

# Two surveys on digitalisation

# Participants



- Cyprus
- Bulgaria
- Republic of North Macedonia
- Croatia
- Slovenia
- Slovakia
- Czechia
- Italy
- Austria
- Poland
- Lithuania
- Estonia
- Germany
- Luxembourg
- Spain
- Portugal

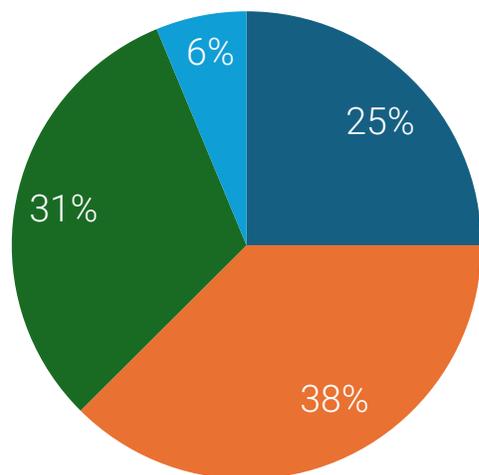
# Digitalisation in Civil Construction

# Survey focused on:



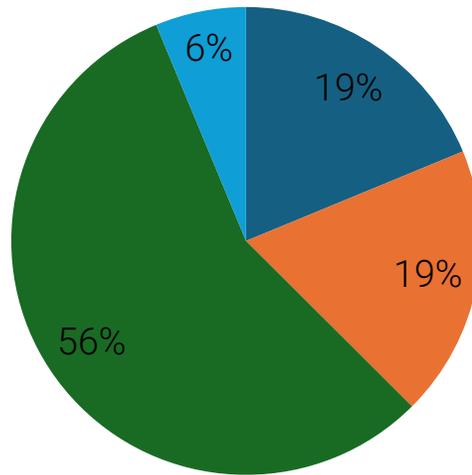
1. Spatial data management
2. Public consultation process
3. Permit issuing process
4. Interoperability & data standards
5. Public accessibility
6. Legal regulation

Unified central portal with spatial data



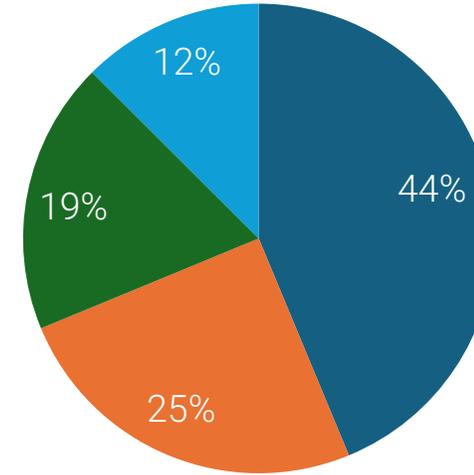
- Yes, fully established and integrated
- Yes, yes, but not integrated
- Partially (separate portals for different data)
- No system exists

Digital system for public consultation



- Yes, standardized and mandatory
- Exists, but not mandatory
- Occasional use (depending on authority decision)
- Does not exist

Digital system for building permits application and issuing



- Yes, fully digital and legally mandatory
- Exists, but paper procedure still in use for some cases
- Only at regional / local level
- Does not exist

# Digitalisation trends

## AREAS OF GREATEST PROGRESS

- Energy performance certificates: national register and mandatory e-issuance 69 % of countries
- E-permits: fully digital and legally mandatory 44 %
- National digital property register: 69 %

## INTERMEDIATE LEVEL – PARTIAL IMPLEMENTATION

- Single national portal/Geoportal  
Fully established and integrated – 25 %  
Most often existing, but not integrated (38%)
- Digital spatial & urban plans, legally binding 19%  
Often available online, but paper versions still prevail or wrong formats prevail
- Partial isystems' nteroperability (permits, cadaster, logbook, tax authority) 56%

## WEAKEST LINKS

- Digital public consultations only occasionally 56%
- Digital construction site logbook, mandatory 6 %  
available, not mandatory 44%
- Green infrastructure register, linked 13 %  
partial, only local 63%

# Main obstacles

- Fragmentation: “islands” in the systems, different data formats, datasets not in vector or georeferenced format, weak data exchange between portals and registers
- Low public participation in digital consultations
- Administrative capacity issues: lack of staff and skills, dual systems coexistence
- Decentralized state organisation (federation) hinders standardization

# Recommendations

- Interoperability-by-design – mandatory APIs, INSPIRE/OGC standards (WMS/WFS/GML), and machine-readable attachments for all documents
- Single entry point (One-Stop System): integrate building permit, spatial plans, cadastre/register, heritage and municipal conditions into one portal with eID/eIDAS access
- E-construction logbook: gradually mandatory use linked directly to the building permit
- Digital public consultations by default: national platform with short, clear formats, automated notifications and a public dashboard of metrics
- Administrative Capacity: targeted training and minimal staffing standards, create shared manuals and guidance materials
- National Green Infrastructure Register: develop standardized attributes and public WMS/WFS services, with mandatory use in all planning documents.

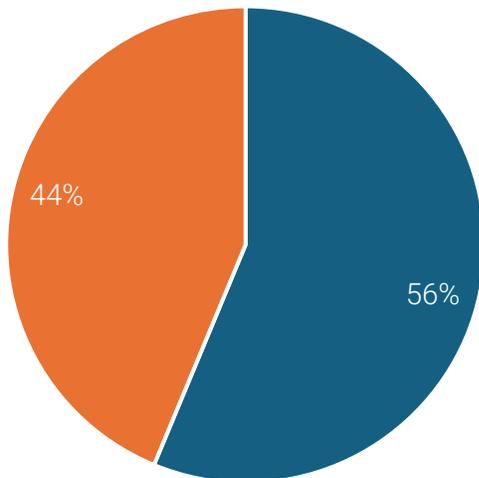
# BIM in Construction

# Survey focused on:



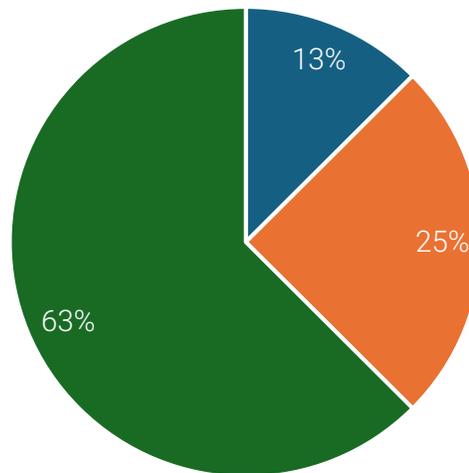
1. Legal frameworks
2. Incentives
3. Education
4. Key drivers
5. Overall success perception

Is BIM part of a legal / regulatory requirement in your country



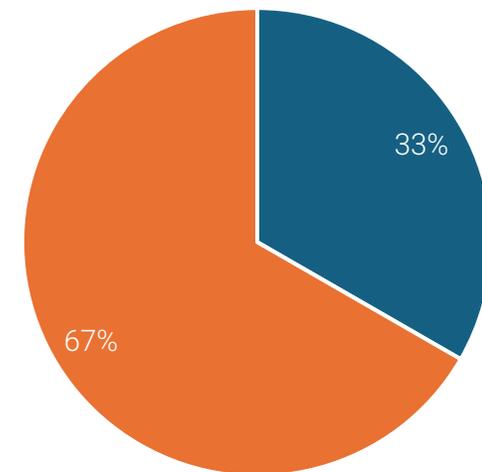
■ No, not yet ■ Partially (only for certain projects)

Are there official national documents or guidelines for BIM implementation?



■ Implementation in progress  
 ■ No  
 ■ Recommendations / guidelines exist

Are there official national documents or guidelines for BIM implementation?



■ Occasionally ■ Yes, regularly organized

# Current status and trends



- 56% of countries have no legal obligation to use BIM, in half of the countries not legally required for any type of project
- 63% have national guidelines or recommendations
- BIM mostly mandatory in specific sectors and public or large projects
- 67% regularly organize BIM education and training (universities and chambers, specialized BIM associations, software companies and consultancies)
- Education emerging as a key pillar for accelerating digital transformation
- Leading promoters are either government/public institutions (30%) or private sector (30%)
- Financial incentives for BIM adoption are rare — over half (56%) of countries have none
- Overall, BIM implementation rated as neutral (“neither successful nor unsuccessful”), an early stage of institutional maturity

# Conclusions



1. Lack of legal obligation and incentives slows BIM implementation
2. Education and upskilling the strongest enablers of progress
3. The private sector plays an increasing role in driving innovation
4. EU programmes and new regulations are major opportunities for BIM expansion
5. European trend moves toward standardisation and interoperability
6. Digital transformation of the construction sector in Europe is progressing, but still lacks coordination, integration, and strategy
7. BIM recognized as the cornerstone of future construction

# Recommendations

- Develop a national BIM framework and implementation plan
- Education as the main accelerator – promote training and certification for engineers
- Connect and integrate digital registries and permitting systems – interoperability and integration
- Public Sector must lead – showcase public projects to demonstrate practical BIM use
- Financial incentives are needed