



Rule Specification for Semantically-oriented Harmonisation of European Datasets

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The INSPIRE directive was published by the European Union in order to provide a legislative framework for the establishment of a Europe-wide Spatial Data Infrastructure. The recent publishing of data specifications for Annex 1 of the directive provides a valuable foundation for inter-governmental organisations to harmonise their geospatial data. In order for earth scientists and governmental organisations to harmonise existing datasets through INSPIRE data specifications, it is necessary for the organisations to conduct a comparative analysis identifying feature types in their own existing datasets that match feature types in the INSPIRE data specifications. Once the comparative analysis has been completed, it is necessary for harmonisation rules to be specified. This presentation will describe an approach for encoding semantically-oriented harmonisation rules. The harmonisation rules abstract data aggregation, fragmentation and direct conversion. The harmonisation rules rely on feature type schemas tagged with references to concepts in an ontology. The tagged schemas can then be transformed based on a transformation script that maps source concepts to target concepts. The presentation will use examples from Elevation and Hydrography data provided by GIS4EU – a European Commission eContentPlus project.