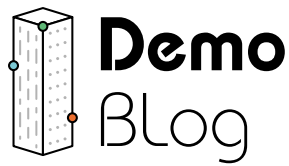


SUSTAINABLE PLACES 2023



Digital Building Logbooks

Developing Useful Digital Building Logbooks for Market Uptake

16 June, 2023 - Madrid, Spain

sustainableplaces.eu



AGENDA

0900-0905	Opening & Motivation	Thomas Messervey, R2M
0905-0925	DEMO-BLOG Aims, Ambition, Approach & State of Play Report	Henk Visscher, TU Delft Sun Ah Hwang, TU Delft
0925-0940	BUILDCHAIN Aims & Ambition CHRONICLE use of DBL	Jairis Arleen Alvarez Trujillo, RINA Giorgia Spigliantini, RINA
0940 - 0950	BIM4EEB: One Team Logbook	Riccardo Merizzi (One Team)
0950-1005	Vision for DBL as a facilitation tool for SRI and EPC assessments	Paris Fokaidis, Federick University
1000-1015	DBL Software Development: Specifications, Implementation, Challenges	Ruben Alonso, R2M
1015-1030	Panel Discussion: Building useful logbooks and their uptake.	Thomas Messervey, R2M

R2M DBL Work

CHRONICLE

- Define the scope of the logbook based on stakeholders' needs
- Define the business model
- Design, develop and deliver the DBL (BIM-Based)
- Integrate the logbook with the CDE for building data capturing in a dynamic way
- Methodology for regular data validation updates supported by blockchain technology for trust, transparency and data reliability

SMARTSQUARE

- SRI integration roadmap to digital logbooks

SMART LIVING EPC

- Roadmap for linking EPCs and EPC data to the DBL, based on stakeholders' needs
- Literature review and market analysis

DEMO-BLOG (R2M FR)

- DEMO B-Log exploitation strategy
- DBL policy landscape factsheets
- Policy roadmap for the implementation of DBLs
- Common EU DBL template

LEGOFIT

- Residential Building BIM-based Digital Logbook
- Develop a secure interoperable data governance framework for managing critical building data (materials used and energy performance)
- Integrate the logbook to the circularity passport
- Logbook and blockchain
- Investigation to produce a platform for measuring user satisfaction, acceptance and participation

DBL Tender (Closed)

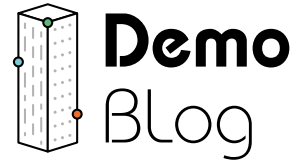
Projects touching DBL (Closed and ongoing)

DBL Call Topic (Ongoing)

DBL Tender (Ongoing)

Demonstrate the use of Digital Logbook for buildings (IA)

There is a need to demonstrate and realise the potential benefits of using digital depositories of information that accompany buildings throughout their lifecycle. These digital building logbooks (DBL) can potentially result in greater efficiency, circularity and transparency in the building stock. DBLs should also improve decision making for all actors along the lifecycle of the building, thereby facilitating better design choices and greater sustainability, contributing in this way to the New European Bauhaus initiative.



**DBL Tender (Ongoing)
Feedback Survey Results**

**June
2023**



**Technical study on the
development and
implementation of DBLs**

Report on the feedback survey by the
study team.

**DBL Tender (Ongoing)
Webinar #4**

**June
2023**

**DBL use cases, benefits and
data management**

4th Workshop, 15 June 2023

DBL
DIGITAL BUILDING
LOGBOOK



**DBL Tender (Ongoing)
DBL Use Cases**

**June
2023**



2.4 DBL Use Cases

Showcasing how DBLs would work in practice.

Authors: Tom Borst, Niko Raes, Amy Cai, Yvon Gankema and Robbin Schinkel (Arcadis)

Editors and Quality Control: Martin van der Ende and Michael Flickenschild (Ecorys)

06 June 2023

DBL Tender (Webinar Slide)**Refresher: What are we aiming to do with this study?**

Aim: development of an EU model for digital building logbooks (DBLs).

With the purpose of:

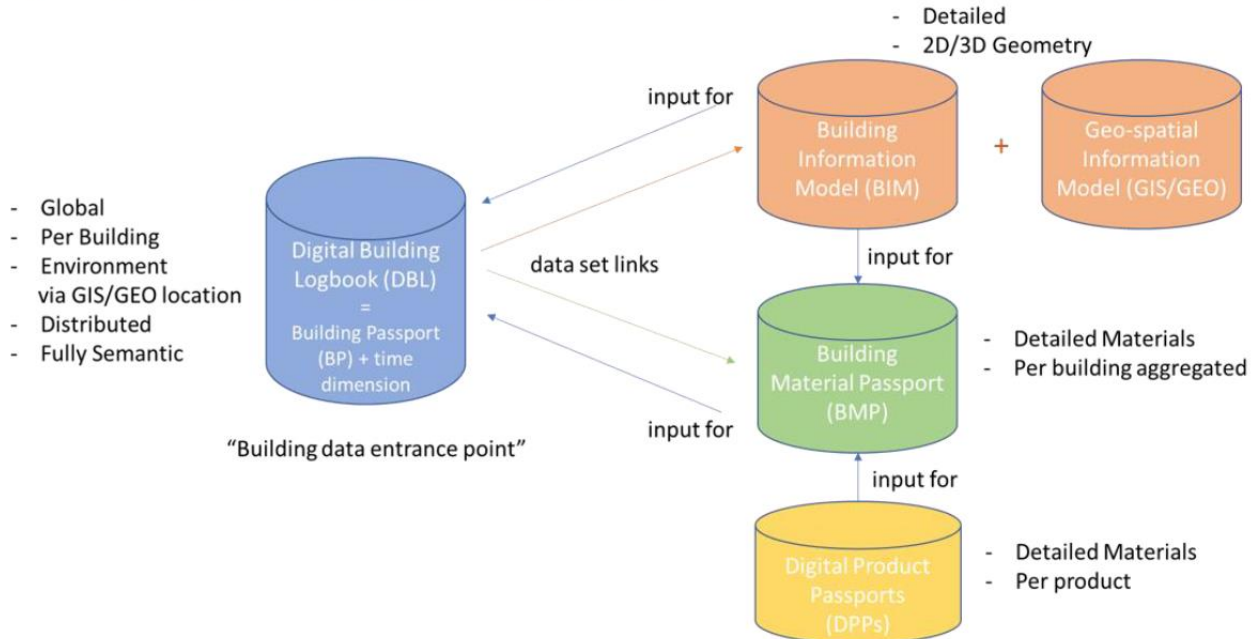
- Providing a common EU Framework to improve harmonization, efficiency & effectiveness
- Improving data sharing, use and organisation in the built environment and construction
- Supporting stakeholders and end-users through reuse of the framework for various use cases (e.g. energy efficiency, construction materials, circularity)

Main outputs: an EU semantic data model for DBLs (ontology + dictionary) as well as technical guidelines for implementation at Member State level.

Today: The objective of the workshop is to engage experts in a discussion about our findings from the survey, the study of use cases as well as exchange on benefits and data management.

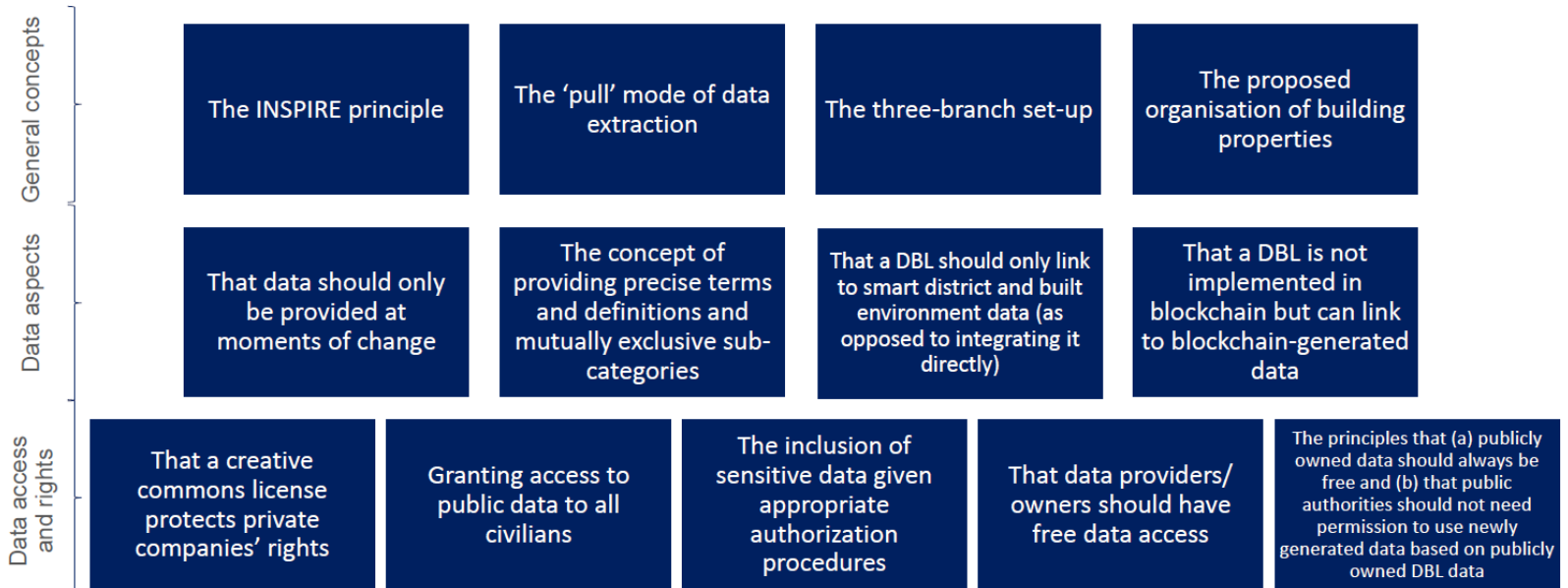
Note on DBL concept

DBL is not BIM or building materials passport



General agreements

Where did we observe the most agreement among participants?



**DBL Tender
Use Cases
Study****User groups**

Based on interviews in the research group, the resulting mind map, the survey, this technical study and other study reports, in combination with the results of the RTA, five main user groups or relevant stakeholders were identified:



Governmental agencies – who need a DBL to obtain insights for policy-making, issuing of licences and enforcement of regulation and disaster management



Construction sector – who need a DBL to obtain building-related information for the design and build.



Building Owners – who need a DBL as a basis for the collection of information about their buildings for exploitation and maintenance.



Financial Institutions – who need a DBL to perform analysis based on formulas to gain insight into the assets market, and its developments and gain an understanding for building transactions.



Utility companies - who need a DBL to obtain building information for connection of utilities to the building and analyses of its uses and provide information related to building use or performance

DBL Tender Use Cases Study

Data mapping exercises

	User group	Relevant data
	Governmental agencies	A - B - D - G - H - I - J
	Construction sector	D - E - F - H - I - J
	Building Owners	A - B - C - D - E - F - G - H - I - J
	Financial Institutions	A - B - I - J
	Utility companies	A - B - F - H - I - J

**DBL Tender Use
Cases Study**

Nice
conclusions for
each user group

5. Conclusions

Based on the use-case workshops, the survey and the semi-structured interviews the following conclusion can be made for each of the primary processes of the identified user groups:

Financial Institutions – Technical Due Diligence Process for Building Transactions



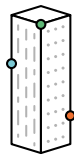
- Environmental- & Social Governance (ESG) is becoming increasingly important in transactions in Real Estate.
- The availability of asset-specific data is increasingly influencing the valuation of the asset.
- The building-specific data can be sensitive data, which relates to data governance and authorization and should be under consideration when determining who has access to the building-specific data.
- For proper technical due diligence (TDD) research, a lot of building data is necessary. Besides existing building data also periodic inspection data and life cycle data are also welcome.

**Invitations
Future Clustering Opportunities**

- | | |
|-------------------|---|
| Sept 2023 | EU DBL Tender Final Webinar – Results from Projects to date |
| April 2023 | BDTIC 2024 |
| Sept 2024 | Sustainable Places 2024 |



SUSTAINABLE PLACES 2023

 **Demo**
Blog

 **BUILDCHAIN**

**Smart
living**

EPC


BIM4EEB
BIM based fast toolkit for
Efficient rEnovation in Buildings

CHRONICLE

LEGOFIT

SMIRT²
ENHANCING THE INTELLIGENCE
OF BUILDINGS IN EUROPE



Digital Building Logbooks

Developing Useful Digital Building Logbooks for Market Uptake

16 June, 2023 - Madrid, Spain

sustainableplaces.eu

R2M
RESEARCH TO MARKET
SOLUTION



POLITÉCNICA