

PRODUCT DESCRIPTION:

GSD-Map of Sweden 1:1 million, vector format

DOCUMENT VERSION: 5.4

Figure 1. Section of the GSD-Sweden map 1: 1 million, vector.



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I General description

I.1 Contents

The database GSD-Sweden map 1: 1 million, vector was originally the basis for the printed map of Sweden in scale 1: 1 million, and the information stored in the database has in large part been chosen for this purpose. The database also meets international requirements.

GSD-Map of Sweden 1:1 million contains administrative division, land types, lakes and watercourses, built-up areas, roads and railways, national parks and text.

Foreign areas contain somewhat fewer features than Sweden. The major differences are that there are only three classes in the polygon layer for land types (lake, locality and land type) and that the point layer for built-up areas and elevation points only contains airports and smaller built-up areas (in Norway).

This document contains a description of the structure of GSD-Map of Sweden 1:1 million.

I.2 Geographic coverage

The database covers the whole of Sweden as well as some parts of Denmark, Norway, Finland, Estonia, Latvia, Lithuania and Russia. The limiting coordinates of most of the layers are:

Table 1. The boundary coordinates for most layers.

| | |
|--------------|-----------|
| N-min | 6 100 000 |
| N-max | 7 678 000 |
| E-min | 240 000 |
| E-max | 940 000 |

The layers administrative division and land use are limited by the coordinates:

Table 2. The boundary coordinates for the layer's administrative division and land use.

| | |
|--------------|-----------|
| N-min | 6 111 000 |
| N-max | 7 671 000 |
| E-min | 245 000 |
| E-max | 921 000 |

1.3 Coordinate system

Plane coordinate system: SWEREF 99 TM

Height system: RH 2000

For information in which other coordinate systems the product can be delivered in, see chapter Koordinatsystem in the document [Fees and shipping information for geodata\(pdf\)](#) (at present only in Swedish) at [Lantmäteriet's webpage](#) select Maps and geo-graphic information and Terms and Fees.

1.4 Sami text

Sami names are presented with the established orthography of the respective language areas, see Appendix 2. A list of Sami characters is given in Appendix 3.

2 Quality description

2.1 Purpose and utility

GSD-Sweden maps, vector, is the collective name of several databases in vector form with different degrees of detail and scales. They belong to the information that Lantmäteriet provides without license fee as open data.

The map of Sweden in scale 1: 1,000,000 is excellent as a background map and for different types of theme presentations. The content is adapted to the scale to give a good cartographic image.

The vector format allows you to tailor the map to your own business. You can:

- add and link your own information to objects in the map
- integrate map data in your own system
- display information as required using the layer division.

2.2 Data capture

2.2.1 LINEAGE

The database has to the greatest extent possible been produced through automatic generalising routines, and data has first and foremost been collected from the GSD-General Map.

Data on Norway has been collected from the Norwegian map database for the scale 1:1 million, N1000. Data on remaining countries has been collected from MapBSR (Map Baltic Sea Region) which is adjusted to the scale 1:1 million. Certain revision and re-coding of data has been made.

2.3 Maintenance

Updating of the Sweden map is done through a working method that is event based. This means that change data based on the Property Map's collaboration with other state authorities, municipalities and organizations is selected based on objects, changes in geometry or attributes and date ranges.

The objects that are updated in this way are nature conservation, railways and roads. Even change data from error reports that arrive at the Land Survey is event-managed.

In addition to the above, some editorial collection at the Land Survey of selected objects is also made. In this way, administrative divisions and airports are collected annually.

Changes to built-up areas are updated according to Statistics Sweden's update interval of urban areas. Other land areas are not updated, nor hydrography.

The place names are updated according to the name decision from Lantmäteriet's place name section. The foreign areas in the Sweden map are not updated.

2.3.1 MAINTENANCE FREQUENCY

New vector data is available twice a year.

2.4 Data quality

2.4.1 COMPLETENESS

Completeness is related to the selection of each detail type.

There are also some rules regarding generalization of information in the Map of Sweden 1:1 million that restrict the number of items presented on the map.

2.4.2 LOGICAL STRUCTURE

Administrative boundaries form closed polygons. Land use also form closed polygons. Roads and railways form networks. Connections between other line features are not always mathematically correct.

2.4.3 THEMATIC ACCURACY

Thematic accuracy varies.

2.4.4 POSITIONAL ACCURACY

Information on positional accuracy depends on the measurement method, generalization and how distinct the object is.

Due to cartographic generalizations, location errors of up to 1000 m may exist.

Positional accuracy describes how well a given position corresponds to its real position in the land for an object positioned in relation to the principal coordinate system. Geometrical requirements on positional accuracy depend on the objects' distinctness within a geographically limited area. Concrete objects have higher requirements than objects with diffuse boundaries in aerial image interpretation.

3 Contents of delivery

3.1 Folder structure

3.1.1 DOCUMENT

This folder, which is included in all deliveries, contains documents that describe the product.

3.1.2 FONT

TrueType fonts are included in the file *GSDsvk.ttf*.

For correct presentation of the Sami text are the files *GSDTxt.ttf*, *GSDTxb.ttf*, *GSDTxbn.ttf*, *GSDTxbni.ttf*, *GSDTxbnb.ttf* delivered.

3.1.3 SVK

This folder contains one or more sub-folders containing data on the ordered area and the format. In addition to the files with map data, this folder also contains a file in which all the features in each layer are listed.

3.1.4 ARCGIS (ONLY WITH SHAPE FORMAT)

When data is supplied in Shape format this folder is enclosed, which contains a LYR file.

3.2 Set of files

3.2.1 SHAPE-FORMAT

Data in Shape format is supplied in 5 files per layer.

Table 3. List of which 5 files are available for the shape format.

| | |
|--------------|---|
| *.shp | Geometry file. |
| *.dbf | Attribute file in Dbase format. |
| *.shx | Index file. |
| *.prj | Projection file (only when SWEREF 99 TM is used). |
| *.cpg | Encoder file. |

Geometry index is not created for the Shape files.

Attribute index is not created for the Dbase files.

Encoder file is needed for correct display of Swedish and Sami text.

Annotation text is delivered as follows.

Table 4. Annotation text.

| | |
|---|---|
| * | ArcInfo Coverage with set text plotting style (annotation). |
|---|---|

3.2.2 MAPINFO-FORMAT

Data in MapInfo (tab) format is supplied in 4 files per layer.

Table 5. List of the 4 files available for the MapInfo format.

| | |
|-------|----------------------------------|
| *.tab | Main file/Table definitions. |
| *.dat | Attribute file. |
| *.map | Geometry file. |
| *.id | Index file for graphic features. |

The tab files do not have geometry and attribute indexes.

3.3 Division into layers

The information in deliveries of GSD-Map of Sweden in Shape format is divided into 15 layers based on line, point, text and polygon. File names have, to the greatest extent possible, been given a logical structure. In the first part of the name, the first letter identifies the theme (for example “a” for administrative information and “v” for roads), the second letter identifies the type of geometry (“l” for lines, “p”/“s” for points/symbols, “y” for area and “t” for text). The second part of the name, (after “_”), is common to all files in a folder. Sets of attributes vary between the different layers and are described in detail in section 5.

4 Layout and plotting of data

4.1 On-screen presentation

4.1.1 GENERAL INFORMATION

The database's generalizations, text and symbol placements are adapted to scale 1: 1,000,000. The setting of plotting style for this product has been performed at a scale of 1:500,000. This scale can therefore be considered suitable for presentation on screen. The plotting style are customized to look like the Topographic web map.

Recommended plotting sequence of the layers is presented in Appendix 1. The best plotting results are obtained if both the MY and ML layers are used.

POLYGONS

The MY layer must be opened to obtain a land polygon layer with full coverage.

SYMBOLS

The font GSDsvk.ttf must be installed to ensure correct presentation of symbols. When setting the plotting style for symbols, the attribute SRIKT has been used to ensure correct orientation.

TEXT

When setting text, the attribute KKOD has determined font, colour and size. Other attributes used are TJUST (anchor point) and TRIKT (orientation). Text strings are, however, not plotted with spaced characters. This is only shown in the attribute TSPARR as a percentage of the size of the delivered strings relative to those originally produced.

4.1.2 SHAPE-FORMAT

The GSD-Map of Sweden standard plotting style are customized to look like the Topographic web map. For use of the data in ArcMap, there are plotting style settings in the LYR file in the arcgis folder.

In the LYR files it is possible to steer whether or not features should be re-scaled when the scale in the program is changed. This has been done in the LYR file enclosed with delivery. In addition, the LYR file contains settings that determine which layers are to be shown at different scale intervals (see Appendix 1).

Text is supplied both as points, with the text as an attribute, and as text with a set plotting style in the ArcInfo Coverage format.

4.1.3 MAPINFO-FORMAT

The GSD-Map of Sweden standard plotting style are customized to look like the Topographic web map. On delivery, all objects in all the layers contains values for the parameters that steer which colour, size and shape are to be used when they are plotted.

MapInfo 4, or a later version, must be used if you want the symbols to be rotated when they are plotted.

4.2 Installing fonts

The fonts supplied with this delivery must be installed, irrespective of the software that you use, to ensure correct presentation, symbols and text. This is done via Control Panel-Fonts.

5 Description of layers and list of codes

This section is a description, layer by layer, of the details that are included in them and with which attributes the details are defined.

The description of the layers is as follows:

- The column *Layer name* (Sw = *Skiktnamn*) contains the layer name/file name that is given to files when they are delivered. XXXXX = the sheet code/area name.
- The column *Category code* (Sw = *Kategorikod*) contains the feature's numerical code.
- The column *Description* (Sw = *Beskrivning*) contains a clarification of the Category code in clear text.

Attributes are described as follows:

- The *No.* column, (Sw = *Nr*) contains the running numbers for the layer's attributes.
- The *Attribute* column, (Sw = *Attribut*) contains the name of the attribute.
- The *Type* column, (Sw = *Typ*) contains the data that is used - integer/decimal/character.
- The *Length* column, (Sw = *Längd*) contains the number of characters allocated to this field.
- The column *Description*, (Sw = *Beskrivning*) contains a short description of the attribute.

5.1 Administrative division

5.1.1 AK POLYGON LAYER WITH DIVISION INTO MUNICIPALITIES

Contains municipalities as polygons.

Table 6. Content in AK polygon layer with municipal division.

| Layer name | Category code | Description |
|------------|---------------|--------------|
| AK_riks | 414 | Municipality |

Table 7. Set of attributes for AK polygon layer with municipal division.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|------------|------------|--------------|--------------|----------------|--|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |
| 3 | KOMMUNKOD | Decimal | 4,0 | Decimal | 4,0 | Municipality code, does not contain initial zero |
| 4 | KOMMUNNAMN | Text | 30 | Text | 30 | Municipality name |
| 5 | LANSKOD | Decimal | 2,0 | Decimal | 2,0 | County code, does not contain initial zero |
| 6 | LANSNAMN | Text | 30 | Text | 30 | County name |
| 7 | KOM_KOD | Text | 4 | Text | 4 | Municipality code, complete code |
| 8 | LAN_KOD | Text | 2 | Text | 2 | County code, complete code |

5.1.2 AN POLYGON LAYER WITH DIVISION INTO COUNTIES

Contains counties as polygons.

Table 8. Content in AN polygon layer with county division.

| Layer name | Category code | Description |
|------------|---------------|-------------|
| AN_riks | 413 | County |

Table 9. Set of attributes for AN polygon layer with county division.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |
| 3 | LANSKOD | Decimal | 2,0 | Decimal | 2,0 | County code |
| 4 | LANSNAMN | Text | 30 | Text | 30 | County name |

5.1.3 AL LINE LAYER WITH ADMINISTRATIVE DIVISION

Contains administrative boundaries down to municipality level.

Table 10. Contents in AL line layer with administrative division.

| Layer name | Category code | Description |
|------------|---------------|--------------------------------|
| AL_riks | 4110 | National boundary |
| AL_riks | 4120 | Territorial boundary in Sweden |
| AL_riks | 4130 | County boundary in Sweden |
| AL_riks | 4140 | Municipality boundary |

Table 11. Set of attributes the AL line layer with administrative division.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.2 Land data

5.2.1 MY POLYGON LAYER WITH LAND TYPES

Table 12. Contents in MY polygon layer with land types.

| Layer name | Category code | Description |
|------------|---------------|---------------------------------------|
| MY_riks | 1 | Sea, territorial waters |
| MY_riks | 2 | Sea, international waters |
| MY_riks | 3 | Water (lakes and larger watercourses) |
| MY_riks | 4 | Locality |
| MY_riks | 5 | Forest |
| MY_riks | 6 | Marshland |
| MY_riks | 7 | Open area |
| MY_riks | 8 | Region above the tree line |
| MY_riks | 11 | Glacier |
| MY_riks | 12 | Bare limestone area |
| MY_riks | 13 | Land type, foreign |

Table 13. Set of attributes for MY polygon layer with land types.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.2.2 ML LINE LAYER WITH LAND AREAS

Contains limiting lines for land areas.

Table 14. Contents in ML line layer with limiting lines for land areas.

| Layer name | Category code | Description |
|------------|---------------|---|
| ML_riks | 102 | Sea, territorial waters - Sea, international waters |
| ML_riks | 103 | Sea, territorial waters – Water (lakes and large rivers) |
| ML_riks | 104 | Sea, territorial waters - Locality |
| ML_riks | 105 | Sea, territorial waters - Forest |
| ML_riks | 107 | Sea, territorial waters - Open area |
| ML_riks | 112 | Sea, territorial waters - Bare limestone area |
| ML_riks | 113 | Sea, territorial waters - Land type, foreign |
| ML_riks | 204 | Sea, international waters - Locality |
| ML_riks | 213 | Sea, international waters - Land type, foreign |
| ML_riks | 304 | Water (lakes and large rivers) - Locality |
| ML_riks | 305 | Water (lakes and large rivers) - Forest |
| ML_riks | 306 | Water (lakes and large rivers) - Marshland |
| ML_riks | 307 | Water (lakes and large rivers) - Open area |
| ML_riks | 308 | Water (lakes and large rivers) - Region above the tree line |
| ML_riks | 313 | Water (lakes and large rivers) - Land type, foreign |
| ML_riks | 405 | Locality – Forest |
| ML_riks | 406 | Locality – Marshland |
| ML_riks | 407 | Locality - Open area |
| ML_riks | 413 | Locality - Land type, foreign |
| ML_riks | 506 | Forest – Marshland |

| Layer name | Category code | Description |
|------------|---------------|---|
| ML_riks | 507 | Forest - Open area |
| ML_riks | 508 | Forest - Region above the tree line |
| ML_riks | 512 | Forest – Bare limestone area |
| ML_riks | 513 | Forest - Land type, foreign |
| ML_riks | 607 | Marshland - Open area |
| ML_riks | 608 | Marshland - Region above the tree line |
| ML_riks | 613 | Marshland - Land type, foreign |
| ML_riks | 708 | Open area - Region above the tree line |
| ML_riks | 712 | Open area – Bare limestone area |
| ML_riks | 713 | Open area - Land type, foreign |
| ML_riks | 811 | Region above the tree line - Glacier |
| ML_riks | 813 | Region above the tree line - Land type, foreign |
| ML_riks | 1113 | Glacier - Land type, foreign |

Table 15. Set of attributes for ML line layer with limiting lines for land areas.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.2.3 MB POLYGON LAYER WITH LOCALITIES

Contains localities with more than 10,000 inhabitants.

Table 16. Content in MB polygon layer with localities.

| Layer name | Category code | Description |
|------------|---------------|-------------|
| MB_riks | 4 | Locality. |

Table 17. Set of attributes for MB polygon layer with localities.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|--|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |
| 3 | TATNR | Decimal | 4,0 | Decimal | 4,0 | Locality code according to Statistics Sweden |
| 4 | NAMN | Text | 32 | Text | 32 | Locality name |
| 5 | BEF | Decimal | 7,0 | Decimal | 7,0 | Population |

5.3 Built-up areas

5.3.1 BT POINT LAYER WITH LOCALITIES

Contains localities with less than 10,000 inhabitants.

Table 18. Contents in BT point layer with localities.

| Layer name | Category code | Description |
|------------|---------------|------------------------------------|
| BT_riks | 432 | Locality, population 2,000 – 9,999 |
| BT_riks | 433 | Locality, population 200 – 1,999 |
| BT_riks | 434 | Locality, population 200 – 1,999 |
| BT_riks | 435 | Locality, population 2,000 – 9,999 |

Table 19. Set of attributes for the BT point layer with localities.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|--|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |
| 3 | TATNR | Decimal | 4,0 | Decimal | 4,0 | Locality code according to Statistics Sweden |
| 4 | NAMN | Text | 32 | Text | 32 | Locality name |
| 5 | BEF | Decimal | 7,0 | Decimal | 7,0 | Population |

5.3.2 BS POINT LAYER WITH BUILT-UP AREAS AND ELEVATION POINTS

Contains point features for symbols.

Table 20. Contents in BS point layer with built-up areas and elevation points.

| Layer name | Category code | Description |
|------------|---------------|---------------------------------|
| BS_riks | 151 | Elevation point |
| BS_riks | 331 | Smaller built-up area |
| BS_riks | 333 | Mountain lodge, tourist station |
| BS_riks | 335 | Castle |
| BS_riks | 351 | Church |

| Layer name | Category code | Description |
|------------|---------------|--|
| BS_riks | 352 | Church, not shown on the printed Map of Sweden 1:1 million |
| BS_riks | 362 | Nuclear power plant |
| BS_riks | 363 | Power plant |
| BS_riks | 571 | Airport |
| BS_riks | 572 | Other airport |
| BS_riks | 581 | Lighthouse |
| BS_riks | 582 | Lighthouse, not shown on the printed Map of Sweden 1:1 million |

Table 21. Set of attributes for BS point layer with built-up areas and elevation points.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |
| 3 | SRIKT | Decimal | 6.2 | Decimal | 6.2 | Symbol orientation |

5.4 Roads

5.4.1 VL LINE LAYER WITH ROADS

Contains line features for public roads.

Table 22. Contents in VL line layer with roads.

| Layer name | Category code | Description |
|------------|---------------|--|
| VL_riks | 5011 | Motorway, numbers E4-99 |
| VL_riks | 5111 | Main arterial road, numbers E4-99 |
| VL_riks | 5211 | Public road, numbers E4-99 |
| VL_riks | 5012 | Motorway, numbers 100-499 |
| VL_riks | 5112 | Main arterial road, numbers 100-499 |
| VL_riks | 5212 | Public road, numbers 100-499 |
| VL_riks | 5013 | Motorway, numbers > 500 |
| VL_riks | 5113 | Main arterial road, numbers > 500 |
| VL_riks | 5213 | Public road, numbers > 500 |
| VL_riks | 5551 | Private road |
| VL_riks | 5334 | Road under construction |
| VL_riks | 5025 | Ferry route, within a country |
| VL_riks | 5026 | Ferry route, between countries |
| VL_riks | 8011 | Motorway, numbers E4-99, underpass |
| VL_riks | 8111 | Main arterial road, numbers E4-99, underpass |
| VL_riks | 8211 | Public road, numbers E4-99, underpass |
| VL_riks | 8012 | Motorway, numbers 100–499, underpass |
| VL_riks | 8112 | Main arterial road, numbers 100-499, underpass |
| VL_riks | 8212 | Public road, numbers 100–499, underpass |
| VL_riks | 8013 | Motorway, numbers >500, underpass |

| Layer name | Category code | Description |
|------------|---------------|---|
| VL_riks | 8113 | Main arterial road, numbers >500, underpass |
| VL_riks | 8213 | Public road, numbers >500, underpass |

Table 23. Set of attributes for VL line layer with roads.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |
| 3 | VAGNR1 | Text | 8 | Text | 8 | Road number |
| 4 | VAGNR2 | Text | 8 | Text | 8 | Road number |
| 5 | VAGNR3 | Text | 8 | Text | 8 | Road number |

5.5 Railways

5.5.1 JL LINE LAYER WITH RAILWAYS

Contains line features for railways.

Table 24. Contents in JL line layer with railways.

| Layer name | Category code | Description |
|------------|---------------|--------------------------------|
| JL_riks | 5611 | Railway, single track |
| JL_riks | 5612 | Railway in tunnel or underpass |
| JL_riks | 5621 | Railway, double track |
| JL_riks | 5651 | Railway under construction |

Table 25. Set of attributes for JL line layer with railways.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.6 Hydrography

5.6.1 HL LINE LAYER WITH WATERCOURSES

Contains line features for watercourses.

Table 26. Contents in HL line layer with watercourses.

| Layer name | Category code | Description |
|------------|---------------|------------------------------------|
| HL_riks | 9110 | Watercourse, size classification 5 |
| HL_riks | 9111 | Watercourse, size classification 4 |
| HL_riks | 9112 | Watercourse, size classification 3 |
| HL_riks | 9113 | Watercourse, size classification 2 |
| HL_riks | 9114 | Watercourse, size classification 1 |
| HL_riks | 9021 | Canal |

Table 27. Set of attributes HL line layer with watercourses.

| No. | Attribute | Type shape | Length shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.7 National parks

5.7.1 NY POLYGON LAYER WITH NATIONAL PARKS

Contains features for national parks.

Table 28. Content in NY polygon layer with national parks.

| Layer name | Category code | Description |
|------------|---------------|---------------|
| NY_riks | 421 | National park |

Table 29. Set of attributes NY polygon layer with national parks.

| No. | Attribute | Type Shape | Length Shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.7.2 NL LINE LAYER WITH NATIONAL PARKS

Contains limiting lines for national parks.

Table 30. Content in NL line layer with national parks.

| Layer name | Category code | Description |
|------------|---------------|---------------|
| NL_riks | 4210 | National park |

Table 31. Set of attributes NL line layer with national parks.

| No. | Attribute | Type Shape | Length Shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.8 Other lines

5.8.1 UL LINE LAYER WITH OTHER LINES

Contains line features with symbol like appearance.

Table 32. Content in UL line layer with other lines.

| Layer name | Category code | Description |
|------------|---------------|----------------------|
| UL_riks | 4410 | Limit of cultivation |
| UL_riks | 1610 | The Arctic Circle |
| UL_riks | 5561 | Mountain trail |

Table 33. Set of attributes for UL line layer with other lines.

| No. | Attribute | Type Shape | Length Shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|------------------------------|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |

5.9 Text

5.9.1 TX MAP TEXT (NAMES AND INFORMATIVE TEXT)


Contains cartographically positioned text.

Table 34. Contents in TX map text (names and informative text).

| Layer name | Category code | Description |
|------------|---------------|--------------------------------------|
| TX_riks | 1 | Mountain lodge |
| TX_riks | 3 | Other built-up area |
| TX_riks | 5 | Localities, population 200-1,999 |
| TX_riks | 7 | Localities, population 2,000-9,999 |
| TX_riks | 8 | Localities, population 10,000-49,999 |
| TX_riks | 9 | Localities, population > 50,000 |
| TX_riks | 14 | Part of locality |
| TX_riks | 18 | Church |
| TX_riks | 21 | Power plant |
| TX_riks | 24 | Trail name |
| TX_riks | 25 | Airport |
| TX_riks | 27 | Castle |
| TX_riks | 34 | County |
| TX_riks | 35 | Country, size classification 1 |
| TX_riks | 36 | Country, size classification 2 |
| TX_riks | 43 | National park, size classification 1 |
| TX_riks | 44 | National park, size classification 2 |
| TX_riks | 45 | National park, size classification 3 |
| TX_riks | 52 | Nature-name, size classification 1 |
| TX_riks | 53 | Nature-name, size classification 2 |
| TX_riks | 54 | Nature-name, size classification 3 |

| Layer name | Category code | Description |
|-------------------|----------------------|---|
| TX_riks | 55 | Nature-name, size classification 4 |
| TX_riks | 56 | Nature-name, size classification 5 |
| TX_riks | 71 | Lighthouse |
| TX_riks | 76 | Elevation figure |
| TX_riks | 79 | Road number |
| TX_riks | 83 | Water (lakes and large rivers), size classification 1 |
| TX_riks | 84 | Water (lakes and large rivers), size classification 2 |
| TX_riks | 85 | Water (lakes and large rivers), size classification 3 |
| TX_riks | 86 | Water (lakes and large rivers), size classification 4 |
| TX_riks | 87 | Water (lakes and large rivers), size classification 5 |
| TX_riks | 92 | Watercourse, size classification 1 |
| TX_riks | 93 | Watercourse, size classification 2 |
| TX_riks | 94 | Watercourse, size classification 3 |
| TX_riks | 99 | Marshland |

Table 35. Set of attributes for TX map text (names and informative text).

| No. | Attribute | Type Shape | Length Shape | Type MapInfo | Length MapInfo | Description |
|-----|-----------|------------|--------------|--------------|----------------|---|
| 1 | KKOD | Decimal | 5,0 | Decimal | 5,0 | Category code |
| 2 | KATEGORI | Text | 50 | Text | 50 | Description of category code |
| 3 | TEXT | Text | 40 | Text | 40 | Text string |
| 4 | TEXTTYP | Text | 1 | Text | 1 | O/U indicates whether text is standard or informative |
| 5 | ORTID | Decimal | 10,0 | Decimal | 10,0 | Place-name identity |
| 6 | REGTXT | Text | 40 | Text | 40 | The complete text string. If a text is divided, only one of the lines is displayed in the attribute TEXT. Here the entire text string is displayed. |
| 7 | THOJD | Decimal | 7,0 | Decimal | 7,0 | The text size (points) for each separate text presented on the printed version of the product. |
| 8 | TRIKT | Decimal | 6,2 | Decimal | 6,2 | Text orientation (0–360 anti-clockwise) |
| 9 | TJUST | Decimal | 1,0 | Decimal | 1,0 | Text anchor point (1-9). Anchor point in decimal point. <i>Figure 2. Figure showing the anchor point of the text.</i> |
| | | | | | |  |
| 10 | TSPARR | Decimal | 3,0 | Decimal | 3,0 | Text spacing in percent of the source string's length (0-100 %) |
| 11 | TKURV | Decimal | 1,0 | Decimal | 1,0 | Specifies whether the text is curved |

Appendix I: Recommended plotting sequence for the layers

The following plotting sequence is suggested, irrespective of software. When ArcMap is used the layers can be linked to the accompanying LYR file. The LYR file governs the plotting sequence and within which scale intervals the layers are shown.

Table 36. Recommended plotting sequence for the layers.

| Descriptive Layer name | Layer name | Geometry | Scale range in the LYR file | Turned on |
|-------------------------------------|------------|------------|-----------------------------|-----------|
| Text | TX | annotation | 1: 1 000 050 and larger | X |
| Built-up areas and elevation points | BS | point | 1: 2 000 050 and larger | X |
| Localities, smaller | BT | point | 1: 3 000 050 and larger | X *) |
| Administrative division | AL | line | 1: 3 000 050 and larger | X *) |
| Lines | UL | line | Always shown | X |
| National parks, limiting lines | NL | line | 1: 3 000 050 and larger | |
| Railways | JL | line | 1: 3 000 050 and larger | X |
| Roads | VL | line | 1: 3 000 050 and larger | X |
| Watercourses | HL | line | 1: 1 000 050 and larger | X |
| Land data, limiting lines | ML | line | 1: 2 000 050 and larger | X |
| National parks | NY | Polygon | 1: 3 000 050 and larger | X |
| Localities | MB | Polygon | 1: 3 000 050 - 1: 1 000 050 | X |
| Municipalities | AK | Polygon | Not shown | X |
| Counties | AN | Polygon | 1: 3 000 050 and smaller | X |
| Land data | MY | Polygon | Always shown | X |

*) Kkod 434 and 435 in layer BT and kkod 4140 in layer AL isn't symbolized in the attached lyr file.

Appendix 2: Presentation of place-names in Saami

Figure 3. Map image of the distribution of Sami language areas.



Appendix 3: List of Saami characters

Table 37. Codes for Sami characters in ISO 8859-10.

| Character | ISO 8859-10 |
|-----------|-------------|
| Á | 193 |
| á | 225 |
| Š | 170 |
| š | 186 |
| Č | 200 |
| č | 232 |
| Ž | 172 |
| ž | 188 |
| Đ | 169 |
| đ | 185 |
| Ŋ | 175 |
| ŋ | 191 |
| Ƨ | 187 |
| Ƨ | 171 |
| Ě | 203 |
| ě | 235 |
| Ń | 209 |
| ń | 241 |