



## **D4.1 Enabling Programme Report**

December 2019

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## 1. ABOUT THIS DOCUMENT

This document contains the summary of the tools used to carry out the task of energizing and activating a community around the 4 trainings of the Project, developed in the respective European nodes of the OD&M Alliance.

With the aim of bringing the OD&M paradigm closer to industry and higher education institutions, the pilot carried out during the project through the trainings of each node, allows the alliance and ultimately any institution interested in development of the paradigm, develop training actions using the learning generated in the alliance as a mirror.

The enabling program is developed during project WP4, specifically through tasks 4.1 and 4.2 Building and animating communities and Piloting the trainings itself. These two activities are key to replicate the project in future nodes, and therefore, it is key in the exploitation of the project. It should be noted that the work developed during these tasks, as well as the replication of the trainings - or their adaptation - through student mobility (Task 4.3), allows the alliance not only to evaluate the results of the work developed during the training in each node, but establish work networks and connect the different interests of the participating entities. In addition, the construction and animation of the communities is related to the dissemination and impact work that is worked on in other work packages of the project, and therefore there is a close relationship with the previous work of trainings design and subsequent communication and dissemination.

This document is based on the creation of the OD&M Learning Program, as well as the common understanding of the formations designed in each node. Therefore, it includes the learning and the results generated during the WP3, as well as it is related to the development of the maker profile made in the previous research phase.

Specifically, this document presents the different strategies carried out in each node for the activation of the community interested in the OD&M paradigm, on the one hand through the collection of information on the activities developed during training, but of a character open and extended to the rest of the community. On the other hand, collect the dates and activities that now if within the training, help the rest of the community to implement new trainings.

## 2. THE ENABLING PROGRAMME STRATEGY

As mentioned, the objective of WP4 is to pilot the Enabling Program in each territorial node of the Alliance, in order to boost the construction of vibrant communities of university staff and students, traditional manufacturers and makers around the Open design and manufacturing, and to support its embedding within the triangle of the Alliance.

Around the 4 trainings, and once defined its contents, competences, domains of activity, times, deliverables and other objects of the design of the trainings collected in the WP3, as an alliance it is necessary to understand all the possibilities, as well as the strategies carried out carried out on each node for the activation of the community interested in OD&M.



Figure 1. Kind of activities carried out during the training.

These activities will be organized and managed by the Enabling Teams in each node; their role is to create the frame within which relations between our target-groups will happen, and to coach HEIs' staff in this respect.

Formal activities such as seminars, round-tables and small conferences (mainly organized within HEIs) will be combined with more informal events such as workshops (from time to time dealing with Arduino, Agile Lean, 3D printing, Linux, Rhinoceros, etc.) (Figure 1), presentations of products and businesses, networking, speed dating events, mainly organized within Fablabs and innovation communities' spaces. Through the use of 'match-making' techniques during such events, the role of the Enablers is to vehicle relations by facilitating the matching between manufacturers 'with a business problem/inefficiency' or 'lacking of specific knowledge or skills' with university students, makers and Open manufacturers.

We can summarize the Enabling Programme strategy with the following 3 steps:

1. Define the Enabling Team (Each node).
2. Elaborate an activities proposal.
3. Tracking qualitativamente (In addition to WP5 tools).

According to WP4, first step to reach the objective to build and animate communities around OD&M Alliance, is creating a working group, hereinafter referred to as the Enabling Teams. These working groups were responsible for collecting and providing the necessary information, complementary to the info collection during Work Package 5.

<b>NODE</b>	<b>TEAM MEMBERS</b>		
<b>Poland Enabling Team</b>	Ewelina Widarska	WSB	ewiderska@wsb.edu.pl
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<b>UK Enabling Team</b>	Andrew Gregson Anoushka Cole Edward Hill	Green Lab	hello@greenlab.org
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	Adam Thorpe	UAL	a.thorpe@csm.arts.ac.uk
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	Rodrigo Martínez	UDeusto	rodrigo.martinez@deusto.es
	Marcelo Leslabay	UDeusto	leslabay@deusto.es
	Paula Fernández	UDeusto	Paula.fernandez@deusto.es
* The specific role of Tongji University in this Task (4.1) is to contribute to animating the project platform with contents and articles related to Open Design and Manufacturing in China.			

Table 1. OD&M Alliance Enabling Teams.

To facilitate the work of the team responsible for collecting information, a tool was developed (Figure 2) to collect the information regarding the activities developed in each node during the training, but beyond the training, such as those described in Figure 1.



## LIST OF PROPOSED ACTIVITIES

This activities will be organized and managed by the Enabling Teams in each node. Formal activities\* such as seminars, round-tables and small conferences will be combined with more informal events\*\* such as workshops, presentation of products and businesses, networking, speed dating events.

*\* Formal activities will take place mainly within HEIs.*

*\*\* Informal activities will take place mainly within FabLabs and innovation communities' spaces.*

TITLE	TYPE OF ACTIVITY	DATE	PROPOSED BY

Figure 2. List of activities tool provided into the Alliance.

To complete the collection of information, and share among the OD&M Alliance all the events carried out during the training, with the aim of building and encouraging communities, a qualitative information collection tool is proposed, which allows a basic understanding of the activity carried out (Figure 3).

## Activity/Event Summary

Please, fill in this form to reflect the most important aspects of the activity or event carried out with the objective of building and animating your community around the Alliance.

**\*Required**

**Date \***  
Date  
dd/mm/yyyy

**Place \***  
Your answer

**Type of activity \***  
Your answer

**Summary of the activity \***  
Your answer

**SUBMIT**

Never submit passwords through Google Forms.

*Figura 3. Activity / Event Summary tool provided into the Alliance.*

With this tool, the objective is to identify the type of activity as well as the basic data such as date and location, but above all, collect a summary of the activity that allows the alliance to assess the suitability of the activities in future trainings.

### 3. REPORTING ACTIVITIES FOR ANIMATING COMMUNITIES

Once the strategy for community creation around the OD&M paradigm is defined, the activities carried out in each node are detailed below.

#### 3.1 POLAND

The activities proposed by WSB and Fablab Lodz in the Polish node are listed below:



## LIST OF PROPOSED ACTIVITIES

This activities will be organized and managed by the Enabling Teams in each node. Formal activities\* such as seminars, round-tables and small conferences will be combined with more informal events\*\* such as workshops, presentation of products and businesses, networking, speed dating events.

*\* Formal activities will take place mainly within HEIs.*  
*\*\* Informal activities will take place mainly within FabLabs and innovation communities' spaces.*

TITLE	TYPE OF ACTIVITY	DATE	PROPOSED BY
First Hackaton	Hackaton	17th November 2018	WSB&Fab Lab Łódź
Second Hackaton	Hackaton	January 2019	WSB&Fab Lab Łódź
Third Hackaton	Hackaton	March 2019	WSB&Fab Lab Łódź
First Workshop	Workshop	3rd December 2018	WSB&Fab Lab Łódź
Second Workshop	Workshop	February 2019	WSB&Fab Lab Łódź
1st Webinar	Webinar	November 2018	WSB&Fab Lab Łódź
2nd Webinar	Webinar	November 2019	WSB&Fab Lab Łódź
3rd Webinar	Webinar	January 2019	WSB&Fab Lab Łódź
4th Webinar	Webinar	February 2019	WSB&Fab Lab Łódź
5th Webinar	Webinar	March 2019	WSB&Fab Lab Łódź

As an example, the information collected is summarized the webinar activities developed in this node (1st Webinar).

#### WSB & FabLab Lodz Webinars

*“Webinars were design to share with OD&M students’ knowledge needed for theirs work on OD&M challenges and hackathons. In two webinars with Igor Zubrzycki highlights the activity around discussing ICT for makers’ movement and introducing rapid prototyping methods. In addition, developing knowledge concerning the Internet of Things, introducing this issue, discussing the*

*LoRaWAN infrastructure, the Things network and Business Model Canvas, focusing on key partnerships, activities, customer relations, used channels, streams and structure.”*

### 3.2 UNITED KINGDOM

Listed below are the activities proposed by CSM-UAL and the Greenlab in the UK node:



## LIST OF PROPOSED ACTIVITIES

This activities will be organized and managed by the Enabling Teams in each node. Formal activities\* such as seminars, round-tables and small conferences will be combined with more informal events\*\* such as workshops, presentation of products and businesses, networking, speed dating events.

*\* Formal activities will take place mainly within HEIs.  
\*\* Informal activities will take place mainly within FabLabs and innovation communities' spaces.*

TITLE	TYPE OF ACTIVITY	DATE	PROPOSED BY
Public Briefing - Chalton Street: Furnishing the Public Living Room	Public Meeting	25th October 2018	UAL
An Introduction to Design Led Social Innovation: Collaboration and Complexity	Workshop	26th October 2018	UAL
Re-Designing Products for a Circular Economy	Workshop	7th November 2018	UAL
Co-design Workshop - Chalton Street: Furnishing the Public Living Room	Workshop	14th November (part 2 on 16th November) 2018	UAL
Introduction to Green Lab	Talk	21st November 2018	UAL
Public Showcase	Exhibition	29th November 2018	UAL
Development of OD&M open access material design lab	Workshop facility	Commencing 30th November	GREEN LAB
Intellectual Property for Social Enterprise	Talk		UAL
Reflection on enterprise and experience-based learning - activities built around structured reflection of the learning experience.			UAL

### 3.3 SPAIN

The activities proposed by the University of Deusto and the Deusto Fablab are listed below, as well as by other agents of the OD&M paradigm in the Spanish node:



## LIST OF PROPOSED ACTIVITIES

This activities will be organized and managed by the Enabling Teams in each node. Formal activities\* such as seminars, round-tables and small conferences will be combined with more informal events\*\* such as workshops, presentation of products and businesses, networking, speed dating events.

\* Formal activities will take place mainly within HEIs.

\*\* Informal activities will take place mainly within FabLabs and innovation communities' spaces.

TITLE	TYPE OF ACTIVITY	DATE	PROPOSED BY
Etzegoki Challenge results	Public Meeting	February 2019	UDeusto
FARO Deusto ingeniería inversa	Exhibition	24 January 2019	Faro Co.
Open milling machine training	Workshop	20 December 2018	Deusto FabLab
Introduction to Autodesk Slicer	Workshop	4 December	Deusto FabLab
IndusMaker	Talks / Conferences	20 November	Tecnalia
Transformando las tendencias del diseño en tecnologías industriales	Talks / Conferences	5 November	UDeusto / Maier
Un nuevo paradigma en el que los diseñadores tienen mucho que aportar	Talks / Conferences	26 October	UDeusto / Dot S. Coop

As an example, the information collected on the public meeting proposed by the University of Deusto is detailed.

### Etzegoki Challenge Results / Public Meeting

*“The activity was open exposure of the solutions developed by students enrolled in the Deusto OD & M Challenge. It was held at the premises of the University of Deusto, where they attended the users involved in the development of solutions. This activity highlights the importance of public presentation and defense of work in a real environment. In addition, the opening to the rest of the community provided that multiple voices could be knowledgeable not only of the project and the solutions, but that new activities and networks could be established.”*

### 3.4 ITALY

The activities proposed by the University of Florence and the LAMA Agency in the Italian node are listed below:



## LIST OF PROPOSED ACTIVITIES

This activities will be organized and managed by the Enabling Teams in each node. Formal activities\* such as seminars, round-tables and small conferences will be combined with more informal events\*\* such as workshops, presentation of products and businesses, networking, speed dating events.

\* Formal activities will take place mainly within HEIs.  
\*\* Informal activities will take place mainly within FabLabs and innovation communities' spaces.

TITLE	TYPE OF ACTIVITY	DATE	PROPOSED BY
Erasmus 4 Curious: Local Workshop around Erasmus+ and opportunities to link formal and informal education via collaborative spaces	Workshop	08/05/2019	LAMA
Prototipi in Mostra: Final event of the Florence Training Course	Open exhibition	24/04/2019	UNIFI
OD&M: Between circular, collaborative and distributed models. Collaborative economy workshop with P2P	Talk / Conference	24/04/2019	UNIFI
World café with challenges stakeholders involved in the Florentine training	Challenges Café		LAMA
Training course open event	Open session	01/02/2019	LAMA
Design Jam with challenges stakeholders	Design JAM	08/03/2019	UNIFI

As an example, the information collected on the workshop proposed by LAMA is detailed.

#### **Erasmus 4 Curious. Ideas and networks to innovate adult education**

*A special event dedicated to adult education will take place in Florence, part of the activities that the Erasmus + Agency organizes for the European Festival. One morning addressed to associations, startups, schools and training centers in the area, and to all the new realities where non-formal education is done, focusing on curiosity as an engine of innovation.*

## 4. TRAINING PILOTING

In addition to ensuring the creation of a community, during WP4 it was necessary to ensure the correct implementation of the training and for this purpose task 4.2 was carried out, providing the alliance with a shared roadmap.

For the pilot training of the different nodes, the strategy developed in two steps can be summarized:

1. Provide any relevant information about the training and identify the key dates
2. Report after the key dates indicated through Google Form > [Tool] Pilot Form.

### 4.1 KEY DATES AND ACTIVITIES SHEET

In order to collect the information of the training in a synthesized way, the alliance was proposed to create a synthesized sheet, which allows to know where it is and to analyze the data qualitatively in addition to sharing the results with the rest of the partners. Table 2 shows the information sections required for the four nodes.

<b>TRAINING INFORMATION FOR PILOTING</b>	
Based on the scheme and template developed in WP3 (Setting up), the piloting of the training will be based on the following information:	
<b>Basic information</b>	
Title	XXX
Start Date	XXX
End Date	XXX
<b>Skills / Competencies / Domains and Badges</b> (According to OD&M Alliance, report and platform)	
Skills	XXX
Competencies	XXX
OD&M Platform Recognition Badges	XXX
OD&M Platform Achievement Badges	XXX

Disciplinary domains	XXX		
<b>Training modules</b>			
<b>Module N°</b>	<b>Module name</b>	<b>Start date</b>	<b>End date</b>
XXX	XXX	XX/XX/XX	XX/XX/XX
<b>Key dates</b> (Such as launching, report deliver, presentation, key frontal lesson, event, hackathon, ...)			
<b>Date</b>	<b>Activity</b>		
XX/XX/XX	XXX		
<b>Kind of activities carried out during and including into the training</b>			
XXX			

Tabla 2. Training and key dates relevant information tool.

## 4.2 COLLECTING PROCESS

Once the relevant information and identified relevant dates and activities have been provided, as well as skills and competencies, challenge badges, kind of activities, . Key dates such as (Launching, events, deliver, visits, ...) the next step is to report according to these dates and activities. For this, a second tool was developed, called Pilot Form, which allows in itself to conduct a training pilot in qualitative terms. The pilot form has been designed so that through the information provided in the previous point, each educational institution was asked about the type of activity developed (Figure 4).



Figure 4. Pilot Form Tool.

Depending on the activity, the form will collect information such as:

- . Skills and competencies developed and degree of compliance.
- . Deviations between programming and implementation.
- . Participants, materials and deliverables generated.
- . Interaction with the OD&M platform.

Due to the differences of the trainings (competencies, activities, third part involved, ...), each pilot form will be different (Figure 5).

The figure displays six screenshots of the OD&M Pilot Form tool, arranged in two rows. The top row shows four selection screens for different training nodes: UNIFI, UAL-CSM, WSB, and UD. Each screen features the OD&M logo, the node name, and a dropdown menu with the text 'Please select and activity to report'. The bottom row shows two 'Activity report' screens. The left screen is for 'Deusto OD&M Training Etxegoki Challenge' (06/09/2018 - 19/12/2018) and the right screen is for 'WSB OD&M Training Open Design and Manufacturing through event based learning' (09/10/2018 - 29/03/2019). Both activity report screens include a disclaimer about Google Account data, a 'Required' label, the OD&M logo, the training details, the title 'PILOT FORM', a dropdown menu for activity selection, and a 'NEXT' button.

Figure 5. Pilot Form tool per node.

## 4.3 TRAINING KEY ACTIVITIES PER NODE

Once the training pilot strategy has been defined, thus completing the Enabling Program strategy, the following summarizes the information summarized in relation to the activities carried out in each node and in each training, as well as the most relevant information regarding dates, competitions, knowledge domains, etc.

### 4.3.1 POLAND

<b>WSB - TRAINING INFORMATION FOR PILOTING</b>	
Based on the scheme and template developed in WP3 (Setting up), the piloting of the training will be based on the following information:	
<b>Basic information</b>	
Title	Open Design and Manufacturing through event based learning
Start Date	9th October 2018
End Date	10th March 2019
<b>Skills / Competencies / Domains and Badges</b> (According to OD&M Alliance, report and platform)	
Skills	<ul style="list-style-type: none"> <li>Problem solving</li> <li>Research skills</li> <li>Collaborative making skills</li> <li>Entrepreneurship</li> <li>Leadership</li> <li>Communication and networking</li> </ul>
Competencies	<ul style="list-style-type: none"> <li>Heuristic methods</li> <li>Designing web applications</li> <li>Coding and designing of embedded systems</li> <li>Cultural psychology of interdisciplinary problem solving</li> <li>Rapid prototyping in practices</li> <li>Smart clothes</li> <li>Electronic textiles</li> <li>Soldering</li> <li>DIY crafting</li> </ul>
OD&M Platform Recognition Badges	<ul style="list-style-type: none"> <li>Analysis in Design Experience</li> <li>Collection in Design Experience</li> <li>Creativity</li> <li>Criticality</li> <li>Decision making in Production Experience</li> <li>Dissemination</li> <li>Ethics</li> </ul>

	Experimentation in Design Experience Flexibility Initiative Interpretation Investigation in Design Experience Logic Negotiation Observation in Design Experience Organisation Planning Precision Reflection Responsibility Self-organisation Study in Design Experience		
OD&M Platform Achievement Badges	Heuristic methods Designing web applications Coding and designing of embedded systems Cultural psychology of interdisciplinary problem solving Rapid prototyping in practices Smart clothes Electronic textiles Soldering DIY crafting		
Disciplinary domains	Economics (Management) Design basics – soft skills Methods of enhancing creativity Electronics Internet of Things Human - Robot Interaction Rapid prototyping and crafting methods Smart citizens solution Urbanistics systems (transportation, environmental issues, small architecture) Smart clothes Electronic textiles		
<b>Training modules</b>			
<b>Module N°</b>	<b>Module name</b>	<b>Start date</b>	<b>End date</b>
Module 1	Heuristic methods	09.10.2018	16.10.2018
Module 2	Designing web applications	22.10.2018	23.10.2018

Module 3	Coding and designing of embedded systems	29.10.2018	30.10.2018
Module 4	1st Hackaton	17.11.2018	17.11.2018
Module 5	Cultural psychology of interdisciplinary problem solving	03.12.2018	03.12.2018
Module 6	Webinars	01.11.2018	29.03.2019
Module 7	2nd Hackaton	12th January 2019	12th January 2019
Module 8	Technical workshop on textronics	9th March 2019	9th March 2019
Module 9	3rd Hackaton	10th March 2019	10th March 2019
<b>Key dates</b> (Such as launching, report deliver, presentation, key frontal lesson, event, hackathon, ...)			
<b>Date</b>	<b>Activity</b>		
17th November 2018	1st Hackaton		
3rd December .2018	1st workshop in Łódź		
12th January 2019	2nd Hackaton		
9th March 2019	2nd workshop in Łódź		
10th March 2019	3rd Hackaton		
<b>Kind of activities carried out during and including into the training</b>			
Heuristic methods - soft skills WORKSHOP Designing web applications - technical WORKSHOP Coding and designing of embedded systems - technical WORKSHOP Technical workshop on textronics - technical workshop Cultural psychology of interdisciplinary problem solving - soft skills workshop Three Hackatons, Webinars - 8 hours.			

### 4.3.2 UNITED KINGDOM

<b>UAL - TRAINING INFORMATION FOR PILOTING</b>	
Based on the scheme and template developed in WP3 (Setting up), the piloting of the training will be based on the following information:	
<b>Basic information</b>	
Title	Open Design and Manufacture: Challenge-based learning in a context of open design engaging socially responsive thematics.
Start Date	1 October 2018
End Date	5 March 2019
<b>Skills / Competencies / Domains and Badges</b> (According to OD&M Alliance, report and platform)	
Skills / Competencies	Observation in Design Experience Experimentation in Design Experience Investigation in Design Experience Study in Design Experience Collection in Design Experience Analysis in Design Experience Initiative in Production Experience Decision making in Production Experience Organisation in Production Experience Ethical Awareness in Production Experience Resilience in Production Experience Communication in Production Experience Organisation Reflection Logic Dissemination Precision Insight Balance Currency Resilience Ethics Rationality Interpretation Reciprocity Negotiation

	Flexibility Interpersonal Responsibility Endurance Self-organisation Planning Reflection Initiative Criticality Creativity		
OD&M Platform Recognition Badges	User research Scenario analysis Project presentation Feasibility study		
OD&M Platform Achievement Badges	OD&M: MAID UAL		
Disciplinary domains	Product Design Industrial Design Design Led Social Innovation Industry 4.0		
<b>Training modules</b>			
<b>Module N°</b>	<b>Module name</b>	<b>Start date</b>	<b>End date</b>
Module 1	OPEN DESIGN FOR INCLUSIVE NEIGHBOURHOOD DEVELOPMENT	1 October 2018	5 March 2018
Module 2	OPEN DESIGN FOR FUTURE SUSTAINABLE LIVING	1 October 2018	5 March 2018
Module 3	HOW CAN WE DESIGN LOCALLY, MAKE GLOBALLY	1 October 2018	5 March 2018
<b>Key dates</b> (Such as launching, report deliver, presentation, key frontal lesson, event, hackathon, ...)			
<b>Date</b>	<b>Activity</b>		
24/10/2018	An Introduction to Design Led Social Innovation: Collaboration and Complexity - 3-hour workshop and lecture.		
7/11/2018	Re-Designing Products for a Circular Economy - a practical workshop structured around teardown and reassembly activities. 3-hour workshop and lecture.		

6/11/2018	Using Service Design Methods and Tools - structured around persona development and scenario building. 3-hour workshop
	Intellectual Property for Open Design, Innovation and Social Enterprise.
25/10/2018	Video Production and Visual Storytelling - introductions into Adobe Premiere and After Effects.
	Physical Computing - introduction into processing and Arduino
	Design for Digital Manufacture - introduction into design for additive manufacture, 3D printing and laser cutting.
21/11/2018	Industry 4.0 / Introduction to Green Lab - lectures delivered through the experience of makerspace coordinators.
29/11/2018	Reflection on enterprise and experience-based learning - activities built around structured reflection of the learning experience.
<b>Kind of activities carried out during and including into the training</b>	
WORKSHOPS LECTURES DEMONSTRATIONS	

### 4.3.3 SPAIN

<b>DEUSTO - TRAINING INFORMATION FOR PILOTING</b>	
Based on the scheme and template developed in WP3 (Setting up), the piloting of the training will be based on the following information:	
<b>Basic information</b>	
Title	Etxegoki Challenge
Start Date	06/09/2018
End Date	01/02/2019
<b>Skills / Competencies / Domains and Badges</b> (According to OD&M Alliance, report and platform)	
Skills	<ul style="list-style-type: none"> <li>. Briefing</li> <li>. Problem definition</li> <li>. Questions &amp; Answers</li> <li>. Agreement</li> <li>. Desk research</li> </ul>

	<ul style="list-style-type: none"> <li>. Contextualisation</li> <li>. User Research</li> <li>. Etxegoki Meeting</li> <li>. Creative sessions</li> <li>. Visual conceptualization</li> <li>. Sketching</li> <li>. Rapid modeling</li> <li>. Basic prototyping</li> <li>. Prototyping tools and Methods</li> <li>. Users feedback</li> <li>. Context observation</li> <li>. Prototype updates</li> <li>. Testing outcomes</li> <li>. Final polishing</li> <li>. Results presentation</li> </ul>
Competencies	<p>Competencies of the elective course “Prototyping and digital fabrication”:</p> <p>CE1. Analyze and apply different prototyping techniques to carry out work, concept and final project models.</p> <p>CE2. Analyze different materials, paints and finishes to apply in models and prototypes of Industrial Design products.</p> <p>CE3. Develop the prototype of a real product by applying the new Digital Manufacturing technologies to verify its formal, functional and use qualities.</p>
OD&M Platform Recognition Badges	<p>Ethics</p> <p>Planning</p> <p>Creativity</p> <p>Analysis in Design Experience</p> <p>Precision</p> <p>Negotiation</p> <p>Self-organisation</p>
OD&M Platform Achievement Badges	<p>Deusto OD&amp;M Challenge / Prototyping Artisan</p> <p>User research</p> <p>Open design and manufacturing and the role of Fablabs and Makerspaces</p> <p>Project presentation</p>
Disciplinary domains	<ul style="list-style-type: none"> <li>. Prototyping</li> <li>. Industrial Design</li> <li>. Product Design</li> <li>. Engineering</li> <li>. Social Innovation</li> <li>. Design for All</li> </ul>

<b>Training modules</b>			
<b>Module Nº</b>	<b>Module name</b>	<b>Start date</b>	<b>End date</b>
Module 1	Framing	6/09/2018	20/09/2018
Module 2	User Research	18/09/2018	28/09/2018
Module 3	Conceptualization	28/09/2018	9/11/2018
Module 4	Prototyping	9/11/2018	13/12/2018
Module 5	Testing	20/11/2018	13/12/2018
Module 6	Evaluation	13/12/2018	19/12/2018
<b>Key dates</b>			
(Such as launching, report deliver, presentation, key frontal lesson, event, hackathon, ...)			
<b>Date</b>	<b>Activity</b>		
18/09/2018	Challenge introduction to the Students and partner visit		
19/09/2018	Briefing delivery		
28/09/2018	Deliver of the conceptualization report		
8-9/11/2018	Deliver of the first prototypes		
13/12/2018	Final prototypes and Fablab evaluation (Green light meeting)		
19/12/2018	Final presentation		
<b>Kind of activities carried out during and including into the training</b>			
<ul style="list-style-type: none"> <li>. Contact hours (face-to face lessons)</li> <li>. Visiting and in-house analysis</li> <li>. Desktop research</li> <li>. Practical lessons of prototyping</li> <li>. Teamwork</li> <li>. Student presentations</li> <li>. Grupal evaluation</li> <li>. Third part evaluation (external agent)</li> </ul>			

#### 4.3.4 ITALY

<b>UNIFI - TRAINING INFORMATION FOR PILOTING</b>	
Based on the scheme and template developed in WP3 (Setting up), the piloting of the training will be based on the following information:	
<b>Basic information</b>	
Title	Design Driven Strategies for Manufacture 4.0 and Social Innovation
Start Date	30 November 2018
End Date	12 April 2019
<b>Skills / Competencies / Domains and Badges</b> (According to OD&M Alliance, report and platform)	
Skills	<ul style="list-style-type: none"> <li>. Multi-disciplinary Research</li> <li>. User Analysis</li> <li>. Scenario Analysis</li> <li>. Co-operative Practices</li> <li>. Engagement</li> <li>. Partnership creation</li> <li>. Communication skills</li> <li>. Prototyping skills</li> <li>. Solution, ideation and design skills</li> </ul>
Competencies	<ul style="list-style-type: none"> <li>. Strategic Design</li> <li>. Design Thinking</li> <li>. Design Driven Innovation</li> <li>. Co-design</li> <li>. Design for Social Innovation</li> <li>. Art of Hosting</li> <li>. Project Modeling &amp; Management</li> </ul>
OD&M Platform Recognition Badges	<ul style="list-style-type: none"> <li>. Observation in Design Experience</li> <li>. Experimentation in Design Experience</li> <li>. Investigation in Design Experience</li> <li>. Study in Design Experience</li> <li>. Collection in Design Experience</li> <li>. Analysis in Design Experience</li> <li>. Initiative in Production Experience</li> <li>. Decision making in Production Experience</li> <li>. Organisation in Production Experience</li> <li>. Ethical Awareness in Production Experience</li> <li>. Resilience in Production Experience</li> <li>. Communication in Production Experience</li> <li>. Organisation</li> </ul>

	<ul style="list-style-type: none"> <li>. Reflection</li> <li>. Logic</li> <li>. Dissemination</li> <li>. Precision</li> <li>. Insight</li> <li>. Currency</li> <li>. Resilience</li> <li>. Ethics</li> <li>. Interpretation</li> <li>. Reciprocity</li> <li>. Negotiation</li> <li>. Flexibility</li> <li>. Interpersonal</li> <li>. Responsibility</li> <li>. Endurance</li> <li>. Self-organisation</li> <li>. Planning</li> <li>. Initiative</li> <li>. Creativity</li> <li>. Criticality</li> </ul>
<p>OD&amp;M Platform Achievement Badges</p>	<ul style="list-style-type: none"> <li>. User research</li> <li>. Design Driven Strategies for Manufacture 4.0 and Social Innovation</li> </ul>
<p>Disciplinary domains</p>	<p><b>Scenario 4.0</b> Industry 4.0: the country specifications Design and Industry 4.0</p> <p><b>Sustainability</b> Definition of sustainability Sustainability scenarios Design for sustainability</p> <p><b>Innovation Communities</b> Communities of change and societal transition Theory U Art of Hosting</p> <p><b>Design Method and tools</b> Strategic Design Design Thinking Design Driven Innovation Co-design Multi-disciplinary Research Research Tools</p>

	Best Practices  <b>Modeling &amp; Management</b> Business model (canvas) Project life cycle Impact assessment methods and tools		
<b>Training modules</b>			
<b>Module N°</b>	<b>Module name</b>	<b>Start date</b>	<b>End date</b>
Module 1	Innovation trends	30/11/2018	15/12/2018
Module 2	Communities of Impact	11/01/2019	12/01/2019
Module 3	Design for Social Innovation	18/01/2019	26/01/2019
Module 4	Challenges launch and team-building	01/02/2019	02/02/2019
Module 5	Exploration and open inquiry	08/02/2019	08/03/2019
Module 6	Ideation	09/03/2019	15/03/2019
Module 7	Prototype and deliver	22/03/2019	12/04/2019
<b>Key dates</b>			
(Such as launching, report deliver, presentation, key frontal lesson, event, hackathon, ...)			
<b>Date</b>	<b>Activity</b>		
October 2018	Launch of the training course		
30/11/2018	Start of the training course + Keynote speech by Marco Tognetti		
01/12/2018	Key frontal lessons by Mauro Lombardi and Flaviano Zandonai		
15/12/2018	Key frontal lessons by Giuseppe Lotti & Irene Fiesoli, Andrea Cattabriga and Andrea Zanni		
11-12/01/2019	Workshop with Michel Bachmann		
18/01/2019	Key frontal lesson and workshop by Loredana Di Lucchio (Viktor Malakuczi)		
19/01/2019	Key frontal lesson by Eleonora Trivellin		
26/01/2019	Workshop with Vincenzo Di Maria		

01/02/2019	Challenges Cafè public event: launch of the 2 macro-challenges
08/02/2019	Key frontal lesson by Leonardo Chiesi
22/02/2019	Intermediary review
01/03/2019	Assessment and Peer review
08/03/2019	Co-design Jam public event
15/03/2019	Assessment and Peer review
22/03/2019	Key frontal lesson by Marco Tognetti
23/03/2019	Workshop with Vincenzo Di Maria
12/04/2019	Final workshop assessment
24/04/2019	Final event

### **Kind of activities carried out during and including into the training**

- . Key frontal lessons
- . Workshops
- . Desktop research
- . Project work (Explore, Ideate, Prototype)
- . Teamwork
- . Students presentations
- . Tutoring
- . Assessment and Peer review
- . Organization of public events related to the training course
- . Final exhibition