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3D Matrix

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Network for Using BIM to Increase the Energy Performance

Grant Agreement Number: 754016
Net-UBIEP H2020

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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*

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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

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

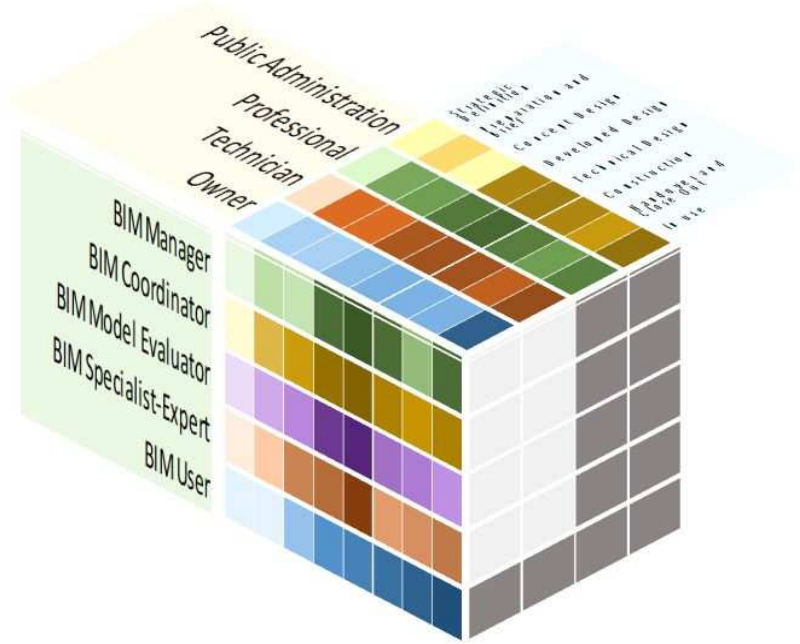
BIM Profiles	Strategic Definition	Preparation and Brief	Concept Design	Developed Design	Technical Design	Construction	Handover and Close Out	In use
BIM Manager								
BIM Coordinator								
BIM Model Evaluator								
BIM Specialist-Expert								
BIM User								

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								



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Network for Using BIM to Increase the Energy Performance

EQF LEVELS

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LEGEND:	KNOWLEDGE	SKILLS	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

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								

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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Manager

Strategic Definition

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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

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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

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)								

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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Coordinator

Strategic Definition

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

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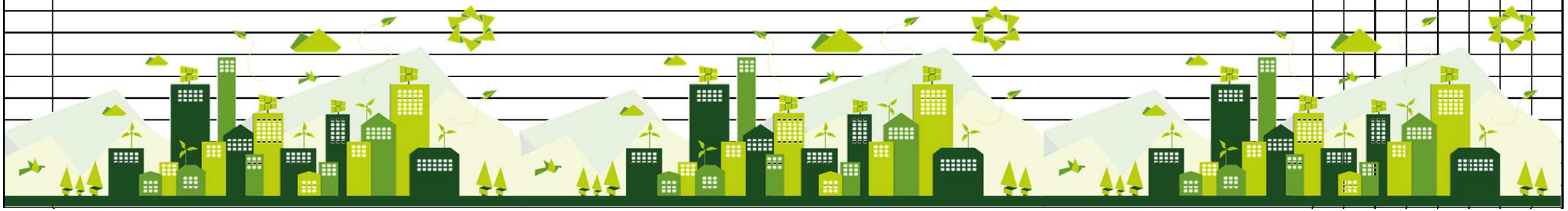
BIM Model Evaluator

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

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BIM Model Evaluator

Strategic Definition

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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

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Network for Using BIM to Increase the Energy Performance

List of Competences

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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)								

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Specialist-Expert

Strategic Definition

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

BACK EXTRACT

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Network for Using BIM to Increase the Energy Performance

List of Competences

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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	■	■	■	■	■			

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

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

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BIM Manager

Preparation and Brief

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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)								

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

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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List of Competences

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BIM Coordinator

Preparation and Brief

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

BACK EXTRACT

NET UBIEP

Network for Using BIM to Increase the Energy Performance

List of Competences

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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)	■	■	■	■	■			

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							
		1	2	3	4	5	6	7	8
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)								

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

Preparation and Brief

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
C0	Have basic BIM knowledge and skills								
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							
		1	2	3	4	5	6	7	8
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	■	■	■	■				

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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

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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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							
		1	2	3	4	5	6	7	8
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								

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

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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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Coordinator

Concept Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Coordinator

Concept Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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 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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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							
		1	2	3	4	5	6	7	8
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

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

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

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

Concept Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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

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

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

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

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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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

Developed Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

Network for Using BIM to Increase the Energy Performance

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List of Competences

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BIM Manager

Developed Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

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

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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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

Developed Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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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

Developed Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

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 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	■	■	■	■	■	■		

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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

Developed Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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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							
		1	2	3	4	5	6	7	8
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	1	2	3	4	5	6	7	8
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							
		1	2	3	4	5	6	7	8
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								

Network for Using BIM to Increase the Energy Performance

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List of Competences

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BIM Manager

Technical Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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BIM Coordinator

Technical Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM Coordinator

Technical Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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 energy performance								

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

Technical Design

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

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

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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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							
		1	2	3	4	5	6	7	8
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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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							
		1	2	3	4	5	6	7	8
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								

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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							
C4	Use BIM technology	1	2	3	4	5	6	7	8
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								

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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							
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							
		1	2	3	4	5	6	7	8
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								

Network for Using BIM to Increase the Energy Performance

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List of Competences

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BIM Manager

Construction

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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

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	EQF Level							
		1	2	3	4	5	6	7	8
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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BIM Coordinator

Construction

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								

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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							
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							
		1	2	3	4	5	6	7	8
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							
		1	2	3	4	5	6	7	8
C0	Have basic BIM knowledge and skills								
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

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BIM Specialist-Expert

Construction

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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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 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								

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							
		1	2	3	4	5	6	7	8
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								

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

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 Manager

Handover and Close Out

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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List of Competences

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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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BIM Coordinator

Handover and Close Out

N	Competence	Level							
		1	2	3	4	5	6	7	8
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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BIM Coordinator

Handover and Close Out

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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

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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	■	■	■	■	■	■	■	

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BIM Model Evaluator

Handover and Close Out

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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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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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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							
		1	2	3	4	5	6	7	8
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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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							
		1	2	3	4	5	6	7	8
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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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							
		1	2	3	4	5	6	7	8
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 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.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							
		1	2	3	4	5	6	7	8
C5.S6	Use BIM models to communicate installation instructions								

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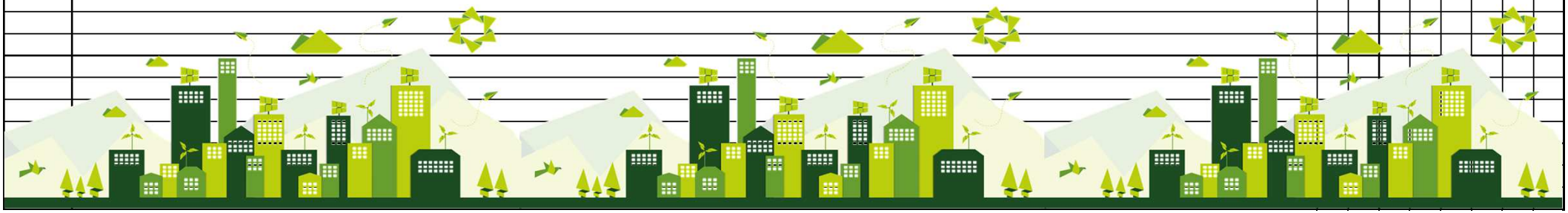
BIM Coordinator

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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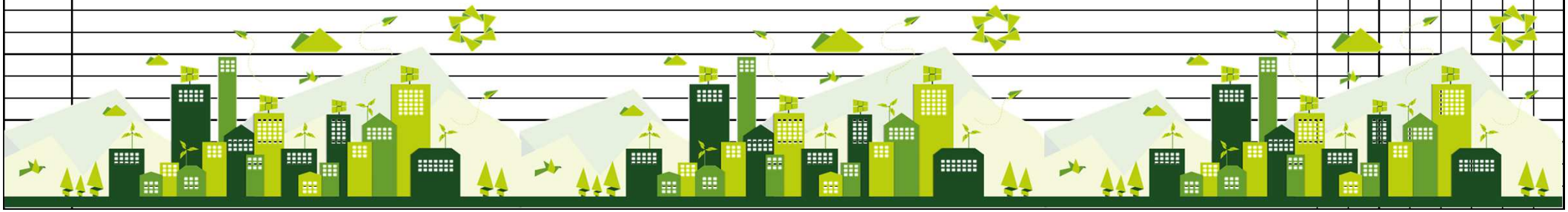
BIM Coordinator

In Use

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								



NET UBIEP

Network for Using BIM to Increase the Energy Performance

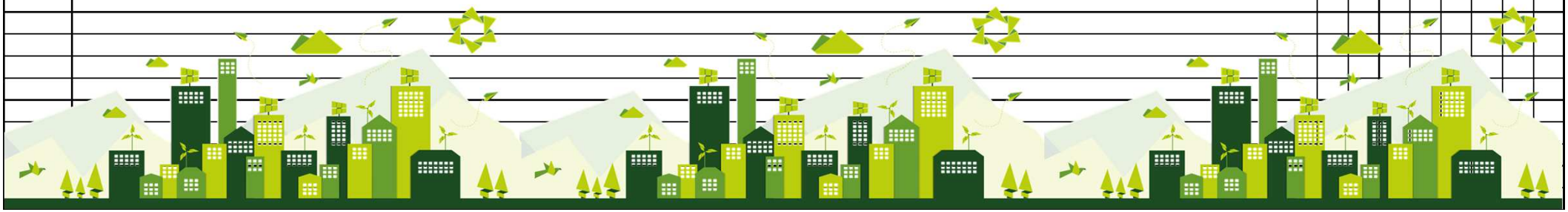
List of Competences

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

BIM Coordinator

In Use

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								



BACK EXTRACT

NET UBIEP
Network for Using BIM to Increase the Energy Performance

List of Competences

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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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BIM Model Evaluator

In Use

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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

List of Competences

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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							
		1	2	3	4	5	6	7	8
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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Network for Using BIM to Increase the Energy Performance

List of Competences

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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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Network for Using BIM to Increase the Energy Performance

List of Competences

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BIM User

In Use

N	Competence	EQF Level							
		1	2	3	4	5	6	7	8
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								