

# **General Assembly**

# 2<sup>nd</sup> of October 2019 Brussels

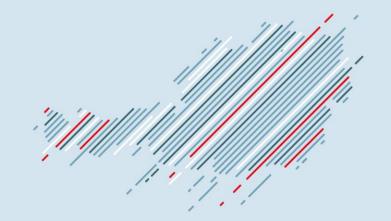


# Part 1 – Presentation of national experiences

**General Assembly – 2 October 2019 - Brussels** 



Die digitale Strategie der österreichischen Bundesregierung (Website dient zu Archivzwecken: Vorgelegt im Jahr 2016)



Sprache ♀ Menü Ξ

DIGITAL ROADMAP AUSTRIA

# Meilensteine der Digitalisierung



Gemeinsame Leitprinzipien

Wegweiser in die digitale Zukunft

Die 12 Leitprinzipien

## Infrastructure



#### 

Education

Infrastructure

Research and innovation

**Business** 

Work and jobs

Health, care and social affairs

Environment, energy, agriculture and climate protection

Mobility and transport

Media, civil courage and culture

Integration and inclusion

Security, protection and trust

Politics and administration

Broadband Internet access forms one of the revolution. Non-discriminatory, safe and eff be ensured as a service in the public intere: participate in economic life and in society. sustainable digital infrastructure, it is not ju that is restricted or made considerably mor development of technologies. To this end, framework in terms of law, non-discriminati

The implementation of the Broadband Stra nationwide ultrafast Internet access by 2020 providing broadband in areas where rollout economically viable. Only investment that c later rollout stage is supported. The fundin

standardization as well as considering tech

used jointly to bridge the digital divide bet Due to the increasing digital integration of mobile use of the Internet is rising significa telecommunications standard 5G, which is to be the key technology of the future in th latency and a high density of connected en of new business models to be developed in Industry 4.0, digital agricultural engineering eLearning, eGovernment, eHealth and logi

competitive on the international stage if the

is available. The aim is therefore to make A

Europe.

### **Business**

The digital revolution will have a direct o Politics and administration business. Digital technologies make new services possible. Industry has long beer to link existing manufacturing and busine with information and communication tec Industry 4.0. Increasing the degree of cu: production offers new business opportu The key factor here is to ensure fair com be competitive in the digital age, we nee

benefits from the advantages of digitizat Digitization also provides the basis for modern, user-friendly and efficient administrative services. Citizens and also businesses have the right to communicate and interact electronically with authorities in a convenient. simple and accessible way. eGovernment solutions and the provision of

To achieve this in Austria, we need a live government data infrastructures should systematically take account of the among SMEs of digital development opj trend towards mobility and the need for unrestricted availability of for innovations and funding. Networking administrative services and information. eGovernment should help to increase companies in different industries and of efficiency in authorities, make things significantly easier for citizens and factors, with the Austrian economy being businesses, and act as an innovation driver for the economy as a whole expertise. While the productivity of the v through its use of new technologies. Austria has already played a pioneering digitization, people with new qualificatio role in eGovernment in the past and we intend to further strengthen this role responsible for ensuring that these quali in future. To do so, well-trained staff in public administration are a prerequisite.

Measures

With over 800,000 users, the electronic signature and Citizen Card or mobile phone signature are already well established in Austria. Consistently digitized processes require secure electronic proof of identity. Citizens should therefore • Implement the measures adopted a be able to use the existing eID not just throughout the EU; it should also become an electronic identity document when it is assigned certain attributes. A future administrative registration process will provide even greater security.





#### Measures

 Introduce a comprehensive right to electronic communication between citizens and the administration

- Extend the range of eGovernment services available in order to personalize and regionalize these services, e.g. at help.gv.at, further improvements to the Business Service Portal (usp.gv.at), networking and automatic information exchange between the eGovernment services offered by the Federal Government, Länder and municipalities
- Expand one-stop processes (everything in one place) and no-stop processes (application-free - no need to apply):
- Application-free employee tax assessment: first tax credit in autumn 2017
- Application-free extension of family allowance: proof of activity (e.g. for students) is automatically gueried and entitlement is extended





- 1. Does your country have one or more national strategies of implementing BIM?
  - **Czech republic has a government strategy for implementing BIM**. Strategy was approved in 25.9.2017.
  - The strategy includes the introduction of BIM for both building and infrastructure construction and for asset management.
  - Closely connected is also change of Czech construction law an digitalization of building permits and digital technical map.
- 2. Which organizations are in charge of these strategies? **Ministry of Industry and trade**, **State Fund for Travel Infrastructure**,
  - Czech agency for standardization,
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement Government <u>https://www.koncepcebim.cz</u>; <u>https://www.sfdi.cz/bim-informacni-modelovani-staveb/</u> Non-profil organization - czBIM
  - http://www.czbim.org/



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- 4. Key national contact person for the EU BIM TG
  - Jaroslav Nechyba, Czech agency for standardization, director of department Koncepce BIM
  - Marcela Mrázková, Ministry of Industry and Trade
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones? BIM will be mandatory from 1.1.2022 for state and municipal property acquired by construction. The aim is to use BIM data for asset management. BIM passportization of property should finish by year 2040. Digitalization of public approvals - 2020 New construction law - 2023-25 Návrh

BIM will be mandatory from **1.1.2022 for state and municipal public procurers** contracting public contracts over EUR 5 million.







- 1. Does your country have one or more national strategies of implementing BIM?
- Croatia began by introducing the BIM to Croatian Ministries and by creating a HR BIM TASK GROUP.
- Development in proggress
- and one of the key elements is the translation of the Handbook for the introduction of Building Information Modelling by the European Public Sector.
- Web page on our official site of our Ministry of Construction and Phyisical Planning is created.

To help introduce Construction Sector to digitalisation we've developed **Information System for physical planning and construction**, which includes e-permit, e-plans, e-inspection, e-energyCertificate and few other modules that are interconnected. One more step in the right direction for us is participation in **DigiPLACE project**.

# 2. Which organizations are in charge of these strategies?

Currently *HR BIM TASK GROUP* has representatives from **5 Chambers**, **15 Ministries** including ours and **two administration bodies of the State**.

3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement Official site of our Ministries link with BIM as a topic\_

https://mgipu.gov.hr/o-ministarstvu-15/djelokrug/graditeljstvo-98/bim-digitalna-revolucija-gradjevinskog-sektora/9203



4. Key national contact person for the EU BIM TG

Members of EU BIM TG from Croatia are:

## Lead representative

 Ms Maja-Marija Nahod, Ph.D., M.Sc. CE, Assistant Minister for Construction and Energy Efficiency in the Building Sector

### **Deputy representatives**

- Ms Jelena Svibovec, M.Arch., Head of Service for Building and Technical Regulations
- Ms Nives Coce, MCiE
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?

There are still no mandatory requirements for BIM in our country.





- 1. Does your country have one or more national strategies of implementing BIM?
  - Yes, we call this initiative the e-construction platform.
- 2. Which organizations are in charge of these strategies?
  - Ministry of Economic Affairs & Communications
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement
  - Information about the e-construction platform and related activities can be found at <u>www.eehitus.ee</u>
- 4. Key national contact person for the EU BIM TG
  - Jaan Saar, Head of Digital Construction
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?
  - At the moment we have not issued any mandatory requirements.



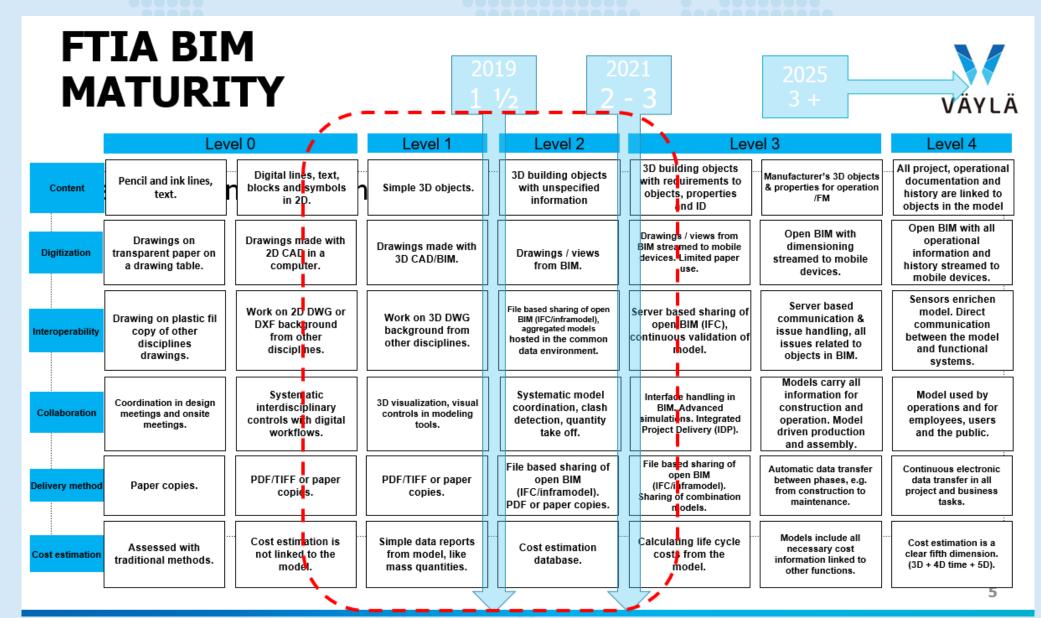
- 1. Does your country have one or more national strategies of implementing BIM?
  - Not official programs

FINLAND

- Big Clients Senaatti (state properties), FTIA (state railroads, roads and seaways) and biggest Cities lead the requirements
- 2. Which organizations are in charge of these strategies?
  - Big Clients Senaatti, FTIA and biggest Cities lead the requirements
  - The whole industry is discussing in same tables
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement
  - Finnish Transport Infrastructure Agency FTIA (Väylä) maturity measurement: <u>https://lutpub.lut.fi/bitstream/handle/10024/159743/ProGradu Kotiranta Heidi.pdf?sequence=1&isAllowed=y</u>
- 4. Key national contact person for the EU BIM TG
  - Tarmo Savolainen and Timo Tirkkonen FTIA
  - Mirkka Rekola and Juho Malmi Senaatti
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?
  - Organisations have requirements

# EXAMPLE









- 1. Does your country have one or more national strategies of implementing BIM?
  - National strategy for buildings: Digital Transition Plan 'BIM 2022'
  - National project for infrastructures supported by the ministry: MINnD
- 2. Which organizations are in charge of these strategies?
  - BIM 2022: A Steering Committee brings together government representatives and construction industry stakeholders: construction companies, architects, engineering firms, contractors, insurers...
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement:
  - <u>https://www.cohesion-territoires.gouv.fr/sites/default/files/2019-07/Plan%20BIM%202022.pdf</u>
  - <u>http://www.minnd.fr/en/</u>
- 4. National contact person:
  - Brigitte JACQUEMONT
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?
  - France has adopted an incentive approach → voluntary commitment of the different stakeholders





# **INSTITUTIONAL FRAMEWORK**

According to recent law of the Greek state (August 2019), the Digital Transformation Paper will be published and will include the basic principles, framework and guidelines for the Digital Transformation of Public Administration as well as Private Sector of the Greek Economy.

The Ministry of Digital Governance will define the specific principles that will govern each horizontal or sectoral initiative to this end and will record all relevant processes and actions with measurable goals and measurable results every three months.

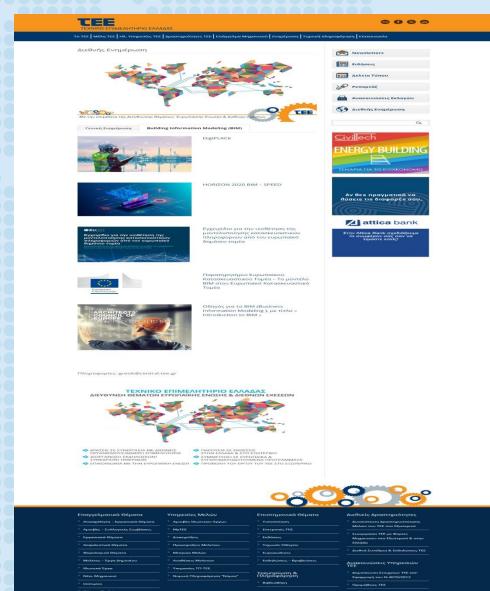




# **INFORMATION ACTIONS**

TEE – TCG subsite: <u>https://web.tee.gr/int-</u> <u>news/</u>

- READERS VIEWS
- "educate" on all BIM matters
- inform the on all latest developments
- News from the EU BIM Task Group







# **NEXT STEPS**

- Coordination of relevant Ministries (of Environment, of Infrastructure etc.) leading the Ministry of Digital Governance;
- Coordination of relevant Stakeholders (Associations of Design and Consultants Offices, Associations of Construction Companies, Engineers of all Specialization in private and in public sector);
- Integrate into the digital transformation strategy of the Country and the digital transition of construction sector.





# 1. Does your country have one or more national strategies of implementing BIM?

The Italian BIM Implementation Road Map does depend on the National BIM Mandate, issued on the December 2017 by the Ministry of Infrastructures & Transportation, throughout a **Law Decree** (560/2017).

Such a Decree makes the Digitized Processes' adoption compulsory in front of the Public Awarding Organizations and Clients by 2025, according to an incremental schedule affected by the amount of the tenders and the complexity of the public works.

The Public Demand-Side (i.e. The Public Clients) are forced to establish a Policy, a 3-year Investment Plan, and a 3-year Training Programme.

The Public Bodies must choose a Common Data Environment and provide the bidders with the Exchange Information Requirements.



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### Main milestones of the strategy envisaged by Decree 560/2017 are:

**Interoperability**: "public contracting appointing parties use data based on interoperable platforms through open non-proprietary formats." The use of such methodology is considered an evaluation parameter of the rewarding requirements.

**Non discrimination**: "The information produced and shared among all the participants in the project, the construction and the management of the intervention, can be used without this involving the exclusive use of specific individual commercial technological applications."

**EU principle compliance**: The Legislative Decree No. 50 of 2016, which was followed by decree 560/2017, derives from the European Union Public Procurement Directive 24 of 2014 and respects its founding principles.

Contracting stations are required to set some **Preliminary compliance** which are:

- a staff training plan in relation to the role covered with particular reference to specific electronic methods and tools such as modeling for construction and infrastructure
- a plan for acquiring or maintaining hardware and software tools for digital management of decision-making and information processes,
- an organizational act that explains the process of control and management, data managers and conflict management.

The management of the so called CDE, **common data environment**, is preferably placed in the hands of the public organization even if the contracting station may, as an alternative to direct management, entrust it externally to a qualified economic operator.

At the same time UNI (Italian Standardization Body) issues the UNI 11337 standard series, based on the same principles but aimed to serve as a reference both for the private sector and the public one.

In particular, part 11337-7, even released in English Language, describes requirements for the building information modeling **professional profiles** according to European Qualification Framework (EQF).



STRATEGIC AND OPERATIONAL ROADMAP

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2. Which organizations are in charge of these strategies?

The National Law Decree envisages the enforcement of a Monitoring Commission, to be appointed.

3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement

A couple of private surveys are yearly performed by the professional associations:

- <u>https://www.architettilombardia.com/Allegati/bim\_monitoring\_cnappc\_cresme.pdf</u>
- <u>https://www.oice.it/592206/rapporto-sulle-gare-bim-2018-per-opere-pubbliche</u>
- http://www.progetto2000web.it/assets/Uploads/BlogAttachments/ASSOBIM-Report-2019.pdf
- <u>http://www.awn.it/component/attachments/download/2157</u>



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# 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?





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- 4. Key national contact person for the EU BIM TG
- pietro.baratono@mit.gov.it
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# Latvia



- 1. Does your country have one or more national strategies of implementing BIM?
  - Road map for BIM implementation in construction sector of Latvia (under development)
- 2. Which organizations are in charge of these strategies?
  - BIM coordination work group:
    - the Ministry of Economics of the Republic of Latvia in cooperation with public and private sector (public authorities, architect's, designer's and constructor's associations, SJSC «State real estate», universities)
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement
  - Under development (information will be available on bis.gov.lv in 2020)
- 4. Key national contact person for the EU BIM TG
  - Gusts Sprogis, senior expert, the Ministry of Economics of the Republic of Latvia (+371 67013113, <u>Gusts.Sprogis@em.gov.lv</u>)
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?
  - Mandatory use of BIM in public sector from 2025



# BIM implementation in SJSC «State real estate»:

- Pilot project
- Capacity (BIM project manager, software, CDE solution)
- Set of SRE BIM requirements and processes:
  - for design and construction phase;
  - is planned to be a public document for all public customers in Latvia (in collaboration with the Ministry of Economics)
- Use of BIM in new construction projects
- Asset information requirements
- BIM process improvement and development

SJSC «State real estate» contact person for the EU BIM TG: Dmitrijs Kots, Senior Development Project Manager, + 371 26122832, <u>Dmitrijs.Kots@vni.lv</u>





- 1. Does your country have one or more national strategies of implementing BIM?
  - We do not have it yet, but we are developing it and plan to have it by the end of Q1 2020 at the latest.
- 2. Which organizations are in charge of these strategies?
  - The Ministry of Environment of the Republic of Lithuania with the support of the Government of the Republic of Lithuania and in cooperation with different stakeholders.
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement
  - There is a recent survey, including the indicative maturity measurement. It is not published.
  - This is one of the background documents for draft Strategy development. We plan to publish it together with a draft Strategy as a background document. Once this is done we will inform the EU BIM Task Group as well.
- 4. Key national contact person for the EU BIM TG
  - Dainius Cergelis, Head of the Construction and Territorial Planning Policy Group
  - Phone number: +370 706 63585
  - E-mail: <u>dainius.cergelis@am.lt</u>



STRATEGIC AND OPERATIONAL ROADMAP

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- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?
  - There is a clear political decision made by the Government of the Republic of Lithuania to have one: application of BIM methods in design and construction of all newly constructed complex and high-value public sector buildings, engineering works or parts thereof starting from the 1st July 2020 will be mandatory.
  - The Strategy will have to encompass that and foresee the ways and scope to implement it, as well as, to foresee further milestones for the implementation of BIM in Lithuania for years to come.







- 1. Does your country have one or more national strategies of implementing BIM?
  - Norway do not have national strategies of implementing BIM
- 2. Which organizations are in charge of these strategies?
  - I hope for a Norwegian BIM Task group
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement:
  - <u>www.statsbygg.no</u>
  - <u>www.statnett.no</u>
- 4. Key national contact person for the EU BIM TG
  - Osmund Skorge Statsbygg
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?
  - BIM manual will be mandatory in Statsbygg when IFC 4 is implemented







- 1. Does your country have one or more national strategies of implementing BIM?
  - It has not been prepared yet.
- 2. Which organizations are in charge of these strategies?
  - BIM assn. Slovakia acts as non-govermental body promoting BIM and negotiating with Ministry of Transport and Construction of Slovak Republic
- 3. Give any useful link (even in national language) about the strategy & surveys of maturity measurement
  - <u>www.bimas.sk</u>
- 4. Key national contact person for the EU BIM TG
  - Tomáš Funtík, funtik@bimas.sk
- 5. Is there any mandatory requirements for BIM ? On which bases? What milestones?
  - BIM is partially used at several small and large-scale public projects. Few public procurements set mandate for BIM use during design phase, construction and operation with various form of specification or measureable deliverables.





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- 1. Do your country have one or more national strategies of implementing BIM?
  - No. Spain will have a national strategy when the recent Inter-Ministerial Commission for the incorporation of the BIM methodology in public procurement finish its works .
- 2. Which organizations are in charge of those strategies?
  - The Inter-Ministerial Commission for the incorporation of the BIM methodology in public procurement, that was created in December 2018. There are 16 Members representatives of 11 Ministries: Development (4), Public finance (4), Ecological transport (2), Foreign Affairs, the European Union and Cooperation (1), Interior (1), Education and Vocational Training (1), Industry, Trade and Tourism (1), Economy and Enterprise (1) and Science, Innovation and Universities (1)
- 3. Link a source of it in attachment (even in national language) & surveys of maturity measurement
  - No by the moment.
- 4. Key national contact person for the EU BIM TG
  - María Rosalía Serrano Velasco, Secretary of the Comisión Interministerial BIM Ministerio de Fomento (+34) 91 597 71 86 – comision.bim@fomento.es
- 5. Mandate Is there any mandatory requirements for BIM on which bases? What milestones? No





#### STRATEGIC AND OPERATIONAL ROADMAP

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## Brief Introduction: Facts and figures to Switzerland's construction industry

Construction expenditure in Switzerland sums up to approximately 15% of the gross domestic product – roughly 66 billion Swiss Francs a year.

Of which approxmately a third, 22 billions are public construction expenditure.

	Overall total	Expenditure by public sector clients				Investments by private clients					
		Total	Confederation	Cantons	Communes	Total	Institutional Investors	Private gas / Power stations / Railways	Construction & real estate	Private Individuals	Other Investors
2015	66,310	21,847	7,431	6,404	8,012	44,463	1,869	1,823	11,712	14,397	14,663
2016	66,433	22,224	7,643	6,429	8,152	44,210	1,853	1,912	12,242	13,881	14,322

In CHF millions at current prices / Database status 16.07.2018

## 1. National strategies of implementing BIM

Switzerland has a strong history as a federal country dating back to the 13<sup>th</sup> century. This has an impact on all political and social developments, including implementing BIM. Meaning there are various strategies due to the three different political levels: The councils, the cantons and the confederation. Nevertheless the overall nationwide coordination is guaranteed by the so called "KBOB", the Conference for the Public Sector of Construction and Property Services which has issued recommendations on working with BIM.





## 2. Which organizations are in charge of these strategies?

The Coordination Conference for the Public Sector of Construction and Property Services, short KBOB represents and coordinates the nationwide interests of Switzerland in all matters linked to the construction sector. All levels communal, cantonal and federal are represented – in all national languages German, French and Italian. It supports its members in various areas, such as Procurement and contracting, Price changes, Management, Standards, Sustainable real estate management, Digitalization (including BIM) and Building technology/building automation.

Focus is clearly the coordination. The members themselves are responsible for the strategy of the implementation of BIM. The Swiss federal office for building and logistics follows the KBOB recommendations and is currently gathering first experiences with BIM-pilot projects in order to then establish a strategy.

### 3. Useful links

www.kbob.ch

https://www.kbob.admin.ch/kbob/de/home/publikationen/digitales-bauen---bim.html https://www.kbob.admin.ch/kbob/de/home/fachgruppen/ad-hoc-arbeitsgruppe-digitales-bauen-bim.html http://shop.sia.ch/normenwerk/architekt/sia%202051/d/D/Product https://netzwerk-digital.ch/en/ https://bauen-digital.ch/de/ https://bauen-digital.ch/de/produkte/praxisreporte/

### 4. Key national contact persons for the EU BIM TG

KBOB: Anna Wimmer, <u>anna.wimmer@bbl.admin.ch</u> Swiss federal office for buildings and logistics: Dorothy Holt, <u>dorothy.holtwacker@bbl.admin.ch</u>

**5.** Is there any mandatory requirements for BIM ? No.







- Does your country have one or more national strategies of implementing BIM? The Slovenian BIM Roadmap has been prepared for a while but it has not been adopted by the government, since the consensus between the ministries has not yet been reached.
- 2. Which organizations are in charge of these strategies? The Roadmap was ordered by the Ministry of Economic Development and Technology. The Roadmap was prepared by siBIM, the Slovenian BIM Association. The title of the document is "Action Plan for the Introduction of Digitization in the Field of the Built Environment in the Republic of Slovenia".
- Give any useful link (even in national language) about the strategy & surveys of maturity measurement

   Draft of the Slovenian BIM Roadmap called "Action Plan for the Introduction of Digitization in the Field of the
   Built Environment in the Republic of Slovenia": <u>http://sibim.si/dokumenti/AN/</u>
  - Home page of siBIM, Slovenian BIM Association: http://sibim.si/
  - Handbook for preparation of EIR: <u>http://www.izs.si/prirocniki-publikacije/drugi-prirocniki-izs/prirocnik-za-pripravo-projektne-naloge-za-implementacijo-bim-pristopa-za-gradnje/</u>



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- Key national contact person for the EU BIM TG Ksenija Marc, from DRI Investment Management, Ltd. <u>ksenija.marc@dri.si</u> representing the Ministry for Infrastructure
- Is there any mandatory requirements for BIM ? On which bases? What milestones? There are no mandatory requirements for BIM. Regardless of that, some major public investors have already required BIM in some projects:
- The Karavanke Tunnel, Investor: DARS, the Motorway Company in Slovenia
- The new railway section near Maribor, Investor: Slovenian Infrastructure Agency
- Residential neighbourhoods, Investor: The Housing Fund of the Republic of Slovenia

