

CityGML Goes INSPIRE

SIG 3D will place the international OGC 3D modelling standard CityGML for the supply of building models, and terrain as well as production and industrial facilities in the INSPIRE expert groups. The specification of CityGML has been established by SIG 3D. As some members of SIG 3D participate as well in the OGC CityGML Standardisation Working Group, requirements from INSPIRE implementation can be submitted directly in the OGC standardisation process.

European Union encourages the set-up of a European Spatial Data Infrastructure by the INSPIRE Directive (RL 2007/2/EG, 15th Mai 2007). 2,5D geodata will be made accessible via internet (web services). The proper data definitions will be elaborated in expert groups (Thematic Working Groups, TWGs) and made mandatory for all geodata providing bodies (e.g. regional Mapping Agencies, municipalities).

SIG 3D as well will emphasise the subject of 3D during the INSPIRE implementation process. The widespread use of CityGML within Europe is important to allow a consistent provision of data sets, which can be handled by all systems and thereby bringing benefits to the user.

"While INSPIRE isn't necessarily concerned with 3D aspects of geographic data, SIG 3D's domain expertise will provide an important input into these INSPIRE Thematic Working Groups. By making experience in modelling the world in 3D available to INSPIRE will facilitate a tighter integration and perhaps harmonisation of data across dimensions. For end users this means that same geographic data such as terrain models or buildings can more easily be used in traditional 2D information systems as well as in 3D environments." says Carsten Rönsdorf, member of the SIG 3D and chair of the OGC's CityGML specification working group.

CityGML is already used successfully in the EU Noise Mapping in North Rhine-Westphalia (NRW). Noise mapping is as well an INSPIRE thematic topic. Buildings, roads and railways are modelled three-dimensional to calculate the noise impact on the buildings and citizens (see CityGML Noise ADE of SIG 3D). The 3D visualisation and the rapid 3D data access via internet (web services) form a high advantage for the end users. The 3D data are provided via high performance web services (WFS-T, WCS). This technique is very successful in NRW so that the concept should be used as well for the implementation of INSPIRE data provision in NRW.