

# Invitation

Scenario workshop: *Future(s) of European Manufacturing*

In person event: *25 November 2024 (1:00 - 5:00 pm)*



## The Workshop in a Nutshell

The future of manufacturing has been the subject of many reports over the past few years. These reports consider the impact of automation and the development of artificial intelligence systems, as well as the impact of new business models on the environment and the implications of these factors for the labour market.

In this workshop, we will discuss the future of manufacturing with a specific focus on the EU. To encourage long-term thinking, we will adopt a 2040 timeframe for our scenario development process. This will allow stakeholders to envision a range of plausible yet challenging trajectories for the development of manufacturing in Europe.

Workshop participants will develop scenarios to facilitate discussion of Twin Transition goals and the role that manufacturing as a service (MaaS) might play in achieving them. These scenarios will provide a basis for strategic planning and decision-making that considers changes spanning over two decades.

## Design of the Workshop

Our dialogue on the future of manufacturing in Europe in 2040 will be framed by preliminary development projections generated by the project team prior to the workshop. These projections, based on previous project results, include a list of key trends, drivers, and weak signals shaping the future of

manufacturing. They cover a wide range of insights: from social to technological, economic, environmental, geopolitical and regulatory issues.

Through structured discussions and group exercises in the spirit of collective intelligence gathering and learning from each other's perspectives, participants will expand on preliminary micro-scenarios. Participants will apply systems thinking, critical analysis, as well as intuition and creative thinking in order to build more detailed, comprehensive visions that are both plausible and challenging. Each scenario will consider aspects such as data standardisation, cybersecurity, circular economy, sustainable development, and decarbonization, manufacturing models, issues related to green and digital transformation, and potential social implications of the Twin Transition goals.

In the final part of the workshop, participants will jointly identify potential implications of the scenarios for the EU and envision the role that manufacturing-as-a-service will have in each of them. They will also identify key opportunities and threats associated with each vision of the future for various stakeholders in the manufacturing sector (from business, government, academia, and society).

## Workshop Agenda

Workshop participants, supported by a qualified team of moderators, will collectively explore their assumptions, share knowledge, and generate new concepts and ideas about the future of the manufacturing sector in Europe in the context of the Twin Transition. Here is the general workshop plan:

### Phase 1 (1:00 - 2:00 pm)

- **Reveal:** An ice-breaker exercise designed to initiate a conversation about participants' thoughts on the future of manufacturing and uncover individual and group assumptions about potential future developments in this area.
- **Reframe:** A "confrontation" with an unexpected vision of the future, "The World Without Work"
- **Reflect:** Presentation of the MASTT2040 project's results so far, including a discussion of key trends, drivers, and signals of change with a crucial impact on the future of the manufacturing sector in Europe.

### Phase 2 (2:00 - 4:00 pm)

- **Scenario building:** Workshop participants will collaboratively develop and expand initial micro-scenarios presented by the project team using methods such as the PESTLE framework, Futures Wheel, and World Cafe. Validation of scenarios's internal consistency using an assessment of their probability and desirability.
- **Envisioning MaaS:** Drafting a desired vision of Manufacturing-as-a-Service in Europe in 2040.

### Phase 3 (4:00 - 5:00 pm)

- **Scenario implications:** Analysis of opportunities and threats associated with each scenario in the context of the Twin Transition goals. Analysis of scenario implications for digitization, decarbonization, circularity, and sustainability. Examination of scenario impacts on stakeholders and various business models (such as MaaS, centralised & contract manufacturing).
- **Sense-making:** Connecting scenarios to the desired MaaS vision. Reflection on the developed scenarios in the context of the next stage of the project: strategic planning purposes at the EU-level.

## Expected Results

- Minimum 3 scenarios will be developed. Scenarios should exhibit similar levels of probability and desirability. This does not mean that the level of probability and desirability of the scenarios must be very high; what is important is that they are at a similar level in each of the scenarios and, in aggregate, that they cover a wide spectrum of possible futures. This is partly to avoid a cognitive bias, for example whereby the most desirable scenarios receive higher ratings.
- The combined realities described in the exploratory scenarios will form the high-level overview of the foreseeable strategic environment of EU manufacturing in the year 2040.
- Scenarios will also provide a framework for identification of potential future use-cases of Manufacturing as a Service.
- Each scenario will be plausible, transformative and useful for strategic planning purposes at the EU-level.
- An additional expected result is enhanced stakeholders' competencies in creating and critically analysing different visions of the future (Futures Literacy).

## Practical Workshop Information

- **Date:** November 25th
- **Time:** 13:00 - 17:00
- **Location:** Polish National Centre for Research and Development Brussels office, Rue Belliard 40

Participation in the workshop requires registration. Please register by 20 November 2024.

Registration link: <https://forms.gle/PJyJoaYbMGs9wjsAZ>

Besides registering, no additional preparation is needed to participate in the workshop - just an open mind!

## About the Workshop Organisers

This workshop is being conducted as part of the MASTT2040 project: **Manufacturing as a service for the EU's twin transition until 2040.**

MASTT2040 aims at effective implementation of a participatory, focused, strategic foresight of Manufacturing-as-a-Service (MaaS) domain to guide decision making and strategies for the EU manufacturing sector in the context of the Twin transition up to 2040. More information about the project: <https://www.mastt2040.eu/>

The project team includes the following partner institutions:

- Sirris-The Collective Center for the Belgian technological industry  
<https://www.sirris.be/en>
- COMET- Metal and Mechanical Engineering Cluster in Friuli Venezia Giulia  
<https://clustercomet.it/en/>
- 4CF The Futures Literacy Company  
<https://4cf.eu/>
- Steinbeis Europa Zentrum  
<https://www.steinbeis-europa.de/en/home>
- FIP-Future Industry Platform  
<https://przemyslprzyszlosci.gov.pl/>
- THHINKBV  
<https://www.ththinkbv.com/>