

BUILDING A DIGITAL INFRASTRUCTURE FOR LOCAL DATA ON A NATIONAL LEVEL

231201

LARS HÄGG





THE STARTING POINT

- New Swedish digital strategy
- Agency for digital government
- A governmental assignment "digital first" with an aim to digitalize the planning and building processes 2018
- We made a stakeholder analyze with around 300 persons from government, municipality and private enterprises



THE RESULT

- A lack of standards
- Finding information is hard and expensive
- No central point of access
- Wide range of fragmented information and generations of legislations
- Data is in many cases not machine readable
- Missing legal support
- Minor municipality's ability to digitalize
- Unclear responsibilities

National basic data domain cadastral and geographic information (geodata).

General model

Version 1.1 2022-12-06

Aerial images

Aerial image

Ontholmagery

Sanelite image

Uidar

Radar

Elevation and depth

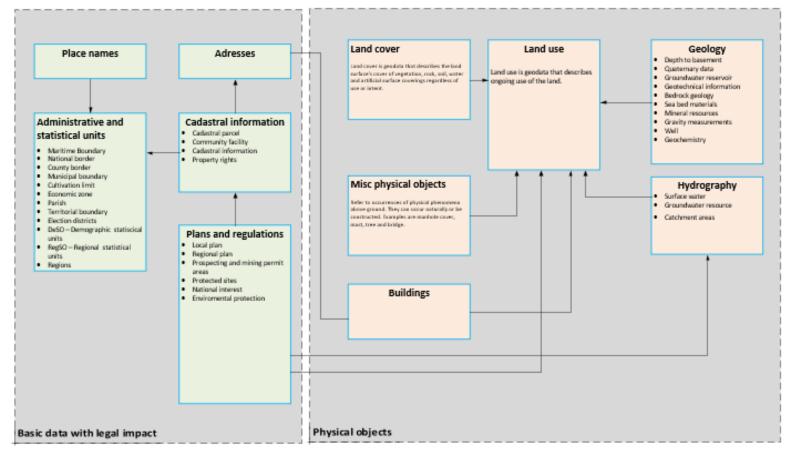
data

Uidar

Radar

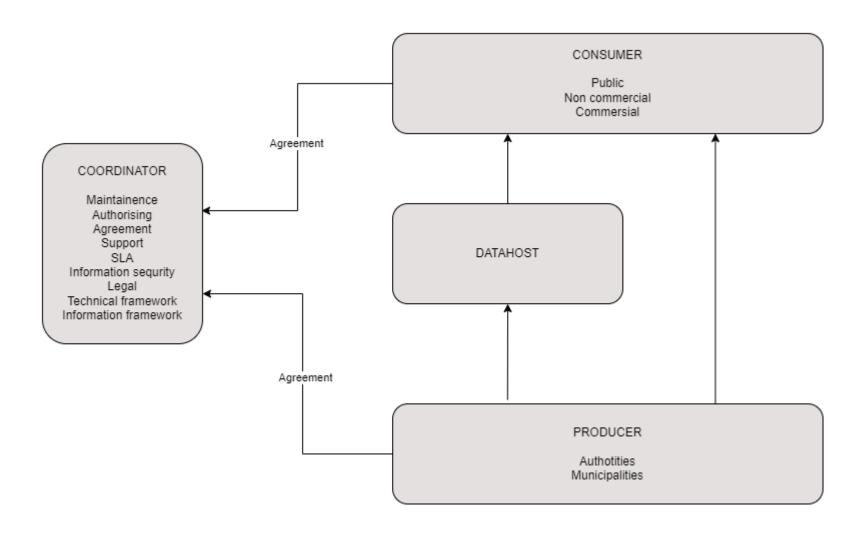
Elevation model

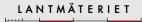
Buthymetry



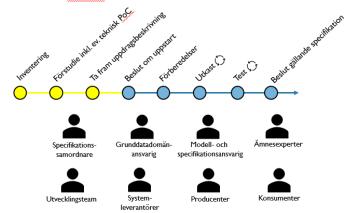


NATIONAL PLATFORM



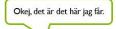


PROCESS AND ROLES



NATIONAL SPECIFIKATION







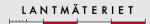
Konsument

Nationellt ramverk för utbyte av geodata

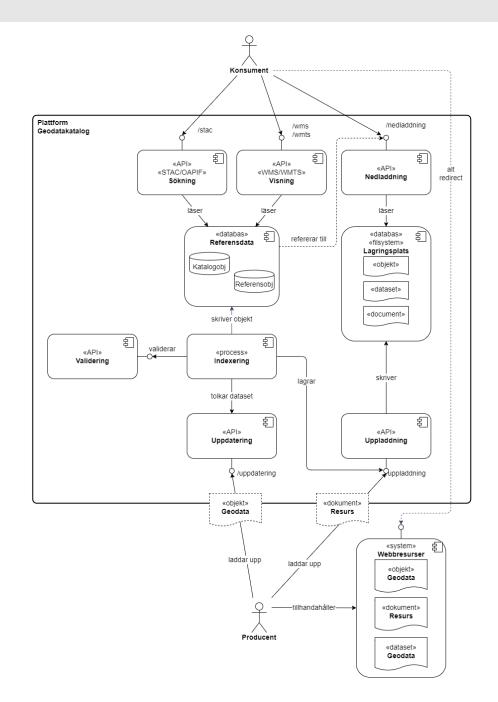
För att uppnå ett enhetlig och effektivt informationsutbyte tas ett Nationellt ramverk för utbyte av geodata fram. Alla aktörer bör läsa och ha kännedom om detta ramverk, men den primära målgruppen är producenter och systemleverantörer.

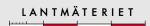
Innehåll på sidan

- » Del A: Introduktion och grundläggande principer
- » Del B: Resursmodeller
- » Del C: Modellering och specifikationer
- » Del D: Teknisk realisering
- » Del E: Tillämpning av standarder



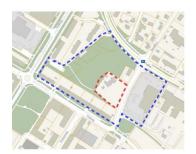
GEODATA CATALOG



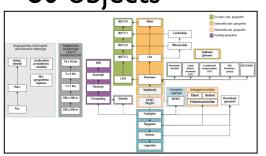


BASEMAP

47 objects

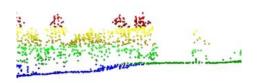


Administrative and statistical units ~80 objects



Elevation

3 objects



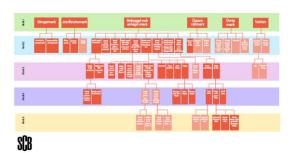
Planning 5 objects



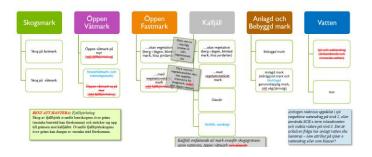
Builkding I object



Land use ~80 objects



Land cover <20 objects





WHAT WAS THE INTENTION OF THE SWEDISH NATIONAL PLATFORM

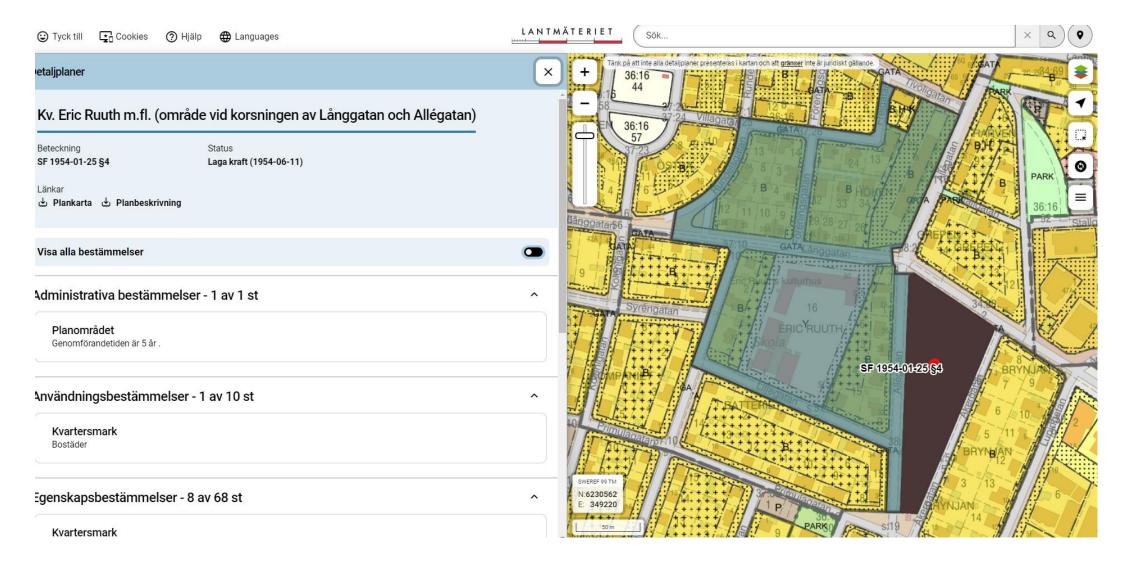
- Help speeding up the planning and building processes
- Create national standards not only from a cadastral view but from a national need of Al-ready information in 3D
- Enable smaller municipalities to publish data on a national level
- Build producer storage for national data, not a metadata portal

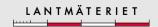


INTENTIONS FOR THE SYSTEM

- Automatic in the way of machine-machine communication between producer and consumer thru
 API
- API:s and format shall go for Open Standards and de facto standards as far as possible
- Also have an eye on the rapid development of open standards and to aim forward
- Handle different types of data in a standardized way (ex. search, find and down load different types
 of data, orthophotos, laser data, vector data, documents)
- Create a single point of contact for consumer for agreement and support

THE START – LOCAL PLANS





LESSONS LEARNED

- Specifications take time
- The framework is essential
- Secure the resources before starting
- Cross functional teams (legal, technical, operational staff and end user)
- Learning by doing
- Cooperation

WHAT'S GOING ON

- Administrative and statistical units (6 themes)
- Buildings
- Regional plans
- Infrastructural plans
- Regulations (3 themes)
- Land cover/Land use
- Geological surveys
- Geodetic surveys



THANKS FOR LISTENING

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Swedish NMCA

www.lantmateriet.se/en

National plattform

www.lantmateriet.se/en/national-geodata-platform/