BIM and INSPIRE, the marriage of two worlds for a better integration of built infrastructures in their environment : the MINnD project

François Robida and Christophe Castaing

(Submission #354)

Abstract

Large infrastructures such highways, airports or metro lines must be designed, build, operated in a way which preserves their environment. The industry of building has developed and adopted BIM standards (Building Information Modeling) to describe buildings along their lifecycle from their design to their operation and maintenance. This standardization process has been achieved under the coordination of BSI (Building Smart International). When it comes to infrastructures, their integration in the geospatial space is key, and therefore the connection with the geospatial information standards become obvious. OGC and BSI are now cooperating to integrate the two domains of standards, so that information about natural and built environment can be jointly used in managing the infrastructures and their environment. MINnD (French acronym for "interoperable information modeling for sustainable infrastructure") is a research project supported by the French Ministry of Environment. It involves 60 partners representing a large diversity of stakeholders and expertise from the industry, engineering, software vendors, research organizations, public agencies, and local authorities. Its ambition is to contribute to the development and implementation of standards that will facilitate sharing of information amongst all the actors (public and private) involved in the life of infrastructures. INSPIRE can provide standard access to environmental information that is necessary for the evaluation of the impact of projects. The example of subsurface information (geology - geotechnics) will be presented to illustrate how services according to INSPIRE requirements can be used and integrated in this process. Some specific requirements from the users could be taken into account by INSPIRE data providers in order to facilitate their use. The role of public data providers is key to provide "neutral" information about the state of environment along the life of the infrastructures.

Categories

Topic Area: *[1.13] Utility and asset management – public and private sector*
Abstract Type: *Oral Presentation*