



## Resilient and Adaptive Supply Chains for Capability-based Manufacturing as a Service Networks

The European industries struggle with supply chain disruptions due to supplier failures, material shortages, and unpredictable events.

**RAASCEMAN addresses these challenges.**

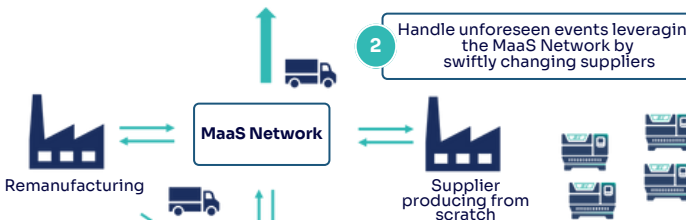
**"Manufacturing as a Service" (MaaS)** offers a solution. By leveraging digital platforms for distributed manufacturing, it enables quick, dynamic responses to supply chain disruptions, minimizing their impact.

Unforeseen events in upstream factories or in logistics

**1** Handle unforeseen events internally by swiftly changing production plans and stock level



**2** Handle unforeseen events leveraging the MaaS Network by swiftly changing suppliers



**3** Enabling company to participate in dynamic MaaS network by swiftly creating offers and adapting production plans



Funded by the European Union

# 7

University partners

# 2

Industrial partners

# 3

Use cases

# 5

Testbeds engaged

## RAASCEMAN for Manufacturing Resilience



RAASCEMAN is an EU-funded project that develops innovative AI-powered tools using real-time data from the supply chain to analyse potential disruptions and quantify their impact.

### RAASCEMAN Approach:

- **Real-time Risk Analysis**  
Detects disruptions early and assesses their impact.
- **Alternative Supplier Network**  
Connects manufacturers with MaaS (Manufacturing as a Service) providers.
- **Reliable Decision-Making**  
Evaluates supplier reliability and feasibility of alternatives.
- **AI-Driven Planning** – Supports production plan adjustments to ensure seamless operations.
- **Digital Twin Integration**  
Creates virtual models for better supply chain management.

### Real-World Applications

Three use cases for validation of the technical and economic viability of MaaS, assessing both supply-side and demand-side impacts of disruptions.

1. Automotive Industry
2. Bike Manufacturing
3. Interconnected Pilot Lines