



Using BIM to structure asset management data

Results of the BIMPro Programme



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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

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350 object types
>= 500.000 individual assets



83.000 trees
15.000.000 m2 roadside grass



340 bridges and tunnels
6.000 culverts
30 km noise barriers



21.000 light poles
192 traffic regulation systems
24 camera systems



780 bus stops
16 carpool places

Asset Management



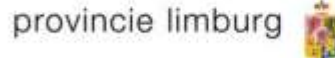
iAMPro model

- 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**

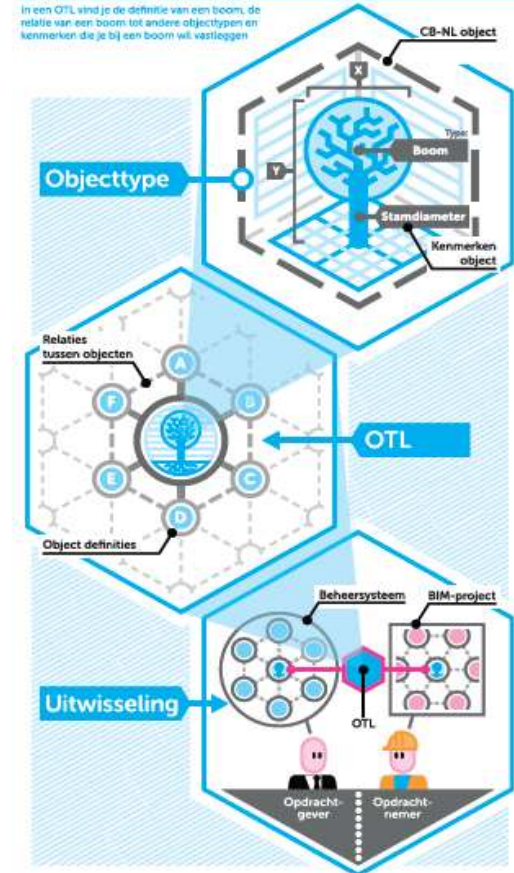


Object Type Library (OTL)

- Dictionary/Encyclopaedia with generic properties about objects/concepts; object types
- Object Library
 - Registers the information need of the asset manager
 - Which object types exists 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

Voorbeeld: Boom

In een OTL vind je de definitie van een boom, de relatie van een boom tot andere objecttypen en kenmerken die je bij een boom wilt vastleggen



Questions?



Feel free to contact me later,
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