Using BIM to structure asset management data

Results of the BIMPro Programme

Geospatial World Forum – 1st October 2021
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• **Providence of Gelderland** - Program Manager BIM and Asset Management
• **BIMpro** – Chairman of the Management Committee
• **BIM Loket** - Member of the Program Committee and ICDD/CB-NL Committees
• **NEN** Member of Committees about information integration and data modelling
Provinces of the Netherlands

- Responsible for:
  - Sustainable spatial development
  - Environment, energy and climate
  - Rural areas and nature
  - **Mobility; Management of regional roads, waterways**
  - Regional economy
  - Cultural infrastructure and historic preservation
  - Supervision of lower governments
Province as Asset Owner

- 1,160 km roads
- 1,400 km bicycle roads
- 340 bridges and tunnels
- 6,000 culverts
- 30 km noise barriers
- 83,000 trees
- 15,000,000 m² roadside grass
- 350 object types
- >= 500,000 individual assets
- 21,000 light poles
- 192 traffic regulation systems
- 24 camera systems
- 780 bus stops
- 16 carpool places
Asset Management
iAMPro model

- Dutch interpretation of the ISO 55.000 standard
- Developed by the joint providences
- Now embraced by municipalities, national road authority, engineering firms

- **Information management forms the heart of the model**
BIMpro programme

• Joint programme of the twelve providences, Amsterdam and Rotterdam

• Goals: improve information management in order for asset managers to be able to
  - Keep data about assets up to date
  - Speak one language – use standards and an ‘Object Type Library’ (OTL)
  - Be a professional client to contractors
Products of the BIMpro programme

- A shared OTL based on Information Model Public Space (IMBOR)

- A shared Exchange Information Requirements (EIR; Dutch; ILS) contractual provisions that provide who delivers which data in which form at what time

- Work process in accordance with ISO 19650, exchange protocol and advice about exchange data formats
Object Type Library (OTL)

- Dictionary/Encyclopaedia with generic properties about objects/concepts; object types

- Object Library
  - Registers the information need of the asset manager
  - Which object types exist and how are they related?
  - Which attributes do asset managers need? Which values are allowed for these attributes?
  - How should 2D- or 3d geometry be stored?
  - Blueprint for structure of asset management systems
  - Delivered to contractors in project together with ‘as-is’ information

- Requirement library
  - Standard requirements for maintenance projects
Questions?

Feel free to contact me later, live here at the World Forum, or via my mail address:

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