# Responsive and Reconfigurable value network for the manufacture of bulky parts

*Type of action:* HORIZON Research and Innovation Actions

*Work programme topic addressed:* HORIZON-CL4-2024-TWIN-TRANSITION-01-03

# Deliverable 1.3

# Initial technical project review report

| **EC Grant Agreement number: 101178405** | |
|---|---|
| Start date of project: 1st of October 2024 | Duration: 36 months |

| **Lead beneficiary of this deliverable: #/I3bE** | **Due date of deliverable: 30/04/2025** |
|---|---|
| Work Package: WP1 | Task(s): T1.3 |
| Actual submission date: 30/07/2025 | Status: Final |

| **Project funded by the European Commission within the Horizon Europe Programme (2021-2027)** | | |
|---|---|---|
| Type | | |
| R | Document, report excluding the periodic and final reports | X |
| DMP | Data Management Plan | |
| DEM | Demonstrator,pilot, prototype | |
| OTHER | Software, technical diagram, etc. | |
| Dissemination level | | |
| PU | PUBLIC Information | |
| SEN | SENSITIVE, restricted under conditions set out in Model Grant Agreement | X |

# DOCUMENT HISTORY

| Version | Date | Description / Reason of change | Author |
|---|---|---|---|
| V0.1 | 25/06/2025 | First Draf Version | Unai Arenal |
| V0.2 | 30/07/2025 | Final Version | Pedro de la Peña |

# AUTHORS, CONTRIBUTORS AND REVIEWERS

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## DISCLAIMER



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# 1. Executive Summary

## 1.1 Executive Factsheet

*Table 1 Executive Factsheet*

| Who should read this deliverable? Who are the stakeholders concerned by this deliverable? (distinguish different types of organisations, roles in organisations and interest focus) | Why should s/he read this deliverable? What will s/he learn from this deliverable? | Which part of the content is most relevant for him / her? |
|---|---|---|
| Technical Reviewers | To assess the progress and coherence of the technical work with the project objectives. | Work Done per Specific Objective, WP technical summaries, KPI framework. |
| Project Officer | To monitor project progress and verify alignment with the Grant Agreement and DoA. | Executive Summary, Objectives section, Risk and Deliverable status. |
| Consortium Partners / WP Leaders | To track progress, identify interdependencies, and ensure alignment across WPs. | Respective WP sections, task descriptions, and next steps. |

## 1.2 Executive Summary

This document provides a comprehensive overview of the technical progress achieved during the first nine months of the REED project, which aims to create a responsive and reconfigurable value network for the manufacture of bulky parts. It details the work carried out across key technical work packages (WP2–WP4), focusing on the definition of requirements, system architecture, and the initial development of digital twins, smart manufacturing devices, and the process tracking infrastructure.

The project has successfully delivered the first version of the Data Management Plan, the MaaS platform requirements and architecture, and defined the key components of the REED ecosystem aligned with EU standards such as GAIA-X, IDSA, and the Digital Product Passport. Three industrial use cases have been

characterized, and a common KPI framework has been established to assess the impact of the platform in terms of efficiency, traceability, and sustainability.

Additionally, initial work has been carried out on environmental foot printing, servitisation of manufacturing assets, and AI-powered feedback systems to support predictive monitoring and operator support. Parallel to the technical work, significant progress has also been made in Wp1 Management and coordination, and WP7 Dissemination and exploitation, including the launch of the project's dissemination and communication strategy, the definition of the initial exploitation and IPR management plans, and the identification of key exploitable results through the Innovation Management Log.

This report serves as a foundational reference for internal coordination, external review, and alignment with Horizon Europe expectations.