Ingenieurfakultät Bau Geo Umwelt

Dokumenttyp: Konferenzbeitrag


Titel des Beitrags: A Refined Product Model for Shield Tunnels Based on a Generalized Approach for Alignment Representation

Abstract: For realizing data exchange in the context of planning and realization of large infrastructure projects, a comprehensive neutral data model capable to present both semantic as well as geometric aspects is necessary. The Industry Foundation Classes (IFC) provide a full-grown and standardized product model for the design and engineering of buildings. In the infrastructure sector, a comparably powerful data exchange solution is still missing. To fill this gap, this paper presents an alignment model which is based on the IFC data model and can be used as a data exchange standard for the design and maintenance of linear infrastructure facilities like roads, bridges and tunnels. The paper presents in detail the results of our data modeling activities. In particular, we demonstrate the use of the alignment sub-model by integrating it with a refined version of an existing shield tunnel product model. The proposed product model provides semantic entities, models the relationships between the physical objects and makes extensive use of the space aggregation concept inherited from standard IFC.

Stichworte: IFC; Alignment; LandXML; 3DTracks; OpenINFRA

Kongress- / Buchtitel: Proc. of the ICCBEI 2013

Jahr: 2013

Jahr / Monat: -
2013-11

Monat:

Nov

Revied:

ja

Occurences:

- Einrichtungen > Fakultäten > Ingenieurfakultät Bau Geo Umwelt > Lehrstühle > Leonhard Obermeyer Center > Lehrstuhl für Computergestützte Modellierung und Simulation (Prof. Borrmann) > Konferenzbeiträge

Entries: