

# INEDIT

open INnovation Ecosystems  
for Do It Together process

## D4.2. SPECIFICATION OF EACH PHYSICAL DEMONSTRATOR (OPEN MANUFACTURING)

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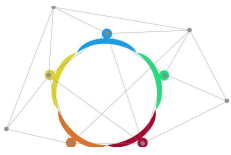
**WP4.2**

**Version 3**

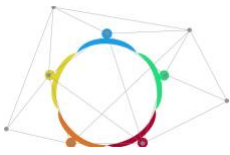
**January 2022**

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	<b>Work Package:</b>		<b>4</b>
	<b>Type of document:</b>		<b>Report</b>
	<b>Due Delivery Date:</b>		<b>End of January 2021</b>
	<b>Actual Delivery Date:</b>		<b>January 2022</b>
<b>Responsible:</b> UL			
<b>Dissemination Level</b> Confidential			
<b>Title:</b> Specifications for Open Manufacturing Demonstration Facilities			
<b>Description:</b> Describe and define the needs of each open manufacturing demonstrator Determine the specification of a common basis for each demonstrator Modelling of the demonstrator			
<b>Version</b> 3			
<b>Contributors</b>	<b>Versions</b>	<b>Dates</b>	<b>Revision Description</b>
UL	1.1	5/01/2021	
UL, ENSAM	1.2	8/02/2021	Restructuring the report to reduce the main part of the report
CRIT, ENSAM, FIR, HUAS, SCM, SUPSI, TTS, UNINOVA	1.3	21/02/2021	Minor corrections, and identification of specific questions
SCM, VERA, AIMEN, CROWD, ENSAM, SUPSI, TTS, TTPSC, UL	1.4	8/03/2021	Clarification on use case 1 and in section 7
UL	1.5	15/03/2021	Final revised version based on the consortium reviews
UL	2.1	26/05/2021	Reduce version according to the reviewers' advice. from D4.2 V1 we have enriched D4.1 which is consistent with T4.1  and we have produced a working document for the consortium to follow up the development of the demonstrator
UL based on Consortium meetings	2.2	15/07/2021	Identification of misunderstandings that question the reviewers; addition of clarification or rewording
UL based on regular interaction with consortium and M25 physical meeting	3.0	3/01/2022	Clarification on the construction methods of the demonstrator through all the WPs and new validation of the appropriation by the consortium



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**Acknowledgment:**

The authors thank the INEDIT consortium, in particular Benjamin POUSSARD (ENSAM) for proof-reading and advice on restructuring the document, Mauricio CAMARGO (UL) for designing and helping in the facilitation of the M25 physical meeting, and the EU reviewers for their valuable comments.

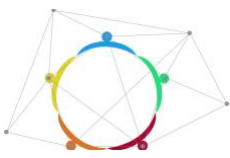
**How to cite:**

Brunelle Marche, Frédérique Mayer, Fedoua Kasmi, Laurent Dupont. Specifications for Open Manufacturing Demonstration Facilities. INEDIT Project - Deliverable 4.2, European Union's Horizon 2020 research and innovation programme; Université de Lorraine. 2022, pp.111. ([hal-04257027](#))

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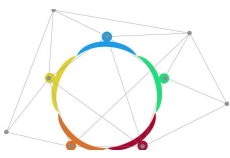
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# Summary

<b>EXECUTIVE SUMMARY .....</b>	<b>5</b>
<b>1. INTRODUCTION .....</b>	<b>8</b>
<b>2. THE ROLE OF THE DEMONSTRATION IN THE DIT DEPLOYMENT .....</b>	<b>13</b>
2.1. THE ROLE OF THE DEMONSTRATION AT THE INDUSTRIAL SCALE.....	13
2.2. FROM TECHNOLOGICAL DEMONSTRATOR TO INDUSTRIAL DEMONSTRATOR.....	14
<b>3. METHOD FOR DEFINING THE INEDIT OMD .....</b>	<b>18</b>
3.1. THE EXTERNAL FUNCTIONAL ANALYSIS .....	19
3.2. THE INTERNAL FUNCTIONAL ANALYSIS.....	22
<b>4. DEFINITION OF THE EXTERNAL PROPERTIES OF THE INEDIT OMD .....</b>	<b>28</b>
4.1. THE EXPRESSION AND VALIDATION OF THE BASIC NEED .....	28
4.2. THE DETERMINATION OF STUDY OBJECTS, SYSTEM BOUNDARIES AND ITS LIFE SITUATION .....	30
4.3. DETERMINATION OF THE EXTERNAL ENVIRONMENT.....	31
4.4. THE DETERMINATION OF THE EXTERNAL ENVIRONMENT AND SERVICE FUNCTIONS .....	31
4.5. THE CHARACTERIZATION OF SERVICE FUNCTIONS .....	32
4.6. CONCLUSION OF THE EXTERNAL FUNCTIONAL ANALYSIS.....	37
<b>5. MODELLING OF THE OPEN MANUFACTURING DEMONSTRATOR .....</b>	<b>40</b>
5.1. ELICITATION AND ANALYSIS OF THE DIT REQUIREMENTS .....	40
5.2. WHAT ARE THE FUNCTIONS OF THE DEMONSTRATOR?.....	42
5.3. THE FUNCTIONAL SPECIFICATION .....	43
<b>6. SPECIFICATIONS FOR EACH USE CASE.....</b>	<b>44</b>
6.1. PF1. DESIGN A CUSTOMIZED PRODUCT FOR USERS WITH THE HELP OF OTHER SPECIALIZED STAKEHOLDERS . .....	52
6.2. PF2. CO-DESIGN WITH OTHER STAKEHOLDERS AND USERS USING THE PLATFORM .....	64
6.3. PF3. PRODUCE A CUSTOMIZED PRODUCT FOR USERS WITH THE HELP OF OTHER SPECIALIZED STAKEHOLDERS. ....	70
6.4. PF4. PRODUCE IN NETWORK WITH OTHER STAKEHOLDERS USING THE PLATFORM .....	82
6.5. PF5. PROVIDE SERVICES TO USERS THROUGH THE PLATFORM .....	87
6.6. SF1. PROVIDE MANUFACTURING DATA TO THE PLATFORM .....	91
6.7. SF2. SHARE ENVIRONMENTAL PRACTICES TO THE OTHER STAKEHOLDERS .....	94
6.8. SF3. SHARE MANUFACTURING DATA FOR THE DESIGN TO THE USERS .....	96
6.9. SF4. INSERT INTO THE TERRITORY.....	100
6.10. CF1. ADJUST TO THE PILLARS OF THE CIRCULAR ECONOMY .....	104
6.11. UNIMPLEMENTED SUB-FUNCTIONS .....	108
<b>7. CONCLUSION .....</b>	<b>109</b>
<b>8. REFERENCES .....</b>	<b>111</b>

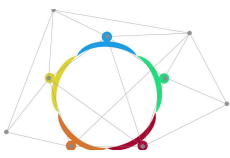


## List of figures

<i>Figure 1: INEDIT strategy to design a robust OMDF based on interconnected WPs (part a) and [Moultrie 2015] model (part b)</i>	6
<i>Figure 2: Links between the different INEDIT tasks and their status in June 2021</i>	7
<i>Figure 3: Representation of the OMD (Digital &amp; physical platforms/networks) and its 4 OMDFs</i>	8
<i>Figure 4: Deployment process of the OMD and its OMDFs</i>	9
<i>Figure 5: The OMDF Development Model (based on D2.3)</i>	10
<i>Figure 6: Process of WP4</i>	11
<i>Figure 7: Structure of the document</i>	12
<i>Figure 8: Industrial life cycle (Source Phaal et al., 2011)</i>	13
<i>Figure 9: INEDIT strategy, linking technological demonstrator and industrial demonstrator (adapted from [Moultrie 2015])</i>	15
<i>Figure 10: Summarize of the T4.2 followed method</i>	18
<i>Figure 11: Relationship between the different components generated by SysML (adapted from Harmony for systems Engineering method)</i>	24
<i>Figure 12: Expression of the needs in the form of a horned beast</i>	28
<i>Figure 13: Determination of the external environment and the service functions of the demonstrator</i>	32
<i>Figure 14: Objective of the Open Manufacturing Demonstrator</i>	39
<i>Figure 15: Elicitation and analysis of the DIT requirements</i>	40
<i>Figure 16: example of functional specification of the DIT</i>	43
<i>Figure 17: Reading framework for the functional specification</i>	43
<i>Figure 18: Location of the different use cases</i>	44
<i>Figure 19: Use cases positioning on the technology map (task 2.3)</i>	45
<i>Figure 20: Development of the co-creation side of the demonstrator in the INEDIT project</i>	46
<i>Figure 21: Contributions of Veragouth Sa/SCM, AIMEN, UL, UNINOVA to the testing of the DIT process</i>	47
<i>Figure 22: WP4 INEDIT Phygital workshop at Lugano (5 November 2021) using Mural app</i>	47
<i>Figure 23: Mural capitalization showing the implication of the consortium members in INEDIT OMDF (November 2021)</i>	50

## List of tables

<i>Table 1: Technology Readiness Level (TRL) scale in European Union</i>	14
<i>Table 2: Summarize of the TRL strategy in INEDIT project</i>	15
<i>Table 3: Purposes of an industrial demonstrator within the scientific literature</i>	16
<i>Table 4: Purpose of the industrial demonstrator within INEDIT project</i>	17
<i>Table 5: Response of each pillar in the design of the demonstrator</i>	23
<i>Table 6: Adopted method to model the INEDIT Open Manufacturing Demonstrator</i>	27
<i>Table 7: Consider the five dimensions of INEDIT OMD</i>	37
<i>Table 8: Description of the Stakeholder Requirements</i>	41
<i>Table 9: Development of the co-creation side of the demonstrator in the INEDIT project</i>	47



## Executive summary

### Description of the tasks 4.2 from the proposal

#### Task 4.2: Model the ideal framework supporting OMDF specifications for furniture

Based on the information collected from the different use cases [(lead by SME, Large company or RTD Centres) and previous tasks involving various stakeholders and communities (customers, multipliers, makers, scientists, etc.)], this step aims to model the demonstrator according to different views: requirements, functionalities, processes and behaviours, these views being linked to each other in order to obtain consistent results. The partners in charge of a demonstrator (use cases) validate each model obtained to ensure step by step that the final specifications will be consistent with the vision established previously. It will comprise a design approach to integrate IoT components, for sensing and connectivity in an OMDF.

Starting from global Open Manufacturing Demonstrator (OMD) concept to the four INEDIT Open Manufacturing Demonstration Facilities (OMDFs), this report goes back over the scientific concepts underlying the demonstrator in order to establish the modalities of a transition to action around the DIT approach, both at the technical level and at the level of the sector (manufacturing and use network). This document, which is the result of several iterations, consists of 3 parts:

The first part presents the motivations for deploying an industrial demonstrator that integrates both the technologies and the manufacturing network

- § 2- Role of the demonstration in the DIT deployment
- § 3- Methodology for defining the Open manufacturing Demonstrator

The second part focuses on the definition of the Open Manufacturing Demonstrator (OMD), i.e. the ideal state expected for demonstrating the DIT approach and its modelling:

- § 4- Definition of the external properties of the INEDIT Open Manufacturing Demonstrator
- § 5- Modelling the Open Manufacturing Demonstrator

Then, the third part describes the specifications of each demonstrator based on the modelling:

- § 6- Specifications for Open Manufacturing Demonstration Facilities (OMDF)

The Figure 1 (part a) shows how WP4 fits into the overall INEDIT project at the very beginning in October 2019 (INEDIT proposal). If WP4 allows to go into the precise modalities of the design, the development and the implementation of a demonstrator, Figure 1 (part b) underlines that all the WPs contribute to the creation and the functioning of the INEDIT OMDF. As described in section 2.2 of this report, we adapted the