The Role of the Swedish Land Information System
In the Business Society
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Swedesurvey
SWEDEN

- 9 million inhabitants
- 450,000 sq. km
- 21 Counties
- 291 Municipalities
- 4.6 million properties in the Real Property Register
## Land in Sweden, areas

<table>
<thead>
<tr>
<th></th>
<th>1,000 km²</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivated land</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>Forests</td>
<td>240</td>
<td>53</td>
</tr>
<tr>
<td>Populated areas</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Swamps</td>
<td>50</td>
<td>11</td>
</tr>
<tr>
<td>Mountains</td>
<td>72</td>
<td>16</td>
</tr>
<tr>
<td>Lakes, rivers</td>
<td>39</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>450</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
The Swedish Land Information System

- Real Property Register
  - Area
  - Address
  - Coordinates
  - Easements
  - Buildings and apartments
  - Public land use regulations

Geographic data bases
  - Land use
  - Topography
  - Hydrology
  - Vegetation
  - Constructions

Land Register
- Title and Owner
- Mortgages
- Encumbrances

Taxation Register
- Land Use
- Constructions
- Value

Population Register
- All people living at the real property, civic number, postal address
The Swedish Organisation of Land Administration

**Land Registration, Registration of Rights**
- Ministry of Justice
- **National Courts Administration**
  - Local Land Register Authorities, 7
  (from the 1st of January 2008 will be transferred to Lantmäteriet)

**Real Property Formation, Registration of Real Property**
The National Land and Geographic Information system, the LIS
- Ministry of Environment
- **Lantmäteriet, National Land Survey**
  - Cadastral Authorities, 21
  - Municipal Cadastral Authorities, 38
Local Organisations

Cadastral organisation
Headquarters
Cadastral Authorities 21
Local offices 100
(Municipal offices 38)

Land Registration
Land registration Offices 7
Components in the Land Information System

- Real Property Part
  - Property Unit
  - Joint Property Unit
  - Co-ordinates
  - Plans, Regulations and Rights
  - Joint Facility
  - Cadastral Index Map

- Land Register Part
  - Title
  - Leasehold
  - Mortgage
  - Rights
  - Notifications

- Property Tax Assessment Part
  - Total Assesst Value
  - Assesst Value for Land
  - Assesst Value for Buildings
  - Basis for Valuation
  - Owner

- Building Part
  - Building Unit
  - Address
  - Co-ordinate

- Address Part
  - Address Unit
  - Property Unit

- Digital Cadastral Index Map
Components in a Land Administration System

The situation in Sweden

3.3 million Living Real Property Units

15,000 Property formation
100,000 Title transfers
460,000 Mortgages

- A good legislative framework
- Effective central national institutions that co-ordinate property formation and land registration
- Integrated information system for real property and land register supporting the institutions and the market
- Electronic mortgages certificate system
- A well functioning real property market, low transaction costs, title and mortgage over a day
Cadastral Index Map

Contents

- Real properties
- Plans and regulations
- Easements

Based on land use map in scales 1:5000-1:20 000
Services and products in the Land Administration sector

Geographic information

Real Property information

Products and services

Distributors

Value Added Services

Base-info

USERS
Principles for financing of Land and Geographic Information in Sweden

Property Formation
- Grants for Registration: 7 M Euro
- Cadastral Authorities: 21 GPFA, 38 MPFA

Land Registration
- Grants for Registration: 15 M Euro
- Grant for Production and Maintenance: 29 M Euro
- Land Register Authorities

User Fees: 51 M Euro

Grants for Registration: 7 M Euro

Grants for Production and Maintenance: 29 M Euro

Fees from Information Users: 26 M Euro

Stamp Duty: 620 M Euro

Service Charges: 30 M Euro

Production, Updating

Basic Information

GI

RPR

MCR

Basic Information

Products
• Real Property Search
  Open for all with limited information

• Information restricted according to the Data Integrity Act
• Delivered in .pdf format
• 3 USD
• No industrial, agricultural or military properties
• Graphical and attribute data <24 hours old

Full information with subscription
Electronic mortgaging

The Banks system

System for processing credits over the Internet

Credit assessment and underwriting system for processing of loan

Loan applicant will receive a credit decision over the Internet

The Bank clerk will give a loan applicant a credit decision over the telephone etc.

Credit regulations based on underwriting guidelines and credit recommendations

Deeds and other pledges

Real property information from the Swedish National Land Survey

Property valuations

Calculating a household budget and key ratios

Swedish Credit Information Agency (UC)

Loan ledger, banking or accounting system

Security systems for credits, mortgage certificate and portfolio analysis

Loan ledger and accounting documents

Register for loan ledger

Register for security

Loan ledger and security systems over the Internet

The Bank clerk will give a loan applicant a credit decision over the telephone etc.

Credit regulations based on underwriting guidelines and credit recommendations

Deeds and other pledges
DISSEMINATION SYSTEM

Application:
Find your way
Find your position

BASIC DATA PRODUCTS

BUSINESS PARTNER: Eniro.se, Hitta.se

www.eniro.se
Application: 
Real Estate Agent

DISSEMINATION SYSTEM

BASIC DATA PRODUCTS

BUSINESS PARTNERS
- Capitex
- Svensk Fastighetsdata

PRODUCTS/SERVICES
- Title holder
- Mortgage
- Taxation
- Buildings
- Servitut
- etc.
Application: In vehicle navigation
Fleet management

DISSEMINATION SYSTEM

Transport

BASIC DATA PRODUCTS

BUSINESS PARTNERS

NAVTECH

TELEATLAS

PRODUCTS/SERVICES

SWEDESURVEY
MapShop Online

On the MapShop Online you can easily order printed maps or maps on CD:s.
LBS - Location Based Services
Wireless Maps - MapMate

- Maps just when you need them
- Map-access via Mobile Internet
- Always updated information
- GPS-connection
- Mobile platform
Rescue Corps

Command Vehicles

GPS
e-government

Ask the Cadastral Surveyor
Digital Archives

Cadastral archives have been scanned and are used in daily case handling through Internet.

Archive also available for general public—Used e.g. for genealogical research.
Historical maps from 1600-
TECHNICAL CADAstral SURVEY using GPS

Connecting cadastral surveys in rural areas to the national reference system.

Technical cadastral surveys, larger real properties or where many real properties are involved.

Staking out (long) real property boundaries in rural areas (forest, national parks ..)

Usually real time
GPS in Sweden

1998    SWEPOS operational for real-time positioning on the metre level, DGPS

1999    Distribution of RTK corrections from some of the SWEPOS stations

2000    Initial tests with Network RTK

2001    Automated post processing service established
        Network RTK in production