Project Title:
THE FOF-DESIGNER:
DIGITAL DESIGN SKILLS FOR FACTORIES OF THE FUTURE

Project Acronym:
DigiFoF

Grant Agreement number:
2018-2553 / 001-001

Project Nr. 601089-EPP-1-2018-1-RO-EPPKA2-KA

Subject:
D6.4 - Report on Quality Assurance Activities

Dissemination Level:
Public

Lead Organisation:
UNIBG

Project Coordinator:
ULBS

Contributors:
All Partners

Reviewers:
UNIBIAL

Revision	Preparation date	Period covered	Project start date	Project duration
Final	December 2021	Month 19-36	01/01/2019	36 Months

This project has received funding from the European Union's EACEA Erasmus+ Programme Key Action 2 - Knowledge Alliances under the Grant Agreement No 2018-2533 / 001-001

Table of content

1 Executive Summary

In this deliverable a summary of the quality assessment for every training material prepared in the period M1-M18 and in the period M19-M36 are reported.

The form used to collect the feedback has been defined in WP6 – Quality assurance, D6.3 -Handbook on QA of Trainings.

2 Training material evaluation

As reported in deliverable "D6.3 - Handbook on QA of Trainings", ensuring high-value quality of training materials implies setting up homogenous and continuous evaluation processes from the creation to the final use. The evaluation of the training material is carried out by:

- **Internal evaluators** are senior members of the DigiFoF consortium;
- **External evaluators** are people with expertise in the training field, from university, research centers and companies.

As mentioned above, evaluation must be organized at different steps in order that the training materials do not remain monolithic blocks quickly losing their interest. Evaluation could rather be seen as a way of maintaining the relevance of the content by making some changes if needed.

The training materials prepared so far and evaluated in this deliverable are reported in the table below.

Training material	**Authors**	**Internal Evaluator**	**External evaluator**	**Period**
Process-oriented topic: Fundamentals of Business Process Management (BPM)	BOC-PL	UNIBG	Elena Legnani – Wittur	M1-M18
Process-oriented topic: Process performance monitoring	BOC-PL	UNIBG	Elena Legnani – Wittur	M19-M36
Process-oriented topic: Process performance monitoring	BOC-PL	UNIBG	Elena Legnani – Wittur	M19-M36
Integration of the uses and the design in the company business model	CIRIDD	AFIL	Valerio Pesenti – Intellimech Consortium	M1-M18
Rapid implementation of Cobots in industrial environment	CONTI	UNIBG	Valerio Pesenti – Intellimech Consortium	M1-M18
AGV for modern Logistics in industrial companies	CONTI	UNIBG	Valerio Pesenti – Intellimech Consortium	M19-M36
Workplace safety – Employees emotion recognition	ULBS	UNIBG	Michele Ermidoro – AiSent	M1-M18
Smart City Modelling using ADOxx	ULBS	UNIBG	Michele Ermidoro – AiSent	M1-M18
Petri Nets based automation of manufacturing systems	ULBS	UNIBG	Michele Ermidoro – AiSent	M1-M18
Customers needs' services deployment	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18

Product-Service System design	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Transformation of Industrial Business Model through digitalization and servitization	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Introduction to the concept of PSS and to the dedicated PS3M modelling method	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Circular Economy and Product-Service System	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Deployment of Service-oriented Strategy	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Design Thinking for Product-Service System Design	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Scientific/Research Foundations of Conceptual Modelling	EMSE	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Business process analysis and rengeneering	UNIBG	AFIL	Valerio Pesenti – Intellimech Consortium	M1-M18
Service Operations Management	UNIBG	AFIL	Elena Legnani – Wittur	M1-M18
Product-service system engineering	UNIBG	AFIL	Elena Legnani – Wittur	M1-M18
Process Simulation in manufacturing	UNIBG	AFIL	Elena Legnani – Wittur	M1-M18
Fundamentals of Business Process Management	UNIBIAL	UNIBG	Paolo Gaiardelli – University of Bergamo	M1-M18
Business model canvas for FoF strategy creation	UNIBIAL	UNIBG	Paolo Gaiardelli – University of Bergamo	M19-M36
Design thinking for product and service design	UNIBIAL	UNIBG	Paolo Gaiardelli – University of Bergamo	M19-M36
Artificial intelligence tools for Industry 4.0 transformation	UNIBIAL	UNIBG	Valerio Pesenti – Intellimech Consortium	M19-M36
Cloud Manufacturing for modeling virtualised resources	UNIBIAL	UNIBG	Valerio Pesenti – Intellimech Consortium	M19-M36
Design Thinking using Scene2Model	OMILAB	UNIBG	Elena Legnani – Wittur	M1-M18
The Value of Conceptual Models	OMILAB	UNIBG	Elena Legnani – Wittur	M1-M18
Conceptual Modeling: Methods, Tools and Application	OMILAB	UNIBG	Elena Legnani – Wittur	M1-M18

Model-Driven Experimentation: from Design to Modelling to Evaluation	OMILAB	UNIBG	Elena Legnani – Wittur	M1-M18
Scientific and Educational Exploitation	OMILAB	UNIBG	Elena Legnani – Wittur	M1-M18
AI-Based Domain-Specific Assessment Service	OMILAB	UNIBG	Valerio Pesenti – Intellimech Consortium	M19-M36
Process-oriented topic Robotics application in Virtual Laboratory	UNIOULU	UNIBG	Valerio Pesenti – Intellimech Consortium	M19-M36

2.1 EMSE trainings

Internal Evaluation

WP and task:	WP 6 – T6.4
Training title:	Customers needs' services deployment
Main author/editor:	EMSE France
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Applicative
Training planned duration:	3 hours
Thematic(s):	Strategy-oriented topics: Customers needs' services deployment
Target group(s):	Professionals of the same company
Summary and learning objectives:	The training allows the company's employees to create product-related service ideas and test them before implementing a deployment plan.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing	X Yes ☐ No ☐ Partially		

with the application form expectations?			
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	This is a workshop where the participants have to work in group to understand the need of their customers	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad		

	☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		This is a workshop applying design thinking to identify the customer needs, as a starting point of the definition of the service offering	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Product-Service System design
Main author/editor:	EMSE France
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	12 hours
Thematic(s):	Strategy-oriented topics: Product-Service System Design
Target group(s):	Vocational training : professional of system design Master students (Industrial engineering and management)
Summary and learning objectives:	Understand and apply a method for the design of product service Systems Acquire operational skills on the use of a PSS modelling toolkit (PS3M), dedicated to design support

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the	X Yes ☐ No		

project requirements?	☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	There is both theory on PSS and PSS design with case study and a case study to develop using the explained methodology	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the	X Yes ☐ No ☐ Partially		

approach, covered topic(s)…)			
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It combines theory and practice and provide a good introduction to PSS concept and PSS design methodology	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Transformation of Industrial Business Model through digitalization and servitization
Main author/editor:	EMSE France
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1,5h (lecture) + 6h (case study)
Thematic(s):	Product-service systems & servitization: consequences on companies' business model and financial performance
Target group(s):	Students or professionals
Summary and learning objectives:	Understand the consequences of PSS & servitization on companies' business model and financial performance

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the	X Yes ☐ No		

project requirements?	☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	There is both theory on PSS business model and a case study to apply in practice what has been explained	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the	X Yes ☐ No ☐ Partially		

approach, covered topic(s)…)			
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It combines theory and practice and provide a good introduction to PSS business model	
Main weaknesses of the training		Some more details on case study should be provided in the introduction	If possible, add some more detail of the case study in the introduction
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		If possible, add some more detail of the case study in the introduction

WP and task:	WP 6 – T6.4
Training title:	Introduction to the concept of PSS and to the dedicated PS3M modelling method
Main author/editor:	EMSE France
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 h
Thematic(s):	Introduction to the concept of PSS and to the dedicated PS3M modelling method
Target group(s):	PhD Students, (NEMO Summer School)
Summary and learning objectives:	Understand the concept of Product System Service, and how the usual product design method and practices have to change. Discover and experiment a PSS dedicated modelling tool (PS3M) and design method

1/ Project objectives and requirements

Question	Answer	Comments	Recommendations
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified	X Yes ☐ No		

as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		There is both theory on PSS design with a case study based on the methodology proposed and the adoxx platform	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Circular Economy and Product-Service System
Main author/editor:	EMSE France
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	7 h
Thematic(s):	Circular Economy and Product-Service System
Target group(s):	Master Students
Summary and learning objectives:	To make students familiar with sustainable solution providing

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		

Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	It is addressed to students who are not familiar with PSS and circular economy concepts	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		

Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Introduction to circular economy and PSS	
Main weaknesses of the training		Few materials for 7 hours of training and the project assignment is missing	Add the project assignment
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Add the project assignment

WP and task:	WP 6 – T6.4
Training title:	Deployment of Service-oriented Strategy
Main author/editor:	EMSE France
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Applicative
Training planned duration:	2 days (4 half-day courses during 2 month)
Thematic(s):	Interactive training with small and medium size industrial companies, to initiate a service-oriented strategy.
Target group(s):	Vocational training: one company. SMI companies with, a first contact with service activities, and an ambition to further develop service-oriented strategies
Summary and learning objectives:	The objective is to bring various complementary competencies of the company, to work collaboratively on both strategic diagnosis and perspective development, so as to identify key strategical factors and incentive/resistance for service development, and key opportunities for initiating the transition.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**

Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Focused on a single company (PMI) to help to understand how to change business model towards servitization	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified	X Yes ☐ No		

as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Workshop addressed to a single company with the objective to understand how to move towards a PSS business model, also showing the path.	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Design Thinking for Product-Service System Design
Main author/editor:	EMSE France
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	14 hours (30% lecture, 70% project)
Thematic(s):	Design Thinking for Product-Service System Design
Target group(s):	Master Students Professionals
Summary and learning objectives:	Defining a sustainable Product-Service System (PSS) using Design Thinking method and tool (OMILAB) • Design Thinking (Basics)

	• Industrial PSS Case • Design Thinking for PSS (OMILAB)

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Provide the basics to design thinking and apply it to a case study	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain	X Yes ☐ No		

relevant in the long run?	☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Application of Scene2Model to ideate PSS using design thinking. Good combination between theory and practice	
Main weaknesses of the training		There is not the schedule of the training in the slide, it could be helpful to understand the balance between theory and practice	Add the schedule of the training
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Material is fine, please, add the schedule of the training

External Evaluation

WP and task:	WP 6 – T6.4
Training title:	Customers needs' services deployment
Main author/editor (Institution, Person):	EMSE France
Evaluator (Institution, Person):	Prof. Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On site

Training nature: (Theoretical/Applicative/Both)	Applicative
Training planned duration:	3 hours
Thematic(s):	Strategy-oriented topics: Customers needs' services deployment
Target group(s):	Professionals of the same company
Summary and learning objectives:	The training allows the company's employees to create product-related service ideas and test them before implementing a deployment plan.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	The course is structured as a workshop in which through interaction in groups and with the help of the teacher participants learn how to identify their clients' needs in order to support them in identifying new ideas.	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		

Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	☐ X Good ☐ Bad X Needed changes		There are some French Typo in the text
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		the interactive workshop based on Design Thinking and Business Model Canvas approaches is always useful to foster learning and discussion	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	☐ Yes X No		There are some French Typo in the text

WP and task:	WP 6 – T6.4
Training title:	Product-Service System design
Main author/editor (Institution, Person):	EMSE France
Evaluator (Institution, Person):	Prof. Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On site

Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	12 hours
Thematic(s):	Strategy-oriented topics: Product-Service System Design
Target group(s):	Vocational training: professional of system design Master students (Industrial engineering and management)
Summary and learning objectives:	Understand and apply a method for the design of product service Systems Acquire operational skills on the use of a PSS modelling toolkit (PS3M), dedicated to design support

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Theory, practice, and examples are well balanced.	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	Examples are well described and useful to understand the concepts and for	

		sure they will remain.	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		The good balance between theory and practice	
Main weaknesses of the training		A lot of new concept, it could be difficult for newer to capture all the issues	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Transformation of Industrial Business Model through digitalization and servitization
Main author/editor (Institution, Person):	EMSE France
Evaluator (Institution, Person):	Prof. Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1,5h (lecture) + 6h (case study)
Thematic(s):	Product-service systems & servitization: consequences on companies' business model and financial performance

Target group(s):	Students or professionals
Summary and learning objectives:	Understand the consequences of PSS & servitization on companies' business model and financial performance

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	The case study is not accessible to the students from the link.	
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad		

	☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Theory and case study are used to explain the servitization concept at both theoretical and practical levels.	
Main weaknesses of the training		The case study is not accessible, so it is not easy to understand the main contents and possible lesson learned	
Is the training ready to be shared and used? If no, please specify the necessary changes	☐ Yes X No		Few additional inputs on the case are requested

WP and task:	WP 6 – T6.4
Training title:	Introduction to the concept of PSS and to the dedicated PS3M modelling method
Main author/editor (Institution, Person):	EMSE France
Evaluator (Institution, Person):	Prof. Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 h
Thematic(s):	Introduction to the concept of PSS and to the dedicated PS3M modelling method
Target group(s):	PhD Students, (NEMO Summer School)
Summary and learning objectives:	Understand the concept of Product System Service, and how the usual product design method and practices have to change. Discover and experiment a PSS dedicated modelling tool (PS3M) and design method

1/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Exercise are really interesting	
Is the planned duration of the training the most appropriate?	X Yes ☐ No	Maybe additional time can be useful	
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		

2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Exercises are useful to support the acquisition of the competences.	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Circular Economy and Product-Service System
Main author/editor (Institution, Person):	EMSE France
Evaluator (Institution, Person):	Prof. Paolo Gaiardelli – University of Bergamo
Date of evaluation:	

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	7 h
Thematic(s):	Circular Economy and Product-Service System
Target group(s):	Master Students
Summary and learning objectives:	To make students familiar with sustainable solution providing

1/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Good balance between theory and examples.	
Is the planned duration of the	X Yes		

training the most appropriate?	☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		There are examples that help understand the concepts	
Main weaknesses of the training		Please provide more insights on what students must do with the cases	

Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Add more instructions on what to do with the cases

WP and task:	WP 6 – T6.4
Training title:	Deployment of Service-oriented Strategy
Main author/editor (Institution, Person):	EMSE France
Evaluator (Institution, Person):	Prof. Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Applicative
Training planned duration:	2 days (4 half-day courses during 2 month)
Thematic(s):	Interactive training with small and medium size industrial companies, to initiate a service-oriented strategy.
Target group(s):	Vocational training: one company. SMI companies with, a first contact with service activities, and an ambition to further develop service-oriented strategies
Summary and learning objectives:	The objective is to bring various complementary competencies of the company, to work collaboratively on both strategic diagnosis and perspective development, so as to identify key strategical factors and incentive/resistance for service development, and key opportunities for initiating the transition.

1/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		

Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		

2/ Conclusions

Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		The workshop approach is the best one to train a single company.	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Design Thinking for Product-Service System Design
Main author/editor (Institution, Person):	EMSE France
Evaluator (Institution, Person):	Prof. Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	14 hours (30% lecture, 70% project)
Thematic(s):	Design Thinking for Product-Service System Design
Target group(s):	Master Students Professionals
Summary and learning objectives:	Defining a sustainable Product-Service System (PSS) using Design Thinking method and tool (OMILAB) • Design Thinking (Basics) • Industrial PSS Case • Design Thinking for PSS (OMILAB)

1/ Content of the training			
Question	**Answer**		**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Applying Design thinking by use of the Omilab tools. Good balance between theory and practice	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well	X Yes ☐ No ☐ Partially		

concerned by the produced content?			
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		The project application is useful to support the learning	
Main weaknesses of the training		The explanation of the Scene2Model is too short	
Is the training ready to be shared and used? If no, please specify the necessary changes	☐ Yes X No		Additional details on the use of Scene2Model can be added to let the student use to tool autonomously

2.2 OMILAB NPO trainings

Internal Evaluation

WP and task:	WP 6 – T6.4
Training title:	Scientific/Research Foundations of Conceptual Modelling

Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Theoretical
Training planned duration:	1 hours
Thematic(s):	Foundations of Conceptual Modelling
Target group(s):	Researchers, Master/PhD students
Summary and learning objectives:	Introduction to the scientific foundation of conceptual modelling

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well	X Yes ☐ No ☐ Partially		

concerned by the produced content?			
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide a theoretical overview of conceptual modelling	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	The OMILAB Ecosystem: Characteristics and Application Cases
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Theoretical
Training planned duration:	1 hours
Thematic(s):	OMILAB presentation
Target group(s):	Any interested party
Summary and learning objectives:	The training introduces OMILAB, its characteristics and application cases using a scenario-based approach. The training objective is to provide the foundation to other modules using OMILAB infrastructure and cases as an innovative training facility.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well	X Yes ☐ No ☐ Partially		

concerned by the produced content?			
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide an introduction to OMILAB and its possible application	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Fundamental Conceptual Modelling Languages using Bee-Up
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site

Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 hours
Thematic(s):	Conceptual Modelling Languages using Bee-Up
Target group(s):	Engineering students and domain experts
Summary and learning objectives:	The training introduces fundamental conceptual modelling languages and the aspect of model value. The modelling languages are introduced and exemplified.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	☐ Yes X No	3 hours is not enough to solve all the exercises if the modeling language and the software is not known	Increase duration
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	There are some exercises to solve during the training	
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s)	X Yes		

appropriate regarding Industry 4.0 stakes and challenges?	☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		

3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide an overview of the different modeling languages supported by BEE-up Provide exercises	
Main weaknesses of the training		Maybe 3 hours are not enough to complete all the exercises	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Design Thinking using Scene2Model
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site

Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 hours
Thematic(s):	Design Thinking using Scene2Model
Target group(s):	Multidisciplinary teams within research and academia, industrial domain experts from different fields
Summary and learning objectives:	The training introduces the selected design thinking method "SAP Scenes" as a storytelling approach for digital innovation and tool support using Scene2Model

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	There is one exercise to solve during the training	
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s)	X Yes		

appropriate regarding Industry 4.0 stakes and challenges?	☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide an overview of design thinking and an application using scene2model	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	The Value of Conceptual Models
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Theoretical
Training planned duration:	1 hours
Thematic(s):	The Value of Conceptual Models

Target group(s):	Any interested party
Summary and learning objectives:	Introduce the value of conceptual modelling and purpose in an academic/research as well industrial context

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain	X Yes ☐ No		

relevant in the long run?	☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide an overview of conceptual model trough examples	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Conceptual Modeling: Methods, Tools and Application
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 hours
Thematic(s):	Methods and tool for conceptual modeling
Target group(s):	Any interested party
Summary and learning objectives:	Introduction to the foundation of conceptual modelling and metamodeling as a realization paradigm

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**

Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	☐ Yes ☐ No X Partially	Some knowledge on modeling are needed to understand these concepts	
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the	X Yes ☐ No ☐ Partially		

approach, covered topic(s)…)			
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide knowledge on tools and methods for conceptual model	Demonstration with adoxx required
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Add a demonstration with the platform

WP and task:	WP 6 – T6.4
Training title:	Model-Driven Experimentation: from Design to Modelling to Evaluation
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 hours
Thematic(s):	Methods and tool for conceptual modeling
Target group(s):	Any interested party
Summary and learning objectives:	Introduction to the foundation of conceptual modelling and metamodeling as a realization paradigm

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the	X Yes ☐ No		

WP objectives and correctly dealing with the application form expectations?	☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad		

	☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Introduction to conceptual modeling with an example in the adoxx platform	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Scientific and Educational Exploitation
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 hours
Thematic(s):	Methods and tool for conceptual modeling
Target group(s):	Researchers, Master/PhD students
Summary and learning objectives:	Introduction to the scientific and educational exploitation possibilities offered by the OMiLAB.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		

2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**

Main positive points developed and offered by the training		Explanation of possible exploitation of OMILAB	
Main weaknesses of the training		Not a real training, but explain how OMILAB can be applied in research	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	AI-Based Domain-Specific Assessment Service
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	UNIBG

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Theoretical
Training planned duration:	1 hours
Thematic(s):	AI-Based Domain-Specific Assessment Service
Target group(s):	Researchers, Master/PhD students
Summary and learning objectives:	AI-Based Domain-Specific Assessment Service

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the	X Yes ☐ No		

most appropriate notably regarding the target group(s)?			
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide a demonstration on how to implement, configure and deploy intelligent	

		assessments services for a specific domain utilizing AI techniques to infer contextual information derived from implicit relations	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

External evaluation

WP and task:	WP 6 – T6.4
Training title:	Fundamental Conceptual Modelling Languages using Bee-Up
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 hours
Thematic(s):	Conceptual Modelling Languages using Bee-Up
Target group(s):	Engineering students and domain experts
Summary and learning objectives:	The training introduces fundamental conceptual modelling languages and the aspect of model value. The modelling languages are introduced and exemplified.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		

Is the planned duration of the training the most appropriate?	☐ Yes X No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good overview of different modeling and on the possibility of bee up	
Main weaknesses of the training		Exercise can be done in group instead of	Provide group exercises.

		individual to foster discussion.	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Design Thinking using Scene2Model
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 hours
Thematic(s):	Design Thinking using Scene2Model
Target group(s):	Multidisciplinary teams within research and academia, industrial domain experts from different fields
Summary and learning objectives:	The training introduces the selected design thinking method “SAP Scenes” as a storytelling approach for digital innovation and tool support using Scene2Model

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of	X Yes ☐ No		

the training well concerned by the produced content?	☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good overview of design thinking and scene2model	
Main weaknesses of the training			Instead of showing an example, a group assignment can be organized
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Take into consideration the previous comment when providing the course

WP and task:	WP 6 – T6.4
Training title:	The Value of Conceptual Models
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Theoretical
Training planned duration:	1 hours
Thematic(s):	The Value of Conceptual Models
Target group(s):	Any interested party
Summary and learning objectives:	Introduce the value of conceptual modelling and purpose in an academic/research as well industrial context

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e.	X Yes ☐ No		

originality of the approach, covered topic(s)…)	☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good introduction to conceptual modeling, even if the concept is not easy	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Conceptual Modeling: Methods, Tools and Application
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 hours
Thematic(s):	Methods and tool for conceptual modeling
Target group(s):	Any interested party
Summary and learning objectives:	Introduction to the foundation of conceptual modelling and metamodeling as a realization paradigm

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably	X Yes ☐ No		

regarding the target group(s)?			
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	☐ Yes X No ☐ Partially		It should be addressed to specialist since the topic is not easy and some pre-knowledge is needed
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good explanation of conceptual modelling	

Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Model-Driven Experimentation: from Design to Modelling to Evaluation
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 hours
Thematic(s):	Methods and tool for conceptual modeling
Target group(s):	Any interested party
Summary and learning objectives:	Introduction to the foundation of conceptual modelling and metamodeling as a realization paradigm

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of	☐ Yes		This kind of course should be addressed to

the training well concerned by the produced content?	☐ No X Partially		modeling specialist/model developer
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good explanation on how to design a new modeling language using adoxx	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Scientific and Educational Exploitation
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 hours
Thematic(s):	Methods and tool for conceptual modeling
Target group(s):	Researchers, Master/PhD students
Summary and learning objectives:	Introduction to the scientific and educational exploitation possibilities offered by the OMiLAB.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified	X Yes		

as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good analysis of OMILAB exploitation in research	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	AI-Based Domain-Specific Assessment Service
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	4 hours
Thematic(s):	Foundations of Conceptual Modelling
Target group(s):	Researchers, Master/PhD students
Summary and learning objectives:	Introduction to the scientific foundation of conceptual modelling

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate	X Yes ☐ No		

notably regarding the target group(s)?			
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	☐ Yes X No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
1/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good example on how to set up intelligent assessments services for a specific domain	

		utilizing AI techniques	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	The OMILAB Ecosystem: Characteristics and Application Cases
Main author/editor:	OMILAB NPO (Germany)
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On site
Training nature: (Theoretical/Applicative/Both)	Theoretical
Training planned duration:	1 hours
Thematic(s):	AI-Based Domain-Specific Assessment Service
Target group(s):	Researchers, Master/PhD students
Summary and learning objectives:	AI-Based Domain-Specific Assessment Service

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models	☐ Yes X No		

etc.) to be offered to participants in advance e.g. via web page			
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good overview of OMILAB and its possible application	
Main weaknesses of the training			I would show a video with an application
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Add a video with an application

2.3 BOC PL trainings

Internal Evaluation

WP and task:	WP6 – T6.4
Training title:	Process-oriented topic: Fundamentals of Business Process Management (BPM)
Main author/editor:	BOC-PL, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	4 hours to 8 hours on the same day or on 2 separately days
Thematic(s):	Business Process Management
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Understanding the key aspects of BPM in the enterprise. Hands-on learning process design, acquiring knowledge and skills in the principles of analysis, modelling, and documentation processes. Developing creativity and contextual thinking.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No	The proposed duration is fine for learning the elements of BPMN,	Add session to apply BPMN in a case study

		maybe more exercise/case study session should be added to improve the acquisition of the BPMN	
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	There are exercises in the training slides	
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes X No ☐ Partially	It provides knowledge on BPMN, a standard language for business process modeling	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Exhaustive explanation of BPMN element and applications	

Main weaknesses of the training		Few exercises/case studies	Provide students more exercise to practice with BPMN and understand how to map as is and to be processes
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		If the time is enough, provide some more exercises

WP and task:	WP6 – T6.4
Training title:	Process-oriented topic: Process performance monitoring
Main author/editor:	BOC-PL, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	2 hours to 8 hours on the same day or on 2 separately days – depending on a local needs
Thematic(s):	KPI
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Being able to define goals for a process on a basis of a strategy and stakeholder analysis. Defining KPIs on a basis of goals or using the APQC PCF. Designing a process performance monitoring system, defining roles and responsibilities. Planning changes.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**

Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No	The proposed duration is fine for learning the KPI	Add session to apply KPI in a case study
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially	It provides knowledge and advices on KPI	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**

Main positive points developed and offered by the training		Exhaustive step by step procedure to define KPI	
Main weaknesses of the training		Few exercises/case studies	Provide students more exercise to practice with KPI definition
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		If the time is enough, provide some more exercises

WP and task:	WP6 – T6.4
Training title:	Process improvement using simulation
Main author/editor:	BOC-PL, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	2 hours to 8 hours on the same day or on 2 separately days – depending on a local needs
Thematic(s):	Business process simulation
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Extending BPMN diagrams with information about costs and times. Process frequencies, probabilities, variables. Using simulation to compare AS IS and TO BE processes and recommend changes Change management and process improvement Methods of process improvement

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the	X Yes ☐ No ☐ Partially		

application form expectations?			
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No	The proposed duration is fine for learning the basic of simulation	
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially	It provides basic knowledge on simulation	
Quality of the writing	X Good ☐ Bad		

	☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Basic understanding on simulation (from BPMN)	
Main weaknesses of the training		Few space is devoted to the analysis of the simulation process	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		If the time is enough, provide some more exercises

External Evaluation

WP and task:	WP6 – T6.4
Training title:	Process-oriented topic: Fundamentals of Business Process Management (BPM)
Main author/editor:	Bialystok University of Technology, Poland
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	4 hours to 8 hours on the same day or on 2 separately days
Thematic(s):	Business Process Management
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Understanding the key aspects of BPM in the enterprise. Hands-on learning process design, acquiring knowledge and skills in the principles of analysis, modelling, and documentation processes. Developing creativity and contextual thinking.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate	X Yes ☐ No		

notably regarding the target group(s)?			
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	There are some exercises in the slides	Provide more exercise
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially	Maybe some concepts are too advanced for people who does not have knowledge on BPMN	Adjust contents based on student's knowledge on BPMN
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially	BPMN is the basis to process improvement and automatization	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Exhaustive explanation of BPMN element and applications	

Main weaknesses of the training		Few exercises/case studies	Provide student more exercise to practice with BPMN and understand how to map as is and to be processes
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP6 – T6.4
Training title:	Process-oriented topic: Process performance monitoring
Main author/editor:	Bialystok University of Technology, Poland
Evaluator:	Elena Legnani – Wittur

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	2 hours to 8 hours on the same day or on 2 separately days – depending on a local needs
Thematic(s):	KPI
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Being able to define goals for a process on a basis of a strategy and stakeholder analysis. Defining KPIs on a basis of goals or using the APQC PCF. Designing a process performance monitoring system, defining roles and responsibilities. Planning changes.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain	X Yes ☐ No		

materials (models etc.) to be offered to participants in advance e.g. via web page			
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially	Useful advices for professionals	
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Exhaustive explanation of KPI	
Main weaknesses of the training		Few exercises/case studies	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	2 hours to 8 hours on the same day or on 2 separately days – depending on a local needs
Thematic(s):	Business process simulation
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Extending BPMN diagrams with information about costs and times. Process frequencies, probabilities, variables. Using simulation to compare AS IS and TO BE processes and recommend changes Change management and process improvement Methods of process improvement

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry	X Yes ☐ No ☐ Partially		

4.0 stakes and challenges?			
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Basic knowledge on business procees simulation	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

2.4 UNIBG trainings

Internal Evaluation

WP and task:	WP 6 – T6.4
Training title:	Business process analysis and re-engineering
Main author/editor:	UNIBG
Evaluator:	AFIL-Andrea Mazzoleni

Training format: (Online/On-site)	Online (due to Covid 19) / Online

Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day
Thematic(s):	Business process analysis and re-engineering. The training aims at delivering process-oriented competences to the participants to be able to describe and analyze a business process. Re-engineering competences will be also provided
Target group(s):	Professional from different companies
Summary and learning objectives:	The participants will be able to model a business process, identify business weaknesses and define possible improvement actions.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	The format is a good balance among theoretical and practical contents.	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of	X Yes		

the training well concerned by the produced content?	☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	Practical content is well realized and useful for the attendees which will be able to acquire competencies with software dedicated to discrete simulations events.	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially	Topics and thematic are in line with context of Industry 4.0 and the approach in useful to achieve the learning objectives.	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good Mix among theory and practice.	If it is possible, I would dedicate more time to exercises and practical examples.
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Service Operations Management

Main author/editor:	UNIBG
Evaluator:	AFIL-Andrea Mazzoleni

Training format: (Online/On-site)	Online (due to Covid 19) / Online
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day
Thematic(s):	The training allows the company's employees to understand the main concept of service, analyze in the associated processes and get to know the main techniques to classify and model them.
Target group(s):	Students
Summary and learning objectives:	• Understating of the main service features • Understating of how to design, describe and improve a service process • Understating on how to measure a service process

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain	X Yes		

materials (models etc.) to be offered to participants in advance e.g. via web page	☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially	Topics and thematic are in line with context of Service Operations Management and the approach in useful to achieve the learning objectives.	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good theory	
Main weaknesses of the training		Practices could be improved	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Product-service system engineering
Main author/editor:	UNIBG
Evaluator:	AFIL-Andrea Mazzoleni

Training format: (Online/On-site)	Online (due to Covid 19) / Online
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day
Thematic(s):	The training allows the company's employees to understand the main concept of product-service system, get to know the main methods to design and engineer them.
Target group(s):	Professional from different companies
Summary and learning objectives:	Through the utilization of theoretical and practical applications, deals with methods and tools to design and engineer product service systems starting from the analysis of customer needs.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the	X Yes ☐ No		

training the most appropriate?			
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially	The topic of PSS engineering is a new topic for scholars	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good Mix among theory and practice.	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please	X Yes ☐ No		

specify the necessary changes			

WP and task:	WP 6 – T6.4
Training title:	**Process Simulation in manufacturing**
Main author/editor:	UNIBG
Evaluator:	AFIL-Andrea Mazzoleni

Training format: (Online/On-site)	Online (due to Covid 19) / Online
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	8 hours
Thematic(s):	The student acquires the necessary elements and concepts related to simulation, specifically applied to manufacturing processes. The student will get known of the Flexim discrete event simulation software.
Target group(s):	Students
Summary and learning objectives:	Through the utilization of theoretical and practical applications, this course deals with process simulation. Trainings on discrete event simulation techniques to develop what ifs analysis are proposed.

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably	X Yes ☐ No		

regarding the target group(s)?			
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially	Simulation is not a new topic, but it is interesting its application to I4.0	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Good Mix among theory and practice.	

Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

External Evaluation

WP and task:	WP 6 – T6.4
Training title:	Business process analysis and re-engineering
Main author/editor:	UNIBG
Evaluator:	Consorzio Intellimech – Valerio Pesenti

Training format: (Online/On-site)	Online (due to Covid 19) / Online
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day
Thematic(s):	Vocational training on Business process analysis and re-engineering. The training aims at delivering process-oriented competences to the participants to be able to describe and analyze a business process. Re-engineering competences will be also provided
Target group(s):	Professional from different companies
Summary and learning objectives:	The participants will be able to model a business process, identify business weaknesses and define possible improvement actions.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Due to fact that vocational training is dedicated to practitioners, the chosen format is appropriate for the good balance among theory and practice.	

Is the planned duration of the training the most appropriate?	X Yes ☐ No	8h is the right duration.	
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	I think yes, but confidentiality issues should be taken into account.	
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	Yes, the course can help attendees in acquiring competencies concerning simulation that can remain relevant in the long run.	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially	I think that the training is in line with I4.0 and that the learning content is structured to provide specific and detailed knowledge to attendees, useful for their life-long learning.	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**

Main positive points developed and offered by the training		Practical contents are well structured, with exercises and simulations carried out by a dedicated software.	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Service Operations Management
Main author/editor:	UNIBG
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	Online (due to Covid 19) / Online
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day
Thematic(s):	The training allows the company's employees to understand the main concept of service, analyze in the associated processes and get to know the main techniques to classify and model them.
Target group(s):	Students
Summary and learning objectives:	• Understating of the main service features • Understating of how to design, describe and improve a service process Understating on how to measure a service process

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding	X Yes ☐ No		

the target group(s)?			
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide knowledge on how to manage service operations management	

Main weaknesses of the training		More practice is required	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Product-service system engineering
Main author/editor:	UNIBG
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	Online (due to Covid 19) / Online
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day
Thematic(s):	The training allows the company's employees to understand the main concept of product-service system, get to know the main methods to design and engineer them.
Target group(s):	Professional from different companies
Summary and learning objectives:	Through the utilization of theoretical and practical applications, deals with methods and tools to design and engineer product service systems starting from the analysis of customer needs.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain	X Yes		

materials (models etc.) to be offered to participants in advance e.g. via web page	☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide knowledge on how to rethink your service offering also with a lot of examples.	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Process Simulation in manufacturing
Main author/editor:	UNIBG
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	Online (due to Covid 19) / Online
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	8 hours
Thematic(s):	The student acquires the necessary elements and concepts related to simulation, specifically applied to manufacturing processes. The student will get known of the Flexim discrete event simulation software.
Target group(s):	Students
Summary and learning objectives:	Through the utilization of theoretical and practical applications, this course deals with process simulation. Trainings on discrete event simulation techniques to develop what ifs analysis are proposed.

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		

Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Provide knowledge on how to improve a process thanks to the adoption of simulation	
Main weaknesses of the training		More practice is required	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

2.5 CIRIDD trainings

Internal Evaluation

WP and task:	WP 6 – T6.4
Training title:	Integration of the uses and the design in the company business model

Main author/editor:	CIRIDD
Evaluator:	AFIL-Andrea Mazzoleni

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	4 hours
Thematic(s):	Integration of the uses and design in the company business model
Target group(s):	all kind of companies, regardless of the size or the sector
Summary and learning objectives:	The objective is to bring companies to integrate the uses of the customer and the design in the company business model

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	☐ Yes ☐ No X Partially	If I correctly understood, the training is more related to aspect concerning design that are complementary to the technological / methodological aspects related to FoF and Industry 4.0.	
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	☐ Yes ☐ No X Partially	The topics are complementary to the technological / methodological aspects related to FoF and Industry 4.0.	
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	I think that the format is appropriate since it balances a presentation by professionals and an iterative process to involve users.	

Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	The material is quite visual.	
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	☐ Yes ☐ No X Partially	Se above comments.	
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	I think that the training provide can be helpful to share to the participants some principles and / or a methodology related on how to design a product.	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	☐ Yes ☐ No X Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		The mixed approach i.e. presentation of professionals and interaction.	If it is possible, I would add more text to the presentation to help attendees in fix the knowledge.

Main weaknesses of the training		If it is possible, I would add more text to the presentation to help attendees in fix the knowledge.	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No	Yes, but if possible, I would add more text to the presentation.	

External Evaluation

WP and task:	WP 6 – T6.4
Training title:	Integration of the uses and the design in the company business model
Main author/editor:	CIRIDD
Evaluator:	Consorzio Intellimech – Valerio Pesenti

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	4 hours
Thematic(s):	Integration of the uses and design in the company business model
Target group(s):	all kind of companies, regardless of the size or the sector
Summary and learning objectives:	The objective is to bring companies to integrate the uses of the customer and the design in the company business model

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	☐ Yes ☐ No X Partially		I would suggest being complementary to the topics of Industry 4.0 by transferring knowledge that are related to stimulate the phase of design of a product considering I4.0 paradigm.

Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	☐ Yes ☐ No X Partially	As previous comment, I think it is complementary.	
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	☐ Yes ☐ No X Partially	In a complementary way.	
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	Yes, because I think it is structured in order to transfer some principles that could be used in several situations by the attendees.	
Could the training nature be qualified as innovative? (i.e.	☐ Yes ☐ No		

originality of the approach, covered topic(s)…)	X Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Add more text to the slide in order to make them self-explained.	If possible, add some industrial cases.
Main weaknesses of the training		See comment above (Add more text to the slide in order to make them self-explained)	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Yes, but add more text to the presentation and if possible, some industrial cases.

2.6 ULBS trainings

Internal Evaluation

WP and task:	WP 6 – T6.4
Training title:	Workplace safety – Employees emotion recognition
Main author/editor:	ULBS, Romania
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	12 hours
Thematic(s):	Understand how emotions affect risk perception and behaviour Understand, design, and implement a method to recognize human emotions from live video sequences
Target group(s):	Master students (Computer Science) Software engineers

Summary and learning objectives:	This training is structured in 4 different laboratories, each having two hours per week. The training period if four weeks. In following describes the organisation of each separate module. **1.** Introduction to Python & OpenCV **2.** Face detection **3.** Supervised learning **4.** Recognizing facial emotions

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	It contains a snapshot and step by step explanation of exercises	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	There are exercises to share with students	
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		

Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	It provides basics knowledge on phyton and face recognition algorithms	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It is combines theory and exercise on the topics	
Main weaknesses of the training		Can be added some slide to explain the theoretical background instead of text	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		Include some slides explaining the theoretical background to help students follow the training

WP and task:	WP 6 – T6.4
Training title:	Sibiu – Smart City Modelling
Main author/editor:	ULBS, Romania
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site

Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	8 hours
Thematic(s):	Smart City Modelling using ADOxx
Target group(s):	Vocational training: professional of system design Master students
Summary and learning objectives:	Understand and apply a method for the design of smart city modelling Acquire operational skills on the use of ADOxx toolkits for Smart City modelling

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	It contains step by step explanation of how to design a smart city using adoxx platform	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	There are exercises to share with students	
Is (Are) the aimed target group(s) of the training well	X Yes ☐ No		

concerned by the produced content?	☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	It is based on the Adoxx platform	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It is very applicative	.
Main weaknesses of the training		I would integrate some background on the adoxx (if students do not have previous knowledge)	
Is the training ready to be shared and used? If no, please specify the necessary changes	☐ Yes X No		I would integrate some background on the adoxx (if students do not have previous knowledge)

WP and task:	WP 6 – T6.4
Training title:	Petri Nets based automation of manufacturing systems
Main author/editor:	ULBS, Romania
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	16 hours
Thematic(s):	Petri Nets based automation of manufacturing systems
Target group(s):	Master students
Summary and learning objectives:	Understand and apply a method for designing robust and deadlock free control solution for manufacturing systems Acquire operational skills on the use of Petri Nets tools for automation

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No	There are exercises to share with students	

Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	Yes, it provides knowledge on petri net and how to design robust and deadlock free control solution for manufacturing system	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It is very applicative, there are a lot of exercises	.
Main weaknesses of the training		Theory part is limited in the document	Add some slides for the theory that is applied on the exercises
Is the training ready to be shared and used? If no, please specify the necessary changes	☐ Yes X No		Add some slides for the theory that is applied on the exercises

External Evaluation

WP and task:	WP 6 – T6.4
Training title:	Workplace safety – Employees emotion recognition
Main author/editor:	ULBS, Romania
Evaluator:	Michele Ermidoro - AISent

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	12 hours
Thematic(s):	Understand how emotions affect risk perception and behaviour Understand, design, and implement a method to recognize human emotions from live video sequences
Target group(s):	Master students (Computer Science) Software engineers
Summary and learning objectives:	This training is structured in 4 different laboratories, each having two hours per week. The training period if four weeks. In following describes the organisation of each separate module. **1.** Introduction to Python & OpenCV **2.** Face detection **3.** Supervised learning **4.** Recognizing facial emotions

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	It provides code and images to explain exercises	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in	X Yes ☐ No		

advance e.g. via web page			
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially	Students need some knowledge on programming	
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially	It is a relevant topic in the factory of the future	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It explains topics using exercises	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Sibiu – Smart City Modelling
Main author/editor:	ULBS, Romania

Evaluator:	Michele Ermidoro - AISent

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	8 hours
Thematic(s):	Smart City Modelling using ADOxx
Target group(s):	Vocational training: professional of system design Master students
Summary and learning objectives:	Understand and apply a method for the design of smart city modelling Acquire operational skills on the use of ADOxx toolkits for Smart City modelling

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No	Training is done using the software, and the document can guide students	
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		

Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially	Smart cities are becoming more and more relevant	
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It is based on a case study to be developed by students	.
Main weaknesses of the training			Add some contextual information
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Petri Nets based automation of manufacturing systems
Main author/editor:	ULBS, Romania
Evaluator:	Michele Ermidoro - AISent

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	16 hours
Thematic(s):	Petri Nets based automation of manufacturing systems
Target group(s):	Master students
Summary and learning objectives:	Understand and apply a method for designing robust and deadlock free control solution for manufacturing systems

	Acquire operational skills on the use of Petri Nets tools for automation

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad		

	☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		It explains topics using exercises	
Main weaknesses of the training		There are only exercises	I would suggest adding some theory
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		I would suggest to add some slides for theory (exercises are fine)

2.7 UNIBIAL trainings

Internal Evaluation

WP and task:	WP 6 – T6.4
Training title:	Business model canvas for FoF strategy creation
Main author/editor:	Alicja E. Gudanowska Bialystok University of Technology, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Improving the ability to create and develop business models; improving skills of identifying weaknesses of current solutions, seeking opportunities for the development, planning, visualization; improvement of skills of teamwork and presentation of prepared solutions.
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of basic theoretical content and example case study, division of teams, clarification of the subject matter of each team – 45 minutes;

	9 blocks: discussion of a given model element and its individual creation – 9 x 30 minutes; summary and presentation – 45 minutes

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry	X Yes ☐ No ☐ Partially		

4.0 stakes and challenges?			
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		The theoretical part is well structured	
Main weaknesses of the training		It explains topics without many examples	
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Design thinking for product and service design
Main author/editor:	Alicja E. Gudanowska - Bialystok University of Technology, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)

Thematic(s):	Improving the skills of designing new products, creating innovative solutions, planning their implementation in practice; solving problems; basic analysis of selected elements of the organization's environment; improving the skills of teamwork, communication and presentation of prepared solutions
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of basic theoretical content, division of teams, clarification of the design challenge – 1 hour and 30 minutes; implementation of the individual steps of the design thinking process – 3 hours; presentation of results – 1 hour; evaluation round and ideas for improvement – 30 minutes

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain	X Yes ☐ No		

materials (models etc.) to be offered to participants in advance e.g. via web page			
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		The theoretical and practical parts are well structured	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Cloud manufacturing for modelling virtualized resources
Main author/editor:	Julia Siderska- Bialystok University of Technology, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Acquainting participants with knowledge regarding fundamentals of cloud manufacturing paradigm; defining the vision, conceptual framework and service models for cloud manufacturing; shaping the ability of identification of data sources and data acquisition; indicating resources and capabilities enabled to be virtualized and shared 'on demand'
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of fundamental theoretical contents – 4 hours examples of data acquisition and data sources identifications, identifying data sources; data acquisition – 1/2 hour identifying virtualizable resources and capabilities – 1 hour discussion and summary – 1/2 hour

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing	X Yes ☐ No ☐ Partially		

with the application form expectations?			
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		

3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		The theoretical part is well structured as well as the exercises provided	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Artificial intelligence tools for Industry 4.0 transformation
Main author/editor:	Julia Siderska Bialystok University of Technology, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Acquainting participants with knowledge about fundamentals of Industry 4.0 technologies and trends; introducing the basics of artificial intelligence tools enabling industrial transformation; shaping the ability of modelling and simulations with the use of chosen artificial intelligence tools; developing the skills of designing expert systems and neural models
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of basic theoretical content – 2 hours grouping participants into teams, explaining the assumptions of the designed expert systems – 1/2 hour working in groups – 2 and 1/2 hours presentation of the results – 1 hour

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain	X Yes ☐ No ☐ Partially		

relevant in the long run?			
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		exercises are the added value of the lesson	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Fundamentals of Business Process Management (BPM)
Main author/editor:	Arkadiusz Jurczuk - Bialystok University of Technology, Poland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Understanding the key aspects of process management in the enterprise. Hands-on learning process understanding and knowledge of the principles of analysis, designing and documentation processes. Understanding of modern IT

	systems supporting the process management and digitalization. Developing creativity and contextual thinking.
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	lecture - presentation of basic theoretical content – 4h working in groups, case study and discussion – 1 1/2h discussion and summary – 1/2h

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well	X Yes ☐ No		

concerned by the produced content?	☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training			
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

External Evaluation

WP and task:	WP 6 – T6.4
Training title:	Business model canvas for FoF strategy creation

Main author/editor:	Alicja E. Gudanowska Bialystok University of Technology, Poland
Evaluator:	Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Improving the ability to create and develop business models; improving skills of identifying weaknesses of current solutions, seeking opportunities for the development, planning, visualization; improvement of skills of teamwork and presentation of prepared solutions.
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of basic theoretical content and example case study, division of teams, clarification of the subject matter of each team – 45 minutes; 9 blocks: discussion of a given model element and its individual creation – 9 x 30 minutes; summary and presentation – 45 minutes

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		

Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		tipic is of extreme interest to the industrial world.	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Design thinking for product and service design
Main author/editor:	Alicja E. Gudanowska - Bialystok University of Technology, Poland
Evaluator:	Paolo Gaiardelli – University of Bergamo

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Improving the skills of designing new products, creating innovative solutions, planning their implementation in practice; solving problems; basic analysis of selected elements of the organization's environment; improving the skills of teamwork, communication and presentation of prepared solutions
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of basic theoretical content, division of teams, clarification of the design challenge – 1 hour and 30 minutes; implementation of the individual steps of the design thinking process – 3 hours; presentation of results – 1 hour; evaluation round and ideas for improvement – 30 minutes

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		

Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		very interactive lesson	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Cloud manufacturing for modelling virtualized resources
Main author/editor:	Julia Siderska- Bialystok University of Technology, Poland
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Acquainting participants with knowledge regarding fundamentals of cloud manufacturing paradigm; defining the vision, conceptual framework and service models for cloud manufacturing; shaping the ability of identification of data sources and data acquisition; indicating resources and capabilities enabled to be virtualized and shared 'on demand'
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of fundamental theoretical contents – 4 hours examples of data acquisition and data sources identifications, identifying data sources; data acquisition – 1/2 hour identifying virtualizable resources and capabilities – 1 hour discussion and summary – 1/2 hour

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in	X Yes ☐ No		

advance e.g. via web page			
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Exercises are the most interesting part of the course	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Artificial intelligence tools for Industry 4.0 transformation
Main author/editor:	Julia Siderska- Bialystok University of Technology, Poland

Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Acquainting participants with knowledge about fundamentals of Industry 4.0 technologies and trends; introducing the basics of artificial intelligence tools enabling industrial transformation; shaping the ability of modelling and simulations with the use of chosen artificial intelligence tools; developing the skills of designing expert systems and neural models
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	Presentation of basic theoretical content – 2 hours grouping participants into teams, explaining the assumptions of the designed expert systems – 1/2 hour working in groups – 2 and 1/2 hours presentation of the results – 1 hour

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		

Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Appreciable the part with Exercises for participants	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP 6 – T6.4
Training title:	Fundamentals of Business Process Management (BPM)
Main author/editor:	Arkadiusz Jurczuk - Bialystok University of Technology, Poland
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	1 day (6 hours)
Thematic(s):	Understanding the key aspects of process management in the enterprise. Hands-on learning process understanding and knowledge of the principles of analysis, designing and documentation processes. Understanding of modern IT systems supporting the process management and digitalization. Developing creativity and contextual thinking.
Target group(s):	Professionals of the same or different companies
Summary and learning objectives:	lecture - presentation of basic theoretical content – 4h working in groups, case study and discussion – 1 1/2h discussion and summary – 1/2h

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		

Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		good theretical introduction to BPM	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

2.8 CONTI trainings

Internal Evaluation

WP and task:	WP6 – T6.4
Training title:	Cobots - installing and programming information needed for a rapid implementation of Cobots in industrial environment
Main author/editor:	CONTI
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	5 days, 8 hours / day
Thematic(s):	The course offers basic knowledge regarding the concept, installation, exploitation and maintenance of Cobots in industrial environment
Target group(s):	Student, Automation Engineer, Researcher on technical topics
Summary and learning objectives:	-measure time to establish frequency and timing for AGV movements -design routes for AGVs in 3D simulation software -programming script for Fleet Manager -integration of object recognition to avoid obstacles -sensor maintenance/replacement - programming Cobot to communicate with industrial environment (sliding doors, industrial equipment, other Cobots etc.)

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the	X Yes		

training the most appropriate notably regarding the target group(s)?	☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially	It provides knowledge on industrial cobot and how to configure and design them	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Exhaustive step by step procedure to configure cobot	

Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP6 – T6.4
Training title:	AGV for modern Logistics in industrial companies
Main author/editor:	CONTI
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 days, 8 hours / day
Thematic(s):	basic knowledge regarding the exploitation and maintenance of AGVs in the logistic field of the industrial environment
Target group(s):	Student, Automation Engineer, Researcher on technical topics
Summary and learning objectives:	-measure time to establish frequency and timing for AGV movements -design routes for AGVs in 3D simulation software -programming script for Fleet Manager -integration of object recognition to avoid obstacles -sensor maintenance/replacement

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**

Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		

Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially	It provides knowledge on industrial AGV and how to configure and design them	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Exhaustive step by step procedure to configure cobot	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

External Evaluation

WP and task:	WP6 – T6.4
Training title:	Cobots - installing and programming information needed for a rapid implementation of Cobots in industrial environment
Main author/editor:	CONTI
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	5 days, 8 hours / day
Thematic(s):	The course offers basic knowledge regarding the concept, installation, exploitation and maintenance of Cobots in industrial environment

Target group(s):	Student, Automation Engineer, Researcher on technical topics
Summary and learning objectives:	-design, install and configure Cobots cells/applications -provide maintenance services for Cobots and accessories -synchronize Cobots with production equipment -learn/know communication protocols -use controllers and interfaces with equipment -able to program the Cobot -design grippers using CAD software

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s)	X Yes		

appropriate regarding Industry 4.0 stakes and challenges?	☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		

2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Very detailed description of cobot and how to design them	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

WP and task:	WP6 – T6.4
Training title:	AGV for modern Logistics in industrial companies
Main author/editor:	CONTI
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	On-site

Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	3 days, 8 hours / day
Thematic(s):	basic knowledge regarding the exploitation and maintenance of AGVs in the logistic field of the industrial environment
Target group(s):	Student, Automation Engineer, Researcher on technical topics
Summary and learning objectives:	-measure time to establish frequency and timing for AGV movements -design routes for AGVs in 3D simulation software -programming script for Fleet Manager -integration of object recognition to avoid obstacles -sensor maintenance/replacement

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		
Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well	X Yes ☐ No		

concerned by the produced content?	☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Very detailed description of AGV and how to design them	
Main weaknesses of the training			
Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

2.9 UNIOULU trainings

Internal Evaluation

WP and task:	WP6 – T6.4
Training title:	Robotics application in Virtual Laboratory

Main author/editor:	UNIOULU, Finland
Evaluator:	UNIBG

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	2 days
Thematic(s):	The course offers knowledge on robots
Target group(s):	Vocational training: professionals on automation Master students (Advanced Computing Systems)
Summary and learning objectives:	- Have knowledge of robotics process conceptual modelling based on ADOxx platform - Be capable of implementing some hands-on tools (adopting Bee-up) to design the models - Get the basic ideas how robots cooperate in the real settings - Cultivate more sense of robotics

1/ Project objectives and requirements			
Question	**Answer**	**Comments**	**Recommendations**
Is the training compliant with the project requirements?	X Yes ☐ No ☐ Partially		
Is the training compliant with the WP objectives and correctly dealing with the application form expectations?	X Yes ☐ No ☐ Partially		
2/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		

Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially	It provides knowledge on robot, how to program and model them	
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
3/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		High detail level on robotics and how to program them	
Main weaknesses of the training		Slide should be preferred	

Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

External Evaluation

WP and task:	WP6 – T6.4
Training title:	Robotics application in Virtual Laboratory
Main author/editor:	UNIOULU, Finland
Evaluator:	Valerio Pesenti – Intellimech Consortium

Training format: (Online/On-site)	On-site
Training nature: (Theoretical/Applicative/Both)	Both
Training planned duration:	2 days
Thematic(s):	The course offers knowledge on robots
Target group(s):	Vocational training: professionals on automation Master students (Advanced Computing Systems)
Summary and learning objectives:	- Have knowledge of robotics process conceptual modelling based on ADOxx platform - Be capable of implementing some hands-on tools (adopting Bee-up) to design the models - Get the basic ideas how robots cooperate in the real settings - Cultivate more sense of robotics

1/ Content of the training			
Question	**Answer**	**Comments**	**Recommendations**
Is the chosen format of the training the most appropriate notably regarding the target group(s)?	X Yes ☐ No		

Is the planned duration of the training the most appropriate?	X Yes ☐ No		
Does the training content contain materials (models etc.) to be offered to participants in advance e.g. via web page	X Yes ☐ No		
Is (Are) the aimed target group(s) of the training well concerned by the produced content?	X Yes ☐ No ☐ Partially		
Is (Are) the subject matter(s) appropriate regarding Industry 4.0 stakes and challenges?	X Yes ☐ No ☐ Partially		
Is the training sufficiently well realized to remain relevant in the long run?	X Yes ☐ No ☐ Partially		
Could the training nature be qualified as innovative? (i.e. originality of the approach, covered topic(s)…)	X Yes ☐ No ☐ Partially		
Quality of the writing	X Good ☐ Bad ☐ Needed changes		
2/ Conclusions			
Question	**Answer**	**Comments**	**Recommendations**
Main positive points developed and offered by the training		Very detailed description on robots	
Main weaknesses of the training			

Is the training ready to be shared and used? If no, please specify the necessary changes	X Yes ☐ No		

3 Conclusion

In this deliverable in total 33 training materials have been assessed by a project partner (as internal evaluator) and by an external evaluator.

In general feedback on the training is positive with some minor recommendations provided to improve the trainings, mainly related to adding some details, some information, or some more exercises to help students to practice on the topic.

In general, the materials provide is appropriate in terms of format, content, target group. The topics addressed are considered innovative, mainly dealing with industry 4.0 stales and challenges, and well realized to remain in the long run.