Building Digital Logbook

Are you ready for B-LOG?

Sustainable Places Conference

Smart Buildings Workshop

28 October 2020
Introduction

- EC call for tenders: Study on the development of an EU framework for buildings' digital logbook
- B-LOG consortium selected: R2M Solution, VITO and BPIE
- Study run from Dec. 2019 to Dec. 2020
Why digital building logbooks?

- To increase data availability and transparency to a broad range of market players
- To reduce information asymmetries along the building life cycle
- To reduce significantly the need to recreate information over the life cycle of the building
Why this study for an EU framework?

- To understand which **market needs** building logbooks address in the first place
- To define **who should have access** to information and data of the digital building logbooks
- To identify the **impacts** of digital building logbooks
- To study how to achieve the **fair distribution of benefits** created by a digital building logbook
- To review existing **national and private systems** related to building logbooks
- To assess whether there a need for a **European approach for data collection and management**
- To propose **concrete steps** the Commission could undertake to support the logbook approach
- To assess how such an initiative fit into the existing **EU policy framework**
- ...

Study on the development of an EU framework for buildings' digital logbook

Service contract EASME/2019/OP/0007
How is the study structured?

- Interviews with experts
- Online consultation
- Conceptual definition of digital building logbooks
- State of play & review of national & sectorial initiatives
- Gaps Analysis and identification of actions to be undertaken to fill in these gaps
- Recommended Commission actions, action plan and suggestions for synergies with other initiatives

Events:
- 13 May: Web conference
- 1st July: Stakeholder workshop 1
- 17 Nov.: Stakeholder workshop 2
Review of existing initiatives

- Woningpas
- Dossier d'intervention ultérieure
- Madaster
- Opleverdossier
- Platform CB'23
- Homebook
- Le carnet numérique du logement
- Passeport Efficacité Énergétique
- Mon carnet logement
- WikiHabitat
- Eigenheim Manager
- Hausakte
- Gëbaudepass
- QDF Hausakte
- ImmoPass
- Fascicolo del Fabbricato
- Livro de obra
- Libro del Edificio
- PAS-E
- Electronic building ID
- Bedrebolig
- Ilmastoviisaat Taloyhtiöt
- Building Passport GBC
- Real estate service manual
- Klimatdeklaration
- BASTA Loggbok
- Produktkollen
- Min Villa
- Federal Register
- IBroad
- ALDREN
- BAMB
- BIM4EEB
- DigiPLACE
- X-tendo
- CIBSE TM31
- Home Information Pack
- Home report
- Arc platform
- Property Register

State of play & review of national & sectorial initiatives
Success factors

State of play & review of national & sectorial initiatives

- Bedreborg
- Produkakollen
- Madaster
- Woningpas
- Real estate service manual
- Property Register
- Federal Register
- Woningpas
- Property Register
- Federal Register
- Eigenheim Manager
- Min Villa
- Easy to use and user friendly
- Clear scope of the building logbook
- BASTA Logbuch
- Opleverdossier
- Arc platform
- Detailed information on what should be provided by the different stakeholders in the value chain
- Federal Register
- Woningpas
- CGISE TME31
- Woningpas
- Federal Register
- Property Register
- Alignment with other initiatives/industry standards
- Federal Register
- Produkakollen
- Service contract EASME/2019/OP/0007
Study on the development of an EU framework for buildings' digital logbook
## Barriers to implementation

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Cost implications</strong></td>
<td>• Costs for implementation, update and validation</td>
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<tr>
<td><strong>Static nature of the building logbooks</strong></td>
<td>• Information often need to be manually updated and the building logbook does not include dynamic information on the day-to-day use</td>
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<td><strong>Privacy and data management</strong></td>
<td>• Not clear data ownership and data handling procedures, including data validation</td>
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<td><strong>Access to information</strong></td>
<td>• Information accessible only on site and/or to specific stakeholders</td>
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<td><strong>Administrative burden</strong></td>
<td>• No clear understanding of the use and added value of the building logbook</td>
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<td><strong>Fragmented regional approach</strong></td>
<td>• In particular in Italy and Spain where regions develop their own requirements for building logbooks</td>
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What is a digital building logbook?

Stakeholders’ views (survey and interviews)

Most common views

- Most (all) interviewees say it’s a repository for (all relevant) building data.
- There is a broad spectrum of ideas of what the DBL should be and what it should be able to do.
- The most common purpose mentioned in related to the definition is that it can enable a reduction of energy/carbon use and mitigate the sector’s climate and environmental impact (throughout the building’s life cycle).
- Other common answers are: support the construction value chain and provide benefits to the building owner.

Some central quotes

- (Most recurrent view) A DBL is a digital repository with an interface that enables different parties to use the data.
- (Visionary) “The DBL should be like a health record for a person”
- (Life-cycle of the building) “A DBL should bring all relevant information together, including what the building is and what it can do. Furthermore, the logbook should enable to capture the information over the whole life cycle of the building to better understand the building and take the appropriate decisions also at the end of life”.
- (Process oriented) “It is the process that is put in place that makes the difference. We need to digitalise the process.”
- (Enable non-energy benefits) “The DBL should address the quality of the building, not only from a thermal and energy point of view, but also from an acoustic and air quality point of view.”
What is a digital building logbook?

**Our definition**

A digital building logbook is a **common repository for all relevant building data**. It facilitates **transparency, trust, informed decision making and information sharing** within the construction sector, among building owners and occupants, financial institutions and public authorities.

**A digital building logbook is a dynamic tool that allows a variety of data, information and documents to be recorded, accessed, enriched and organised under specific categories.**

It represents a **record of major events and changes over a building’s lifecycle**, such as change of ownership, tenure or use, maintenance, refurbishment and other interventions. As such, it can include administrative documents, plans, description of the land, the building and its surrounding, technical systems, traceability and characteristics of construction materials, performance data such as operational energy use, indoor environmental quality, smart building potential and lifecycle emissions, as well as links to building ratings and certificates. As a result, it also enables circularity in the built environment.

Some types of data stored in the logbook have a more **static nature** while others, such as data coming from smart meters and intelligent devices, are **dynamic** and need to be **automatically and regularly updated**. A digital building logbook is a **safe instrument** giving control to users of their data and the access of third-parties, respecting the fundamental right to protection of personal data. Data may be stored within the logbook and/or hosted in a different location to which the logbook acts as a gateway.
Approach for the gap analysis

- Comparison between existing initiatives and desired data fields and functionalities
- Review of barriers and success factors for existing initiatives
- Analysis according to consortium’s expertise

Identification of key gaps

- Actions suggested by stakeholders through survey and interviews
- Analysis according to consortium’s expertise

Identification and characterisation of actions addressing the main gaps

Gaps Analysis and identification of actions to be undertaken to fill in these gaps
Key gaps to be addressed

<table>
<thead>
<tr>
<th>Financial aspects</th>
<th>User expectations</th>
<th>Data aspects</th>
<th>Legal aspects</th>
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<tbody>
<tr>
<td>Gap #1  Lack of a sound funding model</td>
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<td>Gap #6  Challenges linked with the interoperability of the repository</td>
<td>Gap #7  Issues with data governance</td>
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<td>Gap #2  DBL benefits not clear to all the stakeholders</td>
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<td>Gap #8  Lack of defined legal framework</td>
<td>Gap #9  Uncertainty around the role of EU and MS level policy</td>
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<td>Gap #3  Inconsistency around the scope and purpose of DBL</td>
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<td>Gap #4  User-friendliness not optimised</td>
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<td>Gap #5  Barriers to updating the DBL</td>
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Conclusions & Next steps

- See our publications on https://op.europa.eu/en/home

- Next steps:
  - Elaboration of key recommendations for policy actions
  - Stakeholder meeting on 17 November: join us!
  - Third report gathering all project’s results to be published in December
Thanks for your attention!

Sophie Dourlens-Quaranta, B-LOG coordinator
sophie.dourlens@r2msolution.com