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# Methodology Definition & Action Piloting Plan

# Methodology Definition & Preparation of Action Piloting Plan

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<b>Version</b>	<b>Date</b>	<b>Short description</b>	<b>Author(s)</b>
1	30.06.2022	Baseline	CTCP
2	10.2022	Feedback from CETEM & CMA AURA	CETEM
3	11.2022	Corrections #1	CTCP
4	24.11.2022	Feedback Nov online meeting	ALL
5	27.11.2022	Corrections #2	CTCP

## 1 INTRODUCTION TO THE DOCUMENT

This document envisages at analysing and defining the best methodology to carry out the piloting activities predicted in the project, near the target group defined in the project proposal, in the most appropriate and suitable way. Therefore, this document represents the baseline for the IO4 implementation strategy of the ACCESS 3DP project.

In addition, it envisages at planning the piloting near the different target groups, considering the different levels of tests defined in the project proposal, within the different training paths developed.

The purpose of piloting a curriculum and correspondent training solution are to make sure they are effective, and to make the due changes/adjustments before mainstreaming or offering widely.

It serves as a practical guide for project partners to be able to successfully implement piloting activities and report them, as well as the consequent results and provide recommendations for the curricula and contents/tools fine tune.

The piloting methodology and planning cover the piloting timeline, corresponding to **11 months** of the Intellectual Output 4 (IO4) timeline - Pilot validation and mainstream of the innovative tools for the interconnection of C-TCIs through 3D Printing - from **May 2022** to **March 2023**. Nevertheless, this document – therefore the methodology and strategies contained - shall be kept flexible to allow any kind of changes and adjustments based on a variety of needs, happening, which may occur at any time throughout the piloting lifetime.

## 2 FRAMEWORK OF PILOTING

A pilot is a test of a solution, in this case a curricula and training materials and delivery strategy/tool – the e-learning platform - on a small scale and limited in time, before introducing the solutions more widely and on a permanent basis into the market, in this case the target-groups with specific needs and expectations. It envisages to provide information, feed-back, to analyse different target groups reactions to interpret the feasibility and the usability of the curricula, training materials and e-learning platform. A pilot test is designed in a way that the result can be favourable but also unfavourable. It is expected that adjustments to the developed material and e-learning platform will be necessary. The pilot users will tell the Consortium which adjustments are needed.

Pilots can take different forms, because we can request relevant reactions in different ways, with different target groups.

To test all the training materials and the e-learning platform, partners should commit to a defined threshold in terms of the number of testers involved defined in the application. Partners are free and welcome to implement more than the stipulated figures.

In addition and taking into account that the curricula offers 4 different training paths and involve 3 different kinds of target-group, which should be extensively tested, it is important to assure that the partnership altogether covers all these parameters, providing a good quality piloting and really contributes for the improvement of the project results.

In the following sections the Intellectual Output 4 will be described.

## 2.1 INTRODUCTION TO THE IO4 (INTELLECTUAL OUTPUT 4)

IO4 - Pilot validation and mainstream of the innovative tools for the interconnection of C-TCIs through 3D Printing

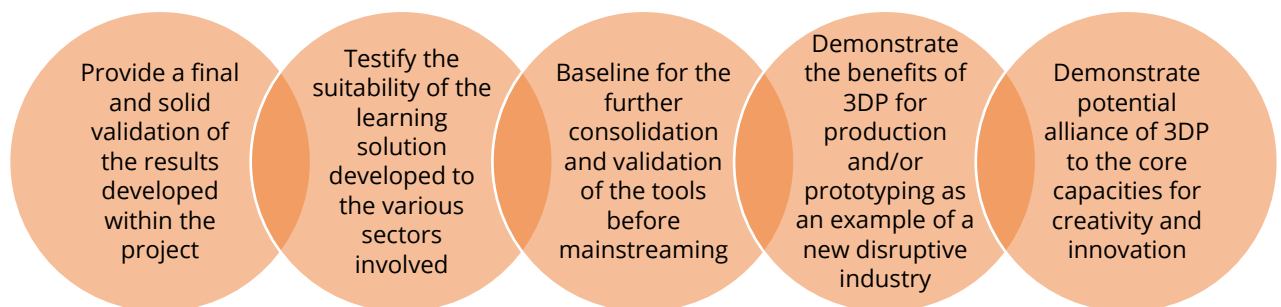
The main goals of this output are the following:

- Defining, organising, implementing, and evaluating all necessary actions to pilot the learning modules developed in the IO3, based on the curriculum developed on the IO2
- Applying the acquired knowledge through hands-on sessions and manufacturing real prototypes in several sectors

Besides these conceptual goals related to the IO4, specific objectives have been drafted which are described in the following sections.

## 2.2 OBJECTIVES OF PILOTING

The specific aims of piloting are detailed in the figure below. Summarising, the keyword for the IO4 is validate, test, consolidation, demonstrating value of the solutions, potential of 3DP, creating links with target-groups and stakeholders.



Key objectives of ACCESS 3DP piloting

## 2.3 EXPECTED OUTCOMES

The expected results from the work within this IO4 are the following:

- A methodology guide and piloting plan (which in fact represents this document and related tools/templates)
- A final report to evaluate the results of the pilot test and its impact on both intermediate and end users. The report will also be the baseline for the adjustment of the project results, developed within the previous IOs. It will allow the Consortium to fix possible problems in the tools and apply mitigation actions while the pilot is running. The report will also settle conclusions about the use of 3D Printing in C-TCIs while also defining future lines of actions for necessary and better improvements. This report will be available in 6 language versions

namely: English (EN), French (FR), Slovenian (SL), Slovakian (SK), Portuguese (PT) and Spanish (SP)

- Prototypes - End users (entrepreneurs, talent designers, students, etc.) will be able to upgrade prototypes, as materialised results, thanks to the knowledge, skills and competences acquired during the pilot

In addition to these outcomes and related with a specific activity inside the IO4 – Learning Training Activity – a set of evidence and a report will be also deliverable, as this activity is also a piloting experience.

## 2.4 TARGET-GROUPS TO INVOLVE

The piloting will target three different groups of testers:

### PRIMARY TARGET GROUP - Professionals, Workers, Entrepreneurs

- End users - designers, managers, entrepreneurs, technician from technology sectors and traditional sectors:
  - Craftsmen and creative professionals (workers and managers), interested in boosting opportunities for innovation, expanding their market share and launching new innovative products through the involvement of Additive Manufacturing (AM).
  - Entrepreneurs interested in setting up a creative business in the traditional sectors or in the new technologies of AM and 3D Printing
  - Professionals of technologies, Designers, 3D Printing Manufacturers
  - Professionals of industry and craft domains, from all kinds of sub-manufacturing sectors, who wish to receive innovative knowledge and training in order to specialise in a specific topic for high perspectives.

### SECONDARY TARGET GROUP - Students, VET providers, Universities, Unemployed

- Facilitators/intermediate users, from partners organisation staff mainly, but also from stakeholders
- VET students
- Universities focusing on CAD design and 3D printing technology, unemployed students with background in CAD design, manufacturing processes in 3D printing and craft industries

### TERTIARY TARGET GROUP - Other relevant stakeholders, Local authorities

- Other relevant stakeholders from traditional sectors, such as local education authorities, decision-makers.

The piloting has been designed in this framework and in line with the 4 different training paths:

## Training Path 1 – For Professionals, Workers, Entrepreneurs

**ACCESS-3DP**  
Art & Creative Craft Enterprises for Successful Breeding of 3D Printing

Co-funded by the Erasmus+ Programme of the European Union

**Professionals, Workers, Entrepreneurs**

**M1. INNOVATION PROCESS APPLIED IN TRADITIONAL SECTOR**

- 1.1 Basics of Innovation process
- 1.2 Stages of Innovation Process
- 1.3 Innovation Management and New Product Development
- 1.4 Co-Innovation concept

**M2. DESIGN THINKING & SKILLS**

- 2.1 What is Design Thinking?
- 2.2 Principles of Design Thinking
- 2.3 Design Thinking process
- 2.4 Design Thinking and Business Models
- 2.5 Critical Thinking Skills
- 2.6 Benefits of Design Thinking
- 2.7 3DP as a tool to adopt the Design Thinking methodology

**M3. 3D PRINTING & PRODUCTION PROCESS**

- 3.1 History of 3D Printing
- 3.2 Description of the Production Processes and Available Software for 3D Printing
- 3.3 Technologies in 3D Printing
- 3.4 3D Printing Materials
- 3.5 Risk Management
- 3.6 Impact of 3D printing on the supply chain

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**Professionals, Workers, Entrepreneurs**

**M4. CURRENT PROCESSES – DIFFERENT FIELDS OF APPLICATION**

- 4.1 3DP Technologies – Process, Resolution, Accuracy, Sizes, Security
- 4.2 3DP Technologies – Extract the pieces, post-processes
- 4.3 3DP Technologies – Real-life examples – Traditional sectors
- 4.4 3DP Technologies – Real-life examples – Non- Traditional sectors
- 4.5 Environmental Impact and Reusing Potential

**M5. ENTREPRENEURSHIP AND 3D PRINTING – NEW BUSINESS IDEAS**

- 5.1 What is Entrepreneurship?
- 5.2 Generating and Development a Business Idea, 3D Printing Business Ideas
- 5.3 New Entrepreneurship ideas using 3D Printing

**M6. ADVANCED INDUSTRIAL ROBOTICS APPLIED IN CRAFTS**

- 6.1 Principles and fundamentals of robotics
- 6.2 Programming a robot
- 6.3 Criteria for the implementation of a robot
- 6.4 Application of robotics
- 6.5 Coupling AIR with 3DP Theory and real examples

## Training Path 2 – Students, VET providers, Universities, Unemployed

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Co-funded by the Erasmus+ Programme of the European Union

**Students, VET providers, Universities, Unemployed**

**M1. INNOVATION PROCESS APPLIED IN TRADITIONAL SECTOR**

- 1.1 Basics of Innovation process
- 1.2 Stages of Innovation Process
- 1.3 Innovation Management and New Product Development
- 1.4 Co-Innovation concept

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## Training Path 3 – Other relevant stakeholders, Local authorities

**ACCESS-3DP**  
An & Creative Craft Enterprises for Successful Strengthening of 3D Printing

Co-funded by the Erasmus+ Programme of the European Union

**Other relevant stakeholders, Local authorities**

**M1. INNOVATION PROCESS APPLIED IN TRADITIONAL SECTOR**

- 1.1 Basics of innovation process
- 1.2 Stages of innovation Process
- 1.3 Innovation Management and New Product Development
- 1.4 Co-Innovation concept

**M2. DESIGN THINKING & SKILLS**

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- 2.2 Principles of Design Thinking
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## Training Path 4 – Open access course

The ACCESS 3DP project consortium also identified the need to personalize the training path according to the needs of the participants, who want to learn and deepen their knowledge about specific topics only. This need is satisfied with the open-access course, that allows learners to choose the topics of their interest, without the need to complete the whole training course. The major difference with the other training paths is that it does not deliver any final certification, even if completed. Thus, we recommend learners who are interested in getting the final training certificate, to choose a different training path. To guide the learners in the choice of the learning units the most appropriate for their needs, the project partners have also prepared a short questionnaire.

### 2.5 PILOTING

The 4 described training paths and the diversity of target groups to involve in the project, it's then possible to assure a multilevel piloting strategy that covers multiple aims, target-groups, and strategies as following:

- The piloting will be performed through on-line distance learning and with special monitoring from all partners.
- Optional practical activities can be organised in each partner organisation, involving the online testers, seeking the application of the knowledge acquired during the online pilot training and promoting the use of a wide range of materials and 3DP technology to produce prototypes, consolidating the development of skills on 3DP.

- During the piloting, the exchange of ideas and practices from the side of the partners teams assigned to this piloting activities will be extremely important for the process of improving the learning material and e-learning platform.
- The pilot will be implemented with end users, to provide an analysis of the suitability, accessibility, and usability of the Learning Modules, alongside the e-learning platform, as well as its suitability with the C-TCl's VET Curriculum. Objectively, it is envisaged that end users will actively contribute positively to the improvement and empowerment of the Learning Modules and consequently to the Curriculum.

## 2.6 PILOTING EXPECTED IMPACT

The piloting expected impact on results and target-groups will be the following:

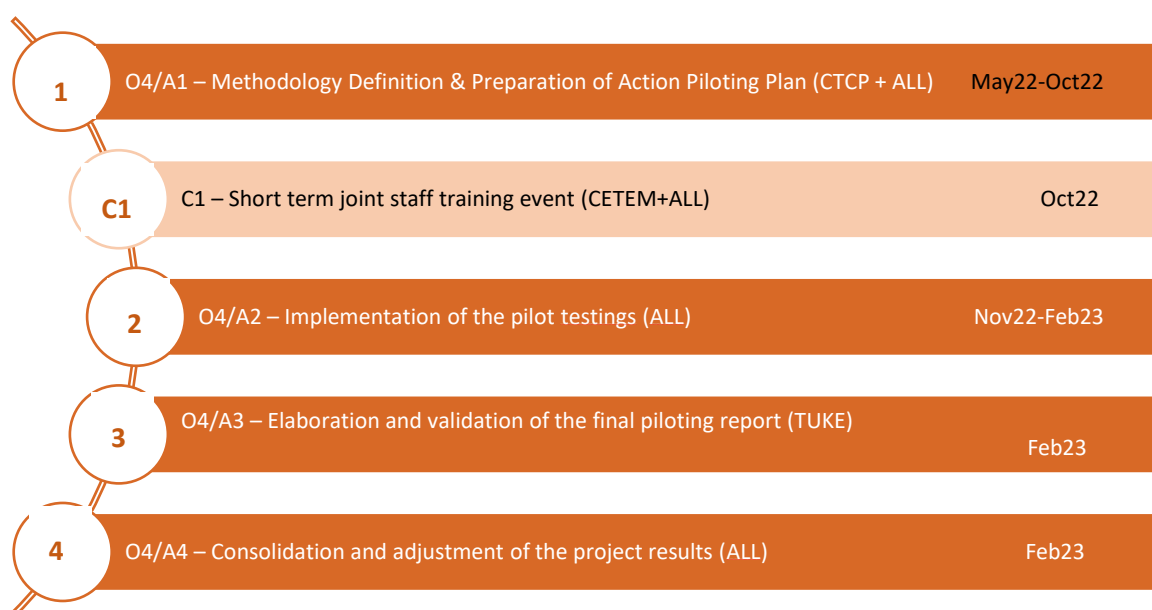
- Quality, accessibility, suitability, and usability of the final results will be checked, while also providing strategies and tips for the future use of the results.
- Provide tips for improvement on the training material and the e-learning platform which will be performed at short, medium, and long-term.
- Collaboration between traditional sectors and the creative sectors will be enhanced, allowing them to adapt and refine a given product, while also shortening cultural gaps between the two industries.
- Represent the real demonstration of the expected effectiveness of the training, and they will be a powerful mean of dissemination and exploitation, including the potential transferability to other sectors, especially to traditional sectors.

## 3 PILOTING STRATEGY

The piloting strategy includes a plan with activities/tasks to be implemented with the predefined aims, distributed by 3 phases: preparation, implementation and checking phase.

### 3.1 ACTIVITIES/TASKS

Piloting activities includes the following 5 major activities summarised below:



The different activities of the IO4 are distributed by 3 different phases of the piloting as following:

## **Preparation phase:**

A1- A guide for the project partners on how to successfully undertake the pilots will be written by CTCP, who will evaluate and make considerations concerning the structure of the pilots, their duration, the tasks to be accomplished, the target users to make the testing and evaluation. CTCP will be the leader of this activity. They will prepare the Piloting Plan with all the partners involved, including templates for registration, for collecting feedback, etc. validated by all partners.

## **Implementation phase:**

This phase involved 3 main activities to know:

C1 – Short term joint staff training event - The workshop is planned to take place in Month 24, at the early stages of IO4 and in any case before the national pilots are implemented within each consortium country. The duration is set to 3 days, excluding travel days, and the location will be Yecla, in the Murcia Region (Spain). Because of this, CETEM is leader organisation of the consortium, who will organise the event with the support of the partners wherever/whenever needed. At the end of the workshop, an activity report is prepared to highlight the main activities and conclusions issued by the participants

A2 - CMA69, CETEM, CTCP, TUKE and STP will implement the pilot, based on the methodology produced in A1. CETEM will focus on users from the Furniture sector, CTCP will focus on the footwear sectors, meanwhile the rest of the partners will involve users from other crafts sectors, who they are co-operating with and who are part of their network.

It is likely that each of the project partners will improve and enhance their premises and services to support the targeted users in their region, with the help of other industrial partners, and to allow them access to equipment.

Keeping the targeted audience in mind, dissemination tools and channels shall be used based to capture the attention of the target-groups for piloting activities. Such tools include:

- The project website.
- Newsletter.
- Social media publications
- Multiplier events.
- Face-to-face meetings with stakeholders to foster the connection between the craft and the creative industries with the aim to contribute to the potential development of new projects using 3D printing technology.
- Informative and working events to encourage the participation of target groups and the sustainability of the project once its lifespan is concluded.
- Contributions in specialised publications in the field of crafts, creative industry and any other related field.
- Attendance at conferences, seminars, etc., related to the scope of the project and dissemination of the piloting activities

The effectiveness of communications and dissemination in this phase of the project will also dictate the success of the piloting.

A3 - Elaboration and validation of the project results will be performed by TUKE. They will define the basics for the validation of the IOs developed in this project and evaluate the data which was collected by the partners during the pilots. Key indicator for the IO assessment:

- Compliance in the implementation of the defined tasks
- Actual collaboration among partners
- Effective use of resources
- Accomplishment of the timeline
- Number of facilitators/intermediate users involved
- Number of end users involved / number of certificates
- Number of prototypes produced during hands-on activities
- Quality and accuracy of the piloting report

Based on this, TUKE will prepare the final piloting report and all partners will be asked to provide inputs and further validation.

### **Checking phase**



A4 - Based on the final piloting report, CTCP will seek to consolidate and adjust the project results accordingly. In particular, the Learning Modules and e-learning platform will be adjusted and finalised with the help of all partners.




## **3.2 PARTNERS' ROLES**

All partners will be involved in the piloting activities with different roles:

- CTCP coordinates, ensures standardisation of the methodologies to be used in the piloting and monitors the development of the outcomes predicted to be piloted.
- The partners involved will be responsible to captivate the piloting target-groups, to motivate them to enrol in this piloting course experience and to provide the accompaniment of them.
- The Quality Committee assigned to the project piloting assessment - CETEM

Below a detailed description of each partner tasks and contributions:

PARTNER	COUNTRY	CONTRIBUTION TO PILOTING
	<p>France</p>	<ul style="list-style-type: none"> <li>▪ Participate in the short-term joint staff training event, also involving representatives from stakeholders.</li> <li>▪ Implement the piloting according to the plan, involving users from craft sector, who they are co-operating with and who are part of their network.</li> <li>▪ The project team of the CMAR AURA will lead the pilot phase in France. The team will involve:               <ul style="list-style-type: none"> <li>○ colleagues within the CMA, which are not currently involved in the project, such as innovation managers at local level.</li> <li>○ local stakeholders, such as fab labs, organisations in the digital sector</li> <li>○ VET schools and VET teachers</li> <li>○ Craftsmen and craft professionals both with and without experience in 3D printing</li> </ul> </li> <li>▪ the project team will follow up with the pilots' users, share the feedbacks and suggestions for improvement with the rest of the partners, support the improvement of the deliverables</li> </ul>
	<p>Spain</p>	<ul style="list-style-type: none"> <li>▪ CETEM prepare and hold the short-term joint staff training event, in the early stages of the pilot implementation.</li> <li>▪ Implement the piloting according to the plan focused on users from the Furniture sector.</li> <li>▪ The project team will follow up with the pilots' users, share the feedbacks and suggestions for improvement with the rest of the partners, support the improvement of the deliverables</li> <li>▪ Consolidate improvements and adjustments on the e-learning platform - they will modify the platform according to the results.</li> <li>▪ Evaluate Piloting - CETEM is the Quality Manager of the project, which will also be involved in this IO4 to ensure the quality of the results obtained</li> </ul>

	<p>Portugal</p>	<ul style="list-style-type: none"> <li>▪ CTCP will be the leader of this activity</li> <li>▪ Elaborates the guide for the project partners on how to successfully undertake the pilots</li> <li>▪ Participate in the short-term joint staff training event, also involving representatives from stakeholders.</li> <li>▪ Implement the piloting according to the plan focused on users from the footwear sector</li> <li>▪ The project team will follow up with the pilots' users, share the feedbacks and suggestions for improvement with the rest of the partners, support the improvement of the deliverables</li> <li>▪ Prepare piloting report with TUKE</li> <li>▪ Consolidate improvements and adjustments on the Learning Modules</li> </ul>
	<p>Slovakia</p>	<ul style="list-style-type: none"> <li>▪ Participate in the short-term joint staff training event, also involving representatives from stakeholders.</li> <li>▪ Implement the piloting according to the plan, involving users from crafts sector, who they are co-operating with and who are part of their network</li> <li>▪ The project team will follow up with the pilots' users, share the feedbacks and suggestions for improvement with the rest of the partners, support the improvement of the deliverables</li> <li>▪ Elaboration and validation of the project results</li> <li>▪ Prepare piloting report with CTCP</li> </ul>
	<p>Slovenia</p>	<ul style="list-style-type: none"> <li>▪ Participate in the short-term joint staff training event, also involving representatives from stakeholders.</li> <li>▪ Implement the piloting according to the plan, involving users from craft sector, who they are co-operating with and who are part of their network</li> <li>▪ The project team will follow up with the pilots' users, share the feedbacks and suggestions for improvement with the rest of the partners, support the improvement of the deliverables</li> </ul>

## 3.3 ASSOCIATED PARTNERS' ROLES

Ever since the project proposal was being prepared, particular importance was given to the selection of appropriate Associated Partners. They play an important role in disseminating the project and its results, while also contributing to the implementation of project activities and impacting the project quality.

The potential behind the ACCESS 3DP project was perceivable from the start by different kinds of stakeholders, who expressed their willingness to be involved, in case of successful funding. Particular interest was shown specially for the L/T/T activity. It offers an opportunity for project partners to test the project results directly with those involved in/dealing with the crafts and creative industries. It also functions as a dissemination activity, making sure that associated partners and stakeholders can in fact disseminate the project results beyond the project partners' scope.

The following Associated Partners have confirmed their support to the project, included project piloting activities as such, they are entitled to:

1. Receiving the latest information about the project progress, particularly about deliverables, results, upcoming events and opportunities for the craft and creative industries.
2. Receiving a request from their contact points to gather practical feedback on the different activities planned to be implemented throughout the project lifetime, of course wherever and whenever this is envisaged.
3. Participate in piloting activities

The associated partners to involve will be the following:

PARTNER	ASSOCIATED PARTNER
<b>CMA69</b>	ECL - École Centrale de Lyon
	ENE - Entreprise Numérique
<b>CETEM</b>	AMUEBLA - Innovative business association of furniture manufacturers and related in the Murcia Region
<b>CTCP</b>	APICCAPS – Portuguese Footwear, Components, Leather Goods Manufacturers' Association
	Vasconcelos & C <sup>a</sup> . Lda. (Belcinto)
	Klaveness Footwear S.A.
<b>TUKE</b>	RINK Gemer Craft Incubator
	Plastic Precious Slovakia
	SBA – Slovak Business Agency

<b>STP</b>	SŠOM - Secondary school of Design Maribor
	RADPM – Regional Development Agency of Podravje
	LFTE – Laboratory of Telecommunication on Faculty for Electric Engineer

The above table can be expanded in case additional organisations express their willingness to get involved and support the project as associated partners.

### 3.4 KEY-PERFORMANCE INDICATORS (KPI'S)

The piloting methodology and strategies aims at achieving specific indicators and thresholds as following, which will be the basis of the piloting plan:

- Learners (students, workers, entrepreneurs, participation in the pilot test. Target Value: 50-60 participants – 10/12 per partners/country
- Teachers/trainers participating in the pilot test. Target Value: 10 participants
- Satisfied Users. Target Value: more than 70% of participants.
- Countries where the pilot is organised. Target Value: 5



## 4 TIMELINE

The strategy covers the full project lifetime of **10 months** from May2022 till February 2023.

Below the indicative timeline for all IO4, including piloting activities as such.

Outputs / Tasks	2022																2023																											
	mai/22				jun/22				jul/22				ago/22				set/22				out/22				nov/22				dez/22				jan/23				fev/23				mar/23			
	M20				M21				M22				M23				M24				M25				M26				M27				M28				M29				M30			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
IO4 – Validation and mainstream of the innovative tools for the interconnection of C-TCIs through 3D Printing (CTCP)																																												
O4/A1 – Methodology Definition and Preparation of Action Piloting Plan																																												
C1 - LTTA - Workshop: innovating crafts through 3DP technology																																												
O4/A2 – Implementation of the piloting tests																																												
O4/A3 – Elaboration and validation of the final piloting report																																												
O4/A4 – Consolidation and adjustment of the project results																																												

## 5 PILOTING PLAN

The following piloting plan pretends to support partners on the planning their piloting activities to accomplish with all indicators listed in the application, providing a homogeneous piloting what concerns the representativeness of all target-groups in each country.

Partner	Date on which the pilot will start dd/mm/yyyy	Target-groups (predicted numbers of participants)				N° of trainees online	N° of trainees practical activities (optional)	Estimated date to complete the pilot dd/mm/yyyy
		Path 1	Path 2	Path 3	Path 4			
		Professionals, Workers, Entrepreneurs	Students, VET providers, Universities, Unemployed	Other relevant stakeholders, Local authorities	Open access course			
CMA	01/11/2022	4	2	2	12	20	0	15/02/2022
CETEM	02/12/2022	8	7	3	2	20	0	28/02/2022
CTCP	02/12/2022	10	2	2	5	15	10	15/02/2023
STP	02/12/2022	3	3	3	3	12	0	15/02/2023
TUKE	02/12/2022	3	3	3	3	12	0	15/02/2023

## 6 PILOTING ASSESSMENT & REPORTS

All activities set for piloting strategy must be monitored to carry out regular assessment and assure the achievements of indicators at quantity and quality level.

This task assumes special importance as one of the piloting activities is to collect information/feed-back to support improvements/adjustments on the curriculum and correspondent training paths, learning material and e-learning platform.

Feed-back form is available at the end of the document, as annexes.

An excel sheet is available to support the accompaniment of the piloting activities progress and provide quantitative information for the piloting report at national and international level.

## ANNEX I – PILOTING PLAN – PROGRESS

Report excel sheet is to be filled along the piloting progress

PARTNER		Country		Target-groups (indicate numbers)				1. INNOVATION PROCESS APPLIED IN TRADITIONAL SECTOR	2. DESIGN THINKING & SKILLS	3. 3D PRINTING & PRODUCTION PROCESS	4. CURRENT PROCESSES – DIFFERENT FIELDS OF	5. ENTREPRENEURSHIP AND 3D PRINTING – NEW BUSINESS IDEAS	6. ADVANCED INDUSTRIAL ROBOTICS APPLIED IN CRAFTS	Nº of trainees online	Nº of trainees practical activities ( optional)	Nº of physical evidences (prototypes)	Follow-up / evidences					OBS.	Estimated date to complete the pilot dd/mm/yyyy					
Date on which the pilot started dd/mm/yyyy	VET / HEI involved	Company involved	Stakholder involved	Professionals, Workers, Entrepreneurs	Students, VET providers, Universities, Unemployed	Other relevant stakeholders, Local authorities	Open access course										Path 1	Path 2	Path 3	Path 4	Feed-back form practical activities (Y/N)			Feed-back form online (Y/N)	Attendance list (practical)	Certificates (how many?)	Report	

## ANNEX II – ATTENDANCE LIST (PRACTICAL ACTIVITIES - OPTIONAL)

For practical activities if any

(...title of the activity...)
<b>Date:</b>
<b>Venue:</b>

Participant	Organisation	Signature

## ANNEX III – PILOTING FEED-BACK FORM (ONLINE)

### Introductory text:

The ACCESS-3DP team is committed to improving the platform and the training materials you have experienced. Therefore, after testing the ACCESS-3DP training materials and the e-learning platform, we ask you to fill in the following evaluation questionnaire.

The questionnaire will propose you some quotes and for each of them, you can report how much you agree with them using a scale from 1 (I do not agree at all) to 5 (I fully agree).

In addition, your opinion matters to us, so you will have the opportunity to write free comments and more detailed answers to better clarify your point of view and give your feedback about how to improve the ACCESS-3DP e-learning experience.

This questionnaire is in English, and we prefer answers in English, but if you are more comfortable by writing in your own language, you are allowed to do so in French, Spanish, Slovenian, Slovak and Portuguese.

Thank you!

### Your profile:

1. What is your age?\*

  - Under 18 years old
  - 18-22 years old
  - 23-32 years old
  - 33-42 years old
  - 43-52 years old
  - 53 or older

  
2. Where do you live (country)?\*
  
  
3. Are you currently\*...

  - Student
  - Unemployed
  - Employee or self-employed
  - Business manager
  - Researcher/Professor
  - Educator/Trainer/Teacher
  - Public authority
  - Consultant
  - Other (please specify)

4. What is the name of your institution/company/university, etc.?

5. What is your educational background?\*

- Legal, economic science and social disciplines
- Mathematic, natural science, physic
- Technical engineering (mechanical, bio-engineering, plant engineering, etc.)
- Management engineering
- ICT, communication and information technology
- Linguistic and literacy
- Other (please specify)

6. Is ACCESS-3DP your first training experience into 3D printing and Advanced Industrial Robotics?\*

- Yes
- No

**Evaluation of the material:**

1. Which training path did you attend?\*

- TP1: ACCESS-3DP for professionals, workers and entrepreneurs
- TP2: ACCESS-3DP for students, VET providers, universities and unemployed
- TP3: ACCESS-3DP for other relevant stakeholders from traditional sectors, local authorities, policy makers, etc.
- TP4: ACCESS-3DP for open-access course

2. Which modules have you completed?\*

- M1 (Innovation Process in Traditional Sectors- Design and 3DP)
- M2 (Design Thinking and Skills)
- M3 (3D Printing and Production Process)
- M4 (Current Process- Different Fields of Applications)
- M5 (Entrepreneurship and 3DP – News business Ideas)
- M6 (Advanced Industrial Robotics applied in crafts)

3. Please evaluate the following quotes:

	1- Strongly disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly agree
The content is well structured					
The materials complete and covers well the topic of interest					
The material is corresponding to the learning goals					
The content was interesting and informative					
Materials are designed so that learners can apply gained knowledge					

Visuals and pictures break up the text and help the learner to understand the material better					
The quality of the interactive tools and video is good and conveys effectively content and interaction capabilities					
The different media and interactions (non-pdf) are well integrated and easy to use					
The assessment tests are clear, useful and correspondent to the learning material					
I received the necessary information, and I was able to plan my involvement in ACCESS-3DP learning process					
The estimated time to complete the learning units is realistic					
The information on how to access and navigate the platform is intuitive and easily accessible					
It is easy to understand where I am within the e-learning platform architecture					
The ACCESS-3DP training program met my expectations					

4. Do you have any recommendations to improve the learning material of the course?

...

5. If you have any comments linked to the question on content, layout or structure, please provide feedback or recommendation here.

...

6. If you have any comment linked to the time and planning of the learning, please provide a recommendation here.

...

7. If you have any comment linked to the learning platform and its technical aspects, please provide recommendation here.

...

8. All in all, how do you rate the ACCESS-3DP course?\*

1 (extremely poor) ... 10 (excellent)

9. Would you recommend the ACCESS-3DP platform and training course to other people?\*

- Yes
- No

10. Any other comment?



**Thank you for your interest in ACCESS-3DP course.**

Answers to questions marked with \* are mandatory

## **ANNEX IV – PILOTING FEED-BACK FORM FOR PRACTICAL ACTIVITIES (OPTIONAL)**

### **Introductory text:**

The ACCESS-3DP team is committed to improving the training materials you have experienced. Therefore, after testing the ACCESS-3DP training materials, we ask you to fill in the following evaluation questionnaire.

The questionnaire will propose you some quotes and for each of them, you can report how much you agree with them using a scale from 1 (I do not agree at all) to 5 (I fully agree).

In addition, your opinion matters to us, so you will have the opportunity to write free comments and more detailed answers to better clarify your point of view and give your feedback about the ACCESS-3DP practical experience.

This questionnaire is in English, and we prefer answers in English, but if you are more comfortable by writing in your own language, you are allowed to do so in French, Spanish, Slovenian, Slovak and Portuguese.

Thank you!

### **Your profile:**

2. What is your age?\*

  - Under 18 years old
  - 18-22 years old
  - 23-32 years old
  - 33-42 years old
  - 43-52 years old
  - 53 or older

  
3. Where do you live (country)?\*
  
  
4. Are you currently\*...

  - Student
  - Unemployed
  - Employee or self-employed
  - Business manager
  - Researcher/Professor
  - Educator/Trainer/Teacher
  - Public authority
  - Consultant
  - Other (please specify)

5. What is the name of your institution/company/university, etc.?

.....

6. What is your educational background?\*

- Legal, economic science and social disciplines
- Mathematic, natural science, physic
- Technical engineering (mechanical, bio-engineering, plant engineering, etc.)
- Management engineering
- ICT, communication and information technology
- Linguistic and literacy
- Other (please specify)

7. Is ACCESS-3DP your first training experience into 3D printing and Advanced Industrial Robotics?\*

- Yes
- No

**Evaluation of the material:**

2. Which modules have you contacted with?\*

- M1 (Innovation Process in Traditional Sectors- Design and 3DP)
- M2 (Design Thinking and Skills)
- M3 (3D Printing and Production Process)
- M4 (Current Process- Different Fields of Applications)
- M5 (Entrepreneurship and 3DP – News business Ideas)
- M6 (Advanced Industrial Robotics applied in crafts)

3. Please evaluate the following quotes:

	1- Strongly disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly agree
The content is well structured					
The materials complete and covers well the topic of interest					
The material is corresponding to the learning goals					
The content was interesting and informative					
Materials are designed so that learners can apply gained knowledge					
Visuals and pictures break up the text and help the learner to understand the material better					

The quality of the interactive tools and video is good and conveys effectively content and interaction capabilities					
The different media and interactions (non-pdf) are well integrated and easy to use					
The assessment tests are clear, useful and correspondent to the learning material					
I received the necessary information, and I was able to plan my involvement in ACCESS-3DP learning process					
The estimated time to complete the learning units is realistic					
The information on how to access and navigate the platform is intuitive and easily accessible					
It is easy to understand where I am within the e-learning platform architecture					
The ACCESS-3DP training program met my expectations					

4. Do you have any recommendations to improve the learning material of the course?

...

5. If you have any comments linked to the question on content, layout or structure, please provide feedback or recommendation here.

...

6. If you have any comment linked to the time and planning of the learning, please provide a recommendation here.

...

7. All in all, how do you rate the ACCESS-3DP course?\*

1 (extremely poor) ... 10 (excellent)

8. Would you recommend the ACCESS-3DP platform and training course to other people?\*

- Yes
- No

9. Any other comment?

**Thank you for your interest in ACCESS-3DP project.**

Answers to questions marked with \* are mandatory

## ANNEX V – REPORT TEMPLATE

Template for report pilot activities at national level - optional

<b>Organisation:</b>		<b>Country:</b>	
<b>Training path:</b>		<b>Module:</b>	
<b>Target Group:</b>		<b>Duration:</b>	
<b>N. of sessions:</b>		<b>Trainer/s</b>	

### Objectives

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### Didactic resources

Methods

Strategies


### CONTENTS

### ACTIVITIES

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### ASSESSMENT

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Notes: Please repeat this table for each pilot practical session you implement