



EUROPEAN CLIMATE, INFRASTRUCTURE AND
ENVIRONMENT EXECUTIVE AGENCY (CINEA)

CEF2 GIS DATA SUBMISSION

USER GUIDE

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Table of Contents

1.	Introduction.....	4
2.	Open the interactive map	5
2.1.	Interactive map editor – overview of main map window.....	6
2.1.1.	Toolbar – CEF Transport	6
2.1.2.	Toolbar – CEF Energy	6
2.1.3.	Other window elements	7
3.	Navigate to the location of your proposal	8
3.1.	Zoom using mouse scroll wheel.....	8
3.2.	Zoom using map [+] / [-] buttons.....	8
3.3.	Zoom using [+] / [-] keys on the keyboard	8
3.4.	Zoom to selected area	8
3.5.	Move the map using mouse (mouse panning).....	8
3.6.	Move the map using keyboard keys (keyboard panning).....	8
3.7.	Find an address on the map.....	9
3.8.	Zoom to an extent of all map features that you created	9
4.	Select and visualise background map information.	10
4.1.	How to change the basemap	10
4.2.	Using CEF Transport reference data.....	11
4.2.1.	How to show the TEN-T Network	11
4.2.2.	How to display the map legend.....	11
4.3.	Using CEF Energy reference data.....	12
4.3.1.	How to show the PCI network types	12
4.3.2.	How to display the map legend.....	12
5.	Creating CEF Transport application data	13
5.1.	Select a tool to draw object(s) on the map	13
5.2.	How to draw an object	14
5.3.	How to draw an object "snapped" to other map objects.....	14
5.4.	How to add whole countries or NUTS regions	15
5.5.	How to upload your GIS data	16
5.6.	Modify an object which you drew earlier (if needed).....	18
5.6.1.	How to modify the shape of the previously drawn object.....	18
5.6.2.	How to delete a point from a line or polygon.....	19
5.6.3.	How to delete a whole object	19
5.6.4.	How to modify category of objects	19
5.7.	Miscellaneous map operations	20
5.7.1.	How to work with a list of all map features which you created	20
5.7.2.	How to get information on the position or dimensions of objects.....	21
5.7.3.	How to measure objects on map	22
5.7.4.	How to print a map of the proposal.....	22
5.7.5.	How to export your data.....	22
5.7.6.	Examples for CEF Transport	23

6.	Creating CEF Energy application data.....	24
6.1.	Select a tool to draw object(s) on the map	24
6.2.	How to draw an object	24
6.3.	How to draw an object "snapped" to other map objects.....	25
6.4.	How to add whole countries or NUTS regions	26
6.5.	How to upload your GIS data	27
6.6.	Modify an object which you drew earlier (if needed).....	28
6.6.1.	How to modify the shape of the previously drawn object.....	28
6.6.2.	How to delete a point from a line or polygon.....	29
6.6.3.	How to delete a whole object.....	30
6.6.4.	How to modify category of objects	30
6.7.	Miscellaneous map operations	30
6.7.1.	How to work with a list of all map features which you created	30
6.7.2.	How to get information on the position or dimensions of objects.....	31
6.7.3.	How to measure objects on map	32
6.7.4.	How to print a map of the proposal.....	32
6.7.5.	How to export your data.....	33
6.8.	Examples for CEF Energy	33
7.	Troubleshooting	34
7.1.	Application freezes	34
7.2.	Cannot see basemap selection box – use scroll bars	34
7.3.	Cannot add many countries in one go using NUTS tool.....	34
7.4.	Cannot select a line with a double-click	34
7.5.	Cannot see basemap: canvas in zoom 5000	34
7.6.	Interactive map hasn't loaded for a very long time.....	34
7.7.	No dialog opens when you click on the [Core Network Corridors], [Comprehensive Network], [Core Network] or [Electricity PCIs], [Gas PCIs] or [Smart Grids PCIs] buttons.....	34
7.8.	After deleting/adding an object on map and changing the map scale the object is visible/invisible.....	34
7.9.	After selecting a layer from table of contents (e.g. Core Network Corridor, Electricity PCIs) it doesn't show up immediately on map.	35

1. INTRODUCTION

Dear Applicant,

In the Electronic Submission of your CEF application you are also asked to provide a location data of your proposal. To help you create such data we have developed the **interactive GIS data editor**. All you need to do is to draw shapes (lines, points or polygons) which will represent elements of infrastructure or areas affected by the proposed action. This manual will guide you through the process of creating such a map.

In order to submit a map of your proposal you will have to:

- (1) Open the interactive map.
- (2) Navigate to the location of your proposal.
- (3) Select and visualise correct background map information.
- (4) Select a tool to draw object(s) on the map.
- (5) Modify an object, which you have drawn earlier (if needed).

Below you can find the detailed procedure for all of these points.

We strongly encourage you to prepare your map well ahead the submission deadline. Heavy workload due to last moment submissions may make your work with interactive map difficult.

"A picture is worth a thousand words" - Correct geographic representation of your proposal may contribute to its better understanding and easier evaluation. We encourage you to make a good use of the **interactive GIS data editor** to make the best illustration of your proposal. You can also use the interactive map to export images, which you can add to your proposal documentation.

2. OPEN THE INTERACTIVE MAP

1 In the Portal Submission System, open your existing application or create a new one and open it for editing.

Go to the submission wizard step “Proposal Forms”. In the section “Administrative forms”, click on the [Edit GIS data] button.



The GIS data editor will open in a new browser tab. It may take several seconds to load.

All users with full-access rights (from the coordinator and partners) can edit the GIS data.

Please note that the GIS data is mandatory for the submission of the proposal.

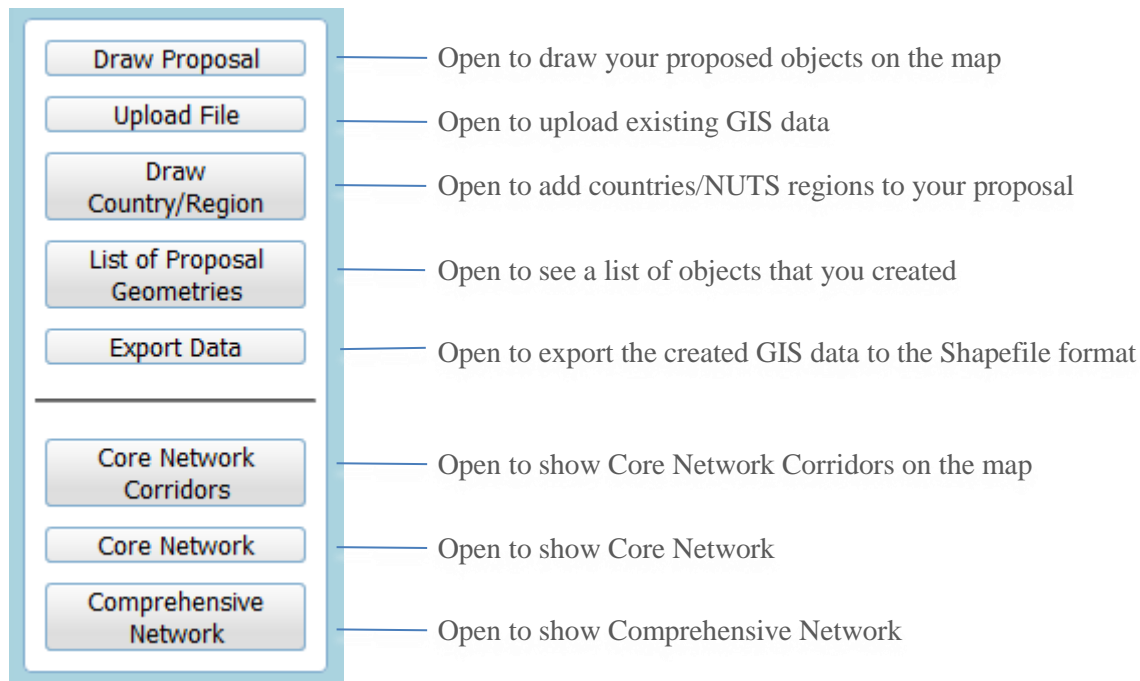


IMPORTANT NOTE: The GIS data is auto-saved, but – depending on your internet connection - it takes few moments to be synchronised with the submission system; please make sure you don't leave it for the last minutes before call closure.

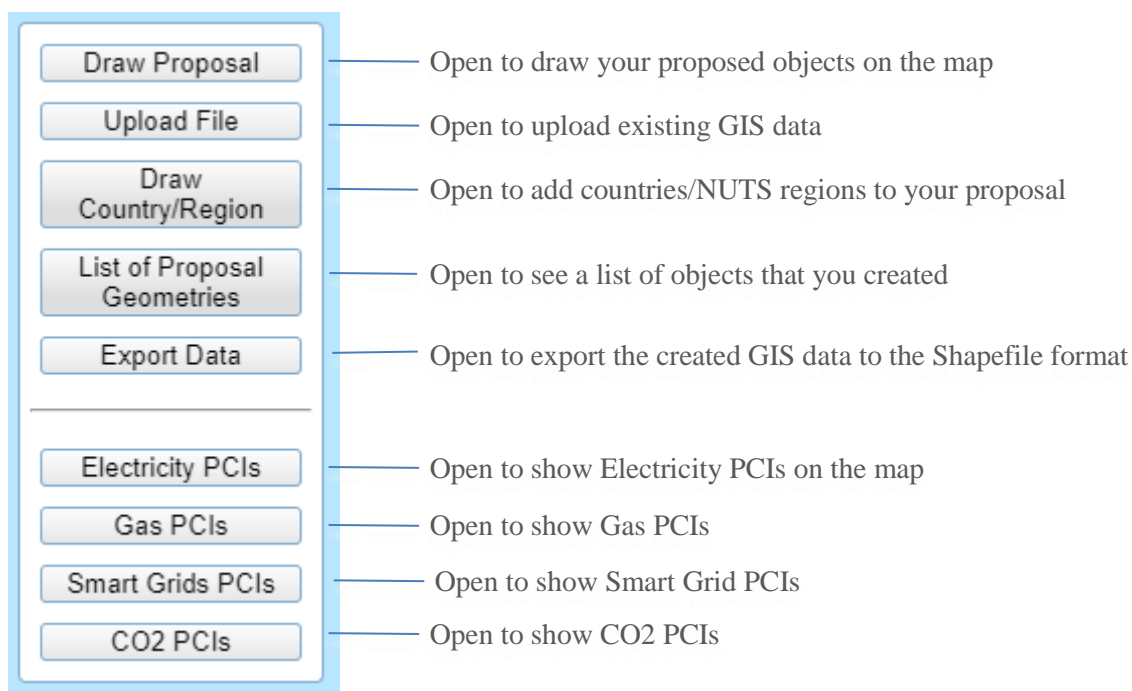
2.1. Interactive GIS data editor – overview of main map window

Please familiarize yourself with the tools in the main map window. The details on how to use each tool will be provided later in the manual.

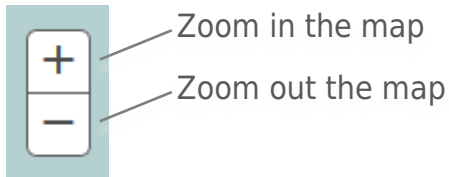
2.1.1. Toolbar – CEF Transport



2.1.2. Toolbar – CEF Energy

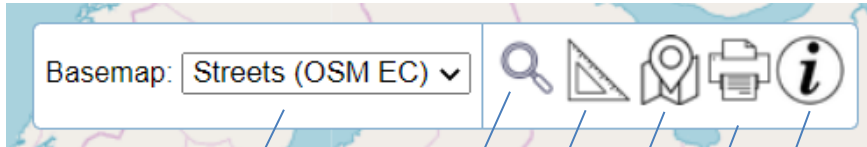


2.1.3. Other window elements



Zoom in the map

Zoom out the map



Select a basemap

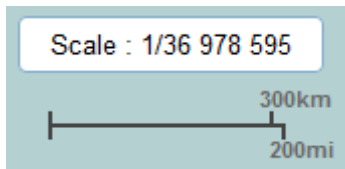
Zoom to extent of all geometries created by an applicant

Open to measure distance, area or get point coordinates

Open to locate an address on the map

Open to see map print preview

Click to open these guidelines



Current map scale

Scale bar

3. NAVIGATE TO THE LOCATION OF YOUR PROPOSAL

First, you need to find the area where the proposal is located. To do this use pan and zoom tools. There are several methods for panning and zooming – you may use the one, which works best for you. You can also use [Address locator] to find the address on the map.

3.1. Zoom using mouse scroll wheel

1	Move the cursor to a place to which you want to zoom
2	Roll the mouse scroll wheel to zoom in or out

3.2. Zoom using map [+] / [-] buttons

1	Click on either of the [+] an [-] buttons in the top left corner of the map window to zoom in or out. Map will zoom around the center of the map
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3.3. Zoom using [+] / [-] keys on the keyboard

1	Click on the [+] an [-] buttons on the <u>numeric</u> keyboard. Map will zoom around the center of the map
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3.4. Zoom to selected area

1	Press [SHIFT] button on the keyboard
2	Press and hold the left mouse button and draw a rectangle by dragging the cursor in the desired direction, then release the mouse button (drag-and-drop). Map will zoom to that area

3.5. Move the map using mouse (mouse panning)




1	Put the cursor on the map and press the left mouse button
2	While keeping the left mouse button pressed move the map by dragging it in the desired direction
3	Release the left mouse button

3.6. Move the map using keyboard keys (keyboard panning)


1	Use keyboard arrow keys to move the map around (up, down, left, right)
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3.7. Find an address on the map

You can also locate proposals using addresses.

1	 Click on the button from the menu on the top-right part of the application
2	Type the address – the application will suggest matching names as you type. You can select one entry from the list by clicking it or continue typing 
3	When you select an address it will be added to the list below the address window 
4	Repeat the steps 2 and 3 to find more addresses
5	You can select addresses from the list by clicking on the checkbox next to it
6	Click on the [Zoom] button to zoom to the selected addresses
7	Click on the [Delete] button to delete the selected addresses

3.8. Zoom to an extent of all map features that you created

1	 Click on the magnifier icon from the menu on top-right of the application. The map will zoom and center automatically to the extent of your proposal data.
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4. SELECT AND VISUALISE BACKGROUND MAP INFORMATION.

Once you have zoomed to the location of the proposal you may show on the map additional information, which may be useful for your proposal. You can

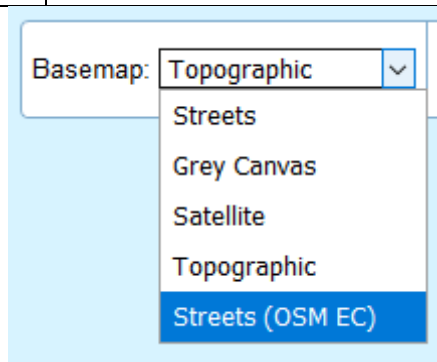
- display the Core Network Corridors or show the Core/Comprehensive network elements on the map (CEF Transport proposals only).
- display different PCI network types (Electricity, Gas, Smart Grids, CO2) on the map (CEF Energy proposals only)

To help you correctly locate the proposal, a few additional background maps (basemaps) are available in the editor. You may change the type of the basemap to one, which contains the most useful information (e.g. topographic, street or satellite).

4.1. How to change the basemap

Select the basemap, which will provide the best reference for you to draw the proposal. You may choose between different types: topographic, street map, satellite image and grey background. E.g. if you want to draw a building, the "satellite" background may be most useful whereas grey background is best for showing Core Network Corridors or Core TEN-T Network for larger areas like regions or countries.

1	Click on the dropdown list from the top right corner of the map
2	Select a basemap, which you want to display by clicking on it.



4.2. Using CEF Transport reference data

This section applies to CEF Transport proposals only.

4.2.1. How to show the TEN-T Network

Buttons [Core Network Corridors], [Core Network] and [Comprehensive Network] open a popup window with a hierarchical list of available data elements, which can be displayed/enabled on the map by ticking a checkbox. Hierarchical means that an element can only be displayed if all higher levels, it belongs to, are also enabled to display.

- [Core Network Corridors]: location of Core Network Corridors. For each of the corridors there is the possibility to enable the different transport modes individually;
- [Core Network]: roads, railways, inland waterways and other elements of the Core Network (more detailed than Core Network Corridors) – a distinction is made between EU and non-EU Member States;
- [Comprehensive Network]: roads, railways, inland waterways and other elements of the comprehensive TEN-T Network (more detailed than Core Network) – a distinction is made between EU and non-EU Member States.

4.2.1.1. How to display additional map layers

1	Click on [Core Network Corridors], [Core Network] or [Comprehensive Network] button
2	Browse through the groups of data elements by using expand [+] and collapse [-] buttons and check the checkbox next to the name of the layer you want to display. Make sure that all higher-level groups are also enabled. The desired layer will be displayed on the map (some layers can show up slower than others due to a large number of objects, some layers may only show when zoomed to a specific level)

4.2.1.2. How to hide additional map layers

1	Click on [Core Network Corridors], [Core Network] or [Comprehensive Network] button
2	Uncheck the checkbox next to the name of the layer, which you want to hide. The layer will become invisible

4.2.2. How to display the map legend

Each of the windows used to select additional objects for CEF layers ([Core Network Corridors], [Core Network] or [Comprehensive Network]) allows you to show the map legend explaining the meaning of different symbols.

1	Click on [Core Network Corridors], [Core Network] or [Comprehensive Network] button
2	Click on the [Legend] bar at the bottom of the dialog window
3	If there are many layers and symbols use the mouse wheel to see the items at the bottom of

	the list
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4.3. Using CEF Energy reference data

This section applies to CEF Energy proposals only.

4.3.1. How to show the PCI network types

Buttons [Electricity PCIs], [Gas PCIs], [Smart Grids PCIs] and [CO2 PCIs] open a popup window with a list of available infrastructure elements, which can be displayed on the map by ticking a checkbox:

- [Electricity PCIs]: PCI Electricity infrastructure like storage, substations etc.;
- [Gas PCIs]: PCI Gas infrastructure like terminals, compressor stations or pipelines etc;
- [Smart Grids PCIs]: locations of Smart Grid PCIs;
- [CO2 PCIs]: PCI CO2 infrastructure like terminal, injection etc

4.3.1.1. How to display additional map layers

1	Click on [Electricity PCIs], [Gas PCIs], [Smart Grids PCIs] or [CO2 PCIs] button
2	Check the checkbox next to the name of the infrastructure you want to display. The layer will be displayed (some layers can show up slower than others due to a large number of objects)

4.3.1.2. How to hide additional map layers

1	Click on [Electricity PCIs], [Gas PCIs], [Smart Grids PCIs] or [CO2 PCIs] button
2	Uncheck on the checkbox next to the name of the infrastructure, which you want to hide. Layer will become invisible.

4.3.2. How to display the map legend

Each of the windows used to select additional objects for PCI layers ([Electricity PCIs], [Gas PCIs] or [Smart Grids PCIs]) allows you to show the map legend explaining the meaning of different symbols.

1	Click on [Electricity PCIs], [Gas PCIs], [Smart Grids PCIs] or [CO2 PCIs] button
2	Click on the [Legend] bar at the bottom of the dialog window
3	If there are many layers and symbols use the mouse wheel to see the items at the bottom of the list

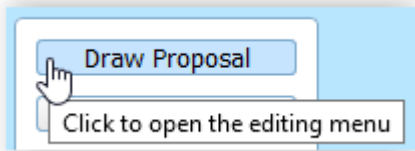
5. CREATING CEF TRANSPORT APPLICATION DATA

This section applies to CEF Transport proposals only.

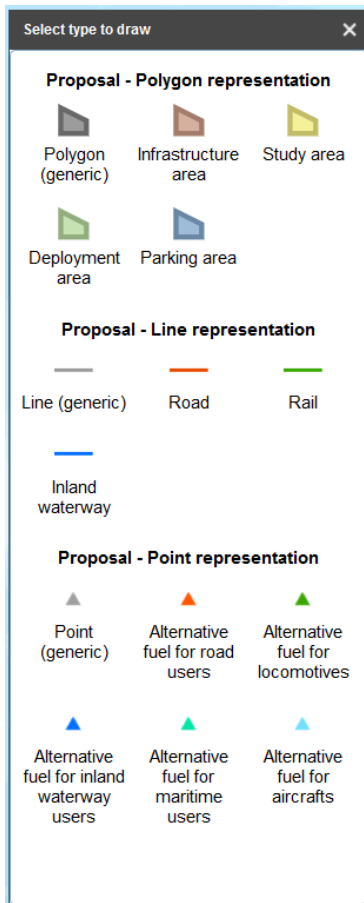
5.1. Select a tool to draw object(s) on the map

After locating the area of the proposal and checking the background information against Core Network Corridors and Core Network you can start drawing the objects representing your proposal.

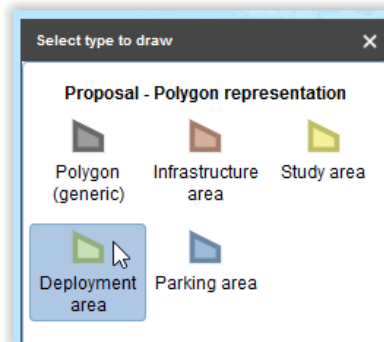
Click on [Draw Proposal] button:



The editing menu will appear and you will be able to choose the type of proposal you wish to draw:



Choose the tool, which will best reflect the type, scope and other aspects of the proposal and click on it:



The type of an object drawn on the map can also be changed later.

5.2. How to draw an object

1	Click on the [Draw Proposal] button
2	Click on the type of Proposal you want to draw
3	Move the cursor over the map
4	Left click on the map where you want to add a point or a starting point of a line or polygon
5	Continue drawing by left clicking on the locations of the remaining nodes of your line or polygon
6	Double click to finish drawing your line or polygon

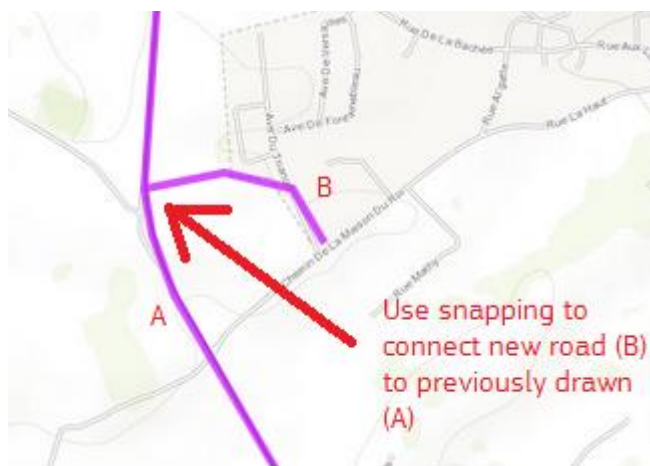
5.3. How to draw an object "snapped" to other map objects

Using this functionality is strongly encouraged if the object you draw is:

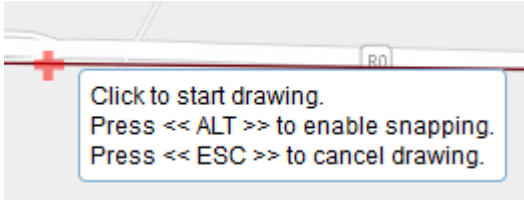
- a part of a different object already existing on the map (e.g. section of an existing road, railway or waterway of the "comprehensive network" only) or is physically linked to such objects

or

- is connected to another object which was drawn earlier (see the picture below)

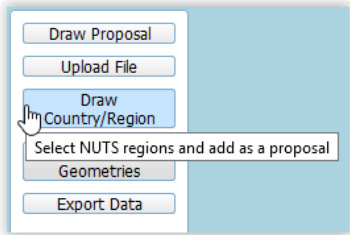
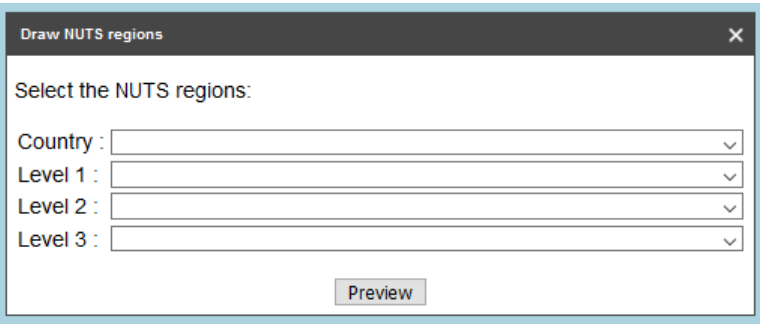


1	Zoom to the area of your proposal to the scale bigger than 1/150 000 e.g. 1/100 000
2	Click on the [Comprehensive Network] button
3	Click on the [Roads], [Railways] or [Inland Waterways]. The layer(s) will be added to the map
4	Click on the [Draw Action] button
5	Click on the type of Action you want to draw (point, line or polygon)
6	Move the cursor towards an existing line of [Roads], [Railways] or [Inland Waterways] or another map object which you drew
7	Press and hold the [Alt] button. The red cross will appear on the existing line and will stay

	<p>on the line if you move the cursor in its vicinity</p> 
8	<p>Click on the spot where you want to add a point or a starting point of your line or polygon. The point will be added where the cross is located. Release [Alt] button if you do not want to "snap" to existing map objects.</p>
9	<p>Continue your drawing by clicking on the remaining nodes of your line or polygon</p>
10	<p>Double click to finish your drawing</p>

5.4. How to add whole countries or NUTS regions

If you need to draw larger polygons like whole countries or NUTS regions, you don't need to draw them by hand. Follow these steps to add them to the map:

1	<p>Click on the [Draw Country/Region] button</p> 
2	<p>[Draw NUTS regions] window will appear</p> 
3	<p>Select country name and if needed names of lower level region(s)</p>
4	<p>Click on [Preview] to display and zoom onto the selected country/region</p>
5	<p>Click on [Add] to display the country/region on the map.</p>
6	<p>Repeat steps 3 - 5 to add other relevant regions</p>

Draw NUTS regions X

Select the NUTS regions:

Country :

Level 1 :

Level 2 :

Level 3 :


List of NUTS regions:

- X Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest
- X Prov. Vlaams-Brabant
- X Prov. Brabant Wallon

7 To remove a single region from the list click on the [x] symbol

8 To remove all regions from the list click on the [Reset List] button

9 Once you selected all the required regions, click on the [Add] button:



All the regions from the list will be added to the proposal.

Remark:

If the regions you are adding share a common border (e.g. two neighbouring countries) they will be merged into a single polygon – this is an intended functionality.

5.5. How to upload your GIS data

If you already have GIS data for your proposal you can upload it and the map objects will be created automatically. Be aware that the GIS data must have specific format to be loaded correctly. The supported file formats are:

- ESRI Shapefile (packed as a .ZIP file),
- Comma separated CSV file,
- GPS exchange format - GPX file,
- KML file

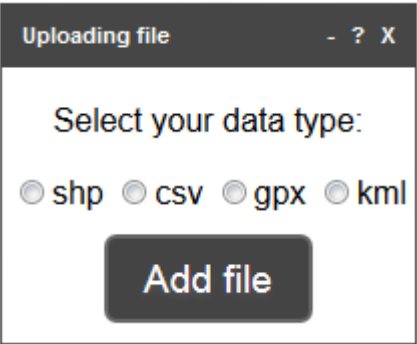
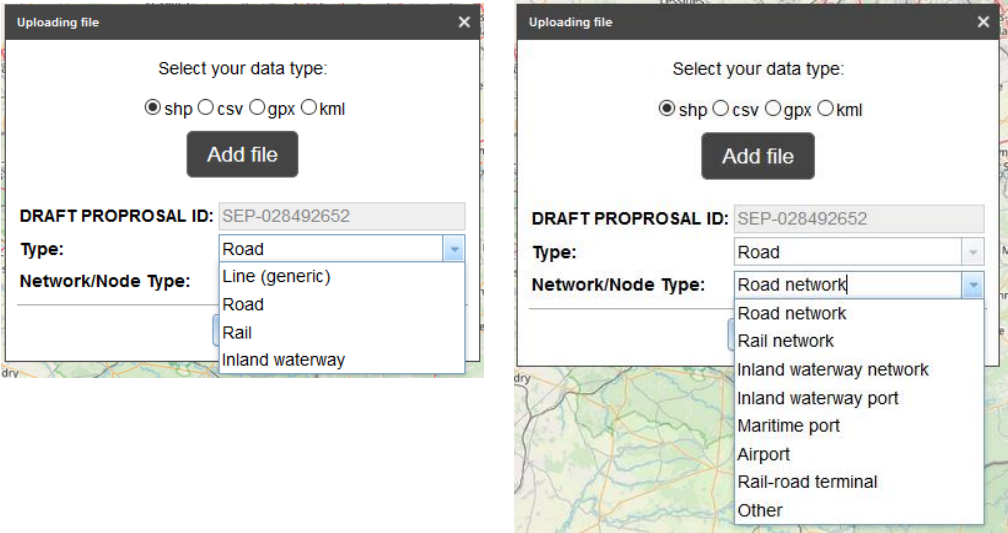
The files should meet the requirements concerning the projection and structure.

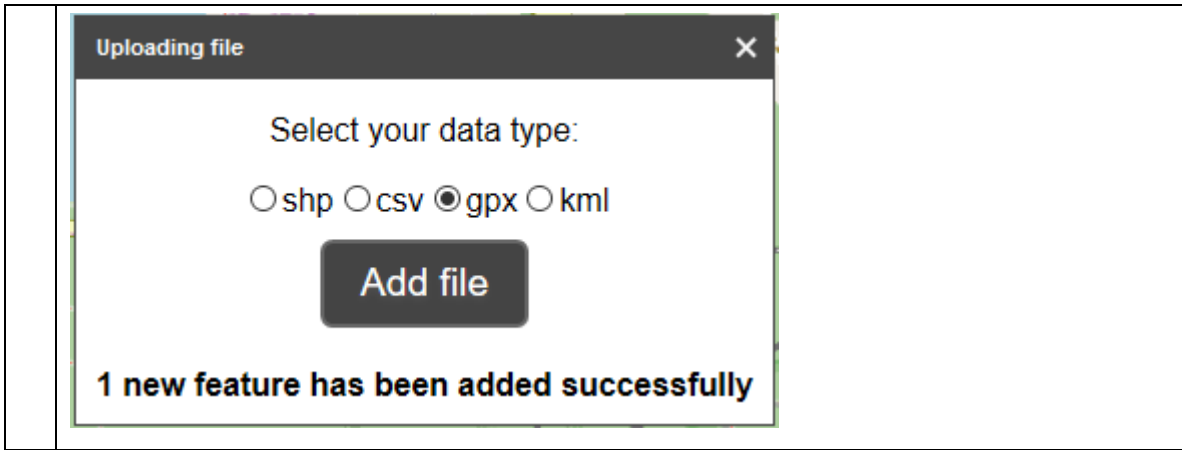
Attention!

Shapefiles should be zipped (all files: .SHP, .SHX, .DBF, .PRJ, etc.) and submitted as a zip-file. The Coordinate Reference System should be WGS 1984.

Comma separated files should have the following format (where X is longitude and Y is latitude):

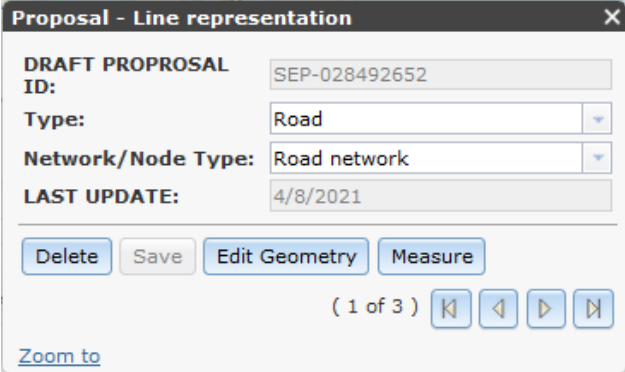
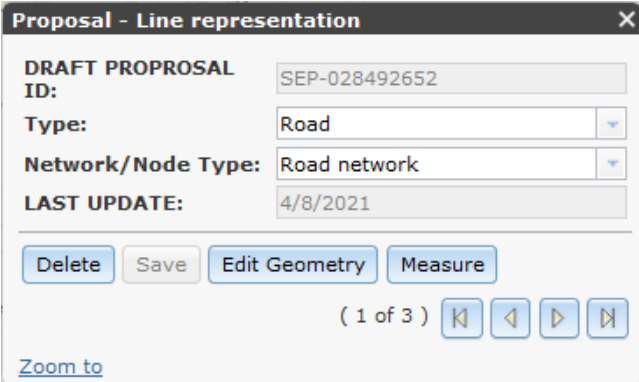
```
X, Y
-3.856334320000000, 51.231720090000003
-3.869418580000000, 51.229018029999999
-3.866209910000000, 51.229940820000003
-3.865544400000000, 51.228794780000001
-3.867826130000000, 51.228169659999999
```


1	Click on the [Upload File] button
2	<p>Select the type of file which you want to upload</p> 
3	Click on the [Add file] button, select the file you want to upload and click [Open]
4	<p>In the popup window define the Type of the uploaded proposal data and the type of node/network they belong to:</p>  <p>Remark:</p> <p><i>all data of the input file will be encoded with the Type and Network/Node type as selected. If many Types and/or many Network/Node types should apply to the data, make sure that you organise your input in separate file accordingly.</i></p>
5	After loading you will receive a message stating if the data has been loaded successfully

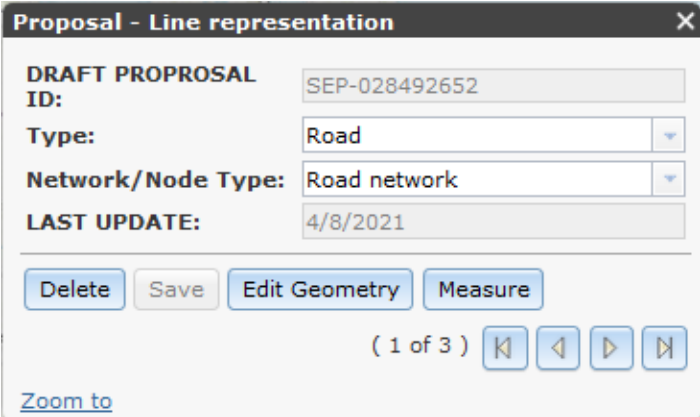



5.6. Modify an object which you drew earlier (if needed)

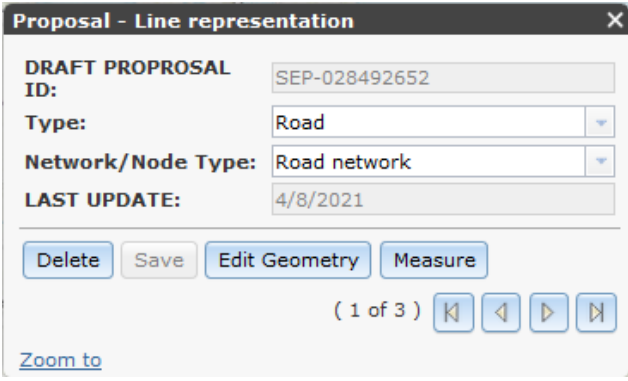
5.6.1. How to modify the shape of the previously drawn object

1	<p>Select an object by clicking on it</p> <p>If you clicked on place where several objects overlap you will see the information about number of objects and arrow buttons to change selection</p> 
2	<p>Click on the [Edit Geometry] button</p> 
3	<p>Click on the white and grey points, keep left mouse button pressed and move the cursor to modify the shape</p>
4	<p>Double click anywhere on the map to save the changes</p>

5.6.2. How to delete a point from a line or polygon

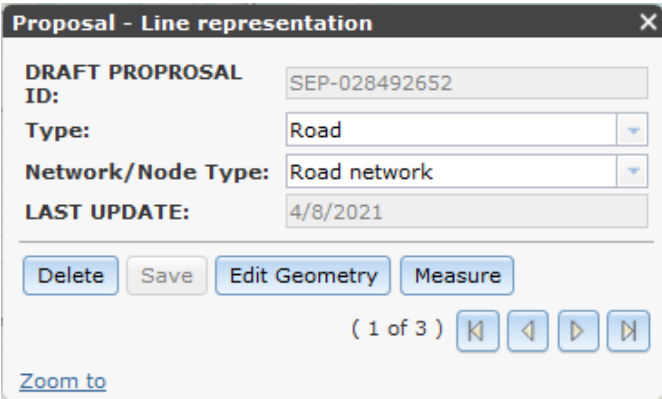
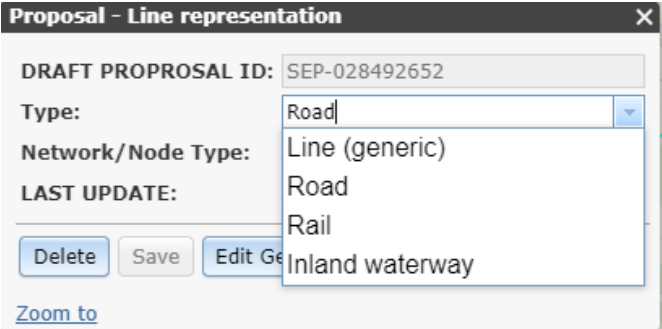
1	Select an object by clicking on it
2	<p>Click on the [Edit Geometry] button</p> 
3	<p>Click the right mouse button on the grey point you want to delete. The [Delete] button will appear</p> 
4	<p>Click on the [Delete] button. The selected point will be removed. Note that you cannot delete a point from a polygon that exists out of only 3 points and a line of 2 points</p>

5.6.3. How to delete a whole object

1	Select an object by clicking on it
2	<p>Click on the [Edit Geometry] button</p> 
3	<p>Click on the [Delete] button from the menu. The selected map feature will be deleted</p>

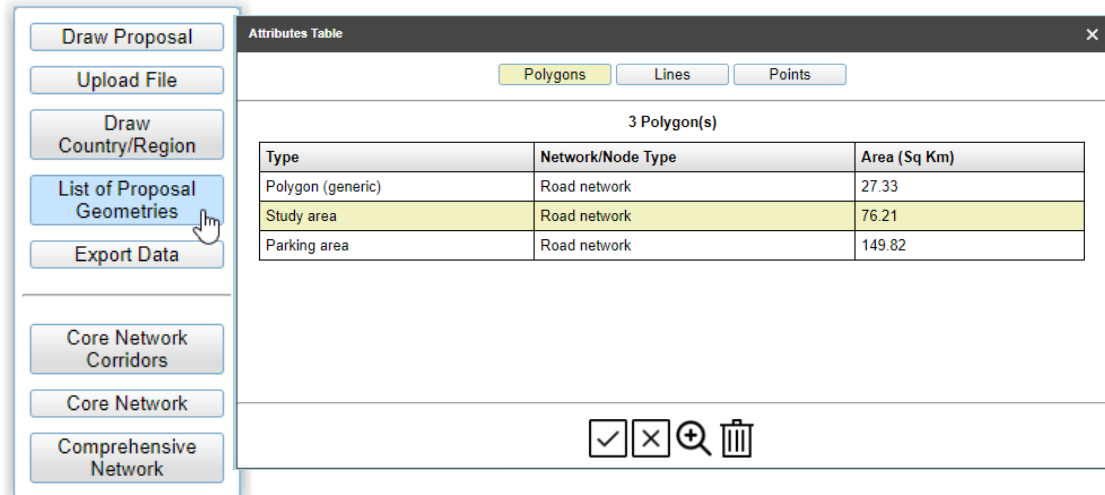
5.6.4. How to modify category of objects

1	Select an object by clicking on it
---	------------------------------------





- 2 Click on the [Edit Geometry] button
 
- 3 Select a value from the dropdown list e.g. [Rail]
 
- 4 Click on the [Save] button. The attribute will be changed

5.7. Miscellaneous map operations

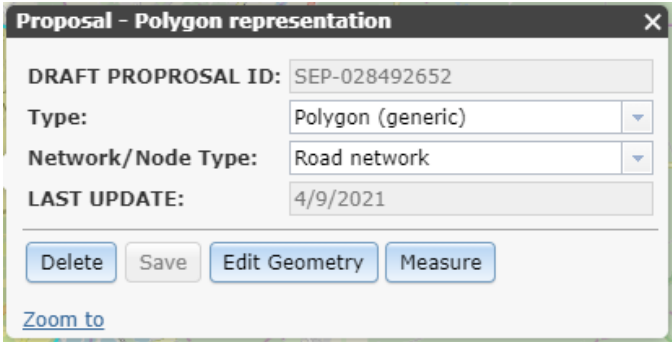
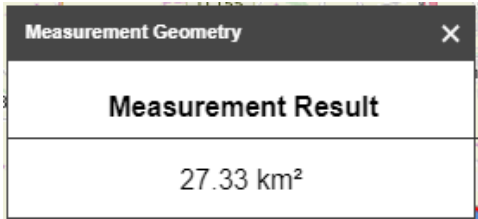
5.7.1. How to work with a list of all map features which you created

- 1 Click on the [List of Proposal Geometries] button. A new panel with a list of map features which you created will appear
 

Type	Network/Node Type	Area (Sq Km)
Polygon (generic)	Road network	27.33
Study area	Road network	76.21
Parking area	Road network	149.82

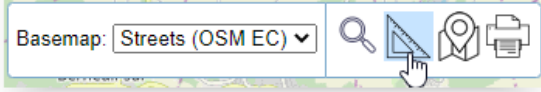
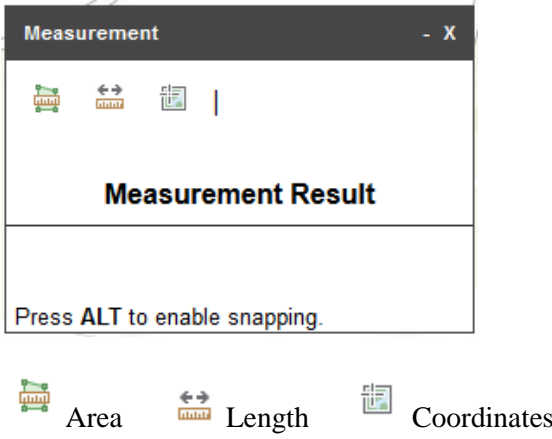
2	<p>Use button(s) [Polygons], [Lines] or [Points] to display list of polygons, lines and points from your proposal</p> <p>Click on a single row in a table to select a single map feature.</p> <p>Once a row or rows are selected you can use:</p> <ul style="list-style-type: none"> - Magnifier glass button  to zoom to selected map feature; - Delete button  to delete selected map feature(s). <p>Use a button with a tick mark  to select all map features from a table.</p> <p>Use a button with a cross  to unselect all selected rows.</p> <p>REMARK:</p> <p>If a map feature has 0 area or 0 length it means that geometry has not been created for that feature. This is usually due to an error in importing data. Such rows can be deleted using the delete button.</p>

5.7.2. How to get information on the position or dimensions of objects

1	Select an object by clicking on it
2	<p>Click on the [Measure] button</p> 
3	<p>The information about object area (for polygons), length (for lines) or coordinates (points) will be displayed in a pop up window</p> 
4	Click on the [X] button to close the information window.

5.7.3. How to measure objects on map

Measure distances, areas or get point coordinates.

1	Click on the [Measure] button 
2	Select the type of measurement 
3	Select measurement units
4	Click on a map to draw a point, line or polygon. The result will be shown in the measurement window
5	Click on the [x] icon to close the measurement window and remove measurement graphic from the map

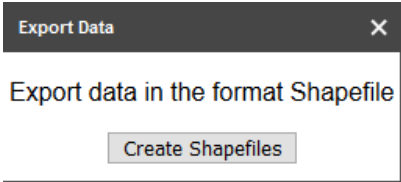
5.7.4. How to print a map of the proposal

Print a simple map with proposal features only (no other map layers can be shown on a printed map)

1	Click on the [Print] button. Print preview page will open
2	Zoom and pan to the map extent which you want to print
3	Click on the [Print] button from the top of the print preview
4	Pan and zoom the map print preview if needed
5	Follow the steps for printing of the browser which you use

5.7.5. How to export your data

You can export your data to a downloadable GIS file.

1	<p>Click on the [Export data] button</p> <p>Click the [Create Shapefiles] button.</p> 
2	After the export is complete, a [Download Shapefiles] links will appear.

5.7.6. Examples for CEF Transport

Examples of actions and the tools, geometry types and categories you should use to draw them.

Proposal subject	Tool	Type of geometry
Construction of charging station(s)	[Draw Proposal]	Point – Alternative fuels for....
Construction or upgrade of a section of road, railway or inland waterway.	[Draw Proposal] using snapping to existing roads, railways, inland waterways from [Comprehensive Network]	Line – Road, Rail or Inland waterway
Construction or upgrade of a terminal (port, airport, multimodal)	[Draw Proposal] Draw the outline of the area of upgraded or newly constructed installations.	Polygon – Infrastructure area
Ferry or locomotive refitted with a new equipment operating on route	[Draw Proposal] Draw the route	Line - Rail
Ferry or locomotive refitted with a new equipment to operate in the specified area.	[Draw Proposal] Draw area or use [Draw Country/Region] to create larger areas (regions, countries)	Polygon – Deployment area
A ship with new equipment operating between a number of ports	[Draw Action]. Mark each port with a point.	Point - ???
Implementing an information system in an area	[Draw Action] Draw area or use [Draw NUTS] to create larger areas (regions, countries)	Polygon – Deployment area
Implementing information system on a section of a route	[Draw Action] using snapping to existing roads, railways, inland waterways from [Comprehensive Network]	Line

6. CREATING CEF ENERGY APPLICATION DATA

This section applies to CEF Energy proposals only.

6.1. Select a tool to draw object(s) on the map

After locating the area of the proposal and checking the background information against PCIs you can start drawing the objects representing your proposal. Before you start you need to decide to which *type* and *category* they belong. Available types are: points, lines and polygons. Categories are: "Physical locations" and "Not physical locations". Categories are used to determine if the object you want to draw represents a physical, fixed structure or rather a line or area covered by an information system. Category can be later changed for an object drawn on the map.

Below you will find more details to help you choose the right type and category.

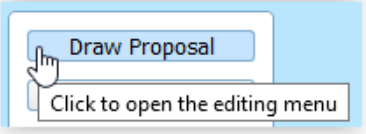
Types:

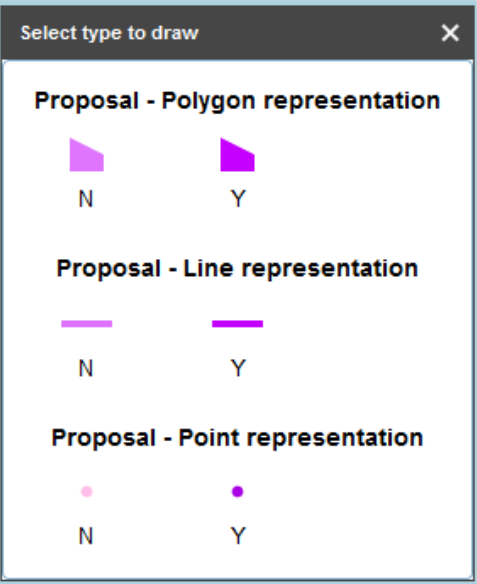
- **Proposal – Point representation** – use it for point objects like substations, compressor stations to be constructed/modified in the proposal;
- **Proposal – Line representation** – use it if the proposal refers to an existing or planned pipeline or high-voltage line;
- **Proposal – Polygon representation** – use it if your proposal concerns a construction of a larger object like a terminal or a region, e.g. a region where a new information system will be available or where a study will be conducted. Please note that we have provided a tool that allows you to select the name of a region or a country to draw automatically so that you do not have to draw map objects covering administrative areas or countries by hand - see "How to add whole countries or NUTS regions".

Categories:

- **Physical location** – physical intervention done to an element of infrastructure. For example an existing or planned substation, compressor station, pipeline, transmission line or a terminal;
- **Not physical location** – not a physical intervention. For example: an area covered by research or a new information system.

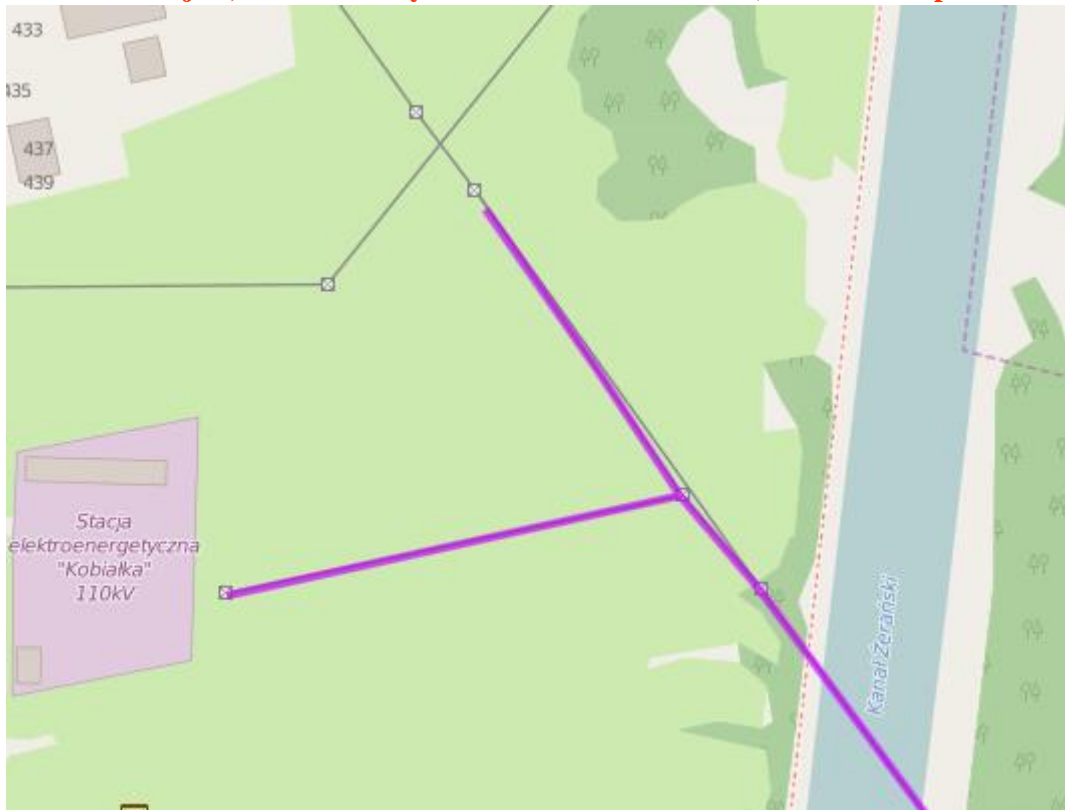
6.2. How to draw an object

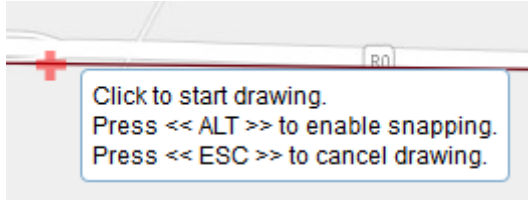
1	Click on the [Draw Proposal] button 
2	Click on the type of Proposal you want to draw

	
3	Move the cursor over the map
4	Left click on the map where you want to add a point or a starting point of a line or polygon
5	Continue drawing by left clicking on the locations of the remaining nodes of your line or polygon
6	Double click to finish drawing your line or polygon

6.3. How to draw an object "snapped" to other map objects

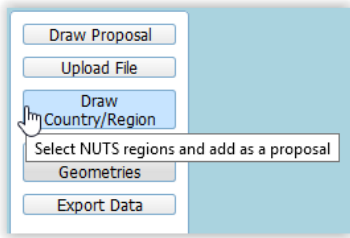
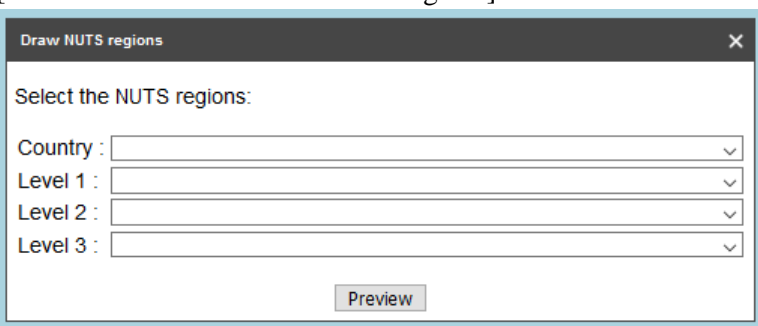
Using this functionality is strongly encouraged if the object you draw is connected to another object, which you drew earlier (see the picture below)

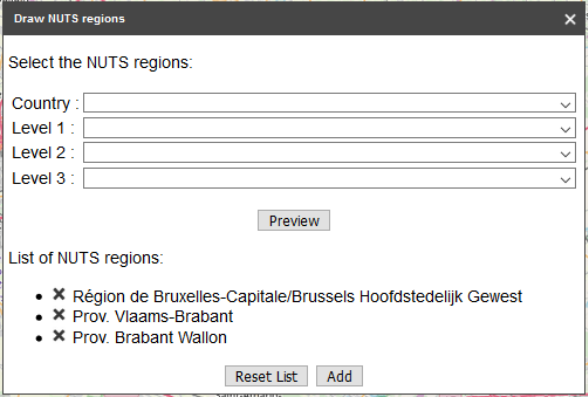
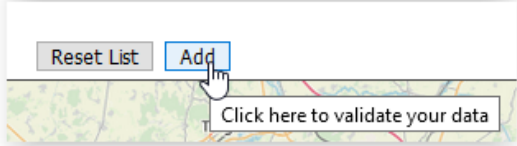


1	Zoom to the area of your proposal to the scale bigger than 1/150 000 f.e. 1/100 000
4	Click on the [Draw Action] button
5	Click on the type of Action you want to draw
6	Move the cursor towards an existing map features which you have drawn before
7	Press and hold the [Alt] button. The red cross will appear on the existing line and will stay on the line if you move the cursor in its vicinity.
	
8	Click on the spot where you want to add a point or a starting point of your line or polygon. The point will be added where the cross is located. Release [Alt] button if you do not want to "snap" to existing map objects.
9	Continue your drawing by clicking on the remaining nodes of your line or polygon
10	Double click to finish your drawing

6.4. How to add whole countries or NUTS regions

If you need to draw larger polygons like whole countries or NUTS regions, you don't need to draw them by hand. Follow these steps to add them to the map:

1	Click on the [Draw Country/Region] button
	
2	[Draw NUTS regions] window will appear
	
3	Select country name and if needed names of lower level region(s)
4	Click on [Preview] to display and zoom onto the selected country/region
5	Click on [Add] to display the country/region on the map.
6	Repeat steps 3 - 5 to add other relevant regions

	
7	To remove a single region from the list click on the [x] symbol
8	To remove all regions from the list click on the [Reset List] button
9	<p>Once you selected all the required regions, click on the [Add] button:</p>  <p>All the regions from the list will be added to the proposal.</p> <p>Remark:</p> <p><i>If the regions you are adding share a common border (e.g. two neighbouring countries) they will be merged into a single polygon – this is an intended functionality.</i></p>

6.5. How to upload your GIS data

If you already have GIS data for your proposal you can upload it and the map objects will be created automatically. Be aware that the GIS data must have specific format to be loaded correctly. The supported file formats are:

- ESRI Shapefile (packed as a .ZIP file),
- Comma separated CSV file,
- GPS exchange format - GPX file,
- KML file

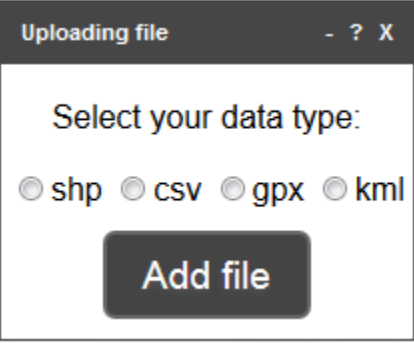
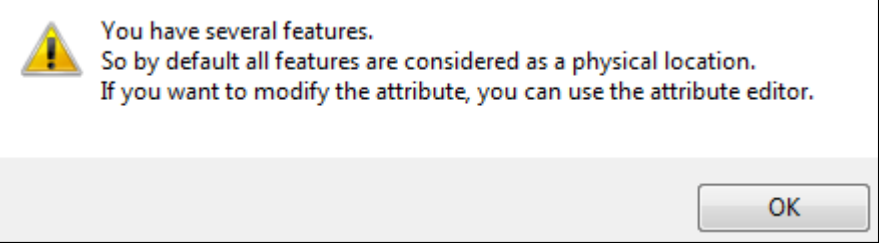
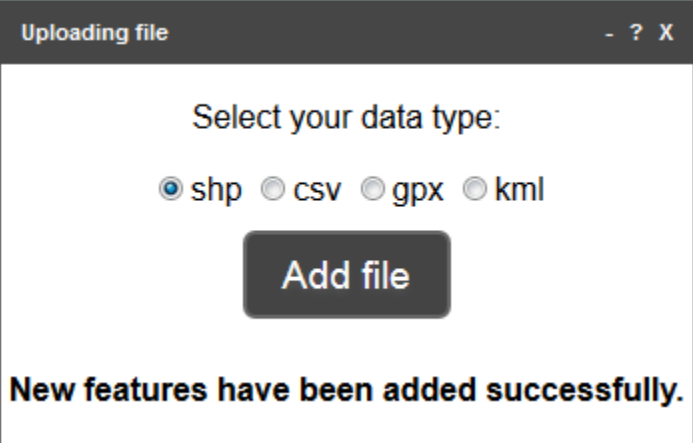
The files should meet the requirements concerning the projection and structure.

Attention!

Shapefiles should be zipped (all files: .SHP, .SHX, .DBF, .PRJ, etc.) and submitted as a zip-file. The Coordinate Reference System should be WGS 1984.

Comma separated files should have the following format (where X is longitude and Y is latitude):

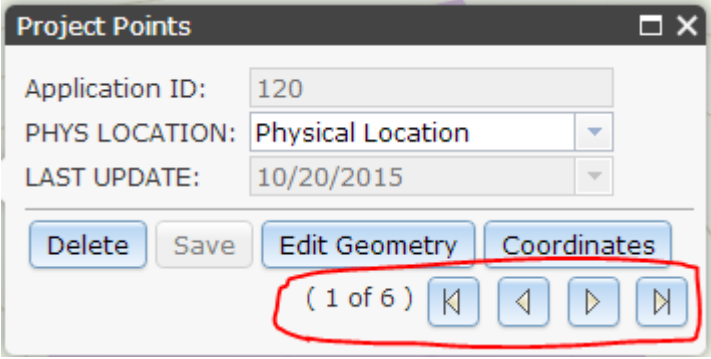
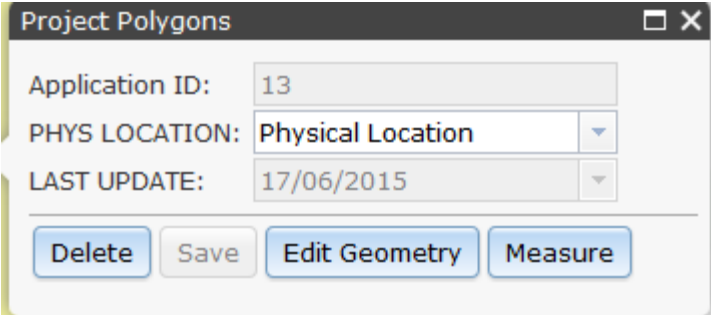
```
X, Y
-3.856334320000000, 51.231720090000003
-3.869418580000000, 51.229018029999999
-3.866209910000000, 51.229940820000003
-3.865544400000000, 51.228794780000001
-3.867826130000000, 51.228169659999999
```

1	Click on the [Upload File] button
2	<p>Select the type of file which you want to upload</p> 
3	Click on the [Add file] button, select the file you want to upload and click [Open]
4	<p>After loading you may receive warnings about automatic assignment of loaded objects e.g.:</p>  

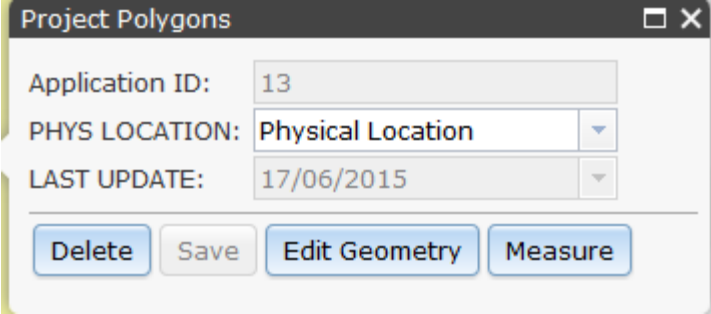
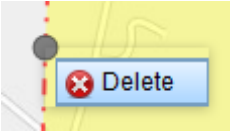
6.6. Modify an object which you drew earlier (if needed)

6.6.1. How to modify the shape of the previously drawn object

1	<p>Select an object by clicking on it</p> <p>If you clicked on place where several objects overlap you will see the information about number of objects and arrow buttons to change selection</p>
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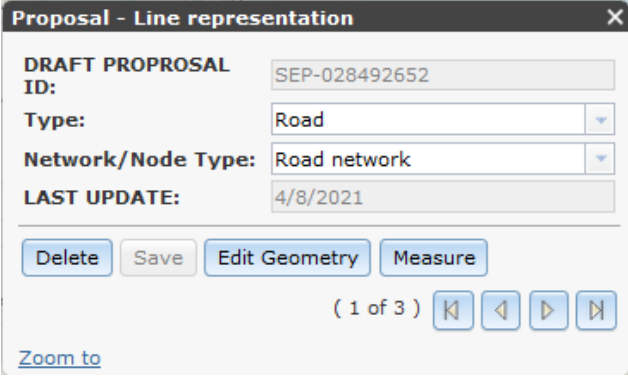
	
2	<p>Click on the [Edit Geometry] button</p> 
3	<p>Click on the white and grey points, keep left mouse button pressed and move the cursor to modify the shape</p>
4	<p>Double click anywhere on the map to save the changes</p>

6.6.2. How to delete a point from a line or polygon

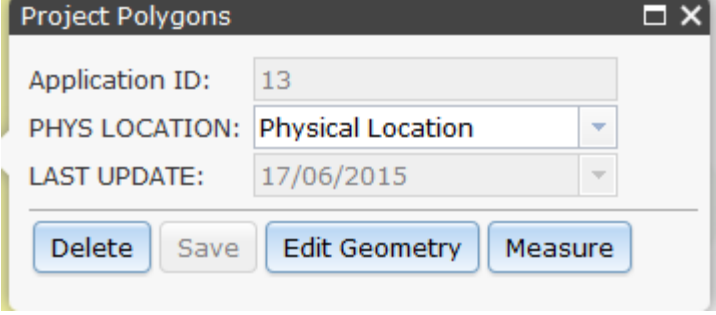
1	<p>Select an object by clicking on it</p>
2	<p>Click on the [Edit Geometry] button</p> 
3	<p>Click the right mouse button on the grey point you want to delete. The [Delete] button will appear</p> 
4	<p>Click on the [Delete] button. The selected point will be removed. Note that you cannot delete</p>

	a point from a polygon that exists out of only 3 points and a line of 2 points
--	--

6.6.3. How to delete a whole object

1	Select an object by clicking on it
2	Click on the [Edit Geometry] button 
3	Click on the [Delete] button from the menu. The selected map feature will be deleted

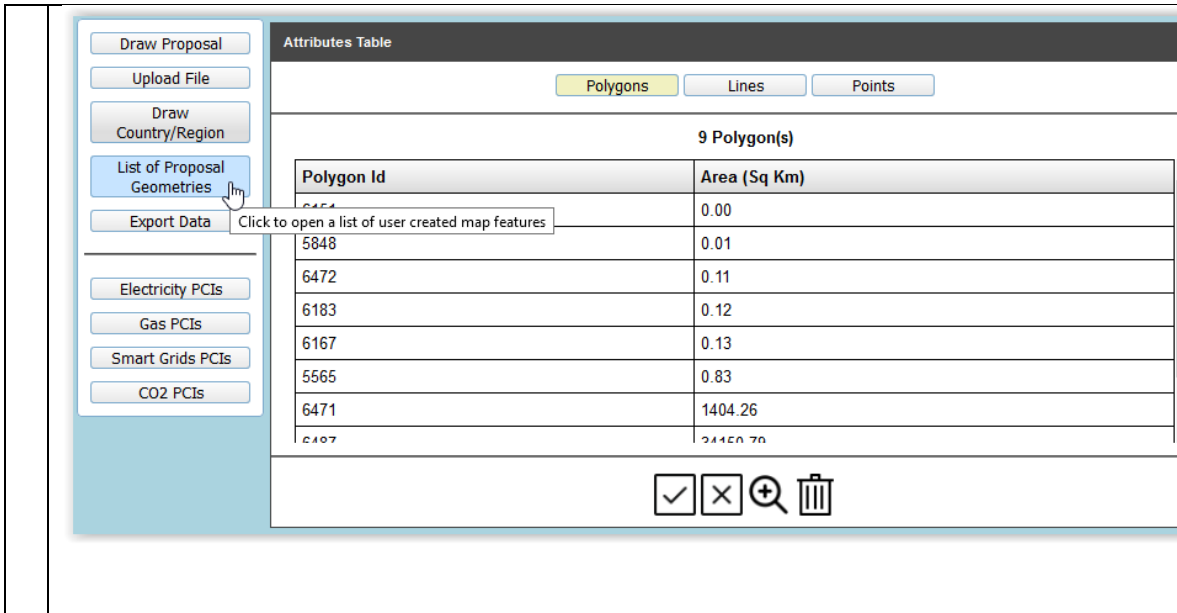
6.6.4. How to modify category of objects

1	Select an object by clicking on it
2	Click on the [Edit Geometry] button 
3	Select a value from the dropdown list [PHYS LOCATION]
4	Click on the [Save] button. The attribute will be changed

6.7. Miscellaneous map operations

6.7.1. How to work with a list of all map features which you created



1	Click on the [List of Proposal Geometries] button. A new panel with a list of map features which you created will appear
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2 Use button(s) [Polygons], [Lines] or [Points] to display list of polygons, lines and points from your proposal

Click on a single row in a table to select a single map feature.

Once a row or rows are selected you can use:

- Magnifier glass button  to zoom to selected map feature;
- Delete button  to delete selected map feature(s).

Use a button with a tick mark  to select all map features from a table.

Use a button with a cross  to unselect all selected rows.

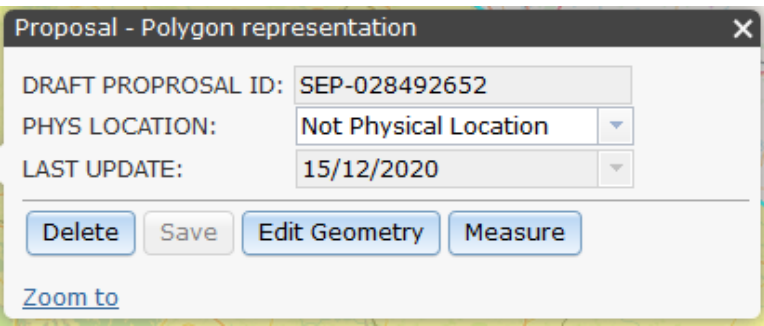
REMARK:

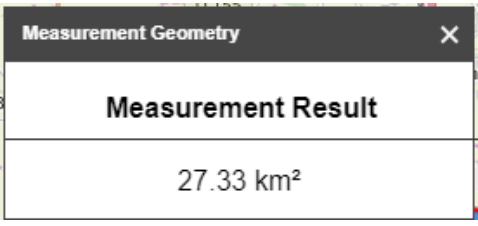
If a map feature has 0 area or 0 length it means that geometry has not been created for that feature. This is usually due to an error in importing data. Such rows can be deleted using the delete button.

6.7.2. How to get information on the position or dimensions of objects

1 Select an object by clicking on it

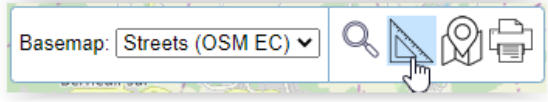
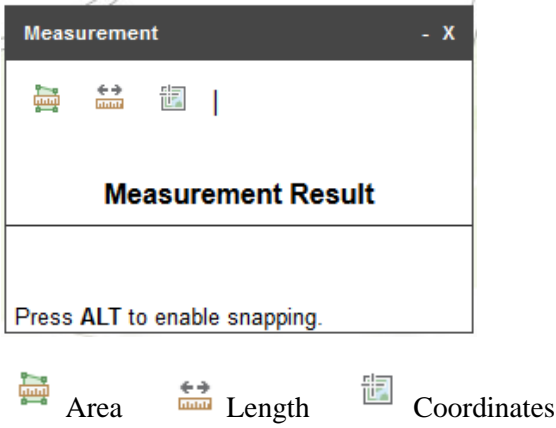
2 Click on the [Measure] button



3	<p>The information about object area (for polygons), length (for lines) or coordinates (points) will be displayed in a pop up window</p> 
4	<p>Click on the [X] button to close the information window.</p>

6.7.3. How to measure objects on map

Measure distances, areas or get point coordinates.

1	<p>Click on the [Measure] button</p> 
2	<p>Select the type of measurement</p> 
3	<p>Select measurement units</p>
4	<p>Click on a map to draw a point, line or polygon. The result will be shown in the measurement window</p>
5	<p>Click on the [x] icon to close the measurement window and remove measurement graphic from the map</p>

6.7.4. How to print a map of the proposal

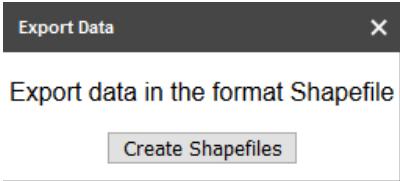
Print a simple map with proposal features only (no other map layers can be shown on a printed map)

1	<p>Click on the [Print] button. Print preview page will open</p>
2	<p>Zoom and pan to the map extent which you want to print</p>

3	Click on the [Print] button from the top of the print preview
4	Pan and zoom the map print preview if needed
5	Follow the steps for printing of the browser which you use

6.7.5. How to export your data

You can export your data to a downloadable GIS file.

1	<p>Click on the [Export data] button</p> <p>Click the [Create Shapefiles] button.</p> 
2	After the export is complete, a [Download Shapefiles] links will appear.

6.8. Examples for CEF Energy

Examples of actions and the tools, geometry types and categories you should use to draw them.

Proposal subject	Tool	Type of geometry	Physical location
Construction of a compressor station	[Draw Action]	Point	Yes
Analysis resulting in locations for compressor stations.	[Draw Action]	Point	Yes
Construction or upgrade of a section of pipeline or transmission line.	[Draw Action]	Line	Yes
Construction or upgrade of a terminal	[Draw Action] Draw the outline of the area of upgraded or newly constructed installations. If there are several terminals away from each other you can add a point in the center of each terminal so that it is visible in smaller map scales too.	Polygon and point	Yes
Implementing an information system in an area	[Draw Action] Draw area or use [Draw NUTS] to create larger areas (regions, countries)	Polygon	No
Deployment of a software or electronic control equipment on a section of pipeline	[Draw Action] Draw a line along the pipeline	Line	No

7. TROUBLESHOOTING

7.1. Application freezes

Sometimes problems with Internet connection or large number of requests sent to the server may cause long reaction times. In such a situation, you may close and reopen the interactive map window or even refresh browser window.

7.2. Cannot see basemap selection box – use scroll bars

The interactive map should display correctly on modern computer screens (wide screens). On some, older screens some widgets from the interactive map may not be visible – use scrollbars on the sides of the map window to show the needed widget (e.g. button menus or scale buttons).

7.3. Cannot add many countries in one go using NUTS tool

If you cannot add many countries in one go try adding it one by one.

7.4. Cannot select a line with a double-click

Sometimes the object you draw on the map can be difficult to select – attribute window doesn't show up after you click on the existing map object. Try panning map window or even reopening the interactive map window.

7.5. Cannot see basemap: canvas in zoom 5000

Some of the basemaps are not available in large zooms. If you don't see a background map select another one (e.g. satellite image) from the list of background maps.

7.6. Interactive map hasn't loaded for a very long time

Server can be overloaded due to large number of concurrent users. Refresh browser window.

7.7. No dialog opens when you click on the [Core Network Corridors], [Comprehensive Network], [Core Network] or [Electricity PCIs], [Gas PCIs] or [Smart Grids PCIs] buttons.

The dialog may have opened outside the visible part of the screen. Use scrollbars to check.

7.8. After deleting/adding an object on map and changing the map scale the object is visible/invisible.

In such situation map tiles have not been refreshed by the browser. Please clear your browser's cache.

7.9. After selecting a layer from table of contents (e.g. Core Network Corridor, Electricity PCIs) it doesn't show up immediately on map.

Sometimes, especially in the beginning of your work re-establishing connections between different data sources used by the application can take up to several minutes. Please wait until data is displayed.