



Testbed for supporting lifecycle 3D geodata and BIM-data

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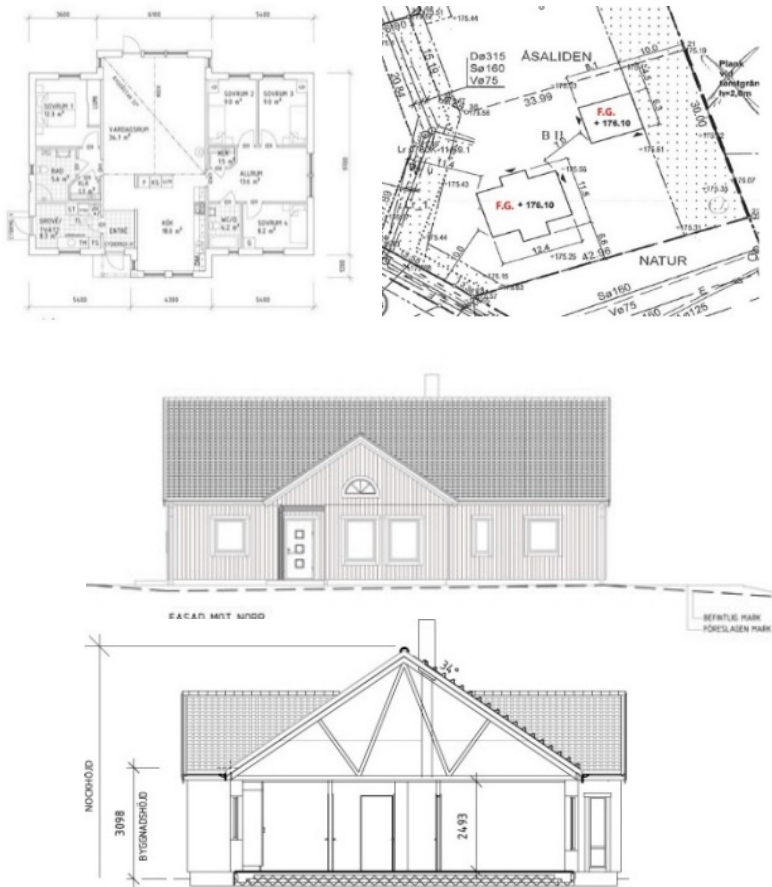
LUND
UNIVERSITY

(1) Three new requirements on
NMAs and municipalities

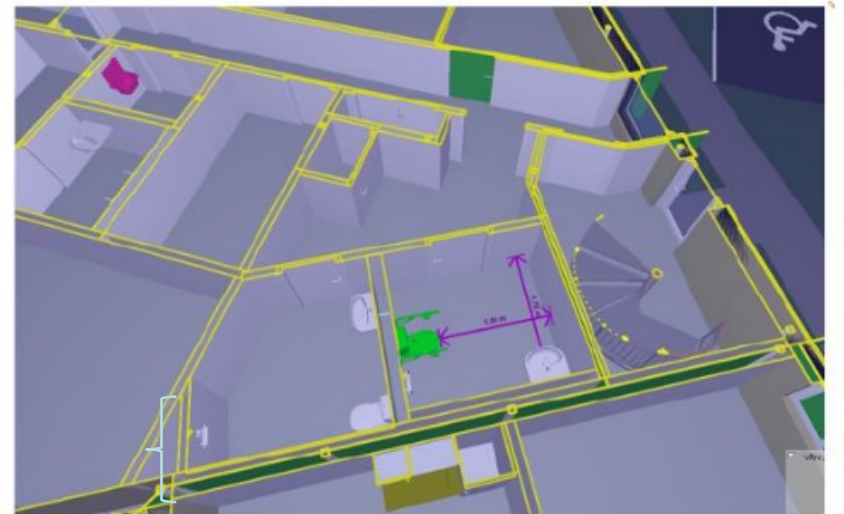
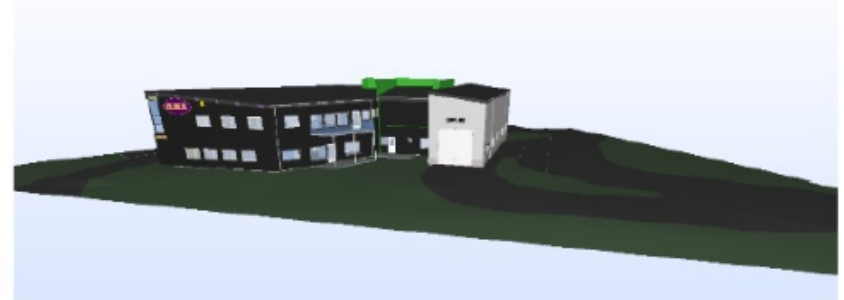
(2) Test bed for coping with these
new requirements

1) Improve the sharing of information

Example: New data exchange for the building permit process



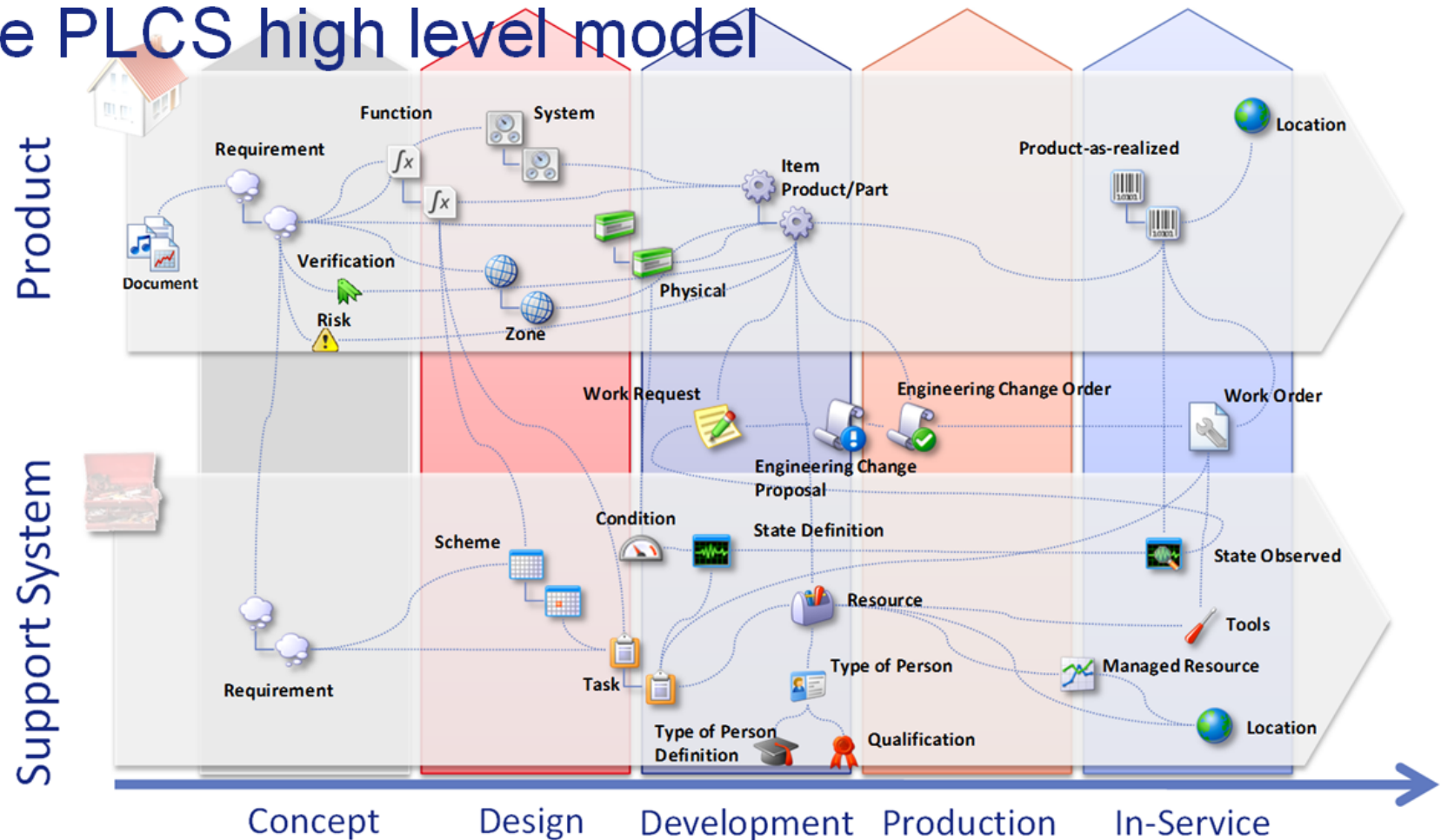
Today



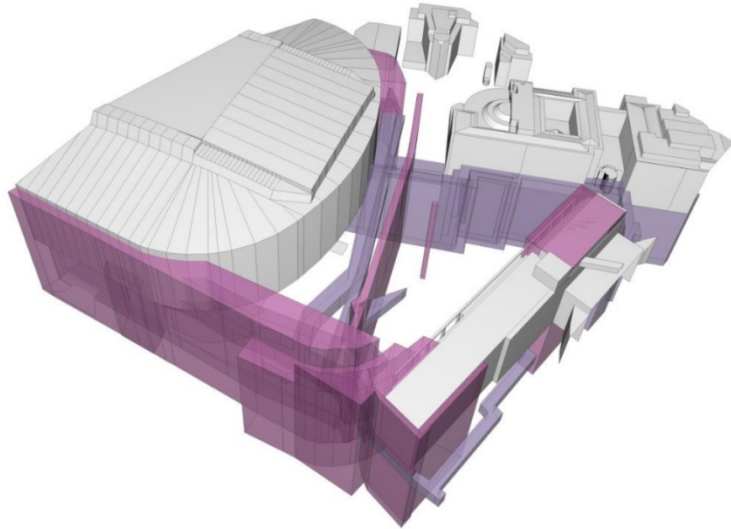
Future

2) Linkage to BIM data stored as life cycle data

The PLCS high level model



3) Authority decisions are made on BIM models

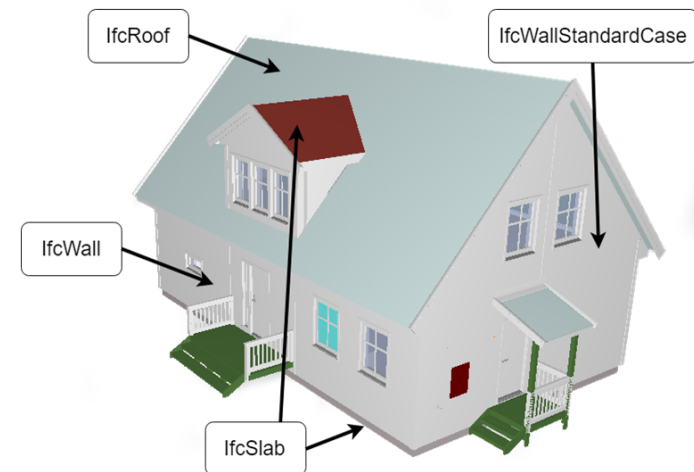


3D Cadastre formation using BIM model

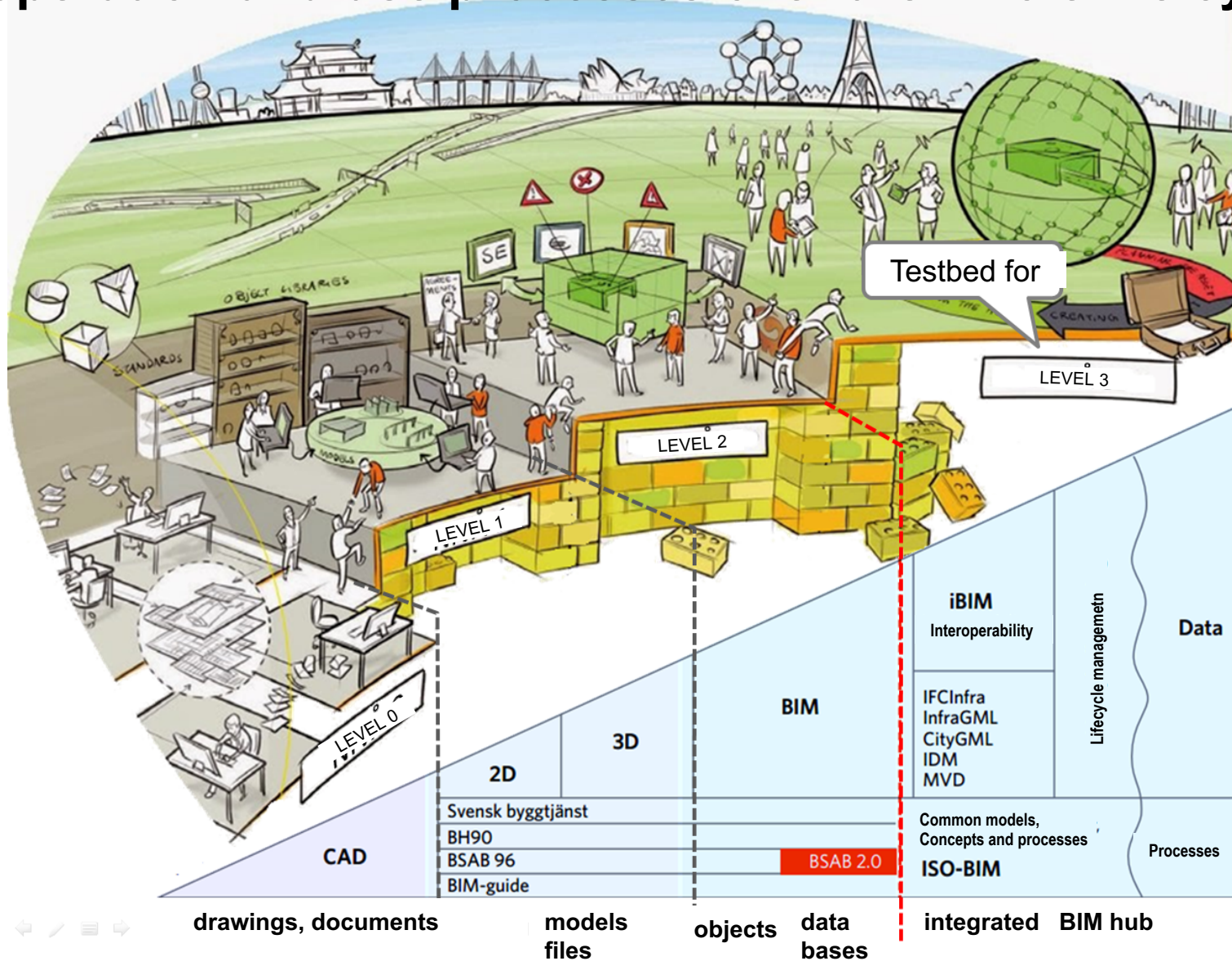
Andrée, Pålsson, Paasch, Seipel et al., 2017

Rule checking in the building permit process

OLSSON P.-O., AXELSSON J., HOOPER M., HARRIE L., 2018.
Automation of Building Permission by Integration of
BIM and Geospatial Data.
ISPRS Int. J. Geo-Inf. Vol. 7, pp. 307-328.



Testbed: Smart planning, design, construction, operation and use processes over the whole life cycle



BIM levels after British Standards Institute (from ARCADIS adapted to Swedish standards)

TESTBED

Visualisation
Agency9

Visualisation
BIMXplorer

Visualisation
Other

RestAPI

PLATTFORM

- Eurostep ShareAspace (database for life cycle data)
- Triona (network handling)
- Etc.



RestAPI

Import / export

Conversion
BIM/GIS

FME-
scripts

Linking

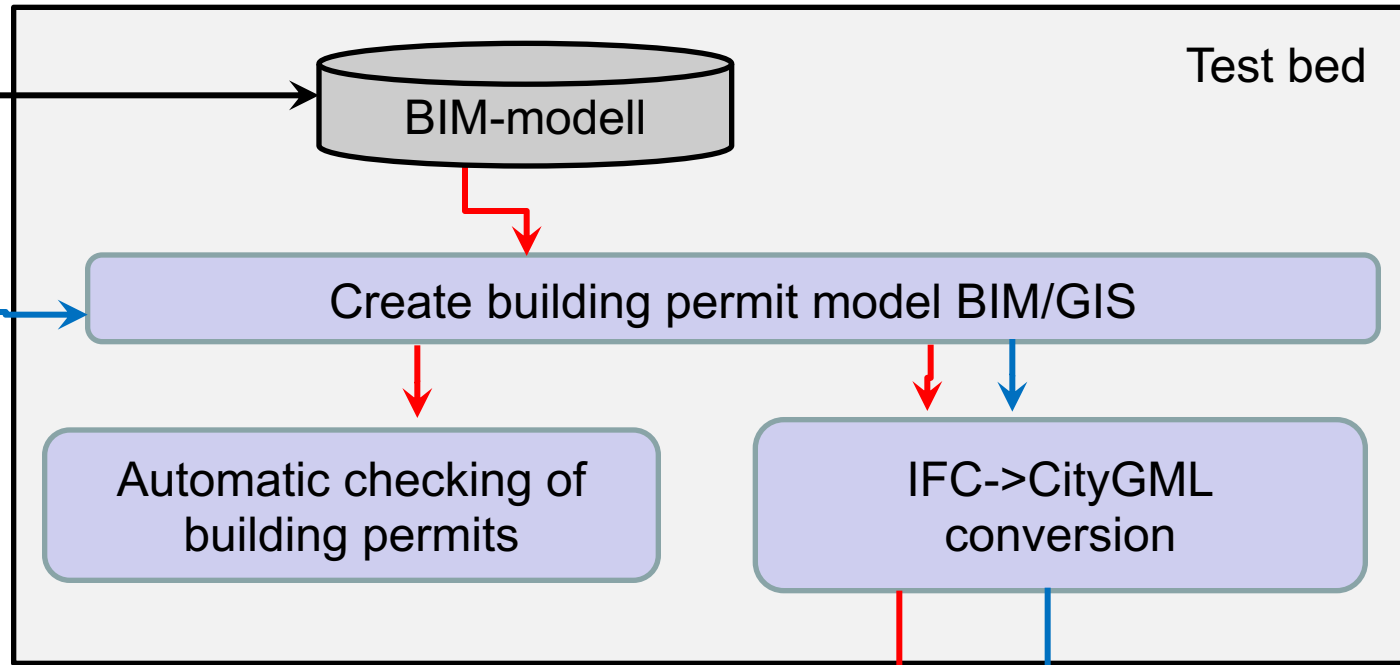
Register information

Building permit process test

Exchange specifications
BIM (MVD)

Data
exchange
specification
work

Exchange
specifications
Geodata



Automatic checking of
building permits

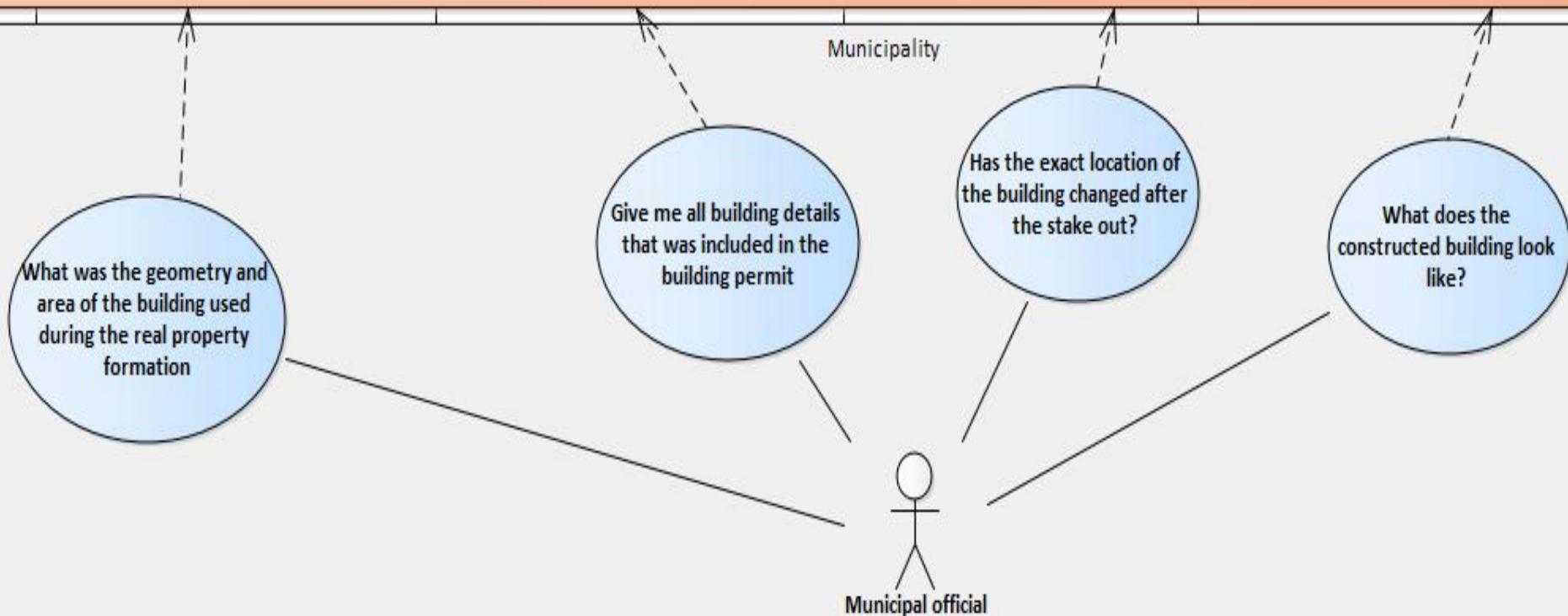
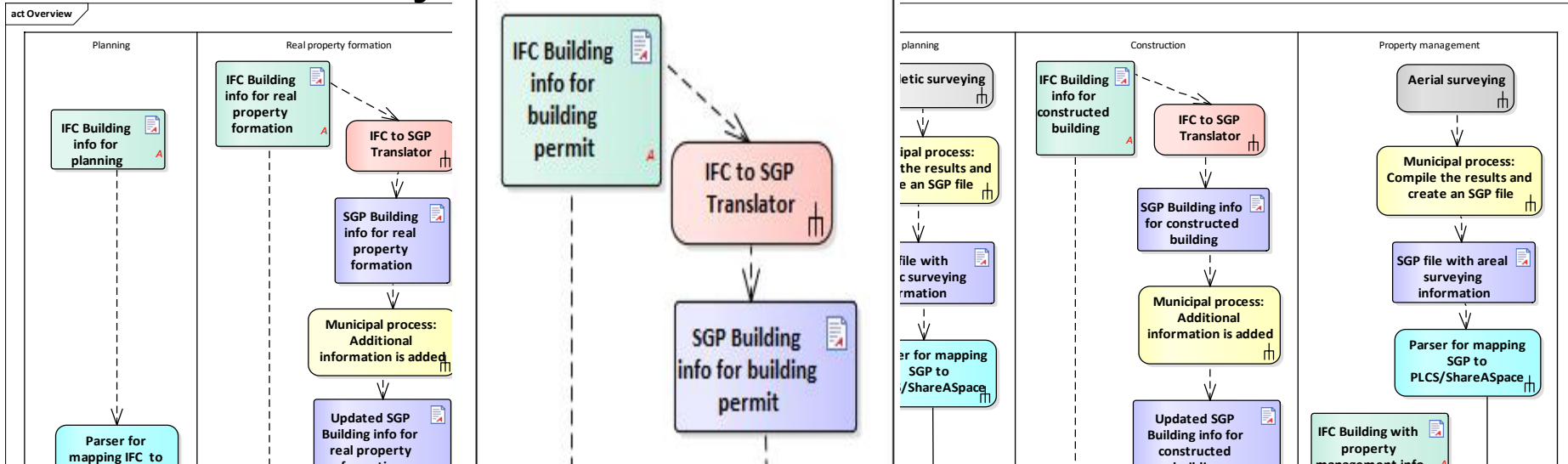
IFC->CityGML
conversion

Reuse of data

Geodata themes

Stored in
new national
specifications

Life cycle and BIM data test



Questions?

