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HOW TO CREATE A EUROPEAN INSPIRE COMPLIANT DATA SPECIFICATION

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The European Commission's ambition to build a European Spatial Data Infrastructure (ESDI) on the National Spatial Data Infrastructures in Member States, for which INSPIRE is the legal instrument, is currently in development. The network of European National Mapping and Cadastral Agencies (NMCA's) represented by EuroGeographics, are the main data providers of many INSPIRE Annex I themes. EuroGeographics has been harmonising national mapping to create European level products like EuroGlobalMap, EuroRegionalMap and EuroBoundaryMap for over a decade. This experience is critical in extending to larger scales, larger regions and greater numbers of themes (administrative units, transport networks, cadastral parcels, hydrography and geographical names for example).

In order to meet the increasing demands for reference data, consolidated data specifications are required to facilitate the interoperability of topographic, administrative and cadastral reference information of European NMCAs according to the requirements set in the INSPIRE directive and other user requirements at the European and Global levels. This will ensure that aggregation and increased use and re-use of high quality, up-to-date, content rich and authoritative geospatial information, particularly for INSPIRE Annex I themes, is improved.

The poster illustrates the approach to the development of these specifications as a set of profiles of the INSPIRE Data Specifications for large, medium and small scales comprising the parts of the INSPIRE Data Specifications that are in the remit of the NMCAs and for which a European coverage can be achieved. However, the INSPIRE Data Specifications do not cover all information currently provided in the existing European products. Since these products are used by European Commission bodies and other organisations, it is not appropriate to simply drop the information just because it is not part of this version of INSPIRE (Figure 1). Rather, these additional information items are specified as extensions in conformance with the Generic Conceptual Model of INSPIRE (Figure 2).

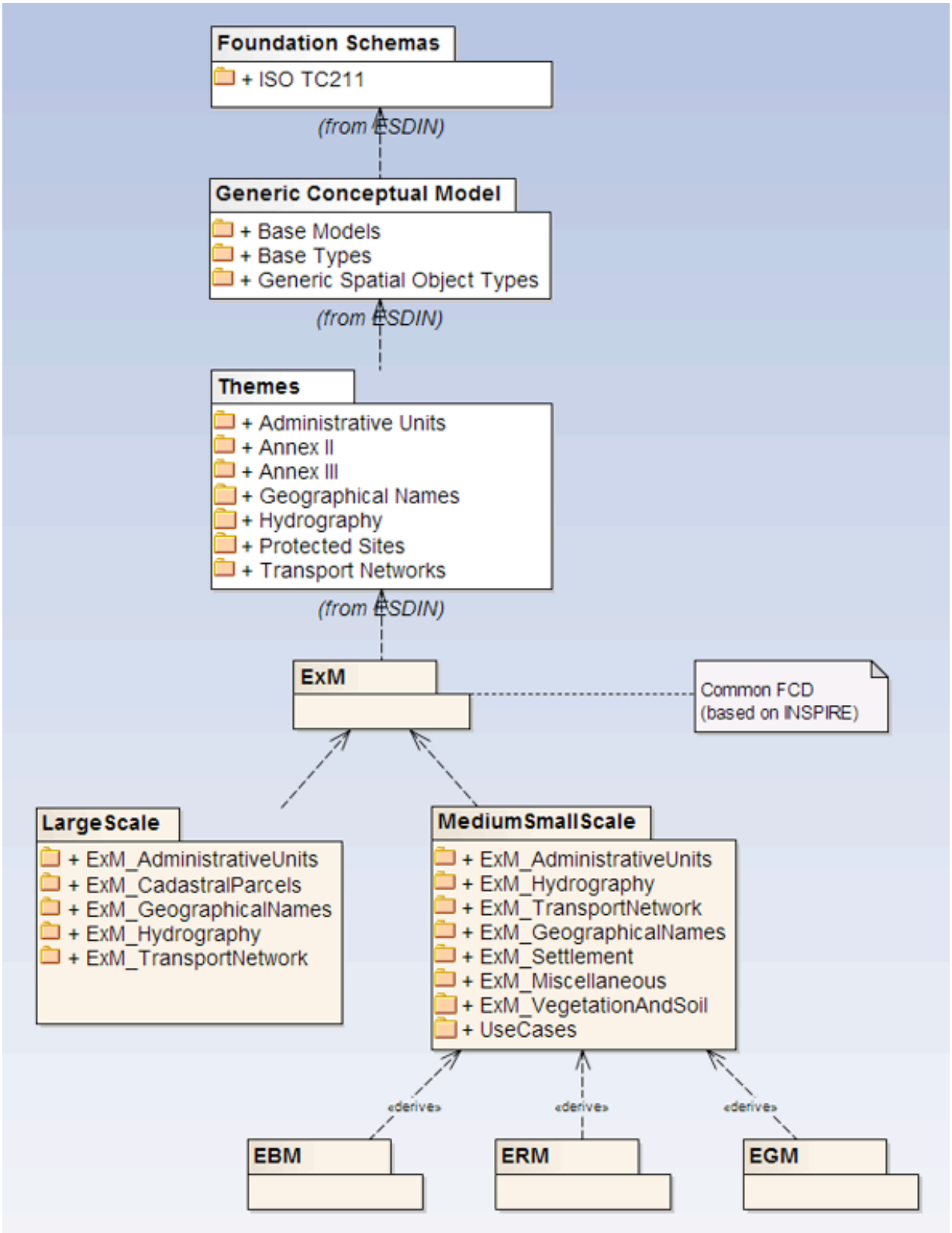

Figure 1 General modelling approach

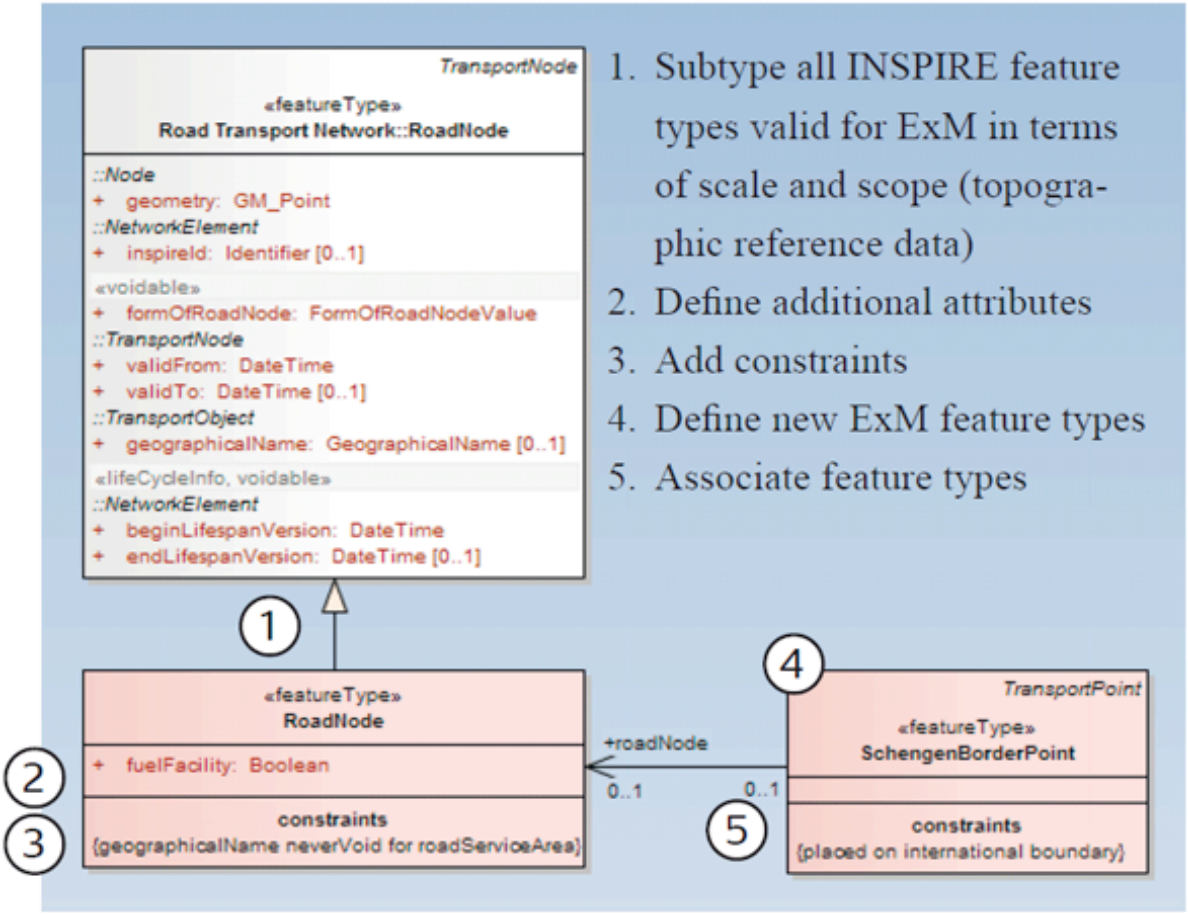

Figure 2 Modelling principles

The ExM data specification, currently developed by the ESDIN project, is a conceptual data model for creating harmonised cross-border, cross-theme and cross-resolution topographic and administrative reference data. It forms the base for the definition of future user-oriented pan-European data services and products of EuroGeographics providing an integrated view of the natural and man-made landscape. Conformance to this specification will enable NMCAs to fulfil INSPIRE requirements.

The solutions developed will ensure that the experience of each Member State of Europe and EFTA state NMCA's in the development of their NSDI's and implementation of 'state-of-the-art' technology is shared and exploited in best practice networks of European NMCAs, technology providers, academics, Value Added Resellers, and users to significantly raise the prospects of success for the European Spatial Data Infrastructure.