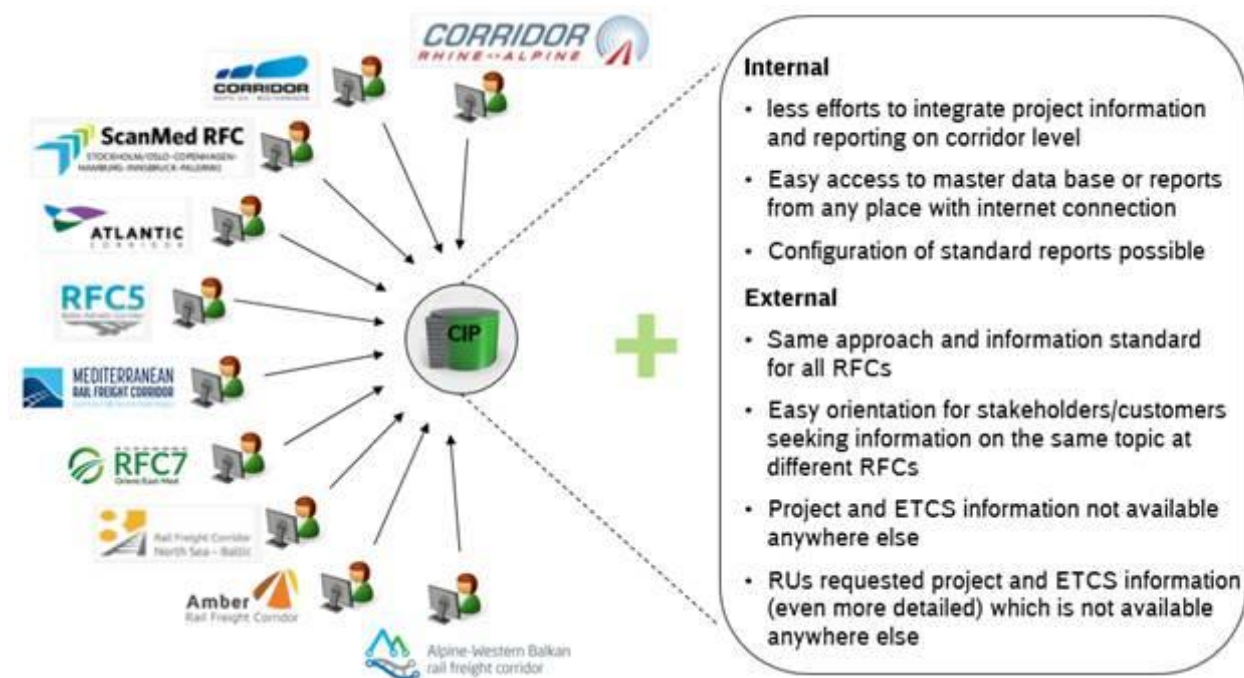
Figure 5.3: General Overview

RFCs can inform their customers about infrastructure projects and the ETCS deployment via CIP. A reporting functionality is available in the Internal area under Projects tab to configure and create the RFC investment plan.

Investment Plan

Project ID	Project Name	Benefit	Go Live Date	Description	Total budget	Project Category	Decision Status	Project Type	IM	Project Owner

Country : Belgium

Project ID	Project Name	Benefit	Go Live Date	Description	Total budget	Project Category	Decision Status	Project Type	IM	Project Owner
30154424	Bocht Ter Doest	Capacity	2012.12	New curve - a single track connection between the line to Zeebrugge and the line to Knokke. Trains can now roll directly between the different areas of the port without having to go to Brugge first and then return	10.19	Infrastructure	Secured	main project	Infrabel	RFC 1
30154490	Iron Rhine: Electrification Herentals - Mol	Capacity	2015.12	Electrification of L15 between Herentals and Mol (part of the Iron Rhine)	15.9	Infrastructure	Realisation	main project	Infrabel	RFC 1
30157236	Port of Gent	Capacity	2020.12	Various extension works in the port of Gent	.51	Infrastructure	Secured	main project	Infrabel	RFC 1
513055	Second access to the Port of Antwerp	Capacity	2023.12	Study on construction of new line between Antwerp North and Lier to provide a better access to the Port of Antwerp	1.57	Infrastructure	Secured	main project	Infrabel	RFC 1
30154523	Liefkenshoek Rail Link	Capacity	2014.12	The new 16,2 km rail section between the left bank and the right bank of the port under the river Scheddt	163.6	Infrastructure	Secured	main project	Infrabel	RFC 1
30157099	Side tracks 750m	Train length	2026.12	Construction of side tracks 750m on L50 (Dendermonde) and L59 (Lokeren)	11.46	Infrastructure	Secured	main project	Infrabel	RFC 1
30157135	Port of Antwerp: left bank	Capacity	2020.12	Various extension and renewal works on the left bank of the port of Antwerp	1.37	Infrastructure	Secured	main project	Infrabel	RFC 1

Figure 5.2: Download of Investment Plan from Internal section / Projects sub-section.

Data related to the ETCS Status can be downloaded from CIP as well.

In this chapter instructions can be found how to create and edit this information and how to report on these topics.

5.2 Project Data Management

The project area has been developed and implemented to create a common integrated database for investment projects along the Rail Freight Corridor. Access to the Projects tab with all the project details is limited to the Home area. Information in the map is the same in home or public area, but in the Home area also the projects marked as "not public" are visible. Creation of projects or change of data is restricted to dedicated persons in the corridor organisation (depending on the role). To enter the projects area the internal user needs to go to the Home area [1] and to choose the Projects tab [2].
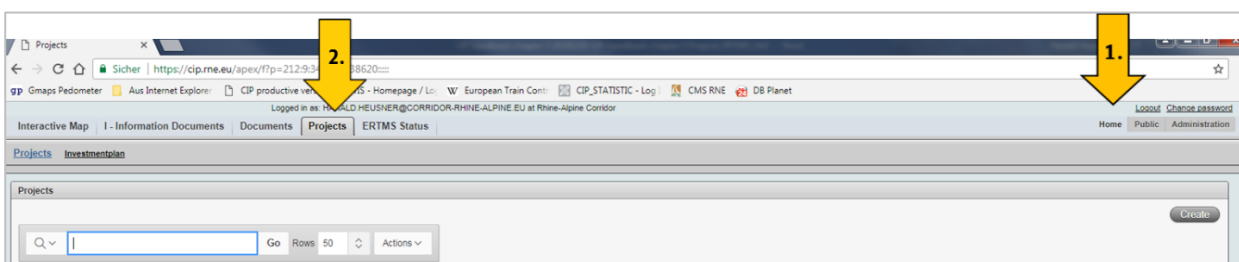

Figure 5.3: Selection

5.2.1 Creating a new project

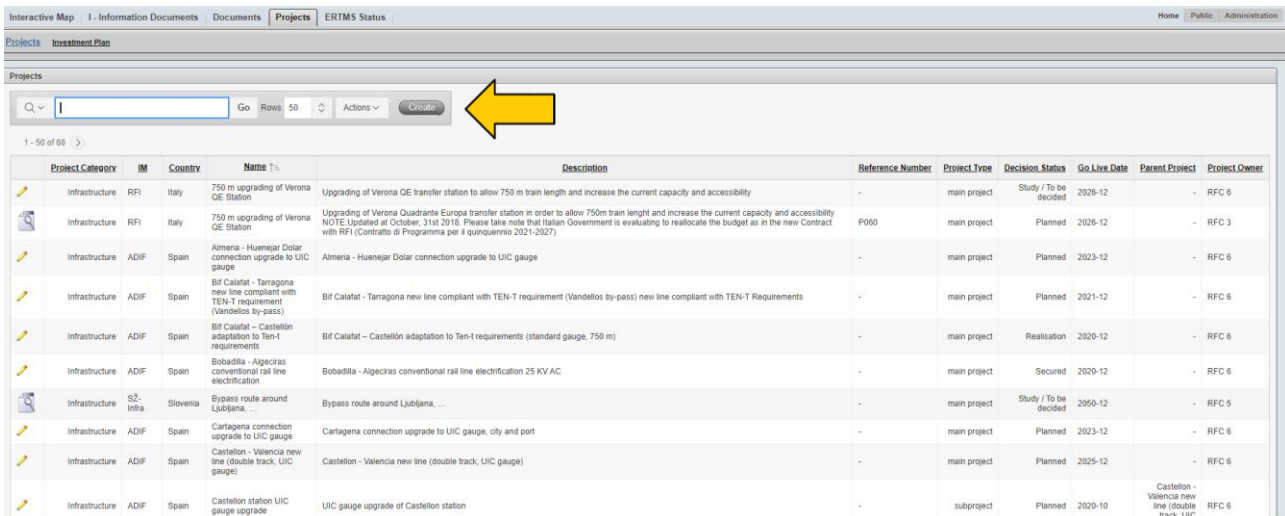To create a new project, please use the Create button:

Figure 5.4: Create a new project.

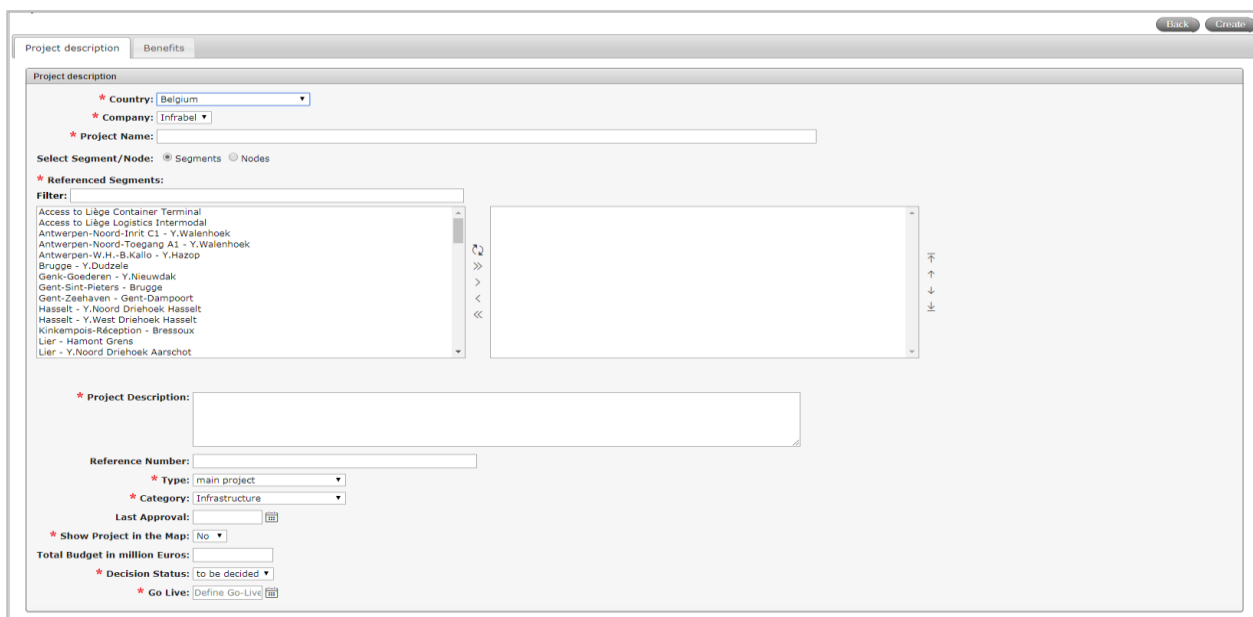Then the following screen appears:

Figure 5.5: Selection

The Project Description page consists of two tabs, each containing data regarding a specific area of the project. The mandatory information is marked with a red star in the first tab. These fields shall be filled in otherwise the system will not let the user save and complete the process (see the screenshot above):

1. *Country;
2. *Company;
3. *Project Name;
4. *Referenced Segments/Nodes;
5. *Project description;
6. Reference Number;
7. *Project Type (main/ sub project);

8. *Project Category (ERTMS, Infrastructure, Signalling);
9. Last Approval;
10. *Show Project on the Map (yes/no);
11. Total budget;
12. *Decision Status (Study/ to be decided, Secured, Planned, Realisation);
13. *Go Live date.

1-2. The first two fields of this tab, **Country** and **Company** define to which country and infrastructure manager a new project belongs to. The infrastructure manager of the Project depends on the selected Country. For example, if a Project belongs to Germany, then the Company field will be automatically set to DB Netz.
It is not possible to create projects for third party infrastructure as they are not in the scope of the RFCs and thus not participating, neither in the RFCs nor in CIP.

3. In the field **Project Name** the user can enter a freely selected name or name/figure combination for the respective project, limited to 120 characters. It is reasonable to use the same name as in other planning documents (e. g. national infrastructure plan) or at least significant names.

4. In a next step the user must select the **Segment(s)/ Node(s)**, the project is associated with, by clicking in the appropriate selection box: **Select Segment/Node:** ⦿ Segments ◯ Nodes

   By doing this, a complete set of Segments or Nodes related to the respective country and infrastructure manager will be eligible in the list of **Referenced Segments** in the left box below. From the left box, the user must mark the Segment/Node with a left click of the mouse. If more than one Segment/Node needs to be selected, it can be done by pressing the "control" key and clicking the additional Segments/Nodes. Now the selected Segments / Nodes can be moved to the right box by using the arrows between the boxes (see Figure 6).

   A **Filter** function allows a direct search for nodes or segments you want to assign to the project instead of scrolling through the whole list.
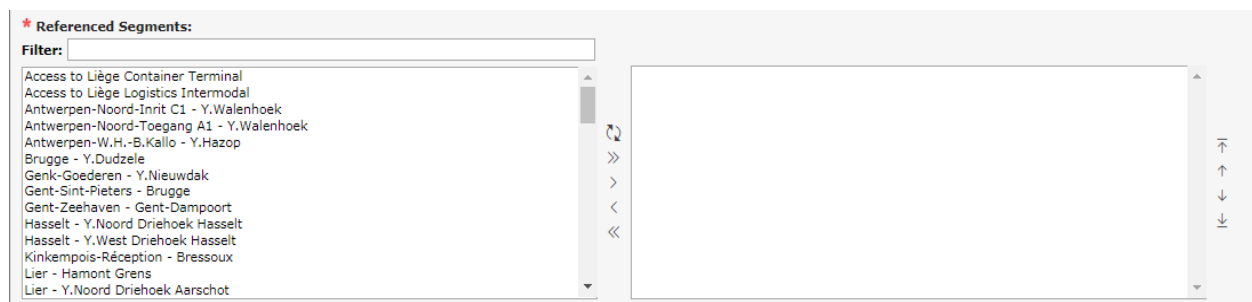
Figure 5.6: Selection of the appropriate segments associated to a specific project

   With the arrows on the right hand of the right box, the user can arrange and move the order of the Segments/Nodes as he wishes, e.g. to put the Segments in a coordinated geographical order.

5. The **Project Description** field should be completed with a short description of the project with any other information that might be useful for the public. Make sure that the description contains details that describe the project and can be easily understood by everyone as this information will appear for the public. Also, you can add information on the exact location of the project, if it does not match the exact segment options (e.g. project is located partly on one and another segment). Also, information about the expected Go Live dates can be given here for the public

reader if the IM is willing to make this information public, but do not disclose confidential information here.

6. The **Reference Number** is an optional field and can be used to set a dedicated number for the project, as in some countries, projects have a unique "Reference Number". If this is the case, the user may introduce this information in numerical or alpha-numerical form here.

7. In the **Type** field the project can – per drop down - be defined as a *main project* or as a *subproject* which has to belong to a main project. A main project can be a single mid-or long-term infrastructure development measure, or it can consist of several subprojects (e.g. project on new stretch of track between Karlsruhe and Basel in Germany).

   After selecting the option "subproject" as the project type, a drop-down list with all available main projects will appear. Please make sure that a corresponding main project has been created first if you want to create a subproject. Only projects belonging to the same company as the subproject would appear as available main projects.

   Be aware that deleting a main project will cause all subprojects to be deleted too.

   In the investment plan tab/list only the main projects are displayed.

8. The project **Category** must be selected by choosing the appropriate value (*ERTMS, Infrastructure, Signalling,*) from the drop-down list.

9. Recommendation: In the input field **Last Approval** the latest date shall be entered when project data has been changed or edited (not mandatory).

10. The **Show Project in the Map** attribute has to be defined by selecting the value (*Yes* or *No*). By choosing *Yes* the project will be shown on the interactive map Public and Home area. By choosing *No*, the project will be only displayed in the Home area, but not to the public.

11. The **Total Budget** is an optional field. The Total Budget is defined for each main project, whereas the subproject does not necessarily have its own budget and, therefore, cannot be easily evaluated.

    If a project budget is not known or available, please put in "0" or leave the field empty. This value will be transcribed into "N/A" (not available) in the investment plan report (see also chapter 5.2.3). Other input than "0" will not be transcribed.

12. The **Decision Status** drop-down list is compulsory and lists the status of the project which can be assigned: *Study/ to be decided*, *Secured*, *Planned* and *Realisation*. The decision on a project can be made based on the following principles:

    - To be decided – there are some ideas how a bottleneck could be solved, but there is nothing decided yet about neither a project nor its financing;
    - Planned – IMs are quite sure how they want to solve the bottleneck, and some decisions about the study and the financing of the project are already taken. Funding is reserved for the project;
    - Secured – all necessary (political) decisions are taken. The project has green light and all necessary steps to realize the project can now be taken. The funding is approved and money – especially national budget – is available.
    - Realisation - The project is currently under construction or has been completed. Completed ETCS projects remain with this status in the system, since the information on the ETCS system properties is linked via the route segments stored in the project.

13. The **Go Live** field defines the date when a deployment goes into operation. To select a specific date, the user has to click on the calendar icon 📅 , next to the **Go Live** field and select a date by clicking on it. The field will be automatically completed with the selected date. If a Go Live Date is not known or not available, please set "2099-12-31" as the input of text is not possible. "2099-12-31" will be transcribed into "open" in the investment plan report (see also chapter 5.2.3).
If you have subprojects, please be aware that the Go Live date of a Parent Project shall cover the latest Go Live date of the assigned subprojects.

After successfully completing all the required data fields and clicking on the **Create Button** on the upper right corner of the project Details page, a new project will be created. The new project data will be displayed to the user and the option to create benefits for the project will be enabled. By pressing the Create Button an ID will automatically be created which can be found in the project list afterwards.

The second tab **Benefits** contains the possibility to add information on Project Benefits. **Benefit Type** and **Benefit Value** are shown within the report. As mentioned above, for defining the Project Benefits, a project must first be created.
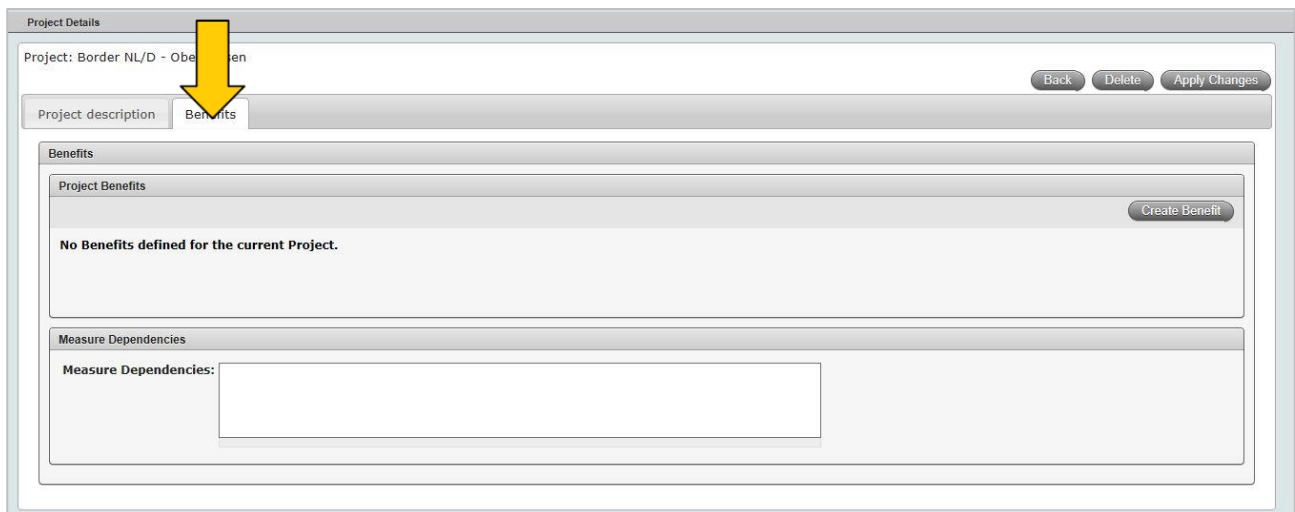
Figure 5.7: The Benefits tab

To create a new benefit, click on the **Create Benefit** button**,** which redirects you to the **Benefit Detail** page. Regarding the **Benefit Type,** which is a non-mandatory field, the user can select one of the following benefit types (*Capacity, Travel time reduction, Interoperability, Loading gauge, Train length, Quality*). The corresponding **Benefit Value** field will appear providing the option to either insert or select the appropriate benefit value for the selected benefit type.
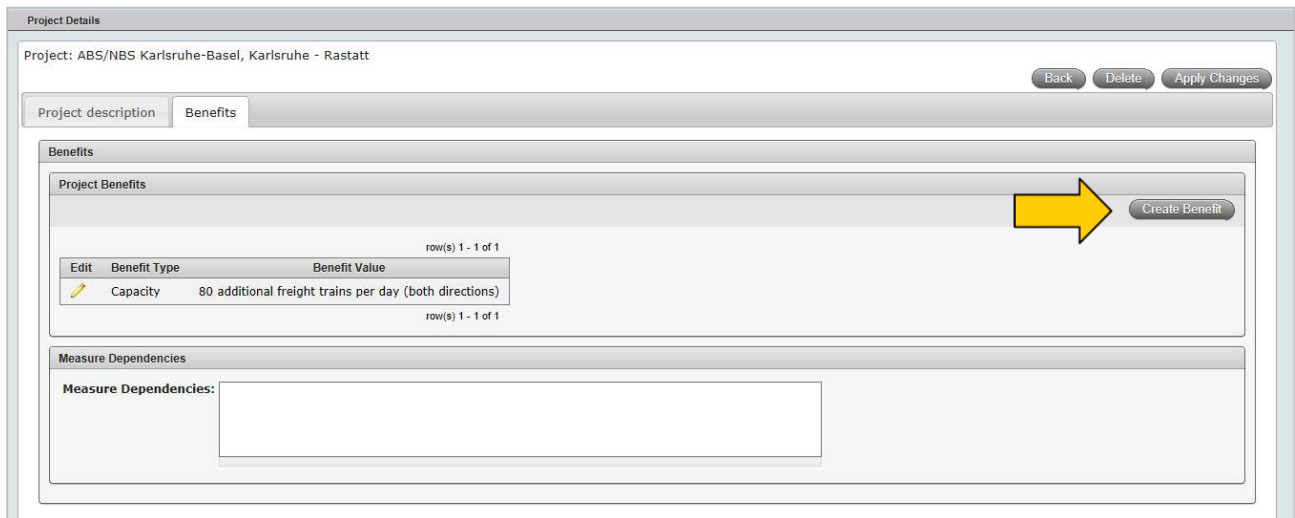
Figure 5.8: Create project benefit

Benefit type	Specification
Capacity	Number of additional freight trains per day (both directions)
Travel time reduction (freight trains)	Number of minutes
Interoperability	ERTMS
Train length	Number of meters
Quality	Punctually; reliability

Figure 5.9: Project benefits details

It is also possible to choose more than one benefit.
Under **Measure Dependencies** the user has the option to mention additional specifications of the benefit selected in the prior column or to add comments about the other data provided.

A click on the **Create button** will create a new benefit for the project. Clicking twice on the **Back** button will redirect the user to the Projects tab screen displaying any changes or new projects created and will display the new record for possible editing.

5.2.2 Editing or deleting a project

By clicking on the Projects tab each internal user can see the list of all the investment projects assigned on the segments of the RFC he is in charge of. If the RFC has overlapping sections with other RFCs, the internal user will also see the projects created on such overlapping sections by internal users of other RFCs.

Projects created by the internal user are editable and are marked with (edit icon), the projects created by internal users of another RFCs are marked with (view icon). For information or changing a project created by internal users another RFCs manager, the responsible project owner shall be contacted.

Figure 5.10: List of projects

To edit an existing project within the report, the user has to click on the edit icon 🖉 located next to each record.

Figure 5.11: Editing a project

This will redirect the user to the Project Details page.

Now all the information can be edited, in the same way as the information was created. This applies to both project description and benefits.

After any possible editing, changes are committed by clicking on the Apply Changes button (see figure 5.12, arrow #1).

Deleting a project

To delete a project, click on the **Delete** button (see figure 5.12, arrow #2). By deleting a project all data contained within the project will be deleted along with any existing subprojects of this project. Therefore, proceed carefully when deleting a project.
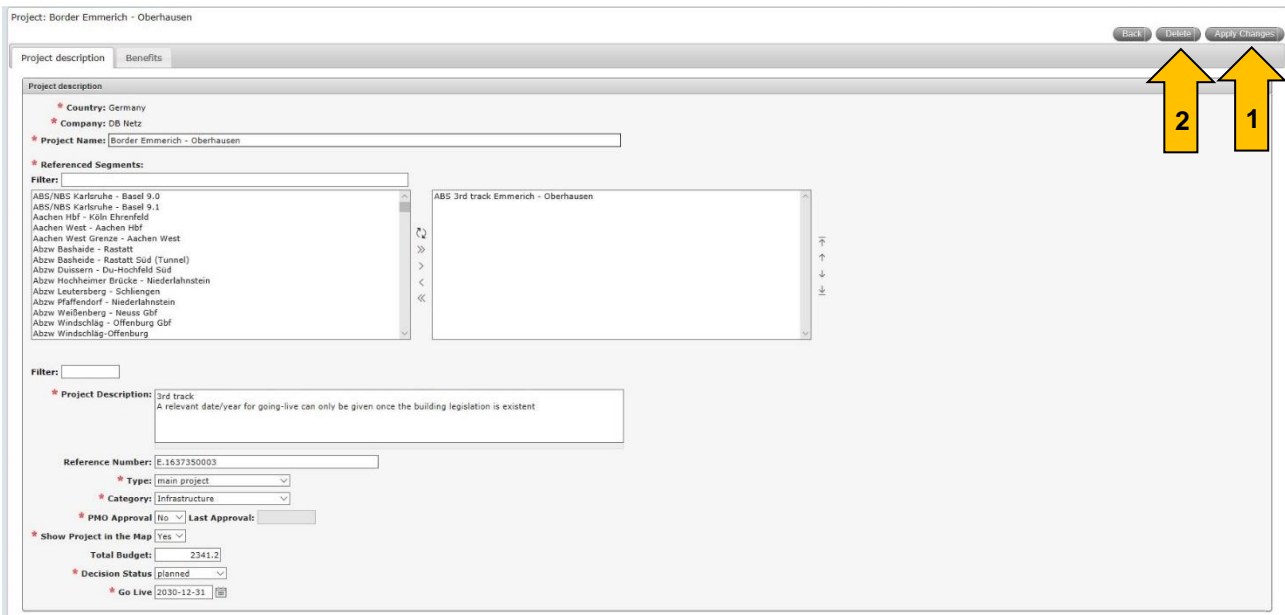
Figure 5.12: Deleting a project

5.2.3 How to filter data and create reports of the available information

On the projects page columns can be filtered by selecting the header of the columns like project category, country or IM. It is also possible to create individually configured reports. After clicking on the "Actions" button additional functionalities like selection of columns, download, how to save reports, creation of graphical charts will become available. More information on the "Actions" table can be found in Chapter 2.3.1. on interactive reports.

To support the RFCs in their obligation to regularly submit an Investment Plan, a standardised online report is available (see figure 5.13).

Certain defined values from the project data base are transcribed into text information if a figure is not available for the project in the following data categories:

- Total budget: A total budget of 0 € will be transcribed to N/A (not available)
- Go Live Date: Selection of 2099-12-31 will be transcribed to "open"

Besides the default primary report it is also possible to save self-configured (private) settings and formats, see the Chapter 2.3.1 for how to do this. The configuration of a separate private report is only possible under investment plan. If done so, an extra field is shown, see figure 11 [2]. Filter or private reports can be deleted by pressing the grey 'x' to the right of the overview on top of the report [3, the x turns red when you move the mouse pointer over the x].
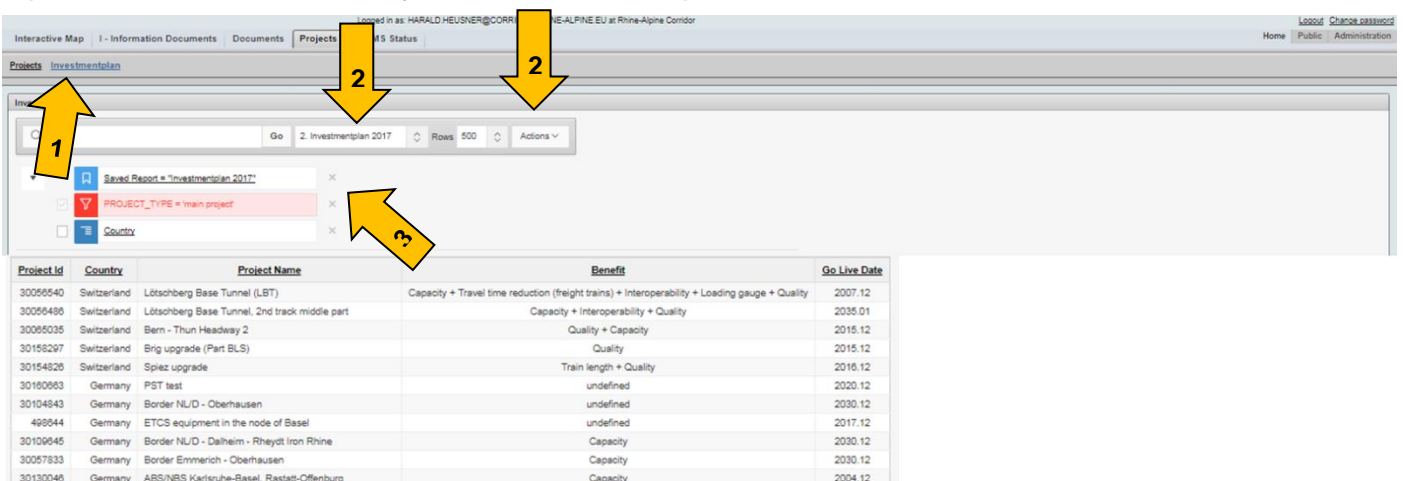
Figure 5.13: Investment plan report

5.2.4 Visualisation and control of projects on the map

Project information assigned to a line segment can basically be shown/visualised in the map (public and internal). Besides graphical customer information the map also serves to control the data that are coming from lists.

Regarding projects, the infrastructure managers agreed to publish only the project category and the project description. For the time being all other project data have been considered as too sensitive.

If you enter the Home area [1], the RFC is set by default depending on internal log in [2] (other RFCs can be added if you like). In the next step the user should use the default value "By Rail Freight Corridor" [3], alternatively any other value under line properties can be chosen. In the next step please select the type of project you want to visualize in the map (e.g. Infrastructure) [4]. Now the segments or nodes assigned with an infrastructure project are highlighted with blue. If you click on the segments or nodes on which a project is indicated [5], a window with more detailed information will pop up [6].
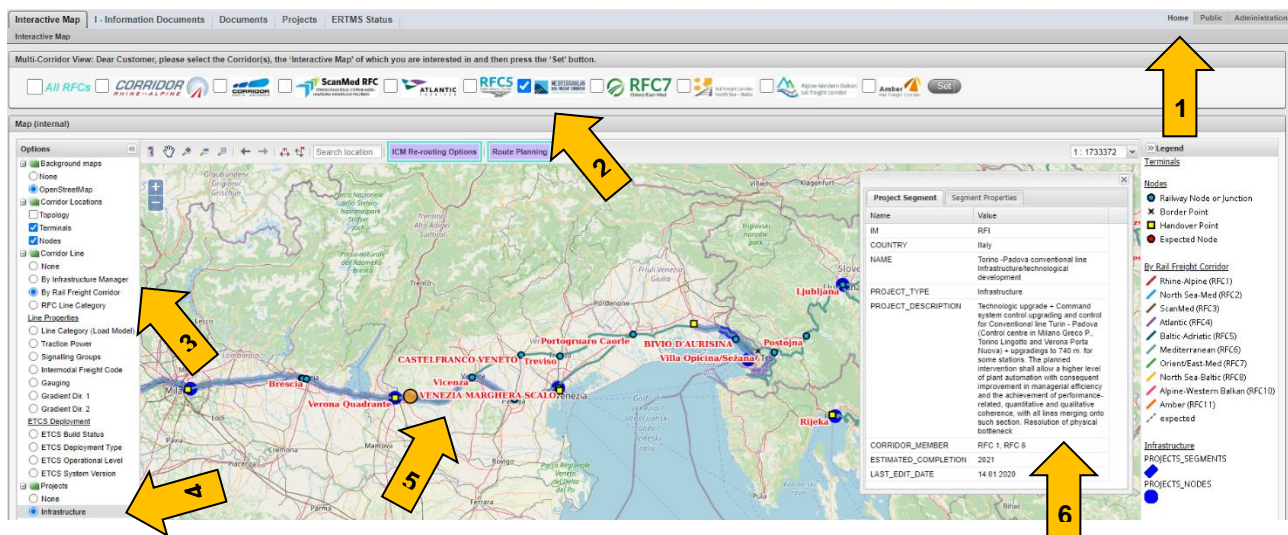

Figure 5.14: Visualisation of infrastructure projects

5.3 ERTMS/ETCS Deployment Status

The ERTMS status tab has been developed and implemented to create a common dedicated and integrated data base for ERTMS/ETCS deployment and the technical parameters along the Rail Freight Corridor for internal and external users.

The ERTMS status is strongly depending on the Projects tab and it was created to provide more specific information for ERTMS installation along the RFC lines.

The assignment of line sections to the ERTMS status tab via an ERTMS project is a mandatory step to visualise ETCS deployment information and ERTMS projects on the map and to steer the line property information for the Class A systems under Signalling.

The idea is to give a full picture of completed and expected ERTMS/ETCS installations on the RFC lines.
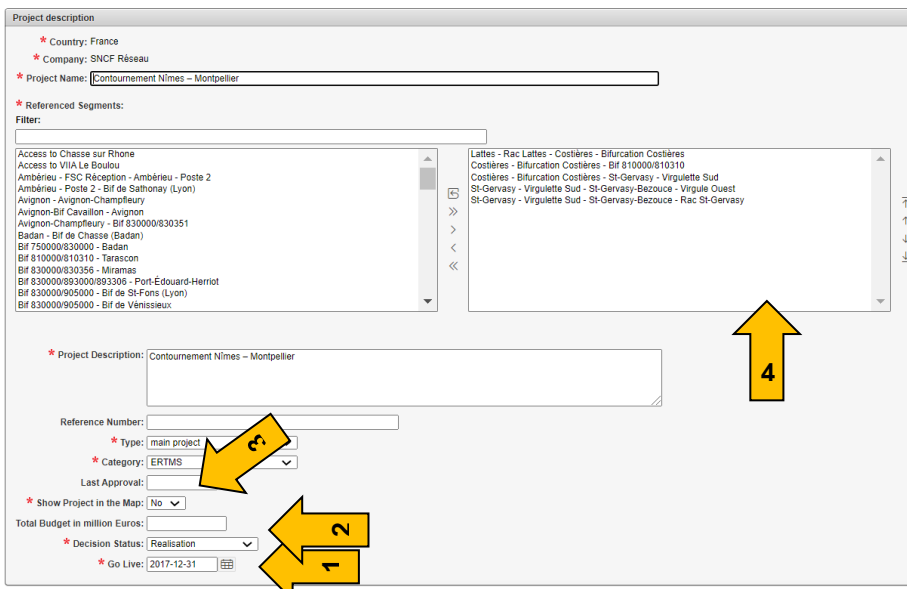
5.3.1 Creating an ERTMS Project

The first step to enter the ERTMS data is the creation of an ERTMS project, respectively an ERTMS subproject. To create an ERTMS project or subproject, go to the Home area, select the Projects tab and follow the instructions to create a project (see chapter 5.2.1). Please remember that the project must be assigned to ERTMS in the mandatory field **Category** of the Project details page.

All the referenced segments/nodes assigned to the ERTMS project created will be automatically displayed in the ERTMS status tab.

An ERTMS Project shall be created whenever:

1) ERTMS is already available on segments of the RFC (this can happen in the roll-out phase to a new RFC), or
2) There is a planned deployment of ERTMS on the RFC line (future main project).
3) ERTMS is planned as a subproject in the frame of an infrastructure project, e. g. construction of a new line.

Below there is an example for a main project created for a section where ERTMS is already in operation. In this case, an ERTMS Project was created in the Home area – Project tab and since it is already in operation the Go-live date is expired (1), the Decision status is set to "Realisation" (2) and the Show project in the Map is "No" (3), because this is no more a project but it's already realised and in operation. The segments assigned to the project or subproject (4) will be automatically displayed in the ERTMS status:

Figure 5.15: ERTMS Project creation to assign ERTMS status segments

The segments assigned to the ERTMS project/subproject (Figure 5.15) will be directly visible in the ERTMS status tab (Figure 5.16), together with the reference to the project (1).

Figure 5.16: Information display in ERTMS status

5.3.2 Input of ERTMS deployment information

To manage ETCS deployment data, please enter the home area [1], then ERTMS Status [2].

For the assignment of line segments that are or will be equipped with ETCS, the mandatory precondition is to create an ERTMS project/subproject [4] (see chapter 5.3.1.) and the assignment of all relevant segments. The segments assignedwill be copied to the ERTMS Status tab where detailed deployment information and parameters under ETCS Status [3] can be inserted (see figure 5.17).

The assignment of line sections to ERTMS deployment and entering or changing of data is restricted to dedicated persons in the corridor organisation (derived from their user role).

In the ERTMS status of standard lines the information can be filtered by IM, Line Category or by Project so make the location of the assigned segments easier. Every time the information is filled in the button "Apply changes" (1) shall be clicked before leaving the page.

Figure 5.17: Assignment of ERTMS deployment information

Data from the ERTMS status page can also be downloaded as csv-file (see paper clip icon in the lower left corner of the ERTMS Status page).

The information inserted in the ERTMS Status tab will be automatically registered in the Line Properties tab under the Administration area, as soon as the In-Operation date has been reached. This way it is ensured that the Signalling Class A information is equal to the information inserted in the ERTMS Status tab.
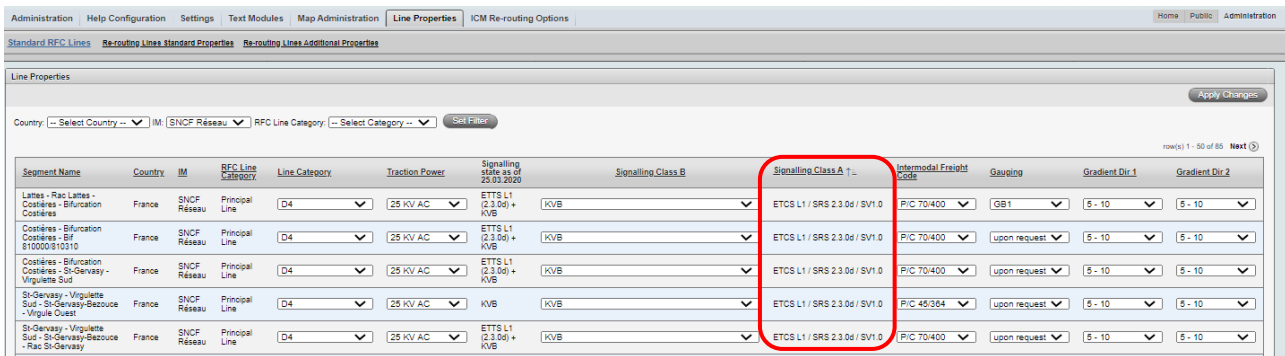
Figure 5.18: Line Properties Tab – Signalling Class A automatic alignment with ERTMS Status

Explanation of technical parameters (mandatory information):

Field	Explanation
Deployment Type	SRS 2.2.2+
	SRS 2.3.0d
	SRS 3.4.0
	SRS 3.4.0 + Euroloop
	SRS 3.4.0 + Radio Infill
	SRS 3.6.0
	to be defined

Field	Explanation
Operational Level	ETCS L1
	ETCS L1 + Radio Infill
	ETCS L1 LS
	ETCS L 2
	to be defined

Field	Explanation
System Version	SV1.0
	SV1.1
	SV2.0
	SV2.1
	to be defined

Figure 5.19: Technical parameters selectable in drop down lists

If your preferred operational level is not available, please select "not applicable" and use the comment section for your remark.

5.3.3 Control information in interactive map

In the field of ERTMS deployment, the technical parameters, the In-Operation date and the project information are published in the public area. Besides graphical customer information the map also serves to control the data in the ERTMS Deployment area. Information on ERTMS deployment is presented automatically on the map by selecting e. g. the respective options in the area ETCS Deployment or Projects [1] on the bottom of the left-hand side of the screen. The corresponding legend is presented on the right-hand side of the screen [2].
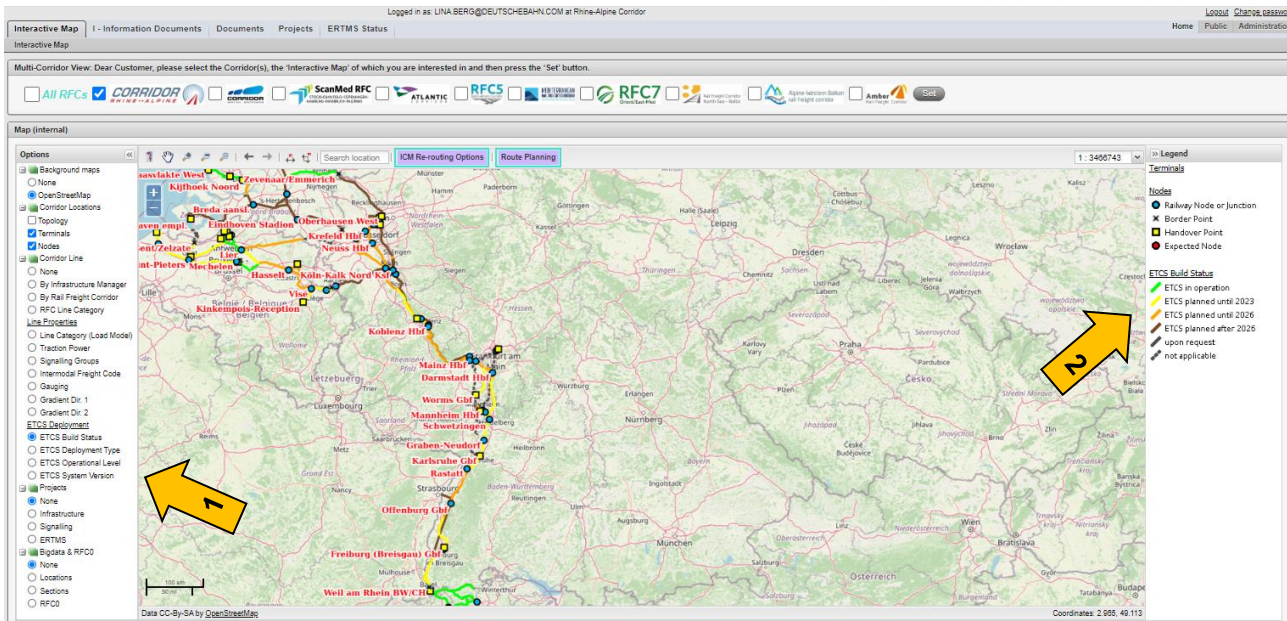
Figure 5.20: Map with info on ETCS Deployment

Regarding the information element "Built Status", data from the tab "ETCS State" are translated as follows (see also chapter 5.3.2, text related to Figure 5.17).

Explanation of the relation between the information on "Built status" and data input under ETCS State (read also chapter 5.3.1).

Style	Rule
Not applicable	Segment is not assigned to ETCS State
Upon request	In Operation is empty
ETCS in operation	Start of Operation is in the past or actual year
ETCS planned until 2023*	Line sections with an "In Operation" date up to and including 2023 will be allocated to this category
ETCS planned until 2026*	Line sections with an "In Operation" date up to and including 2026 will be allocated to this category
ETCS planned after 2026*	Line sections with an "In Operation" date after 2026 will be allocated to this category

Figure 5.21: Explanation of information on Built Status

*These categories refer to the European Deployment Plan (EU 2017/6) which sets out implementation dates on corridor sections where ERTMS can be put into operation by 2023 and a timeframe for postponements (to be accepted by the Commission) of max. three years.

Lines where no ETCS installation is foreseen appear as "not applicable".

6   ICM Lines & Re-routing Options

This chapter provides information about the creation, functioning and display of the International Contingency Management (ICM) Lines and their Re-routing Options in CIP.

6.1   Background

In some cases, the trains might not be able to run on the paths assigned to the corridors due to incidents such as accidents or extreme weather, thus making a specific part of a corridor line completely or partly blocked for traffic. Since goods are supposed to reach their destinations anyhow, providing information on the re-routing options is crucial.

In 2018, the European Rail Infrastructure Managers (IMs) agreed on international processes described in the "Handbook for International Contingency Management". An important element of that is an international re-routing overview for the RFCs and re-routing scenarios for ICM Lines.

These re-routing scenarios help traffic management and timetabling with the coordination of the deviation of freight trains in the plannable phase (as soon as possible after an incident) in case of disruptions (larger incidents with an international impact).

6.1.1   ICM Lines

When a section of an RFC is (partly) blocked for traffic, this may result in major and/or international disruptions. Such RFC section would be referred to as an 'ICM Line'. In an ICM scenario it is assumed that this RFC section would be blocked. It is particularly important to have re-routing options at hand to allow for the continuation of rail traffic. Therefore, each RFC defines its ICM Lines and their Re-routing Options and publishes them in a document called re-routing overview.

6.1.2   What are Re-routing Options?

A Re-routing Option is an alternative route that may be taken in a situation of a disruption to reach the same destination. Customers of the RFCs are sensitive to traffic disruptions. Therefore, it is crucial for them to know what measures are in place to mitigate the impact on their trains.

Moreover, CIP is an application available 24 hours a day / 7 days a week. Therefore, important mechanisms such as the International Contingency Management would not be lacking in the information supply if provided via the application. CIP offers the opportunity to display the information concerning ICM Re-Routing Options graphically, thus enabling the users to display ICM Lines and their Re-routing Options at a glance.

6.2   Creating ICM Lines

If the required ICM Line does not exist in CIP yet, it has to be created first. To do this, an internal CIP user with the relevant user rights has to enter the ICM Re-routing Options sub-section of CIP, which is available under the section Internal and then click on the [Create] button.

Should the required ICM Line exist in CIP already, typically as an ICM Line of another RFC in an overlapping section, the existing ICM Line shall be located within the Interactive report on ICM Lines and opened for editing by means of the edit icon ✏ and in the next step assigned to your RFC via the MCV selection. The most suitable way for identifying the already existing ICM Lines is to browse the Internal Map while having all RFCs selected in the MCV functionality and after having clicked on the [ICM Re-routing Options] button.

Figure 6.1: Accessing and layout of the Interactive report on ICM Lines

When creating a new ICM Line, this would be by default assigned to the RFC you are logged-in with, whereas via the MCV selection it could be assigned to further RFCs. In the field 'ICM Line Name' it is preferable to enter the line name that is stated in the re-routing overview document of your RFC. If you want the ICM Line to be visible to public users, switch the Public visibility to 'Yes'. Otherwise, it will be only visible in the Internal map. You may want to choose this option if you do not want to publish a 'work-in-progress'. In the next step, select the CIP segments that constitute the ICM Line. A quick way to look up the relevant segments is typing the first letters of the names of these segments into the 'Contains text:' field. You can double-click on the desired segment to move it to the box with referenced segments. When finished, click on the [Create] button.

Figure 6.2: ICM Line Details

6.3 Creating Re-routing Lines

6.3.1 Assigning already existing Re-routing Options to ICM Lines / copying

If you navigate to the Re-routing Lines page located under the ICM Re-routing Options sub-section of the Internal section, the Interactive report on Re-routing Lines will be displayed to you.

To assign an already existing Re-routing Line to another ICM Line, select the Re-routing line by clicking on the edit icon 🖉 in front of the record of this Re-routing Line.
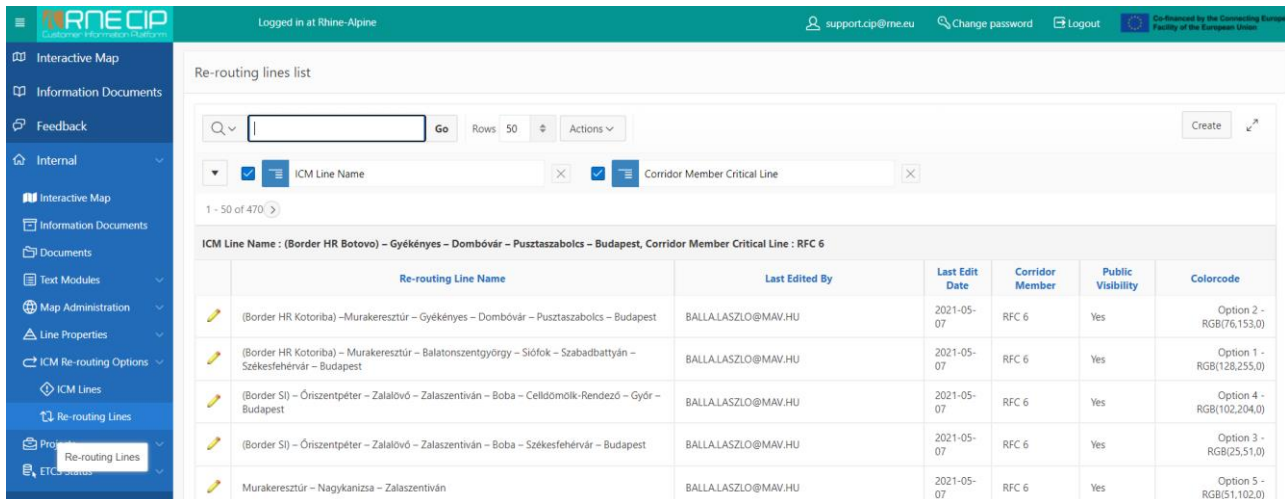
Figure 6.3: Accessing and layout of the Interactive report on Re-routing Lines

The 'Re-routing Line Details' page will open. After clicking on the [Copy to other ICM Line] button you will be able to select the desired ICM Line from a drop-down menu. Confirm your selection by clicking on the [Copy] button:

6.3.2   Creating new Re-routing Options

While segments which constitute an ICM Line are by definition already part of an RFC and therefore existing in CIP, some Re routing Options can include lines which are not mapped in CIP yet. In general, the following options can possibly apply to the segments required for a Re-routing: We can distinguish different situations regarding the segments that are supposed to constitute a Re-routing line:

- The required segments belong to an RFC and are therefore already in CIP.
- The required segments are not part of an RFC but already exist in CIP (in the RFC0 layer)
- The required segments do not exist in CIP yet.

Segments that exist in CIP already, can be selected and assigned to a Re-routing Option readily. Segments that are not yet in CIP need to be first created in CIP and assigned to the RFC0 layer via the MCV selection or imported from RNE's Big Data, again through the RFC0 layer.

To create a new Re-routing Option, navigate to the Interactive report on Re-routing Options and then click on the [Create] button. The 'Re-routing Line Details' page will open, whereas you have to:

1. Select the ICM Line to which the new Re-routing Option shall be assigned.
2. Choose the RFC(s) to which the re-routing line is supposed to belong to (the corridor you logged-in with is selected by default).
3. Name the Re-routing Option preferably the same as in the Re-routing scenarios.
4. Decide if it should be visible in the public or only in the internal map.
5. Select the color code. This depends on the number of Re-routing Options which would be assigned to this ICM Line. If this is the first Re-routing Option for this ICM Line, choose 'Option 1'. If there is already another Re-routing Option, choose 'Option 2'. If there are already two other Re-routing Options, choose 'Option 3' etc.
6. Select the segments that should constitute the Re-routing Option. On the left is the box with all segments in CIP, on the right is the box with the segments selected to constitute the Re-routing Option. A quick way to look up the relevant segments is typing the first letters of the names of these segments into the 'Contains text:' field. You can double-click on the desired segment to move it to the box with referenced segments..
7. Click on the [Create] button when finished.

Figure 6.4: Re-routing Line Details

6.3.3 Attributing segment properties to Re-routing Options

For the description how to administer segment properties in CIP, refer to Chapter 4.1.3 of this Handbook. However, be aware of the fact, that for Re-routing Options not only the standard segment properties but also additional segment properties may apply.

6.4 The RFC0 layer and importing segments from Big Data

The RFC0 layer is technically a fictional RFC that supports the administration of CIP map. It can be displayed in the Interactive map by selecting the ☐ *Network+* in the MCV functionality.

While first introduced in CIP to enable the mapping of Re-routing Options going beyond the routes of the RFCs, it is now being widely used to introduce in CIP also further railway lines, such as those assigned to the TEN-T Network, those marked as relevant by the customers or in order to map the entire railway network of volunteering IMs.

The sections established in the RFC0 layer of Big Data can be looked up in the page **Segments only in Big Data** under the Map Administration sub-section of the Internal section. To update the view provided on this page it is advisable to click on [Update BigData] the ''button. Alternatively, you can wait for the next daily update of this view which usually takes place late at night.

	Segment Id	From node	To node	Name	Code	Segment Type	Visibility	IM	Country	Corridor member
☐	1386514	Nagykanizsa-Szeszgyár ipvk.	Nagykanizsa-Szeszgyár ipv.	Nagykanizsa-Szeszgyár ipvk. - Nagykanizsa-Szeszgyár ipv.	-	Principal Line	visible	Magyar Államvasutak	Hungary	RFC0
☐	1386520	Bácsalmás	Bácsalmás-Kabernet ipv.	Bácsalmás - Bácsalmás-Kabernet ipv.	-	Principal Line	visible	Magyar Államvasutak	Hungary	RFC0
☐	1386509	Tiszaújváros	Tiszaújváros TVK	Tiszaújváros - Tiszaújváros TVK	-	Principal Line	visible	Magyar Államvasutak	Hungary	RFC0

Figure 6.5: Interactive report on Segments only in Big Data

Once the update has taken place, you should be able to see Interactive report all segments created in Big Data but not yet existing in CIP. It may be convenient to filter by Country and

Corridor member (RFC0!). Select the desired segment(s) and click on the [Copy to CIP] button. Subsequently, the selected segment(s) would become available in CIP as a part of the RFC0 layer.

6.5   Displaying ICM Lines & Re-routing Options in the map

You can trigger the display of ICM Lines in the map by clicking on the [ICM Re-routing Options] button. Subsequently, the ICM Lines for the RFC(s) selected via the MCV functionality will be displayed in the map. If you are in the public map, all ICM lines with public visibility will be displayed. However, if you are in the internal map, all ICM lines will be displayed.
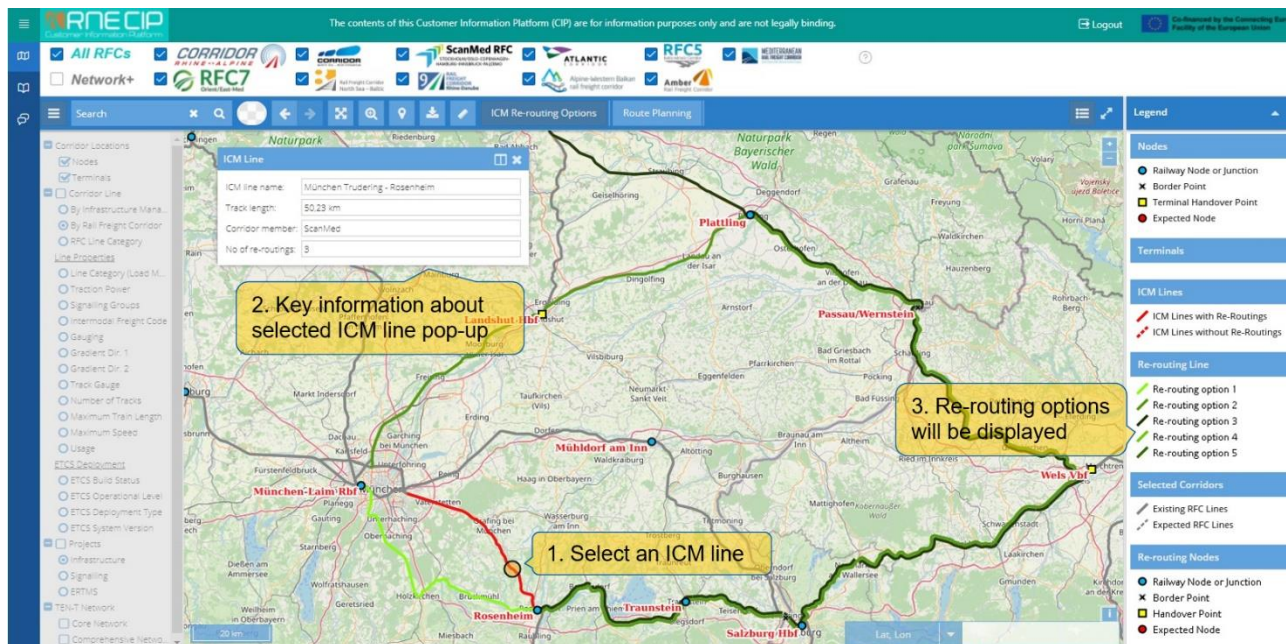
Figure 6.6: Displaying the ICM Lines and Re-routing Options in the map

The ICM Lines will be displayed in the map as red lines. However, ICM Lines without any assigned Re-routing Option will be displayed as a dashed red line.

When clicking on an ICM line, the Re-routing Options assigned to it will be displayed with the assigned color code. At the same time, the map will automatically adjust its zoom level to the area required for displaying of the selected ICM Line and all the Re-routing Options assigned to it.

When clicking on a specific Re-routing Option, a summary of the segment properties will be displayed in a distinct pop-up window. This pop-up window would also feature some dedicated buttons, providing quick access to the Interactive report on segments involved in the selected Re-routing Option, to the download of this Interactive report from CIP as well as to the download of the actual map from CIP:
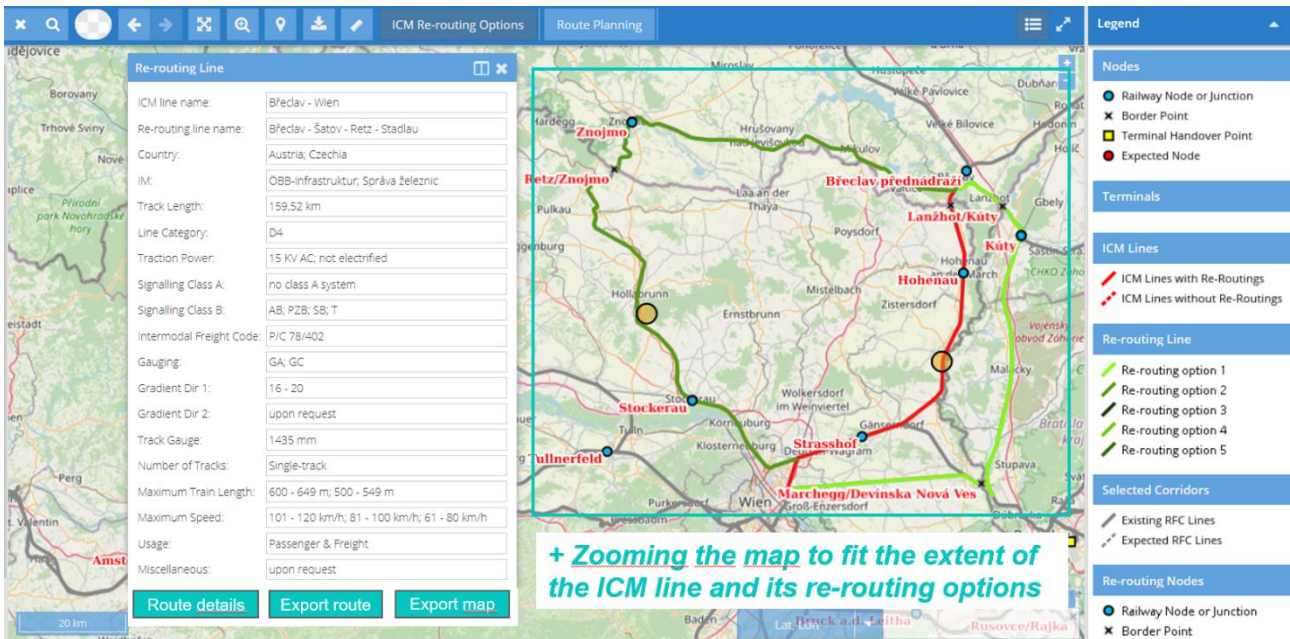
Figure 6.7: Pop-up window of the selected Re-routing Option

While hovering over a Re-routing Option, the application provides the user with hint on eventual differences in the relevant segment properties along this Re-routing Option in comparison to the ICM Line to which it is assigned. This hint is provided in form of distinct icons:
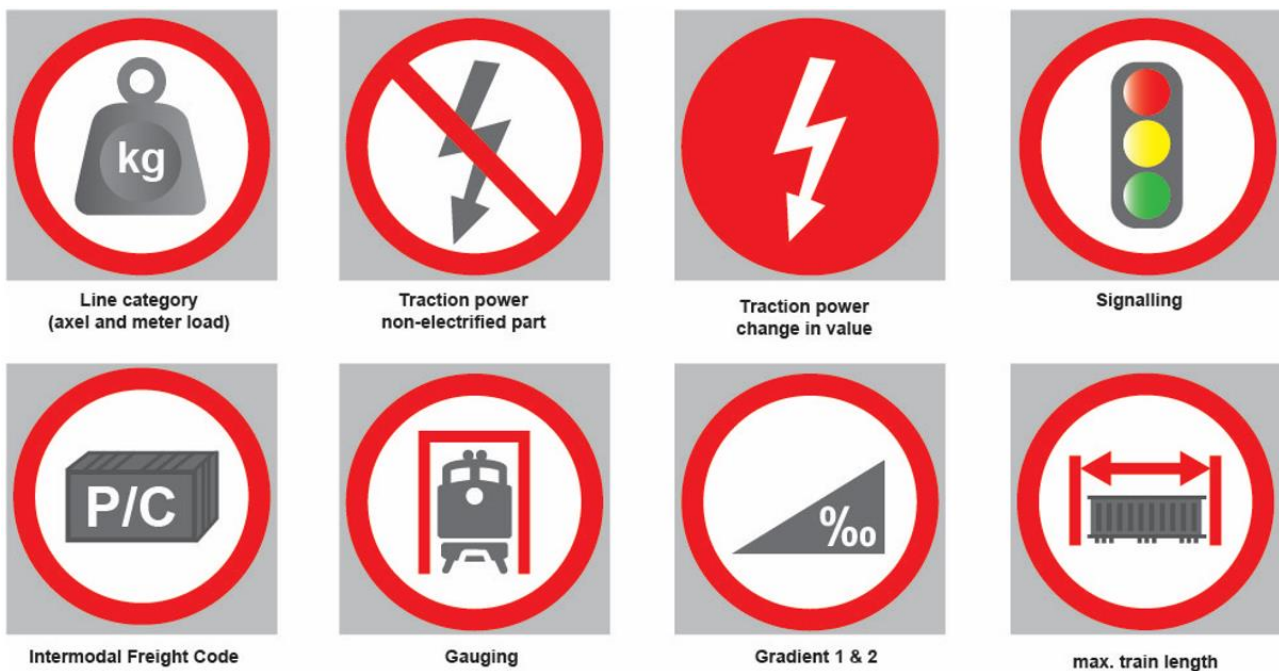

Figure 6.8: Icons signalling differences in the segment properties along a Re-routing Option

7 Information Documents

7.1 Accessing Information Documents within CIP

Via the Information Documents section, the RFCs display all their documents which are desired to be available to the external (public) users. The 'Information Documents' is also available as a sub-section of the Internal section where it may contain additional document tabs available just to the internal users, e.g. the archived contents referring to previous timetable periods.

The Information Documents page consists of a **Tree structure** region, a **Pages** region and the **Multi-Corridor-View** functionality.
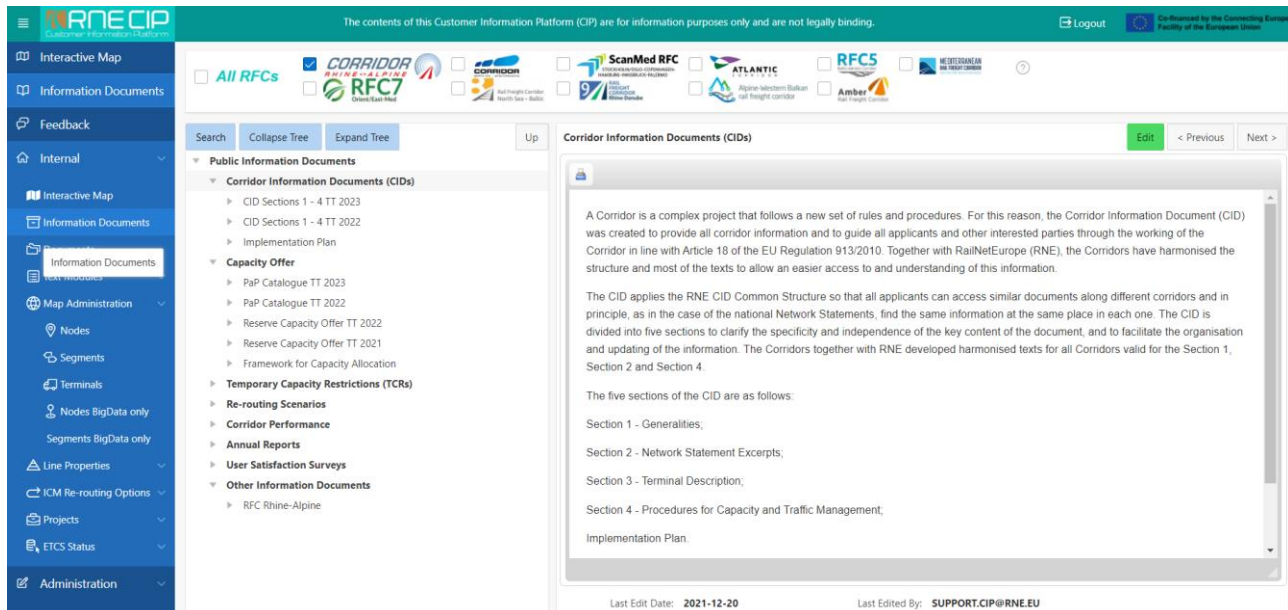
Figure 7.1: Accessing and layout of the Information Documents

The **Tree Structure** region is located on the left-hand side and the **Pages** region on the right-hand side of the Information Documents. Within the **Tree Structure** region the tree hierarchical structure is displayed that contains folders and document tabs. The main folder of the **Tree structure** page is called "Public Information Documents". The main folder contains several subfolders, whereas the subfolders of the 1st level contain further subfolders etc. By default, the internal user sees only the Information documents of the corridor, he has chosen while logging-in to CIP. The name of the lowest level subfolder of the tree structure always corresponds with that corridor. The **Multi-Corridor-View functionality**, enables the internal user to choose further corridors, the Information Documents of which he/she is interested in.

Click on the triangle, which is located to the left of the name of each folder and subfolder, for expanding or collapsing of a (sub-)folder. Clicking on the chosen subfolder will open its content, which will be displayed on the right side on the **Pages** region.

For returning to the higher level of the folder structure, simply click on the subfolder of the higher level or just click on the Up button.

Clicking on the Expand Tree and Collapse Tree buttons triggers the expansion / collapse of the document tree structure by one level

The **tree structure** of the **information documents** has been harmonised in the multi-corridor view (MCV) and is structured as followed:

- Corridor Information Documents (CIDs):
    - CID Sections 1 - 4 for the next TT period,
    - CID Sections 1 – 4 for the actual TT period,
    - Implementation Plan,
- Capacity offer:
    - PaP Catalogue for the next TT period,
    - PaP Catalogue for the actual TT period,
    - Reserve Capacity Offer for the actual TT period,
    - Reserve Capacity Offer previous TT period,
    - Framework for Capacity Allocations,

- Temporary Capacity Restrictions (TCRs),
- Re-routing Scenarios,
- Corridor Performance,
- Annual Reports,
- User Satisfaction Surveys,
- Other Information Documents (If available, see remark hereunder).

Concerning this last section of the tree structure **'Other Information Documents'**, it is important to remark that:

- Each corridor can present here its RFC-specific information, if it wishes to do so and if such documents are available,
- Presenting double-information to the common structure shall be avoided.

As mentioned above, on the lowest level of the tree, every participating corridor has its own section in the tree structure. A CIP user may select via the Multi-Corridor-View functionality those RFCs, the documents of which he/she would like to consult/download, via the .

7.2 Administrating the Information Documents sections

The following **governance** was set up for administrating the contents of the 'Information documents' sections:

- The **document** should be **directly displayed in CIP** or a **link to it** should be provided that **leads to the document**, in such a way that the document opens directly.
- The **format** of the documents should be **PDF** for text documents and **Excel** for TCRs and Capacity catalogues.
- It is **possible** for RNE / RFCs **to modify** the Information Document tab **structure** without a change request to the IT supplier.
- Harmonized **introductory text** for each folder is introduced and should only be changed after agreement of all participating RFCs.
- Responsible person for maintenance and keeping documents up to date shall be defined per RFC. One substitute per RFC can be indicated.
- In order to be clearly **recognisable** by **name** and in consequence also easily **identifiable** within the standardized reports, the **following combination of letters shall be included in the name** of each document stored in CIP by individual RFCs:
    - **Rhine-Alpine** in case of RFC Rhine-Alpine,
    - **RFC_NSM** in case of RFC North Sea-Mediterranean,
    - **ScanMed** in case of RFC Scandinavian-Mediterranean,
    - **Atlantic** in case of RFC Atlantic,
    - **RFC5** in case of RFC Baltic-Adriatic,
    - **RFC_MED** in case of RFC Mediterranean,
    - **RFC_OEM** in case of RFC Orient/East-Med,
    - **North_Sea-Baltic** in case of RFC North Sea-Baltic,
    - **Rhine-Danube** in case of RFC Rhine-Danube,
    - **RFC_AWB** in case of RFC Alpine-Western Balkan,
    - **Amber** in case of RFC Amber.
- Also, in the **naming of the document**, the name **is limited to 80 characters** in the system. The person in charge of the storage of the documents should take this into account before uploading the documents into the system.
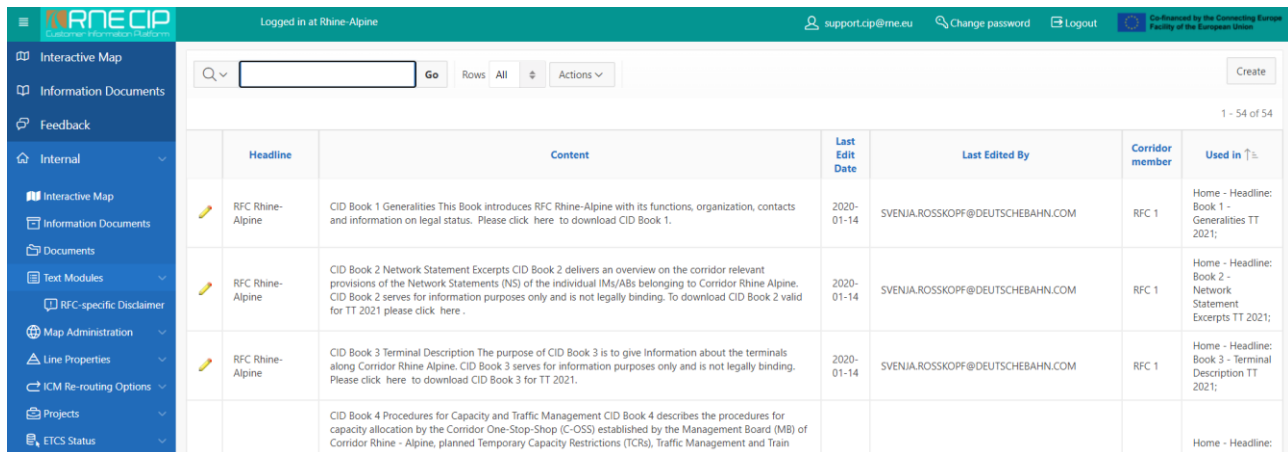
The person in charge of keeping the 'Information Documents' of an RFC up to date has to be assigned with a proper user role providing the access rights for the editing this CIP section.

The easiest way to fill in or edit a page is to navigate through the tree structure and select the concerning page. For users with the proper access rights, the Edit button is available in the upper right corner of the screen. Clicking on this button opens the text module of CIP where the content box can be edited.

7.2.1 Administration of text modules

For accessing the text modules, an internal CIP user with the relevant user rights has to enter the 'Text Modules' sub-section of CIP, which is available under the section 'Internal'.

After entering the 'Text Modules', the Interactive report on text modules will be shown to the user:

Figure 7.2: Interactive report on Text Modules

Essentially, text modules are text-based records containing not only written information but also graphs, images, tables created by using a text editor integrated in the application.

Text modules are used as the contents of chapters for predefined tabs within the application, e.g. by the 'Implementation Plan' tab. The Interactive report displays the 'Headline', the 'Content', the 'Last Edit Date' and 'Last Edited By', as well as the 'Corridor member' and 'Used in' information.

As a general principle, all of the items in the common document structure shall be provided for two years / timetabling periods displaying the latest available versions of these items. In some cases (e.g. in case of the Implementation Plan), the documents might be available only in one version. This needs to be taken into account when creating the common document structure. Storing and displaying of older versions of documents for archiving purposes can be done by RFCs on an individual basis, but shall be limited to the internal users of CIP (i.e. Home area).

The common structure as defined above will be set up and managed in the system by RNE, based on a common agreement within the CIP Development group.

Each RFC will be assigned with a dedicated sub-chapter within each chapter of the common document structure including the chapter 'Other Information Documents' for displaying of further RFC-specific information. While each RFC is free to manage the contents of its dedicated sub-chapters, a few common principles shall be followed:

- Displaying of redundant information in different sub-chapters shall be avoided.
- As a minimum requirement, each RFC shall provide working links to the documents relevant for each sub-chapter of the common structure.
- Any links placed in the common structure shall lead directly to the relevant document, regardless, if the document will be stored in the CIP or in RFC's webpage.

To create a new text module, click on the button located in the upper right corner of the Interactive report on Text Modules:
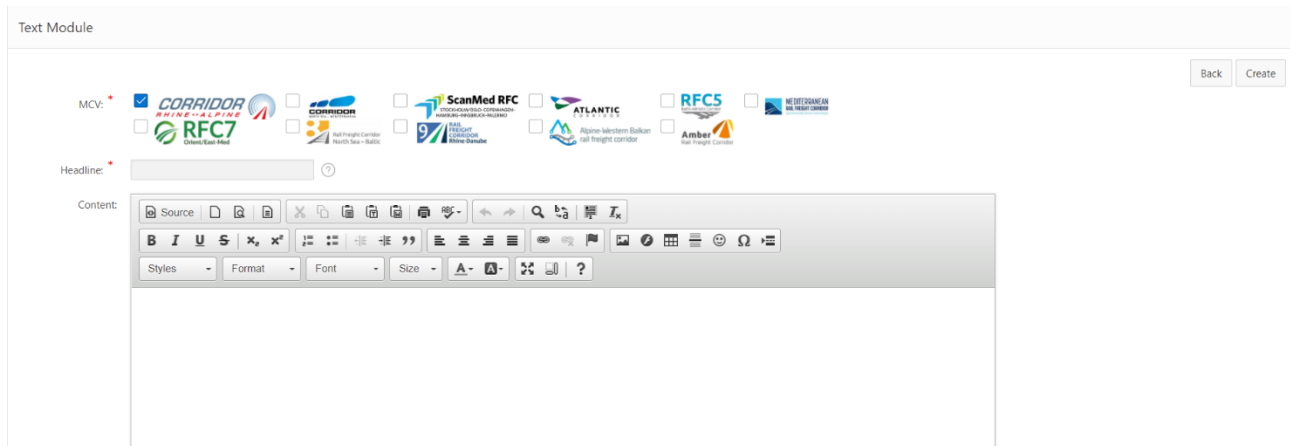

Figure 7.3: Text Module Page

The '**Headline'** and the main '**Content'** should be filled in to create a proper text module.

The text editor used for the main Content provides various options common to most text editors such as text formatting, image inserting, table creation etc.

After creating a new text module, an option is available to edit the newly created text module.

At the bottom of a text module opened for editing, the sub-region **Used in Books** is displayed. This area displays the books/tabs in which the current module is used. It is possible to use a text module in more than one book/tab:
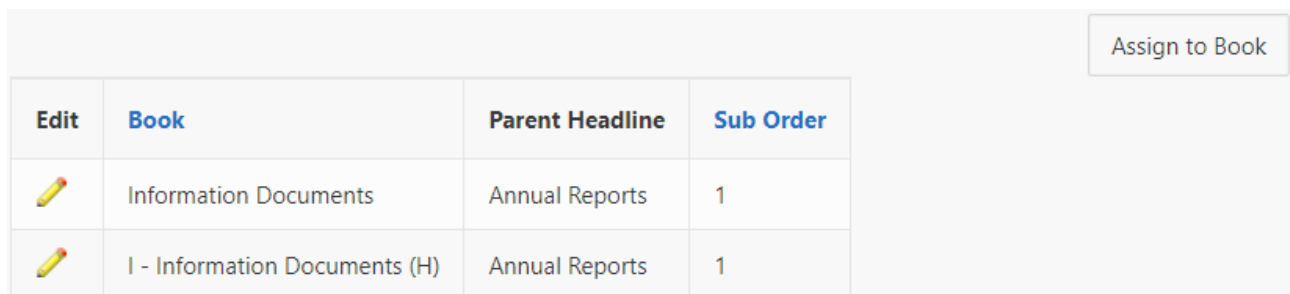
Figure 7.4: Used in Books sub-region of the Text Module Page opened for editing

Clicking on the [Assign to Book] button within the Used the Books sub-region, will navigate the user to the **Book Details** page. Here the following window appears in allowing the user to assign the text module to a book / tab.
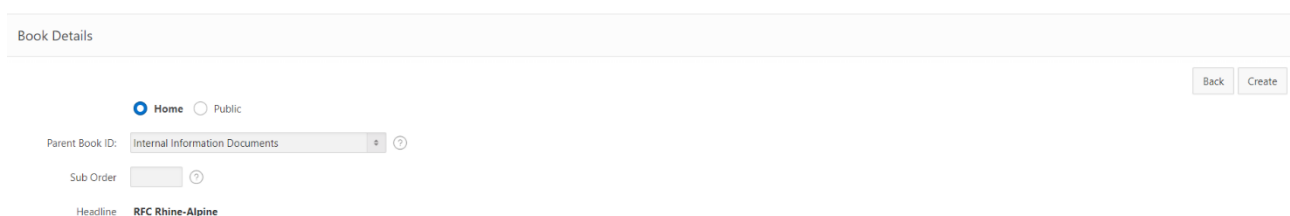

Figure 7.5: Book Details page

On this page, first select the appropriate box 'Home' or 'Public' to steer in which area the text module would be displayed. The user can now assign the text module to an existing book/tab by selecting the 'Parent Book ID' from the first selection list.

The next field 'Sub Order' defines the display order of the current text module within the book/tab.

Clicking on the [Create] **button** will assign the text module to the selected book/tab. Clicking on the [Back] button will redirect the user to the Text Module Page.

You can reference the text module in several books within the application. To do this, you have to repeat the process for every reference.

After assigning the text module, the book/tab to which the text module was assigned would be displayed in the **Used in Books** sub-region at the bottom of the Text Module page. Clicking on the edit 🖉 icon displayed to the left of each record will allow editing and possible reassignment of the text module. Deleting of any of the records within the Used in Books sub-region will remove the current text module from the books/tabs to which it was assigned to.

In order to delete the module itself, the user has to click on the [Delete] button on the upper right corner of the Text Module page. Deleting of a text module will delete it also from every assignment it has been attributed to.

7.2.2   Adding images to text modules

First, the images which should be displayed in a text module has to be uploaded in the Documents sub-section of CIP. For more details on this please refer to the Chapter 2.4 of this Handbook.

By clicking on the folder in which the image has been uploaded, the below report will be shown to the user, from which the 'Document Link ID' of the images stored in the folder can be obtained:

	Document Name	Date	Version	Author	Upload Date	Uploaded By	Filename	Download	Document Link ID
🖉	RFC2.png	2015-09-10	-	SUPPORT@FIT.FICHTNER.DE	2015-09-10	support@fit.fichtner.de	RFC2.png	Download	50
🖉	SNCF Réseau.jpg	2015-09-24	-	ADMIN_RFC2	2015-09-24	-	SNCF Réseau.jpg	Download	51
🖉	Infrabel.jpg	2015-09-24	-	ADMIN_RFC2	2015-09-24	-	Infrabel.jpg	Download	52

Figure 7.6: Obtaining the Document Link ID from a document folder

After obtaining the Document Link ID proceed to the concerned text module and open it for editing. Within the text editor of the main Content, click on the Image 🖼 icon, which opens the interface for inserting/editing of images in a text module.

It is vital to enter in the 'URL' field the following formula:

download_my_file?in_document_id=[document_id]

Be aware that the '*[document_id]*' represents the Document link ID of the desired image obtained from the Documents folder in which the image has been uploaded.

Within the following fields of the interface for inserting/editing of images in a text module, such as the 'Width' and 'Height', the appearance of the image in the text module can be further steered.
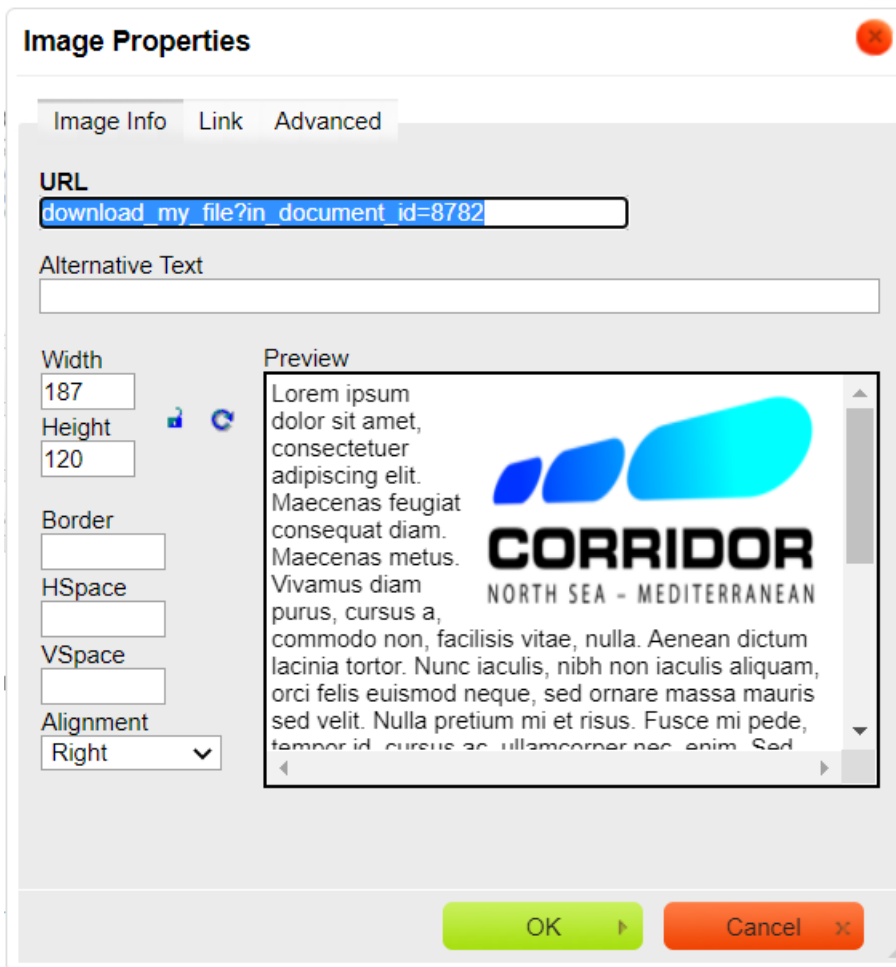
Figure 7.7: interface for inserting/editing of images in a text module

7.2.3 Adding links into text modules

In general, the following two cases of linking may occur:

1. Linking to a document stored in CIP,
2. Linking to a document stored externally, e.g. on the website of an RFC.

To add a link into the text module, within the text editor of the main Content, click on the Link 🔗 icon, which opens the interface for inserting/editing of links in a text module.

1. To link to an internal document:
    a. Select protocol 'Others';
    b. Then paste in the URL following formula:
       download_my_file?in_document_id=[document_id];
       (the '*[document_id]*' represents the Document link ID of the document to be linked to obtained from the Documents folder in which the document was uploaded)
2. To link to an external link (e.g. RFC website):
    a. Select protocol http:// or https:// depending of your website security settings
    b. Then paste the link of the document on the website.

Be aware of the fact, that under the tab 'Target' of the interface for inserting/editing of links in a text module, the target would be by default <not set>. It is advisable to check whether this is desired, as the <not set> will trigger the document to open in a new tab.
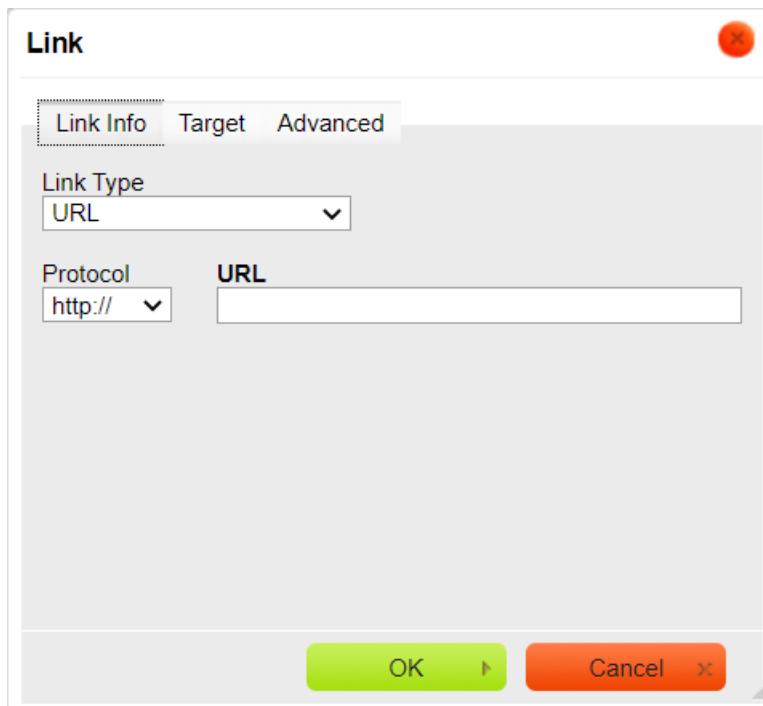
Figure 7.8: interface for inserting/editing of links in a text module

8 Ticket management & collection of feedback

This chapter comprises the information concerning ticket management and collection of users' feedback related to CIP.

8.1 Ticket management

Management of all CIP-related tickets is conducted by RNE's IT Service Desk.

RNE's IT Service Desk supports the CIP users (both public and internal) via phone and e-mail with accessing the CIP system. The Service Desk also registers and handles all CIP-related tickets.

RNE's IT Service Desk is available for telephone enquiries under the following phone number:

+43 1 907 6272 25

Telephone support is offered during RNE's office hours on working days in Austria as follows:

Monday - Thursday: 09:00 - 16:00

Friday: 09:00 - 15:00

RNE's IT Service Desk is available for e-mail enquiries under the following address:

support.cip@rne.eu

Tickets sent by e-mail in English are registered and handled on all weekdays, regardless of holidays or vacation periods, with a guaranteed response time.

RNE's IT Service Desk uses the Deskero software package to assign tickets to incoming queries and track further communications about them.

The Deskero can be accessed via the following URL:

https://rne.deskero.com/login

8.2 Collection of feedback

For collection of feedback concerning the CIP users' experience with the use of CIP, a dedicated publicly available 'Feedback' section has been established in CIP:
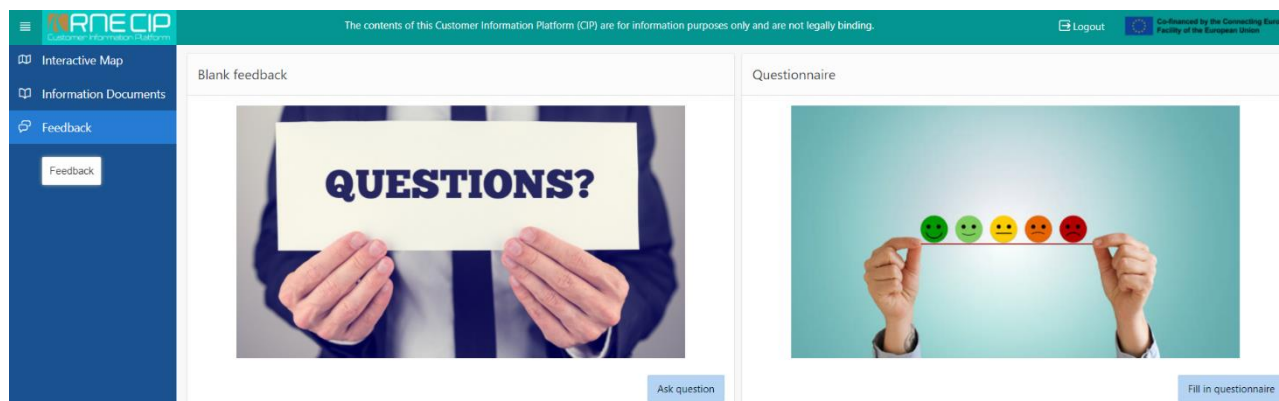

Figure 8.1: Accessing and layout of the Feedback section

Within the 'Leave Feedback' area, the users have two options to choose from:

- Provide an open feedback / pose a question in form of a free text;
- Fill-in a short harmonised questionnaire.

In both cases the users are able the choose, whether they would like to provide their name and e-mail address or if they prefer to stay anonymous.

From technical point of view, both forms for leaving of the feedback are hosted by RNE's Content Management System (CMS) and are available under the following URLs:

http://cms.rne.eu/cip-blank-feedback

http://cms.rne.eu/cip-questionnaire

Any feedback provided by the customers via the 'Leave Feedback' area is being stored in the CMS and used as one of the inputs for steering further developments of CIP by the Change Control Board as well as by the Development Group. This process is coordinated by RNE.

9 Usage monitoring

This chapter comprises the information concerning a dedicated application providing statistics on the usage of CIP along with the information concerning standardised reports on CIP usage for the Change Control Board.
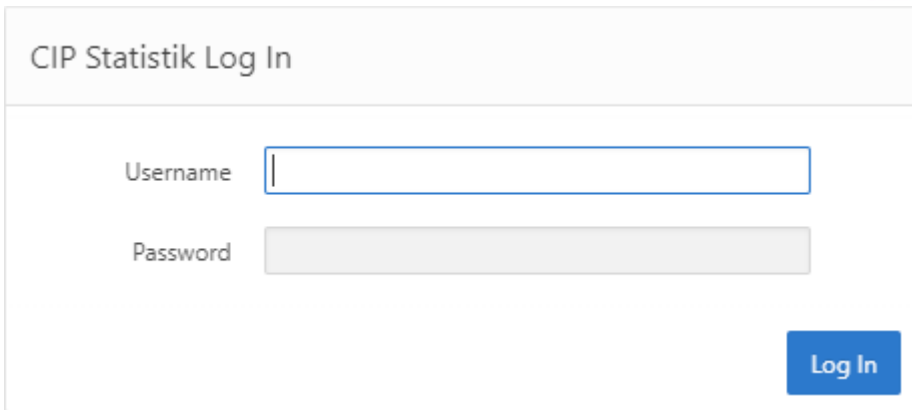
9.1 Usage monitoring application

Members of the Development Group have at their disposal a dedicated application for retrieving statistics on the usage of CIP. All members of the CIP Development Group were provided with credentials for accessing this application.

The CIP usage monitoring application can be accessed via the following URL:

https://cip.rne.eu/apex/f?p=CIP_STATISTIC

In order to log in to the application, a member of the CIP Development Group has to type in his/her 'Username' and 'Password' into the login mask, which appears as follows:
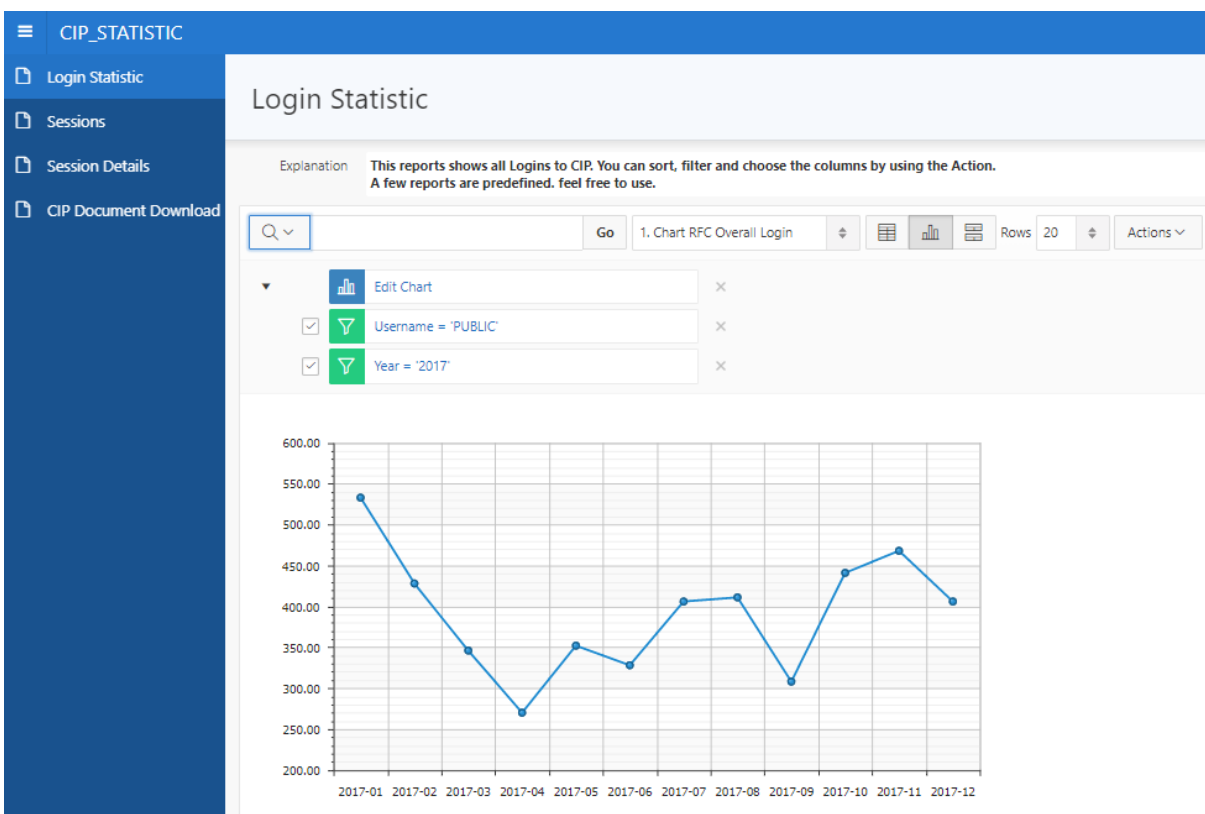
Figure 9.1: Login mask of the CIP Usage monitoring application

After having successfully logged in to the application, a member of the Development Group would see the following dashboard providing access to CIP-related statistics and reports:

Note: In the screenshot, a sample report with a chart displaying the number of successful monthly logins to CIP by public users throughout 2017 is shown. Depending on the default settings of the CIP usage monitoring application, the initially shown sample report can change in the future.

Formerly, the application provided information merely on the number of logins to CIP. At this point, it has been possible to sort between the following types of logins:

- Successful and unsuccessful logins;
- Internal and public logins;
- Logins per individual RFCs;
- Logins over a certain period of time (in terms of months and years).

Within the application, it was also possible to aggregate all of the sorted values and display them in basic graphs, i.e. it was possible to generate basic login statistics and reports.

In line with the decision of the Change Control Board, the application has been developed further and since the deployment of a multi-corridor view functionality in CIP, i.e. since the middle of April 2017, it also provides statistics and contains pre-defined reports on the following figures:

- Time spent by the user within CIP: Number of sessions lasting shorter/longer than 15/30/45 etc. minutes;
- Time spent by users within the different tabs of CIP: Percentage of time spent within interactive tab, information documents, home tab, etc.;
- Number of visits (i.e. clicks on individual pages) within the CIP;
- Number of downloads per individual documents / document types;
- Usage of the multi-corridor view functionality.

Note: The introduction of an improved user interface functionality in CIP caused a break in series within the original login statistics. This is due to the fact, that customers do not have any longer to log in to the CIP separately in order to see the contents belonging to different RFCs.

To better understand customers' interest in the contents of individual RFCs participating in CIP, it is recommended to combine the overall number of logins with the usage of multi-corridor view functionality instead of combining it with the number of logins per individual RFCs.

9.1.1 Login Statistics

Reports and statistic concerning the number of logins to the CIP constituted the former functionality of the CIP usage monitoring application. Therefore, inside of the application it is available as the first option in the main bar situated on the left side of the user interface. Within this section of the application, following pre-defined reports are available:

- Primary Report;
- Chart RFC Overall Login;
- Number of Logins per RFC.

The 'Primary Report' shows all individual logins to CIP arranged from the most recent ones towards the oldest ones. For each of the individual logins, the following information is shown:

- The RFC concerned (since introduction of multi-corridor view only applies to internal logins);
- Date and time of the login;
- Information whether the login concerned public or internal environment of CIP;
- Information whether the login attempt has been successful or not.

Users of the CIP usage monitoring application can, based on their preferences rearrange the order, in which the individual logins are being shown and/or filter among all of the above categories.

The 'Chart RFC Overall Login' shows a chart with the number of successful monthly logins to CIP throughout a defined period of time (currently throughout 2017).

Users of the CIP usage monitoring application can, based on their preferences, further sort out the number of displayed logins just to those concerning public or internal environment of CIP and/or modify the period of time covered by the chart.
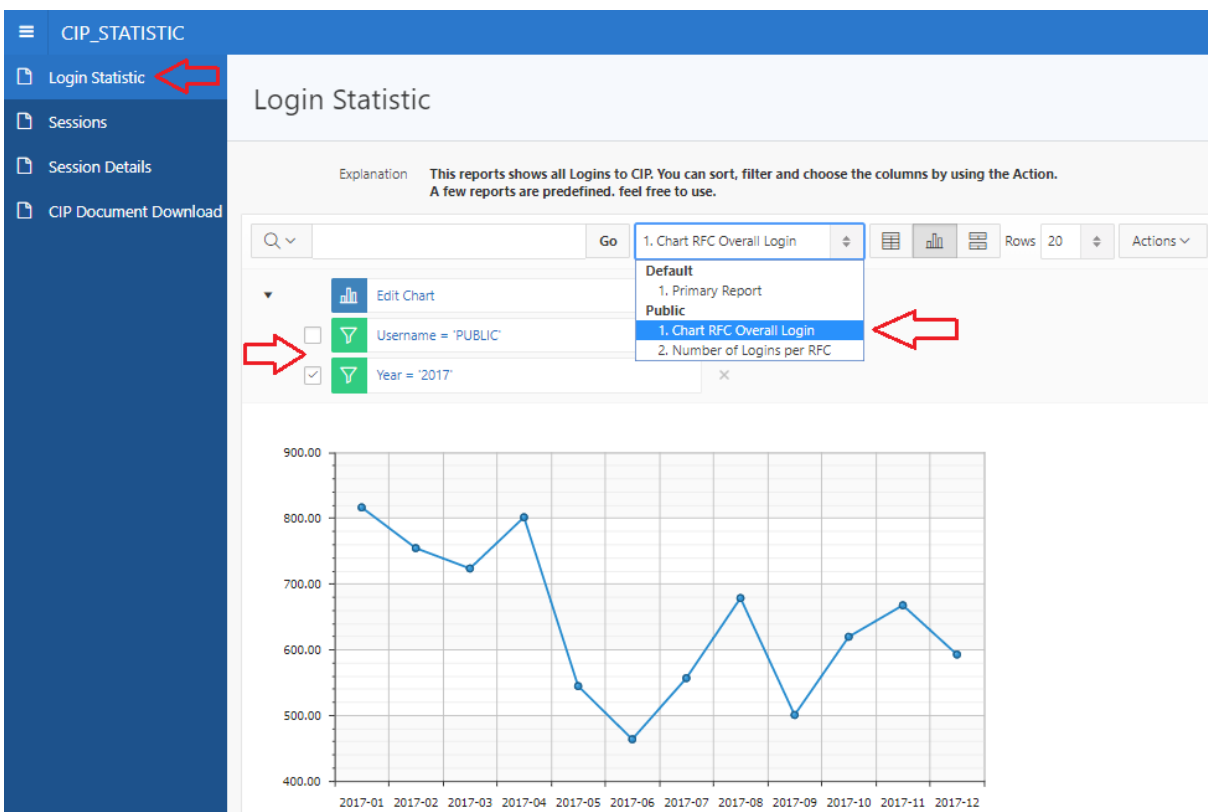
The 'Number of Logins per RFC' shows the total number of successful logins to the CIP clustered per individual RFCs as well as per internal vs public logins.

Users of the CIP usage monitoring application can, based on their preferences, further specify the period of time, for which the clustered number of logins is being shown.

Note: Since the introduction of multi-corridor view functionality in CIP, i.e. since the middle of April 2017, the numbers shown in this subsection are only relevant for the public logins.

9.1.2 Sessions and Session Details

Sessions and Session Details providing reports and statistic concerning the behavior of users, while using the CIP, have been available since further development of CIP usage monitoring application, i.e. since the middle of April 2017.

Inside of the application it is available as the second and third option in the main bar situated on the left side of the user interface. Within this section of the application, following pre-defined reports provide useful information to the users of the application:

- Sessions / Time spent by User;
- Session Details / MCV Counts per Corridor;
- Session Details / Number of page requests;
- Session Details / Time spent on page.

The 'Sessions / Time spent by User' shows time spent by the users during their individual sessions. Arranged from the longest lasting period towards those lasting the shortest. By default all sessions lasting longer than 15 minutes are shown including the number of such sessions.

Users of the CIP usage monitoring application can, based on their preferences, modify the length of sessions which should be shown in this report as well as further specify the period of time, which shall be taken into account in this report. They can also filter whether the report shall concern only public or internal logins and in case of internal logins also the RFC concerned.

The 'Session Details / MCV Counts per Corridor' provides a report on the usage of multi-corridor view on all participating RFCs by showing the number of sessions, during which individual RFCs have been chosen via the multi-corridor view selection pane. Figures in this report are clustered per calendar months.

Users of the CIP usage monitoring application can, based on their preferences, filter whether the report shall concern only public or internal logins.

The 'Session Details / Number of page requests' shows the number of visits/clicks on individual pages/within CIP arranged from the most visited pages within the CIP towards the least visited ones.

Users of the CIP usage monitoring application can, based on their preferences, filter whether the report shall concern only public or internal logins as well as further specify the period of time, which shall be taken into account in this report.

The 'Session Details / Time spent on page' shows the time spent by users on individual pages within CIP both in terms of minutes as well as in terms of percentage of the total time spent by users in CIP.
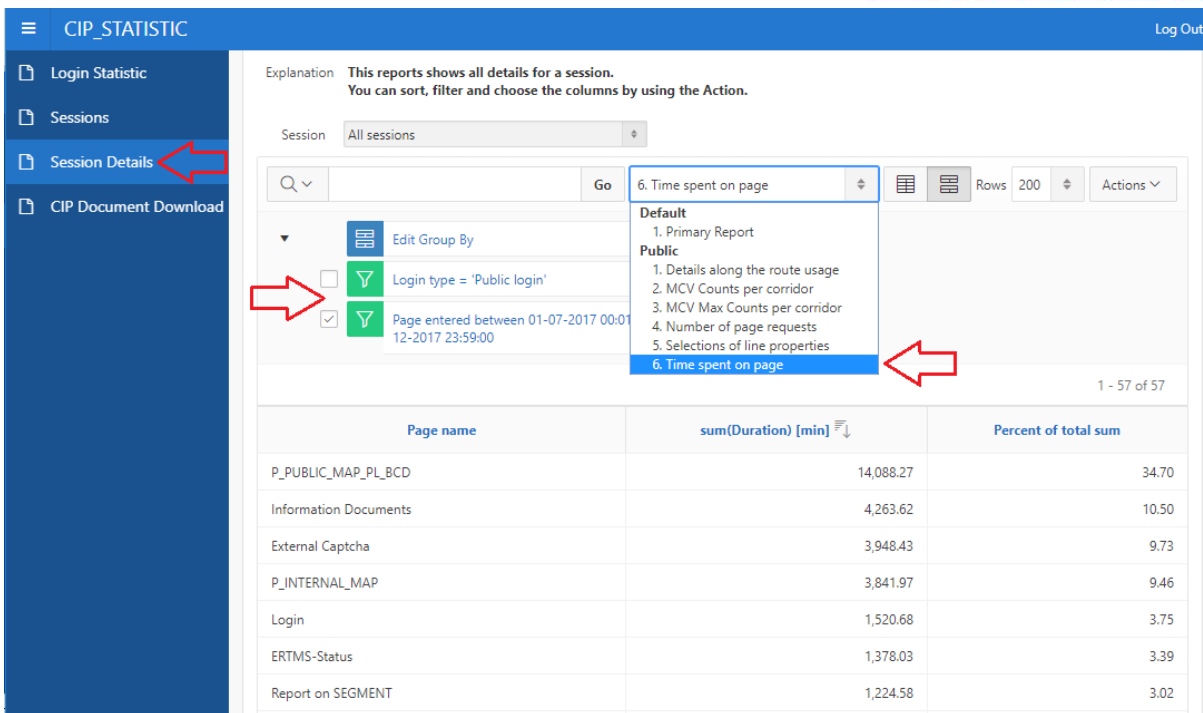
Users of the CIP usage monitoring application can, based on their preferences, filter whether the report shall concern only public or internal logins as well as further specify the period of time, which shall be taken into account in this report.

9.1.3 Download of documents from CIP

Reports and statistics concerning the number of documents downloaded from CIP have been available since further development of CIP usage monitoring application i.e. since the middle of April 2017.

Inside of the application it is available as the fourth and last option in the main bar situated on the left side of the user interface. Within this section of the application, following pre-defined reports are available:

- Primary Report;
- Number of downloads per document;
- Number of downloads per document type.

Note: The reports and statistics shown within this section of the CIP application only take into account the downloads of documents which are stored within CIP and downloaded directly from it. It does not take into account download of documents from RFC's websites and other external data storages, even if there are links too these documents placed within the CIP.

The 'Primary report' shows all individual downloads of documents from CIP arranged from the most recent ones towards the oldest ones. For each of the individual downloads, the following information is shown:

- Date and time of the download;
- ID of the downloaded document;
- Name of the downloaded document;
- Type of the downloaded document.

Users of the CIP usage monitoring application can, based on their preferences, further specify the period of time, for which the individual downloads of documents from CIP are being shown. They can also rearrange the order, in which the individual downloads are being shown and/or filter among all of the above categories.

The 'Number of downloads per document' shows how many times has a certain document been actually downloaded from CIP arranged from the most downloaded documents towards the least downloaded ones.

Users of the CIP usage monitoring application can, based on their preferences, further specify the period of time, for which the number of downloads per document is being shown.

The 'Number of downloads per document type' shows how many times has a certain document type been actually downloaded from CIP arranged from the most downloaded document types towards the least downloaded ones.

Users of the CIP usage monitoring application can, based on their preferences, further specify the period of time, for which the number of downloads per document type is being shown.
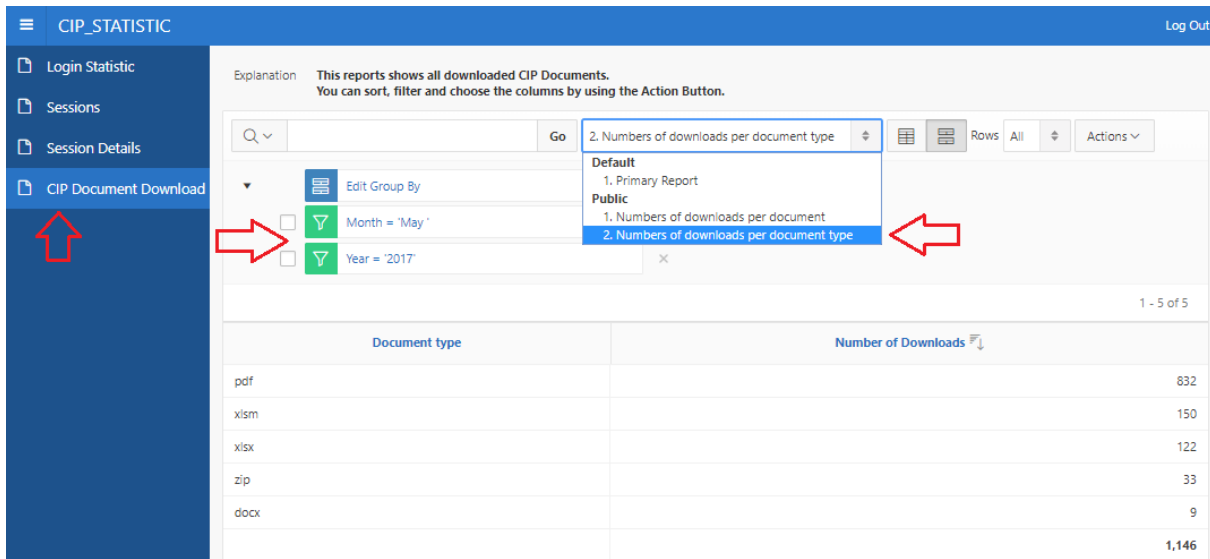
9.1.4 Creation of customised / private reports

All reports described in the subchapters above have been pre-defined within the CIP usage monitoring application and are available to the users of this application upon logging in. These pre-defined reports are marked as public reports within the application.

In addition, each user of the application is able to further configure the pre-defined reports according to his/her preferences. Such configurations can be done either by modifying the filters available within individual public reports or via the functionalities available under 'Actions' menu. Such configurations would remain applicable until the user has logged out from the application After a repeated login of the user, all repots would revert to their pre-defined form.

To preserve the configurations made by individual users also for their future sessions, the user has to save the configured report as a private one. Such private report would be linked to the account of the user who configured and saved it, and could therefore be accessed repeatedly by this user.
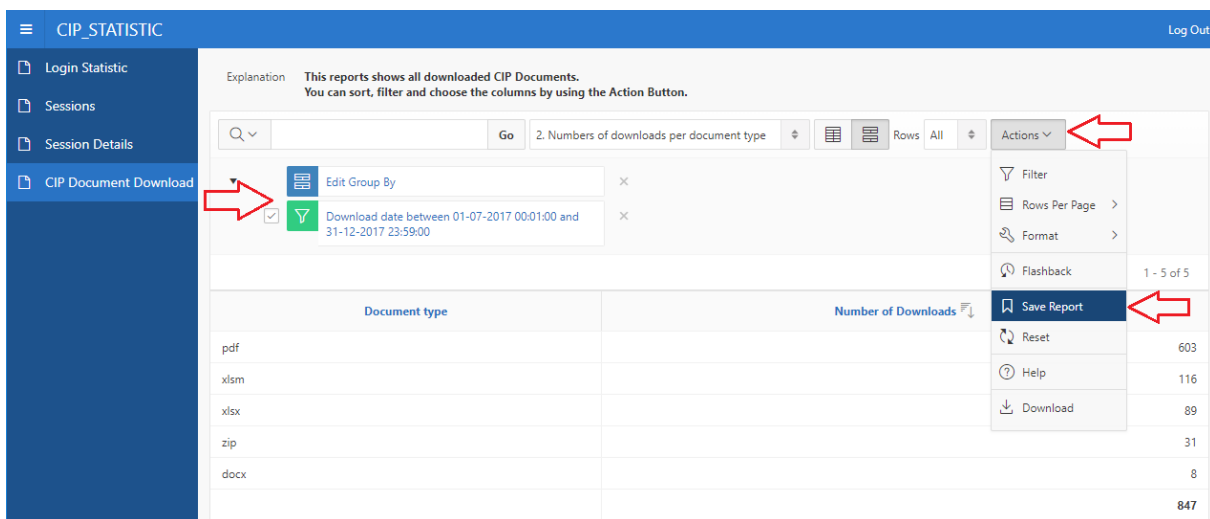
Note: All reports can be also downloaded as charts, diagrams, etc. for further evaluation.

9.2 Standardised reports on CIP usage

The Change Control Board requested the Development Group to develop a standardised report (e.g. in form of a PowerPoint presentation), which would make use of the available functionalities of the CIP usage monitoring application. Such report shall be then presented and reviewed by the Change Control Board during each of its meetings.

In response to the request of the Change Control Board the Development Group agreed on the following common standards for creation of regular reports on CIP usage:

- All values included in the report shall concern the CIP productive environment;
- All reported data shall be retrieved from the tool for CIP Usage monitoring available under:
    - https://cip.rne.eu/apex/f?p=CIP_STATISTIC
- The regular reports shall always cover a period of 6 months:
    - 1st July to 31st December of the previous year for CIP CCB meeting scheduled in spring;
    - 1st January to 30th June of the running year for CIP CCB meeting scheduled in autumn.
- Following reports shall be included in presentation for Change Control Board:
    - 1. Number of successful Monthly Logins for all RFCs;
    - 2. Number of successful Logins during Customer Events;
    - 3. Usage of CIP per Individual RFCs;
    - 4. Duration of Logins to CIP in %;
    - 5. Page Requests by Public Users in CIP;
    - 6. Selection of Line Properties by Public Users;
    - 7. Usage of Details Along Route in CIP;
    - 8. Download of Documents from CIP.

Retrieving of the standardised reports from the CIP usage monitoring application and presenting of these reports to the Change Control Board shall be the responsibility of RNE.

10 Abbreviations

This chapter comprises a list of abbreviations used throughout this handbook.

CCB	Change Control Board
CIP	Customer Information Platform
CRD	Common Reference Database
CSV	Comma separated values
ERTMS	European Rail Traffic Management System
ETCS	European Train Control System
EU	European Union
ExB	Executive Board
GA	General Assembly
GIS	Geographic Information Systems
GUI	Graphical User Interface
LS	Limited Supervision
MCV	Multi-Corridor View
IM	Infrastructure Manager
IT	Information Technology
OTRS	Open-source Ticket Request System
PLC	Primary Location Code
RINF	Register of Infrastructure
RFC1	Rail Freight Corridor Rhine – Alpine
RFC2	Rail Freight Corridor North Sea – Mediterranean
RFC3	Rail Freight Corridor Scandinavian – Mediterranean
RFC4	Rail Freight Corridor Atlantic
RFC5	Rail Freight Corridor Baltic – Adriatic
RFC6	Rail Freight Corridor Mediterranean
RFC7	Rail Freight Corridor Orient / East Med
RFC8	Rail Freight Corridor North Sea – Baltic
RFCs	Rail Freight Corridors (CIP-Users)
RNE	RailNetEurope
RU	Railway Undertaking
SRS	System Requirements Specification
TEN-T	Trans-European Transport Network
TAF TSI	Telematics applications for freight service
URL	Uniform Resource Locator

Annex 1: Segment property values

Line Category	
Value list	**Basic Description**
E5	25 t axle load, 8,8 t meter load
E4	25 t axle load, 8 t meter load
D4L	22,5 t axle load with speed restrictions
D4	22,5 t axle load, 8,0 t meter load
D3	22,5 t axle load, 7,2 t meter load
D2	22,5 t axle load, 6,4 t meter load
CM4	21 t axle load, 8,0 t meter load
CM3	21 t axle load, 7,2 t meter load
CM2	21 t axle load, 6,4 t meter load
C4/CE	20 t axle load, 8,0 t meter load, including 6 axle cars
C4	20 t axle load, 8,0 t meter load
C3	20 t axle load, 7,2 t meter load
C3L	20 t axle load, 7,2 t meter load, with speed restrictions
C2	20 t axle load, 6,4 t meter load
B2	18 t axle load, 6,4 t meter load
B1	18 t axle load, 5,6 t meter load
A	16 t axle load, 5 t meter load
national category	National category applies
upon request	Default if no data is available

Traction Power	
Value list	**Basic Description**
25 KV AC	
15 KV AC	
3 KV DC	
1,5 KV DC	
not electrified	
upon request	Default if no data is available

Signalling Class B	
Value list	**Basic Description**
75 Hz	Class B-System (Legacy)
AB	Class B-System (Legacy)
ALSN	Class B-System (Legacy)
ASFA	Class B-System (Legacy)
ATB EG	Class B-System (Legacy)
ATB NG	Class B-System (Legacy)
BAL + KVB	Class B-System (Legacy)
BAPR + KVB	Class B-System (Legacy)
BMVU	Class B-System (Legacy)
BT	Class B-System (Legacy)
Crocodile	Class B-System (Legacy)
Crocodile + TBL1(+)	Class B-System (Legacy)
EBICAB - ATC	Class B-System (Legacy)
EBICAB (700)	Class B-System (Legacy)
EMS with BT	Class B-System (Legacy)
Euro-Signum/Euro-ZUB (P44 per ETM)	National System (Legacy)
Euro-Signum/Euro-ZUB (P44 per ETM) + KVB	National System (Legacy)
Euro-Signum/Euro-ZUB (P44 per ETM) + KVB	National System (Legacy)
Euro-Signum/Euro-ZUB (P44 per ETM) + SCMT	National System (Legacy)
KVB	Class B-System (Legacy)
LS System	Class B-System (Legacy)
MEMOR II+	Class B-System (Legacy)
PAB	Class B-System (Legacy)
PZB	Class B-System (Legacy)
PZB + LZB	Class B-System (Legacy)
SB	Class B-System (Legacy)
SCMT	Class B-System (Legacy)
SHP	Class B-System (Legacy)
T	Class B-System (Legacy)
TBL1(+)	Class B-System (Legacy)
Telecom	National System Only (Legacy)
ZUB123 – ATC	Class B-System (Legacy)
no class B system	no class B system
not signalling controlled	no interlocking system
upon request	Default if no data is available

Intermodal Freight Code	
Value list	**Basic Description**
P/C 99/429	
P/C 90/410	
P/C 82/412	
P/C 80/410	
P/C 80/405	
P/C 80/400	
P/C 78/402	
P/C 72/398	
P/C 72/391	
P/C 70/400	
P/C 70/390	
P/C 67/391	
P/C 67/389	
P/C 65/395	
P/C 60/390	
P/C 60/384	
P/C 60/380	
P/C 57/381	
P/C 55/385	
P/C 52/368	
P/C 50/380	
P/C 50/370	
P/C 47/360	
P/C 45/375	
P/C 45/364	
P/C 45/351	
P/C 38/357	allowed corner height with corresponding loading units
P/C 33/349	
P/C 32/351	
P/C 22/341	
not in use	National procedure applies
upon request	Default if no data is available

Gauging	
Value list	**Basic Description**
A	
DE3	
EBVO1	
EBVO3	
G1	
G2	
GA	
GB	
GB1	
GB2	
GB&G2	
GB+&G2	
GC	
GHE16	
PTb+	
S	
upon request	Default if no data is available

Gradient Dir 1 (in the direction from node – to node) & Gradient Dir 2 (in the direction to node – from node)	
Value list	**Basic Description**
< 5	Gradient <= 5
6 - 10	5 < Gradient <= 10
11 - 15	10 < Gradient <= 15
16 - 20	15 < Gradient <= 20
21 - 25	20 < Gradient <= 25
26 - 30	35 < Gradient <= 30
31 - 35	30 < Gradient <= 35
> 35	Gradient > 35
upon request	Default if no data is available

Number of Tracks	
Value list	**Basic Description**
Three or more	
Double-track	
Single-track	
upon request	Default if no data is available

Maximum Train Length

Value list	Basic Description
> 740/750m75 Hz	Best case scenario which may not be guaranteed under all operational conditions
700 - 740/750 m	Best case scenario which may not be guaranteed under all operational conditions
650 - 699 m	Best case scenario which may not be guaranteed under all operational conditions
600 - 649 m	Best case scenario which may not be guaranteed under all operational conditions
550 - 599 m	Best case scenario which may not be guaranteed under all operational conditions
500 - 549 m	Best case scenario which may not be guaranteed under all operational conditions
450 - 499 m	Best case scenario which may not be guaranteed under all operational conditions
400 - 449 m	Best case scenario which may not be guaranteed under all operational conditions
350 - 399 m	Best case scenario which may not be guaranteed under all operational conditions
300 - 349 m	Best case scenario which may not be guaranteed under all operational conditions
< 300 m	Best case scenario which may not be guaranteed under all operational conditions
upon request	Default if no data is available

Maximum Speed

Value list	Basic Description
≥ 121 km/h	Technical speed of the line applicable for the freight traffic
101 - 120 km/h	Technical speed of the line applicable for the freight traffic
81 - 100 km/h	Technical speed of the line applicable for the freight traffic
61 - 80 km/h	Technical speed of the line applicable for the freight traffic
≤ 60 km/h	Technical speed of the line applicable for the freight traffic
upon request	Default if no data is available

Usage

Value list	Basic Description
Freight	
Passenger & Freight	
Passenger	
upon request	Default if no data is available

Miscellaneous

Value list	Basic Description
Free text (upon request)	To be used as a disclaimer / additional comment if needed

Annex 2: Segment property values for Re-routings

Max. Operational Train Length	
Value list	**Basic Description**
Free text (upon request)	Maximum train length that is feasible in an ICM case

Max. Train Weight Dir 1 (in the direction from node – to node) & Max. Train Weight Dir 2 (in the direction to node – from node)	
Value list	**Basic Description**
Free text (upon request)	Provide precise value preferably in tons

Capacity Indication	
Value list	**Basic Description**
Excellent (> 75 %)	Rough indication of capacity available for re-routing
Good (50 - 75 %)	Rough indication of capacity available for re-routing
Limited (50 - 75 %)	Rough indication of capacity available for re-routing
Extremely Limited (< 10 %)	Rough indication of capacity available for re-routing
upon request	Default if no data is available

Capacity Indication Explanation	
Value list	**Basic Description**
> 50 trains / day / direction	Amount of theoretically available paths
25 - 50 trains / day / direction	Amount of theoretically available paths
10 - 25 trains / day / direction	Amount of theoretically available paths
< 10 trains / day / direction	Amount of theoretically available paths
upon request	Default if no data is available

Official Communication Language	
Value list	**Basic Description**
Free text (upon request)	Official language to be used according to national law

Implemented Language Tools	
Value list	**Basic Description**
Free text (upon request)	Measures concerning Directive 2007/59/EC on certification of train drivers