Draft

Comment of the Technical Working Group (TWG) EUREF (IAG Sub-Commission 1.3a EUREF) on objective and work content of the INSPIRE Thematic Working Group Coordinate Reference Systems

The available ***Overview description v 0.1*** of the INSPIRE Thematic Working Group (TWG) Coordinate Reference Systems (CRS) (drafted by Paul Cruddance) contains the Scope and Definitions of the ISO Standard 19111 „Spatial Referencing by Coordinates“ what is not subject of the topic of the TWG. There is no statement what actually shall be treated in the Thematic Working Group.

ISO 19111 specifies the structure of data and information that are necessary for the definite description of the Coordinate Reference System (CRS) used for a coordinate set. Solely the user describes the coordinate reference systems. The main elements of 19111 are also part of ISO 19115 „Meta data“. The term of geodetic reference system (GRS) from the world of geodesy is used synonymously with the term of the Coordinate Reference System of the GIS world. In 19111 it is not distinguished between frame (realisation) and system (definition). ISO19111 combines elements of definition and realisation of GRS and CRS, respectively.

Global, regional, as well as local geodetic reference systems can be described with the roles of 19111. In connection with other standards, as 19115 „Meta data“, 19127 „Geodetic Codes and Parameters“, 19113/14 accuracy aspects the standard 19111 is necessary for the task to be solved by INSPIRE.

For provision of the documents

- Analysis of the reference materials

- Analysis of the user requirements and documentation of the use-case development
- Resolutions …
- Data specifications …
- Provide material …

at the end of the work of the Thematic Working Group the corresponding tasks have to be formulated.

A user-oriented product catalogue should be established that contains the necessary products for georeferencing. The description of the CRS and transformations are two of several products. How CRS and transformations are described, ISO 19111 regulates. But in 19111 it is not regulated which CRS are used for the INSPIRE introduction and which parameters characterize the CRS and are used for the transformation.

On the part of EUREF, the provision of geodetic basic information for the users like:

– description of the geodetic reference systems
– transformation parameters from national reference systems into the ETRS89 or into global reference systems ITRF, ITRS, respectively
– coordinates and time series of the European GNSS stations,

is considered as being part of the INSPIRE data. It is necessary for the georeferencing of the European geo-data.

Dr. Johannes Ihde
Chair of IAG Sub-Commission 1.3a EUREF