

ifcROADS Project Proposal

Having standardized infrastructure asset data available throughout the lifecycle of the facility is an important key to a higher efficiency in planning, constructing and operating of our infrastructure. A comprehensive neutral data model capable to present both semantic as well as geometric aspects is necessary for enabling data exchange and open data access in the context of planning, realization and maintenance of road and rail infrastructure.

This ifcROADS project aims at defining the IFC4-standard extensions necessary for the roads spatial and structural semantic elements, including the different types of roads and crossing with their different layers, pavement, etc..

ifcROADS shall use the P6 buildingSMART Alignment project data model for the geometric and geographical layout of its road elements and shall be complementary to other infrastructure data models for bridges, tunnels, etc.

Objectives

The ifcROADS Schema Extension is set to achieve:

- Ability to exchange road semantic elements information from planning to construction and maintenance phases of projects
- Open data access of road elements information from asset management databases
- Lasting archiving of infrastructure information models
- For BIM/GIS synchronisation, ability to establish connection with CityGML Transportation objects and future InfraGML

buildingSMART Infra Room support

The buildingSMART Infra room support is required for ifcROADS project in order to reach the harmonisation around the world and providing a single approved referenced data model to be implemented and supported by software vendors.

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