





Round table discussion of Thematic Working Group Facilitators

Tuesday 24th June 2008
Maribor



Specification development roadmap Annex I



Description	Start	End
Task 1: User requirements and use cases	2008-03	2008-09
Task 2: Analysis of the relevant reference materials	2008-02	2008-05
Task 3: "As-is" analysis	2008-06	2008-09
Task 4: Gap analysis	2008-06	2008-09
Task 5: Drafting of data specification (includes SDIC/LMO consultation at the end of 2008)	2008-05	2009-03
Task 6: Testing of draft data specifications (involving SDICs and LMOs)	2008-10	2009-03
Task 7: Preparation and adoption of IR for the interoperability and harmonisation of spatial data sets and services for Annex I spatial data themes	2009-02	2009-05



TWG-GN : Geographical Names



- Are proper nouns applied to a natural, man-made or cultural features on Earth, where each feature can have several different names
- An *endonym* is a name for a geographical feature in an official or well-established language occurring in that area where the feature is situated.
- An *exonym* is a name used in a specific language for a geographical feature situated outside the area
- They serve as means to identify a location
- Are often published on maps and in gazetteers that associate names with corresponding features by means of co-ordinates or feature types
- They can be applied as attributes of spatial objects, or can be modeled as objects in spatial data sets



TWG-AU : Administrative Units



- Are divisions of national territory where Member States have and/or exercise jurisdictional rights
- They are separated by administrative boundaries
- They form a partition of space which may comprise land and (coastal) water parts
- May carry a reference to national statistical units at local level (LAU) and to the Nomenclature of Territorial Units for Statistics (NUTS) established by Eurostat.
- They don't include related systems such as census districts, post office regions and other sector-specific regions



TWG-AD : Addresses



- **Address** is an identification of the fixed location of a property
- **Addresses serve several purposes** (4 uses described in the Dutch Address Registration catalogue):
 - (i) **location** (e.g. for visits or the delivery of mail),
 - (ii) **identification** (e.g. in context of a building registration),
 - (iii) **jurisdiction** (e.g. authority responsible for the property identified by the address), and
 - (iv) **sorting and ordering** (VROM 2006)
 - other uses
- Different object types can be related to property
- Object types that have addresses:
 - land parcels, buildings, water pumping stations, agricultural buildings, sports ground, “mobile” home, houseboat (mooring place), ...
 - Collectively, objects which can have addresses are referred to as **addressable objects**.
- **Differences exist:**
 - in formal and informal standards, rules, schemas and data models within Europe
 - in the extent of the address system, for example, it maybe more limited in rural areas..



TWG-CP : Cadastral Parcels



- Are areas defined by cadastral registers or equivalent
- In INSPIRE context they are mainly used as locators for geo-information including environmental data, thus they focus on their geographical representation
- For numerous applications they are the smallest spatial objects that can be referenced across Europe
- At national level, cadastres have the function to ensure ownership security, to facilitate land market and/or to enable taxation
- They are defined by five core elements:
 - Boundaries, unique identifier, official area, geo-reference, origin/history.



TWG-TN : Transport Networks



- **The transport component:**
 - should comprise an **integrated transport network**, and related features, that are
 - **seamless** within each national border
 - national transport networks should also be **seamless** at European level, i.e. connected at national borders
- Transportation data includes topographic features related to **transport by road, rail, water, and air.**
- **Important requirements:**
 - the features form **networks**, where appropriate
 - the **links between different networks** are established, i.e multi-modal nodes,
 - in order to satisfy the requirements for **intelligent transport systems** such as location based services (LBS) and telematics
 - satisfy environmental impact assessments
- The transport network should also support the **referencing of transport flow** to enable our **navigation services.**



TWG-HY : Hydrography



- The theme “Hydrography” is a basic reference component and, therefore, of interest for many users and uses.
- For mapping purposes, the representation of all main hydrographic elements, both natural and artificial, is needed to provide a map background for orientation and to understand place relationship.
- To fulfill the reporting requirements of water related directives of the EC it is required that the river and channel network and the surface water bodies within the river basin district shall be identified.
- Furthermore, a topological sound river network is necessary for GIS-based spatial analysis and modeling;
- The theme “Hydrography” covers in geographic scope all inland and marine waters as far as covered by the Water Framework Directive



TWG-PS : Protected Sites



- According to IUCN and adopted for the INSPIRE context a protected site is: **An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means**
- The sites may receive protection due to more than one type of objectives, and may have a double or multifarious designation status;
- The main purposes of designation are specified in categories of CDDA (4.5.2 National designation type category) and according to the typology developed in the Standard Data Form for Natura2000 under the Habitat Directive, furthermore, categories of IUCN for Protected Sites and other international designation types have to be applied. A new classification system of protected sites with an overall set of categories under the INSPIRE directive, therefore, has to include Sites of Community Importance (SCI) under the Habitat directive and Special Protection Areas (SPA) under the Birds directive, as well as further designation types on a global level



TWG-RS : Coordinate Reference Systems



- Follows EN ISO 19111:2007 definitions
- Horizontal component :
 - mandate **ETRS 89** (on the stable part of the Eurasian tectonic plate)
 - mandate (**ITRS**) and other systems compliant with ITRS elsewhere
- Vertical component :
 - mandate **EVRS**
 - other vertical reference systems may be used in areas that are outside the geographical scope of EVRS.
- Address registries of the relevant geodetic codes and coordinate transformation parameters.



TWG-RS : Geographical grid systems



- 2D grids used for indirect georeferencing of themes with coarse resolution (e.g. statistical data).
- General requirement: grid needs to be georeferencable in accordance with the rules of CRS Theme.
- Cell coding system and cell subdivisions should be user friendly (understandable, easy to aggregate/generalize..)
- Recommended multipurpose grid: EEA reference grid ETRS-LAEA 52N 10E:
 - ETRS89 Lambert Azimuthal Equal Area, resolutions
 - grid size of metric resolution in standard size 100 m, 1 km, 10 km and 100 km