The Swedish Geodata Strategy and its Implementation

FIG 2010, Sydney

Anders Lundquist & Ulf Sandgren, Lantmäteriet, Sweden

Geodata
SWEDEN BIT BY BIT

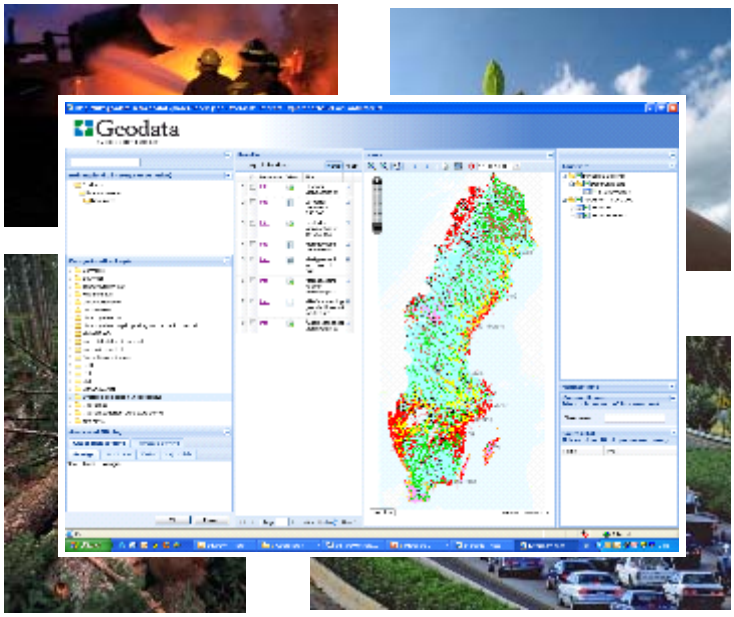
LANTMÄTERIET

Some facts ….

- The population of Sweden is 9 010 591
- The population density is only approximately 22 persons per square km
- Sweden is 1 572 km long and approximately 500 km wide at its widest point
- Sweden have ~ 20 Public (geodata) authorities and 290 Municipalities

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET



Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

INSPIRE principles

- Data should be **collected once** and maintained at the level where this can be done most effectively
- **Combine seamlessly** spatial data from different sources and share it between many users and applications
- Spatial data should be collected at one level of government and **shared between all levels**
- Spatial data needed for good governance should be available on conditions that are not restricting its **extensive use**
- It should be easy to discover which spatial data is available, to **evaluate its fitness for purpose** and to know which conditions apply for its use

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

How to fulfil that need - nationally?

- Co-operation
- Information structure
- Technical infrastructure
- Metadata
- Geodetic reference systems
- R&D and education
- Legal framework
- Financing- and price models

Geodata SWEDEN BIT BY BIT

LANTMÄTERIET

Co-operation

- Lantmäteriet - national co-ordinator
- A Geodata Advisory Board to support the co-ordinator
- Co-operation will be based on common frameworks and regulated in contracts and agreements
- A common business model for co-operation

Geodata SWEDEN BIT BY BIT

LANTMÄTERIET

Current Data sharing Policy in Sweden

- There is so far no consistent data sharing policy in Sweden
- The handling of data sharing is fragmented
- Agreements, rules for pricing, technical solutions are not coordinated

But from 1 January 2011 we will have:

- A new model for co-operation
- Harmonized conditions for licensing of data
- A fully-fledged Geoportal

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

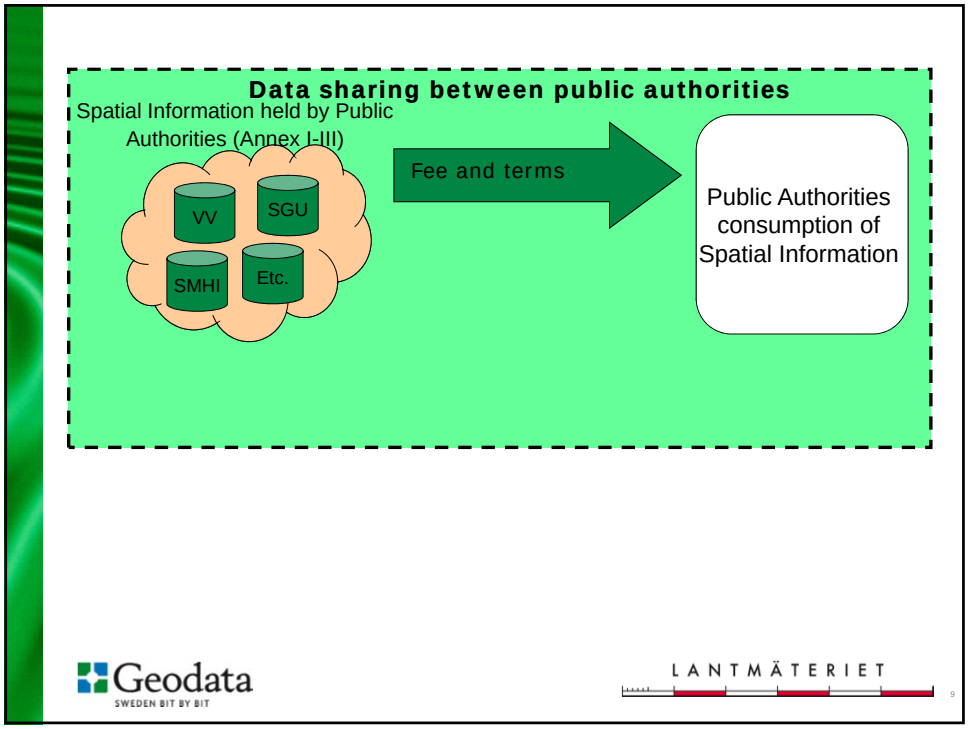
Model for establishment of co-operation

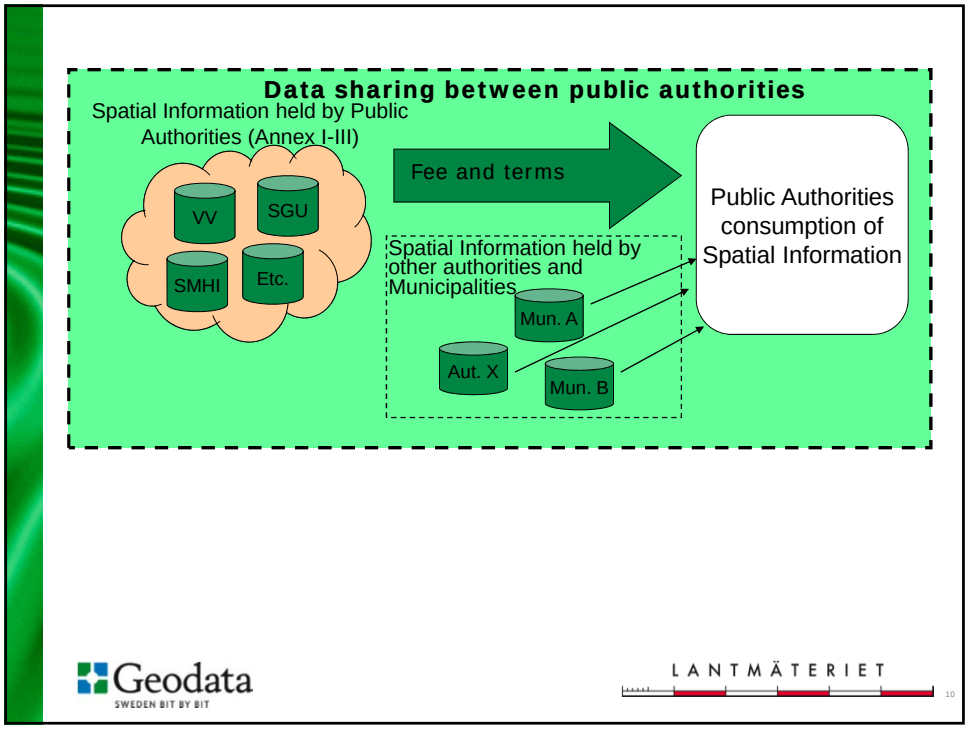
Agreement on co-operation

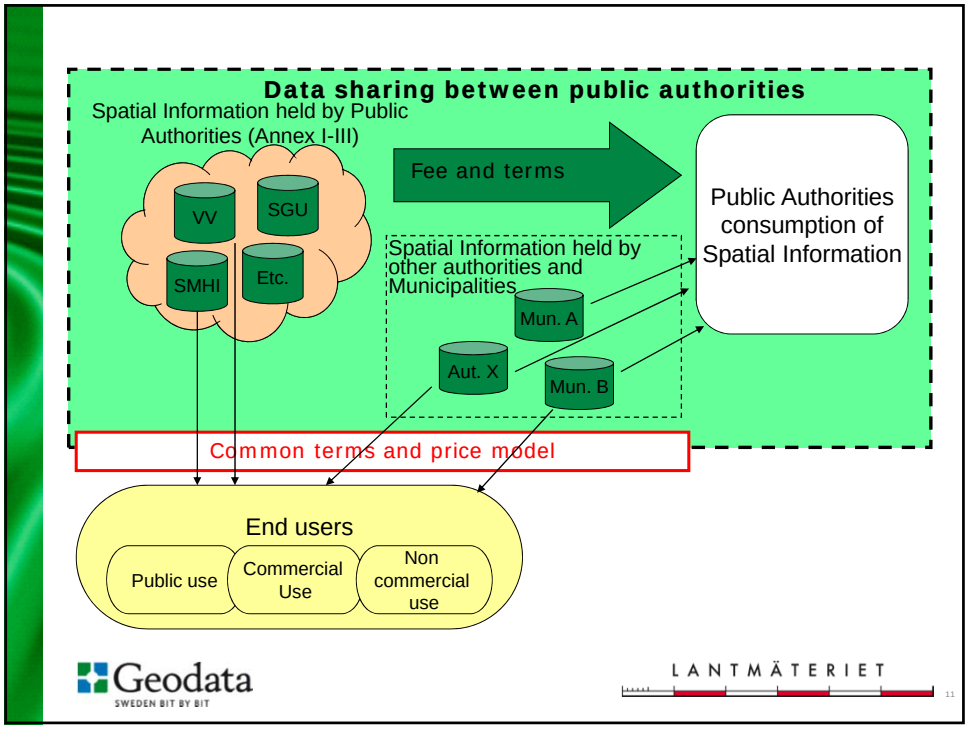
Appendix A	Partners
Appendix B	Definitions
Appendix C	Management, co-ordination and maintenance
Appendix D	Technical pre-requisits
Appendix E	Product catalogue
Appendix F	Economic conditions
Appendix G	Conditions for use

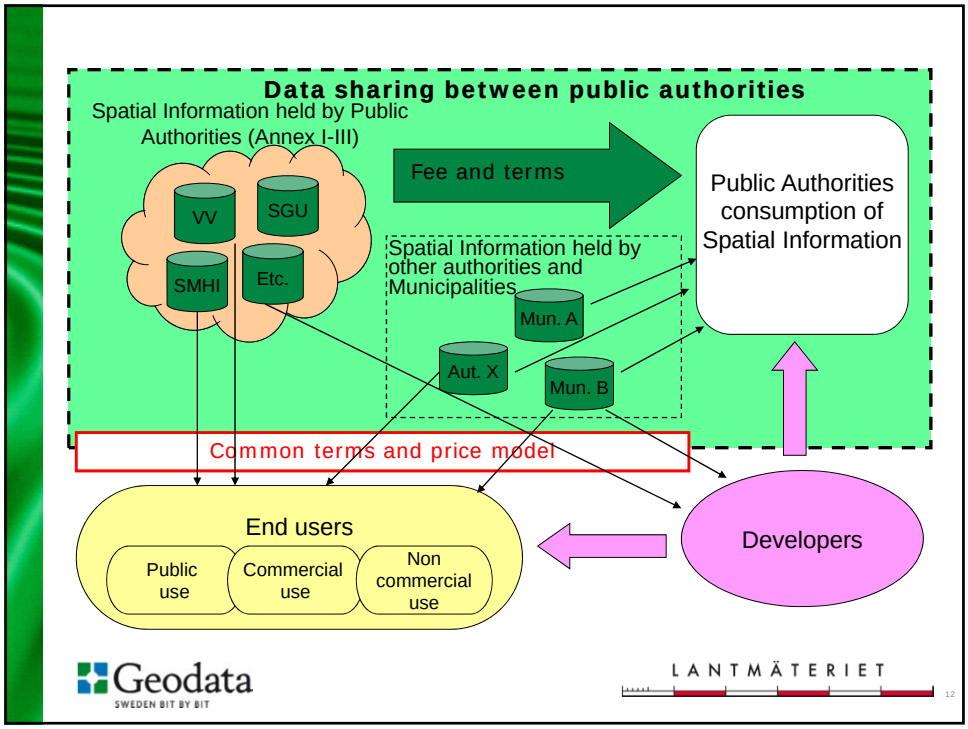
Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET


Data sharing between public authorities
Spatial Information held by Public Authorities (Annex I-III)
VV
SGU
SMHI
Etc.
Fee and terms
Public Authorities consumption of Spatial Information
Geodata
SWEDEN BIT BY BIT
LANTMÄTERIET


Data sharing between public authorities
Spatial Information held by Public Authorities (Annex I-III)
VV
SGU
SMHI
Etc.
Fee and terms
Public Authorities consumption of Spatial Information
Spatial Information held by other authorities and Municipalities
Mun. A
Aut. X
Mun. B
Geodata
SWEDEN BIT BY BIT
LANTMÄTERIET


Data sharing between public authorities
Spatial Information held by Public Authorities (Annex I-III)
VV
SGU
SMHI
Etc.
Fee and terms
Public Authorities consumption of Spatial Information
Spatial Information held by other authorities and Municipalities
Mun. A
Aut. X
Mun. B
Common terms and price model
End users
Public use
Commercial Use
Non commercial use
Geodata
SWEDEN BIT BY BIT
LANTMÄTERIET


Data sharing between public authorities
Spatial Information held by Public Authorities (Annex I-III)
VV
SGU
SMHI
Etc.
Fee and terms
Public Authorities consumption of Spatial Information
Spatial Information held by other authorities and Municipalities
Mun. A
Aut. X
Mun. B
Common terms and price model
End users
Public use
Commercial use
Non commercial use
Developers
Geodata
SWEDEN BIT BY BIT
LANTMÄTERIET

Objectives for the Public Sector

- Reduced administration
- Simple and fast access to information from other Public Authorities
- Any person working with a public task should be able to access Spatial Information when needed
- Provide possibilities to use Spatial Information in more applications without increased costs
- Easy to budget future (next years) costs for Spatial Information

Geodata SWEDEN BIT BY BIT

LANTMÄTERIET

Information structure

- A description of the requirements will be placed on datasets for use in a national infrastructure for geodata
- Co-operation with the Swedish standardisation organisation within the geodata field
- Clear responsibility for the government agencies that have responsibility for the provision of information

Geodata SWEDEN BIT BY BIT

LANTMÄTERIET

Technical infrastructure

- A national geodata portal – an access point to geodata and associated services
- Based on a service-oriented architecture and built on communication via interfaces where services and applications work together via standardised messages
- The geodata portal will be the node for the co-operation in Europe

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

15

Geodata portal 1.0 and 2.0

- Version 1.0 was launched in 2009 and meets the requirements from Inspire
- Version 2.0 will be released from 1 Januari 2011
- Version 2.0 is developed between Denmark, Norway, Finland, Sweden and the Netherlands and is build on open software

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

16

Metadata

- National metadata for geodata and services will be available and satisfy the demands of adopted standards
- A Swedish profile for the metadata standard ISO 19115, has been approved
- Production of metadata in accordance with the Swedish profile for those agencies which have the responsibility for the provision of information

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

The EC-directive INSPIRE

- INSPIRE is the directive for the establishment of an infrastructure for spatial information in Europe
- The purpose is to create a legal framework for handling and disseminating information via the Internet
- To ensure that the spatial data infrastructures of the Member States are compatible and usable Implementing Rules are adopted in a number of specific areas

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

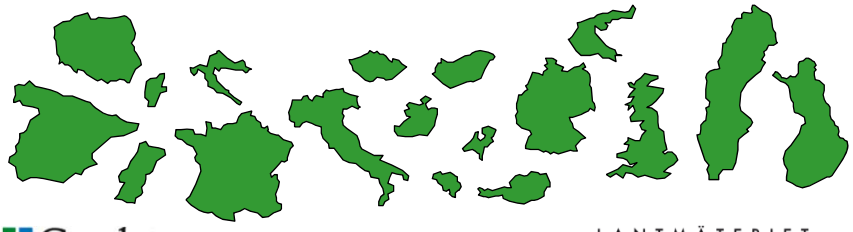
What is the aim of INSPIRE?

- Better access to geodata across Europe
- A more effective data sharing between public sector authorities
- Making geodata and services accessible in a standardised way
- Finding geodata through services on Internet
- Easily combine data from different sources/member states

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

Common framework for an infrastructure
Metadata, Services, Data specification, Data and service sharing



Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

Important elements for success

- A wide contribution in the continuous development work
- To point out the benefits
- A well developed co-ordination between public authorities responsible for geodata according to INSPIRE
- Willingness to create efficient solutions regarding information structure, financing/pricing, legislation and technique
- A stepwise approach on a long-term investment
- A legislation which supports the development of an infrastructure

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET

Follow our work on www.geodata.se

Geodata
SWEDEN BIT BY BIT

LANTMÄTERIET