INSPIRE implementation Break-out session

Summary

Topics for discussion

- Data content which data sets are in scope?
- Download Services
 - WFS, WCS<mark>,</mark> Atom, SOS, ...
 - Update of TG
- Metadata / Discovery services
 - Architecture / harvesting
 - How to avoid duplication between INSPIRE, WMO, national metadata
- View Services
 - Layers
 - WMTS
- Process: How to best support exchange INSPIRE implementation experiences?
- Consistency INSPIRE METCE
- Overlaps INSPIRE environmental reporting obligations

Content Download Service WTS, WCS, (WMS) Atom, Sos? nd Kat architecture + haven. Consistency INSPIRE - MERCE Process kupl + Mainten. Ovolop INSPIRE / env. vgating - Lo Serlige Metadata * IS WIS MD END

Data content

- Recommended parameters, spatio-temporal coverage and resolution in TG
 - but not possible to "narrow down" the scope of the INSPIRE theme
 - Why are warnings and alarms not considered? → should maybe be explicitly excluded
- Dimensions to consider when discussing the scope
 - − Parameters → see recommendations in TG
 - Spatial: which stations (Only WMO stations or all)?
 - Temporal resolution & extent: Until when in the past should historic data be made available?
- Underlying question: Who are the users? Which use cases?
 - Use cases in TG: Flood forecasting, emergency response (flash floods), climate (change) modeling, road situation (e.g. icing), plume detections, AQ reporting
- Scope could be defined by asking yourself: What data is generated by the public task a Met service is given (by law)?

Discovery Service / Metadata

- Mostly based on Geonetwork or OpenWIS
- One MD record should fulfill INSPIRE, WMO and (if possible) national requirements
- How to implement hierarchies of MD series / MD using ISO 19115?
- For some data sets, MD would still need to be created/generated

View Service

- Layers to be provided not clear (gap in the TG)
- Implementations based on WMS 1.3.0 (and sometimes older WMS versions)
 - Mainly GeoServer mentioned
- Considerations to use WMTS to deal with heavy loads

Download Service

- Current plans to use WFS or Atom
- NB: GeoServer plugin for INSPIRE compliance
- Interest in Update of Download service TG to WCS: Peter Baumann, Peter Trevelyan?, others?
- There may be no alternative to WCS for large meteo data sets
 - OpenDAP used with netCDF files (which can subset) or FTP may be other options

Process & next steps

- Main focus: exchange implementation plans and experiences
- JRC to inform about general INSPIRE maintenance and implementation process
 - Meteo (MetOcean?) community to serve as guinea pigs to test ways / tools for INSPIRE implementation discussions
- JRC to set up communication tools
 - mailing list
 - wiki
 - issue tracker (?)
 - conf calls only if necessary to discuss particular issues
- All to provide structured information on wiki on implementation plans
 - data content
 - technology choices for Discovery, View and Download services
- Possible events for further meetings
 - EGU Vienna (April)
 - OGC Frascati (Sept)
- INSPIRE METCE discussion
 - Mailing list & ad-hoc telecon

INSPIRE implementation

Status and planning in different Member States

Austria

- Discussion ongoing about which data to provide
 - For sure: climate data (no temporal dimension): multiyear average 1961-1990 30y reference period
- Metadata:
 - Decision to be made whether to provide through national INSPIRE contact point (temp. solution)
 - CSW will be set up at ZAMG in the long run
 - no plans to use WMO metadata, but interest to produce MD only once for INSPIRE and WMO

Netherlands

- KNMI data centre set up over last 2 years
- Data providers can provide ISO 19115 MD
- MD published through Geonetwork CSW
- View service: For certain data sets preview through WMS, but will be INSPIRE view services incl. MD for these
- Discovery service: Will look into OpenWIS software stack (based on Geonetwork)
 - incl. subscription and dissemination
- Download service: Atom feeds pointing to FTP downloads

Finland

- See Roope's presentation
- Discovery service: Use Geonetwork instead of OpenWIS for CSW
- Download service
 - based on WFS, Atom not planned
 - Stored queries incl. query parameters like parameters, area, ...
 - INSPIRE data sets are derived using these stored queries with certain default values
- Discovery service: contains only MD for few INSPIRE data sets (few parameters, course grained temporally and spatially)

Sweden

- MD for INSPIRE and WIS are kept separately
- Discovery service: own Geonetwork instance
 - Observations: 1 data sets for each parameter (based on TG recommendations)
 - Grids: based on model runs
 - EMFs
- Download: Atom feed
- View service : only show location of stations and outline of model grid (without any observation values)

France

- Separate WIS and INSPIRE metadata
- Which data sets?
 - French numerical model at 2 deg grid resolution with predefined sub-set of fields
 - Surface observation WMO RBSN → 47 stations in France and overseas departments
 - Vertical profiles
 - WMO climate bulletin
 - EMFs not planned
- Discovery service: based on OpenWIS
- View service: WMS for numerical models and surface observations, maybe also profiles and climate data
- Download service: Simple WFS, subsetting through stored queries

UK

Data scope

- Discussion based on the question what the public task of the MetOffice is → public weather service outputs
- Already available through data point service
- Still need to create MD
- Download service: Atom feed
- Discovery service: to be based on OpenWIS
 - obligation to also use gemini 2.1 → should both be covered by one service
- View: Discussion whether to use WMS or WMTS. Probably to use WMTS to deal with load

Germany

- Discovery service: Climate Data catalogue based on Geonetwork
 - harvests WIS subset (for Germany = WIS-DE)
 - harvested by GDI.DE catalogue
- Data scope: Discussion whether all these data sets should be considered within scope of INSPIRE
- View : WMS 1.3.0 Geoserver
- Download: WFS/WCS of Geoserver could be used, but not done operationally
- Download currently through other systems, e.g. via FTP