

**Net4***Society*

**Collaborative online Brokerage event:**

**“Artificial intelligence in Horizon Europe calls:  
an interdisciplinary challenge”**

**Flash Presentation**

**PAL**

# Our expertise /project idea

PAL



## Navigation

SLAM  
Navigation  
Localization



## Software

DevOps  
Continuous integration  
Perception



## Embedded

Motor & Sensor  
Control boards  
Connectivity



## HRI

Social AI  
Human Perception  
Interaction Design



## Control

Real Time  
Manipulation  
Walking



## Electronics

Firmware  
Sensor boards  
Integration



## Mechanics

Bio-inspired  
and actuation designs  
Integration



## Ad-Hoc Projects

Flexibility  
Adaptation  
Customized solutions



## Support

Training sessions  
Technical assistance  
SW Integration



## Community

Collaboration  
Open Source  
Dissemination & Events

# Topics of interest



## Collaborative Projects

We cooperate with other European partners in order to boost innovation in several fields through more than 25 EU-funded projects.

Horizon Europe / Eureka / FSTPs / CDTi / Spanish Ministry



### R&D Projects



### Healthcare Projects



### Industry Projects



### Agri-food Projects



# Topics of interest

PAL



## **PAL Robotics' Potential Contributions to CL1, CL2 and CL4:**

- ▶ **Embodied AI Platforms:** Providing social robots and mobile manipulators like **TIAGo** as tangible assets for social research.
- ▶ **Social Perception & HRI:** Implementing multi-modal interaction (speech, gaze, gestures) and person-centric recognition to facilitate natural human-robot dialogue.
- ▶ **Validation Environments:** Leveraging our experience in over 70 collaborative projects to deploy robots in real-world scenarios like museums, hospitals, and care homes.
- ▶ **Technical Integration:** Bridging the gap from research concepts (TRL 3) to functional industrial/service prototypes (TRL 6) using open-source ROS frameworks.

# Role in the STEM-SSH collaboration

**STEM Expertise Offered:** we provide the **robotic embodiment** for social AI. Our platforms are designed for safe and intuitive interaction, serving as "social agents" in shared human spaces.

**SSH Expertise We Are Looking For:** we seek partners from the Social Sciences and Humanities to lead research on:

- ▶ **User Acceptance:** analyzing how different demographics (elderly, children, factory workers) perceive and trust embodied AI.
- ▶ **Social & Psychological Impact:** effects of long-term robot presence on social cohesion and mental well-being.
- ▶ **Ethics & Governance:** developing ethical frameworks for data privacy (GDPR) and "robot-rights" in public and private domains.
- ▶ **Socio-Economic Policy:** assessing the impact of service robotics on the future of care work.

**Our Goal** is to ensure that our technological solutions are not just "functioning" but are **market-ready and socially integrated**, respecting the complex relationship between humans and machines.

# Contact us!

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The logo for PAL Robotics, featuring the letters 'PAL' in a stylized, orange, sans-serif font. The 'P' has a unique shape with a vertical bar on its left side, the 'A' is a simple triangle, and the 'L' is a simple L-shape.

**Thank you  
for listening!**

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