ICEG Building - Meeting Report

Thematic Webinar #1

Date: May 24, 2022 (9:00 - 12:00)
Attendees:

Attendee Name	Affiliation
Bart Boute	WVI
Christophe Van Loo	Digitaal Vlaanderen
Claude Hannecart	CIRB/CIBG/BRIC
Daniel Reuviaux	SPW
Evy Dewinter	FOD Financiën
Fabien Krzewinski	CIRB/CIBG/BRIC
Gael Kruwialis	Nationaal Geografisch Instituut (NGI)
Geert Thijs	Digitaal Vlaanderen
Geert Van Haute	Departement Omgeving (Flanders)
Grégoire Verhulst	Belgian Buildings Agency
Hendrik van Hemelryck	Digitaal Vlaanderen
Hilde Blondeel	FOD Financiën
Jean-Claude Jasselette	SPW
Johan Boogaerts	Fednot
Jordan Ikalulu	Nationaal Geografisch Instituut (NGI)
Karin Mertens	Nationaal Geografisch Instituut (NGI)
Karlien Perdieus	Stad Leuven
Kay Warrie	Stad Antwerpen
Leticia Garcia-Patron	MFWB
Liesbet D'Hondt	FOD BOSA
Luc Leclercq	GAPD
Marc Bruyland	FOD BOSA
Martin Erpicum	CFWB
Mieke Ryckoort	Stad Kortrijk
Nathalie Mertens	FOD Financiën - Patrimoniumdocumentatie
Paul Van Lindt	Departement Omgeving
Pierre-Antoine Lehrmann	CIRB/CIBG/BRIC

Ralph Boswell	Perspective.brussels
Raphaël Lebrun	Proximus
Thomas Ruhi	CIRB/CIBG/BRIC
Yahsmeen Coulon	Fednot
Florian Barthelemy	PwC
Christophe Bahim	PwC
Yaron Dassonneville	PwC

Agenda

Welcome	9:00 to 9:15
Process, input and timeline	9:15 to 9:30
Presentation of identified use cases and requirements	9:30 to 10:00
Identification and presentation of parts of the model	10:00 to 11:20
Next steps	11:20 to 11:30

Meeting Minutes

Welcome

Within this section, more information was provided about ICEG and the process for developing a building specification.

As opposed to what was previously communicated, the project team aims at delivering a stable version of the ICEG building model by the end of September, which will be ensued by a public review period of approximately a month and half. Once the public review is over, the working group will reconvene for a final thematic webinar. As there is no webinar foreseen during the summer / holiday break we kindly invite the members of the working group to give input to the model. This input can be given between the second and third webinar.

For more information, we would like to refer to slides 1 to 10.

Presentation of identified use cases and requirements

During this part of the presentation PwC gave insights into the applicable use cases and the requirements for these use cases based on the previous workshop. Based on this information PwC created a high level overview of the model.

PwC clarified that “address” and “parcel” are out-of-scope of this trajectory, as per the charter. These concepts will however be connected to the model and PwC will refer to the already existing specifications.

For more information, we would like to refer to slides 11 to 14.

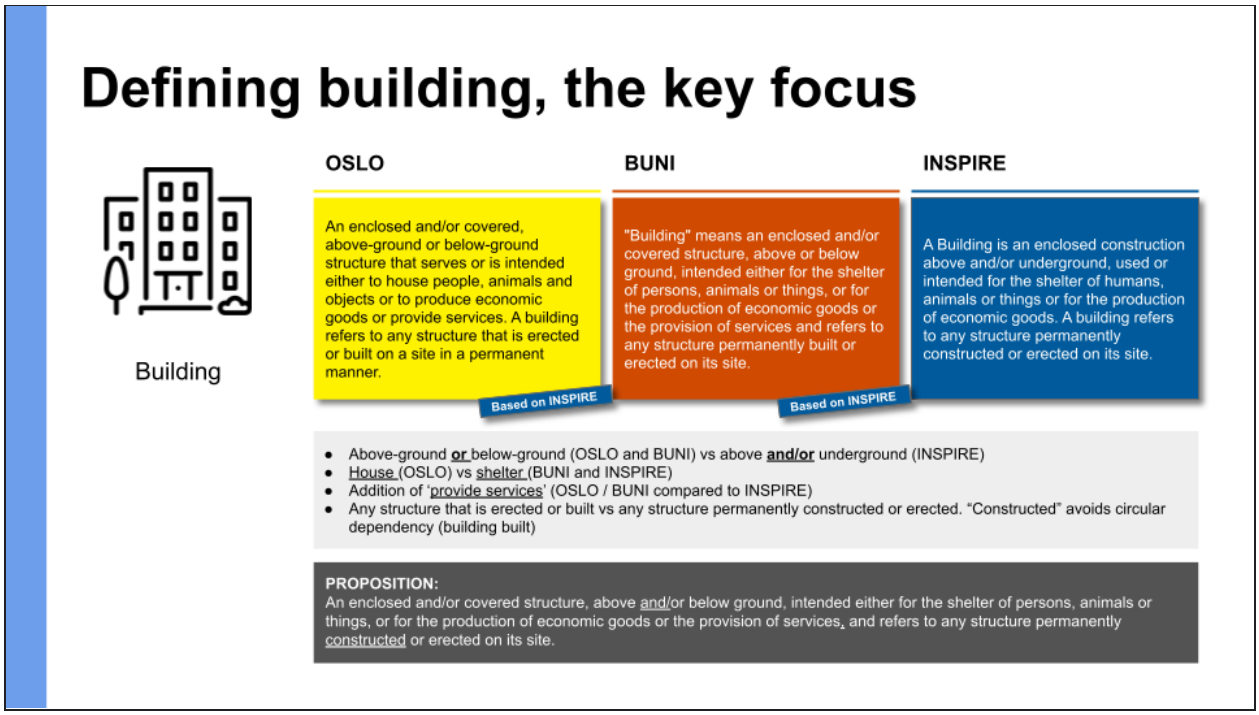
Identification and presentation of parts of the model

During this part of the presentation PwC looked into the definitions of both building and building units. Next to that PwC gave more insight into the first draft model.

For more information, we would like to refer to slides 15 to 26.

Defining building (slide 18)

PwC proposed the following definition for building, based on OSLO, BUNI and INSPIRE

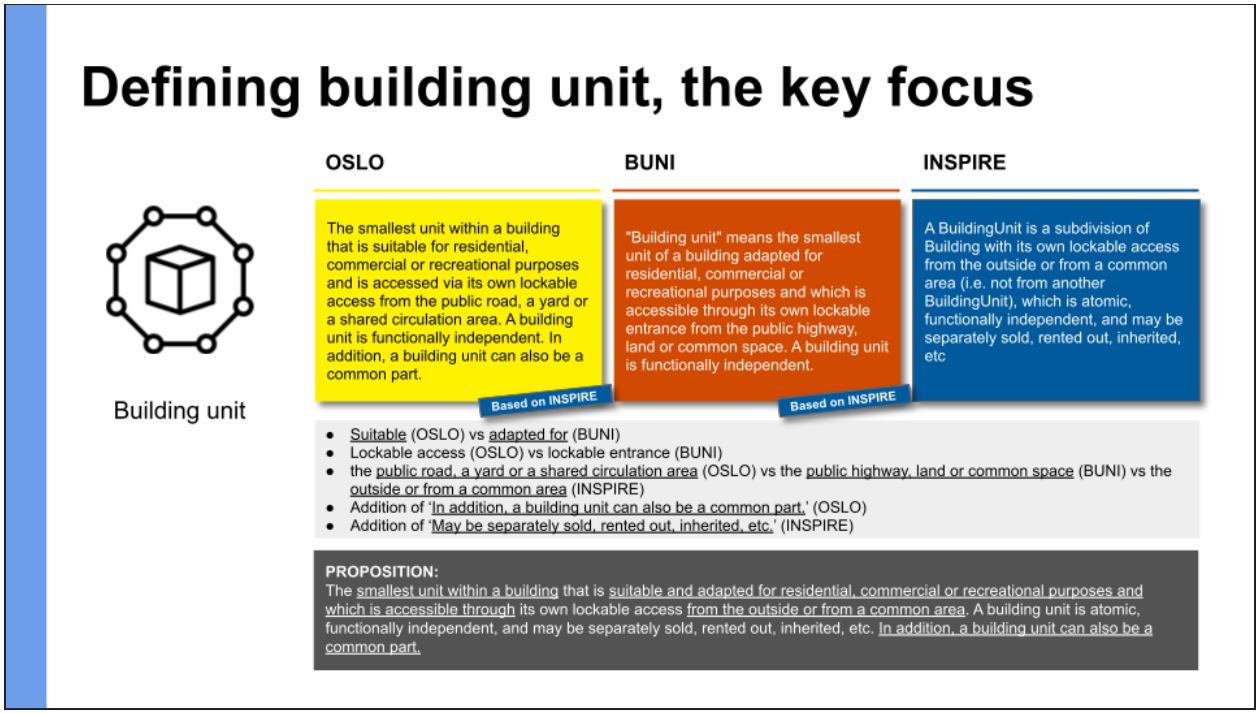


The following discussions were held:

- Usage of “site” instead of “Parcel” was questioned. PwC clarified that this comes from INSPIRE[1][2] and further specified that the idea is to stick as much as possible to INSPIRE, as being the main source for modeling buildings.
- PwC confirmed that the definition includes buildings that are present in holiday parks, as long as their volume is more than 15m² but not boats — which is a requirement coming from BUNI and that could potentially be added to the usage notes of the to-be ICEG building model, but is more an implementation issue. It was further clarified that besides their definition, BUNI defined additional requirements such as the minimal surface, complete enclosure, etc.
- It was remarked that OSLO and BUNI are stricter than INSPIRE, as evidenced by the fact that “covered” is not needed as a requirement in INSPIRE. Based on the discussion the definition should include covered but not necessarily enclosed, as some buildings might not be fully enclosed.

[1] https://inspire.ec.europa.eu/featureconcept/Site
[2] https://www.w3.org/TR/vocab-org/#class-site

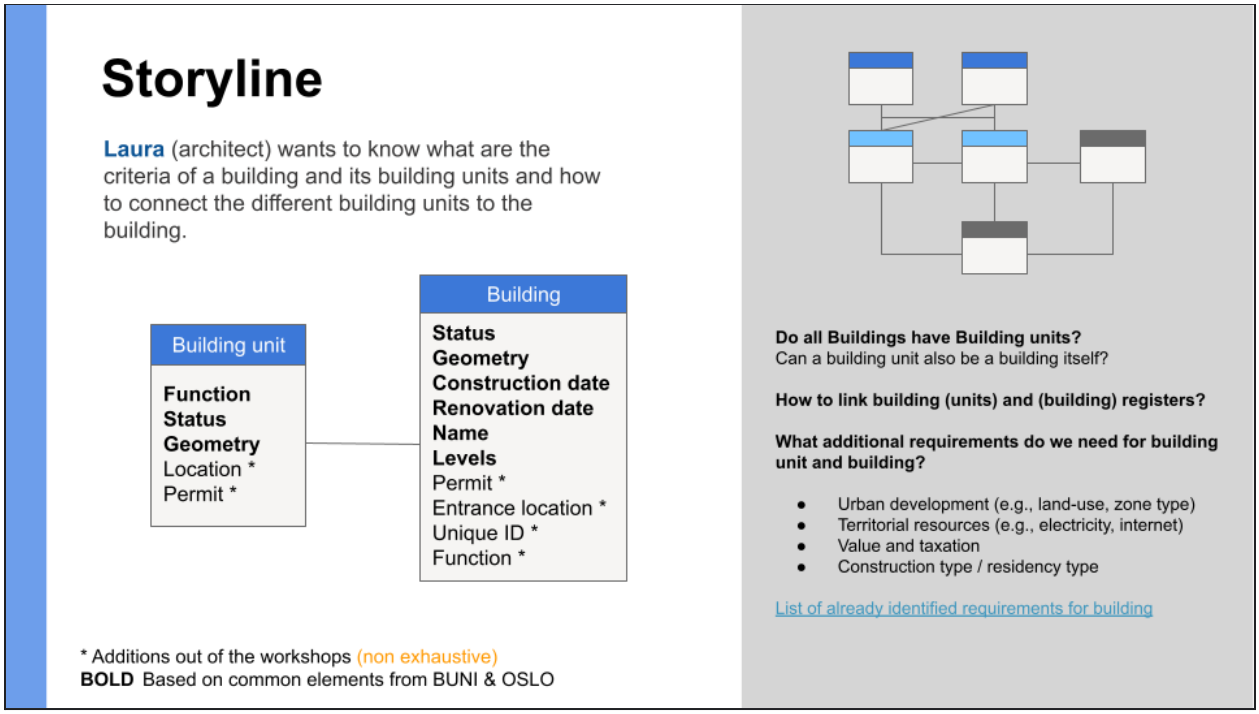
Defining building unit (slide 19)



The following discussions were held about the definition of 'Building Units':

- The part of the sentence "and may be separately sold, rented out, inherited, etc" was stripped from the OSLO and BUNI definitions. It was discussed that a "building unit" cannot always be sold or rented out, e.g. common parts. For others, a building unit can only be a building unit when it can be separately sold or rented out.
- Whether "parking" was a building unit or not was discussed a lot. Divergent views were expressed. A parking lot can be a separate entity on the cadastre. A parking lot can be enclosed and covered. A parking lot can belong to different people and be sold (patrimonium). All the costs of a building are divided over building units, parking lots are not an exception to the rule. There is also a functional difference between a parking space, and a parking lot with numerous parking spaces. They also have a volume which doesn't match with the one of the building itself. It was mentioned and concluded that a parking lot should be a "building unit".
- Based on the discussion whether a parking lot is considered as a building unit or not, some raised that it is possible to buy or rent a parking space which is not lockable itself. It was suggested to remove the notion of 'lockable'.

Modeling building and building unit (slide 22)



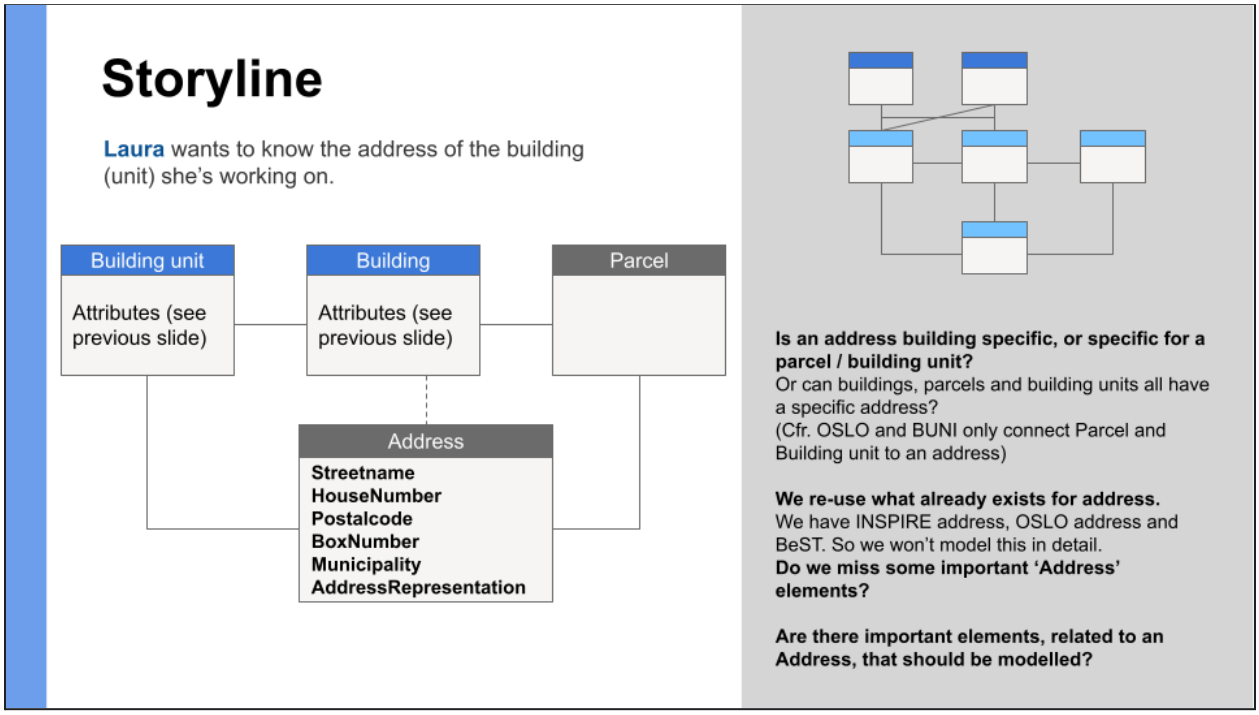
PwC presented a first visualization of how building and building unit should be modeled. The following topics were discussed:

- It was discussed whether a building should have a “zero-to-many” or “one-to-many” relation with building units. This is also linked to the discussion about the address of a building and building units, which you can find further on in this document. It was agreed that one building should have a relationship “zero-to-many” to building units.
- It was suggested to model “geometrically overlapping” building units, e.g., cubes that are integrated into each other[3]. This implies that building units can be related to each other. It was concluded that since the geometry of a building is modeled, the geometric relationship between building units can be implicitly derived.
- It was mentioned that a building unit can be renovated without the need of a renovation of the building itself. Thus the building unit should be connected to the foreseen lifecycle entity. Next to that also the building itself should have its designated lifecycle and should be connected to the foreseen lifecycle entity.
- The notion of ‘building part’, as in INSPIRE, was discussed. A building part is a subdivision of a Building that might be considered itself as a building. A BuildingPart is homogeneous related to its physical, functional or temporal aspects. However, it was agreed not to model a building part.
- Every building should have its own unique identifier. Within the usage notes PwC will refer to existing ones (e.g.,OSLO Generic, ADMS identifier). The unique identifier should be composed of a URI. PwC will document this discussion on GitHub for further input.
- As agreed, PwC will look into specific specifications (and existing data models) such as the inventory of urban planning to check which additional attributes are needed for Building.

[3] https://en.wikipedia.org/wiki/Mereology

- It was questioned to have a function on building level and how this could be defined. This can be defined based on the permitted function or the function it actually has. This function may also change over time. It was agreed that 'Function' should only be there on building unit level. Next to that PwC will make it clear in the usage notes what is meant by the function based on the existing definitions in INSPIRE and OSLO Building.
- The fact that there is no reference to "real estate", "good" and "property" was questioned. It was agreed that this trajectory models building and building units, but not a "good", "real estate" nor a "property" as this is related to another domain.

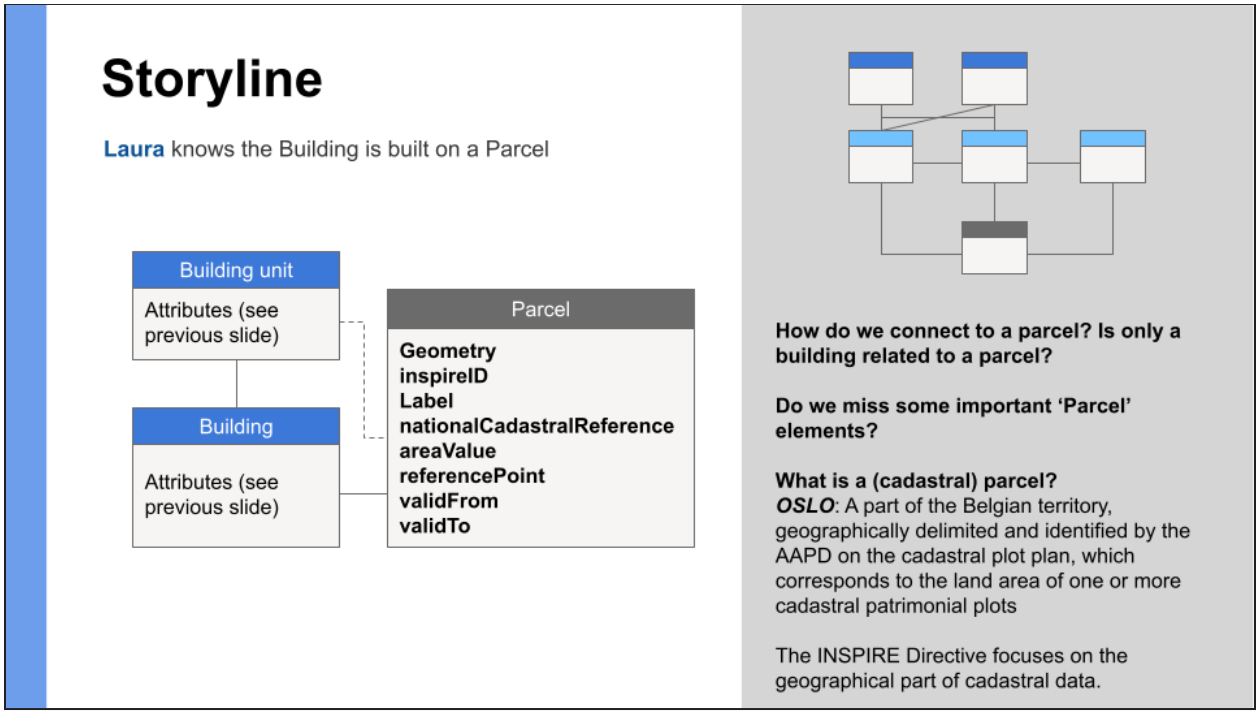
Address and the relationship with building unit, building and parcel (slide 23)



Based on the visualization on the slides, the following topics were discussed:

- Both OSLO and BUNI don't have a link between a building and an addressable object. If a building has no building unit, it cannot be addressed. Having a building unit should be a prerequisite to create an addressable object. During the workshop, it was stated that in fact everything can have an address, but not everything is an addressable object. Building units and parcels are both considered addressable objects. While a building is not. If a building doesn't have a building unit, you have to create a building unit to be able to include an addressable object. It was agreed to use address instead of addressable objects for this trajectory. We will reapply the agreed standards such as INSPIRE address, BeST and OSLO Address.

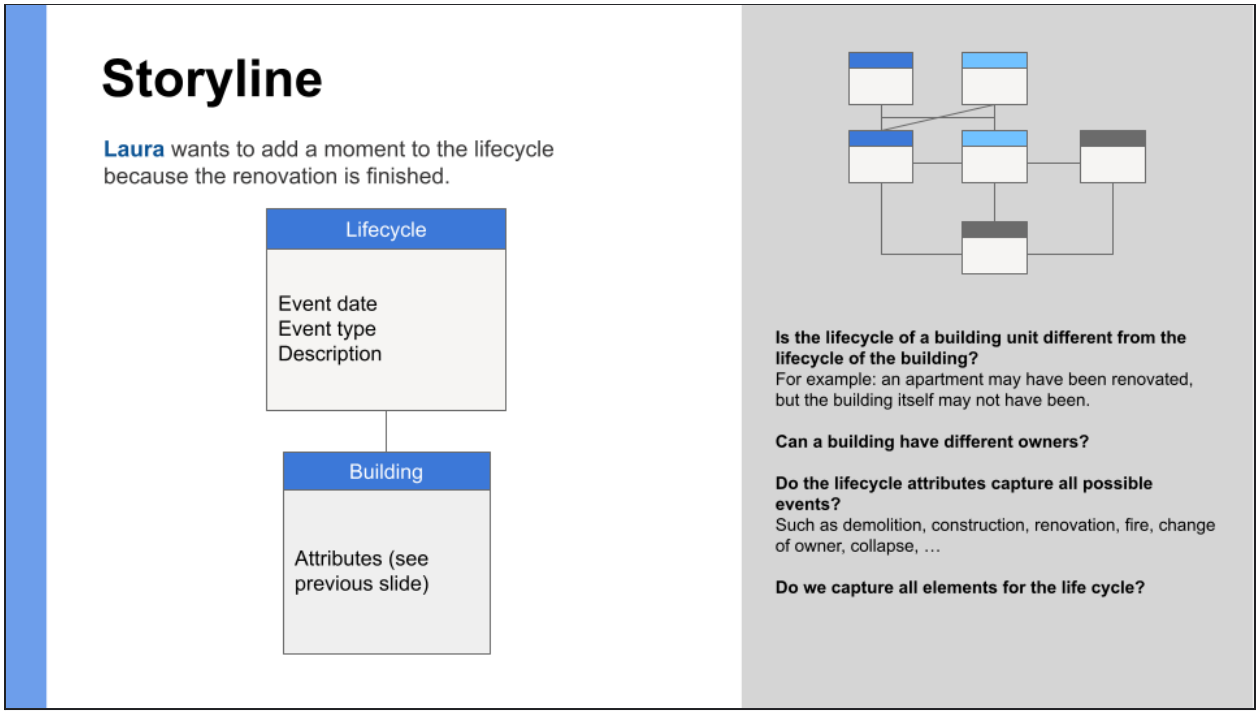
A building (unit) is connected to a parcel (slide 24)



Based on the visualization on the slides, the following topics were discussed:

- It was mentioned that there is a difference between a cadastral parcel and a parcel patrimonium. Buildings can be linked to one or more patrimonial plan parcels Johan Boogaerts will share documentation about parcels and whether a building can have 0, 1 or many parcels. Based on this information PwC will look further into this and model this in a correct way.

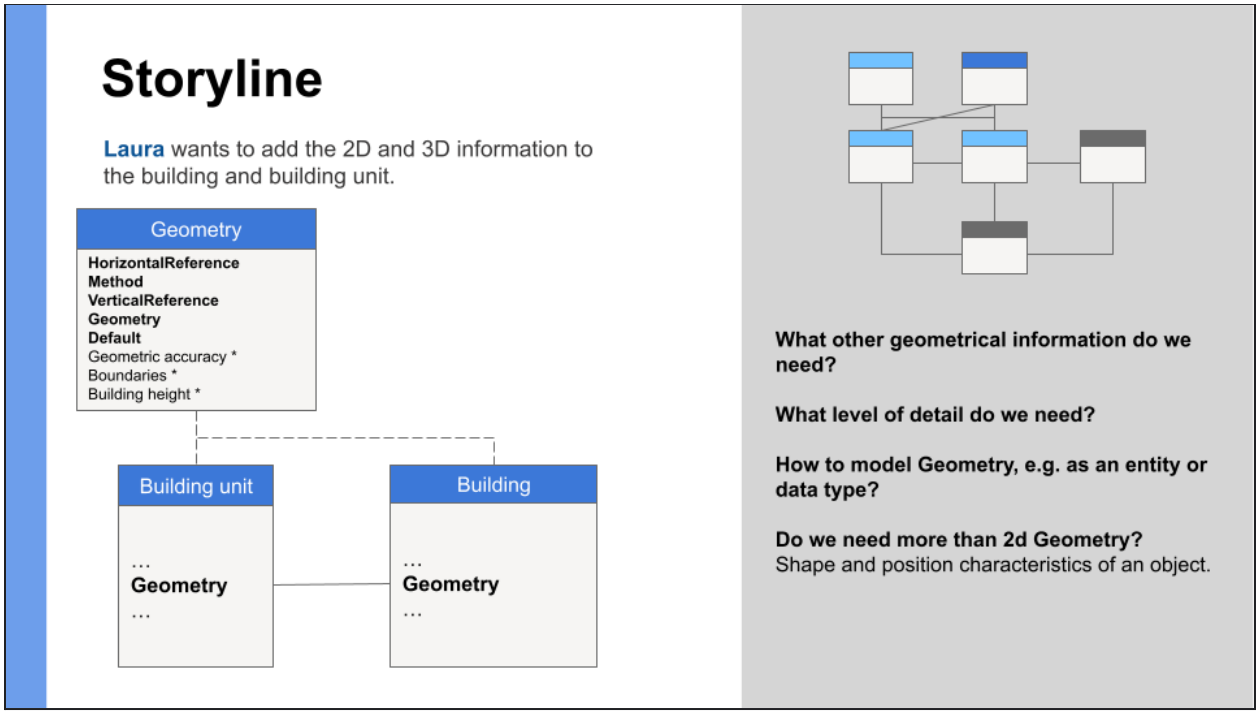
A building (unit) has a lifecycle (slide 25)



Based on the visualization on the slides, the following topics were discussed:

- It was discussed that the life cycle is important for different objects. It was mentioned that OSLO uses a separate generic way to ensure that every object can have its own ‘history’. This is information that you can apply to every object such as version, version in real time, version in database, stream of versions. We agreed that both a building and a building unit can have different / separate lifecycles.
- The working group agreed that the specific elements such as demolition, construction, etc. should be modeled specifically within this model as this is specific for building (units).
- It was questioned whether buildingPart is needed to include more information into the lifecycle. However, it was mentioned that BuildingPart is only something geometrical and not functional. Also, earlier in the workshop, it was agreed not to implement buildingPart into this model.
- Based on the question if the model should capture the owner, a discussion followed. Ownership is already included and linked to cadastral patrimonial parcels and this relationship is complex. It was mentioned that from the perspective of building permits on Flemish region level, no ownership information is demanded. The working group agreed that ownership is not in scope for this project as this trajectory is about building and building unit as a construction. Ownership might be a separate trajectory and that we should not mix different domains.

Geometry information (slide 26)



Based on the visualization on the slides, the following topics were discussed:

- It was stated that there should be a possibility to choose whether you want to model in 2D, 2.5D or 3D. Sometimes more detail is needed than only 2D information. Next to that there should also be a possibility to select the level of detail that is desired. We will give the opportunity to capture 2D, 2.5D and 3D information. PwC will look into existing standards such as INSPIRE to model this.
- It was questioned how data quality of 2D, 2.5D and 3D information (geometric accuracy) is defined. It was agreed to further look into the ISO standard about data quality to come up with a decent definition.

Next steps

The next workshop is planned on the 29th of June at 9h.
We encourage you to give feedback through GitHub.
For more information, we would like to refer to slides 27 to 33.