**2021-03-24**

ICEG Building

**OVERVIEW**

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| --- | --- |
| Start date | TBD |
| End date | TBD |
| Chairman | TBD |
| Project team | TBD |
| Scheduled meetings | TBD |
| Decision criterion | Unanimity minus one (U-1)  (each party has one vote) |
| License | TBD |
| License documentation | TBD |
| Issue logging | [Issues · belgif/thematic (github.com)](https://github.com/belgif/thematic/issues)  (use Label "Building") |

# Context

## WHAT

Via this initiative, the various stakeholders wish to semantically model the different data flows and standardize the structure of the data for the subject **Building**. The focus is on terms related to buildings and building units. We start from terms defined for these entities in the existing Buildings Registers.

The objective is to make the data accessible as Linked Open Data and to define standard interfaces (APIs) in order to simplify collaboration and integration of the various services and tools. The objective is to make the data easily reusable for all stakeholders.

## WHY

A semantic standard makes sharing and exchanging data between different stakeholders easier. Each stakeholder can directly use and interpret the data of the other. This stimulates the exchange and reuse of data and reduces the cost of exchange.

In the semantic web, data is distributed in a different way so that the AI ​​driven machines and the digital gatekeepers of the future such as Siri, Alexa, Cortana, Google Assistant, etc. are able to use and interprete the data. The semantic standard provides machine-readable data.

Opening up semantic data initiates innovation and will enable companies to develop more intelligent products and services. By linking data, we also have richer data. Enriched data from which more knowledge can be obtained.

## USe cases

There are various use cases for which the standardization of building provides added value. These use cases will be discussed in the first business workshop.

### First use case

*Building units are addressable objects, meaning that they can have an address attached to them. As the labels attached to an address can change due to administrative changes (merger of municipalities, rename of a streetname, renumbering of house numbers in a street, renumbering of box numbers in a building with appartments, ..), an historic address chain can be constructed based on the addresses linked to building units.*

### Second use case

*Create a link between the following registers: parcels, buildings, building units, addresses*

### Third use case

*Create a link between a building and his quality criteria (surfaces, volumes, functions, energetic performances etc). Buildings can have different functions (offices, housing, school, etc…). Energetic performances (EPC) is another attribute that can also be associated to it.*

### Fourth use case

*Create a link between a building and urban development control and land use statistics. A building has an impact on its environment.*

### Fifth use case

*Create a link between a building and territorial resources allocation as transportation, roads, heating, sewer, electricity, etc…*

### Sixth use case

*Create a link between a building and its value and taxation (property tax, taxation of unoccupied buildings, second residence, etc…). Each building has a real estate value which evolves regularly. Taxation is also specific to each building.*

# Scope

The objective of the business workshop is to map, define and standardize information related to building. Based on our use cases the scope will be defined.

The following are within the scope:

* Building
* Building unit
* Parcel
* Address
* …

In the business workshop, we will evaluate the different use cases of the stakeholders to determine the detail scope.

# Stakeholders

The stakeholders of this process include:

|  |  |
| --- | --- |
| **Stakeholder type** | ***Examples*** |
| * Responsibles/experts for the building register in the regions | *Municipalities, Experts from the regions* |
| * Responsibles/experts for the addresses in the regions * Responsibles/experts for the parcels (FPS Finance AAPD) * National Geographic Institute (NGI/IGN) * The Belgian Buildings Agency (Regie der Gebouwen/ Régie des Bâtiments) * Crossroads Bank for Enterprises (KBO/BCE) * Het Vlaams Energie- en Klimaatagentschap (VEKA) * De Vlaamse Belastingdienst (VLABEL) / SPW Fiscalité * Royal Federation of Belgian Notaries (Fednot) * Vlaamse Milieumaatschappij (VMM) / Department Omgeving / SPW Territoire, Logement, Patrimoine, Energie (TLPE) - Département de l'énergie et du bâtiment durable * Vlaamse Vereniging van Vlaamse Steden en Gemeenten (VVSG) | *Municipalities, Experts from the regions* |

# SuccesS criteria

This process will be considered a success when the deliverables are widely used and applied. Initially within the Government in Belgium, but also beyond. In particular, we list the following criteria:

1. There is maximum coordination with all stakeholders - mentioned in point 3 - who are represented in at least one of the workshop sessions
2. The workshops result in a stable candidate standard that represents a consensus of all participants
3. The specification is accepted by the data standards workshop and the Steering Board
4. The specification is implemented and at least the framework data is published semantically.

# Deliverables

The workshops will deliver the following deliverables:

* Drawing up an overview of information needs based on analysis of available documentation and existing standards.
* Organizing a business workshop with stakeholders to validate and further expand the information needs.
* Organizing and facilitating 4 workshops composed of domain experts and processing their feedback.
* Preparation of reusable documentation for the information model and publication on data.vlaanderen.be:
  + RDF vocabulary
  + HTML documentation for the vocabulary with terms and definitions
  + UML diagram
  + HTML documentation for the UML diagram
  + SHACL validation rules
  + JSON-LD context file
* Integration in the ICEG system of vocabularies
* Integration in the OSLO system of vocabularies

# Milestones and timing

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| --- | --- |
| **Date[[1]](#footnote-2)** | **Milestone** |
| **2021-03-24** | ICEG meeting: go/no-go |
|  | Prepare a letter of intent and invite interested parties to the first business workshop. |
|  | Business workshop with stakeholders to validate the information needs and further refine scope. |
|  | Validation of charter by Workshop Data standards |
| **2021-05** | Workshop 1 |
| **2021-06** | Workshop 2 |
| **2021-07** | Workshop 3 |
| **2021-08** | Workshop 4 |
|  | Start of public review period - Recognition "Candidate Standard" – Workshop Data Standards |
| **2021-09** | Public review period |
|  | End of public review period - Recognition of "Standard" - Workshop Data Standards |
| **2021-10** | Standard communication to the ICEG Committee |

# dependencies

* INSPIRE Building
* OSLO Vocabularium ‘Gebouw’
* OSLO Application profile ‘Gebouwenregister’

1. Specific data te be confirmed after sourcing consultants [↑](#footnote-ref-2)