

EU BIM Task Group Survey Report

Overview

EU BIM Task Group survey was carried out from April till June 2024, with the aim to collect information about the main BIM approaches, achievements, and challenges among European public authorities and public sector organizations. Results of the survey can be used of purpose to exchange information regarding best practice, synergy between the European public sector, establishing common approaches and more.

Participants

44 survey answers were considered analyzing results. 20 different countries have submitted their responses: Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Spain, Sweden, Switzerland, Ukraine, representing 41 different organization.

Considering that during the survey responses were not received from all public clients and policymakers in the EU, the goal of the report is to compile examples and opinions on current practices and issues to be addressed, to foster an understanding of common trends and tendencies. To do it most objective way the survey report includes unedited/cited responses from survey participants, thereby eliminating subjective editing.

EU BIM Task Group survey was splitting answers into two categories – public client and policy makers. Both public client and policy makers were represented in survey 2024. Public clients were represented by 25 organizations from 14 countries, policy makers by 16 organizations from 13 countries.

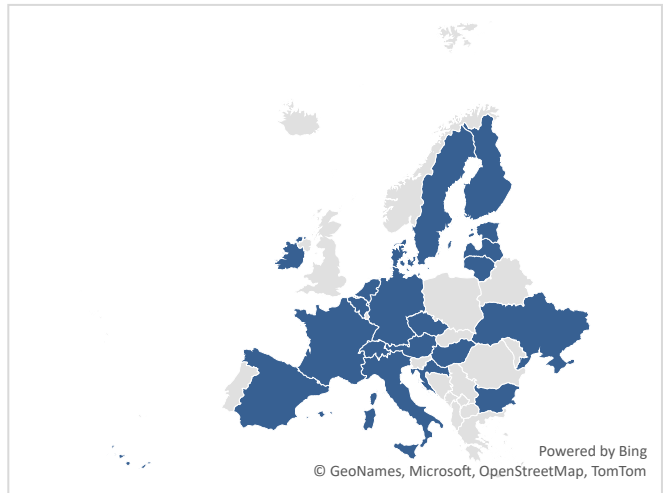


Figure 1 EU BIM Task Group survey represented countries

Public client

In total 33 answers were received from public client representatives. Gathered answers were provided by 25 different organizations from 14 different countries.

What needs to be outlined, that in some cases there was inconsistent information provided from the same organization. In case of mismatched information, provided by organization, strongest or most positive answers were considered, for example, if the answers stated “yes” and “no”, answer “yes” was processed.

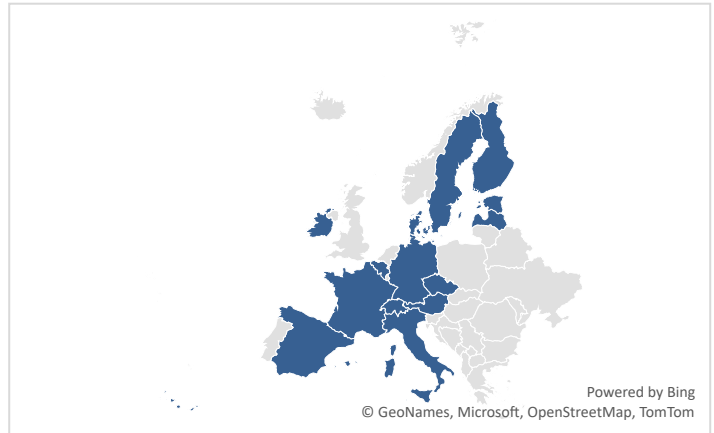


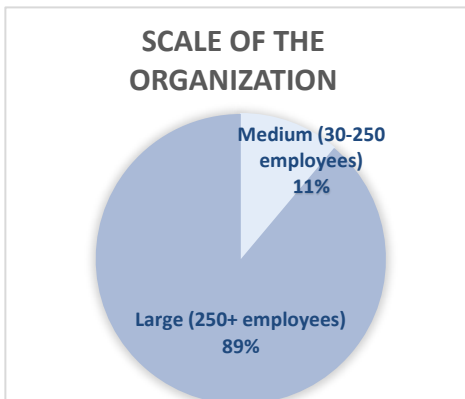
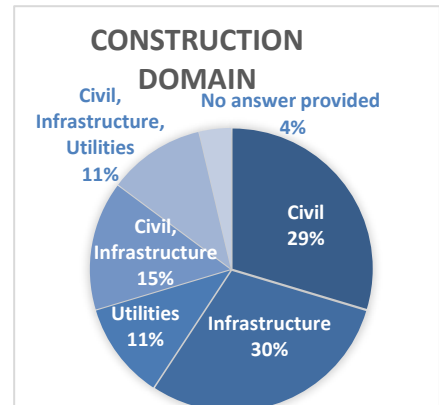
Figure 2 Public client represented countries

Answers were processed taking into consideration 27 answers given – 25 different organization answers and 2 answers with no organization name specified.

Overall, there were 20 questions stated to the public client representatives, with 14 sub questions and extra space, allowing to provide more insights and details regarding question asked.

Question Nr.1 – Represented construction domain

Question was formed as multiple-choice question, providing opportunity to choose between 1 or more domains that are represented by the organization. The results showed that answers mainly were provided by Civil and Infrastructure representatives.

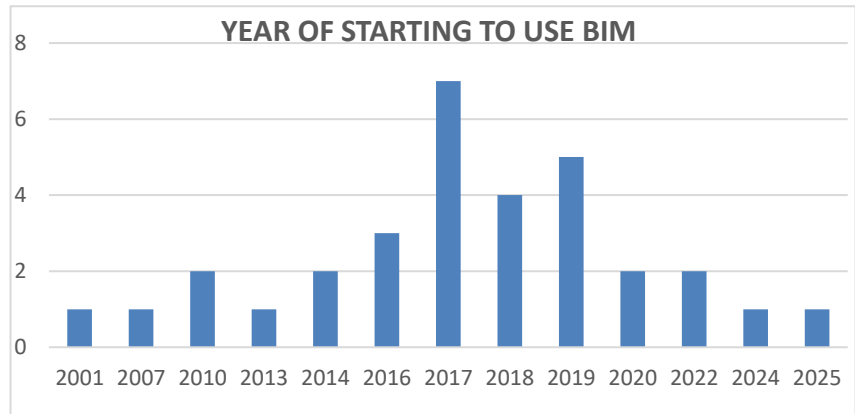


Question Nr.2 - Scale of the organization

The question two provided the insight regarding scale of the participant organizations, revealing that mostly large organizations, with more than 250 employees have taken part in the survey, meanwhile, no participants from small organizations (less than 30 employees) have been participated.

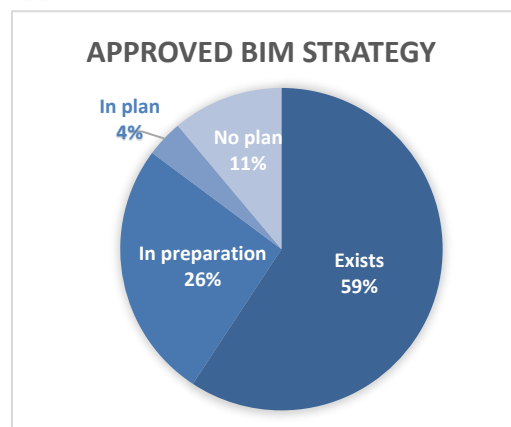
Question Nr. 3 - Year of starting to use BIM (For example, first pilot project)

Question number three reflect the year of BIM use within organization. Results show that some of organizations have been using BIM as early as 2001, but some are on the way of implementation and plan to start using it next year.



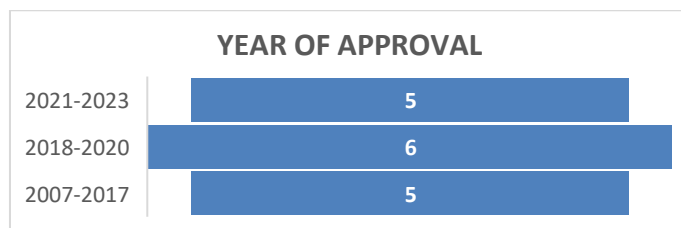
Question Nr. 4 - Does your organization have an approved BIM strategy?

Next question was related to approved BIM strategy. Results shows that almost 60% of represented organizations approved BIM strategy exists and only 11% has no plan for it.



Q 4.1. - Year of approval (If "EXISTS")

Subquestion reveals that some respondents have had approved BIM strategy as early as 2007.








Question Nr. 5 - BIM use cases carried out by your organization divided by construction life cycle phases:

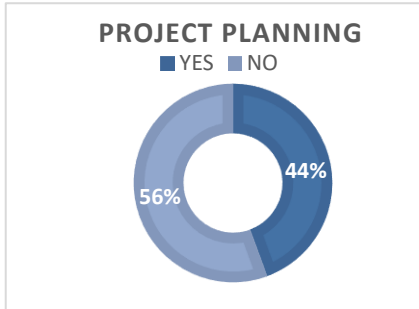
During the survey it was asked to provide information about BIM use cases based on construction life cycle phase – project planning, conceptual design, detailed design, construction and facility management and operations. Each organization had a chance to provide more information regarding most frequent use cases in each phase.

In the table it is possible to view overview regarding BIM use cases carried out during different construction lifecycles as well as additional graphs in the sub questions shows BIM use cases and responses provided by organizations.



	 Project planning	 Conceptual design	 Detailed design	 Construction	 Facility management and operation
YES	12	15	19	21	15
NO	15	12	8	6	12

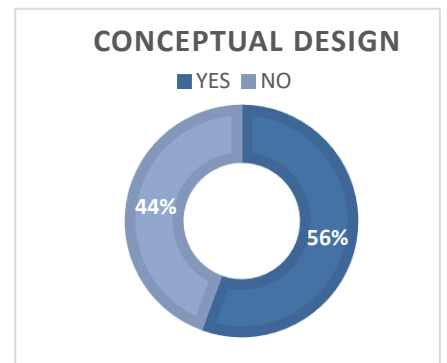
Q 5.1 Project planning



Most frequent use cases in the project planning phase are:

Cost estimation, Quality control, Risk management, Communication tool, visualization tool, time management tool, fixation of existing situation, design coordination, planning tool

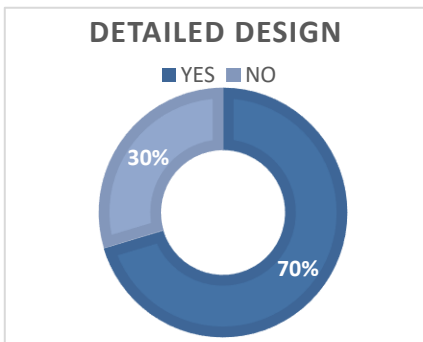
Q 5.2 Conceptual design



Most frequent use cases in the Conceptual design phase are:

Analysis tool, visualization/3D architecture models, drafting support of documents and drawings, quality control, results of interaction with existing situation, representation of geometry and characteristics of the assets, risk evaluation (inc. Interfering operations), 3D laser scanning, support for calculations.

Q 5.3 Detailed design

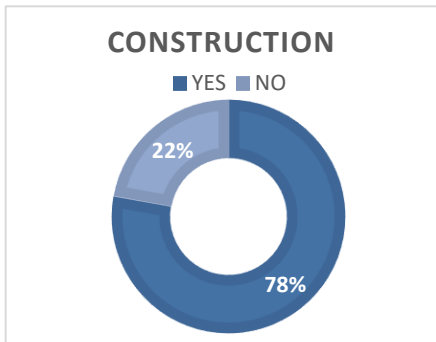


Most frequent use cases in the detailed design phase are:

Refurbishment, authoring, collaboration, quantification, Modelling/ Graphic elaborations, quality control and review, coordination, drawings, 4D simulation, virtual reality, project reports, calculations, visualization, cost estimation, analyses, simulations, Quantity take off, plan production, DSP a DPS, DSPS, assessments



Q 5.4. Construction



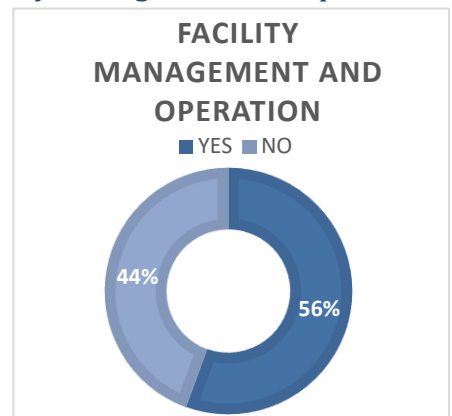
Most frequent use cases in the Construction phase are:

Coordination, quantity survey and cost calculation, as built documentation, construction information, data logging, change requests, claims, technical requests, quantification, construction planning, simulation, design review, quality control and guidance, procurement planning, production planning, scheduling, as-built model, AIM development, AR, CDE for controlling information flows.

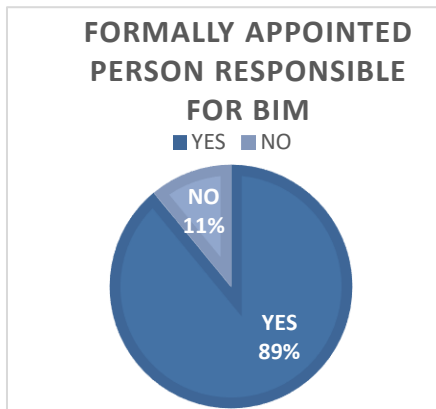
Q 5.5. Facility management and operation

Most frequent use cases in the facility management and operation phase are:

Calculation of areas for material/usage/cleaning purposes, asset management, Occupation, NEIS - National Estates Information System, Link between BIM and Space Management Software; Link between BIM and Computerized Maintenance Management Solution (CMMS); project management and coordination, visualization, Connection between the "As Built" documentation and the FM model; operational costs management, analysis, simulations, facility management, digital twin.



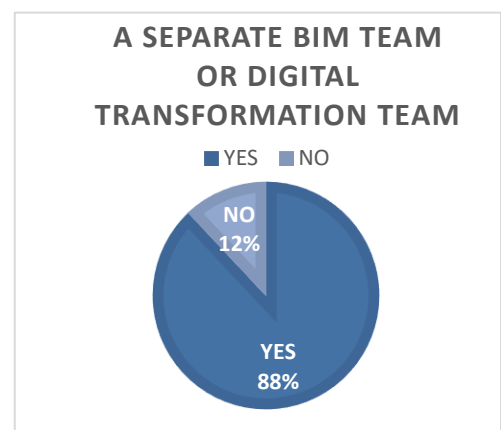
Question Nr. 6 - Do you have formally appointed person responsible for BIM implementation?



Questions number 6 and 7 were related to responsible persons/teams regarding BIM. As the question 6 shows 89% of respondent organizations have person that is responsible for BIM processes.

Question Nr. 7 - Do you have a separate BIM team or Digital transformation team?

1% less organizations have BIM team or digital transformation team.



Question Nr. 8 - Do you carry out in-house quality control based on digital models and linked structured data to them (clash detection, information checks, etc.)?

Responses provided: Ensuring the quality of the BIM model is part of the work of the planner, however, models are controlled and checked by BIM management on the BIG side during the ongoing process. The essential check takes place upon handover. This is about transferring data into the maintenance procedures.

Testing PIM/AIM models in a CAFM tool

Data validation periodically performed via Power BI, connection with IWMS systems

Digital deliveries in the investment projects are checked according to exchange information requirements

Own rule sets based on organization requirements

Clash detection and information checks

Additional quality control by customer's BIM manager: clash checks, coordination, drawing compliance with models.

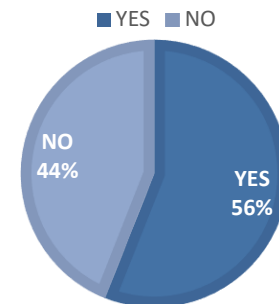
Cross-cutting team for model review and quality control: clash detection, preset checking, quantification checking

Cross-checking between complementary models (e.g. alarm and fire extinguishing systems)

Quality-control of the structure of the data to continuously improve the automation grade of data-handovers in master-systems.

Organization platform that can automatically check models for certain attributes

IN-HOUSE QUALITY CONTROL



Question Nr. 9 - Do you use BIM in procurement process (e.g. for evaluation of offers)?

Responses provided: BIM standards are delivered to planning teams, during procurement process, in order to consider their costs for using the BIM-method.

Evaluation of offers, both technical and administrative specifications

Sample models as a most economically advantageous offer criteria "Skills of BIM team", pre-contract BIM execution plan as a technical offer and qualification questionnaire as qualification requirements.

Organization is going to use BIM in procurement process to evaluate cleaning quantities in the future.

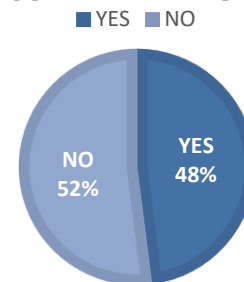
Certain roles and procedures are described in procurement documents

BIM process or BIM coordinator can be the point givers in the tender process

Models are available to the bidding party, and we use exchange information requirements

Delivery team BIM capabilities and capacities evaluation is part of the procurement

BIM USE IN PROCUREMENT PROCESS



Organization has an in-house BIM Vision and Protocol documents and currently working on a BIM Charter. These documents are part of the procurement dossier combined with a maturity matrix. These documents contain several demands for offers, based on which Organization can evaluate the candidates.

Question Nr. 10 - Do you use BIM in the project management process (scheduling, finance planning, communication, etc.)?

Responses provided: On the BIG side there is BIM project management in the construction projects. There is a role model for this job. This is currently outsourced. Here, the services begin in project preparation and continue throughout the entire project until handover.

Communication

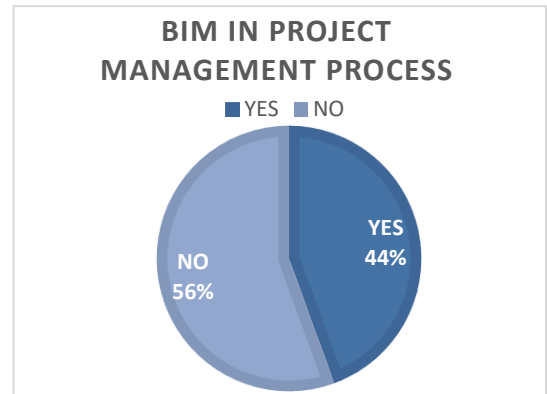
Claims

Scheduling

iModel as a viewer/communication platform for non-technical users. ProjectWise for CDE. Synchro field for RFI's, etc. during construction

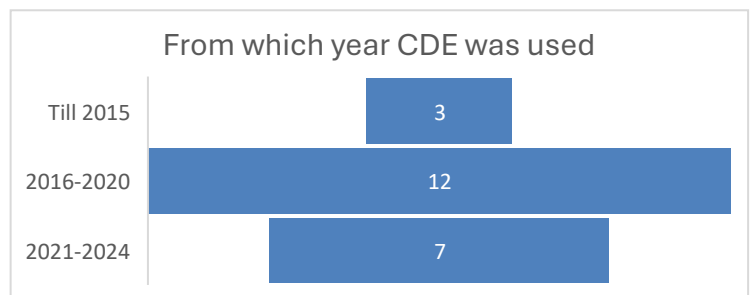
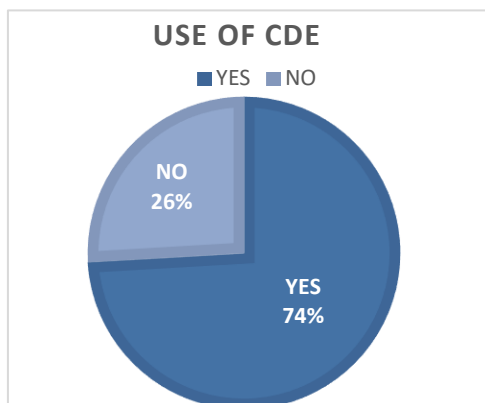
Technical requests and Change requests

We use a project CDE for communication between ordering and contracting parties.



Question Nr. 11 - Do you use CDE in your organization and projects?

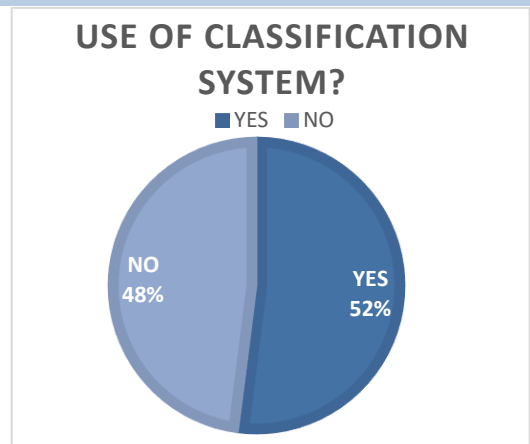
Question shows, that almost ¾ of respondents are using CDE. Some of the respondents have implemented CDE use as early as 2000.



Question Nr. 12 - Do you use classification system?

Responses provided:

- ifc 4.0.2.1, own classification
- BERS
- BBSfb (a derivative of NISfb)
- CCI, formerly Uniclass
- Uniclass
- DDA lagstruktur
- IFC; Talo90; Talo2000, InfraBIM
- Finnish own system - Infra-classification
- Uniclass- in development
- Uniclass2015
- UniClass
- Railway Classification System
- EUIPO's classification System
- Several but harmonization is ongoing
- IFC, CObie



Purpose(s) where you use it (like estimating, controlling, logistics, asset management, facility management etc.)?

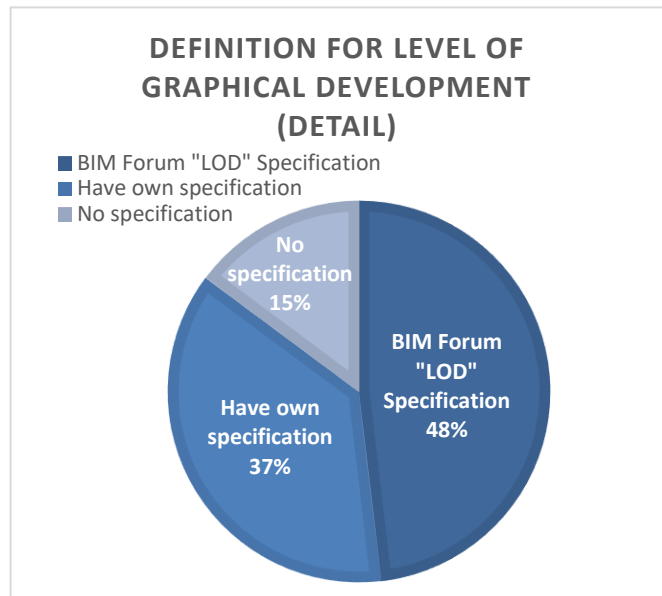
Responses provided:

- own classification in facility management
- IFC
- facility and asset management
- Classification system is new, so for now it's used to design (and check) the models that eventually will be fit for operation phase. We're currently in Design phase and are planning to re-evaluate the classification system with the next big phase switch
- estimating, facility management, model validation
- National CAD layer structure
- quantity take off, general quality definitions, linked to InfraBIM
- Asset management
- FM
- Material volume specifications
- elements identification, especially in infrastructure field
- for any purpose
- Facility Management.
- asset management



Question Nr. 13 - How do you define Level of graphical development (detail) in your projects?

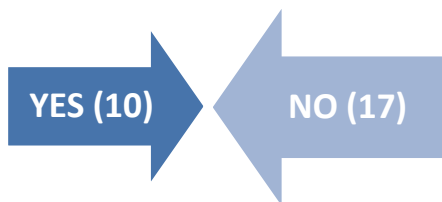
The survey shows, majority of respondents use BIM Forum "LOD Specification" for Level of graphical development definition. However, almost as many have their own specification.



Question Nr. 14 - Publicly available documentation:

Q 14.1 Organizational strategy

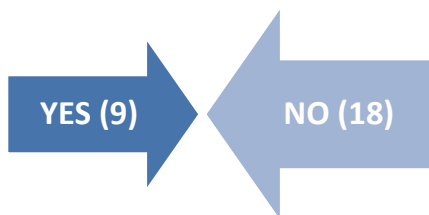
List of links provided with publicly available organizational strategy:



- <https://urn.fi/URN:ISBN:978-952-317-769-7>
- <https://www.vejdirektoratet.dk/tema/saadan-arbejder-vi-med-digitalisering>
- https://admin.www.ngprague.cz/storage/6211/Koncepce_rozvoje_NGP_-2022-2026.pdf

Q 14.2 Organizational Exchange Information Requirements (EIR)?

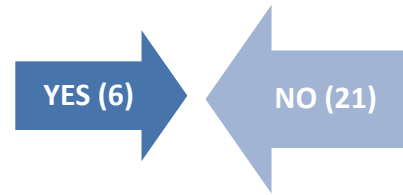
List of links provided with publicly available organizational Exchange Information Requirements (EIR):



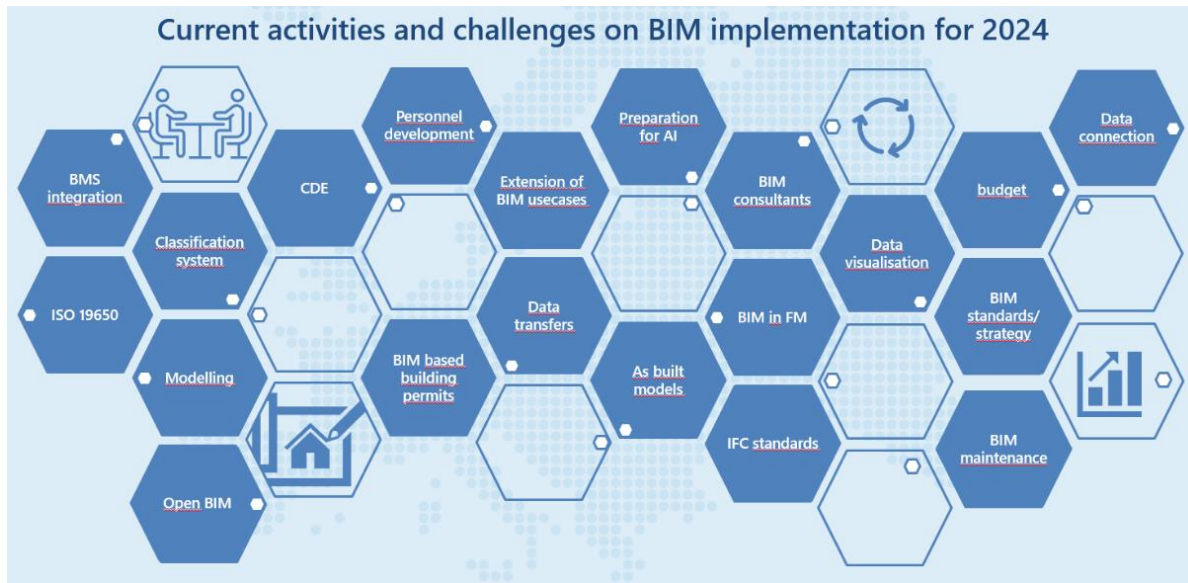
- <https://vejregler.dk/h/7e0fba84-06dd-483b-898a-c7b3e3affaa1/19959c44e37740e584f2066869347061?showExact=true>
- <https://nouded.rkas.ee/bim>
- https://ava.vaylapilvi.fi/ava/Julkaisut/Vaylavirasto/vo_2022-32_inframallivaatimukset.pdf
- https://ava.vaylapilvi.fi/ava/Julkaisut/Vaylavirasto/vo_2022-41_siltojen_inframalliohje.pdf
- https://www.bbr.bund.de/SharedDocs/Downloads/DE/BR/BIM/AIA_Stand_1-2.html
- https://www.railbaltica.org/?smd_process_download=1&download_id=44536
- <https://www.vni.lv/en/competence/sustainable-construction>

Question Nr. 15 - Do you use a data dictionary as the source for project Exchange information requirements (EIR)?

Exchange information requirements with data dictionary as the source for it is not used in most of the cases. Only 22% uses data dictionary as the source for the project EIR.



Question Nr. 16 - Current activities and challenges on BIM implementation for 2024:



Responses provided:

Transfer of the model data to operational management after completion of the project
Adaptation of contracts regarding modeled planning
ESG in connection with BIM models
Qualification of employees

Interoperability across systems and enhanced data visualization

We have done a lot of progress since 2019, but the information is currently fragmented. Main challenge for 2024 is reviewing and combining all the done work on one cohesive BIM Charter document, that would be a "company" wide policy, rather than a project by project documentation.

Public contract for the provision of a property management system

Procurement of BIM Consulting specialists.

Continuing implementation of ISO 19650 in the company's BIM standards

Facility information management strategy

Project CDE implementation (on-premise)

We are in the process of re-defining BIM in our organization. The challenges include moving towards open-BIM (BSI) products and implementing ISO 19650 into our current processes. Denmark does not have a national, free-to-use forum like the United Kingdom, with the UK BIM Framework and Digital Built Britain, or a common interpretation of standards such as ISO 19650 using national annexes. Additionally, there is no public funding for such initiatives.

Connection of existing classifications systems

Connection of graphical objects to the bill of quantities

Implementing BIM in facility management

Changing our BIM requirements from ifc2x3 standard to 4.3, trying to implement CCI-EE classification system, creating Tallinn own CDE (at the moment we are using different ones and mainly provided by contractors), BIM in FM pilots, BIM based building permits for all city developments

Introduction of a common requirements management and reporting platform to BIM projects.

Developing and unifying our BIM maintenance process.

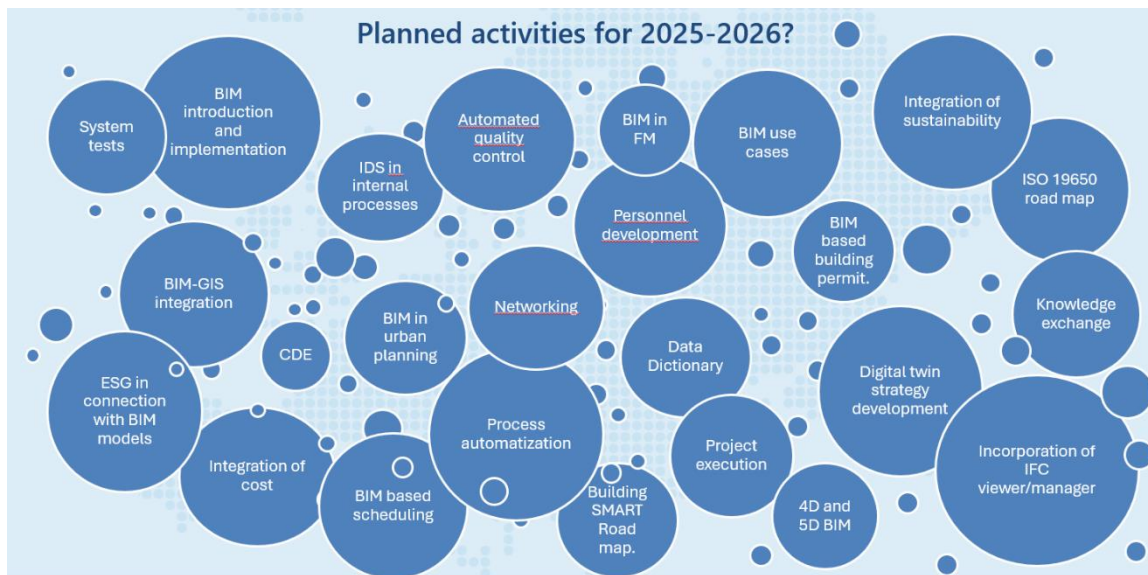
Taking common project information portal to use in all projects and implement BIM tool for that.

Tender and implement and develop information and quality inspection process to our investment projects

BIM based building permit expected in 2026. Lot's of information requirement definition and testing projects going on in the industry related to that.

Carrying out a consulting activity to define a BIM strategy for the next years.

Question Nr. 17 - Planned activities for 2025-2026?



Responses provided:

Further introduction of BIM in the company

ESG in connection with BIM models

Further development of use cases

Qualification of employees

Execution phase of our main project: renovation of the HQ.

Continue testing different systems for operation (ie Planon) and their communication with each other.

Further finetuning of internal documents, need to create a Data Dictionary

Implementation of the asset management system

BIM implementation within organization, BIM implementation to a construction pilot project, to prepare BIM documentation EIR, standards, BEP,

Employees education

knowledge exchange with Lower Austria (partner region)

Building SMART Road map.

ISO 19650 road map.

BIM based scheduling

Integration of sustainability

Integration of cost

Implementing BIM in facility management

BIM-GIS integration, BIM in urban planning, BIM in FM implementation, 4D and 5D BIM implementation

Consolidating the use of our requirements management and reporting platform.

Consolidating our BIM maintenance process.

Implementation of required information exchanges for the BIM based building permit.

No planned activity

Policy maker

In EU BIM Task Group survey 2024, policy makers were represented by 16 different organizations from 13 different countries. For result proceeding were used 17 of the given answers. Just as for public client answers, in case of same organization answer, the answers were merged and most positive or the most complete answer were considered.

In total, 12 questions were dedicated to policy makers, as well 15 sub questions and extra space to provide more detailed information about the questions given.

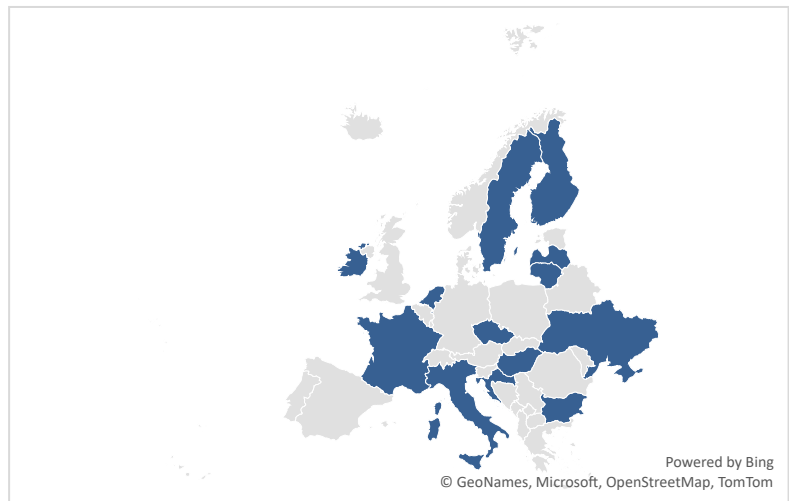
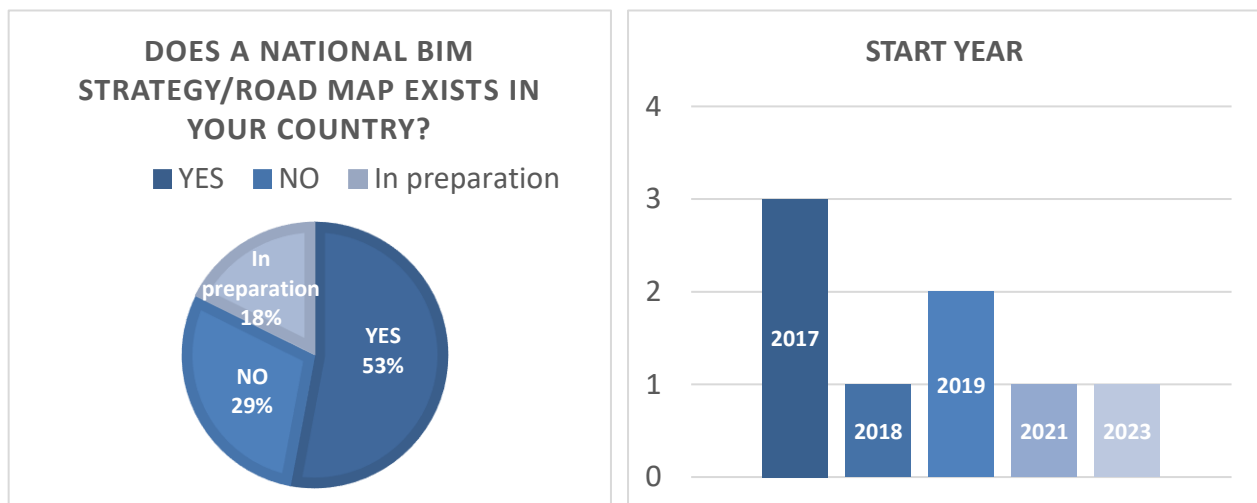


Figure 3 Policy maker represented countries

Question Nr. 1 - Does a national BIM strategy/road map exist in your country?

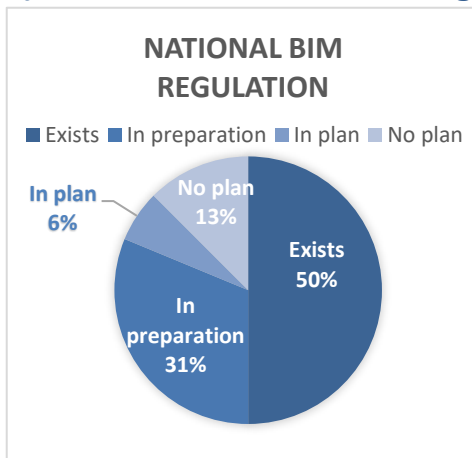
More than half of the respondents already has BIM strategy/ road map or are in preparation stage.



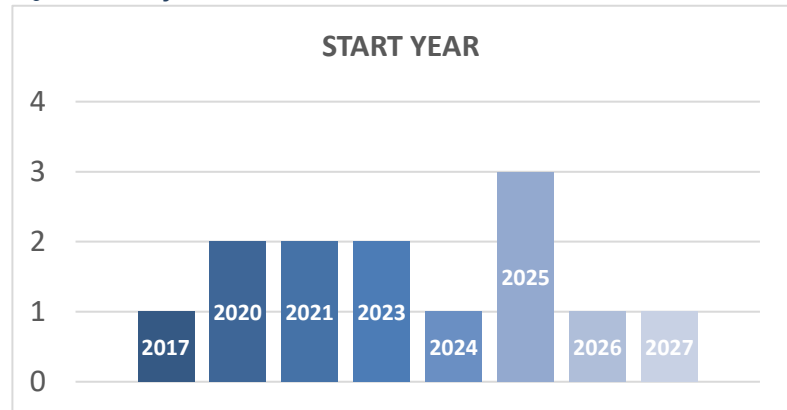
List of links with publicly available/published strategy and/or road map:

- <https://www.mrrb.bg/bg/proekti-nbsp-nbsp-br-po-npvu/investicii-po-npvu/cifrova-transformaciya-na-bulgarskiya-stroitelno-sektor/>
- <https://www.mpo.cz/en/construction-and-raw-materials/bim/concept-of-introducing-the-bim-method-in-the-czech-republic---233659/>
- <https://www.koncepcbim.cz/dokumenty/koncepce-zavadeni-metody-bim/>
- <https://rastiprojekti.com/en/the-rasti-project/>
- <https://www.mit.gov.it/normativa/decreto-ministeriale-numero-560-del-01122017>
- <https://www.em.gov.lv/lv/buvniecibas-informacijas-modelesana-bim>
- www.construction40.it
- <https://zakon.rada.gov.ua/laws/show/152-2021-%D1%80#Text>

Question Nr.2 National BIM regulation (mandatory requirements)



Q2.1 Start year



Q 2.2 Responses provided

By 2027 mandatory application of BIM in public procurement, for projects 50 mil euro and more, by 2030 mandatory application of BIM in public procurement, for projects 20 mil euro. Three phase strategy: 1. phase - Capacity building period. Regulatory framework, national BIM model development, training programs and IT infrastructure by 2026. 2. phase – Procurement activities. Stakeholder enabling/preparation. Phase start end of 2026 or beginning of 2027. 3.phase – BIM implementation. The scope of this stage will be public works contracts worth more than EUR 20 million. Expected to start at the beginning of 2030.

Ministry of Transport, SFDI, has methodologies for implementing building information modeling (BIM) for transport infrastructure - road and rail network. Methodologies are used for the realization of road and railway constructions (still only pilot projects).

New "Act on the built assets information management, information models of built assets and the built environment and on the amendment of certain laws".

The Building Act passed in 2023. Amendments have been proposed before the act comes into force in 1.1.2025.

The climate reporting and the delivery of the BIM models for building permits is required in 1.1.2026.

Construction Law was adopted in 2023 and the regulations in development.

The "Codice dei contratti pubblici" is a normative text that regulates public administration contracts to carry out public works. This normative text contains mandatory requirements related to BIM for public works at various stages of the construction process. The mandate concerning public clients and public tendering & awarding bodies has been issued in 2017, however, the obligations have been widened and will be enforced starting on 2025.

BIM regulations are mandatory for large new public buildings, Cabinet regulation No.529 74.1

The Government of the Republic of Lithuania on 8th December 2021 approved mandatory application of Building Information Modelling (BIM) methods. BIM mandate (or Resolution) defines the cases (the value of the project, type of construction, type of structure) where public contracting authorities must specify the requirements and (or) criteria for the application of mandatory BIM methods in the procurement documents.

IFC must be applied as a file format for the communication and mutual coordination of building information models for public buildings

Draft Law of Ukraine "On Amendments to certain legislative acts of Ukraine on the introduction of Building Information Modeling (BIM Technology) at all stages of the life cycle of facilities and scientific

and technical support of facilities, improvement of the procedure for inspection of facilities commissioned in accordance with the legislative procedure”.

List of links with publicly available National BIM regulations:

- <https://finlex.fi/fi/laki/alkup/2023/20230751>
- <https://www.mrrb.bg/bg/proekti-nbsp-nbsp-br-po-npvu/investicii-po-npvu/cifrova-transformaciya-na-bulgarskiya-stroitelno-sektor/>
- <https://www.gov.ie/en/publication/81d55-bim-and-the-cwmf/>
- <https://www.gazzettaufficiale.it/dettaglio/codici/contrattiPubblici>
- https://www.bosettiegatti.eu/info/norme/statali/2023_0036.htm
- <https://likumi.lv/ta/id/269164-eku-buvnoteikumi>
- <https://www.e-tar.lt/portal/lt/legalAct/cfcd1b05cb111eca9ac839120d251c4/asr>
- https://www.forumstandaardisatie.nl/open-standaarden/ifc#_Introductie
- <https://zakon.rada.gov.ua/laws/show/2364-IX#Text>

Question Nr.3 - Exchange information requirements (EIR) template?

Responses provided: Will be prepared as the result of public procurement.

Recommended for public procurement (according to the answers Ministry of Industry and Trade)

There are no national EIR templates, our organization has its own template.

Recommended for public procurement

The regulations are in development.

This is a voluntary standard, not mandatory.

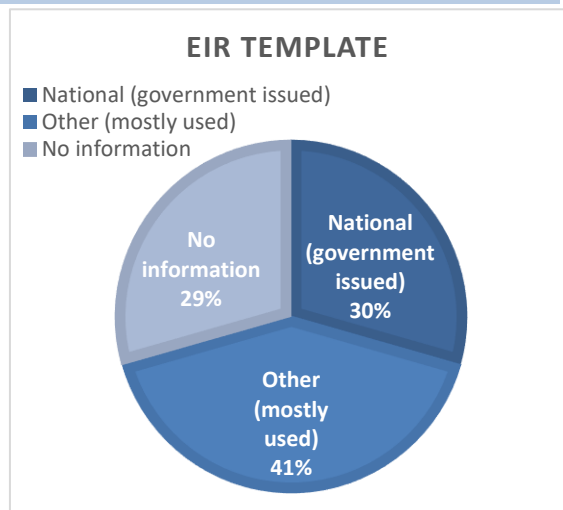
UNI 11337-6:2017 Standard

SJCS "State real estate" created a template for themselves, but this template currently is being adopted as a national standard

Based on Senaatti (government's property assets) lead project YTV 2012 (Common BIM Requirements). Requirements for different disciplines. Building Smart Finland hosts and has an initiative for updating EIR and requirements. Additionally, there are YIV requirements for Infra and YVK for cities.

The standard was issued by the Italian standardization body (UNI) and defines a standard structure of information specifications distinguishing a technical section and a management section.

Ministry of Environment of the Republic of Lithuania on 24th February 2022 approved Employer Information Requirements (also known as EIR). This document implements the Amendment to the Resolution on the implementation of the Law on Public Procurement of the Republic of Lithuania and Law on Procurement in the Field of Water Management, Energy, Transport or Postal Services of the Republic of Lithuania. The client (employer) defines his requirements for the project information in Employer Information Requirements (EIR) document. The supplier (designer or contractor) fills in the form of BIM project implementation plan.



EIR configurator was developed by DigiGO, a public private partnership which coordinates digitalization in the building sector

List of links with publicly available Exchange information requirements (EIR) template:

- <https://drive.buildingsmart.fi/s/HmYs63fDx6meTry>
- <https://www.builddigitalproject.ie/templates>
- <https://www.vni.lv/kompetence/ilgtspejiga-buvnieciba#BIM-kompetences-centrs>
- <https://www.e-tar.lt/portal/lt/legalAct/df1cf1c0956e11ecaf3aba0cb308998c>
- <https://www.digigo.nu/ilsen-en-richtlijnen/ils-configurator>

Question Nr.4 - Building permits using BIM?

Responses provided: Will be prepared as the result of public procurement.

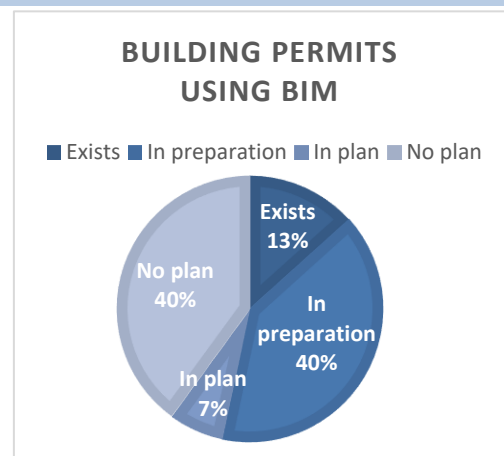
Extension of the currently finalized national Digital building permit system (according to the answers Ministry of Industry and Trade); It relates with "Digital Czech" activities, it is still "under construction"

Though not mandatory, the biggest municipalities have received BIM models in building permit processes for at least a decade. BIM models have also been utilized in the city models.

There are components which are important for BIM-based building permitting which will be implemented in near future (e.g. National Construction Information Classification System, BIM validator). Currently, there is no existing building permitting processes based on BIM models.

Some pilot projects have been done in Rotterdam, other municipalities are also working on this. Geo-BIM integration and digital twins of the city are projects which must precede large scale adoption.

A few municipalities accept BIM formats according to a recent survey, but no national regulation or guidelines.



Q4.2 Technical solution (national digital platform)?

Responses provided: Will be prepared as the result of public procurement.

National eGovernment Architecture (according to the answers Ministry of Industry and Trade)



The municipalities receive the building permits. Over 90% use Cloud permit or Trimble E-permit. RYHTI is a national build environment's information system, which will receive building permit information (and land use information) from municipalities for official use, BIM mandatory for applications in 2026 and transfer to RYHTI at latest in 2029.



There is a national platform for permit requests, this does not (yet) support IFC

List of shared links regards building permits using BIM:

- <https://ryhti.syke.fi/en/>
- www.planuojustatau.lt.
- <https://www.omgevingsloket.nl/>

Question Nr. 5 - Classification system?

Responses provided: BSAB CoClas

CCI (RDS)

Uniclass previewed

Uniclass 2015

IFC

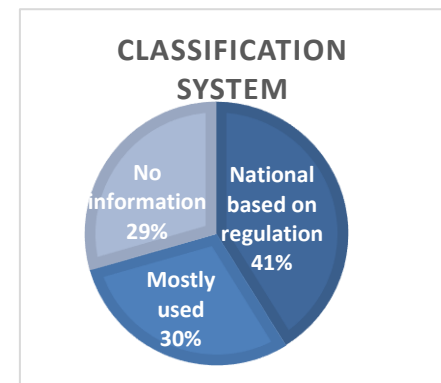
UNI 8290 Standard

Nation building code LBN 501-17 "Procedure for determining construction costs"

National Construction Information Classification System (also known as NSIK).

Will be prepared as the result of public procurement

<https://www.rakennustieto.fi/nimikkeistot/talo-2000-nimikkeistot>



Q 5.2 Purposes where it is mandatory:

In relation with the new BIM mandate (according to the answers Ministry of Industry and Trade)

Not yet, in preparation. Mandatory in public procurements

In relation with the new BIM mandate

<https://www.gov.ie/en/publication/81d55-bim-and-the-cwmf/#core-bim-requirements>

Mandatory for creating cost estimates for public buildings. Not mandatory for BIM

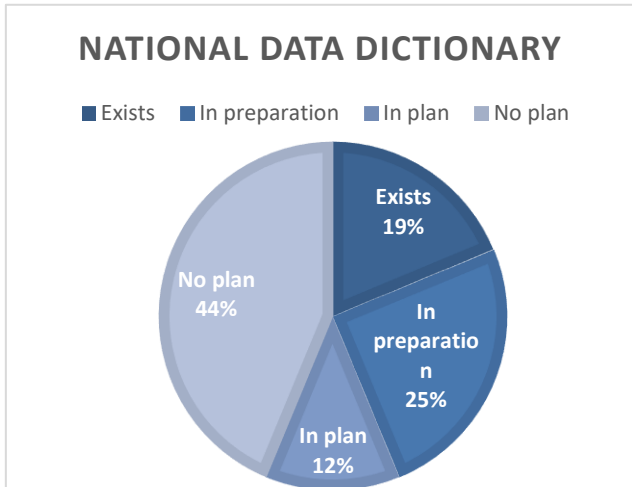
<https://likumi.lv/ta/id/291029-noteikumi-par-latvijas-buvnormativu-lbn-501-17-buvizmaksu-noteiksanas-kartiba>

National Construction Information Classification System (also known as NSIK) has been created in BIM-LT project and it is based on CCI. It is still not approved but the idea of the first stage of NSIK - to use it in design and construction stages for objects identification and classification under certain defined cases.

Question Nr.6 - National data dictionary?

Q 6.1 Responsible organization:

- Czechia: Czech Standardization Agency
- Finland: The interoperability platform maintained by the Digital and Population Data Services Agency
- Hungary: ÉKM (Ministry of Construction and Transport)
- Ireland: NSAI
- Lithuania: Ministry of Environment of the Republic of Lithuania and public body Construction Sector Development Agency
- Netherlands: Ketenstandaard



Q 6.1 Brief description

The platform consists of the terminologies, code sets and data models needed for data flows and in other areas of information management. The interoperability platform is intended for both public administration and the private sector. The platform tools are available free of charge for terminology work, the management of code sets and data modelling.

Will be explained in the regulations.

The idea is to have National Construction Information Classification System (NSIK) and Employer Information Requirements (EIR) and other digitalization components and documents not only in document/paper form but also in the manner that the data could be collected and managed accordingly to approved structure, to be read not only by human but also machine-readable.

NL-sfb and other standards exist and are broadly used but they are not regulated

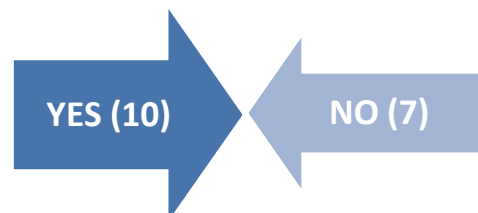
List of shared links regards National data dictionary:

- <https://www.koncepcbim.cz/>
- <https://sanastot.suomi.fi/en/site-information>
- <https://www.nsai.ie/>
- <https://ketenstandaard.nl/nl-sfb-facts/>

Question Nr.7 - National public authorities responsible for BIM?

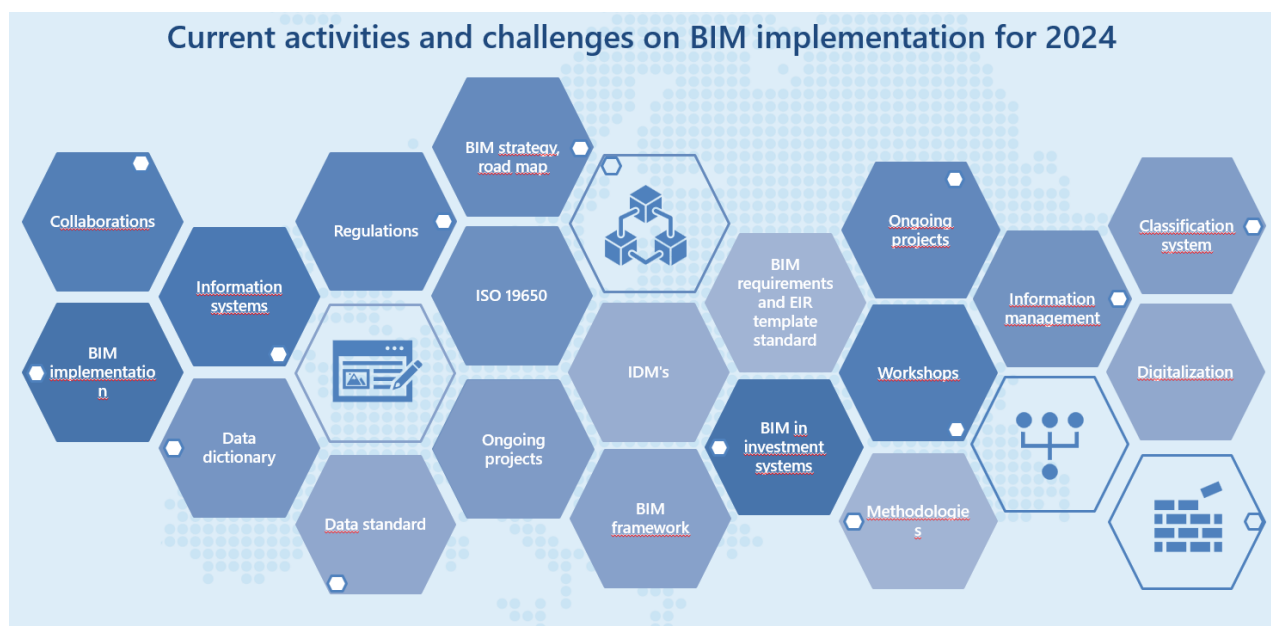
Q 7.1 Name of organization/organizations responsible for BIM:

- Bulgaria: Ministry of Regional Development and Public Works
- Croatia: The Ministry of Physical Planning, Construction and State Assets
- Czechia: Ministry of Industry and Trade, Czech Standardization Agency
- Czechia: Ministry of Transport, SFDI - road a railway
- Hungary - Ministry of Construction, KTI Nonprofit Llc.
- Italy: Ministry of Infrastructure and Transportation



- Latvia: Ministry of Economics, Latvian standard
- Lithuania: Ministry of Environment of the Republic of Lithuania is responsible for formation of state policy in construction and the supervision of construction, organization, coordination and controlling of its implementation in Lithuania, also formation of policy in construction sector progress (digitalization of built environment, BIM, other digitalization measures). The activity field is coordinated by Spatial Data Policy Group. The website of Ministry of Environment of the Republic of Lithuania: <https://am.lrv.lt>. Public Body Construction Sector Development Agency (SSVA) implements the digitalization policy, the creation, maintenance, development of Lithuanian construction sector digitalization measures, attestation of construction participants. The website of SSVA: <https://www.ssva.lt>.

Question Nr.8 - Current activities and challenges on BIM implementation for 2024?



Responses provided:

Currently the Ministry of Regional Development and Public Works is working on completing a project titled "Support for a pilot phase of the introduction of building information modeling (BIM) in the investment design and construction as a basis for digital reform of the construction sector in Bulgaria". The project is an Investment within the Bulgarian National Recovery and Resilience Plan (NRRP).

Implementation of Investment C10.I6 "Support of a pilot phase for the introduction of building information modeling in investment design and construction as a basis for digital reform of the construction sector in Bulgaria" and of investment C10.I7 for the creation of a "Unified information system for territorial planning, investment design and construction authorization", financed under the National Plan for Recovery and Sustainability

Translation of BIM materials in progress and organization of EUBTG workshop.

Finalization of the BIM mandate, update of the national BIM strategy, finalization of the national data dictionary

The amendments to the Building Act and the related regulation. The municipalities' preparation for receiving BIM models and changes to their information systems in permitting and land use. EPBD implementation. Communication in various fora.

Permits for 3000m² warehouse

Regulation for public constructions - the BIM framework, details are under construction.

Construction Law was adopted in 2023 and the regulations in development.

Build Digital working on preparing support for the mandate. Focusing in process standards ISO 19650

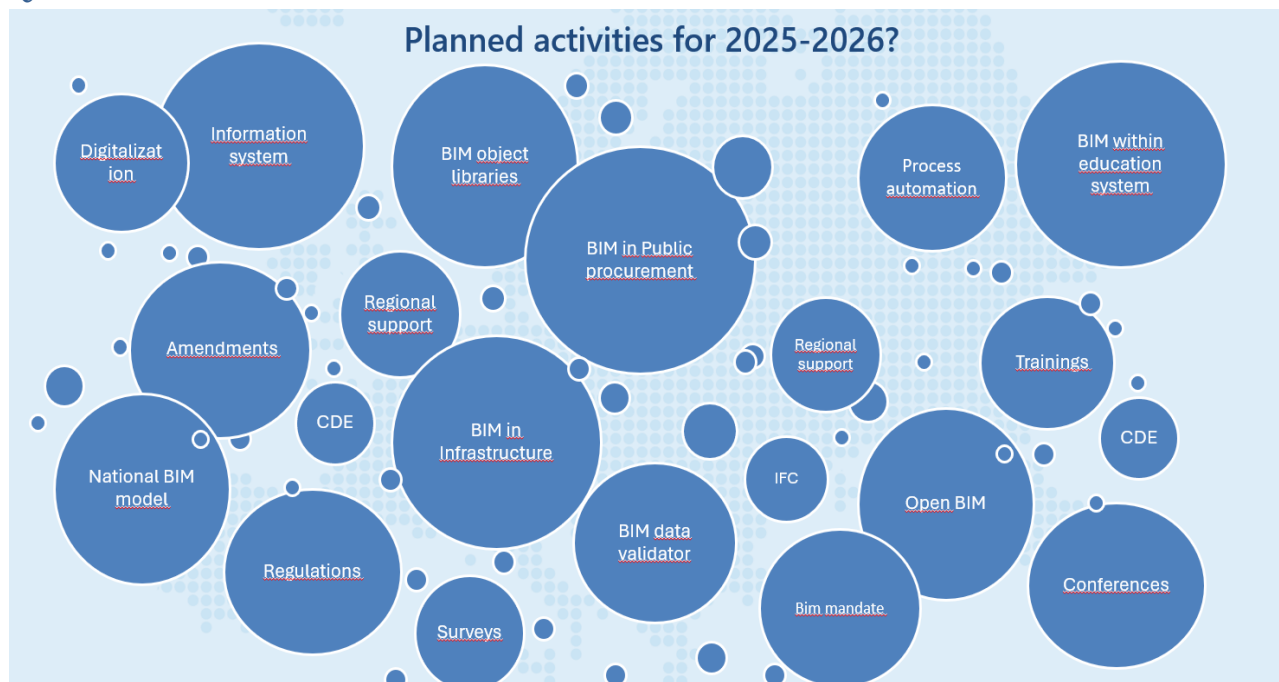
Linking e-Procurement to Information Management.

BIM requirements and EIR template standard

Our policy focus is not on the use of BIM but rather on digital collaboration and data sharing. Our construction data space (DSGO) will be launched on June 18th, and parallel to that the sector is working on a number of DigiDeals to

Recent report Boverket 2024:5 (publication) suggests a roadmap consisting of national classification and IDMs based on 19650 for all public processes and involve public procurement.

Question Nr.9 - Planned activities for 2025-2026?



Responses provided:

Digital building logbook

Build Digital working on preparing support for the mandate. Focusing in exchange standards IFC, IDM, etc.

CDE implementation and IFC requirements

The state transport infrastructure organization (Directorate of Roads and Highways of the Czech Republic, Railway Administration) will complete the selection and introduction of a common data environment, the use of BIM in large infrastructure projects

Adoption of the BIM mandate, support of mandated requirements for public procurement

Step-by-step introduction in different areas: building, road BIM framework in 2024, railway, in 2025, waterworks, infrastructure in 2026.

The municipal preparation for the new tasks. The building sector's preparation for the new delivery requirements. EPBD implementation. Communication in various fora.

On January 1, 2025, according to the "Codice dei contratti pubblici", mandatory BIM will be triggered for all Public Works above €1 million.

To make library of NSIK objects. To make BIM data validator which will be the basis for building permitting based on BIM model.

Establishment of a unified register for spatial planning, investment design and construction permitting
Establishment of a Unified Information System for spatial planning, investment design and construction permitting

Development of draft amendments to related laws and regulations, including new regulations created for the functioning of the systems

Creation of a Portal on Spatial Planning

Development of a national BIM model, templates and procedures for information collection, management and sharing, security and access control based on BDS EN ISO 19650 and CEN standards

Development of libraries of BIM objects to reflect construction products and materials in infrastructure construction

Establishment of software infrastructure for working with BIM projects in the process of approval and coordination of investment projects

Introduction of requirements for the application of BIM in public procurement

Hardware and software support for experts from municipal, regional and state administration involved in the process of coordination and approval of investment projects

Development of a web-based platform with published online training, an interactive guide (manual) on the national BIM model, design and approval processes for BIM projects, downloadable resources such as libraries, templates and forms, and digital maturity checker applications for enterprises in the construction sector

Pilot development of a module for automated checking for conflicts between all engineering networks, structural and architectural elements within the BIM model and for automated reconciliation

Conducting specialized trainings in line with the common framework standards for the introduction of BIM and European best practices in the administration

Preparation of an online training format for further training of staff from all interested administrations through the Institute of Public Administration

Specialized training of 70 teachers in vocational schools preparing personnel for the construction sector to work with BIM

Updating the state educational standards for the construction professions, curricula and syllabuses to ensure skills in working with BIM software

Provision of the necessary hardware and software for the training in at least 4 vocational schools in the field of construction

Preparation of teachers from all necessary specialties in the technical universities

Development and introduction of curricula for the application of BIM and their inclusion in the curricula for the training of all architectural and engineering staff in technical universities

Providing internships and placements for students in construction business organizations

Development of 2 web-based manuals - for work with BIM, for designers and for the administration approving investment projects

Conduct a survey of stakeholder's communication needs and attitudes and run a media campaign on the implementation of BIM

Conducting 12 press conferences regarding the project for the implementation of BIM on a national level in 6 regions in Bulgaria

Currently no plans related to the BIM implementation for 2025-2026

Investment C10.I6 supports reform C10.R5 "Digital reform of the Bulgarian construction sector" and should be considered as a stage of the proposed reform. It is planned that the IT infrastructure developed as a result of investment C10.I6 will be integrated into the IT infrastructure of investment C10.I7 "The

unified information system for territorial planning, investment design and construction authorization" (investment C10.I7) as such to become part of a single central, public web-based information system, normatively defined in the Territorial Planning Law.

As a result of the implementation of investment C10.I6, an IT infrastructure will be provided to enable the application of the most up-to-date engineering practices for design, presentation and approval of investment projects in a SIM environment, incl. Issuing in electronic form the documents for construction authorization and commissioning of the constructions designed in the SIM environment. Also, with the implementation of investment C10.I6, the capacity of the participants in the design and construction to work in a SIM environment will be increased, as well as it will contribute to the creation of the normative conditions for the introduction of SIM in the design, approval, implementation, control and operation of constructions, and modernization of the construction sector in accordance with European priorities and current European standards, without prioritizing specific software solutions and in compliance with the principles of open source (OPEN BIM).

The IT infrastructure, created as a result of the implementation of investment C10.I6, is directly dependent on the IT infrastructure as a result of investment C10.I7 from NPVU. In themselves, both investments are large-scale and interrelated, through which, for the first time in the Republic of Bulgaria, regulatory conditions will be created, and IT infrastructure will be provided for the processing of development plans in electronic form, as well as electronic submission of investment projects for approval by a competent authority. The IT module for the presentation of investment projects in a SIM environment is an innovative module that builds on the one under investment C10.I7 and therefore should be able to be successfully integrated into the IT infrastructure under investment C10.I7. This implies synchronizing the two infrastructures already during their development.

As a result of the implementation of investment C10.I7, with the creation of the system, it is envisaged that the applicant will submit a one-time request for the administration of the regime (provision of the relevant package of services), the affected administrations will provide conciliatory opinions, as an internal administrative service, and subsequently the competent authority will issue and delivered a final act electronically. In this way, an opportunity will be created for electronic submission of documents, applications and projects, authorization of development and approval of development plans, approval of investment projects, issuance of permits for construction and commissioning.

The unified system for planning the territory, investment design and construction authorization will manage the processes of conducting the procedures for application, official referral, coordination, approval and delivery of the final administrative act, and will provide an opportunity to submit and approve projects of development plans and investment projects electronically.
