eGovernment for eCitizens
Case from Norway
and a short visit to Europe

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

Supporting government initiatives...
- eNorway 2005 Plan
- Strategy for electronic content
- HOYKOM-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

"Digital Norway"
The public will have free access to Internet map services

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

- national components
  - WMS, WFS, WCS, ..., web services
- regional and local components
used to build:
- national portal
- regional and local portals
- organisation specific portals

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 ++

Users:

the development addresses **all and any**
potential application field for geospatial information !!
a variety of content, reference and thematic data

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 |

A rich set of functionality – services ...

OGC WMS (ISO 19128) – most popular
OGC WFS (ISO 191nn) – 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

A variety of applications ...

some examples will follow later ...
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

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)

Applications - some quick glimpses ...

MyPage – initiative from MOD
The portals:
- Internet services (WMS, WFS, ...)

Users

Geographic data

The geoportal – geoNorge.no
opened by the Minister of MOD

The map viewer ...
Overview
1:50,000 scale
1:500 scale
Detail

AIS system for Coast Directorate
Automatic Identification System
- MMSI number; unique identification
- Navigation status (e.g. “at anchor”, “under way using engine”)
- Rate of turn
- Speed over ground – 1/10 knot resolution
- Position accuracy – different GPS or other
- Longitude – to 1/1000 minute and Latitude – to 1/1000 minute
- Course over ground – relative to true north
- True Heading – 0 to 359 degrees derived from gyro input
- Time stamp

Protected areas
Sea chart with protects areas

Orthoimagery – full national coverage

Municipal portal – integrated into national level

Municipal planning classification

Bedrock

Wild nature
Pollution – deposit and waste

Example: Avalanche damage on roads and buildings

In more detail ...

DG Information Society and Media, March 2005

Figure 11a: Country results - online sophistication

European Spatial Data Infrastructure

INSPIRE required services

Lessons learned ...

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

Still much to do – especially on eCitizen interaction!!

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:

(a) 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;
(b) 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;
(c) download services, enabling copies of complete spatial data sets, or of parts of such sets, to be downloaded;
(d) transformation services, enabling spatial data sets to be transformed;
(e) “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.