



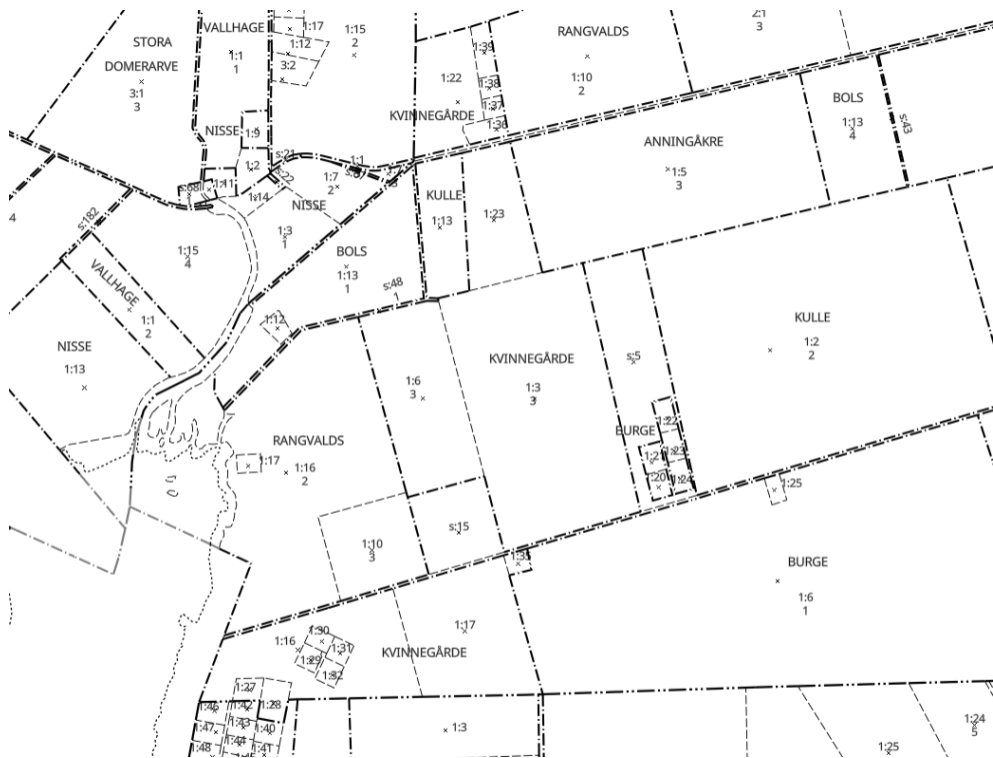
PRODUCT DESCRIPTION

Cadastral Parcels View service, vector tiles

DOCUMENT VERSION: 1.1

CONCERNING THE INTERFACE VERSION OF THE SERVICE: 1.0

Figure 1 Example image for Cadastral Parcels View service, vector tiles.



Innehållsförteckning

1	GENERAL DESCRIPTION	3
1.1	CONTENTS	3
1.2	GEOGRAPHIC COVERAGE	3
1.3	GEOGRAPHIC SECTION	3
1.4	COORDINATE SYSTEM	3
2	QUALITY DESCRIPTION	3
2.1	PURPOSE AND UTILITY	3
2.2	DATA CAPTURE	3
2.2.1	<i>Lineage</i>	3
2.3	MAINTENANCE	4
2.3.1	<i>Maintenance frequency</i>	4
2.4	DATA QUALITY	4
2.4.1	<i>Completeness</i>	4
2.4.2	<i>Logical consistency</i>	5
2.4.3	<i>Thematic accuracy</i>	5
2.4.4	<i>Positional uncertainty</i>	6
3	LAYOUT AND PLOTTING OF DATA	6
3.1	PLOTTING IN DIFFERENT SCALES	6
3.2	DESCRIPTION OF PRESENTATION STYLES	6
4	LAYER DESCRIPTION AND CODE LIST	7
4.1	ADMINISTRATIVE DIVISION	7
4.1.1	<i>County</i>	7
4.1.2	<i>Municipality</i>	7
4.1.3	<i>Administrative division</i>	8
4.2	REAL PROPERTY INFORMATION	9
4.2.1	<i>Property boundary points</i>	9
4.2.2	<i>Real property boundaries</i>	12
4.2.3	<i>Line-presented joint property units</i>	15
4.2.4	<i>Point-presented real property units and joint property units</i>	15
4.3	BOUNDARY POINTS	16
4.3.1	<i>property boundary points</i>	16
4.4	FISHING	19
4.4.1	<i>Fishing area boundaries</i>	19
4.4.2	<i>Line-represented fishing</i>	21
4.4.3	<i>Point-represented fishing</i>	21
4.4.4	<i>Text for Fishing areas</i>	22
4.5	TEXT	24
4.5.1	<i>Text for property division</i>	24
5	LIST OF CHANGE	27

1 General description

1.1 Contents

Cadastral Parcels View service, vector tiles are a display service consisting of polygons, boundaries, points, and text for properties and other administrative units, such as county and municipal areas, real property boundaries, and real property boundary points.

When calling Cadastral Parcels View service, vector tiles transmit data in the form of vector data divided into a grid of tiles.

1.2 Geographic coverage

Nationwide.

1.3 Geographic section

The service contains data for the entire Sweden.

1.4 Coordinate system

Plane: SWEREF 99 TM and Web Mercator.

2 Quality description

2.1 Purpose and utility

The product is primarily intended for users developing various types of applications and solutions for the web. With view services like vector tiles, there is the opportunity to access information about objects, attributes, and to style data according to personal preferences or by using Lantmäteriet's proposed appearance.

For buildings, attributes are included that allow integration possibilities for those who have agreements for products with information from the Real Property Register, such as Lantmäteriet's direct access services for property information.

2.2 Data capture

2.2.1 LINEAGE

Lantmäteriet's [Real Property Register](#) contains information about all properties in Sweden. A part of the Real Property Register is the Cadastral Index Map (DRK), which, according to section 37 in The Real Property Register Ordinance (FRF) includes, among other things:

- Division into counties and municipalities (administrative division)
- The extent of real properties and joint properties (real property division)
- The division into civil parishes (historic division).

The real property division in Cadastral Parcels View service, vector tiles correspond to the boundaries in the Cadastral Index Map. The Cadastral Index Map's property boundaries have been established over a long period and are created using various methods, resulting in highly varied data quality. There are property boundaries, especially in rural areas, which are measured during the 19th century. These boundaries may have an error margin of several meters. Today, new properties are surveyed using satellite positioning which can have an accuracy of a few centimetres. The property division is suitable for obtaining an overview of the relationship between properties, but it is important to remember that the contents of the Cadastral Index Map do not have any legal effect. It is the cadastral dossier, along with decisions and protocols, which constitutes the legal documents. These documents are archived at Lantmäteriet.

If the real property information in this vector product is to be used as the basis for use or authority decision requiring the highest level of updating and positional accuracy, it is recommended to contact Lantmäteriet's customer centre to obtain access to the current plan decision documents. Refer to [Lantmäteriets website](#) for more information.

Changes in administrative boundaries and real property information are made after decisions by authorities. The legal traceability of properties is documented in the Real Property Register. The cadastral procedure was documented in detail in a dossier with the associated cadastral map.

2.3 Maintenance

The administrative division included in the Cadastral Index Map is continuously updated, by Lantmäteriet and Municipal cadastral authorities, in combination with property formation. The boundaries can also be updated in connection with quality improvement measures.

The areas for the administrative division have been generated from the real property division.

2.3.1 MAINTENANCE FREQUENCY

Updates to the Cadastral Index Map should be done no later than two days after registration in the Real Property Register. The layer for the real property information is updated every night.

The boundaries of the administrative division in the product are continuously updated. The areas are static and are not updated.

Other information is updated continuously.

2.4 Data Quality

2.4.1 COMPLETENESS

Sweden's real property information is not fully investigated. This means that there are objects that only exist in the dossiers but are not presented in the Real Property Register.

There are also real properties and joint properties presented with incomplete (part of a polygon) or a simplified geometry (point or line).

There are areas that are not investigated and therefore lack information in the Real Property Register's textual section, these are presented in the map and have an identity. Here, there are completely uninvestigated areas and areas that are known to be joint properties but have not been registered.

There are also older joint properties which are registered but lack geometry. These are not included in the delivery.

Many boundary points are missing in the Cadastral Index Map. This especially applies to older boundary points which have not been stored in the database. These can be found in dossiers and old registers. Efforts are under way to supplement the database, partly with boundary points from municipalities and partly by transforming older boundary points into the correct coordinate system. Thus, completeness is continuously improving.

Boundary points have an attribute, marking type, indicating the type of marking on the ground. This attribute exists for approximately 35% of boundary points.

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. Value ranges and object types are also checked for validity before being stored in the database.

For objects included in the real property information, it is verified that they are located within the correct municipality and that the real property areas correspond to those in the Real Property Register.

There can be deficiencies in logical consistency, meaning that the data structure is not correct. An example are gaps in the real property information, which means that a correct polygon cannot be formed. The consequence is multiple ID points within an area. Logical consistency is continuously checked and corrected. Some errors are due to insufficient synchronization between databases cannot be avoided. However, they are corrected within a few days.

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

2.4.3 THEMATIC ACCURACY

Isolated errors may occur, for example, a misclassification where a municipality boundary has been coded incorrectly and become a property boundary.

2.4.4 POSITIONAL UNCERTAINTY

Positional uncertainty is stored in the form of a mean square error. The mean square error is specified with millimetre accuracy and refers to the positional uncertainty in relation to the coordinate system, e.g., SWEREF 99 TM, in which it is presented. In cases where the boundary points of a real property are correct positioned in relation to each other, i.e., high internal positional uncertainty, they may still be incorrect positioned in relation to the principal coordinate system, i.e., lower external positional uncertainty.

The mean square error is almost always calculated or estimated based on the measurement methods used in data capture. The value may be considered as an assumed value for the applied measurement method. The value may be better or worse, but it provides a certain understanding of the positional uncertainty of boundary points.

3 Layout and plotting of data

3.1 Plotting in different scales

The information is displayed up to a scale of 1:10,000.

3.2 Description of presentation styles

The view services have a styling mechanism applied at the client, which means that a user can change the appearance of the map, for example, switching between a day and night mode or highlighting different thematic conditions in the visualized data.

Lantmäteriet has developed a styling that closely resembles the one used for other view services to the greatest extent possible. The styling is adapted to Web Mercator (works for OpenLayers and Mapbox) and SWEREF 99 TM (works for OpenLayers), see Technical Description. As a user, it is your choice to use this style or create your own. Connecting the data received through the service with the styling in the style file is done in the client using the product. Since this can be done in many different ways, it is not a support service that Lantmäteriet can provide.

4 Layer description and code list

4.1 Administrative division

4.1.1 COUNTY

COUNTY AREA

Contains polygons for counties, including enclaves. An enclave is a county area located within another county.

Table 1. Layer description and code list for county.

Detail type	Definition	Description	Comment
LÄN	county	Administrative division in Sweden consisting of 21 counties.	Each county always contains a number of municipalities.

SET OF ATTRIBUTES COUNTY

Table 2. Set of attributes för county.

Attribute	Type	Definition	Description
ytidentitet	Integer	a unique integer number for the area	Stored internally in Lantmäteriet's database.
detaljtyp	Text	specifies object type	Detail type list according to table 1.
lanskod	Text	specifies county code	Example: 21
lansnamn	Text	specifies the name in plain text	Example: Gävleborg

4.1.2 MUNICIPALITY

MUNICIPALITY AREA

Contains polygons for municipalities, including enclaves. An enclave is a municipalities area located within another municipality.

Table 3. Layer description and code list for municipality.

Detail type	Definition	Description	Comment
KOMMUN	municipality	Administrative division in Sweden consisting of 290 municipalities.	A municipality always belongs to a county.

SET OF ATTRIBUTES MUNICIPALITY

Table 4. Set of attributes for municipality.

Attribute	Type	Definition	Description
ytidentitet	Integer	a unique integer number for the area	Stored internally in Lantmäteriet's database.
detaljtyp	Text	specifies object type	Detail type list according to table 3
kommunkod	Text	specifies municipality code	Example: 0331
kommunnamn	Text	specifies the name in plain text	Example: Heby

4.1.3 ADMINISTRATIVE DIVISION

Administrative boundaries are continuously updated during property formation, such as through partition or amalgamation of property areas. Changes to the actual size of areas, such as municipalities and counties, occur less frequently. . The civil parish division is static.

ADMINISTRATIVE BOUNDARIES

Table 5. Layer description and code list for administrative boundaries.

Detail type	Name	Description	Comment
TERRGR	territorial waters boundary	Boundary line in Swedish waters to other nations' territories.	The boundary also constitutes county, district, and real property boundaries.
RIKSGR	national boundary	Boundary line showing Swedish national boundary to other nations.	The boundary also constitutes county, district, and real property boundaries.
LÄNSGR	county boundary	Boundary line showing county boundary, which is not simultaneously a national boundary.	The county boundary also constitutes municipal, district and real property boundary.
LÄNS1:5	county boundary, 1:5	Boundary line showing non-established boundary of counties in a water area under the Land Code (SFS 1970:994) Chapter 1 Section 5.	The boundary simultaneously constitutes non-established county, district, and real property boundaries.

Detail type	Name	Description	Comment
KOMMUNGR	Municipality boundary	Boundary line showing municipal boundary, which is not simultaneously a county boundary or national boundary.	The municipal boundary also constitutes a district and real property boundary.
KOMMUN1:5	Municipality boundary, 1:5	Boundary line showing non-established boundary of municipalities in a water area under the Land Code (SFS 1970:994) Chapter 1 Section 5.	The boundary simultaneously constitutes non-established district and real property boundaries.
SOCKENGR	Civil parish boundary	Boundary for the civil parish information, not updated	The civil parish boundary shows former land registration civil parishes, i.e., the parish division that was valid on December 31, 1999

SET OF ATTRIBUTES ADMINISTRATIVE BOUNDARIES

Table 6. Set of attributes for administrative boundaries.

Attribute	Type	Definition	Description
linjeidentitet	Integer	a unique integer number for the line	Stored internally in Lantmäteriet's database.
detaljtyp	Text	specifies type of administrative boundary	Detail type list according to table 5.

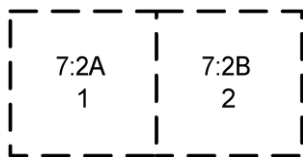
4.2 Real property information

4.2.1 PROPERTY BOUNDARY POINTS

Layer containing ID points for real properties and joint properties. When forming areas of real property, attribute information is retrieved from points with the detail types FASTID, SAMFID, 3DFASTID, 3DSAMFID, FAS-TOID and SAMFOID.

The ID points for buildings and joint properties may have parcel letters (a letter) or area information. Parcel letters belong to unofficial parcels which are part of a real property (or part of a joint property unit) that has been formed by private land division. The letter is in the third position after the area number in **externid**, for example, 1489>BERGA>7:2>1>>A and 1489>BERGA>7:2>2>>B.

Figure 2 Each area of unofficial parcels has a unique register designation through one unofficial parcel letter.

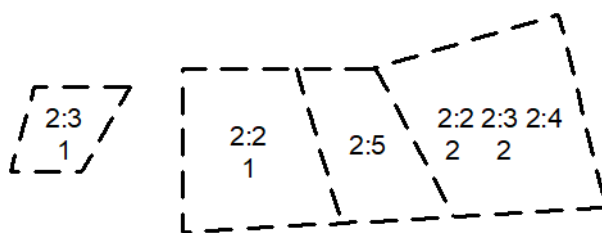


Area information is found in the fourth position after the area number in **externid**. Area information can have the following values:

- A Part of an unregistered joint property unit
- J Railway property
- O Uncertain position: designation is presented in brackets, e.g. (3:5)
- S Unofficial parcel within a joint property unit or area not asserted in established maps (unofficial land exchange); the designation is presented within square brackets, e.g. [2:4]
- U Three-dimensional space, designation is presented within backslashes, e.g., \1:3\
- Z Condominium, designation is presented within backslashes, e.g., \1:4\

ID points with an "A" as area information are part of the unregistered joint property unit. 1266>FULLTOFTA>14:1>1>>>A>1. Information on ownership in unregistered joint properties is not always complete.

Figure 3 The real properties 2:2, 2:3 and 2:4 have a share in an unregistered joint property unit and have "A" in the EXTERNID for the shared area.

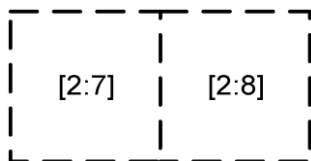


ID points with a "J" as area information are real property used for railway purposes, for which the boundaries of the real property are not fully presented.

Area information "O" is only used for real properties and joint properties presented with a point, as well as joint properties presented with lines.

Area information "S" is used for unofficially parcelled joint properties and unofficial land exchange (the area is not asserted on an established map).

Figure 4 An unofficially parcelled property, designation within square brackets.



There are also unregistered and unresolved areas with ID points of the types SAMFOID and FASTOID. These may be unregistered joint properties, so-called “d areas” that could not be mapped in the 1:10,000 scale when the economic map was created, or areas that are unresolved for other reasons. These areas have a different type of external ID consisting of <county municipal code>:<district block name>:<type of unresolved area>:<serial number>, for example 1315:ÖSTTEG:SAMF:11.

ID POINTS (POINT)

Table 7. Layer description and code list for id points

Detail type	Definition	Description	Comment
FASTID	specifies the identity point for real property unit	Real property unit, with information the Real property register	
FASTOID	specifies the identity point for real property unit without identity	Real property unit, without information the Real property register	The real property unit lacks object identity in the Real property register
SAMFID	specifies the identity point for the joint property unit	Joint property unit, with information the Real property register.	
SAMFOID	specifies the identity point for the joint property unit without identity	Joint property unit, without information the Real property register	The joint property unit lacks object identity in the Real property register
3DFASTID	specifies the identity point for three-dimensional space for real property unit	Three-dimensional space for real property unit, with information the Real property register	
3DSAMFID	specifies the identity point for three-dimensional space for joint property unit	Three-dimensional space for joint property unit, with information the Real property register.	

SET OF ATTRIBUTES FOR ID POINT

Table 8. Set of attributes for id points.

Attribute	Type	Definition	Description
objektidentitet	Text	globally unique identity (UUID) for the object	The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.
externidentitet	Text	external identity in Lantmäteriet's basic database	Example: 0114>VÄLLSTA>1:36>1>>>>1
detaljtyp	Text	specifies the type of real property area	Detail type list according to Table 7.
kommunkod	Text	specifies municipality code	Example: 0114
traktnamn	Text	specifies the district name in plain text	Example: VÄLLSTA
blockenhet	Text	specifies precinct and unit	Example: 1:36
omradesnummer	Integer	specifies the number of the real property unit	Example: 1
lagestatus	Integer	location status indicates whether the ID point is part of an area or is only represented by a point	Example: 0 if the ID point is part of an area or 2 if the ID point does not have any area, e.g., for shared properties.

4.2.2 REAL PROPERTY BOUNDARIES

Contains the same property division as in the Cadastral Index Map. Boundary lines are hierarchically coded from national boundaries to real property boundaries and form a polygon structure. Shorelines that have not been replaced by established real property boundaries are referred to as real property shorelines and are used to ensure an enclosed structure. A real property shoreline may divide a property into water and land areas or constitute an enclosing boundary for 1:5 water (according to the Land Code Chapter 1 Section 5).

Restrictions

PLEASE NOTE! Presented boundaries have no legal effect.

Circular arcs are delivered as line objects.

REAL PROPERT BOUDARY

Table 9. Layer description for property boundaries.

Detail type	Definition	Description	Comment
KVTRAKTGR	specifies the boundary type precinct boundary	A precinct consists of real properties and joint properties with the same precinct name. A precinct boundary is the boundary line for the precinct.	It is used as a delimitation against real properties/joint properties with different precinct or district names.
TRAKTGR	specifies the boundary type district boundary	Boundary line showing a district boundary, which also constitutes a real property boundary. Delimits the district against public waters.	Superior boundaries are municipality, county, or national boundary.
TRAKT1:5	specifies the boundary type district boundary, 1:5	Boundary line showing non-established boundary of a district in a water area under the Land Code (SFS 1970:994) Chapter 1 Section 5. Also constitutes non-established real property boundaries	Superior boundaries are municipality, county, or national boundary. On Gotland: Boundary between districts with the same civil parish name in the district name.
FASTGR	specifies the boundary type real property boundary	Boundary line for real property, joint property units, or unofficial parcelling area. When the extent of the real property or joint property unit is unclear against the water, the boundary is instead a real property shoreline.	Superior boundaries are district, precinct, municipality, county, or national boundary.
FAST1:5	specifies the boundary type real property boundary, 1:5	Boundary line showing non-established boundary of a real property in a water area under the Land Code (SFS 1970:994) Chapter 1 Section 5.	Superior boundaries are district, precinct, municipality, county, or national boundary.
FASTSTR	specifies the boundary type real property shoreline	Boundary line between a real property or joint property units land area and a water area or	The real property shoreline is used to form a closed figure in

Detail type	Definition	Description	Comment
		former water area (filled area). Real property shoreline is used in cases where the extent of the real property or joint property unit is unclear or when there is no boundary presented.	the real property division. The real property shore may coincide with the shoreline.
FASTTÄTGR	specifies the boundary type enclosing line for real property division	Enclosing line for real property division.	Used to create a closed real property unit.
FAST1:5TÄT	specifies the boundary type enclosing line for real property division 1:5	Enclosing line for real property division 1:5	Used to create a closed real property unit.
SOCKNAGR	specifies the boundary type civil parish name boundary	Civil parish name boundary exists only on Gotland instead of district name. Used instead of district boundary to distinguish between districts with different civil parish names in the district name.	Superior boundaries are municipality, county, or national boundary
SOCKNA1:5	specifies the boundary type civil parish name boundary 1:5	Civil parish name boundary 1:5 exists only on Gotland instead of district name. Used instead of the district boundary 1:5 to distinguish areas with different civil parish names in the district name. Boundary line showing non-established boundary in a water area under the Land Code (SFS 1970:994) Chapter 1 Section 5	Superior boundaries are municipality, county, or national boundary
3DGR	specifies the boundary type boundary for three-dimensional space.	Boundary line for three-dimensional real property.	

SET OF ATTRIBUTES REAL PROPERTY BOUNDARY

Table 10. Set of attributes for property boundaries

Attribute	Type	Definition	Description
linjeidentitet	Integer	a unique integer number for the boundary line.	Stored internally in the Lantmäteriet's database.
detaljtyp	Text	type of real property boundary	Detail type list according to Table 9.

4.2.3 LINE-PRESENTED JOINT PROPERTY UNITS

Contains generalised joint properties presented with a centre line. This means that there is no complete boundary representation of the joint properties in the database.

LINE-PRESENTED JOINT PROPERTY UNITS

Table 11. Layer description and code list for line-presented joint property unit.

Detail type	Definition	Description	Comment
SAMF	simple representation joint property unit	Linear joint property, often coinciding with a road	Joint property unit, schematic

SET OF ATTRIBUTES LINE-PRESENTED JOINT PROPERTY UNITS

Table 12. Set of attributes for line-presented joint property unit.

Attribute	Type	Definition	Description
objektidentitet	Text	globally unique identity (UUID) for the object	The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.
detaljtyp	Text	type of real property	Detail type list according to table 11.
kommunkod	Text	specifies municipality code	Example: 2161
externid	Text	identity in Lantmäteriet's basic database	Example: 2161>KÅSJÖ>S:6>10

4.2.4 POINT-PRESENTED REAL PROPERTY UNITS AND JOINT PROPERTY UNITS

The layer includes property areas and joint property areas that are represented schematically as points. This means that the property area or joint property area has an uncertain location.

POINT-PRESENTED REAL PROPERTY UNITS AND JOINT PROPERTY UNITS

Table 13. Layer description and code list for point-presented joint property unit.

Detail type	Definition	Description	Comment
FASTIGHET	simple representation real property unit	Real property unit with undefined position.	Real property unit, schematic
SAMF	simple representation joint property unit	Joint property unit with undefined position.	Joint property unit, schematic

SET OF ATTRIBUTES POINT-PRESENTED REAL PROPERTY UNITS AND JOINT PROPERTY UNITS

Table 14. Set of attributes for point-presented joint property unit.

Attribute	Type	Definition	Description
objektidentitet	Text	globally unique identity (UUID) for the object	The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.
externidentitet	Text	external identity in Lantmäteriet's basic database	Example: 2161>RÅNGSTA>1:13>1>>>O>1
detaljtyp	Text	specifies type of real property area	Detail type list according to table 13.
kommunkod	Integer	specifies municipality code	Example: 2161
traktnamn	Text	specifies district name in plain text	Example: RÅNGSTA
blockenhet	Text	specifies block and unit	Example: 1:36
omradesnummer	Integer	specifies the number of real property area	Example: 1
lagestatus	Integer	position status for the point	The position status is always null for point-represented areas

4.3 Boundary points

4.3.1 PROPERTY BOUNDARY POINTS

PROPERTY BOUNDARY POINTS

Property boundary points refer to a point established in a legal property decision that defines the line of the boundary between areas.

In the first chapter of the Land Code on Real Properties and their boundaries, the following is stated:

Section 3 Boundaries that have been legally established have the marking on the ground according to the regulations prescribed by law. If the marking can no longer be determined with certainty, the boundary has the alignment that can be assumed based on the cadastral plan, as well as documents, ownership, and other circumstances. If the boundary line has not been marked on the ground according to the regulations prescribed by law, the boundary has the alignment described by maps and documents.

For each property boundary point there is a boundary line, and on this boundary line, there is a break point in the same position as the surveyed boundary point. There may be occasional surveyed points that do not have any connecting boundary line.

It is also possible to place boundary marks in the form of witness marks. Like standard surveyed boundary points, these witness marks are legally determined and thus have legal force. These also have unique external identities in the same way as surveyed boundary points. Instead of GRÄ, the type of FMK is specified in the designation.

A national boundary marker is usually a marker of the national boundary position on land, but they may also be in water. All national boundary markers have a unique designation that consists of a digit, Roman numeral and/or letter. There may also be a name for a national boundary marker, for example Tretriksörset.

Table 15. Layer description and code list for property boundary point.

Detail type	Definition	Description	Comment
GRÄ	property defined point defining the alignment of the boundary.	Property boundary point	
FMK	Boundary marking where for some reason it is not possible to mark a boundary point for a property boundary. property definition ordered and thereby legally valid.	Witness mark	
RIKSRÖSE	Marking for the location of the national boundary on land and water.	boundary point for national boundary	Examples of national border markers are Rr KC, Rr 1, or with Roman numerals Rr II

SET OF ATTRIBUTES PROPERTY BOUNDARY POINTS

Table 16. Set of attributes for property boundary points.

Attribute	Type	Definition	Description
punktidentitet	Integer	a unique integer number for the point	Stored internally in Lantmäteriet's database.
detaljtyp	Text	type of boundary point	Detail type list according to table 15
granspunktsbeteckning	Text	Unique designation for the boundary point consisting of municipality code + area, type, and serial number	Example: 0188SÖD*GRÄ*648, 0188BLI*FMK*1953 or Rr C
medelfel	Floating point	positional uncertainty for the measured coordinate	Mean square error. Stated in meters. The value ranges from 0.025 – 999,999 m. 0 is treated as a null value.
markeringstyp	Text	type of marking	Refer to value range for type of marking, table 17.

VALUE RANGE TYPE OF MARKING

Table 17. Value range for type of marking.

Code	Description
	No information
db	Peg in rock
dg	Peg in concrete casting
dh	Peg in building
dm	Peg in wall
ds	Peg in earthbound stone
fr	Boundary mark (Five stone cairn)
fs	Fixed signal (photogrammetry)
gr	Glazed pipe
graf	Graphic point
hb	Drill hole in rock

Code	Description
hg	Drill hole in concrete casting
hs	Drill hole in earthbound stone
jk	Iron bracket
js	Iron bar
kv	Bracket for wall marker
mp	Target point (spire etc.)
ms	Brass screw
om	Unmarked boundary point
rb	Pipe in rock
rg	Pipe in concrete casting
rgd	Pipe in casting with cover
rm	Pipe in ground
rmd	Pipe in ground with cover
rn	Hoar stone (boundary stone)
rs	Pipe in earthbound stone
sa	Spike in asphalt
sb	Spike in rock
sg	Spike in concrete casting
ss	Spike in earthbound stone
st	Fencepost
tp	Pole of wood

4.4 Fishing

4.4.1 FISHING AREA BOUNDARIES

The object identity contains a reference to the property and can be used for searching through the Lantmäteriet's direct service.

Fishing is a type of property that includes fishing rights. For fishing areas, individual and joint separated fishery are reported. Separated fishery refer to separate fishing lots and joint fishery units.

Restrictions

PLEASE NOTE! Presented boundaries have no legal effect.

Circular arcs are delivered as line objects.

Table 18. List with description of different types of fishing rights.

Fishing right	Definition
Separate fishing lot	area where the ownership for the fishing is separate from ownership of water
Joint fishery unit	area where the fishing is joint

FISHING BOUNDARIES

The layer contains boundaries for fishing areas. The enclosing boundary is only used to form a closed figure when the area is not completely presented.

The boundary lines are hierarchically coded from national to property boundaries, forming an area structure.

Table 19. Layer description and code list for fishing boundary.

Detail type	Definition	Description	Comment
FISKEGR	specifies the boundary type as property boundary	Fishing boundary	Superior boundaries can be county, precinct, municipal, district, or national boundaries.
FISKETÄTGR	specifies the boundary type as property boundary	Enclosing line for fishing	Used to create a closed property unit.

SET OF ATTRIBUTES FISHING BOUNDARY

Table 20. Set of attributes for fishing boundary

Attribute	Type	Definition	Description
linjeidentitet	Text	globalt unik identitet (UUID) för objektet	The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.

Attribute	Type	Definition	Description
detaljtyp	Text	type of property unit	Detail type list according to table 19

4.4.2 LINE-REPRESENTED FISHING

LINE-REPRESENTED FISHING

Contains linear-shaped property areas where the extent is unknown.

The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.

Table 21. Layer description and code list for line-represented fishing.

Detail type	Definition	Description	Comment
FISKELOTT	simple representation of fishing	Line-drawn separate fishing lot	Fishing area, schematic
FISKESAMF	simple representation of fishing	Line-drawn joint fishery unit	Fishing area, schematic

SET OF ATTRIBUTES LINE-REPRESENTED FISHING

Table 22. Set of attributes for line-represented fishing.

Attribute	Type	Definition	Description
objektidentitet	Text	globally unique identity (UUID) for the object	The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.
detaljtyp	Text	type of fishing property	Detail type list according to table 21
kommunkod	Text	specifies municipality code	Example: 0188
traktnamn	Text	specifies district name in plain text	Example: OPPLUNDA
blockenhet	Text	specifies block and unit	Example: FS:1

4.4.3 POINT-REPRESENTED FISHING

POINT-REPRESENTED FISHING

The layer contains fishing areas where the extent is small or unknown, as well as ID points for fishing areas.

The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.

Table 23. Layer description and code list for point-represented fishing.

Detail type	Definition	Description	Comment
FISKELOTT	simple representation of fishing	Fishing lot with uncertain position	Fishing area, schematic
FISKESAMF	simple representation of fishing	Joint fishery unit with uncertain location	Fishing area, schematic
FISKEID	identity point for fishing area	Fishing area with a determined location	

SET OF ATTRIBUTES POINT-REPRESENTED FISHING

Table 24. Set of attributes for point-represented fishing.

Attribute	Type	Definition	Description
objektidentitet	Text	globally unique identity (UUID) for the object	The object identity contains a reference to the property and can be used for searching Lantmäteriet's direct service.
detaljtyp	Text	type of fishing property	Detail type list according to table 23
kommunkod	Text	specifies municipality code	Example: 0188
traktnamn	Text	specifies district name in plain text	Example: TÄLJE
blockenhet	Integer	specifies block and unit	Example: FS:56

4.4.4 TEXT FOR FISHING AREAS

TEXT FOR FISHING

Contains cartographically placed register numbers and area numbers, e.g., 1:2, for fishing areas.

Table 25. Layer description and code list for text for fishing.

Detail type	Definition	Description	Comment
FREGNRTX	register designation according to the Real Property Register	Register designation for fishing.	

Detail type	Definition	Description	Comment
FREGNRTXPA	register designation according to the Real Property Register	Register designation for fishing with uncertain location	

SET OF ATTRIBUTES TEXT FOR FISHING

Table 26. Set of attributes for text for fishing.

Attribute	Type	Definition	Description
texttidentitet	Integer	a unique integer number for the text	Stored internally in Lantmäteriet's database.
detaljtyp	Text	specifies text for fishing area	Detail type list according to table 25
riktning	Float- ing point	specified in unit degrees.	Text direction. 0.00 – 360.00, increasing anti-clockwise. 0.00=Undirected text
texthojd	Integer	specifies text height in the form of code.	Refer to table 27 for which font sizes are used when the text is adapted for presentation in a scale of 1:10,000.
zoomniva	Integer	scale area for text representation on the map	Applies to detailed and overview representation, see Table 28
insättningspunkt	Integer	indicates text positioning in relation to the insertion point	Text insertion point (1-9). <i>Figure 5 Image showing the text insertion point.</i> 
text	Text	map text	Example: FS:1
text1	Text	alternative map text	Example: F:56
text2	Text	alternative map text	Example: (f1)

VALUE RANGE TEXT HEIGHT

Table 27. Value range for text height.

texthojd	Size
6	6 points (1.59 mm)
8	8 points (2.12 mm)
10	10 points (2.65 mm)
12	12 points (3.18 mm)
14	14 points (3.71 mm)
16	16 points (4.24 mm)
20	20 points (5.30 mm)
30	30 points (7.95 mm)

VALUE RANGE FOR ZOOM LEVEL

Table 28. Value range for zoom level.

zoomniva	Description
9	No information
1	Text placement and appearance adapted for overview (small-scale) representation (1:2,000-1:20,000)
2	Text placement and appearance adapted for detailed (large-scale) representation (> 1:2,000)
3	Text shall not be presented

4.5 Text

Contains cartographically placed text. Arial font is recommended.

4.5.1 TEXT FOR PROPERTY DIVISION

ADMINISTRATIVE TEXT OCH PROPERTY TEXT


Includes cartographically placed registration numbers and area numbers, e.g., 1:2, and administrative text.

Table 29. Layer description and code list for administrative text and real property text.

Detail type	Definition	Description	Comment
LÄNTX	administrative text	County name	Only at the county enclave.
KOMMUNTX	administrative text	Municipality name	Only at the municipality enclave.
SOCKENTX	text for historic division	Civil parish name	Only at the civil parish enclave.
TRAKTTX	administrative text	District name	
KVTRAKTTX	administrative text	Precinct name	
F-UPPLYTX	informative text	Informational text for real property information	
REGNRTXHA	register designation according to the Real Property Register	Register designation enclosed within square bracket [] refers to unofficially parcelled joint property units.	
3DREGNRTX	register designation according to the Real Property Register	Register designation enclosed within backslashes \ \, refers to for 3D space.	
REGNRTXPA	register designation according to the Real Property Register	Designation enclosed within parenthesis () refers to real properties/joint properties with uncertain locations.	
REGNRTX	register designation according to the Real Property Register	Designation for för real properties and joint property units.	

SET OF ATTRIBUTES ADMINISTRATIVE TEXT OCH REAL PROPERTY TEXT

Table 30. Set of attributes for administrative text and real property text.

Attribute	Type	Definition	Description
textidentitet	Integer	a unique integer number for the text	Stored internally in Lantmäteriet's database.
detaljtyp	Text	specifies type of map text	Detail type list according to table 29
position	Integer	specifies the position of the text	Example: top, bottom, centre
riktning	Integer	specified in degrees	Text direction. 0.00 – 360.00, increasing anti-clockwise. 0.00=Undirected text
texthojd	Integer	specifies text height in the form of code	Refer to table 27 for which font sizes are used when the text is adapted for presentation in a scale of 1:10,000.
zoomniva	Integer	scale area for text representation on the map	Applies to detailed and overview representation, see Table 28
insättningspunkt	Integer	indicates text positioning in relation to the insertion point	<p>Insertion points of text (1-9).</p> <p><i>Figure 6 Image showing the text insertion point.</i></p> 
text	Text	map text	
text1	Text	alternative map text	
text2	Text	alternative map text	

5 List of change

Table 31. List of change

Version	Date	Reason and change from previous version
1.1	2024-01-25	First established version in English.