

Attendees

- Kris McGlinn (TCD)
- Pieter Pauwels (Ghent University)
- Michel Bohms (TNO)
- Zohreh
- Maxime Lefrançois (Univ. Lyon)
- Jakob Beetz (TU Eindhoven) (late)

Date and time

- 02/03/2017
- 17:00 CET

Agenda

1. outside news and review of overall management
2. short update by each domain leader about status of alignments
3. use case update
4. any other items for discussion (open for suggestions)

Minutes

5. outside news and review of overall management
6. short update by each domain leader about status of alignments
 - Geometry
 - <https://drive.google.com/file/d/0B3aGbDKGwEGETXZTV2d1cFpVYXc/view>
 - Michel - In NL we have the BAG: the Basic registration of Buildings and Addresses. It is available at:
<https://bagviewer.kadaster.nl/lvbag/bag-viewer/>.
 - Example (my own house :)):
<https://bagviewer.kadaster.nl/lvbag/bag-viewer/index.html#?geometry.x=73216.07023476&geometry.y=443516.36239177&zoomlevel=6&objectId=178310000007424&detailsObjectId=178301000001825>

- We also have the BGT: Basic registration Large-scale Topology map (data structured according to IMgeo2.0, an OGC GML Application Schema).
- Pieter - need to represent complex geometries in wkt? Then have BOT represent the topology, and geometry separated into wkt literals
- Michel - we could link this to IFC
- Building Topology
 - Pieter - Mads is on holiday, so not much to say for the minute. But the geometry links are the way we could use it.
 - Zohreh - Using GPS to locate buildings, it could be useful to consider this work for identifying buildings/products. We could provide an ontology for them to store their information. LOD4 - point clouds, could be used to building internal geometries, object recognition.
 - Pieter - might be also interesting to look for a packaging format, for example geospatial link to wkt. In a similar way could point to points (point cloud points).
- Products
 - Windows, doors, walls, etc. how they are manufactured, etc. So, we need to support types of windows, properties, etc. This is well done in IFC - bsDD. Simple mechanism to describe product, most specifically the property sets.
 - Michel - vCON project, we have some conversion processes. Can have semantic properties, embedded into property sets, so they can be used in IFC.
 - Pieter - simpleBIM - make property sets more semantically meaningful. Highly context specific.
 - Michel - have you considered the containment relationship, like in GeoSPARQL
 - Maxime: <https://github.com/w3c-lbd-cg/lbdw/blob/bot-develop/bot/bot.ttl>
the property is named bot:containsElement and links an element to a

space. Does not link two spaces (i.e. A space is contained within a space).

- Pieter: Building hasSpace, Space hasElement (these are a type of containment relationship). Could be made more generic?
- Michel: GeoSPARQL has nice topological relationships, so if we can use these that might be good.
- Maxime - the Spatial Data on the Web Group is defining best practices, <http://w3c.github.io/sdw/bp/>, would be good to produce something similar for Building Data on the Web, more specialised version of Spatial Data guidelines.

- Automation and Control

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7. Use Case

- Sandra: We are still waiting on use cases from three of the groups.
- Sandra: What about automation?
- Zohreh: We have a plan and we are meeting next week, so we should have more details by the end of next week.

Example Use Case (GEOMETRY)

- **Title:** Integration of Ordnance Survey Ireland Prime2 Data with BIM
- **Description:** This use case addresses the integration of OSi data into BIM to support querying of OSi data alongside BIM and other related building data.
- **Data Domain(s):** Geometry, Product
- **Objectives:**
 - · To allow easier access to the OSi's building data.
 - · To make the data machine-readable.
 - · To provide flexible access control to OSi's building data
- **Stakeholders:** NMA license holders or who have a specific, commercial license
- **LD Benefits:**
 - · Data linking and structured vocabularies support data integration
 - · Logical basis supports inference

- **Challenges**
- · Access Control: How to support different levels of access to OSi targeted stakeholders. Data in Prime2 falls under 3 categories; Public (everyone can see that information on the Linked Data front-end), Stakeholder (only people under the Irish National Mapping Agreement or who have a specific, commercial license can see the data on the front-end/API), Private (nobody has access to those attributes)
- · Provenance: exposing provenance information to stakeholders
- **Data Standards Used:** IFC, BOT, GeoSPARQL, Prov-O
- **External sources:** <http://data.geohive.ie/>, <http://client.geohive.ie/>
- | Use | Case | Description | in | BIM*Q | Tool: |
|---|------|-------------|----|-------|-------|
| http://85.10.201.48:4590/en/contexts/64/requirements/1 | | | | | |
- **Wiki contributors:** Christophe Debruyne, Kris McGlinn
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8. any other items for discussion (open for suggestions)

- Should we have weekly calls?
- Zohreh: If we have more time to work on our plans then we can have more outcomes to explain.
- Jakob: +1 for biweekly calls
- Next Call 14/03/2017 11:00CET
- Pieter: Combine Geometry with HVAC
- Pieter: How do we support different formats, we should point these out in the different slides. Examine legacy data. Providing data in non-rdf syntax (json, xml, binary formats, wkt, etc.). For each domain we should explore the types of syntax to serialise data.
- Maxime: for example Haystack: <http://project-haystack.org/doc/Intro#data> mentions [Grids](#), [Filters](#), [Zinc](#), [Json](#), [CSV](#)

Action items

- Sub-groups to continue working on the development of use cases and data alignments with BOT and other ontologies

Previous action items

- All Sub-groups take Wiki Use Cases and Identify Use Cases which are relevant (All Group Leaders - 2nd March)
- Update Linked Building Data site <AP - Kris, Pieter> (ONGOING)
- Provide use cases <AP - All> (ONGOING)
- Review geometry models to support BOT <AP - Maria, Kris> (ONGOING)
- Review the BLC stages and data domains <Michel - Ongoing> (ONGOING)
- Provide a list of competency questions for BOT <Mads> (ONGOING)
- Coordinate efforts on GitHub <Kris, Maxime> (ONGOING)
- Generate overview and external facing document/slides <Ana> (ONGOING) - published on the w3C website
- Manage iterations of ontology (BOT) <Mads, Maxime> (ONGOING)

Previous minutes

Next Call

- 24/01/2016 11:00 CET @ gotomeeting