

PRODUCT DESCRIPTION

Land Regulation View service

DOCUMENT VERSION: 1.0

CONCERNING THE INTERFACE VERSION OF THE SERVICE: 1.0

Figure 1 Section from Land Management Regulation View service

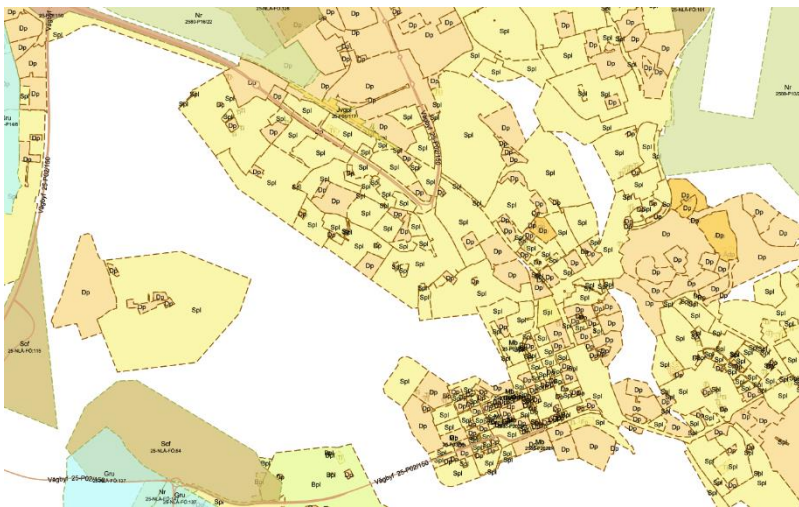


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I General description

Land regulation View service is one of the map and image viewing services provided by Lantmäteriet. The service displays information from Lantmäteriet's basic data layer.

Land regulations are presented in the general section of the Real Property Register. The general section contains a textual section and a map section - the Cadastral Index Map. The Cadastral Index Map displays a selection of the information found in the Real Property Register's general section, textual section. Read more about the Real Property Register and the Cadastral Index Map at [Lantmäteriet's website](#).

I.1 Contents

Land regulation View service contains plans and regulations regarding land use from the Cadastral Index Map.

Here is a simple description of the content of the product. For a more detailed description of how information is managed in the Cadastral Index Map, please refer to the Swedish handbook for the Cadastral Index Map: Handbok Registerkarta, LMV Rapport 2004:6, ISSN 0280-5731. The handbook is available for downloading in Swedish at [Lantmäteriet's website](#).

The information is presented in the service in five separate layers:

- Regulations
- Boundary point text, regulations
- Real property plans
- Detailed development plans
- Amendment of detailed development plans

I.2 Geographic coverage

Nationwide.

I.3 Coordinate system

Plane: See the technical description.

I.4 Miscellaneous

Currently, the product does not include information on shore protection due to quality issues. Reconstruction of shore protection information is underway but the timing for re-entry into the product has not been determined. Information of when it will be re-entered into the product will be communicated well in advance. For more detailed information on the location of shore protection, please contact the respective county administrative board.

2 Quality description

Content and timeliness vary across the country. Quality deficiencies are partly due to historical reasons, and partly the updating and storage of

information can cause some deficiencies. However, continuous improvements are being made. A continuous work is ongoing to complement the map and textual section with information that is missing for various reasons.

The objects in the database are stored with information about history and positional uncertainty.

For more information about the various quality parameters used in the product description, refer to [HMK Ordlista \(pdf, in Swedish\)](#) and [HMK Geodatakvalitet \(pdf, in Swedish\)](#). For terms and definitions of these, refer to [termdatabasen Ekvator](#).

2.1 Purpose and utility

Land regulation View service contains information from the Real Property Register's map part, the Cadastral Index map. The product provides information about the plans and land regulations applicable to a specific area or property, such as detailed development plans, nature reserves, and building memorials. The product also includes boundary-established cultural-historical remains.

Plan boundaries from the Cadastral Index Map are suitable for obtaining an overview over plans' relationship to each other and which real properties are affected.

Plangränser från Registerkartan är lämpliga att använda för att få en överblick över planers förhållande till varandra och vilka fastigheter som berörs.

It is important to remember that the content in **the Cadastral Index map does not have any legal effect**. The legal documents that apply are the decision documents of the plans. These documents are archived at Lantmäteriet as well as the authorities responsible for the information regarding the plans.

2.2 Data capture

2.2.1 LINEAGE

Plans and regulations are retrieved from a variety of original materials. For example, they may be digitized from old maps or measured with high accuracy using GPS. Therefore, the content varies in quality.

The current presentation of plans and regulations in the Real Property Register was established in connection with the introduction of the Planning and Building Act in 1987 and the presentation system introduced in the Real Property Register at that time. Prior to this date, certain plans and regulations were only presented in textual information as a note on the real properties concerned. There was a note on the real property that it was affected by for example, a plan, and it also included a reference to the regulation document in the archive. Several plans and regulations were also presented in old, partly originals of maps.

With the introduction of an object-oriented method of displaying information, these notes and maps were used to build a new information base. In addition to this, the content was supplemented with plans and regulations that were not yet included but needed to be. This meant that Lantmäteriet contacted municipalities and county administrative boards etc., to complement the content as much as possible using their materials.

Plans usually follow real property boundaries. In the current digital handling, many new plan boundaries have been created by duplicating the real property boundary, inheriting the quality of the property boundary. The plan boundary also inherits any deficiencies in quality that the real property boundary might have. When collecting plan geometries from Municipal Cadastral Authorities (KLM), KLM sometimes did not specify the quality of the boundaries. When stored in the Cadastral Index map, then assigned a general quality.

Regulations sometimes follow real property boundaries and may, in some cases, have been created/changed in conjunction with real property formation actions and thereby been accurately measured. These cases primarily concern certain types of regulations, such as nature reserves. Otherwise, the capture of regulation geometries could have been conducted through separate methods and often has acquired a general quality.

2.3 Maintenance

2.3.1 MAINTENANCE FREQUENCY

The information is continuously updated by Lantmäteriet and municipal cadastral authorities. The goal is that plans and regulations should be stored in the Real Property Register within 2 weeks from the date they gain legal force.

Information for plans and land regulations, which are to be presented both in the Cadastral Index map and in the Real Property register's textual section, should be added to the Real Property register map no later than two working days after the information has been added to the textual section. However, delays may occur.

2.4 Data quality

2.4.1 COMPLETENESS

There are certain generalization rules for the information in Land regulations View service which means that not all objects are represented in the map.

The presentation of current plans in the Real Property register is largely complete. The most likely reason for omissions in the presentation is that notification of the plan has not come to the attention Lantmäteriet or municipal cadastral authorities.

Omissions may occur where a plan is in the textual section of Real Property register but not in the Cadastral Index map, and vice versa. If a plan is present in the map but not in the textual section Real Property register, it may result in lack of information for some attributes.

It may also occur that a plan has been deregistered but is still present in the Cadastral Index map.

For regulations, completeness varies regionally across the country. Some types of information are more complete while others may be more incomplete.

Various efforts for quality improvements are ongoing within certain types of information, especially concerning regulations. In 2021 a major quality effort regarding the presentation of building memorials will be completed. A similar quality improvement of quarry information has begun in 2021 and will be continue into 2022.

For some types of regulations, a simplified geometric representation (point or line) is sometimes used. Regulations with line representation is in the *Line layer with line objects for regulations*. Point occurrences are in the layer *Point layer with point objects for regulations*.

2.4.2 LOGICAL CONSISTENCY

The structure of point objects, line objects, and area objects has such requirements for geometric positions that it should be possible to easily create topology.

When storing objects in the database at Lantmäteriet, it is checked that the objects follow the geometric and topological rules that are in place, and that the information corresponds to OGC's (Open Geospatial Consortium) requirements for geometries.

For polygon objects the identity is carried by the identity point. For point or line objects the identity is stored directly on the object.

There may be omissions in logical consistency, i.e., the structure of the data is not correct.

Logical consistency is continuously checked and corrected. Some errors caused by a lack synchronization between databases cannot be avoided. However, they are corrected within a few days.

Plans are stored as polygons. Micro polygons or overlaps can therefore occur between adjacent plans that should share a boundary. Some types of plans are not allowed to overlap, but deficiencies in data or other reasons can cause such unallowed overlaps.

Each regulation is stored with its own boundary. Micro polygons or overlaps can therefore occur between adjacent regulations that should share a boundary. Regulations with the same regulation type are not allowed to overlap, but deficiencies in data can cause such unallowed overlaps.

The coordinates of the boundary point and the coordinates for the breaking points on the boundary line should match.

The identity of regulations consists of a dossier designation that can also be found in the textual section of the general section of the Real Property register.

2.4.3 THEMATIC ACCURACY

In general, thematic accuracy is high.

2.4.4 POSITIONAL UNCERTAINTY

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

Positional uncertainty describes how well a given position corresponds to the actual position in the terrain for the object that has been positioned in relation to the principal coordinate system.

Geometrical requirements for positional uncertainty depend on the objects' distinctness within a geographically limited area.

In the cases where the boundaries coincide with the real property boundaries, the same positional accuracy as for the real property boundary applies.

3 Layout and plotting of data

3.1 Plotting in different scales

The table below describes the representation of Land regulation View service at different scales.

The scale intervals are approximate and depend partly on the client where the map is displayed.

Table 1 Representation of plans at different scales.

| Scale from | Scale to | Information type | Selection |
|------------|----------|----------------------------|---|
| 1:1 | 1:90 000 | Plans, polygons, and lines | All |
| 1:1 | 1:30 000 | Plans, text | Plan abbreviation, outside urban area |
| 1:1 | 1:7 500 | Plans, text | Plan abbreviation, within urban area Dossier designation |

Table 2. The table illustrates the representation of regulations at different scales.

| Scale from | Scale to | Information type | Selection of content |
|------------|-----------|--|--|
| 1:1 | 1: ∞ | Cultivation boundary | |
| 1:968 000 | 1: ∞ | Regulations, polygons, and text | Polygon, regulation type and dossier designation for nature conservation area with area > 100 km ² |
| 1:484 000 | 1:968 000 | Regulations, polygons, and text | Polygon, regulation type and dossier designation for nature conservation area with area > 50 km ² |
| 1:242 000 | 1:484 000 | Regulations, polygons, and text | Polygon, regulation type and dossier designation for nature conservation area and processing concessions with area > 25 km ² |
| 1:90 000 | 1:242 000 | Regulations, polygons, and text | Polygon, regulation type and dossier designation for nature conservation area, processing concessions and prohibited areas according to the the Building Act with area > 5 km ² |
| 1:1 | 1:90 000 | Regulations, polygons, lines, and points | All except boundary point |
| 1:1 | 1:90 000 | Regulations, text | Regulation type, outside urban area. |
| 1:1 | 1:30 000 | Regulations, text | Dossier designation, outside urban area |

| Scale from | Scale to | Information type | Selection of content |
|------------|----------|---------------------|--|
| 1:1 | 1:7 500 | Regulations, text | Regulation type, within urban area. |
| 1:1 | 1:5 700 | Regulations, points | Boundary point for regulations |
| 1:1 | 1:3 800 | Regulations, text | Designation for boundary point for regulations |
| 1:1 | 1:3 800 | Regulations, text | Dossier designation, within urban area |

For more detailed information on the representation, see the separate symbol legend.

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 change

Table 3. List of change.

| Version | Date | Reason and change from previous version |
|------------|------------|---|
| 1.0 | 2022-02-01 | First established version in English. (2024-01-16) |