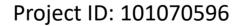
# **European Robotics and Al Network**





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HORIZON-CL4-2021 - DIGITAL-EMERGING-01

Christophe Leroux, CEA
Brussels – Adra-e csa 8 October 2022



# Vision

- European ecosystem
  - sharing data and knowledge
  - to jointly perform a variety of tasks
  - in human environment

## **Partners**

- 31 partners
  - 7 industries
  - 24 science





United

Kingdom

London

Ireland



Netherlands

Belgium

France

North Sea



Sweden

Czechia

Croatia

Italy

Tyrrhenian Sea

Denmark

Berlin

Germany



























Portueal Portue

Lisbon



Madrid

Spain







Greece

Lithua

Ron

Poland

Warsaw

Slovakia

Hungary

Serbia













UNIVERSITY OF TWENTE







# Goals

- Addressing scientific and technological challenges hampering breakthrough and large-scale deployment of robotics
- Making cognition-enabled robotics more transferable and reusable among scientists and by new industries.
- Providing a stage for cooperation and exchange of scientific knowledge and talents between robotics labs in Europe in
  - knowledge representation,
  - physical interaction,
  - robotic learning
  - human-robot interaction
- Generating a nucleus for the community at large, enabling groundbreaking new applications in industrial, personal and outdoor robotics in Europe

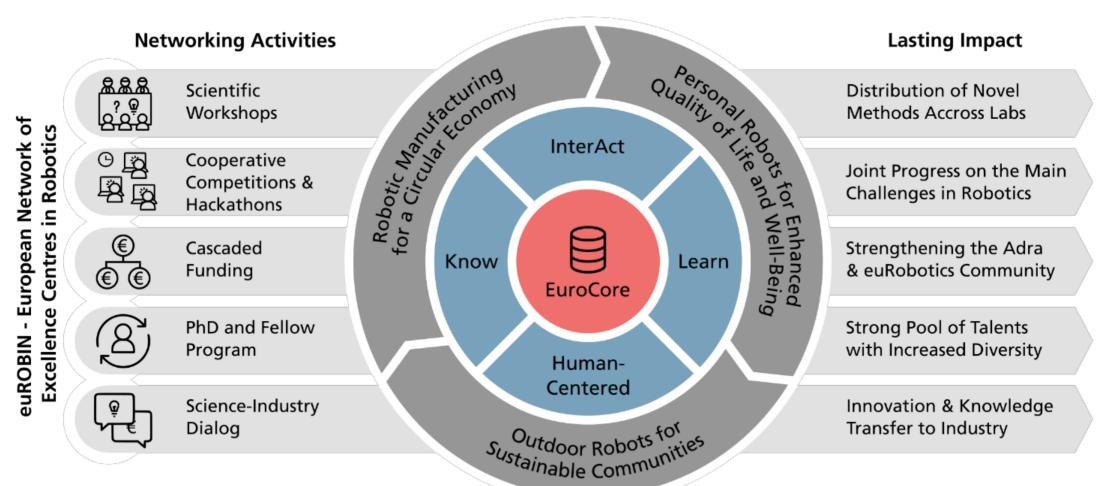


# An instrument, Cooperative competitions focused on

- Robotic manufacturing for a circular economy
- Personal robots for enhanced quality of life and well-being
- Outdoor robots for sustainable communities



# **Activities**



Science, Industry & Society



### **Impact**

#### Scientific breakthrough

• Providing a *scientific and technological framework for transferable AI-powered and cognitively-enabled robots* basis for an ecosystem of heterogeneous, jointly learning intelligent machines.

#### **Economic**

• *Increasing share of European robotics industry in global market* in the areas of interactive industrial manufacturing, personal/healthcare robotics, supply chain robotics.

#### **Long-Term economic**

• reaching out emerging robotics mass-market, making them benefit from the transferability concepts and from the EuroCore repository.

#### **Societal**

• Contributing to the acceptance and emergence of AI-powered robotics to societal, social, socioeconomics challenges like climate changes, digital transformation, demographic change, resilience,



# International leadership of European robotics science and technology through

# focus on

• transferability, interoperability, cooperation,

# instruments

• EuroCore repository, ...

