AMS FREE
Newsletter July 2020

CEDR
Conférence Européenne
des Directeurs des Routes
Conference of European
Directors of Roads

The Project

The main goal of the AMSFree Project is to establish detailed technical requirements for linking Infrastructure Asset Management Systems (IAMSs) and Building Information Models (BIMs) as infrastructure asset databases on both macro and micro levels. The AMSFree project analyses the architecture of IAMSs used by NRAs as well as the implementation of BIM and sensor technology along with IFC and the data structure in current IAMSs. The European project is funded by CEDR.
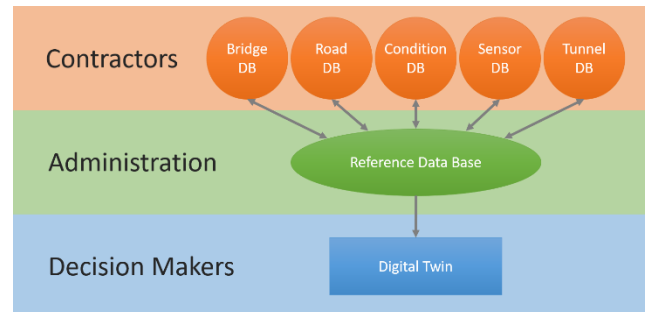
The Consortium

The Consortium of the AMSFree project consists of experts in infrastructure management systems at Infrastructure Management Consultants (IMC), BIM implementation and data exchange at the Institute of Computing in Engineering of Ruhr University Bochum, geotechnical effects on transport infra-structure networks at InGeo and management of road maintenance at the Institute for Institute for Transport Systems and Infrastructure at University of Applied Science in Karlsruhe.

The Start

At the Start of the project, the website amsfree.eu was created. The website contains general information about the project and the consortium as well as the project flyer. In the future, results and publications will be provided on the website.

In the first completed work package "The Comparative analysis of IAMS and common BIMs in Europe" the task was to determine commonality and differences between the asset management systems used in Europe and common BIMs used in Europe. As a conclusion, a central storage and administration of the asset information of the transport infrastructure is impossible. Information must be managed in existing systems and in a decentralized way. Therefore, a standardized access can be enabled via linked data concepts.

Schematic diagram of Dataflow

Workshop

In July, a first workshop with the whole consortium of AMSFree took place in Karlsruhe. The next steps of the project were discussed. Including the Process map of IAMSs, the integration of sensors and the required data structure.

Near Future

In the next steps, the consortium will adapt existing inspection and monitoring procedure for BIM and develop data workflow for new sensor and scanning techniques. Moreover, the consortium will identify how the data can be used directly in condition scores or be transformed to provide key performance indicators. Furthermore, a reference database will be established as well as interfaces to different database (archipelago) that allow semantic transformations.

Mid-Term-Conference

On October 22nd, the Mid-Term-Conference will take place partly physical in Copenhagen with the possibility to attend online as well. The AMSFree Consortium will present the current work progress. Those topics which are expected to be covered are "Data flow models in asset management", "Detailed Reference Process Model for IAMS", "Establishment of IDM for the condition assessment of assets" and "Analysis of the IFC and its adaptation to accommodate condition assessment".

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