DELIVERABLE: D28 - D4.8

Review of the three-dimensional Matrix

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WP Leader: University of Zagreb, Faculty of Civil Engineering
Authors: CSA - CENTRO SERVIZI AZIENDALE - University of Zagreb, Faculty of Civil Engineering
Contribution: all partners

Network for Using BIM to Increase the Energy Performance

Grant Agreement Number: 754016
Net-UBIEP H2020

www.net-ubiep.eu
netubiep.project@net-ubiep.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

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The present deliverable will be update during the project in order to align the outcome to the market needs as well as to other BIM related projects realized within Horizon 2020 program.
The updated version of the deliverable will be only available in the website of the project www.net-ubiep.eu.
Some deliverables could also be translated in partners national languages and could be find in the respective national web pages. Click on the flags to open the correspondence pages:

International web page
Italian web page
Croatian web page
Slovak web page
Spanish web page
Dutch web page
Estonian web page
Lithuanian web page

NET UBIEP

Network for Using BIM to Increase the Energy Performance

3D Matrix

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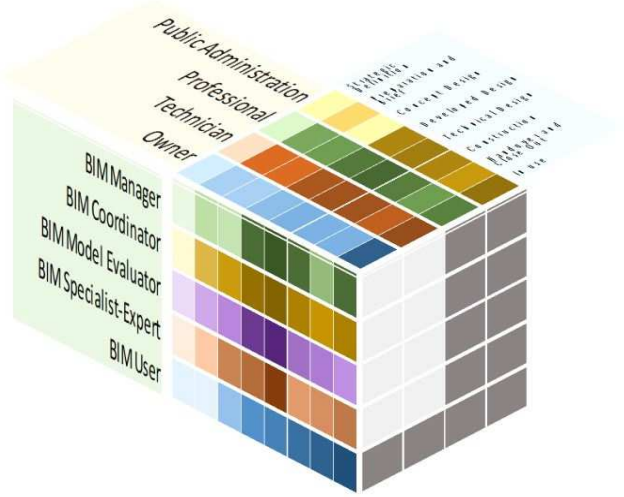
BIM Profiles	Strategic Definition	Preparation and Brief	Concept Design	Developed Design	Technical Design	Construction	Handover and Close Out	In use
BIM Manager								
BIM Coordinator								
BIM Model Evaluator								
BIM Specialist-Expert								
BIM User								

Target Group	Strategic Definition	Preparation and Brief	Concept Design	Developed Design	Technical Design	Construction	Handover and Close Out	In use
Public Administration								
Professional								
Technician								
Owner								

	Strategic Definition	Preparation and Brief	Concept Design	Developed Design	Technical Design	Construction	Handover and Close Out	In use
BIM Coordinator								
BIM Model Evaluator								
BIM Specialist-Expert								
BIM User								

	Owner	Technician	Professional	Public Administration
BIM Manager				
BIM Coordinator				
BIM Model Evaluator				
BIM Specialist-Expert				
BIM User				

	Strategic Definition	Preparation and Brief	Concept Design	Developed Design	Technical Design	Construction	Handover and Close Out	In use
Public Administration								
Professional								
Technician								
Owner								



EQF LEVELS

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LEGEND:	KNOWLEDGE		RESPONSABILITY AND AUTONOMY
	In the context of EQF, knowledge is described as theoretical and/or factual.	In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).	In the context of the EQF responsibility and autonomy is described as the ability of the learner to apply knowledge and skills autonomously and with responsibility
Level 1 The learning outcomes relevant to Level 1 are	basic general knowledge	basic skills required to carry out simple tasks	work or study under direct supervision in a structured context
Level 2 The learning outcomes relevant to Level 2 are	basic factual knowledge of a field of work or study	basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	work or study under supervision with some autonomy
Level 3 The learning outcomes relevant to Level 3 are	knowledge of facts, principles, processes and general concepts, in a field of work or study	a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	take responsibility for completion of tasks in work or study adapt own behaviour to circumstances in solving problems
Level 4 The learning outcomes relevant to Level 4 are	factual and theoretical knowledge in broad contexts within a field of work or study	a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
Level 5* The learning outcomes relevant to Level 5 are	comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	exercise management and supervision in contexts of work or study activities where there is unpredictable change review and develop performance of self and others
Level 6** The learning outcomes relevant to Level 6 are	advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups
Level 7*** The learning outcomes relevant to Level 7 are	highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research critical awareness of knowledge issues in a field and at the interface between different fields	specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams
Level 8**** The learning outcomes relevant to Level 8 are	knowledge at the most advanced frontier of a field of work or study and at the interface between fields	the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

NET UBIEP

Network for Using BIM to Increase the Energy Performance

Competences & Learning outcomes

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754076

Public Administration

N	Competence	Learning outcome (D3.2-A)					
C0	Have basic BIM knowledge and skills	PA.L01	PA.L02	PA.L03	PA.L04	PA.L05	PA.L06
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition						
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings						
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout						
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines						
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses						
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance						
C0.S1	Read a BIM Execution Plan (BEP)						
C0.S2	Read a Information Delivery Manual						
C0.S3	Identify information requirements for his own role						
C0.S4	Identify the format to read information and transfer information within the supply chain						
C0.S5	Identify the EIR (Employer Information Requirements)						
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)						
C1	Understand BIM tools	PA.L01	PA.L02	PA.L03	PA.L04	PA.L05	PA.L06
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment						
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software						
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies						
C2	Apply information management	PA.L01	PA.L02	PA.L03	PA.L04	PA.L05	PA.L06
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)						
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design						
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)						
C2.K4	Principle of information management in building sustainability and lean design						
C2.K5	Principle of reusing and recycling of materials and components of a building						
C2.S1	Manage and coordinate information related to energy performance						
C2.S6	Verify the correspondence between the "as built" and the final BIM model						
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals						
C2.S11	Use BIM for assessing the reusability and recycling of building materials and components						

Network for Using BIM to Increase the Energy Performance

Competences & Learning outcomes

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Public Administration

N	Competence	Learning outcome (D3.2-A)					
C3	Apply procurement management	PA.L01	PA.L02	PA.L03	PA.L04	PA.L05	PA.L06
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers						
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good						
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM						
C3.S1	Select or evaluate selected companies with experience in the technologies defined						
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and						
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees						
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met						
C3.S6	Include measureable Quality Analysis criteria as part of the contract						
C4	Use BIM technology	PA.L01	PA.L02	PA.L03	PA.L04	PA.L05	PA.L06
C4.K7	Techniques of automatic code checking and management of software e-permit						
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level						
C4.S10	Use 4D and 5D BIM technologies to evaluate time and cost						
C5	Analyse the BIM Model	PA.L01	PA.L02	PA.L03	PA.L04	PA.L05	PA.L06
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC						
C5.S1	Coordinate the work of different disciplines in order to obtain a consolidate BIM model that satisfy all the requirements						
C5.S2	Apply Quality Management and coordinate team members of different disciplines						
C5.S6	Use BIM models to communicate installation instructions						

BACK EXTRACT

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Network for Using BIM to Increase the Energy Performance

Competences & Learning outcomes

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Professional

N	Competence	Learning outcome (D3.2-A)											
C0	Have basic BIM knowledge and skills	PR.L01	PR.L02	PR.L03	PR.L04	PR.L05	PR.L06	PR.L07	PR.L08	PR.L09	PR.L10	PR.L11	PR.L12
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition												
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings												
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the												
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines												
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses												
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance												
C0.S1	Read a BIM Execution Plan (BEP)												
C0.S2	Read a Information Delivery Manual												
C0.S3	Identify information requirements for his own role												
C0.S4	Identify the format to read information and transfer information within the supply chain												
C0.S5	Identify the EIR (Employer Information Requirements)												
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)												
C1	Understand BIM tools	PR.L01	PR.L02	PR.L03	PR.L04	PR.L05	PR.L06	PR.L07	PR.L08	PR.L09	PR.L10	PR.L11	PR.L12
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment												
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software												
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies												
C1.S3	Decrease the life cycle cost of the building using methods described in ISO 15686-5												
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5												
C2	Apply information management	PR.L01	PR.L02	PR.L03	PR.L04	PR.L05	PR.L06	PR.L07	PR.L08	PR.L09	PR.L10	PR.L11	PR.L12
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)												
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design												
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)												
C2.K4	Principle of information management in building sustainability and lean design												
C2.S1	Manage and coordinate information related to energy performance												
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the												
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use												
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)												
C2.S6	Verify the correspondence between the "as built" and the final BIM model												
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the												
C2.S8	Transfer building information using BIM to facility managers and final users												
C2.S9	Ensure that construction process and product information is transferred into BIM Model / Technical Specifications and provide												

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Professional

N	Competence	Learning outcome (D3.2-A)											
C2.S10	Ensure the update of the BIM Model / Technical Specification when a maintenance is performed												
C2.S11	Use BIM for assessing the reusability and recycling of building materials and components												
C2.S12	Develop a CDE (Common Data Environment) to exchange data through the building life cycle as well as through the supply chain												
C3	Apply procurement management	PR.L01	PR.L02	PR.L03	PR.L04	PR.L05	PR.L06	PR.L07	PR.L08	PR.L09	PR.L10	PR.L11	PR.L12
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers												
C3.K2	Processes, methods and principles of decision-making on materials and products												
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM												
C3.S1	Select or evaluate selected companies with experience in the technologies defined												
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase												
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving												
C3.S5	Define building environmental impact as part of the contract												
C4	Use BIM technology	PR.L01	PR.L02	PR.L03	PR.L04	PR.L05	PR.L06	PR.L07	PR.L08	PR.L09	PR.L10	PR.L11	PR.L12
C4.K1	Techniques and principles of integrated digital production and rendering												
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using												
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)												
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation												
C4.K5	Principles and systems of sustainable buildings, including renewable energy production												
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing												
C4.K7	Techniques of automatic code checking and management of software e-permit												
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level												
C4.S1	Produce a digital 3D model of building / any BIM objects needed for the library in the Common Data Environment												
C4.S2	Develop a BEP (BIM Execution Plan)												
C4.S3	Develop site utilization planning, set-up organized management systems, tack the effectiveness distribution of appropriate spaces												
C4.S4	Use laser scanning in order to produce a point of cloud of existing buildings, comparing and evaluating facilities and related systems												
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact												
C4.S6	Integrate different RES (Renewable Energy Sources) and energy efficiency systems into buildings without clash detection												
C4.S7	Produce a maintenance plan and a maintenance manual for building systems												
C4.S8	Produce a visualization design in order to report back to costumers, users and reviewers												
C4.S9	Use code checking to verify the respect of energy performance requirements												
C4.S10	Use 4D and 5D BIM technologies to evaluate time and cost												
C5	Analyse the BIM Model	PR.L01	PR.L02	PR.L03	PR.L04	PR.L05	PR.L06	PR.L07	PR.L08	PR.L09	PR.L10	PR.L11	PR.L12
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and												
C5.K2	Techniques of passive measures needed for the management of nZEB												
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using												
C5.S1	Coordinate the work of different disciplines in order to obtain a consolidate BIM model that satisfy all the requirements												
C5.S2	Apply Quality Management and coordinate team members of different disciplines												
C5.S3	Apply BIM enabled energy and lighting analysis with periodic monitoring												
C5.S4	Validate BIM Model												
C5.S5	Use BIM to assure the technical supervision of construction works												
C5.S6	Use BIM models to communicate installation instructions												

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Network for Using BIM to Increase the Energy Performance

Competences & Learnign outcomes

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Technician

N	Competence	Learning outcome (D3.2-A)				
C0	Have basic BIM knowledge and skills	TE.L01	TE.L02	TE.L03	TE.L04	TE.L05
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition					
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings					
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle					
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines					
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses					
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance					
C0.S1	Read a BIM Execution Plan (BEP)					
C0.S2	Read a Information Delivery Manual					
C0.S3	Identify information requirements for his own role					
C0.S4	Identify the format to read information and transfer information within the supply chain					
C2	Apply information management	TE.L01	TE.L02	TE.L03	TE.L04	TE.L05
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design					
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)					
C2.K4	Principle of information management in building sustainability and lean design					
C2.K5	Principle of reusing and recycling of materials and components of a building					
C2.S1	Manage and coordinate information related to energy performance					
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery					
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use					
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)					
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process					
C2.S9	Ensure that construction process and product information is transferred into BIM Model / Technical Specifications and provide status of works when request					
C3	Apply procurement management	TE.L01	TE.L02	TE.L03	TE.L04	TE.L05
C3.K2	Processes, methods and principles of decision-making on materials and products					
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase					
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan					
C4	Use BIM technology	TE.L01	TE.L02	TE.L03	TE.L04	TE.L05
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation					
C4.K5	Principles and systems of sustainable buildings, including renewable energy production					
C4.S4	Use laser scanning in order to produce a point of cloud of existing buildings, comparing and evaluating facilities and related systems					
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact					
C5	Analyse the BIM Model	TE.L01	TE.L02	TE.L03	TE.L04	TE.L05
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)					
C5.S6	Use BIM models to communicate installation instructions					

BACK EXTRACT

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Competences & Learning outcomes

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Owner

N	Competence	Learning outcome (D3.2-A)							
C0	Have basic BIM knowledge and skills	OW.LO1	OW.LO2	OW.LO3	OW.LO4	OW.LO5	OW.LO6	OW.LO7	OW.LO8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C1	Understand BIM tools	OW.LO1	OW.LO2	OW.LO3	OW.LO4	OW.LO5	OW.LO6	OW.LO7	OW.LO8
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S3	Decrease the life cycle cost of the building using methods described in ISO 15686-5								
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5								
C2	Apply information management	OW.LO1	OW.LO2	OW.LO3	OW.LO4	OW.LO5	OW.LO6	OW.LO7	OW.LO8
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								
C2.K5	Principle of reusing and recycling of materials and components of a building								
C2.S1	Manage and coordinate information related to energy performance								
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the								
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use								
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)								
C2.S5	Evaluate the completeness of the handover strategy								
C2.S6	Verify the correspondence between the "as built" and the final BIM model								
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process								
C2.S11	Use BIM for assessing the reusability and recycling of building materials and components								

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Owner

N	Competence	Learning outcome (D3.2-A)							
C3	Apply procurement management	OW.LO1	OW.LO2	OW.LO3	OW.LO4	OW.LO5	OW.LO6	OW.LO7	OW.LO8
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers								
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance								
C3.S1	Select or evaluate selected companies with experience in the technologies defined								
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the								
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees								
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met								
C4	Use BIM technology	OW.LO1	OW.LO2	OW.LO3	OW.LO4	OW.LO5	OW.LO6	OW.LO7	OW.LO8
C4.K5	Principles and systems of sustainable buildings, including renewable energy production								
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact								
C4.S10	Use 4D and 5D BIM technologies to evaluate time and cost								
C5	Analyse the BIM Model	OW.LO1	OW.LO2	OW.LO3	OW.LO4	OW.LO5	OW.LO6	OW.LO7	OW.LO8
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation								
C5.K2	Techniques of passive measures needed for the management of nZEB								
C5.S6	Use BIM models to communicate installation instructions								

BACK EXTRACT

NET UBIEP
Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Manager

Strategic Definition

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C1.S3	Decrease the life cycle cost of the building using methods described in ISO 15686-5								
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5								
C2	Apply information management								

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Strategic Definition

N	Competence	EQF Level
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	
C2.K4	Principle of information management in building sustainability and lean design	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	

BACK EXTRACT

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Strategic Definition

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Strategic Definition

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C2.S12	Develop a CDE (Common Data Environment) to exchange data through the building life cycle as well as through the supply chain	
C3	Apply procurement management	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	

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Network for Using BIM to Increase the Energy Performance

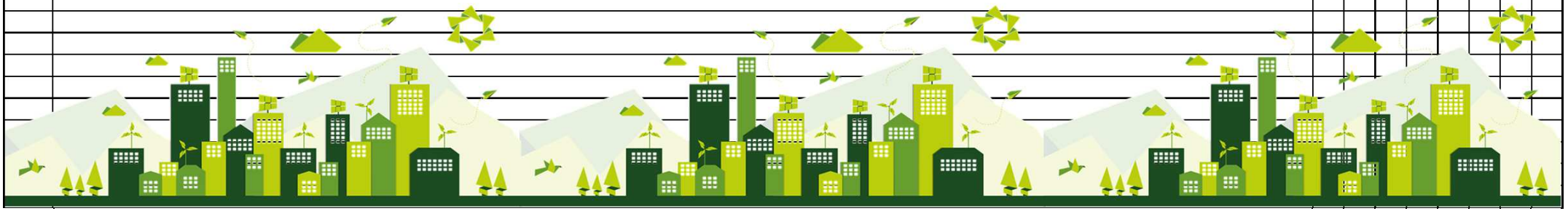
List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Strategic Definition

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								



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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Strategic Definition

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	

BACK EXTRACT

NET UBIEP
Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Strategic Definition

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K4	Principle of information management in building sustainability and lean design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Strategic Definition

N	Competence	EQF Level
C2.S12	Develop a CDE (Common Data Environment) to exchange data through the building life cycle as well as through the supply chain	
C3	Apply procurement management	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Strategic Definition

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■					
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■				
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■					
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■				
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■					
C0.S2	Read a Information Delivery Manual	■	■	■					
C0.S3	Identify information requirements for his own role	■	■	■					
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■					
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■						
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	■	■	■					
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■	■			
C3	Apply procurement management								
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	■	■	■	■	■			

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Preparation and Brief

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C1.S3	Decrease the life cycle cost of the building using methods described in ISO 15686-5								
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5								
C2	Apply information management								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Preparation and Brief

N	Competence	EQF Level
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	
C2.K4	Principle of information management in building sustainability and lean design	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.S2	Develop a BEP (BIM Execution Plan)	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	

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NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Preparation and Brief

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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Network for Using BIM to Increase the Energy Performance

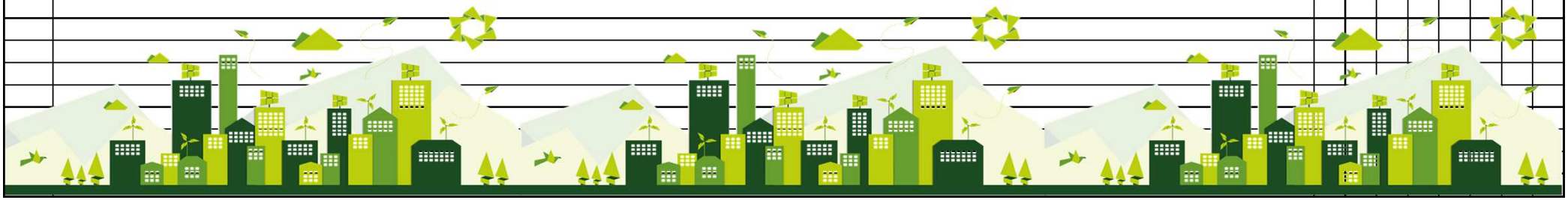
List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Preparation and Brief

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C2.S12	Develop a CDE (Common Data Environment) to exchange data through the building life cycle as well as through the supply chain	
C3	Apply procurement management	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	
C4.S2	Develop a BEP (BIM Execution Plan)	
C4.S10	Use 4D and 5D BIM technologies to evaluate time and cost	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.S2	Apply Quality Management and coordinate team members of different disciplines	



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NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Preparation and Brief

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■	■	■	■		
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■	■	■		
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■	■	■			
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■	■	■		
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses	■	■	■	■	■			
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■	■	■			
C0.S1	Read a BIM Execution Plan (BEP)	■	■	■	■	■	■		
C0.S2	Read a Information Delivery Manual	■	■	■	■	■	■		
C0.S3	Identify information requirements for his own role	■	■	■	■	■	■		
C0.S4	Identify the format to read information and transfer information within the supply chain	■	■	■	■	■	■		
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■	■	■			
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■	■	■	■			
C1	Understand BIM tools								
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment	■	■	■	■	■			
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies	■	■	■	■	■			
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5	■	■	■	■	■			
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	■	■	■	■	■	■		
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	■	■	■	■	■			

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Preparation and Brief

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C4	Use BIM technology	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.S8	Produce a visualization design in order to report back to costumers, users and reviewers	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Preparation and Brief

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Preparation and Brief

N	Competence	EQF Level
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S12	Develop a CDE (Common Data Environment) to exchange data through the building life cycle as well as through the supply chain	
C3	Apply procurement management	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	
C4.S4	Use laser scanning in order to produce a point of cloud of existing buildings, comparing and evaluating facilities and related systems	
C4.S10	Use 4D and 5D BIM technologies to evaluate time and cost	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	

BACK EXTRACT

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Preparation and Brief

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■					
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■				
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■					
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■				
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■					
C0.S2	Read a Information Delivery Manual	■	■	■					
C0.S3	Identify information requirements for his own role	■	■	■					
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■					
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■						
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	■	■	■					
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■				
C3	Apply procurement management								
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	■	■	■	■				

BACK EXTRACT

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Concept Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Concept Design

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C4	Use BIM technology	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.S2	Develop a BEP (BIM Execution Plan)	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Concept Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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List of Competences

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BIM Coordinator

Concept Design

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C2.S12	Develop a CDE (Common Data Environment) to exchange data through the building life cycle as well as through the supply chain	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S1	Produce a digital 3D model of building / any BIM objects needed for the library in the Common Data Environment	
C4.S2	Develop a BEP (BIM Execution Plan)	
C5	Analyse the BIM Model	

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BIM Coordinator

Concept Design

N	Competence	EQF Level
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Model Evaluator

Concept Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■	■	■	■		
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■	■	■		
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■	■	■			
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■	■	■		
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses	■	■	■	■	■			
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■	■	■			
C0.S1	Read a BIM Execution Plan (BEP)	■	■	■	■	■	■		
C0.S2	Read a Information Delivery Manual	■	■	■	■	■	■		
C0.S3	Identify information requirements for his own role	■	■	■	■	■	■		
C0.S4	Identify the format to read information and transfer information within the supply chain	■	■	■	■	■	■		
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■	■	■			
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■	■	■	■			
C1	Understand BIM tools								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies	■	■	■	■	■			
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	■	■	■	■	■	■		
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	■	■	■	■	■			
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■	■	■		
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	■	■	■	■	■	■		

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List of Competences

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BIM Model Evaluator

Concept Design

N	Competence	EQF Level
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S5	Define building environmental impact as part of the contract	
C4	Use BIM technology	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S8	Produce a visualization design in order to report back to costumers, users and reviewers	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

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BIM Specialist-Expert

Concept Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								

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Network for Using BIM to Increase the Energy Performance

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BIM Specialist-Expert

Concept Design

N	Competence	EQF Level
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S12	Develop a CDE (Common Data Environment) to exchange data through the building life cycle as well as through the supply chain	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S1	Produce a digital 3D model of building / any BIM objects needed for the library in the Common Data Environment	
C4.S4	Use laser scanning in order to produce a point of cloud of existing buildings, comparing and evaluating facilities and related systems	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

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BIM User

Concept Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■					
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■				
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■					
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■				
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■					
C0.S2	Read a Information Delivery Manual	■	■	■					
C0.S3	Identify information requirements for his own role	■	■	■					
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■					
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■						
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	■	■	■					
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■				
C3	Apply procurement management								
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	■	■	■	■				
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	■	■	■	■				
C3.S5	Define building environmental impact as part of the contract	■	■	■	■				
C4	Use BIM technology								
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	■	■	■	■				

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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Manager

Developed Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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BIM Manager

Developed Design

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S1	Select or evaluate selected companies with experience in the technologies defined	
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C3.S6	Include measureable Quality Analysis criteria as part of the contract	
C4	Use BIM technology	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level	

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List of Competences

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BIM Manager

Developed Design

N	Competence	EQF Level
C4.S2	Develop a BEP (BIM Execution Plan)	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	

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Network for Using BIM to Increase the Energy Performance

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BIM Coordinator

Developed Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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BIM Coordinator

Developed Design

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S1	Select or evaluate selected companies with experience in the technologies defined	
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	

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BIM Coordinator

Developed Design

N	Competence	EQF Level
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level	
C4.S1	Produce a digital 3D model of building / any BIM objects needed for the library in the Common Data Environment	
C4.S2	Develop a BEP (BIM Execution Plan)	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C4.S6	Integrate different RES (Renewable Energy Sources) and energy efficiency systems into buildings without clash detection	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S1	Coordinate the work of different disciplines in order to obtain a consolidate BIM model that satisfy all the requirements	
C5.S2	Apply Quality Management and coordinate team members of different disciplines	
C5.S4	Validate BIM Model	

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BIM Model Evaluator

Developed Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■	■	■	■		
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■	■	■		
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■	■	■			
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■	■	■		
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses	■	■	■	■	■			
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■	■	■			
C0.S1	Read a BIM Execution Plan (BEP)	■	■	■	■	■	■		
C0.S2	Read a Information Delivery Manual	■	■	■	■	■	■		
C0.S3	Identify information requirements for his own role	■	■	■	■	■	■		
C0.S4	Identify the format to read information and transfer information within the supply chain	■	■	■	■	■	■		
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■	■	■			
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■	■	■	■			
C1	Understand BIM tools								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies	■	■	■	■	■			
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	■	■	■	■	■	■		
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	■	■	■	■	■			
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■	■	■		
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	■	■	■	■	■	■		

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Developed Design

N	Competence	EQF Level
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S5	Define building environmental impact as part of the contract	
C3.S6	Include measureable Quality Analysis criteria as part of the contract	
C4	Use BIM technology	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level	
C4.S8	Produce a visualization design in order to report back to costumers, users and reviewers	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Developed Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Developed Design

N	Competence	EQF Level
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S1	Produce a digital 3D model of building / any BIM objects needed for the library in the Common Data Environment	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C4.S6	Integrate different RES (Renewable Energy Sources) and energy efficiency systems into buildings without clash detection	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Developed Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K4	Principle of information management in building sustainability and lean design								
C2.S1	Manage and coordinate information related to energy performance								
C3	Apply procurement management								
C3.K2	Processes, methods and principles of decision-making on materials and products								
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting								
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation								
C3.S5	Define building environmental impact as part of the contract								
C3.S6	Include measureable Quality Analysis criteria as part of the contract								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Developed Design

N	Competence	EQF Level
C4	Use BIM technology	
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Technical Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Technical Design

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S1	Select or evaluate selected companies with experience in the technologies defined	
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C3.S6	Include measureable Quality Analysis criteria as part of the contract	
C4	Use BIM technology	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level	

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BIM Manager

Technical Design

N	Competence	EQF Level
C4.S2	Develop a BEP (BIM Execution Plan)	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S6	Use BIM models to communicate installation instructions	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Technical Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Technical Design

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S1	Select or evaluate selected companies with experience in the technologies defined	
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	

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List of Competences

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BIM Coordinator

Technical Design

N	Competence	EQF Level
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level	
C4.S1	Produce a digital 3D model of building / any BIM objects needed for the library in the Common Data Environment	
C4.S2	Develop a BEP (BIM Execution Plan)	
C4.S3	Develop site utilization planning, set-up organized management systems, tack the effectiveness distribution of appropriate spaces and related resources	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C4.S6	Integrate different RES (Renewable Energy Sources) and energy efficiency systems into buildings without clash detection	
C4.S7	Produce a maintenance plan and a maintenance manual for building systems	
C4.S9	Use code checking to verify the respect of energy performance requirements	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S1	Coordinate the work of different disciplines in order to obtain a consolidate BIM model that satisfy all the requirements	
C5.S2	Apply Quality Management and coordinate team members of different disciplines	
C5.S4	Validate BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Technical Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■	■	■	■		
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■	■	■		
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■	■	■			
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■	■	■		
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses	■	■	■	■	■			
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■	■	■			
C0.S1	Read a BIM Execution Plan (BEP)	■	■	■	■	■	■		
C0.S2	Read a Information Delivery Manual	■	■	■	■	■	■		
C0.S3	Identify information requirements for his own role	■	■	■	■	■	■		
C0.S4	Identify the format to read information and transfer information within the supply chain	■	■	■	■	■	■		
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■	■	■			
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■	■	■	■			
C1	Understand BIM tools								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies	■	■	■	■	■			
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	■	■	■	■	■	■		
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	■	■	■	■	■			
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■	■	■		
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	■	■	■	■	■	■		

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List of Competences

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BIM Model Evaluator

Technical Design

N	Competence	EQF Level
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S5	Define building environmental impact as part of the contract	
C3.S6	Include measureable Quality Analysis criteria as part of the contract	
C4	Use BIM technology	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.K8	Principle of information maturity level representation of the model defining the methodology for BIM maturity level	
C4.S8	Produce a visualization design in order to report back to costumers, users and reviewers	
C4.S9	Use code checking to verify the respect of energy performance requirements	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Technical Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								

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BIM Specialist-Expert

Technical Design

N	Competence	EQF Level
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K2	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C4.K4	Principles of interplays between all aspects of building design, building use and outdoor climate for dynamic evaluation	
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S1	Produce a digital 3D model of building / any BIM objects needed for the library in the Common Data Environment	
C4.S3	Develop site utilization planning, set-up organized management systems, tack the effectiveness distribution of appropriate spaces and related resources	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C4.S6	Integrate different RES (Renewable Energy Sources) and energy efficiency systems into buildings without clash detection	
C4.S9	Use code checking to verify the respect of energy performance requirements	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	

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BIM Specialist-Expert

Technical Design

N	Competence	EQF Level
C5.S4	Validate BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Technical Design

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K4	Principle of information management in building sustainability and lean design								
C2.S1	Manage and coordinate information related to energy performance								
C3	Apply procurement management								
C3.K2	Processes, methods and principles of decision-making on materials and products								
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting								
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation								
C3.S5	Define building environmental impact as part of the contract								
C3.S6	Include measureable Quality Analysis criteria as part of the contract								

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Technical Design

N	Competence	EQF Level
C4	Use BIM technology	
C4.K5	Principles and systems of sustainable buildings, including renewable energy production	
C5	Analyse the BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

BACK EXTRACT

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Construction

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Construction

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S1	Select or evaluate selected companies with experience in the technologies defined	
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees	
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C4	Use BIM technology	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Construction

N	Competence	EQF Level
C5.S5	Use BIM to assure the technical supervision of construction works	
C5.S6	Use BIM models to communicate installation instructions	

BACK EXTRACT

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Construction

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Construction

N	Competence	Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C2.S9	Ensure that construction process and product information is transferred into BIM Model / Technical Specifications and provide status of works when request	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S1	Select or evaluate selected companies with experience in the technologies defined	
C3.S2	Select products that fit specifications and demands on given quality aspects making financial calculation related to contracting phase	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	

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List of Competences

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BIM Coordinator

Construction

N	Competence	EQF Level
C4.S3	Develop site utilization planning, set-up organized management systems, tack the effectiveness distribution of appropriate spaces and related resources	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S1	Coordinate the work of different disciplines in order to obtain a consolidate BIM model that satisfy all the requirements	
C5.S2	Apply Quality Management and coordinate team members of different disciplines	
C5.S4	Validate BIM Model	
C5.S5	Use BIM to assure the technical supervision of construction works	
C5.S6	Use BIM models to communicate installation instructions	

BACK EXTRACT

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Construction

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Construction

N	Competence	EQF Level
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C3	Apply procurement management	
C3.K1	Processes, methods and principles of decision-making on procuring services and suppliers	
C3.K2	Processes, methods and principles of decision-making on materials and products	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S5	Define building environmental impact as part of the contract	
C4	Use BIM technology	
C4.K3	Principle of planning and scheduling for BEP (BIM Execution Plan)	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S8	Produce a visualization design in order to report back to costumers, users and reviewers	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Construction

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Construction

N	Competence	EQF Level
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S3	Develop site utilization planning, set-up organized management systems, tack the effectiveness distribution of appropriate spaces and related resources	
C4.S4	Use laser scanning in order to produce a point of cloud of existing buildings, comparing and evaluating facilities and related systems	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Construction

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■						
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■					
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■						
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■					
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■						
C0.S2	Read a Information Delivery Manual	■	■						
C0.S3	Identify information requirements for his own role	■	■						
C0.S5	Identify the EIR (Employer Information Requirements)	■	■						
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■							
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	■	■						
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■				
C2.S1	Manage and coordinate information related to energy performance	■	■	■	■				
C2.S9	Ensure that construction process and product information is transferred into BIM Model / Technical Specifications and provide status of works when request	■	■	■					
C3	Apply procurement management								
C3.K2	Processes, methods and principles of decision-making on materials and products	■	■						
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	■	■	■	■				
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	■	■	■	■				
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees	■	■	■	■				

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List of Competences

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BIM User

Construction

N	Competence	EQF Level
C3.S5	Define building environmental impact as part of the contract	
C5	Analyse the BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Handover and Close Out

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Manager

Handover and Close Out

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S5	Evaluate the completeness of the handover strategy	
C2.S6	Verify the correspondence between the "as built" and the final BIM model	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees	
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S6	Use BIM models to communicate installation instructions	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Coordinator

Handover and Close Out

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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List of Competences

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BIM Coordinator

Handover and Close Out

N	Competence	Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S5	Evaluate the completeness of the handover strategy	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S6	Verify the correspondence between the "as built" and the final BIM model	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	

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List of Competences

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BIM Coordinator

Handover and Close Out

N	Competence	EQF Level
C5.S3	Apply BIM enabled energy and lighting analysis with periodic monitoring	
C5.S4	Validate BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Handover and Close Out

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■	■	■	■	■	
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■	■	■	■	
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■	■	■			
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■	■	■	■	
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses	■	■	■	■	■			
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■	■	■			
C0.S1	Read a BIM Execution Plan (BEP)	■	■	■	■	■	■	■	
C0.S2	Read a Information Delivery Manual	■	■	■	■	■	■	■	
C0.S3	Identify information requirements for his own role	■	■	■	■	■	■	■	
C0.S4	Identify the format to read information and transfer information within the supply chain	■	■	■	■	■	■	■	
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■	■	■			
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■	■	■	■			
C1	Understand BIM tools								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies	■	■	■	■	■	■		
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	■	■	■	■	■	■	■	
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	■	■	■	■	■	■		
C2.K4	Principle of information management in building sustainability and lean design	■	■	■	■	■	■	■	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	■	■	■	■	■	■	■	

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

Handover and Close Out

N	Competence	EQF Level
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S5	Evaluate the completeness of the handover strategy	
C2.S6	Verify the correspondence between the "as built" and the final BIM model	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S5	Define building environmental impact as part of the contract	
C4	Use BIM technology	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S8	Produce a visualization design in order to report back to costumers, users and reviewers	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

Handover and Close Out

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■	■	■	■			
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■	■	■			
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■	■				
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■	■	■			
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses	■	■	■	■				
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■	■	■				
C0.S1	Read a BIM Execution Plan (BEP)	■	■	■	■	■			
C0.S2	Read a Information Delivery Manual	■	■	■	■	■			
C0.S3	Identify information requirements for his own role	■	■	■	■	■			
C0.S4	Identify the format to read information and transfer information within the supply chain	■	■	■	■	■			
C0.S5	Identify the EIR (Employer Information Requirements)	■	■	■	■				
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■	■	■					
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software	■	■	■	■	■			
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies	■	■	■	■				
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	■	■	■	■	■			
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	■	■	■	■				
C2.K4	Principle of information management in building sustainability and lean design	■	■	■					

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List of Competences

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BIM Specialist-Expert

Handover and Close Out

N	Competence	EQF Level
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S5	Evaluate the completeness of the handover strategy	
C2.S6	Verify the correspondence between the "as built" and the final BIM model	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S4	Use laser scanning in order to produce a point of cloud of existing buildings, comparing and evaluating facilities and related systems	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S3	Apply BIM enabled energy and lighting analysis with periodic monitoring	
C5.S4	Validate BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

Handover and Close Out

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition	■	■						
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings	■	■	■					
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle	■	■	■	■				
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines	■	■	■					
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance	■	■						
C0.S2	Read a Information Delivery Manual	■	■						
C0.S3	Identify information requirements for his own role	■	■						
C0.S5	Identify the EIR (Employer Information Requirements)	■	■						
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)	■							
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	■	■						
C2.K4	Principle of information management in building sustainability and lean design	■	■	■					
C2.S1	Manage and coordinate information related to energy performance	■	■	■					
C2.S5	Evaluate the completeness of the handover strategy	■	■						
C2.S6	Verify the correspondence between the "as built" and the final BIM model	■	■	■					
C3	Apply procurement management								
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	■	■	■					
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	■	■	■					
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees	■	■	■					

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BIM User

Handover and Close Out

N	Competence	EQF Level
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C3.S5	Define building environmental impact as part of the contract	
C5	Analyse the BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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List of Competences

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BIM Manager

In Use

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C1.S3	Decrease the life cycle cost of the building using methods described in ISO 15686-5								
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5								
C2	Apply information management								

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BIM Manager

In Use

N	Competence	EQF Level
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)	
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design	
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)	
C2.K4	Principle of information management in building sustainability and lean design	
C2.K5	Principle of reusing and recycling of materials and components of a building	
C2.S1	Manage and coordinate information related to energy performance	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C3	Apply	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees	
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K2	Techniques of passive measures needed for the management of nZEB	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	

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BIM Manager

In Use

N	Competence	EQF Level
C5.S6	Use BIM models to communicate installation instructions	

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List of Competences

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BIM Coordinator

In Use

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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BIM Coordinator

In Use

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S1	Manage and coordinate information related to energy performance	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C2.S8	Transfer building information using BIM to facility managers and final users	
C2.S10	Ensure the update of the BIM Model / Technical Specification when a maintenance is performed	
C2.S11	Use BIM for assessing the reusability and recycling of building materials and components	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.K4	Strategies for training programs to increase energy efficiency with the support of BIM	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C4.S6	Integrate different RES (Renewable Energy Sources) and energy efficiency systems into buildings without clash detection	
C5	Analyse the BIM Model	

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List of Competences

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BIM Coordinator

In Use

N	Competence	EQF Level
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K2	Techniques of passive measures needed for the management of nZEB	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S1	Coordinate the work of different disciplines in order to obtain a consolidate BIM model that satisfy all the requirements	
C5.S2	Apply Quality Management and coordinate team members of different disciplines	
C5.S3	Apply BIM enabled energy and lighting analysis with periodic monitoring	
C5.S4	Validate BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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Network for Using BIM to Increase the Energy Performance

List of Competences

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Model Evaluator

In Use

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.K1	Principle of economic subjects for the cost estimation and evaluation of energy refurbishment								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C1.S4	Evaluate and compare different plans and related Return of Investments using methods described in ISO 15686-5								
C2	Apply information management								
C2.K1	Principle of data mining, data base and back up in the CDE (Common Data Environment)								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								

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List of Competences

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BIM Model Evaluator

In Use

N	Competence	EQF Level
C2.K4	Principle of information management in building sustainability and lean design	
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S3	Archive the model ensuring that the information provided is kept intact and not manipulated for any future use	
C2.S7	Identify requirements for the management of data in the CDE (Common Data Environment) for any professionals involved in the process	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C4	Use BIM technology	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K2	Techniques of passive measures needed for the management of nZEB	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S4	Validate BIM Model	

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Network for Using BIM to Increase the Energy Performance

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM Specialist-Expert

In Use

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K5	Methodology to identify, plan, develop and evaluate organization's BIM implementation capabilities and BIM uses								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S1	Read a BIM Execution Plan (BEP)								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S4	Identify the format to read information and transfer information within the supply chain								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C1	Understand BIM tools								
C1.S1	Specialised skills to incorporate information into BIM Model, evaluating openBIM software								
C1.S2	Stay up to date on BIM trends, current developments and new directions of BIM technologies								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K3	Principle of data security and administrative law in the archiving of data in a CDE (Common Data Environment)								
C2.K4	Principle of information management in building sustainability and lean design								

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BIM Specialist-Expert

In Use

N	Competence	EQF Level
C2.S2	Identify which graphic and/or non-graphic information are necessary for a better management of works and for define the completeness of the Information Delivery Plan in relation to	
C2.S4	Evaluate the completeness of the maintenance plan to be used in EPC (Energy Performance Contracting)	
C2.S11	Use BIM for assessing the reusability and recycling of building materials and components	
C3	Apply procurement management	
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting	
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation	
C4	Use BIM technology	
C4.K1	Techniques and principles of integrated digital production and rendering	
C4.K6	Design techniques for different scenarios for new resilient buildings to future climate changes and for the refurbishment of existing buildings	
C4.K7	Techniques of automatic code checking and management of software e-permit	
C4.S4	Use laser scanning in order to produce a point of cloud of existing buildings, comparing and evaluating facilities and related systems	
C4.S5	Use BIM enabled simulation techniques to reduce the environmental impact	
C4.S6	Integrate different RES (Renewable Energy Sources) and energy efficiency systems into buildings without clash detection	
C5	Analyse the BIM Model	
C5.K1	Principle of global environmental impact of different building products and technologies (RES use, insulation, HVAC systems and building automation systems)	
C5.K3	Principle of integrated design and data transferring, with particular knowledge of IFC (Industry Foundation Classes) structure using international standard	
C5.S3	Apply BIM enabled energy and lighting analysis with periodic monitoring	
C5.S4	Validate BIM Model	
C5.S6	Use BIM models to communicate installation instructions	

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BIM User

In Use

N	Competence	EQF Level							
C0	Have basic BIM knowledge and skills	1	2	3	4	5	6	7	8
C0.K1	BIM basic concepts, terminology, principles, strategies and its value proposition								
C0.K2	Benefits and uses of BIM compared to traditional methods for improving energy efficiency of new or existing buildings								
C0.K3	Project information development cycle: information specification, development, exchange and maintenance throughout all the building life cycle								
C0.K4	Reasons for open and interoperable solutions to ensure collaboration among professionals of different disciplines								
C0.K6	Relevance of maintenance for maintaing the foreseen energy performance								
C0.S2	Read a Information Delivery Manual								
C0.S3	Identify information requirements for his own role								
C0.S5	Identify the EIR (Employer Information Requirements)								
C0.S6	Identify and/or verify the stages of PIM (Project Information Management)								
C2	Apply information management								
C2.K2	Principle of data transferring among different software and/or data federating into an integrated design								
C2.K4	Principle of information management in building sustainability and lean design								
C2.K5	Principle of reusing and recycling of materials and components of a building								
C2.S1	Manage and coordinate information related to energy performance								
C2.S10	Ensure the update of the BIM Model / Technical Specification when a maintenance is performed								
C3	Apply procurement management								
C3.K3	Legal and technical aspects on green procurement, state and rules for using public funding and international good practices of energy performance contracting								
C3.S3	List and collaborate with several stakeholders who participate in the sustainable project, distinguishing roles/needs and involving them in the information delivery plan preparation								
C3.S4	Apply change management, identifying and handling deviations / breach of the contract with particular guarantees								

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.754016

BIM User

In Use

N	Competence	EQF Level
C3.S5	Negotiate and take necessary legal steps if the contractual requirements were not met	
C5	Analyse the BIM Model	
C5.K2	Techniques of passive measures needed for the management of nZEB	
C5.S6	Use BIM models to communicate installation instructions