



**European Digital Innovation Hubs in Digital Europe Programme**

# **DIHCUBE**

## **DIGITAL ITALIAN HUB FOR CONSTRUCTION AND THE BUILT ENVIRONMENT**



Co-funded by  
the European Union

**DIHCUBE is the Italian digital hub for construction and the built environment cofounded by to the European Commission to become part of the initial network of European Digital Innovation Hubs. It is a strategic project focused on the construction sector which is fundamental for the national economy (22% of GDP) and central to the daily life of citizens (homes, infrastructures, urban spaces). However, it suffers from low competitiveness and productivity determined by a marked digital backwardness, by a strong presence of micro and small enterprises (95%). DIHCUBE, therefore, represents an indispensable element that must be launched quickly, also given the very positive effects it would have in ensuring the success of the National Recovery and Resilience Plan (NRRP). Almost 50% of the NRRP measures are of interest to the sector. DIHCUBE also promote the sustainability of the construction sector and the energy transition. Finally, in a value chain in which data will become increasingly important, the real challenge is communication and real interoperability of the different platforms (design, procurement of materials, site management, building / heritage management, sales, etc. ...).**

### **DIHCUBE'S PARTNERS AND OBJECTIVES**

**DIHCUBE brings together in one single hub the main players in the fields of digitalization and innovation for construction and the built environment in Italy.**

<b>DIHCUBE PARTNERS</b>
1. ANCE
2. Federcostruzioni
3. ITC - CNR
4. Ente Nazionale per il Microcredito
5. Officine Innovazione S.r.l.
6. Politecnico di Milano – DABC
7. SMILE-DIH
8. STAM S.r.l.
9. STRESS - Distretto Tecnologico Costruzioni Sostenibili
10. Un. Studi di Brescia – DICATAM, DII
11. Un. Studi di Napoli Federico II
12. Un. Politecnica delle Marche – DIISM, DII, DICEA

The hub consists of 12 partners:

- ✓ 2 trade associations (including the leader, ANCE) representing the construction industry and its supply chain.
- ✓ Six partners with relevant R&I expertise (universities, research organizations and technology transfer bodies).
- ✓ 1 Public Administration.
- ✓ Three partners from business and non-profit sectors.

*DIHCUBE services cover the whole Italian territory. The Hub's partners have been chosen on the grounds of their expertise, but also to guarantee a balanced geographical distribution between*



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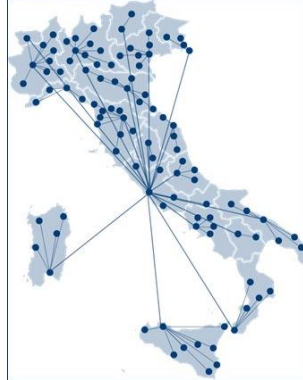
*Foster digitalization for a green, safe and socially responsible built environment*

the North, the Centre and the South of Italy. At national level, the widespread network of ANCE's territorial offices (110 offices) allows for a first and significant involvement of stakeholders.

DIHCUBE can also be able to count on an **existing European network** that connect the Italian hub with 6 other construction hubs in Europe (Belgium, Finland, France, Germany, Poland and Portugal) and collaborates with other European SME support networks such as the European Enterprise Network.

In the last three years, DIHCUBE partners have already been involved in almost 60 digital innovation

projects at regional, national, European and international level, and in particular in more than 30 projects funded under Horizon 2020 or with the European Structural Funds.



DIHCUBE EXISTING NETWORK



### **DIHCUBE SERVICES**

The technological focus of **DIHCUBE** is the **transfer of knowledge and innovative digital technologies for Construction and the Built Environment** by enabling the creation of an **innovative ecosystem**. The **HUB is specialized in Artificial Intelligence and its dissemination**, with consequent implications in the field of **High-Performance Computing** support and of **Computer Security**. It also raises awareness of all the enabling technologies in the sector including, for example: advanced 3D printing systems, ultra-high definition digital surveys, advanced BIM modeling techniques, etc.

**DIHCUBE's target customers** are, on the one hand, **all companies and entities in the construction supply chain, especially SMEs**. This includes construction companies, specialized craftsmen, manufacturers of components and operating machines. On the other hand, there are the clients and real estate managers (public and private), engineering / architecture companies and professionals. The **Public Administration** is no less crucial for the sector given its role as driver of change in the supply chain and the growing digitalization of public procurement. Therefore, the hub offers a range of national and European services dedicated to construction (see Annex).

**Skills development** is also central: DIHCUBE contributes to defining innovative processes for the analysis of training needs closely related to the skills needs required by companies and it focuses on guidance and skills assessment actions aimed at both workers in the sector and young people interested in joining it.

DIHCUBE plans to set up **7 thematic Clusters**: ICT&DIH; Industry – Sustainability – Circular Economy; Public Administration; Competence Centers and Research Laboratories; Real Estate Assets; Funds; Standards and Regulations. The Clusters assist the Hub in raising market awareness about digital aspects, as well as by gathering information about the market needs in order to **improve the type of services to be offered**.

#### **CONTACTS:**

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**DIHCUBE SERVICES SUMMARY**

*(All services are be provided for free)<sup>1</sup>*

<b>Testing before Investing</b>
<i>Advising on current technologies (assessment, demonstration and consulting)</i>
<i>Cybersecurity Assessment</i>
<i>Pilot coaching devoted to ICT: AI (Artificial Intelligence), Cybersecurity, Industry platforms (e.g. for Risk Analysis or participative urban maintenance), IoT (Internet of Things)</i>
<i>Pilot coaching of technologies already used in the construction sector: 3D printing, BIM, Environmental and site monitoring, Digital Surveying (laser scanner, drones, etc.); Smart Safety; Site machine Control; Building energy monitoring (consuming and optimization); Indoor environmental quality control; Testing equipment for enterprises (Mechanical, thermal, acoustic, thermal fatigue/ageing and humidity), Virtual and Augmented Reality, Smart-Living.</i>
<b>Training and skills development</b>
<i>Digital Needs Competences Assessment</i>
<i>Training services for the development of digital skills: base and advanced level</i>
<i>Virtual Reality/ Gamification support in trainings</i>
<i>1 to 1 Entrepreneurship mentoring</i>
<i>Innovation management modules (e-learning)</i>
<i>National/regional reference programmes update for Public Sector Organizations</i>
<b>Support to find investments</b>
<i>Market Maturity Assessment focused on the construction sector</i>
<i>Monitoring and Matchmaking for EU, national and regional innovation funding</i>
<i>Dissemination of financial tools and promotion of Microcredit</i>
<b>Networking and access to innovation ecosystem</b>
<i>Start-up incubation</i>
<i>Start-up acceleration</i>
<i>Enterprises connections: in place/virtual events (Awareness, matchmaking, networking)</i>
<i>Technology Broking/Scouting for enterprises</i>
<i>Call4Ideas/Innovation Challenge - Open Innovation (OI) workshops (e.g. Hackathons on challenges identified by stakeholders from the sector)</i>
<i>Organization of international virtual and in-place events (devoted to EU networking)</i>

<sup>1</sup> Cost are covered by EU and Italian financial support.