



Open-Digital-Industrial and Networking pilot lines  
using modular components for scalable production

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## **PRESS RELEASE: EU project ODIN growing and launches its first prototypes in advanced robotics**

Mobile and fixed collaborative robots will be used in ODIN EU project to introduce a new production paradigm **where robotic systems will work autonomously to seamlessly collaborate with human operators for different products assembly.**

**ODIN focuses on the implementation of Large Scale Pilots composed by 4 technical components** namely a) Open component, b) Digital component, c) Network component and d) Industrial components. ODIN components' modules will be demonstrated in three different industrial sectors, automotive, aeronautics and white goods.

**Open Component (OC):** The first component of ODIN, namely Open Component, targets on the development, testing and integration of core robotics technologies such as **mobile manipulators, reconfigurable tooling, perception systems** and **human interfaces** using an open approach, before their deployment in industry.

**Digital Component (DC):** ODIN Digital Component focuses on the the digital simulation and control tools (**Digital Twin, AI based decision making, Virtual Commissioning**) to allow optimization and robust operation of ODIN system in a modular and reusable way.

**Networked component (NC):** The main target of this component is to provide a **standard and robust platform** for ODIN robotics **technologies integration and linking** them either to their OC and DC or other pilot instances running in the enterprise environment. Additionally, a **cybersecurity threat analysis tool** will be developed under this component.

**Industrial Component (IC):** This component focuses on the **validation of the integrated solution** at full scale and in realistic conditions but also its **interoperability with OEM and legacy systems**. It is responsible to provide **real time data flow to the OC and DC** for reconfiguration and optimization reasons.

The first period of the project is focused on the definition of the industrial pilot cases, the identification of the technical specifications for implementing ODIN respective pilot lines but also on the preparation of ODIN modules first prototypes.



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Running the 16<sup>th</sup> month of the project, the technology partners have made great efforts in preparing the first prototypes of ODIN developments while integration activities for ODIN module's connection with the main software orchestrator (OpenFlow platform) have been initialized.

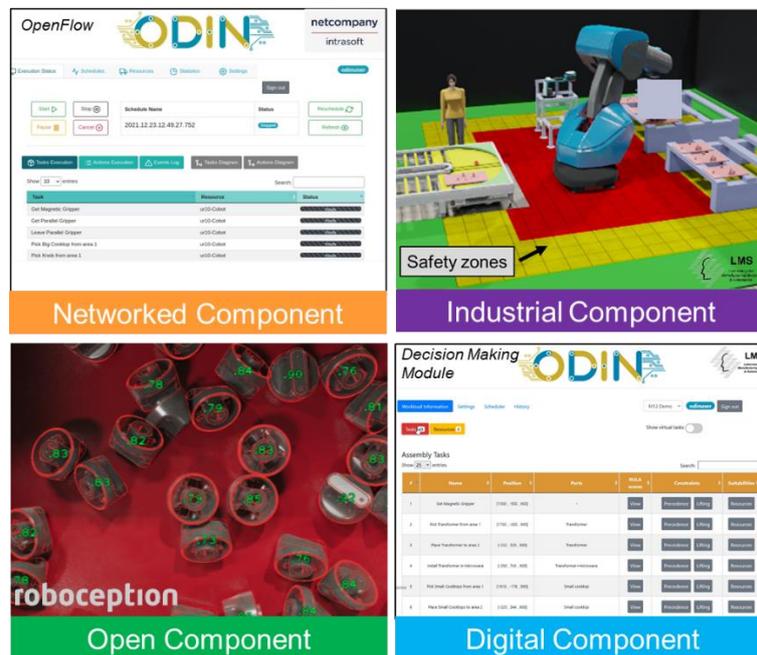


Figure 1: ODIN technical components and initial prototypes

During the 1<sup>st</sup> period of the project, ODIN partners were able to join either virtually or physically different public events and disseminate project's concept, vision and first results. In more details, project's concept has been presented in 24 public events (Conferences, exhibitions, workshops, trade fairs and pitch events). The first joint publication of ODIN partners has been accepted for publication and in total 4 publications have been accepted focused on ODIN project's concept and technology developments.

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More information on the ODIN project can be found at [www.ODIN-H2020.eu](http://www.ODIN-H2020.eu).  
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