

INEDIT

open INnovation Ecosystems
for Do It Together process

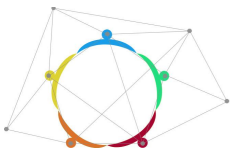
D4.5. A USER GUIDE TO DESIGN AN OPEN MANUFACTURING DEMONSTRATION FACILITIES

WP4.5

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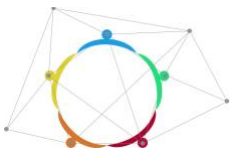


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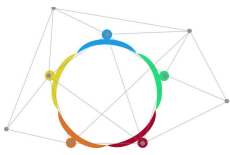
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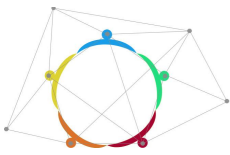


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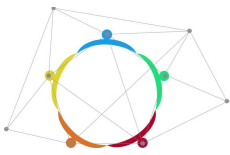
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Executive summary

Description of the 4.5 deliverable

D4.5: A user guide to design an Open Manufacturing Demonstration Facility (OMDF)

Based on the results from each step of the WP 4 dedicated to the development of a framework of a replicable Open Manufacturing Demonstration Facility (OMDF) supporting the INEDIT process, this step aims to design a user guide leading to the implementation of an OMDF. It is based on the practices implemented by the various use cases during the demonstration of the INEDIT process. This guide seeks to synthesize the approaches and actions implemented within the various use cases on the basis of the specifications determined in deliverable D4.2.

The overall objective of WP4 is to design and implement a framework of a replicable Open Manufacturing Demonstration Facility (OMDF) allowing stakeholders to switch from conceptualization to materialization with the adapted sustainable logistics in a Do-It-Together approach. In our context, this replicable OMDF experiments an innovative furniture manufacturing network including all the relevant stakeholders (consumers, makers, suppliers, producers, etc.) as soon as possible in the process. Furthermore, this socio-manufacturing network must consider sustainable development and smartification. According to the diversity and richness of the project partners' ecosystems, the INEDIT OMDF framework has been designed, developed, and assessed through multiple use cases in Spain, Portugal, Switzerland / Italy and France within existing facilities that are networked through DesignTogether, the INEDIT multi-sided platform.

This document provides a guide for duplicating Do-It-Together approach, designing and implementing new Open Manufacturing Demonstration Facilities. These OMDF must support the co-creation and open-manufacturing processes. Based on the monitoring, assessment, and validation of the INEDIT OMDFs, this report transcribes the capitalised knowledge to guide other actors in the design and implementation of such demonstrators. The feedback from SMEs, large companies, technology centres and universities involved has been built up over the last 3.5 years. It is a small group of actors on a European scale but this longitudinal study over several years allows for the sharing of rich data, and useful advice for SMEs, innovation space, open communities.

The first part places the INEDIT project in the context of the Factory of the Future (FOF) strategy, as a response to the challenges and opportunities facing European SMEs in developing Industry 4.0.

The second part describes the generic process to design an OMDF. Recommendations guided by the questions to be asked upstream are provided for the definition, diagnosis, and characterization phases. The implementation, monitoring and consolidation stages are illustrated by the scaling-up of INEDIT OMDFs from TRL4 to TRL6.

Then, the third part focuses on the original Living Lab event organised in the framework of an international conference to involve researchers and industrialists as users of intermediate OMDFs and accelerate the design of the OMDFs.