BDTIC
2ND BUILDING DIGITAL TWIN International Congress

Buildings' renovation Digital Twins BIM4EEB / DigiPLACE

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ORGANIZED BY:

BUILDING DIGITAL TWIN ASSOCIATION

SPHERE

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BIM4EEB H2020 project

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DigiPlace
EU Construction Digital Platform
project coordinator

UNI
BIM CT033/SC05 *president*
BIM CEN – ISO *national expert*

BIM A+
EU BIM Master Erasmus+
deputy manager, A+5 coordinator

BIMReL
IT SmartCE Product Digital Library
scientific manager

INNOVance
IT Construction Digital Platform
scientific manager

CCLM
Center Construction Law Management
scientific board

Building Smart IT (2005/15)
House of Open BIM - IFC standard
CEO member / treasurer

BIM4EEB H2020 project

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BIM4EEB goals

An EU-funded project supporting the renovation industry in retrofitting existing residential buildings with a complete **BIM-based toolkit to make the flow of information efficient and decrease intervention working time, while improving building performances, quality and comfort for inhabitants**.

These tools will allow to **rapidly reconstruct 3D digital models of existing buildings** and to seamlessly **integrate semantic data** in order to perform advanced evaluations of design options for renovations.

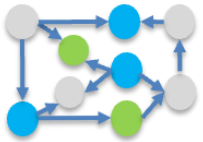
Main results will include **guidelines for BIM implementation** and providing an easy, practical and operational platform as a central repository of information, namely **Common Data Environment (CDE)**, with different connected tools.

BIM4EEB H2020 project

Phase 1

Construction & service companies

HVAC designers

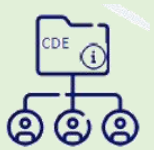


linked data & ontologies

owners & inhabitants

Requirements, linked data & ontologies

Phase 2



BIMMS

AR for fast mapping & survey

Auteras, BIMcpd, BIMeaser

BIMplanner, BIM4Occupants

Tools development

Phase 3

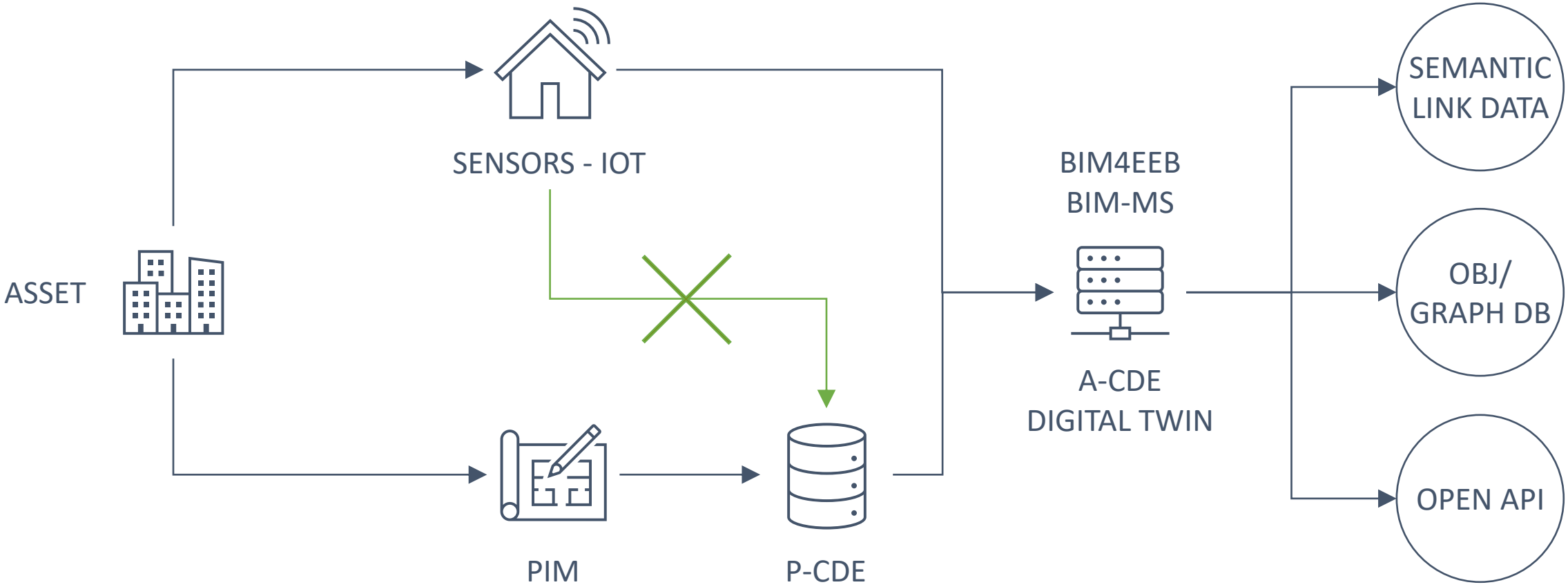
Monza demo site (IT)

Chorzow demo site (PL)

Tampere demo site (FI)

Demonstration in relevant environment

BIM-MS / Information Model



DigiPLACE H2020 project

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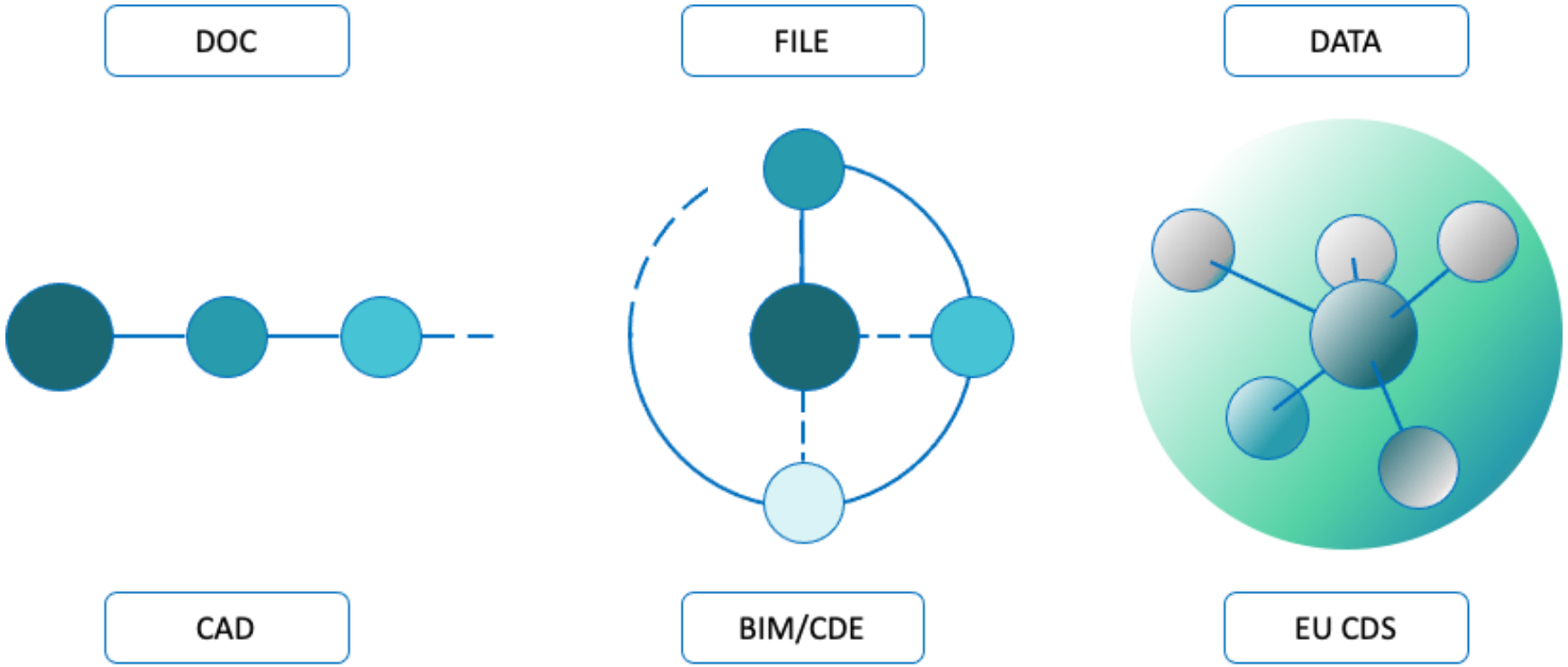
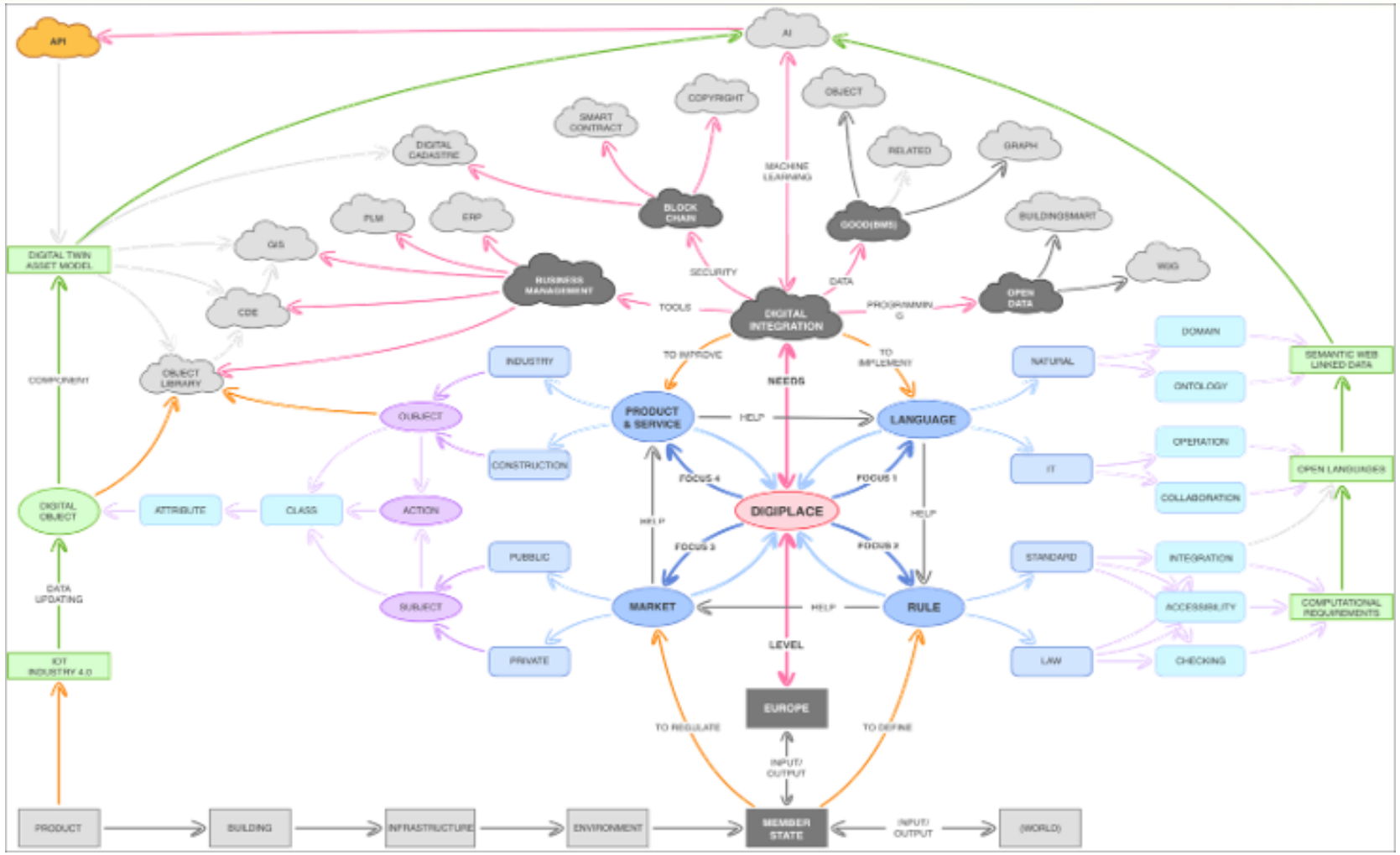
DigiPLACE platform

Reference Architecture Framework (RAF)

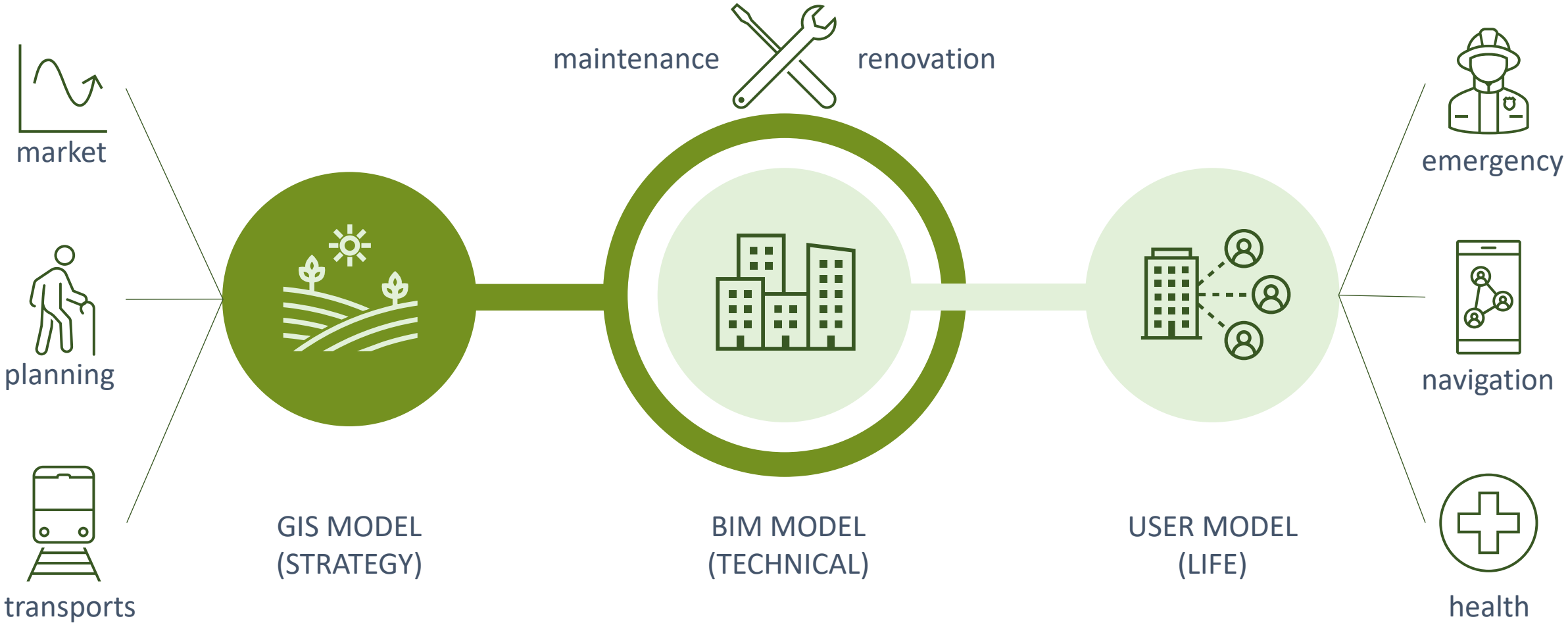
for the **digital industrial platform** for the **construction sector** based on a **shared consensus** along the entire **value-chain** and supported by a **Strategic Roadmap**



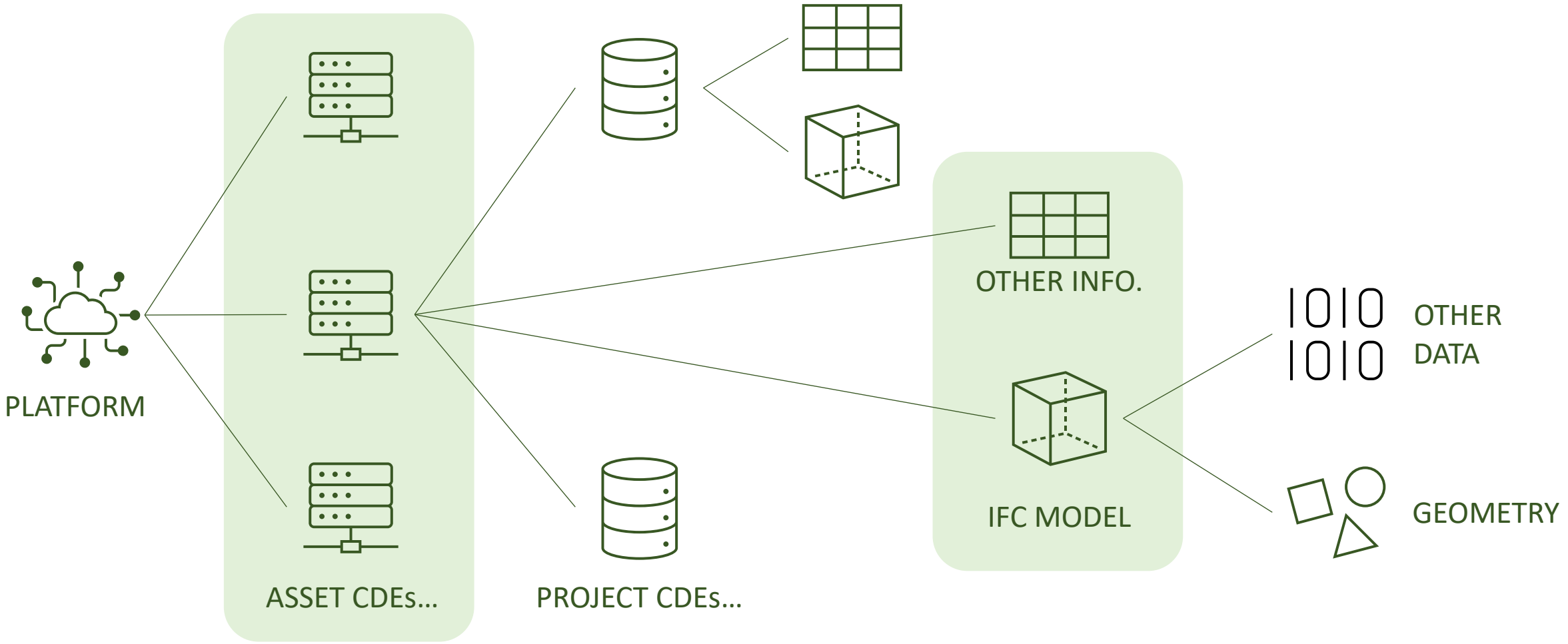
Construction Data Space



Digital twin: GIS & users model



Model data/geometry updating

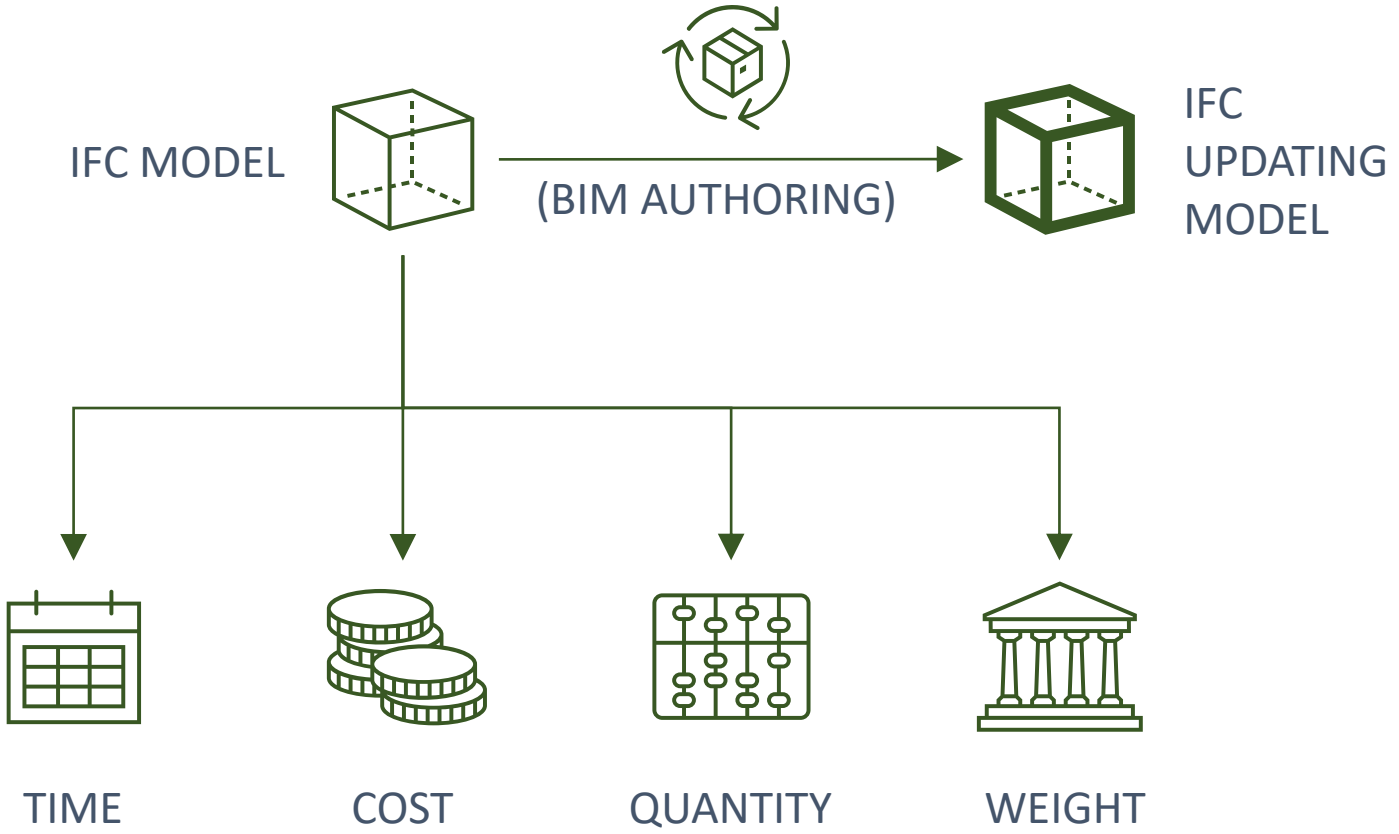


Digital Twin updating

GRAPH/GEOMETRICAL MODEL

MODEL FAILURE MAINTENANCE

MODEL PLANNED MAINTENANCE



Thanks

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