



The Future of **European Location Services**

The technical infrastructure

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Kartverket a strong believer in **ELF and ELS!**



A presentation on behalf of



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AUTHORITATIVE GEO-INFORMATION



The Norwegian Vision and Strategy

Nationally

- A key player in Norwegian eGovernment
 - The Cadastre recognised as one of the three base registers
- National geospatial coordinator by law
- The national geospatial node
 - A national, governmental cloud platform for geospatial data and services
 - Geonorge.no the national platform



based on the national collaboration «Norway Digital»





The Norwegian Vision and Strategy

International commitments:

EuroGeographics



- UN-GGIM
 - UN GA resolution on global geodetic reference frame



- standards
- EEA Grant/Norway Grant mechanisms 🭳





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- Arctic SDI
- ELF and ELS









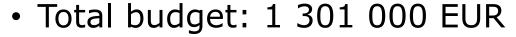
Kartverket's investment in ELF

- Overall project coordination (WP1)
 - Project administrator









- Total number of person months 94
 - approx. 8 man years
 - approx. 20 persons involved









Running an operational service The role of Kartverket

Governance Support processes

Software

Data providers Supplier relations

Data and Quality management Product Management

Services management management

Infrastructure management

Marketing

Account mgt/ Sales

User support

FIF users







Technical coordination

Services management

Web-sites:

<u>www.locationframework.eu/schemas</u>, <u>www.elfproject.eu</u>

Basemap (topo + admin)
Cascading services, Geolocator,
Cadastral Index Map,
GeoProductFinder, performance, ...

Software management

Oskari, Degree, Mapserver,
Geoserver, Security and license
server,
Table Joining Service, Drupal
Possibly:
Schema tools, Central geotools, ...

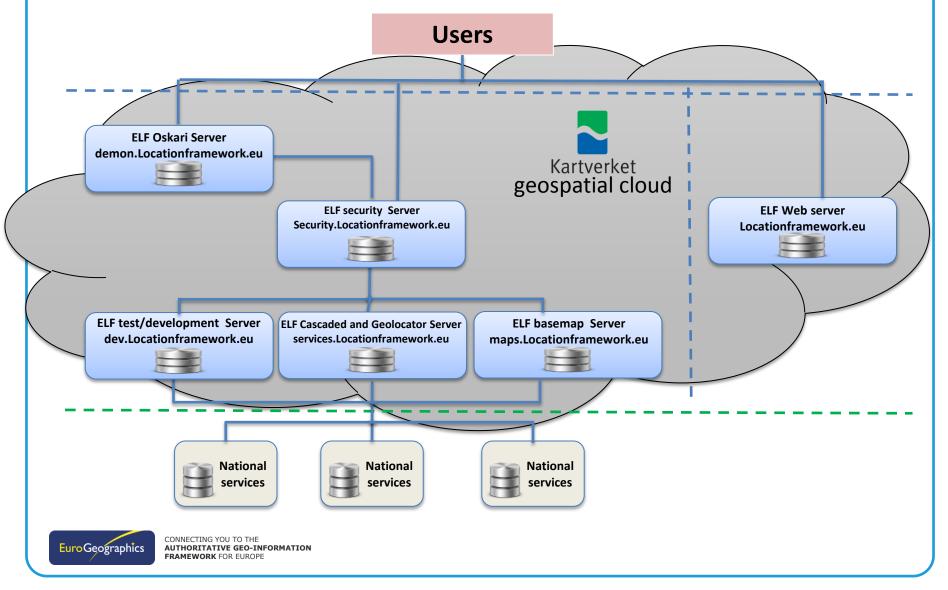
Infrastructure management

Servers, storage, network, operating systems, Security, firewall, backup, mirroring, load balancing ...





Consolidated Basic Technical Infrastructure



Organisation and collaboration

- Software management
 - NLS Finland, Kadaster, EGHO
 - possibly others ...
- Service management
 - NLS Finland, BKG, EGHO
 - possibly others ...
- Infrastructure management
 - Mainly Kartverket itself



Risks and Issues

From start:

- Commitment from all parties
 - Seamless continuation from project phase
- The platform succeeds only if the underlying infrastructure performs
 - the national services
- Scaling
 - costs if great success
 - act quickly enough (cloud technology, but not Amazon ...)
- Competence in all components



