

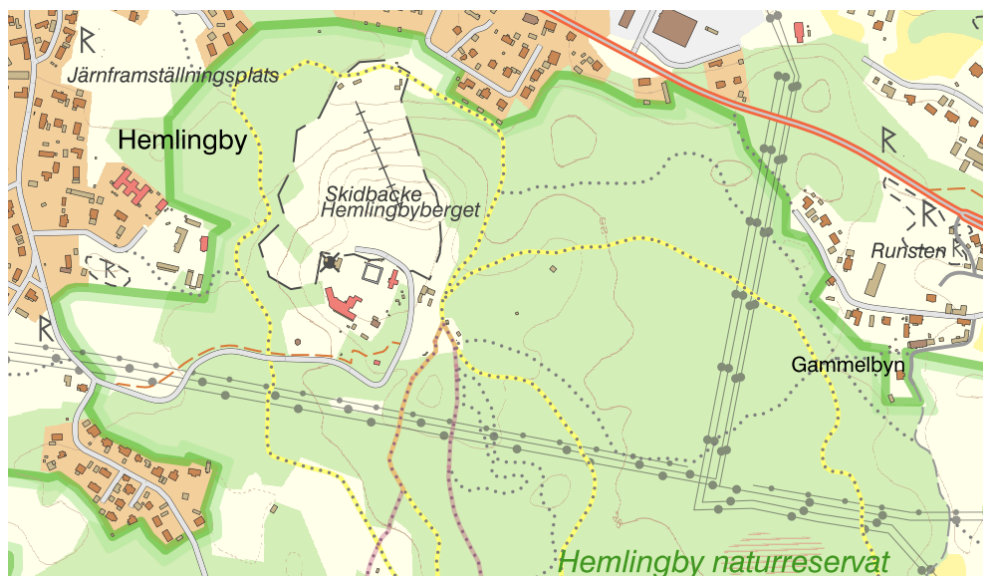
## PRODUCT DESCRIPTION

# Topographic web map View service, layer divided

DOKUMENT VERSION: 1.12

CONCERNING THE INTERFACE VERSION OF THE SERVICE: 1.1.4

*Figure 1. Section from Topographic web map View service, layer divided.*



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## I General description

Topographic web map View service is one of the map and image viewing services provided by Lantmäteriet. The service displays information from Lantmäteriet's basic data layer with a harmonized cartography between scales.

The map information is divided into fifteen types of information. Each type of information, except from terrain shading, is presented in two layers. One layer where the information is presented clearly and coloured-coded and one where the information is presented in a toned-down greyscale. The layering allows the user to choose which information to display on the map image. The toned-down layers are suitable as a background for other information that need to be distinguished.

### I.1 Contents

Topographic web map View service contains a selection of topographic information from several of Lantmäteriet's products. For a detailed description of the content of each product, please refer to the product descriptions on [Lantmäteriet's website](#).

- Address points from the Real Property Register
- Topography 10 Download, vector
- Topography 50 Download, vector
- Topography 100 Download, vector
- Topography 250 Download, vector
- Topography 1M Download, vector
- GSD Map of Sweden 1:5 million
- Adjusted VectorMap, level 0 (a public global geographic database)

Partly the content varies depending on what scale it is displayed in. Currently the different map products are created in separate production lines. Since data is retrieved from different map products inconsistencies will occur, e.g., that a municipality boundary shifting in the map image between different scales. For presentation of content in different scale levels see chapter 3 and a separate document with the symbol legend

The topographic layers that the service is divided into are briefly described below.

**I.1.1 TOPOGRAPHIC WEB MAP**

**TEXT**

The layer contains place names and informative text.

*Figure 2. Example image in scale 1:80 000.*



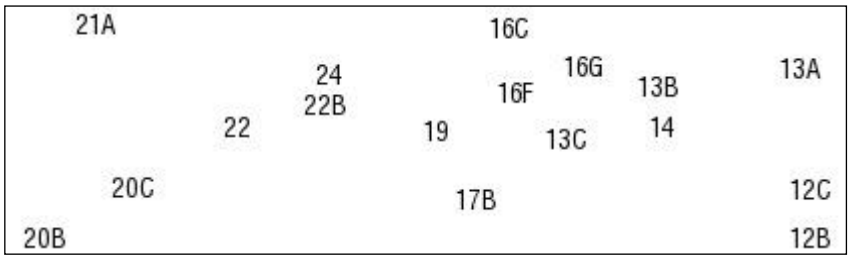
*Figure 3. Example image in scale 1:80 000, toned-down.*



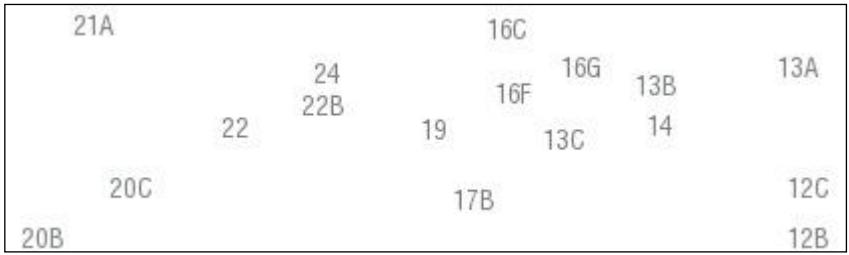
**ADDRESSES**

The layer contains address numbers.

*Figure 4. Example image in scale 1:1 500.*



*Figure 5. Example image in scale 1:1 500, toned-down.*



## ADMINISTRATIVE DIVISION

The layer contains national, county, and municipal boundaries, maritime territory boundaries as well as international cairns.

Figure 6. Example image in scale 1:1 000 000.

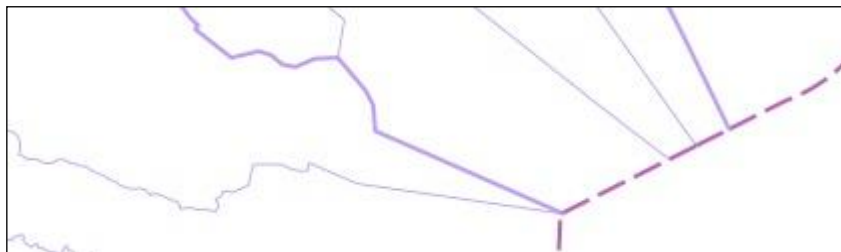
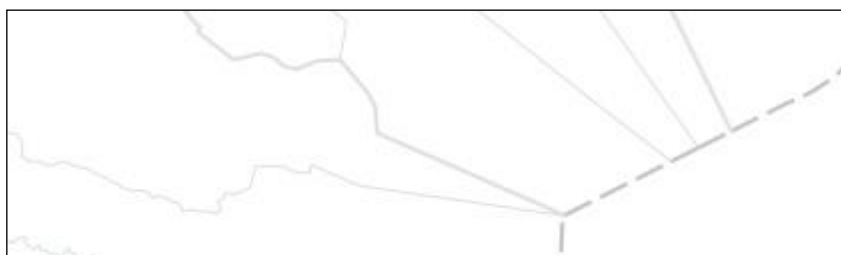


Figure 7. Example image in scale 1:1 000 000, toned-down.



## REGULATIONS

The layer contains nature conservation regulations, military areas, and restricted areas for terrain vehicles as well as ancient remains, cultural heritage remains and building monuments.

Figure 8. Example image in scale 1:10 000.

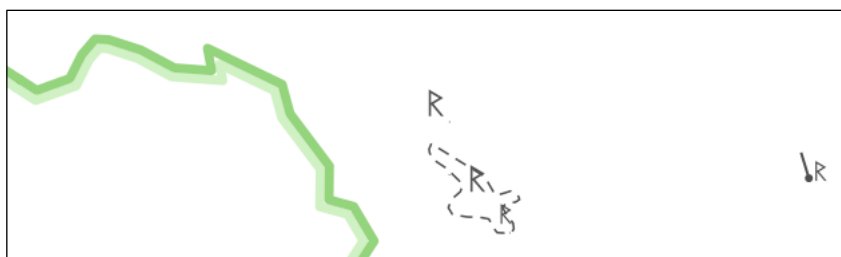
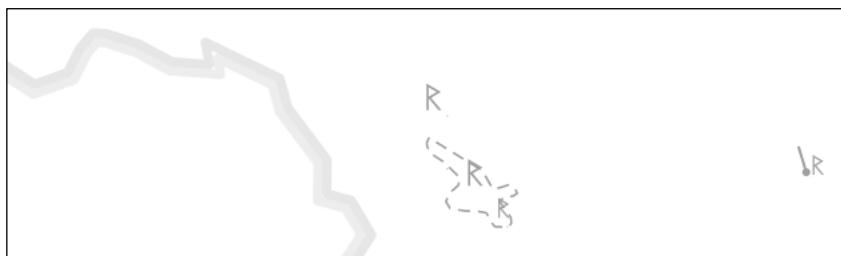


Figure 9. Example image in scale 1:10 000, toned-down.



## BUILDINGS

The layer contains buildings such as residential houses, industrial buildings, hospitals, castles, manors, farms, wind shelters and churches as well as symbols for built-up areas.

*Figure 10. Example image in scale 1:5 500.*



*Figure 11. Example image in scale 1:5 500, toned-down.*



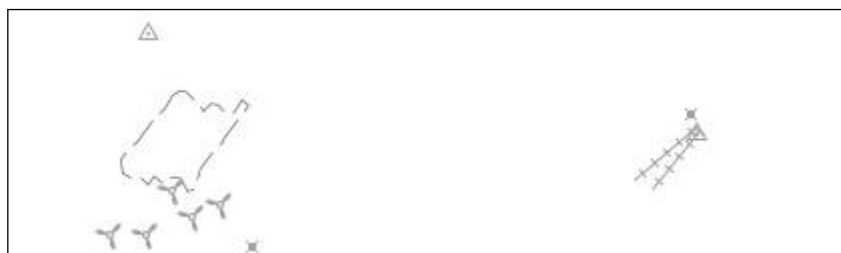
## FACILITIES

The layer contains facility areas, sports facilities, transformer areas, cemeteries, cable cars, reindeer fences, power plants, masts, chimneys, towers, wind turbines, and the Arctic circle.

*Figure 12. Example image in scale 1:50 000.*



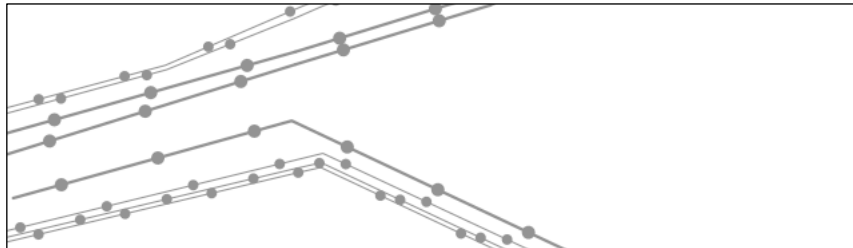
*Figure 13. Example in scale 1:50 000, toned-down.*



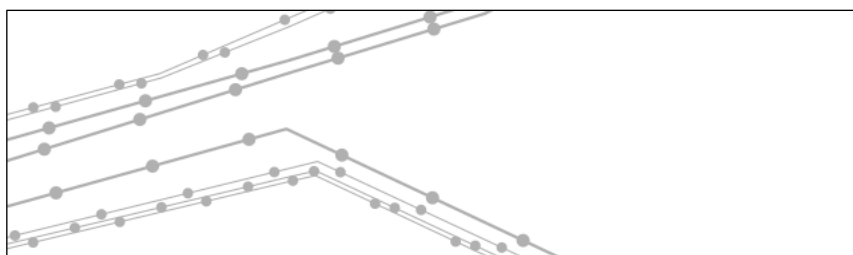
## ELECTRICITY TRANSMISSION LINES

The layer contains electricity transmission lines.

*Figure 14. Example image in scale 1:15 000.*



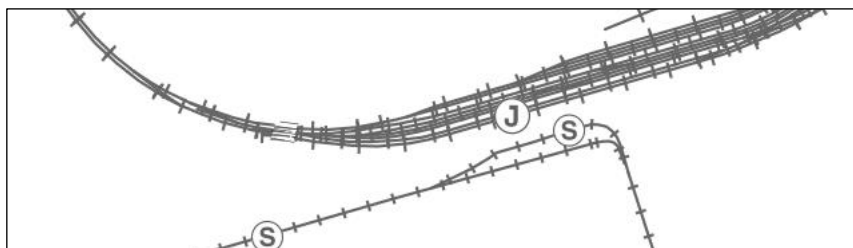
*Figure 15. Example image in scale 1:15 000, toned-down.*



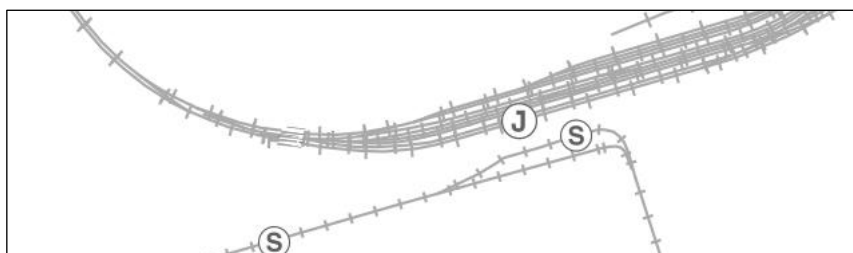
## RAILWAY

The layer contains railways, tramways, subway tracks and railway stations.

*Figure 16. Example image in scale 1:10 000.*



*Figure 17. Example image in scale 1:10 000, toned-down.*



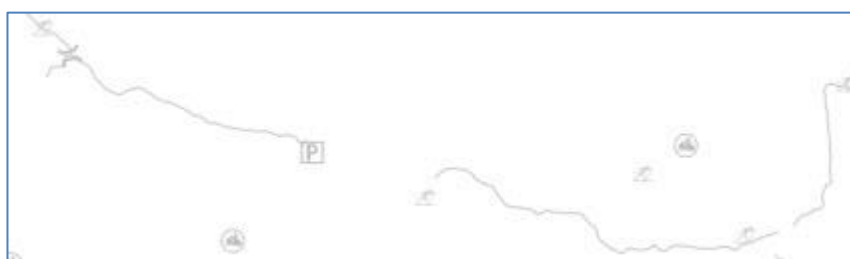
## MOUNTAIN INFORMATION

The layer contains parking, emergency phones, footbridges, fords, symbol for prescribed route for snowmobile, ski trail symbols, ski trails, dense vegetation etc.

Figure 18. Example image in scale 1:50 000.



Figure 19. Example image in scale 1:50 000, toned-down.



## COMMUNICATION

The layer contains roads, cycle paths, paths, hiking trails, illuminated tracks, ferry routes, road numbers, street names, road barriers, turning places, light-houses as well as runways.

Figure 20. Example image in scale 1:7 000.

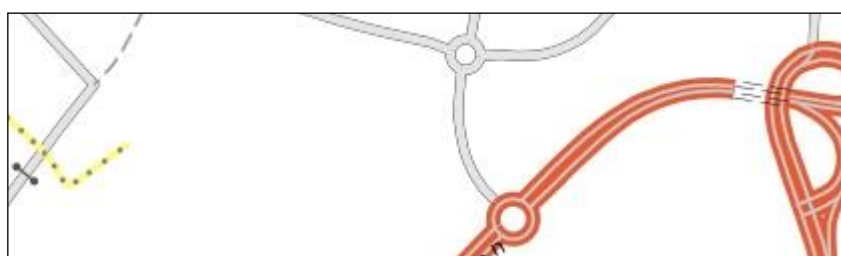
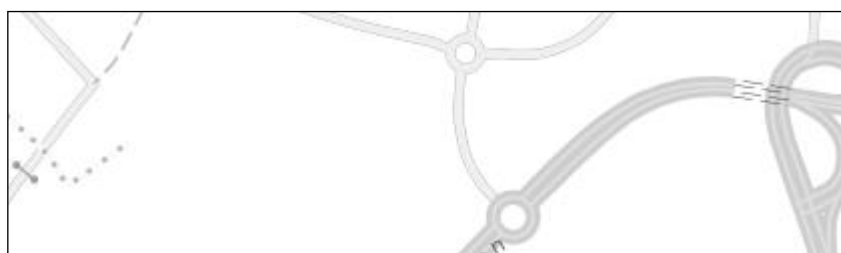


Figure 21. Example image in scale 1:7 000, toned-down.





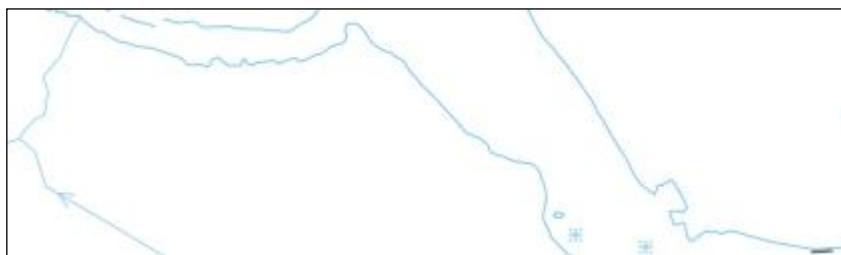
## HYDROGRAPHY

The layer contains water courses, boundary lines for water surfaces, canals, rapids, and waterfalls as well as facilities such as dams, locks, jetties, and piers.

*Figure 22. Example image in scale 1:10 000.*



*Figure 23. Example image in scale 1:10 000, toned-down.*



## CONTOURS

The layer contains contour lines, contour numbering as well as height point with elevation values.

*Figure 24. Example image in scale 1:100 000.*



*Figure 25. Example image in scale 1:100 000, toned-down.*



## HYDROGRAPHY SURFACES

The layer contains water surfaces.

*Figure 26. Example image in scale 1:24 000.*



*Figure 27. Example image in scale 1:24 000, toned-down.*



## LAND AREAS

The layer contains land cover surfaces such as forests, marshes, open land, bare mountains, arable land, glaciers, built-up areas, town squares as well as some surface boundary lines.

*Figure 28. Example image in scale 1:24 000.*



*Figure 29. Example image in scale 1:24 000, toned-down.*



## TERRAIN SHADING

The layer includes terrain shading.

*Figure 30. Example image in scale 1:250 000.*



### 1.2 Geographic coverage

Topographic web map View service includes the entire Sweden. In the smallest scales, information for Northern Europe is included.

### 1.3 Coordinate system

Plane: Refer to the technical description.

Height: RH 2000.

## 2 Quality description

Data capture, maintenance and data quality for the information displayed in the service vary depending on what product it comes from, i.e., the scale in which is displayed in (refer to tables in section 3.1). For a more complete description of quality refer to the products and product information on [Lantmäteriet's web site](#).

- [Topography 10 Download, vector](#)
- [Topography 50 Download, vector](#)
- [Topography 100 Download, vector](#)
- [Topography 250 Download, vector](#)
- [Topography 1M Download, vector](#)
- [GSD Map of Sweden 1:5 million](#)

## 2.1 Maintenance

### 2.1.1 MAINTENANCE AND UPDATE FREQUENCY

The information in the service is updated at different intervals depending on type of information and scale level. A simplified description of the maintenance frequency is that:

- The information in scale areas up to 1:15 000 is updated daily.
- The information in scales between 1:15 000 – 1:60 000 is updated weekly.
- The information in scale areas up to 1:60 000 is updated monthly.
- A more detailed description of how the information in the service is updated is presented in the table below.

*Table 1. Update frequency for each type of information.*

Type of information	Update frequency
Address points	1 time/day
Road name	1 time/ hour
Buildings	1 time/ hour
Topography 50 Download, vector	1 time/week
Topography 100 Download, vector	1 time/ week
Topography 250 Download, vector	1 time/ month
Topography 1M Download, vector	1 time/ year

### 3 Layout and plotting of data

Different products are the basis for information in different scale areas. The scale intervals are approximate and depend partly on the client used to display the map.

For examples on symbol legends in different scales, refer to a separate document.

#### 3.1 Plotting in different scales

The table below describes the main principle for within which scale ranges the different products are used.

*Table 2. Scale area for plotting for each product.*

From scale	To scale	Product, with any selection
1:1	1:3 800	Address points from the Real Property Register
1:1	1:15 000	Topography 10 Download, vector*
1:1	1:30 000	Topography 50 Download, vector *
1:1	1:90 000	Topography 100 Download, vector*
1:60 000	1:180 000	Topography 250 Download, vector*
1:180 000	1: ∞	Topography 1M Download, vector *
1:180 000	1: ∞	Adjuster VectorMap
1:1 450 000	1:11 600 000	Text from GSD Sweden Map 1:5 millions
*Some content is shown in other scale intervals, see table below.		

In the table below the contents of the different products is described, which is displayed in other approximate scale intervals than according to the main principle (the table above).

*Table 3. Scale range for plotting for each product and selection.*

From scale	To scale	Product	Selection of content
1:1	1:5 500	Topography 10 Download, vector	Built-up area names
1:1	1:11 000	Topography 10 Download, vector	Ground areas, hydrography, and text
1:1	1:15 000	Topography 10 Download, vector	Administrative classification, facilities, built-up areas, regulations, railways, communication, and power lines
1:1	1:30 000	Topography 50 Download, vector	Contours
1:11 000	1:30 000	Topography 50 Download, vector	Built-up areas, ground areas, hydrography, and text
1:15 000	1:30 000	Topography 50 Download, vector	Administrative classification, regulations, facilities, railways, communication, power lines and mountain information.
1:30 000	1:60 000	Topography 100 Download, vector	Administrative divisions, facilities, railways, communication, electricity transmission lines, regulations, built-up areas, hydrography, and text
1:30 000	1:90 000	Topography 100 Download, vector	Land areas and hydrography areas
1:30 000	1:180 000	Topography 100 Download, vector	Mountain symbols
1:30 000	1:240 000	Topography 250 Download, vector	Contours
1:60 000	1:90 000	Topography 250 Download, vector	Hydrography
1:60 000	1:360 000	Topography 250 Download, vector	Text
1:60 000	1:180 000	Topography 250 Download, vector	Administrative divisions, facilities symbols, railway, communication, electricity transmission lines and built-up areas.
1:60 000	1:240 000	Topography 250 Download, vector	Regulations except for military areas
1:60 000	1:360 000	Topography 250 Download, vector	Facilities lines and military areas

From scale	To scale	Product	Selection of content
1:60 000	1:1 450 000	Topography 1M Download, vector	Text
1:60 000	1: ∞	-	Terrain shading
1:90 000	1:180 000	Topography 250 Download, vector	Land areas and hydrography areas
1:180 000	1:720 000	Topography 1M Download, vector	Contours
1:180 000	1:960 000	Topography 1M Download, vector	Built-up areas
1:180 000	1:1 450 000	Topography 1M Download, vector	Facilities, railway, and hydrography areas
1:180 000	1:11 600 000	Topography 1M Download, vector	Communication
1:180 000	1: ∞	Topography 1M Download, vector	Administrative divisions and land areas
1:240 000	1: 970 000	Topography 1M Download, vector	Nature reserves

The above presentation is a rough classification, and there are details that do not follow the classification completely.

### 3.2 Information for printing

The maximum image size in the service is 4096\*4096 pixels to enable printing of map images in larger paper formats and/or in higher resolutions. User systems are recommended to only download the maximum image size if needed for printing to avoid issues with performance

## 4 List of changes

The table indicates in which version of the product description the change was made. The date indicates from which day the change is valid from.

*Table 4. Table of changes for the document.*

Version	Date	Changes from previous version
1.12	2023-04-04	Chapter 2.1.1 Maintenance frequency has been updated.
1.11	2023-02-01	Reference to the road Map and Mountain Map changed to the new product Topography 100 Download, vector. Reference to the Overview Map changed to the new product Topography 250 Download, vector.

Version	Date	Changes from previous version
		<p>Reference to the Sweden Map 1:1 million changed to the new product Topography Download, vector.</p> <p>Figure 2, 3, 18 and 19 is updated.</p> <p>Chapter 2.1.1 Maintenance frequency updated, including Table 1.</p> <p>Table 2 Scale range for plotting for each product is updated.</p> <p>Table 3 Scale range for plotting for each product and selection is updated.</p>
1.10	2022-09-01	<p>References to the Terrain Map changed to the new product Topography 50 Download, vector.</p> <p>Table 3 Scale range for plotting for each product and selection is updated.</p> <p>Chapter 2.1.1 Maintenance frequency updated.</p>
1.9	2021-10-01	<p>References to the Real Property Map changed to the new product Topography 10 Download, vector.</p> <p>Example images updated due to changes in style.</p>
1.8	2019-04-02	Links updated.
1.7	2019-03-27	<p>Text and table regarding maintenance frequency in section 2.1.1 have been updated.</p> <p>The Artic circle has been added.</p> <p>Limestone bog, peatery and shallow soil on flat limestone have been removed.</p>
1.6	2017-09-01	Information about quality in section 2. Quality description has been clarified.
1.5	2017-06-28	Information about military restricted areas has been removed from the service.
1.4	2017-01-17	<p>Information about GSD Locality, which has expired as a product, has been removed from the text.</p> <p>Cartographic changes in the service:</p> <ul style="list-style-type: none"> <li>• Snowmobile route information has received a new style.</li> </ul>
1.3	2016-09-01	A clarification regarding inaccuracies in the service between various scales has been added under Content.
1.2	2016-01-01	<p>Cartographic changes in the service:</p> <ul style="list-style-type: none"> <li>• Breakers and depth values are only displayed in scale 1:1 - 1:15 000.</li> <li>• The service is supplemented with mountain information in scale 1:15 000 – 1: 120 000.</li> </ul>
1.1	2015-02-17	<p>Cartographic changes:</p> <ul style="list-style-type: none"> <li>• Adjustment have been made to display Sami characters correctly in the text.</li> </ul>



Version	Date	Changes from previous version
		<ul style="list-style-type: none"> <li>• More street names have become visible by using a dynamic method of adapting names based on the map's section.</li> <li>• In the selection of address numbers, a reprioritization is now made based on the current address, so that the corner property receives the address number that applies.</li> <li>• Hiking trails are placed over roads and made transparent so that trail markers stand out.</li> <li>• Tunnels are given a new thinner style and are always placed over all roads and railways. Tunnel for cycle paths is included and the same style is used as for all other tunnels.</li> <li>• In larger scales railways now have a slightly narrower style. In smaller scales railway have the same style as in other scales.</li> <li>• Buildings have been given a new style where both building types and colours have been adjusted.</li> <li>• After the cartographic changes the sample images have been replaced.</li> <li>• The technical description for the service is now referred to for plan coordinate system</li> </ul>
1.0	2013-09-17	Established version.