

Digitalisation of construction planning in Poland

Kick off meeting report

3 December 2019, Warsaw



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Strictly private and confidential

1 Kick off Meeting information

1.1 Details of the meeting

Project Title	Digitalisation of construction planning in Poland
Date of meeting	Wednesday 13 November 2019
Host	Ministry of Investment and Economic Development
Time	10:15-12:15
Location	ul. Wspólna 2/4, Warsaw
Language	English / Simultaneous interpretation into Polish

1.2 Participants

SRSS (Client)	Edward Tersmette (ET) - Policy Coordinator
	Valentin Ariton (VA) - Policy Officer
	Maciej Thel (MT) - Head of the Coordination and Supervision DAB (Department of Architecture, Construction and Geodesy)
Ministry of Investment and Economic Development (Beneficiary)	Jarosław Sosnowski (JS) - Specialist of the Coordination and Supervision DAB (Department of Architecture, Construction and Geodesy)
	Anita Grabowska-Wiaż (AGW) - Director of the Department of Architecture, Construction and Geodesy of the Ministry (first 15 min of the meeting)
	Michał Orczyk (MO) - Vice Director DAB (Department of Architecture, Construction and Geodesy)
	Joanna Sakowska (JS) - Head of the Investment Process Department
	Bogumiła Chewińska (BCh) - Engagement Manager (PwC)
	Konrad Danieluk (KD) - SRSS Framework Manager (PwC)
PwC (The Contractor)	Filip Czerniawski (FCz) - Intern (PwC)
	Katarzyna Orlińska – Dejer (KOD) - BIM Expert (BIM Klaster)
	Robert Szczepaniak (RS) - BIM Expert (BIM Klaster)
	Karolina Wróbel (KW) - BIM Expert (BIM Klaster)
	Wojciech Hartung (WH) - Legal Expert (DZP)
	Tomasz Michalczyk (TM) - Legal Expert (DZP)

1.3 Meeting agenda

Agenda	Responsible person
Introduction from the Ministry of Investment and Economic Development	Maciej Theł
Introduction from the SRSS	Edward Tersmette
Overview of the project objective and general approach Presentation of the project team Workplan and timeline Project implementation strategy and detailed methodology Project challenges and risks Open questions and Key success factors	Bogumiła Chewińska / Katarzyna Orlinska - Dejer
Discussion	All participants

Key discussion points



2 Key discussion points

2.1 Introduction from the Ministry of Investment and Economic Development

1. MT provided an acknowledgement from the Ministry and introduced the participants as well as their role in the organization and in the project.

2.2 Introduction from the SRSS

2. ET presented the SRSS scheme, its structure and mission as well as the expected project outcomes.

2.3 Overview of the project scope, general approach, project communication strategy

3. The project objectives are as follows:
 - a. Support the Ministry to define and implement the process to mandate the use of Building Information Modelling (BIM) in public projects
 - b. Provide the Ministry with necessary standards and documents to procure the first public project mandating BIM in the affordable housing sector.
 - c. As a long-term goal - Improve the efficiency of the public tendering system
4. Involvement of public authorities and inter-ministerial cooperation.
 - d. VA addressed the Beneficiary on how the Ministry sees the role of the public authority in the project and the strategy to drive the project results. MT advised due to the upcoming organisational changes the long-term strategy of the implementation of the digital platform is yet to be determined and depends on the political will. MT advised the Ministry is engaged in the leading of the project and promoting it across the organization and other Ministries.
 - e. ET advised SRSS is ready to provide support in terms of contacting senior staff members to work out the positive approach to the project implementation and assist in the definition of the project benefits.
 - f. ET pointed out the importance of involving the public sector stakeholders in the consultation process as early as possible. It is strongly recommended to involve the Ministry of Infrastructure, Ministry of Entrepreneurship and the Ministry of Digitalisation in the project consultation process.
 - g. The SRSS have confirmed the process of consultation of the BIM templates will be open and the stakeholders don't need to be bound with the confidentiality agreement. The documents templates will be published by the Beneficiary. The Ministry is also encouraged by the SRSS to promote the project on their web site and via other communications tools.
 - h. KD suggested, in order to prompt the communication and cooperation between the Ministries and other public sector representatives the Beneficiary could organise another internal kick-off meeting. The Contractors team would assist in presentation of the project methodology.

- i. Project kick-off and progress will be communicated by the Beneficiary through the Ministry website. The first communication will be released within a month.
- j. ET encouraged the Beneficiary to advertise the project within the organisation. One of the benefits of the internal communications could be gaining support from the staff passionate about the BIM subject
- k. VA advised every press release needs to be validated by the SRSS
- l. ET suggested the project team could reach out to the Polish office of the European Commission for support in any communications activities. POST MEETING NOTE: An internal kick-off meeting could potentially be organised in the office of the EC in Warsaw.

2.4 Project implementation approach

5. Stakeholder consultations:

- m. KOD recommended that workshops will be organized in the group of max. 30 participants. Based on experience, the meetings will address different groups of interest experts (consultants, investors and general contractors). This is to ensure the efficiency of the meeting and obtain the expected outcomes i.e. avoid arguments between groups of participants, group of 30 is more open and engaged than a group of 100.
- n. Teachers. ET suggested to involve the BIM teachers (the academics from the Technical Universities). KOD advised they are usually members of the BIM promoting associations that will be invited to the consultations.
- o. EU BIM Task Group. JS will participate in the EU Task Group meeting next week. JS will become a member of the Group. The project outcomes / draft documents will be consulted with the Group
- p. BCh advised one of the immediate next steps would be to define the list of stakeholders to be involved in the project consultations starting from workshops in January 2020.

2.5 Project challenges and risks

6. Following the presentation of the risk matrix ET addressed the Beneficiary with a request to define the project risks from their perspective. MT advised the inter-ministerial cooperation could potentially be challenging due to the different visions of BIM implementation. The parties agreed the mitigation strategy would be a communication addressed to other Ministries and public sector representatives regarding the commencement and objectives of the project, involve them as early as possible in the consultation process and keep them up to date with the project progress.

2.6 Discussion - Open questions

7. Draft BIM documents should be published by the Beneficiary in for transparency reasons and to keep the industry up to date with the progress of the project.
8. The Contractor will provide analysis of BIM implementation in two (2) EU Member states as well as previous tender procedures with BIM requirements implemented on Polish market. ET confirmed this is in line with the scope.
9. The Contractor requested whether the Ministry could provide any support in collecting data via contacts



with the ministries and government agencies of the EU member states. JS advised he'll attend EU BIM Task Group meeting next week and potentially obtain some assistance. JS advised he'll become a member of the group as well.

10. JS will approach the representatives of Lithuania, Estonia and Czech Republic as they are on similar level of implementing BIM in their countries.

Next steps



3 Next steps

1. Submission of Kick-off Meeting Report and Inception Report (PwC)
2. Issue the list of stakeholders for the meetings in January 2020 (Beneficiary)
3. Preparation to the stakeholder's meetings workshops in January (PwC)

Annex 1

4 Workshop

4.1 Details of the meeting

Project Title	Digitalisation of construction planning in Poland
Date of meeting	Wednesday 13 November 2019
Host	PwC
Time	14.00-17:15
Location	ul. Polna 11, Warsaw
Language	Polish / Simultaneous interpretation into English

4.2 Participants

SRSS (Client)	Edward Tersmette (ET) - Policy Coordinator
	Valentin Ariton (VA) - Policy Officer
Ministry of Investment and Economic Development (Beneficiary)	Maciej Thel (MT) - Head of the Coordination and Supervision DAB (Department of Architecture, Construction and Geodesy)
	Jarosław Sosnowski (JS) - Specialist of the Coordination and Supervision DAB (Department of Architecture, Construction and Geodesy)
PwC (The Contractor)	Bogumiła Chewińska (BCh) - Engagement Manager (PwC)
	Konrad Danieluk (KD) - SRSS Framework Manager (PwC)
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	Katarzyna Orlińska – Dejer (KOD) - BIM Expert (BIM Klaster)
	Robert Szczepaniak (RS) - BIM Expert (BIM Klaster)
	Karolina Wróbel (KW) - BIM Expert (BIM Klaster)
	Tomasz Michalczyk (TM) - Legal Expert (DZP)
	Maciej Dejer (MD) - BIM Expert (BIM Klaster) - videoconference

4.3 Purpose of the meeting

Detailed review of the methodology in Polish language and discussion of the approach to the project delivery. The Contractor's understanding of the project was presented and discussed to ensure it meets SRSS and Beneficiary's expectations. The Contractor provided several solutions for the project implementation.

4.4 Key discussion points

1. Roadmap and BIM documents templates
 - a. The roadmap will address the strategy of implementation of BIM in the entire construction sector public and private.
 - b. It will provide a recommendation for the construction contracts to be used on projects with a BIM technology
 - c. It will indicate potential publicly available funding sources to support the small and medium enterprises to implement BIM. RS provided an example of the UK market where the government established several forms of support (e.g. BIM toolkit, capacity building support)
2. Communication strategy
 - a. The Ministry will lead the project communications. The updates on the project progress will be posted on the Ministry website. Any press release is to be reviewed and approved by the SRSS prior to publication.
 - b. On 19 November there is a conference "Nowe Oblicze BIM" [New Face of BIM] organised by a software provider. The Contractor will attend the conference. One of the keynote speakers will be Mr Hubert Nowak, the Head of the Public Procurement Office, an executive agency of the Ministry of Entrepreneurship. The Contractor is encouraging the Beneficiary to announce the project kick-off by Friday 15 November. It will enable the Contractor to promote the project via their communications tool and sound the potential stakeholders for the consultation process. JS advised the Ministry will likely attend the conference as well.
 - c. Another occasion to promote the project, by giving a lecture, would be a conference held in Cracow, Poland in April 2020 "Designing of the Future". The conference participants will be designers, investors and contractors. Expected number of participants 250 people. The Conference is organized by BIM Klaster.
3. Pilot project
 - a. MT confirmed the pilot project will be related to the public projects of social / affordable housing. The Beneficiary will confirm which housing scheme will be subject of the pilot project
 - b. MT will liaise with the Department of Housing responsible for implementation of the social housing schemes to introduce the project and to discuss the lessons learned from the "Apartment Plus" scheme. MT will provide the following:
 - i. The type of contract that is currently used to deliver the scheme (construct only, design and build, other) and what model is envisaged in the future. This information is required to finalise the BIM templates by the PwC team. According to SRSS the design only or design and build type of contract would be preferable given the readiness of the consulting sector for the BIM implementation.

- ii. The list of challenges in the facility management encountered since the launch of the scheme.
- iii. Method of calculation of project lifecycle costs (draft of a legal act from November 2017)
- c. The BIM templates will be prepared for the affordable housing type of buildings but will be adaptable to any other type of buildings
- d. The parties agreed that the documents will comply with the new Public Procurement Law that will enter into force on 1 January 2021.

4. Digital platform

- a. MD presented the scope of work in detail. It is necessary to accurately identify the "good practices" and solutions used in the EU member countries and provide examples from outside of the EU (with an indication of Singapore). The analysis will include solutions available on the domestic market as well as the case of developing a dedicated IT platform. The guidelines for the IT platform and the implementation timetable will be developed in consultation with the SRSS and the Ministry. The summary report will also indicate the risks to the success of the platform implementation, the steps to be taken to minimize the likelihood of their occurrence and the estimated costs associated with the implementation in time.
- b. The Contractor will make available a digital platform for demonstration purposes and document management. All the project members (PwC Team, SRSS, Beneficiary) will have access with the right to review and provide comments.
- c. The purpose of the platform is to demonstrate the way of operation of such tool and test it by the Beneficiary ahead of procurement. The platform is to be launched by the end of this year. The Contractor will submit for approval the structure and the level of authority for each user.

5. Stakeholders consultations

- a. The Beneficiary will provide the list of stakeholders to BCh by the end of November.
- b. The list will represent the stakeholders interested in the participation in the project (name and surname, organization).
- c. The list will be reviewed by the Contractor and additional members proposed if required.
- d. In the first meetings with the stakeholders in January the Contractor will present the history of BIM in Poland, examples of tender procedures with requirements for BIM technology, assessment criteria used as well as the course of technology implementation in the two other EU member states: Great Britain and Czechia.
- e. It was agreed these meetings will take place in January 29,30 and 31 (one meeting for each of the stakeholder's groups). The group will not exceed 30 participants. The Beneficiary will issue the invites and arrange the venue.

6. On-line survey

- a. The questions for the online survey will be agreed between the parties. The questions related to the preparedness to the BIM implementation may potentially be seen a commercially sensitive hence not responded or responses misleading
- b. The link to the survey should be placed on the Ministry website rather than PwC website.



Annex 2

5 Kick-off meeting presentation

Digitalisation of construction planning in Poland

Kick-off meeting

13 November 2019



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Acknowledgement

This study is carried out with funding by the European Union via the Structural Reform Support Programme and in cooperation with the European Commission's Structural Support Reform Service



Agenda

- | | | |
|----|--------------------------------------|----|
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Q&A after each section

1

Objective of
the project



Objective of the project

- Support the Ministry of Investment and Economic Development to define and implement the processes to mandate the use of Building Information Management (BIM) in public projects.
- Provide the Ministry with necessary standards and documents to procure the first pilot project mandating BIM in the affordable housing programme.
- Improve the efficiency of public tendering system.

Building Information Management requirements exist in the Polish public procurement tenders as a result of the local authorities initiatives.

50+ projects released with BIM requirements in various stages of the tender and delivery. The tender specifications are based on the external experts' advice or prepared by the investor's technical team and differ from project to project.

Objective of the project



We will work with you to standardise the tender requirements mandating BIM



Deliver a strategy of BIM implementation



Define the IT requirements and prepare BIM procurement



Increase the knowledge of the BIM requirements across the construction sector

2

Project team

PwC Team Overview

A dedicated team of experts consists of 12 local and international consultants (apart from the EM and PM).

We have combined the application of international standards together with local presence and understanding of local specifics and legal framework.



PwC. Advising clients on BIM projects internationally. Through our global network, we support national governments and businesses in the development and implementation of the BIM strategies and preparation of BIM procurement.



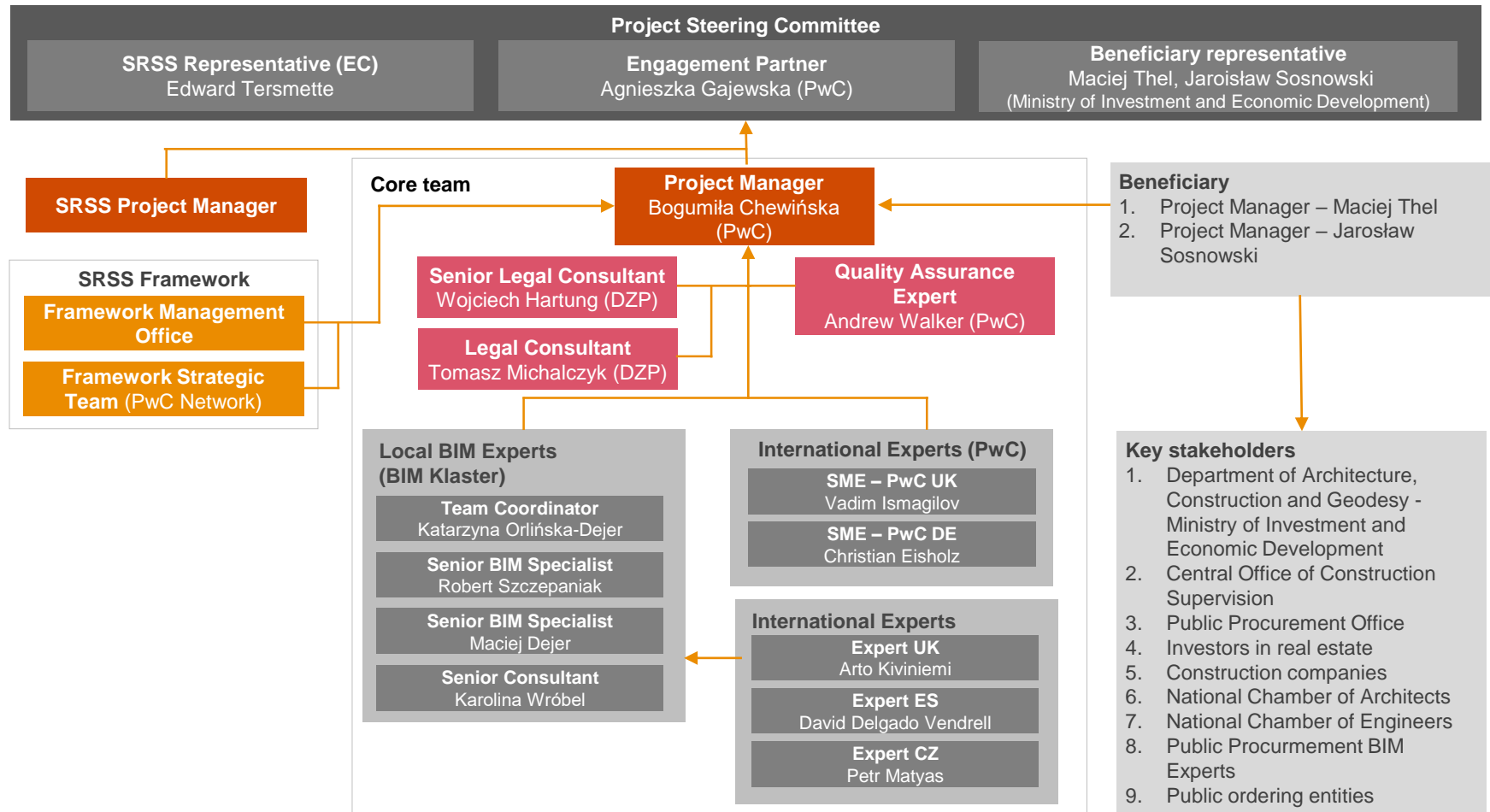
Association Cluster of Information Technologies in Building Industry. Polish and international experts representing an Association of Information Technologies in Building Industry Poland. Knowledgeable of the BIM penetration in the Polish market with its challenges and specifics.



DZP. Procurement legal team experienced in Polish and EU public procurement law.



Team structure



Team composition (1/2)



Agnieszka Gajewska
Engagement Leader

Agnieszka is PwC Capital Projects & Infrastructure Leader and International Development Leader for 29 countries in CEE / CIS. She worked in over 20 countries on four continents, with particular focus on advising governments and local authorities on pilot infrastructure projects, esp. in PPP and Project Finance, structured as a mix of private and public finance. She acted as advisor or Mandated Lead Arranger, on PPP / PF projects of the total value exceeding \$15bn.



Bogumiła Chewińska
Engagement Manager

A professionally qualified Architect with over 15 years of experience in the project management of large residential, commercial and retail developments in Europe. For the last 6 years she has specialised in BIM supported procurement, design and project management, FF&E, commissioning, transition management and stakeholder consultations in public healthcare projects.



Katarzyna Orlińska-Dejer
BIM Experts Coordinator

Katarzyna is the President of the Board of the Cluster of Information Technologies in Building Industry (BIM Klastr) as well as an author of publications on BIM. Over two years of experience in R&D projects (e.g. Development of an application for visualization of BIM models in HoloLens technology) and projects related to technology transfer (e.g. 3D Central). Responsible for product development (from concept, specification of tool functionality to system implementation).



Wojciech Hartung
Legal Expert

Wojciech advises on infrastructure projects carried out under the Public Procurement Law or using partnership structures, i.e. PPP, concessions and other forms of co-operation between public and private partners. He specialises in issues involving public-public cooperation (in-house procurement). He heads projects concerning exclusion of the obligation to apply the Public Procurement Law covering entity and subject-matter exclusions.



Konrad Danieluk
Framework Manager

Konrad is PwC Framework Manager of the Multiple Service Framework Contract with the SRSS. He is responsible for coordinating framework activities of all PwC offices across the EU including the bidding process, contracting, monitoring and evaluation of specific projects. Konrad has 12 years of framework and project management experience. He has been working with the EC and DFID UK managing projects in Europe, Africa and Asia.

Team composition (2/2)



Robert Szczepaniak
BIM Expert (BIM Roadmap)

An expert consultant with over 15 years of experience with full architectural qualifications in Austria and Poland. Robert has his own architectural practice and is a founding member of the 'BIM for Polish construction' Association. An activist of the BIM Cluster and an author of dozens of articles on BIM in the professional press. Robert is an expert in the implementation of the BIM methodology in public projects.



Maciej Dejer
BIM Expert (IT Systems)

An expert consultant with over 10 years of experience in the implementation of projects in BIM technology, project coordination and contract administration of projects implemented in New Zealand, Canada, the USA and Poland. Maciej is a VP of the Board of the Information Technologies in Building Industry (BIM Klaster), responsible for popularizing knowledge and processes based on innovation.



Karolina Wróbel
BIM Expert (BIM templates)

BIM Manager, BIM Coordinator, BIM Trainer. Karolina has over 6 years of experience in the implementation of projects using the BIM methodology including design, project management, coordination and consulting on tenders. She specializes in handling programs used for BIM modelling and coordination. Karolina is an author of the BIM guide for SketchUp users and articles on BIMblog.pl, as well as a speaker at conferences and a leader of BIM workshops.



Tomasz Michalczyk
Legal Expert (Procurement)

Tomasz specialises in matters concerning infrastructure, public procurement and PPPs. He advises both contractors and contracting authorities on all aspects of public procurement law at all stages of procurement procedures. He has extensive experience in handling tenders conducted by private entities with EU funds. He represents clients before the National Appeal Chamber and also in proceedings based on appeals filed with common courts.

Key Project Experts (1/2)



Arto Kiviniemi (Subject Matter Expert – UK)

Dr Arto Kiviniemi, Honorary Research Senior Fellow, retired Professor of Digital Architectural Design, at the University of Liverpool is one of the **internationally leading experts in the integrated Building Information Modelling (BIM) which he has developed internationally since 1996**. He initiated the first MSc BIM programme at the University of Salford in the UK. Arto is one of the founding members of the International Alliance for Interoperability, now known as building SMART International. Arto has presented over 180 keynote and invited lectures in international seminars and conferences around the world in the vast majority regarding BIM.



David Delgado Vendrell (Subject Matter Expert – Spain)

David is an architect by ETSAV (Polytechnic University of Catalonia), and CEO of DDV Arquitectura, a BIM consultancy especially **focused on implementing BIM technology in the public sector and private companies**, working in the different stages of asset life-cycle. He is a specialist in the use of the ARCHICAD platform and the fostering of openBIM. He has co-authored the BIM classification system "GuBIMclass," an initiative of GuBIMCat and Infraestructures de Catalunya.



Petr Matyas (Subject Matter Expert – Czechia)

Petr is the Chairman of the board of the Czech BIM Council, a Member of the executive board for **coordination of BIM standardization** at Ministry of Industry ČR. Petr is leading his own architectural practice, he's Partner in di5 Architects and Engineers and BIM-POINT. He is a Member of EU BIM Task Group.

Key Project Experts (2/2)



Christian Elsholz (Subject Matter Expert – Germany)

Christian is a Director in the Capital Projects & Infrastructure team of PwC Management Consulting, Germany. He has 15 years of professional experience within consulting, engineering and construction industry. Christian is specialized in capital projects organizational and process improvement assignments. Christian managed the BIM strategy development and BIM implementation for public and private clients in Germany (German Railway, Ministry of Infrastructure)



Vadim Ismagilov (Subject Matter Expert – UK)

Vadim is a Manager within Capital Project Services PwC team based in London. He is a Chartered Civil Engineer, a Professional Project Manager with experience in design, construction and delivery of large capital projects and programmes. Through the project with the UK government on BIM L2 benefits Vadim gained an expertise in the field of BIM use and implementation in public sector (BIM Level 2 in UK). He has a knowledge of BIM industry standards (UK and international) and developed BIM benefits measurement methodology for the UK government client.



Andrew Walker (Quality Assurance Expert)

Andrew is a Senior Manager in PwC's London based Capital Project Services practice and leads the team's focus on the Digital Built Environment, including Building Information Modelling (BIM) and its integration with wider business processes. Andrew has advised both UK and global clients on BIM, including the quantification of the benefits of BIM, review and development of a business case for investment in BIM and advising clients on their strategy, procurement and implementation of BIM (clients: UK government, Water utility client, General Contractors).

Q&A

3

Workplan
and timeline

Deliverables



Report with Recommendations on the BIM templates



BIM Management Standard Document Templates



Roadmap for implementation of BIM methodology in Poland



Technical report on necessary IT system for BIM



Document templates for procurement of the IT system



3 meetings with the stakeholders, online survey and a seminar



Workshop with SMEs representing 3 EU countries

Stakeholders consultation (1/2)



BIM Management Standard

It is necessary to understand the differences between the stakeholder groups to ensure the dialogue conducted with them during the meetings is adequate to the stakeholders' profile. Such approach will allow us to obtain valuable feedback from the market about the document templates

Meeting No. 1 – Investors/public entities

Meeting No. 2 – Designers

Meeting No. 3 – General contractors

Stakeholder consultation survey and seminar



Roadmap for implementation of BIM in construction sector

Representatives of the EU Member States: Great Britain, Spain and Czechia will present the key assumptions of the road map and other strategic documents used in their countries.

Supported by case studies showcasing the lessons learned from the implementation of BIM methodology.

Workshop with the stakeholders who deal with strategic decisions concerning BIM in Poland

Stakeholders consultation (2/2)



Investors/public entities

- Polish Development Fund – Real Estate [PFR Nieruchomości]
- Polish Real Estate Holding [Polski Holding Nieruchomości]
- Polish Association of Developers [Polski Związek Firm Deweloperskich]
- Public Procurement Office [Urząd Zamówień Publicznych]
- Representatives of the largest cities in Poland - Warsaw, Cracow, Poznań etc.



Designers

- Association of Polish Architects [SARP – Stowarzyszenie Architektów Polskich]
- Chamber of Architects of the Republic of Poland [IARP – Izba Architektów Rzeczypospolitej Polskiej]
- Chamber of Construction Design [IPB – Izba Projektowania Budowlanego]
- Polish Chamber of Civil Engineers [PIIB – Polska Izba Inżynierów Budownictwa]
- Polish Association of Construction Engineers and Technicians [PZiTb – Polski Związek Inżynierów i Techników Budownictwa]



General contractors

- Polish Association of Construction Industry Employers [Polski Związek Pracodawców Budownictwa]
- National Association of Road and Construction Companies [Krajowe Stowarzyszenie Firm Drogowo – Budowlanych]
- Sectoral clusters e.g. Polish Construction Cluster



Option – Facility managers

The group will be invited to Investors/public entities workshops. The list of facility managers will be discussed with the project team

Timeline

Deliverable	Date
Kick-off meeting	13.11.2019
Inception report	04.12.2019
Meetings with stakeholders	01.2020
Seminar to discuss on-line survey	04.2020
Workshop with the EU experts	04.2020
BIM Management Standard Document Templates	30.04.2020
Roadmap for implementation of BIM methodology in Poland	29.05.2020
Technical report on necessary IT system for BIM	30.06.2020
Report on preparation of the procurement of the IT system	31.07.2020
Final report and presentation	31.08.2020



Commencement date

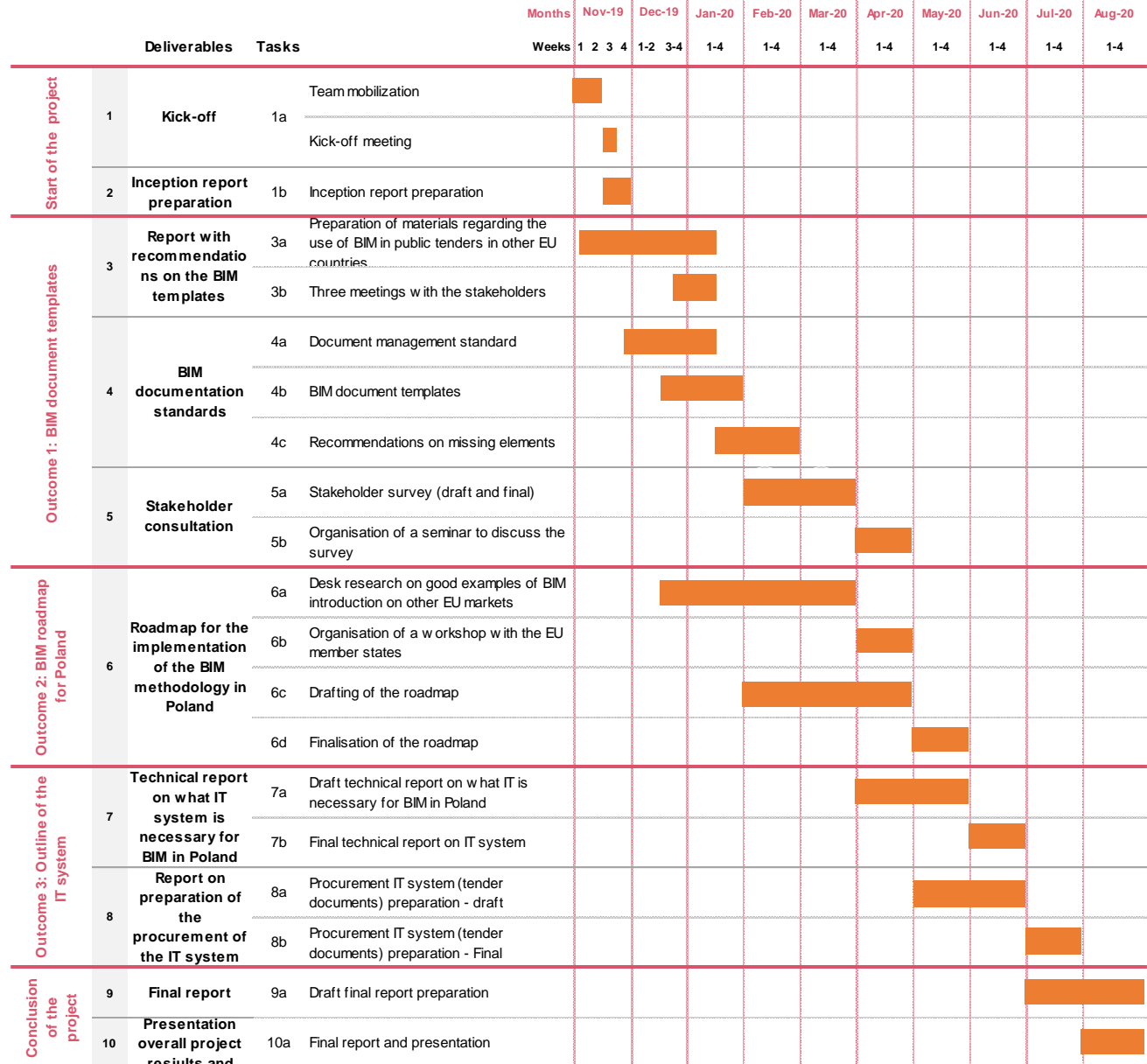
22.10.2019



Duration

10 months, (40 weeks)

Work plan



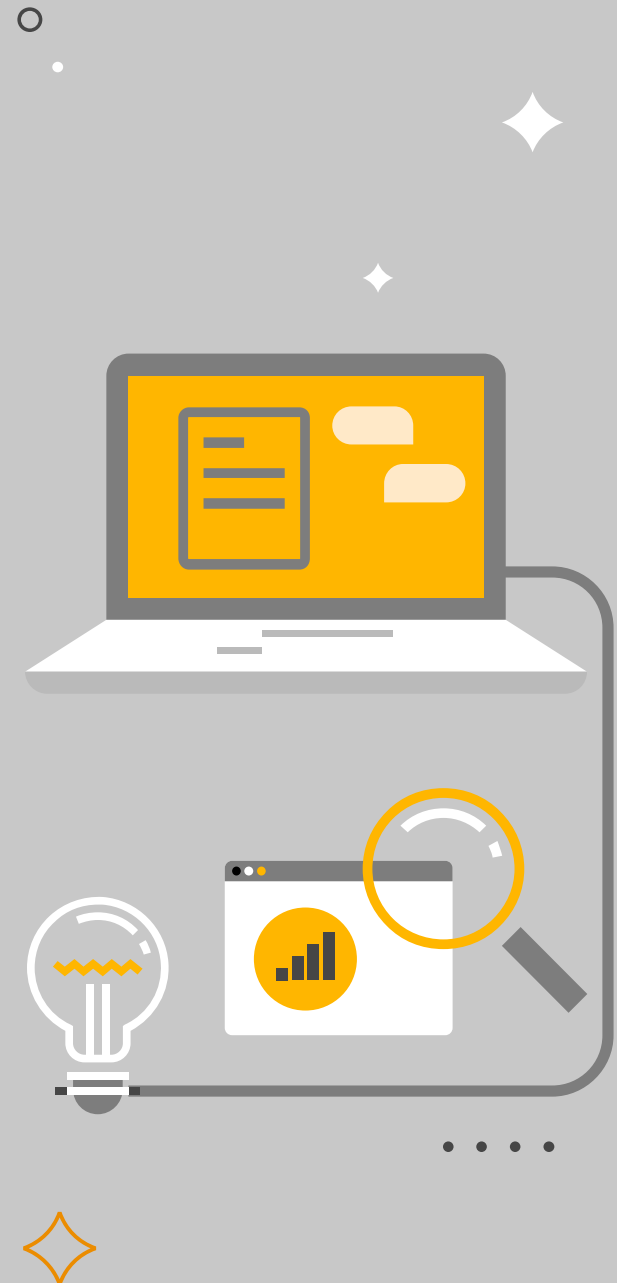
Monitoring and communication lines

Internal Project Team coordination

- > **PwC Project Team status update** – Once a week, face-to-face / conference call
- > **PwC Framework monitoring** – Once a month, conference call

Meetings with Beneficiary and SRSS

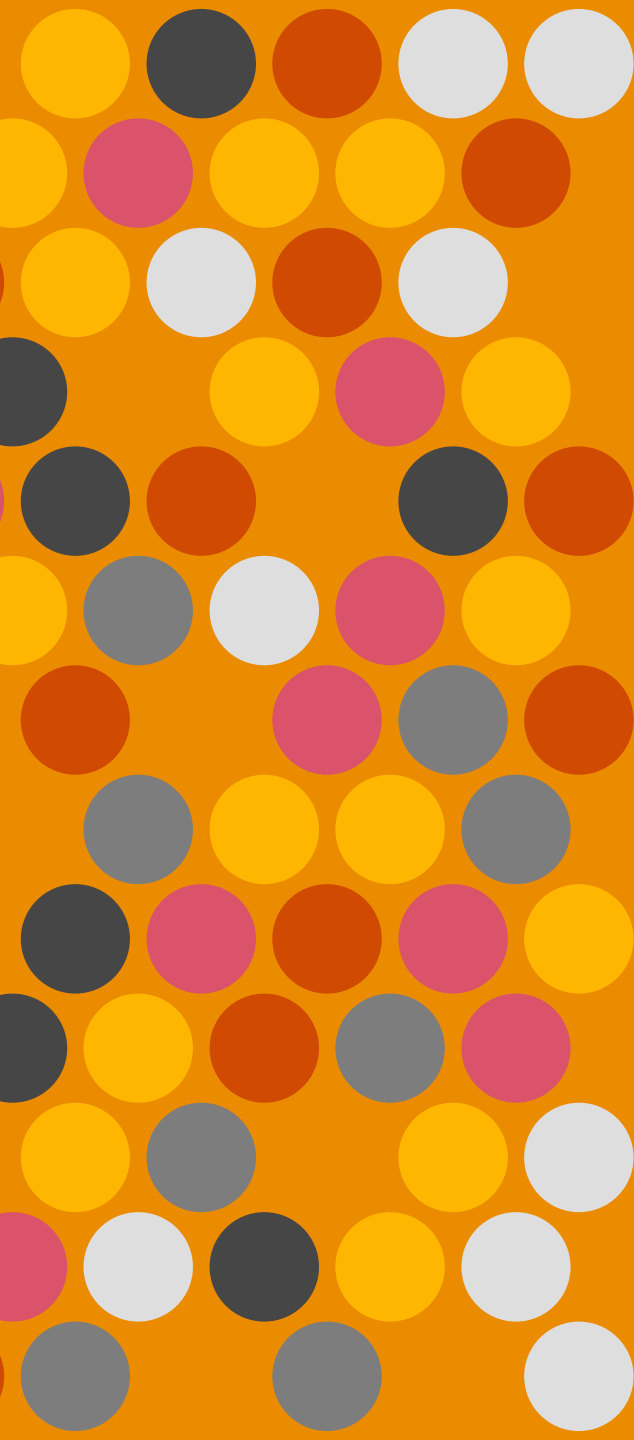
- > **SRSS - PM status update** – Twice a month, conference call
- > **Beneficiary - PM status update** – Twice a month, face-to-face / conference call
- > **Steering Committee (SRSS, the Beneficiary, PwC)** – Once a month, progress report /
Every two months - face-to-face / conference call



Q&A

4

Detailed
methodology

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Recommendations on the BIM templates

Recommendations on the BIM templates

Review implementation of BIM in public procurement in EU Member countries.
Validate the proposed standards through the stakeholders consultations process.

1

Carry out research on concept, strategy and procedure of technology implementation in the EU Member States: United Kingdom, Czechia, Spain, Germany.

Review the history of BIM in Poland, examples of tender procedures with BIM technology requirements, evaluation of criteria applied. Assess which documents and processes were the most beneficial from the point of view of both the participants of the project and the project itself on domestic market.

2

Carry out workshops with three groups of stakeholders – investors, consultants and general contractors to obtain valuable feedback from the market regarding BIM use and establish beneficial cooperation with the participants.

The agenda of the meeting will include the time for discussion with the participants on their expectations, concerns and possible market limitations.

Present experiences from BIM integration into the public procurement system in EU Member States: United Kingdom, Czechia, Spain, Germany

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BIM Management Standard Document Templates

BIM Management Standard and Document Templates

Develop the first BIM Management Standard templates for public projects in Poland

1

Documentation management standard

Develop a complete document management system using BIM methodology. We will conduct an in-depth analysis of the rules and standards in this matter, including those in force in the home market. We will review the compliance of selected documents with Polish law, including public procurement and construction law, considering provisions in the vacatio legis period (e.g. most likely the new Public Procurement Law, of which the expected effective date is 1 January 2021) and draft regulations. We'll check against the relevance to Polish market requirements to ensure the documents correspond to the realities of the Polish construction market.

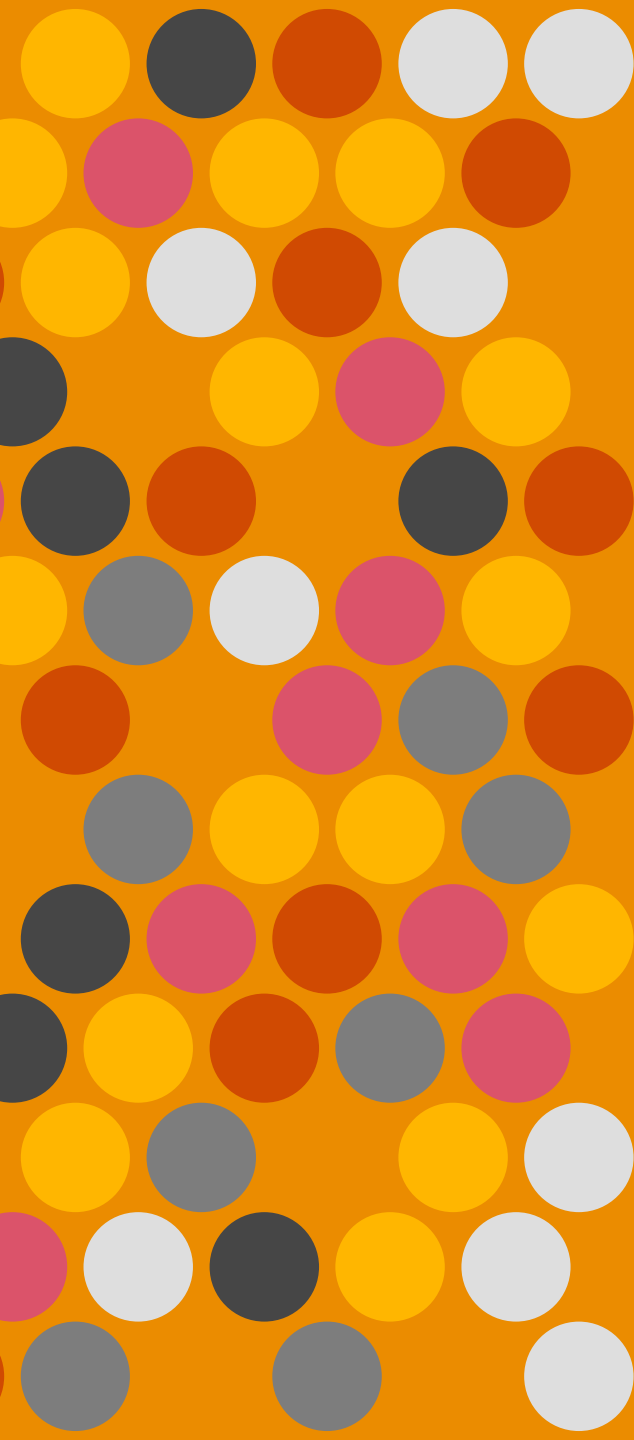
2

Stakeholder consultation survey and seminar

Consultations with key stakeholder groups (investors and general contractors) will be carried out by means of an online survey.

Following the survey we will carry out a workshop to obtain market feedback on the document templates and their usefulness at the stage of implementation of subsequent stages of investment. We'll aim to understand the market potential and the current level of companies' preparation for the implementation of projects with the requirement of BIM.

Invite the most active participants of the survey, whose comments are of a key importance for the final version of the documents.

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Roadmap for implementation of BIM methodology in Poland

Roadmap for implementation of BIM methodology in Poland

The roadmap will determine the the likely time perspective for introduction of BIM in Poland

1

Desk research on good examples of BIM introduction in three EU Member States. Particularly in MS which also produced comparable strategic policy documents and roadmaps:

United Kingdom, Czechia, Spain, Germany.

2

Workshop with the countries representatives to present the implementation strategy of the BIM methodology in each of these countries.

The BIM experts will present the key assumptions of the road map or other strategic documents used in their countries. Case studies will be presented showcasing the challenges and benefits during the implementation of the BIM methodology.

3

Roadmap will present the current state of application of the BIM methodology in public projects in Poland.

Focus on the objectives to be achieved in the construction industry for the implementation of BIM.

Develop a work schedule detailing the milestones necessary to achieve the objective.

Identify the minimum resources required in following groups: people, finances, technology, procedures, legislation.



Technical report on IT system

Technical report on necessary IT system for BIM

The report will consist of technical recommendations for the required IT system for BIM enabling the digitalisation of public procurement in construction

Based on:

- Good practice and lessons learned from other EU Member States
- Analysis of ICT systems in domestic market
- Conclusions from previous consultations with stakeholders and the Beneficiary

Focus on:

- Analysis of the BIM penetration in the Polish construction industry, in particular in the area of residential buildings
- Simulate a future use of an efficient system supporting BIM processes
- Indicative budget for that system to put in place
- Common digital platform
- Steps necessary to achieve the objective of implementing the BIM technology
- Resources needed to implement the IT system (time, finance, capacity)

A decorative graphic on the left side of the page consists of a grid of circles in various colors including yellow, orange, pink, grey, and white. The circles are arranged in a pattern that tapers to the right.

Document templates for procurement of IT system

Document templates for procurement of the IT system

Documentation will allow the Beneficiary to use new procurement standard in the future tender procedure for the BIM IT system

We will prepare tender documentation for public procurement contracts for the Beneficiary's use in the tender for the procurement of IT system underpinning BIM.

The following documents will be prepared:

- Invitation to submit initial offers and Invitation to submit offers - if the public procurement procedure is conducted in the form of negotiations with an announcement
- Description of the contracting authority's needs and requirements and Invitation to dialogue - if the public procurement procedure is conducted in the competitive dialogue mode
- Specification of the Essential Terms and Conditions of Purchase, including:
- Description of the subject of the contract;
- Instructions for Economic Operators setting out the formal requirements which should be fulfilled by the applications for participation in the procedure and tenders submitted by the Economic Operators;
- Terms of Reference (draft of contract);
- Template of Offer Form
- Template of Declaration of fulfilment of conditions for participation in the proceedings and lack of conditions for exclusion;
- Template of Declaration on the use of resources of another entity
- Template of Obligation of another third party to donate sufficient resources to the contractor for the purposes of Article 22a of the Polish Procurement Law.

Q&A

5

Risks and
mitigation

Risks and mitigation

Risk	Probability-Impact	Mitigation measure
Delay in providing the documents, data and information necessary for the implementation of the Contract	Low / High	<ul style="list-style-type: none"> • Agree a schedule of the documentation at the inception of the project • Agree milestones activities • Early warnings and continuous update on progress of data acquisition
Key Beneficiary representatives not available to carry out an audit of existing IT system	Low / High	<ul style="list-style-type: none"> • Agree availability of the key personnel • Request for someone else in the same organisation to provide support • Communicate project aim via lines of communication
Insufficient commitment or capacities of stakeholders for Project support	Medium / High	<ul style="list-style-type: none"> • Communicate the aim of the project and role of stakeholders involvement • Stakeholders are contacted and invited to the meetings as early as possible. • Select the stakeholders based on their level of use and understanding of BIM and manage their expectations
Complexity of the seminar and workshops	Low / Medium	<ul style="list-style-type: none"> • Participants will be provided with relevant material well in advance
Change of Beneficiary project team responsible for the project	Low / High	<ul style="list-style-type: none"> • Establish a decision-making team of several members on Beneficiary side in order to ensure project continuity (approval of documents, reports, etc.)
Divergence of opinions between the parties regarding the BIM implementation concept	Medium / Medium	<ul style="list-style-type: none"> • Establish the principles of cooperation i.e. Being responsible for the project delivery and its final substantive value, the Project Team is open to consider the substantive comments regarding the BIM implementation concept

Q&A

6

Open
questions

Key success
factors

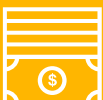
Open questions



Confidentiality agreement with stakeholders with whom templates of documents will be consulted



Option: Provide analysis of previous tender procedures with BIM requirements implemented on Polish market, reduce analysis of EU market (2 countries)



Attracting stakeholders for consultations



Workshop with the Ministry to discuss project objectives, outcomes, level of BIM use within the organisation



Support from the Ministry in terms of contacts with ministries and government agencies of the EU member states



Project communications strategy

Key success factors

Key success factors for implementation of BIM technology in Poland:



Capacity building
of administrative and
technical staff



Define guidelines for
implementation of pilot
project



Cooperation between
the Ministries

Q&A

Contact details



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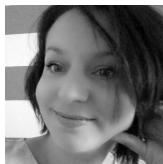


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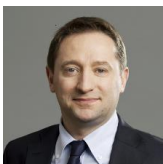


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Thank you!

