Collecting the existing experiences about the digitalization of the building permit process



The steps of the digital building permit process are the following:

- Step 1: Pre-consultation and preliminary analysis
- Step 2: Building information modelling and export to IFC
- Step 3: Application review (formal requirements) IFC validation
- Step 4: Conversion to geodata and integration with 3D city model or geoinformation
- Step 5: Application review (content): regulations checks
- Step 6: Completion of the works and building authorities notification

In addition, two kinds of datasets are considered as input for the process steps:

- 1. digital regulations
- 2. 3D city models/geoinformation

For each of these st	teps you will be asked to answer to the following questions:
1. Is the experience th	at you are about to report related to Step ?
<ul><li>Yes</li></ul>	
○ No	
2. Could you provide a process step?  Max 1000 characters (sp	short description about the experience you are reporting on, with respect to the digitalization of this aces included).
Description	
	nk to existing references of your experience, also in your national language.
Link	
4. In which country/cou	ntries does/did this experience take place?

Collecting the existing experiences about the digitalization of the building permit process  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left$ 



5. What is the geographical scope of this experience?
○ International
○ National
○ Regional
○ Local (Municipality)
Other
6. To which of the following types of contribution does this experience belong?  A = Research
A1: literature review, evaluation of software or procedure, data review
A2: solid research or application experiment report, possibly supported by data
B = Developments
B1: Demonstrator or early-stage experiments, preliminary to tools implementation
B2: Tools tested with many data, potentially usable/used in practice
C = Initiatives in operational environment
○ A1
○ A2
○ B1
○ B2
○ C
○ I do not know
7. What is the state of progress of this experience?  According to the discipline of Project Management.
Conception and Initiation
Operation and Planning
○ Executing
○ Validating
○ Closing
○ I do not know
8. Which of the following EUnet4DBP ambitions does this experience contribute to?
Please, refer to the complete framework of the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html
☐ Interoperable technology: Technologies for data analysis and data visualization
<ul> <li>Interoperable technology: Technologies for data analysis and data visualization</li> <li>Interoperable technology: A network platform as a unique repository of data across the whole life cycle</li> </ul>
☐ Interoperable technology: A network platform as a unique repository of data across the whole life cycle
<ul> <li>Interoperable technology: A network platform as a unique repository of data across the whole life cycle</li> <li>Interoperable technology: Very high technology readiness level</li> </ul>
<ul> <li>☐ Interoperable technology: A network platform as a unique repository of data across the whole life cycle</li> <li>☐ Interoperable technology: Very high technology readiness level</li> <li>☐ Interoperable technology: An inclusive system at all levels (European, national, municipality)</li> </ul>
<ul> <li>☐ Interoperable technology: A network platform as a unique repository of data across the whole life cycle</li> <li>☐ Interoperable technology: Very high technology readiness level</li> <li>☐ Interoperable technology: An inclusive system at all levels (European, national, municipality)</li> <li>☐ Simple and machine-readable rules and requirements: Clear specification of requirements</li> </ul>
<ul> <li>□ Interoperable technology: A network platform as a unique repository of data across the whole life cycle</li> <li>□ Interoperable technology: Very high technology readiness level</li> <li>□ Interoperable technology: An inclusive system at all levels (European, national, municipality)</li> <li>□ Simple and machine-readable rules and requirements: Clear specification of requirements</li> <li>□ Simple and machine-readable rules and requirements: simple and clear rules</li> </ul>
<ul> <li>☐ Interoperable technology: A network platform as a unique repository of data across the whole life cycle</li> <li>☐ Interoperable technology: Very high technology readiness level</li> <li>☐ Interoperable technology: An inclusive system at all levels (European, national, municipality)</li> <li>☐ Simple and machine-readable rules and requirements: Clear specification of requirements</li> <li>☐ Simple and machine-readable rules and requirements: simple and clear rules</li> <li>☐ Efficiency of process: Align the process at EU level</li> </ul>

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The Requirements listed	ng EUnet4DBP requirements does this experience contribute to?  If below are necessary towards the achievement of the previous ambitions. Please, refer to the complete framework tions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.
<ul><li>Digitalize the minds</li></ul>	et of the public officers
☐ A roadmap and a cl	nange framework towards a fully digital building permit process
■ Normative text shows the shown in the	ıld be interpretable
☐ Machine readable b	uilding codes
☐ The process steps	contain different spatial and semantic data
<ul> <li>Understanding the</li> </ul>	necessary process steps
<ul><li>Alignment across E</li></ul>	urope in Scope and Ambition
<ul><li>Standardization</li></ul>	
Common Dictionari	es
Modelling convention	ons and guidelines
Interoperability and	APIS
Other	
Back	Next
questionnaire:	ur experience as well, answering to the following questions located at the end of the nat you are about to report related to another step/aspect of the digital building process?
<ul><li>No</li><li>You are now reporting or</li></ul>	
	spects of the digital building process
2. Could you provide a process step?  Max 1000 characters (sp	short description about the experience you are reporting on, with respect to the digitalization of this aces included).
Description	

Collecting the existing experiences about the digitalization of the building permit process  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left$ 



3. You can also	o add a link to existing references of your experience, also in your national language.
Link	
4. In which cou	untry/countries does/did this experience take place?
5. What is the	geographical scope of this experience?
<ul><li>International</li></ul>	al
<ul><li>National</li></ul>	
<ul> <li>Regional</li> </ul>	
O Local (Mun	ilicipality)
Other	
A = Research A1: literatur A2: solid re B = Developme B1: Demor B2: Tools te C = Initiatives ir	the following types of contribution does this experience belong?  re review, evaluation of software or procedure, data review esearch or application experiment report, possibly supported by data ents ents ents estator or early-stage experiments, preliminary to tools implementation ested with many data, potentially usable/used in practice in operational environment
○ C	
○ I do not kno	OW
	state of progress of this experience? e discipline of Project Management.
Conception	n and Initiation
<ul><li>Definition a</li></ul>	and Planning
<ul><li>Executing</li></ul>	
<ul><li>Validating</li></ul>	
Closing	
○ I do not kno	ow .

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# 8. Which of the following EUnet4DBP ambitions does this experience contribute to? Please, refer to the complete framework of the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html Interoperable technology: Technologies for data analysis and data visualization.

	Interoperable technology: Technologies for data analysis and data visualization
	Interoperable technology: A network platform as a unique repository of data across the whole life cycle
	Interoperable technology: Very high technology readiness level
	Interoperable technology: An inclusive system at all levels (European, national, municipality)
	Simple and machine-readable rules and requirements: Clear specification of requirements
	Simple and machine-readable rules and requirements: simple and clear rules
	Efficiency of process: Align the process at EU level
	Efficiency of process: Simplify the building permit process
	Empowerment of public officers
	Other
9. ۱	Which of the following EUnet4DBP requirements does this experience contribute to?
	e Requirements listed below are necessary towards the achievement of the previous ambitions. Please, refer to the complete framework the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers  A roadmap and a change framework towards a fully digital building permit process
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers  A roadmap and a change framework towards a fully digital building permit process  Normative text should be interpretable
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers  A roadmap and a change framework towards a fully digital building permit process  Normative text should be interpretable  Machine readable building codes
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers  A roadmap and a change framework towards a fully digital building permit process  Normative text should be interpretable  Machine readable building codes  The process steps contain different spatial and semantic data
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	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers  A roadmap and a change framework towards a fully digital building permit process  Normative text should be interpretable  Machine readable building codes  The process steps contain different spatial and semantic data  Understanding the necessary process steps  Alignment across Europe in Scope and Ambition
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers  A roadmap and a change framework towards a fully digital building permit process  Normative text should be interpretable  Machine readable building codes  The process steps contain different spatial and semantic data  Understanding the necessary process steps  Alignment across Europe in Scope and Ambition  Standardization
	the EUnet4DBP Ambitions and Requirements here: https://3d.bk.tudelft.nl/projects/eunet4dbp/about.html.  Digitalize the mindset of the public officers  A roadmap and a change framework towards a fully digital building permit process  Normative text should be interpretable  Machine readable building codes  The process steps contain different spatial and semantic data  Understanding the necessary process steps  Alignment across Europe in Scope and Ambition  Standardization  Common Dictionaries