ICEG Building Thematic Webinar #4, Meeting Report

Attendees

Attendee Name	Affiliation
Christophe Van Loo	Digitaal Vlaanderen
Claude Hannecart	CIRB/CIBG/BRIC
Cindy Valvekens	Stad Leuven
Geert Thijs	Digitaal Vlaanderen
Grégoire Verhulst	Belgian Buildings Agency
Hugues Lorent	Nationaal Geografisch Instituut (NGI)
Johan Boogaerts	Fednot
Marc Bruyland	FOD BOSA
Martin Erpicum	CFWB
Catalin Turlica	CIRB/CIBG/BRIC
Benoît Fricheteau	CIRB/CIBG/BRIC
Jan Laporte	Vlaanderen
Jordan Ikalulu	Nationaal Geografisch Instituut (NGI)
Brecht Vandewalle	FOD Finance
Cécile Pizziferri	CFWB
Luc Leclercq	
Pierre-Antoine Lehrmann	CIRB / CIBG
Florian Barthelemy	PwC
Christophe Bahim	PwC
Yaron Dassonneville	PwC

Agenda
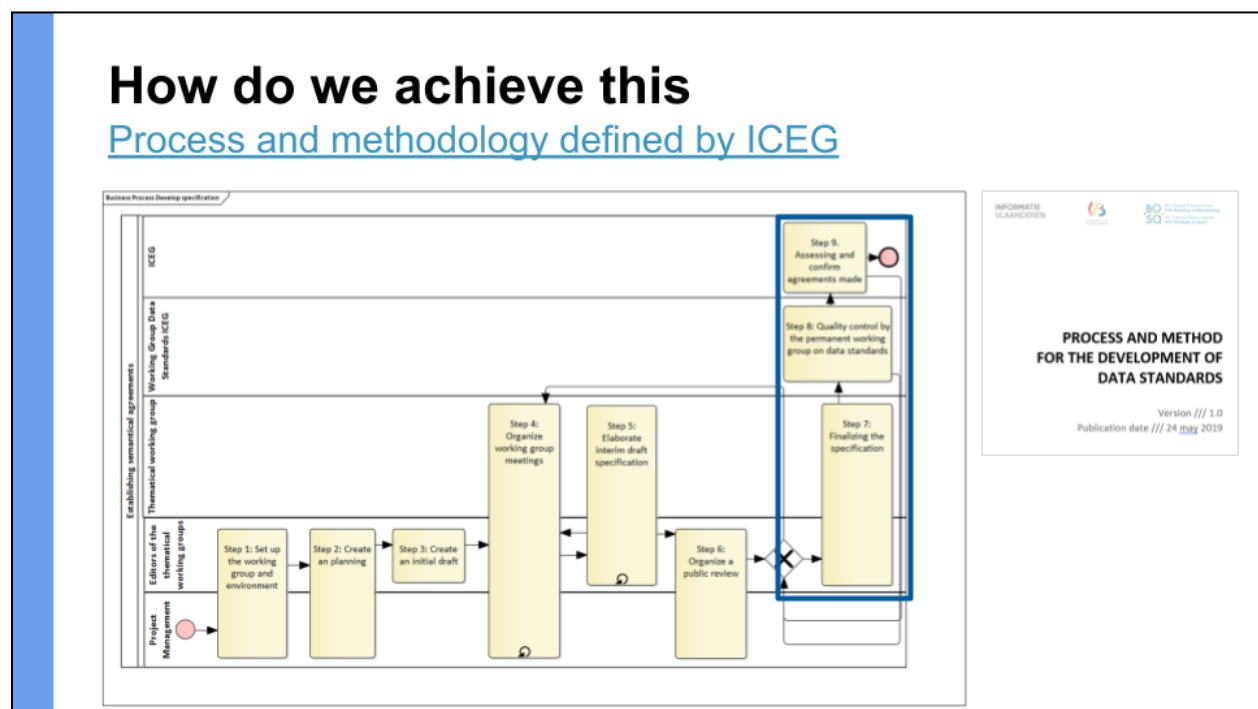
Date: November 30, 2022 (9:00 - 11:00)

Welcome
Process, input and timeline
Presentation of the latest version of the model, including public review changes

Distributions
Next steps

Meeting Minutes

Welcome

- Prior to the webinar, a new version of this model was developed and published on the [ICEG thematic repository](). This new version took into account the feedback from the public review period and feedback raised via GitHub. This version was presented as the final version of the model.

- This webinar was the last webinar after ending the public review period. Following the conclusion of this webinar, the model will undergo fine-tuning based on the latest feedback received. Upon completion of this process, the model will be presented to the ICEG core group for a quality review. Once the review is complete and any necessary adjustments have been made, the ratification process can commence. The ratification process will involve the Address Committee.
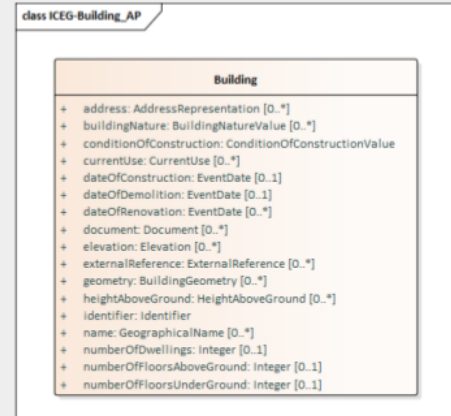
Presentation of the latest version of the model

- During the public review period four mandatory attributes imposed by INSPIRE were added to the model. This included 'externalReference', 'heightAboveGround', 'currentUse' and 'numberOfDwellings'. 'buildingPart' was not included as it was determined not in scope. Next to that 'document' was added as an optional attribute suggested by INSPIRE and requested during the public review period.

Building

Building

Updates since last Webinar
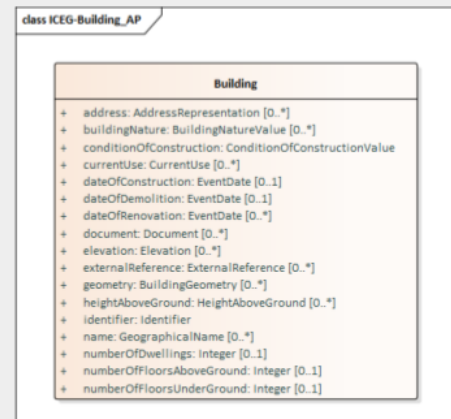
- [Issue #104] Request to improve the definition of Building (see next slide)
- [Issue #102] Addition of two attributes to geographicalName
  - NameStatusValue → status of a geographical name
  - Nativeness → allowing for endonym & exonym
- [Issue #101] Addition of 'document' for e.g., EBP certificate, renting contract, etc.
- [Issue #100] Editorial changes to allow for better interoperability and make BuildingGeometry an Abstract
- [Issue #98] Addition links and contextual information for LOD geometries

class ICEG-Building_AP

Building

- + address: AddressRepresentation [0..*]
- + buildingNature: BuildingNatureValue [0..*]
- + conditionOfConstruction: ConditionOfConstructionValue
- + currentUse: CurrentUse [0..*]
- + dateOfConstruction: EventDate [0..1]
- + dateOfDemolition: EventDate [0..1]
- + dateOfRenovation: EventDate [0..*]
- + document: Document [0..*]
- + elevation: Elevation [0..*]
- + externalReference: ExternalReference [0..*]
- + geometry: BuildingGeometry [0..*]
- + heightAboveGround: HeightAboveGround [0..*]
- + identifier: Identifier
- + name: GeographicalName [0..*]
- + numberOfDwellings: Integer [0..1]
- + numberOfFloorsAboveGround: Integer [0..1]
- + numberOfFloorsUnderGround: Integer [0..1]

Building

Updates since last Webinar

- [Issue #95] Use of locn:Address URI for AddressRepresentation
- [Issue #94] 'DirectPosition' and 'EventDate' are modelled based on OpenGIS and time:TemporalEntity for better interoperability
- [Issue #86] Addition of terms to the currentUse code list
- [Issue #86] Addition of terms to the natureValue code list & their definitions.
- [INSPIRE] Elevation cardinality [0..*]
- [INSPIRE] Addition of 'externalReference' to comply with requirements
- [INSPIRE] Addition of 'heightAboveGround' to comply with requirements
- [INSPIRE] Addition of 'numberOfDwellings to comply with requirements
- [Editorial] Change of 'text' to 'GeographicalName for 'name'
- [Editorial] Renamed '^identifier' to 'identifier'

class ICEG-Building_AP

Building

- + address: AddressRepresentation [0..*]
- + buildingNature: BuildingNatureValue [0..*]
- + conditionOfConstruction: ConditionOfConstructionValue
- + currentUse: CurrentUse [0..*]
- + dateOfConstruction: EventDate [0..1]
- + dateOfDemolition: EventDate [0..1]
- + dateOfRenovation: EventDate [0..*]
- + document: Document [0..*]
- + elevation: Elevation [0..*]
- + externalReference: ExternalReference [0..*]
- + geometry: BuildingGeometry [0..*]
- + heightAboveGround: HeightAboveGround [0..*]
- + identifier: Identifier
- + name: GeographicalName [0..*]
- + numberOfDwellings: Integer [0..1]
- + numberOfFloorsAboveGround: Integer [0..1]
- + numberOfFloorsUnderGround: Integer [0..1]

- The different updates done during the public review period were explained during this webinar and can be consulted in the slides

● During the explanation of these changes participants shared that the public review period was considered as too short. The example of OSLO where public reviews last between three and six months was given. Other participants indicated that they felt the same way. It was agreed, for next trajectories, to extend the public review period to the extent possible. It was mentioned that the addition of 'document' as an attribute contributes to not structuring data. Next to that, i.e., a rental contract is not seen as a document about a building as legal aspects are out of scope for this trajectory. However, this use case is necessary for the needs of the Brussels government. The working group was in favor of keeping the attribute 'document', but to refine it.

Definition

A enclosed and/or covered structure, **partially or not**, above and/or below ground, intended either for the shelter of persons, animals or things, or for the production of economic goods or the provision of services, and refers to any structure permanently constructed or erected on its site.

Addition of Usage

- Everything with a roof is a building, except for what is listed in the list of approaches and/or specific constructions.
- It is a group of buildings with the same (or similar) date of construction and a similar superstructure (except for minor volumes such as cellars or technical rooms in the roof).
- Its perimeter includes all premises communicating with each other by internal access [above ground] or sharing the same structural elements except for party walls.
- Covered courtyard is a building if isolated or adjoining another building, but not when integrated into another building and the latter houses it.
- HV cabin is a building when isolated.
- If two structures are connected by a gallery, they are considered as one building. However, if there is a public road/street underneath the gallery, these two structures are considered as two separate buildings .
- The gallery is part of the main building (unless its function is not limited to circulation between premises or it is built in a different structure or at a different time).

● There was a discussion on the proposed updated definition of a Building. The proposed definition suggests it should only be partially and differs from the INSPIRE definition. The current definition 'An enclosed and/or covered structure' indicates that the building can also be partially or not enclosed/covered. However, there is a need to also include partially enclosed buildings within this model. It was agreed to not make any further changes as the definition was validated a few webinars ago already.

Building

Updates considered:

- [Issue #109] How to locate a buildingUnit within a Building. There was a suggestion to add specific fields as 2D & 3D might not serve their purpose before years.

- [Issue #107] The set of two distinct volumes united by a gallery/walkway is nevertheless considered as a single building. Two volumes separated by a footbridge (which is above a public road) are considered as two distinct buildings which are in different sites (because they are different plots).

- [Issue #106] Cardinality already allows for mixed nature.

- [Issue #103] Request to describe whether a building is protected is not in line with the use cases. Can be addressed through the natureValue attribute or via a new attribute.

- [Issue #92] At the moment, entranceLocation is a BuildingUnit level. BeST states that the entrance of a building can be derived from the house number. Either we don't add anything, or we add entranceLocation with GeoCoordinates to Building.

- [Issue #108] Addition to Usage notes to specify *how* to count floors → main entrance

- [Issue #89] At the moment, only LOD1 and LOD2 are modelled. Should the working group want to add characteristics such as doors, windows, etc. LOD3 & LOD4 will need to be modelled.
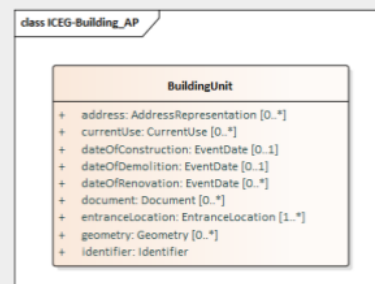
class ICEG-Building_AP

Building

- + address: AddressRepresentation [0..*]
- + buildingNature: BuildingNatureValue [0..*]
- + conditionOfConstruction: ConditionOfConstructionValue
- + currentUse: CurrentUse [0..*]
- + dateOfConstruction: EventDate [0..1]
- + dateOfDemolition: EventDate [0..1]
- + dateOfRenovation: EventDate [0..*]
- + document: Document [0..*]
- + elevation: Elevation [0..*]
- + externalReference: ExternalReference [0..*]
- + geometry: BuildingGeometry [0..*]
- + heightAboveGround: HeightAboveGround [0..*]
- + identifier: Identifier
- + name: GeographicalName [0..*]
- + numberOfDwellings: Integer [0..1]
- + numberOfFloorsAboveGround: Integer [0..1]
- + numberOfFloorsUnderGround: Integer [0..1]

- Some of these issues were considered but not implemented within the model. An explanation was given on the slides.

Building unit

Building Unit

Updates since last Webinar

- [Issue #101] Addition of 'document'

- [Issue #101] Addition of dateOfConstruction and dateOfDemolition

- [Editorial] Renamed 'function' to 'currentUse' to align with INSPIRE

- [Editorial] Renamed '^identifier' to 'identifier'

class ICEG-Building_AP

BuildingUnit

- + address: AddressRepresentation [0..*]
- + currentUse: CurrentUse [0..*]
- + dateOfConstruction: EventDate [0..1]
- + dateOfDemolition: EventDate [0..1]
- + dateOfRenovation: EventDate [0..*]
- + document: Document [0..*]
- + entranceLocation: EntranceLocation [1..*]
- + geometry: Geometry [0..*]
- + identifier: Identifier

- There was an addition of multiple attributes in the class 'Building unit'. These additions consist of 'document' 'dateOfConstruction' and 'dateOfDemolition'.
- There are also editorial changes such as the renaming of 'function' to 'currentUse' to align with INSPIRE and the renaming of '^identifier' to 'identifier'.
- There was a discussion about the cardinality of a building unit. Some argued that if BuildingUnit is mandatory, entranceLocation of Building level is not needed, while others argue that for example in Flanders half of the buildings don't have a BuildingUnit and the cardinality should be zero-to-many. It was concluded to have a zero-to-many relation to cater for everyone's needs. Next to that there was also a question on what is addressable. The answer to this question is 'things' that can be officially addressed.
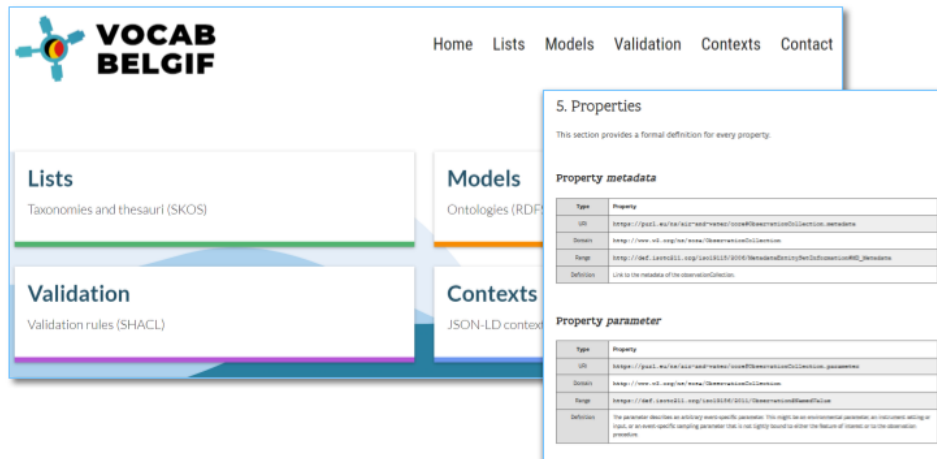
Data types

- There were different comments on these data types:
  - LangString / GeographicalName
    - LangString is better than GeographicalName as GeographicalNames are names which apply to a (specific) position.
    - Change 'spellingOfName' to 'LangString' so language is not needed anymore.
    - Specify all the attributes for 'LangString'
  - TemporalEntity / DateTime
    - Do we need anyPoint? If so, we need several anyPoints.
- There were some comments on the enumerations
  - Not using 'official' and 'non-official' for 'SourceStatusValue'

- ○ Enumerations are for illustrative purposes only. These should be done in a separate trajectory.

Distributions

- ● During the meeting, the project team provided a detailed explanation of all the different artifacts that will be produced following the validation of the model, including an HTML documentation for the vocabulary with terms and definitions, which will be pushed on vocab.belgif.be. Additionally, the team will be producing SHACL validation rules and JSON-LD context. As previously communicated, working group members were given an extra two weeks to submit their last comments, and during this period, the team will make any necessary changes before the model is sent for quality review to the core group.