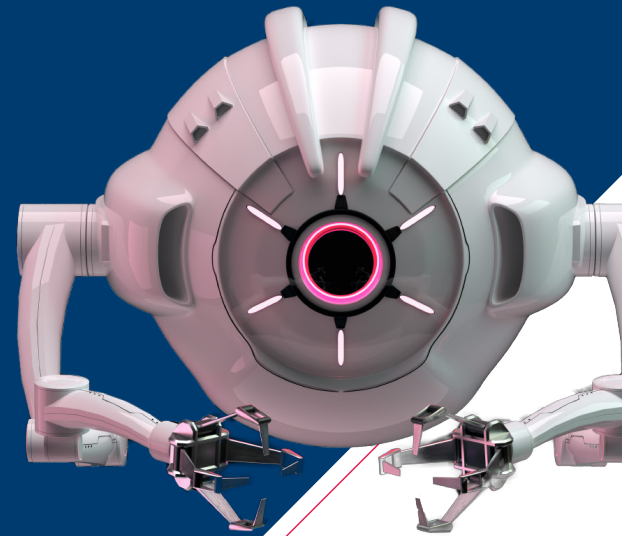


// // //

Responsible Robotics Advocacy Report



Summary

The Robotics4EU Responsible Robotics Advocacy report, informed by the Robotics4EU activities, desk research, and stakeholder consultations, delineates an advocacy strategy for responsible robotics development in the EU. Policy recommendations, focused on EU policymakers, also hold value for national and regional policy stakeholders, as well as robotics industry and academia.

In this summary, 10 priority recommendations, endorsed by the robotics community and experts in ethics, law, and societal aspects, are presented alongside actionable steps to achieve them, identified by the Robotics4EU team.

Recommendations are covering the following topics:

- Regulatory Framework
- Support for Robotics Community
- Engagement of Stakeholders
- Education



Regulatory Framework

//

//

for Responsible Robotics

Recommendation #1. **Advance regulation coherence for responsible robotics**

Form an EU expert group, advancing the coherent regulation for responsible robotics, in form of ethics and safety requirements as annex to EU ethics guidelines for AI or Machinery Regulation or Product Safety Directive.

Recommendation #2. **Ensure that testing and experimentation leads to evidence-based policy recommendations**

Develop testing and experimentation tools and methodologies for policy-relevant knowledge generation, supporting evidence-based policy decisions.

Recommendation #3. **Update safety guidelines in light of new advancements in robotics**

Elaborate safety-by-design approaches integrating a balance between safety, speed and versatility, as well as reflecting on the trade-offs between safety standards, economic liability, regulatory guidelines and user experiences.

Support for Robotics Community

in creating Responsible Robotics

Recommendation #4. **Provide roboticists, especially SMEs, with support for compliance with ethical and legal requirements**

Improve the accessibility of consultations on ethics, legal and societal aspects of robotics, through, for example, (E)DIHs, TEFs, IP Helpdesk and other robotics-industry targeted EU initiatives. Support self-assessment tools that help robotics developers assess their compliance to responsible robotics principles and regulations.

Recommendation #5. **Amplify the focus on ethical, legal and social aspects (ELSA) in robotics R&D**

Strengthen the requirements in the EU-funded robotics projects (i.e., Horizon Europe Cluster 4) to allocate the project position for the ELSA experts with integral and reiterative participation in the responsible robotics solution research and development.

//

//

//

//

//

Engagement of stakeholders

for the ethics, legal and social aspects deliberation and responsible robotics development

Recommendation #6

Showcase and discuss the realistic state of robotics

Invest in societal dialogue and awareness campaigns about capabilities, limits, risks, and benefits of robotics through initiatives (i.e., exhibitions, science festivals, public lectures, etc.) and public media channels.

Recommendation #7

Ensure EU citizens' views are heard in shaping EU robotics visions

In the upcoming EU facilitated consultations for the programming periods of Horizon/Digital Europe, include questions on responsible robotics. Also, consider the citizen engagement work done by the EU-funded projects.

Recommendation #8

Ensure multi-stakeholder representation in robotics life-cycle

Enhance multi-stakeholder engagement in EU-funded robotics projects, and incorporate engagement facilitation services in Testing and Experimentation Facilities to integrate diverse multi stakeholders' inputs, focusing on responsible robotics aspects.

Recommendation #9

Ensure collaborative dialogue for equitable workforce transition

To promote a smooth transition towards integration of robotics in workplaces, foster active discussions between industry, worker representatives, and policymakers. Facilitate sector-specific conferences to address the impact of automation and robotics, identifying emerging employment trends and developing action plans for adapting strategies and regulations to ensure a just transition for workers.

Education

In skills for responsible robotics

Recommendation #10. **Promote technology and engineering education with focus on responsible robotics**

To foster a skilled workforce for responsible robotics development, incentivise technical education through scholarships and certification programmes. Implement mandatory technology ethics courses and collaborative projects with ethics/social perspectives in engineering and computer science curricula.

Scan the **QR code** to access the full list of recommendations and measures, along with the presentation of drivers and barriers for robotics acceptance in society.



The report aims to summarise Robotics4EU activities that can be followed in the www.robotics4eu.eu

consortium

CIVITTA

robotex
International

LOBA®

LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS **LNE**



AgriFood **DIH**
Lithuania

NTNU
Norwegian University of Science and Technology

follow
US ON

f t in y
[@robotics4eu](https://www.instagram.com/robotics4eu)

contact us
info@robotics4eu.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101017283

