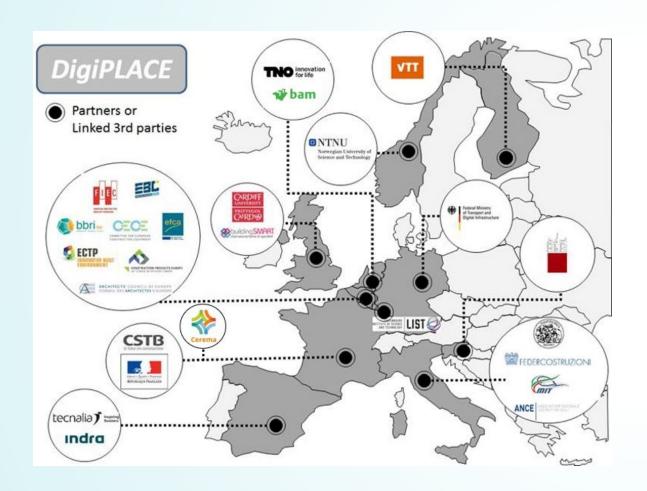


DigiPLACE Project introduction





The highest-level objective of the **DigiPLACE** project is to create a

Reference Architecture Framework (RAF)

for the **digital industrial platform**for the **construction sector**

based on a shared consensus along the entire chain



DigiPLACE Project Structure



WP1 - Project management - Politecnico di Milano

WP2 – Long term community building - Federcostruzioni

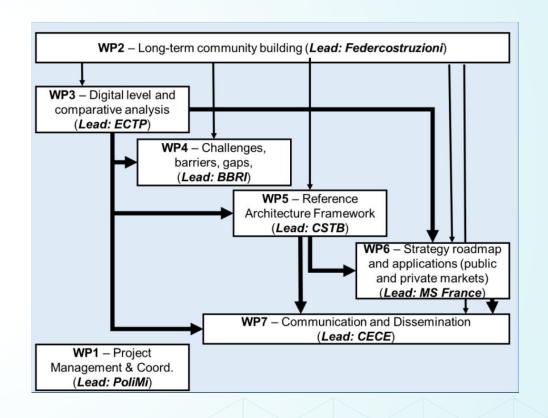
WP3 - Digital level and comparison analysis - ECTP

WP4 - Challenge barriers and gaps - BBRI

WP5 – Reference Framework Architecture - CSTB

WP6 – **Strategy roadmap** (private and public markets) - MEEM

WP7 – Communication and dissemination - CECE





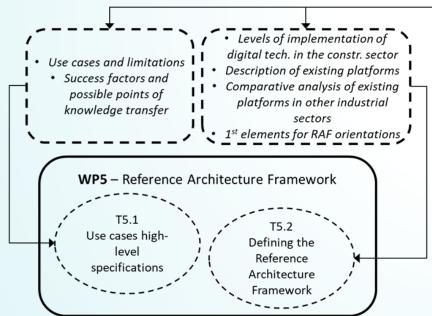
Activities overview



Provide a global vision of the level of digitalisation of the Construction sector

WP1 - Project

- Digital technologies & tools implementation
- Ongoing initiatives & existing digital platforms
- Actual practices
- Barriers & gaps
- Comparison with other industrial sectors
- ..



management & community Communication coordination building & dissemination WP3 Level of Comparative analysis implementation of of existing platforms digital technologies in the construction & industrial sector & other hubs/platforms T3.3 sectors Impact analysis and success factors for the identification of points of knowledge transfer

WP2 - Long-term

WP7 -

• Global vision of the implementation of digital tech.&tools in the constr. sector

• 1st identification of challenges & success factors

WP4 – Challenges, barriers, gaps & WP6 – Strategy roadmap



Success factors for the DigiPLACE RAF

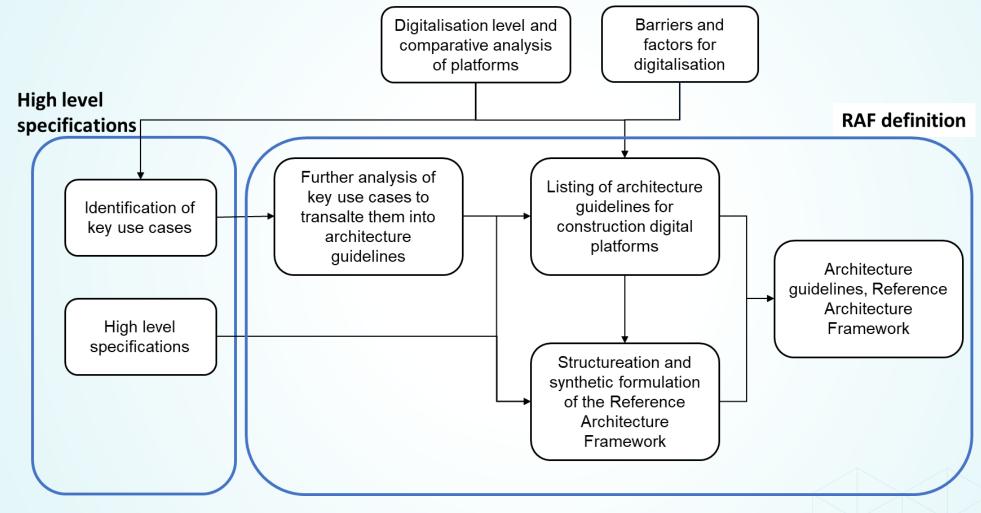
	TECHNICAL ASPECTS
1	Interoperability and sustainability
2	Collaboration enabler
3	Single entry point
4	Capacity to connect several platforms both at regional and national levels
5	Integration of both public and private data
6	Easier circulation of / access to services and products
7	Maintenance of data
8	Maintenance and update of the services
9	Adequate backup of data
10	Be customizable
11	Be scalable and dynamic (provide an environment able to integrate new/existing tools)
12	Efficient and fast data management and data queries
	DEMAND / REGULATORY ASPECTS
13	Capacity to check compliance with regulations & certifications
14	Capacity to answer the demand/needs of every kind of stakeholder
15	Relying on the national level, by interconnecting with national platforms
	ECONOMIC ASPECTS
16	Identification of clear funding mechanisms / systems (analysis of the economic sustainability of the platform)
17	Identification of business cases for all stakeholders
18	Increase of the competitiveness for all the value chain
	SECURITY ASPECTS
19	Information and data security
20	GDPR compliance



TOWARDS A EUROPEAN DIGITAL PLATFORM FOR CONSTRUCTION

Research methodology







Reference Architecture Framework overview



Area-specific guidelines: leverage interoperability and data sharing in construction

Environmental performance

Large scale data sharing, European big data platform for the construction sector

Business, market and collaboration

Public services and initiatives

Core guidelines: enable interoperability and data sharing in construction

Pillar 1: interoperability, common language and processes

Data formats, models and semantics, use of open standards

Semantic interoperability, Data dictionaries

Data models and formats

Standards for data exchange & access

Information management and processes

Collaboration, Common Data Environments

Data management along the lifecycle, digital twin

Governance and access to standards and frameworks

Pillar 2: control over the use of data

Data storage, security and sovereignty

Data security

Data sovereignty

European Common Data Spaces

Data qualification and trust

Data certification

Data with contractual or regulatory value

Data ownership

GDPR compliance

Data ownership in business relations

Transparency on the use of data

Data availability and sustainability

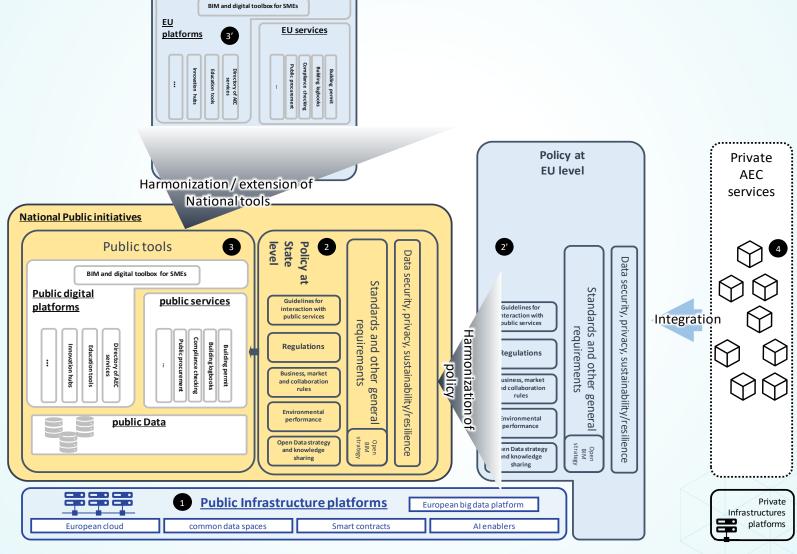
FAIR data principles

Data sustainability



DigiPLACE RAF positioning





EU tools



Proposed perimeter of future public platforms



Access to BIM and collaboration services

Publicly-driven open platforms for BIM and collaboration services

- > Enable collaboration, multi-scale and cross-lifecycle integration, independently from the proprietary tools used
- > Adapt to each stakeholder, esp. SMEs
- > Create a level playing field for both construction stakeholders and tools/services providers
- > Reinforce the ecosystem of European digital AEC services

Access to digitalized public services

Connection with other existing public platforms

Digitalized public services

Examples: building permit, regulatory procedures, building logbook services...

> Connexion with public procurement platforms, progressive harmonisation and digitalisation of procurement

> Share best practices and innovation in the field of digitalisation

> Products and equipment data, catalogues, territorial data and territorial digital twins, other public data, environmental performance data...

- > Easy digital access across Europe, and progressive harmonisation
- ➤ Make BIM collaboration simple and accessible to all, based on agreed use cases
- > Towards European data dictionaries and ontologies

> Easy access to standards and frameworks, engage with the community to govern them

Public procurement

Best practices, feedback, education tools

Data

Access to data and knowledge: repository of EU digital commons

Construction rules

BIM collaboration: templates and guidelines

Data dictionaries, ontologies

Standards





