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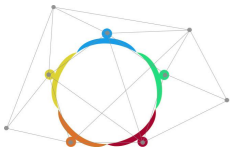
D4.1: GENERIC DATABASE SUPPORTING THE OBSERVATION AND DATA GATHERING FOR EACH PHYSICAL DEMONSTRATOR


WP4.1

Version 2

05 2021



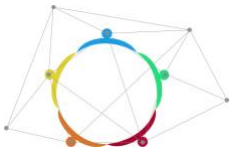


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Scientific editor:

Dr. Laurent DUPONT, WP4 leader - ORCID: <https://orcid.org/0000-0002-8279-9690>

Université de Lorraine, ERPI, F-54 000 Nancy, France

Contact: l.dupont@univ-lorraine.fr

Contributors (in alphabetical order):

Dr. Fabio CRUZ¹, Dr. Laurent DUPONT¹, Dr. Alex GABRIEL¹, Dr. Fatima-Ezzahra HAMDANI, Dr. Fedoua KASMI¹, Dr. Brunelle MARCHE¹, Dr. Frédérique MAYER¹

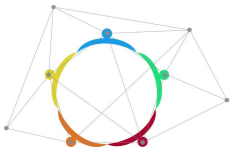
¹Université de Lorraine, ERPI, F-54 000 Nancy, France

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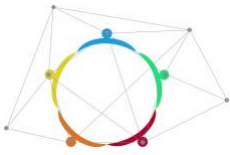
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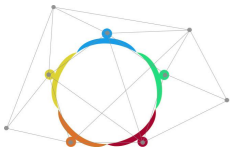


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Executive summary

Description of the tasks 4.1 from the proposal

Task 4.1: Specification for Open Manufacturing Demonstration Facilities

In relation to WP2, this step aims to describe and define the needs of each open manufacturing demonstrator facility in order to determine the specification of a common basis for each demonstrator. The data are collected thanks to interviews, databases filling before validating the general needs expected for each demonstrator in order to facilitate the replicability. It addresses the specification of devices to be integrated in an OMDF aiming personalization and user and manufacture requirements for Smartification.

UL interviewed four physical platforms: SCM and VERA as Smart Manufacture, AIMEN (3D printing wood), UNINOVA (smartification), UL (Green FabLab/Plastic recycling) to position/place them in a DIT approach and understand the link with their region and local SMEs/Makers/Customers.

Co-creation space from UL (Immersive Collaborative Environment) will be observed to consider physical co-creation space using VR/AR (from ENSAM) for the replicable OMDF supporting the INEDIT process.

This report is divided in two parts.

The first part provides a quick overview (like a user guide) of the final data base, built on the observation and data gathering for each physical demonstrator (Open Manufacturing) and available online since April 2021 with the following link: <http://inedit-db.lf2l.fr/fr/>

The second part focuses on the current state of each OMDF, it stems from the observations of the different Use Case:

- § 4- Approach to data collection (WP 4.1)
- § 5- Presentation of each Open-Manufacturing Demonstrator Facility and Cross-interpretation of results

As described in Figure 1 a previous conceptual task (2.2) allowed to design the DIT approach, defined the keywords and generated the requirements of DIT (digital) platform. To confront this theoretical work on DIT, we focus on the four INEDIT use cases to design a “distributed” demonstrator (in five EU countries) considering the initial state of our Open Manufacturing Demonstration Facilities.

NB: An analysis of the vision of the use cases is carried out in order to identify their role in the future demonstrator and their needs to integrate a DIT process centred on the circular economy. Due to the COVID pandemic, the team in charge of this study adapted its initial approach, designed a new protocol and made interviews and online survey during this period. Each use case team gave the physical observations of their situation.

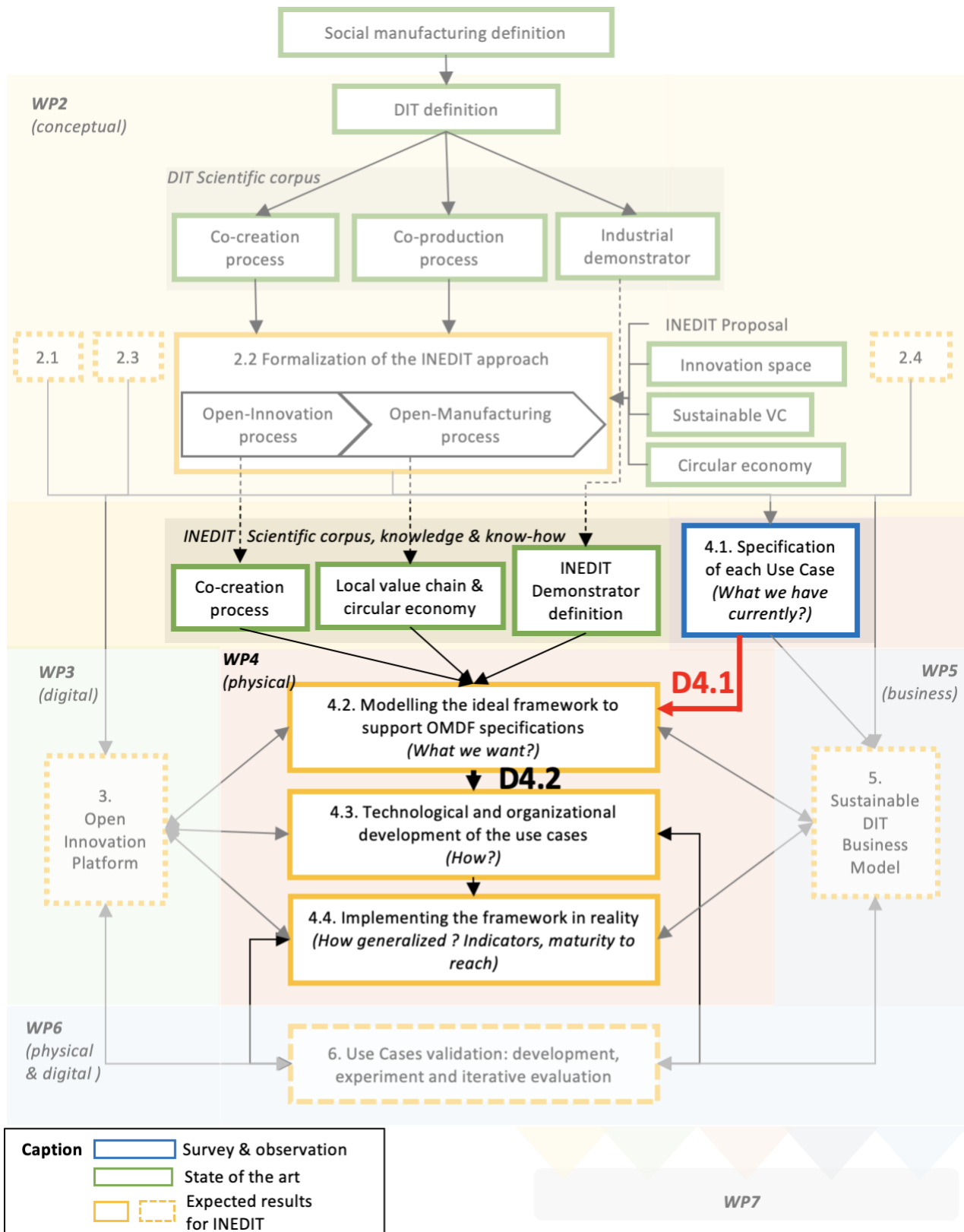


Figure 1 : Focus on WP4 and its links with other WPs and D4.1 as T4.1 output