

eGovernment for eCitizens

Case from Norway

and a short visit to Europe

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 Norwegian Mapping and Cadastre Authority
 FIG Working Week/GSDI 8
 Cairo, April 16, 2005




Supporting government initiatives ...

- eNorway 2005 Plan
- Strategy for electronic content
- HØYKOM-programme support initiative for broadband internet access

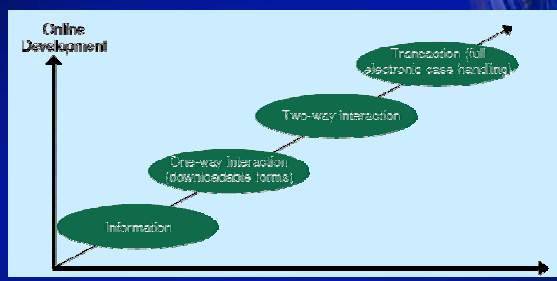


Standards for eGovernment

- Architecture for electronic interoperability in public sector
- Working group on the policy for open standards in support for eGovernment



Levels of eGovernment




«Norge digitalt» - et felles fundament for verdiskaping


«Digital Norway» - a common fundament for value adding

The Parliamentary White Paper presented by the Norwegian government and accepted by the Parliament on June 18, 2003

The major concept in the White Paper is the establishment of national geospatial infrastructure in support of eGovernment

"Digital Norway"


The public will have free access to Internet map services



Delivery services

- Distributed infrastructure
- Unifying reference data and thematic data
- Partnership and joint venture funding
- Covers local, regional and national authorities
- Establishes a public limited company to provide delivery services to non-partners
 - commercial
 - non-commercial

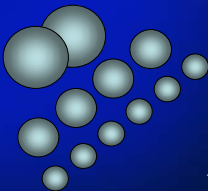
geoportals architecture



- national components
 - WMS, WFS, WCS, , web services
- regional and local components

used to build:

- national portal
- regional and local portals
- organisation specific portals



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Partners

- Directorate for Nature Management
- The Geological Survey of Norway
- The Norwegian Water Resources and Energy Directorate
- Norway Land Information
- Norwegian Institute for Land Inventory
- The Directorate for Cultural Heritage
- The Norwegian Pollution Control Authority
- Norwegian Mapping and Cadastre Authority
- Public Roads Administration

also

- Statistics Norway
- County authorities
- Local authorities (municipalities)
- ++ many other interested and complying !



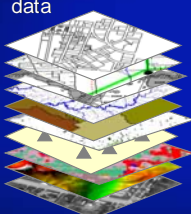
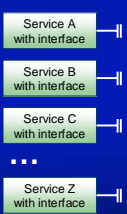

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Users :

the development addresses *all and any* potential application field for geospatial information !!

a variety of content, reference and thematic data

a rich set of functionality - services

a variety of applications

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A variety of content, reference and thematic data ...

reference data, 1:5 mill – 1: 5000

addresses

place names

real estate

geodetic network

geology

wildlife

pollution

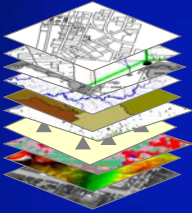
hydrology

transport

cultural heritage

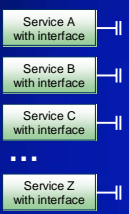
agriculture

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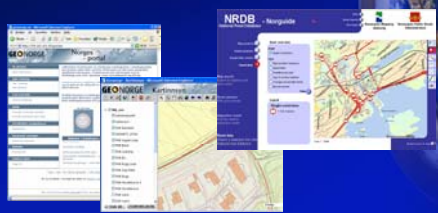

A rich set of functionality – services ...



- OGC WMS (ISO 19128) – most popular
- OGC WFS (ISO 19111) – coming
- OGC WCS – coming later
- ...
- web services for addresses
- web services for place names
- web services for real estate information
- web services for transformations
- ...
- metadata services (OGC + ISO 19115++)
- service metadata, UDDI catalogue

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A variety of applications ...

some examples will follow later ...

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Timeframe


- much is in daily, fully operational use
 - the national portal
 - wms services from a large amount of agencies with national coverage
 - web services
 - local authorities
- a new extension including more support of eCitizens accepted for 2005



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Standards

- National framework
 - mandatory architecture and overview of standards involved
- Content standards
 - long range of ISO 191xx's
- Metadata
 - dataset and services, ISO, OGC, UDDI
- Services
 - OGC, ISO, OASIS (web services)



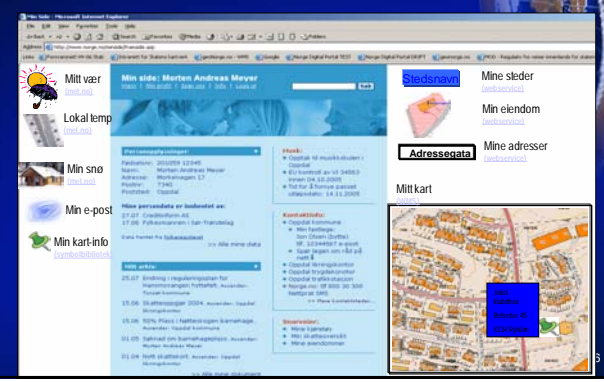
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Applications - some quick glimpses ...

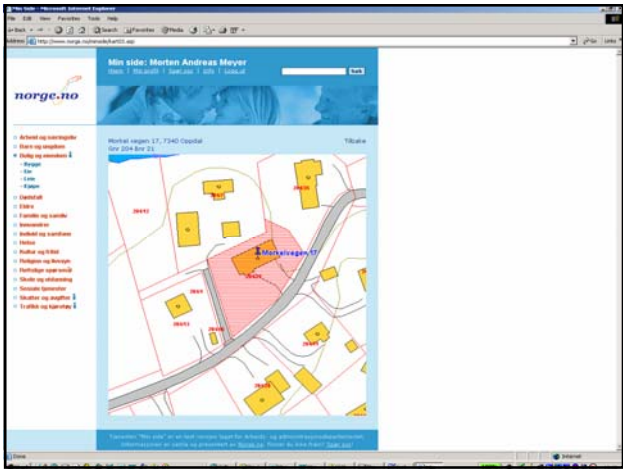


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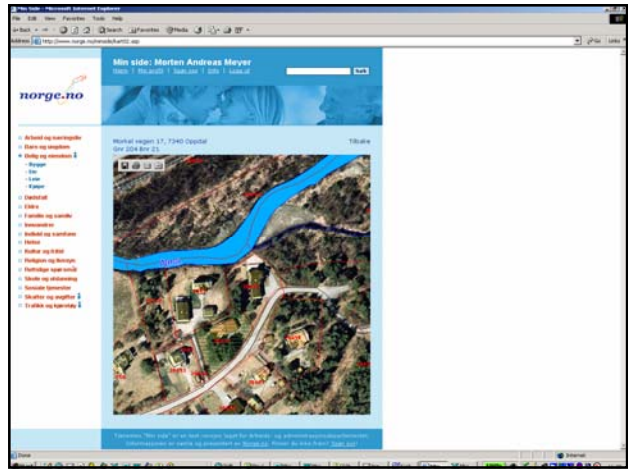
MyPage – initiative from MOD



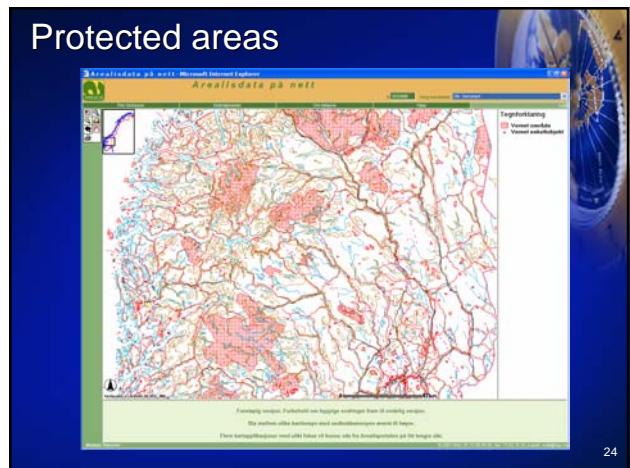
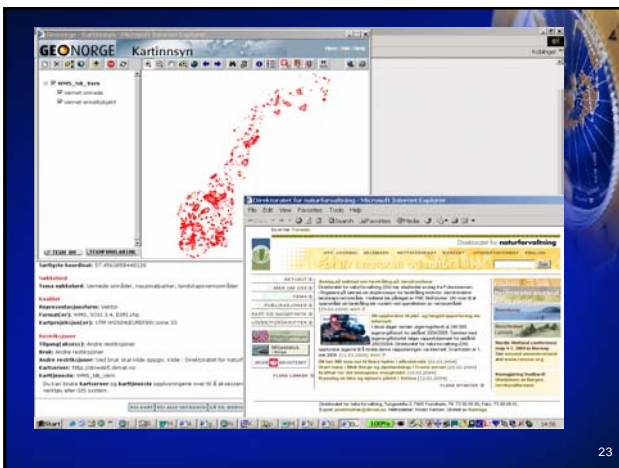
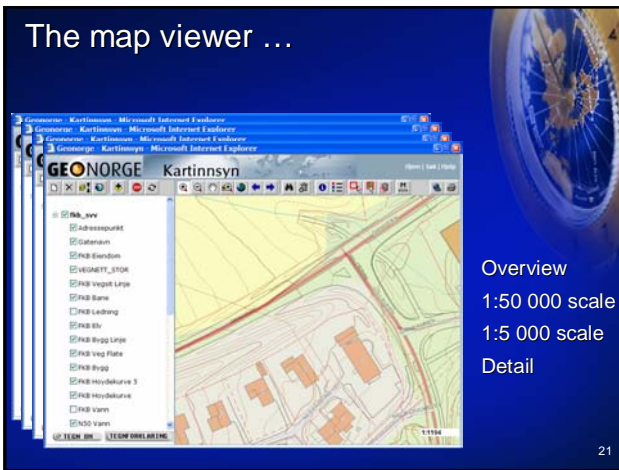
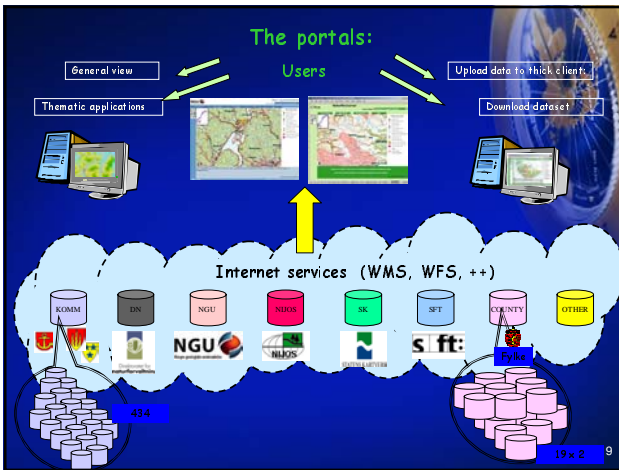
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Farm with soil classification
Application for the farmer – agricultural funding support

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Hydrology authority
<http://arcus.nve.no/nyatlas>

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National Road Data Bank

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NGU
Marine geology and resources
www.mareano.no

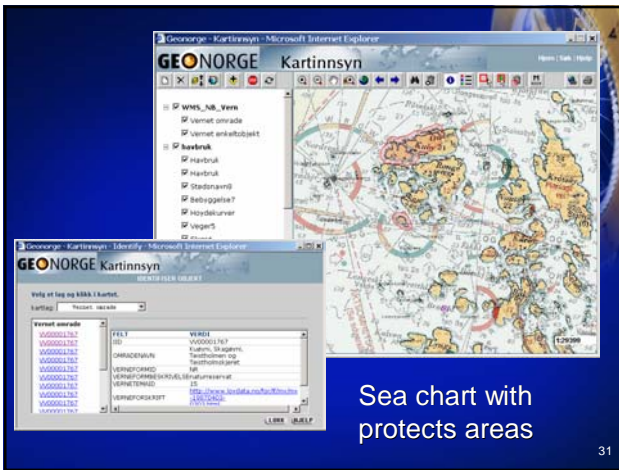
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No building zone – 100 m coastal buffer

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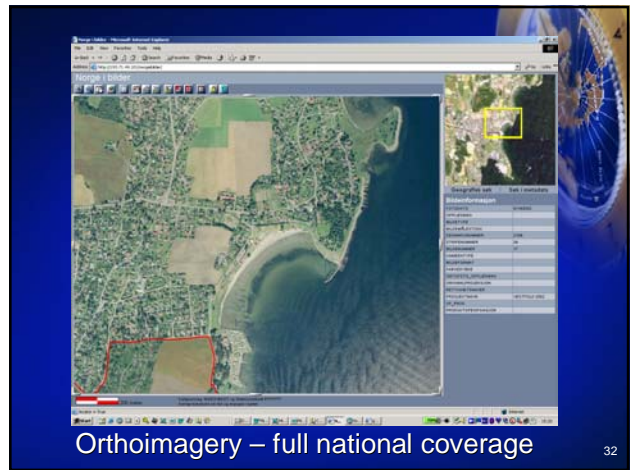
Fish farming

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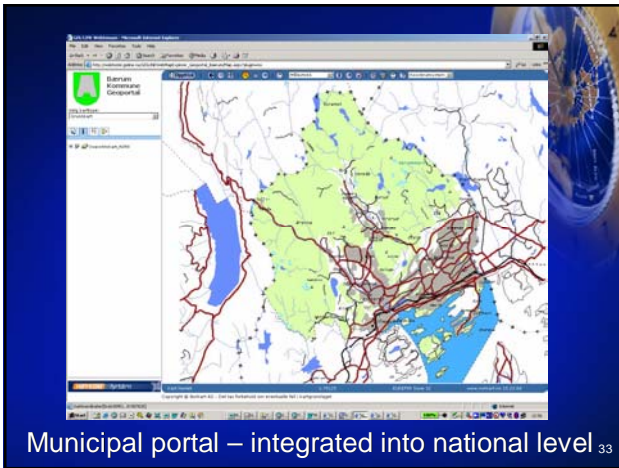
Sea chart with protects areas

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Orthoimagery – full national coverage

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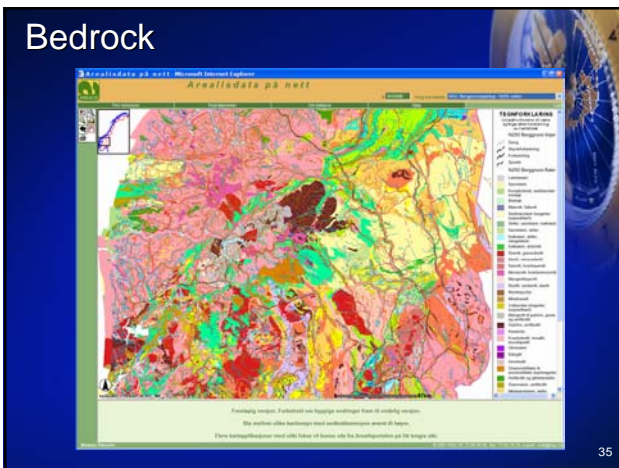
Municipal portal – integrated into national level

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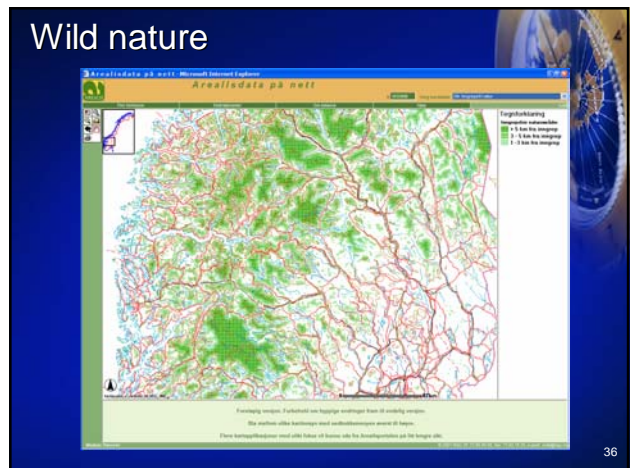
Municipal planning classification

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Bedrock

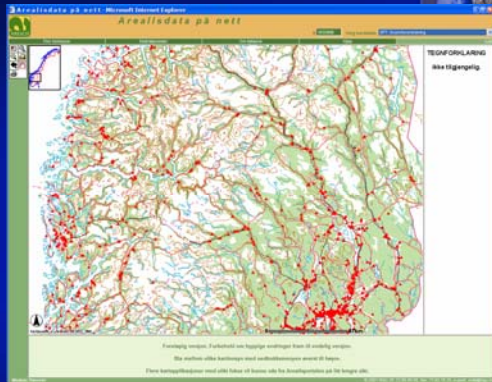
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Wild nature

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Pollution – deposit and waste



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In more detail ...

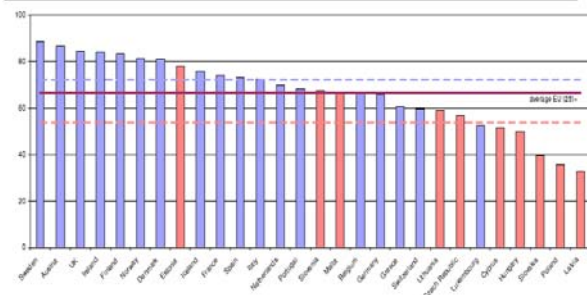
Example : Avalanche damage on roads and buildings



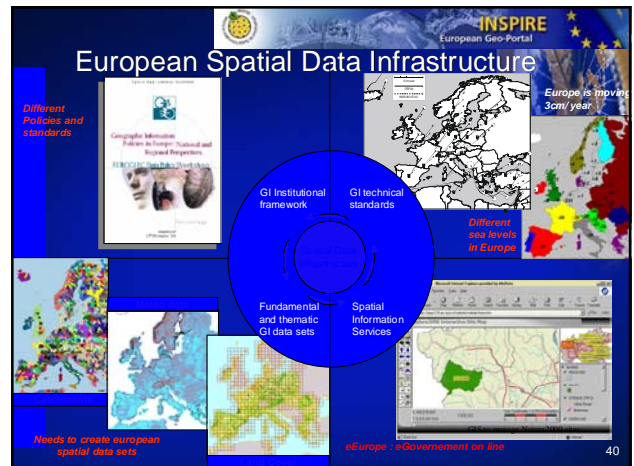
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DG Information Society and Media, March 2005

Figure 11a: Country results - online sophistication



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INSPIRE required services

Article 18

Member States shall establish and operate a network of the following services for the spatial data sets and services for which metadata have been created in accordance with this Directive:

- discovery services** making it possible to search for spatial data sets and spatial data services on the basis of the content of the corresponding metadata and to display the content of the metadata;
- view services** making it possible, as a minimum, to display, navigate, zoom in/out, pan, or overlay spatial data sets and to display legend information and any relevant content of metadata;
- download services**, enabling copies of complete spatial data sets, or of parts of such sets, to be downloaded;
- transformation services**, enabling spatial data sets to be transformed;
- "invoke spatial data services"** services, enabling data services to be invoked.

Those services shall be easy to use and accessible via the Internet or any other appropriate means of telecommunication available to the public.

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Lessons learned ...

- **The importance of**
 - Political support
 - Enthusiastic organisations at all levels
 - A clear strategy
 - An open, standards based technology
 - Allowing on-line integration from distributed sources
 - Dynamic metadata, both data content and services catalogues

Still much to do – especially on eCitizen interaction !!

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