AI REDGIO 5.0

Regions and (E)DIHs alliance for AI-at-the-Edge adoption by European Industry 5.0 Manufacturing SMEs

THE PROJECT

AI REDGIO 5.0 aims at renovating and extending I4MS and AI REGIO Horizon 2020 project results' and their alliance between Vanguard EU regions and Digiral Innovation Hubs (DIHs) for a **competitive AI-at-the-Edge** Digital Transformation of **Industry 5.0** Manufacturing SMEs.

BACKGROUND

With the aim of coordinating already existing significant outcomes and the evolution of manufacturing toward **Industry 5.0**, of cloud AI technologies to **AI-at-the-Edge**, of Horizon2020 to **Horizon Europe**, **AI REDGIO 5.0** maintains the momentum of AI technology adoption in Manufacturing SMEs. The pillars on which the project is built, lie in the outcomes of:

I4MS   **VANGUARD INITIATIVE** New growth through smart specialisation   **AI REGIO**

OBJECTIVES

The **overall objective** of **AI REDGIO 5.0** project is to enable competitive AI-at-the-Edge digital transformation of Industry 5.0 Manufacturing SMEs. While the list of **individual goals** is composed by:

1. Conceptual framework and reference architecture for **AI-at-the-edge Industry 5.0** applications and experimentations, through the development of methods and tools, maturity assessments, 6ps pathway specification and AI skills
2. Secure and trustworthy **edge-to-cloud continuum data and computational space** for highly distributed AI applications
3. Interoperability by design with the pan-EU AI-on-demand platform and its ecosystem of H2020 and HE innovation actions
4. Transition from regional DIHs to a **network of EDIHs** in AI for manufacturing
5. Test-before-invest experiments in AI Didactic Factories and TEF (Testing and Experimentation Facilities) for SME-driven applications
6. Support the transition towards **sustainability**, through the ecosystem development and replication to SMEs

In order to show and exploit the benefits of **applying Artificial Intelligence in Manufacturing,** three types of experiments will be conducted:

• TEchnology and REgulatory SAndboxes (TERESA) experiments in the **Didactic Factories of 14 Regions**
• **SME-driven experiments** in selected **7 Regions** by project's partners
• **20 additional SMEs-driven experiments as outcome of the two waves of Open Calls**

All of them are supervisioned and coordinated by a common methodology and by a shared framework for defining and measuring Key Performance Indicators.

CONSORTIUM