The European Meteorological Network (EUMETNET) and INSPIRE

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Outline

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Annex III Data

- **7.5 Human Health and Safety**
  Air quality \((O_3, NO_2, SO_2, UV, aerosols)\).
- **7.7 Environmental quality**
  Air quality, synoptic observations, **climate data**.
- **7.12 Natural Risk Zones**
  Seismograms, wind products (radar, scatterometer, model output).
- **7.13 Atmospheric conditions**
  Precipitation, wind, clouds, lightning, temperature, UV.
- **7.14 Meteorological geographical features**
  Synoptic observations, clouds, precipitation.
- **7.15 Oceanographic geographical features**
  VOS (Volunteering Observation Ships), remote sensing, waves, model output.
- **7.16 Sea Regions**
  Sea water temperature, sea level
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INSPIRE Milestones

• 15 May 2013: Metadata available for spatial data corresponding to Annex III.
• 15 May 2014: Newly collected and extensively restructured Annex II and III spatial data sets available.
• 15 May 2019: Other Annex II and III spatial data sets available.
Organisation & Working Groups

Stakeholders

- Individual NHMS (National Hydro-Meteorological Services).
- Network of European Meteorological Services (EUMETNET).
- European Centre for Medium-Range Weather Forecasts (ECMWF).
- European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT).
- World Meteorological Organisation (WMO).
Organisation & Working Groups

Activities & Working Groups

- Individual NHMS and WMO are active in INSPIRE reviews as LMOs.
- Participation in TWG Atmospheric Conditions + Meteorological Geographical Features (AC, MF).
  - Chair: Bernard Strauss (Météo France).
- OGC Meteorology Domain Working Group.
  - Chair: Chris Little (UK Met Office), Co-Chair: Marie-Francoise Voidrot (Météo-France).
- WMO: Inter-Programme Expert Team on Metadata and Data Interoperability (IPET-MDI).
  - Chair: Jeremy Tandy (UK Met Office).
- E-INSPIRE-ET, an EUMETNET technical working group.
  - Chair: Wim Som de Cerff (KNMI).
EUMETNET INSPIRE Expert Team (E-INSPIRE-ET)

EUMETNET

• GIE/EIG EUMETNET:
  – A network grouping 26 European NMHSs.
  – Provides a framework to organize co-operative programmes:
    › Observing systems, data processing, basic forecasting products.
    › Research and development and training.
  – Established a dedicated INSPIRE EUMETNET working group
    › Continued in an INSPIRE Expert Team (E-INSPIRE-ET) 2010.
EUMETNET INSPIRE Expert Team (E-INSPIRE-ET)

Main Tasks:

- Enabling networking, sharing of ideas and best practices to ensure interoperability across the community.
- Involvement in INSPIRE TWG (AC, MF).
- Providing a resource for the NMHSs to seek consultancy advice.
- Coordinate its activities with the EUMETNET programme EUMETrep.
- Bring issues related to INSPIRE to the attention of EUMETNET, particularly those which require separate resolution, through further funding, resourcing and training.
- Acquire and maintain contacts with technical development groups in order to influence and coordinate progress on modelling and implementation of EUMETNET data exchange.
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Some technical issues:

- Selection criteria for Annex-III datasets.
- Data formats, coordinate reference systems.
- Data volumes.
- The effort that is required for each NMHS to provide relevant datasets to the INSPIRE spatial data infrastructure.
- Governance of pan-European datasets.
- Services (WCS) & data models for raster data.
- Catalog services State of Art.
- Soap vs REST
EUMETNET INSPIRE Expert Team (E-INSPIRE-ET)

E-INSPIRE-ET

Composition & relations:

• Chair: Wim Som de Cerff (KNMI).
• Participants: UK Met Office, EUMETNET, SMHI, Met Norway, Meteoam Italy, Meteo Portugal, Météo France.
• Alignment with INSPIRE TWG, WMO IPET-MDI and OGC-Meteo DWG through UK Met Office, SMHI, KNMI & Météo France.
Conclusion

- Meteorological & climatological domain very active within INSPIRE.
- Many stakeholders.
- Several working groups with different goals.
- Strong links between the different working groups.
- It has just started: many (technical) issues to be resolved!