

MOZART

Insights from
the MOZART
project

**STANDARDISATION
TO DRIVE
RESEARCH IMPACT**



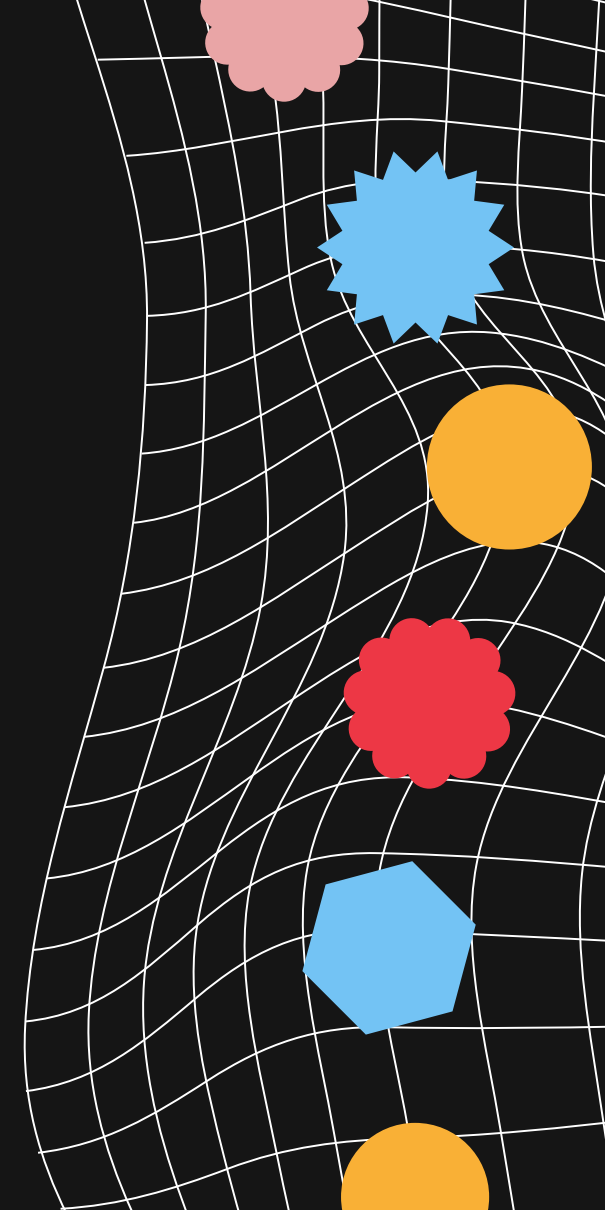
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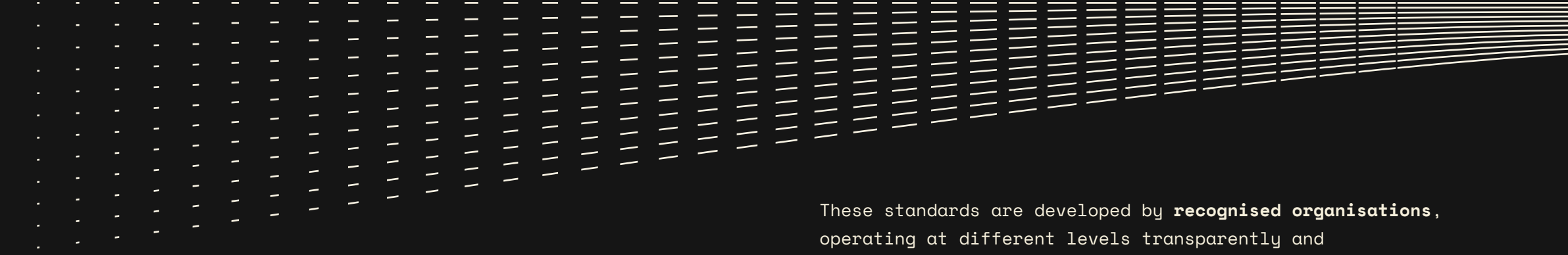
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WHAT IS MOZART?

MOZART is a **Horizon Europe research project** developing advanced **automation and robotic technologies** for the handling of soft, fragile objects using AI-controlled, reconfigurable surfaces known as **Autonomous Manipulation using Morphing Modular Mats (AUTOMATs)**. The project brings together research, industry, and standardisation partners to develop automation solutions for the food industry that are safe, interoperable, sustainable and suitable for real-world deployment.





BUILDING IMPACT FROM RESEARCH

The MOZART project is developing promising technologies for industrial automation, but technological excellence alone is not enough to ensure real-world uptake. **Standardisation plays a key role** in supporting interoperability, contributing to policy priorities and enabling the wider adoption of project results.

In this context, **standardisation refers to the development of shared practices, specifications, or guidelines** that promote consistency, quality, compatibility and trust across products, services and processes.

These standards are developed by **recognised organisations**, operating at different levels transparently and collaboratively, with the involvement of a wide range of stakeholders: international bodies such as ISO and IEC, European Standardisation Organisations such as CEN and CENELEC, and National Standardisation bodies such as UNI.

For research and innovation projects, integrating standardisation activities can bring significant benefits, such as:

- **Market uptake and technology transfer** by aligning innovations with existing technical frameworks
- **Interoperability between technologies** developed by different stakeholders
- **Support for regulatory frameworks** in facilitating the compliance with legal requirements
- **Collaboration** between research organizations, industry and standardisation bodies

PROJECT TIMELINE

Since the start of MOZART in 2022, **UNI – the Italian National Standardisation Body** – has supported partners through a wide range of activities, promoting standards awareness and supporting the development of a new European pre-standardisation document based on the project's results.

Training on standardisation

The first in-person training, held during the MOZART consortium meeting, introduced participants to the EU standardisation system and its role in research and innovation projects.

Training on Regulation (EU) 2023/1230 on Machinery

Afterwards, an online training introduced the consortium to Regulation (EU) 2023/1230 on Machinery and its impact on robotics, focusing on cybersecurity, AI safety, and human-machine collaboration requirements.

Standards Mapping

A third activity was focused on mapping standards relevant for soft-tactile robotics, identifying gaps and opportunities to support AUTOMAT's conformity and market uptake.

Strategic Roadmap / CWA Development

Finally, building on prior trainings and standards mapping, the MOZART team developed a CEN Workshop Agreement (CWA) to guide autonomous manipulation with morphing modular mats and support the development of future EN standards.

22.03.2023

26.06.2024

21.10.2025

29.09.2026

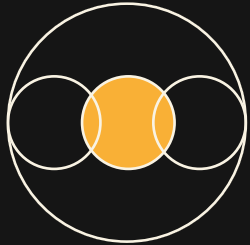
STANDARDISATION

OUTLOOK BEYOND THE PROJECT

The work undertaken in MOZART is **only part of what a standardisation body can bring** to a research consortium. Depending on a project's needs and resources, it can also provide the services shown on the next pages.



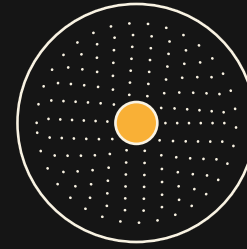
ACCESS TO DRAFTS AND NORMATIVE PIPELINE: As members of CEN, CENELEC, ISO and IEC, national standardisation bodies have privileged access to standards under development – including non-public working drafts – enabling consortia to anticipate normative changes and align research outputs accordingly.



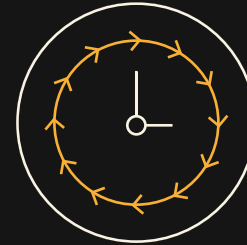
LIAISON WITH TECHNICAL BODIES: Standardisation bodies can promote formal liaison agreements between research consortia and technical bodies, letting consortia present results to standardisation work, fostering exchange between research and standardisation and informing new activities.



PROCEDURAL MANAGEMENT OF NORMATIVE OUTPUTS: Developing standardisation deliverables from research results, such as pre-normative documents or CEN Workshop Agreements, requires procedural expertise and institutional support. Standardisation bodies can guide and manage the full process, from launch to publication, within the official CEN/CENELEC framework.



DISSEMINATION THROUGH NATIONAL NETWORKS: National standardisation bodies maintain established channels to industry, regulators and other research actors. They can disseminate project results, newly adopted standards and technical outputs to a wide audience, extending the project's reach beyond the consortium.



LONG-TERM FOLLOW-UP: Standardisation deliverables (e.g. CWA) extend well beyond project timelines. A standardisation partner can ensure continuity – monitoring the evolution of relevant standards, tracking committee activities and supporting post-project engagement with the standardisation bodies that matter most.

TOWARDS BETTER STANDARDISATION

UNI identified key factors influencing standardisation uptake in research projects.

CHALLENGES

Limited awareness of standardisation within research communities can slow its integration into project activities and reduce alignment with existing technical frameworks.

Standardisation activities are often addressed only in later project stages, limiting opportunities to align research outputs with standards and regulatory frameworks.

Dedicated effort for standardisation tasks is sometimes limited, making it difficult to organise training, conduct standards mapping or develop relevant outputs.

Interaction between research consortia and national or European standardisation bodies can **remain limited**, reducing opportunities for collaboration, feedback and alignment.

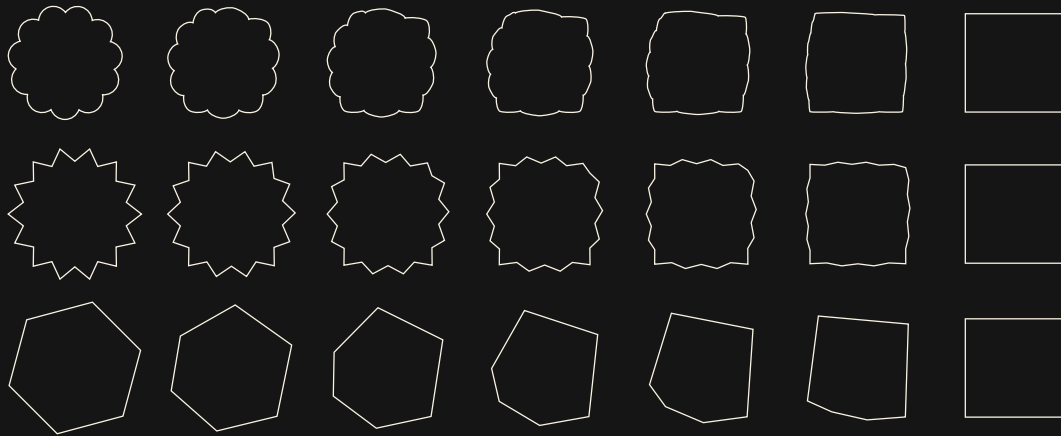
RECOMMENDATIONS

Promote awareness and targeted training on standards within research projects to help researchers understand their role in supporting innovation and deployment.

Plan standardisation activities from the proposal stage to align project development with relevant standards and regulatory frameworks from the beginning.

Allocate dedicated resources for standardisation tasks, including training, mapping and preparation of outputs supporting the long-term impact of results.

Strengthen collaboration between research consortia and national or European standardisation bodies to facilitate knowledge exchange and alignment with ongoing work.



CONCLUSION

Standardisation is a key enabler for translating research results into tangible societal and industrial impact. The MOZART experience demonstrates how the systematic integration of normative and interoperability activities can strengthen innovation processes, facilitate regulatory alignment and enhance collaboration among stakeholders. **Embedding these activities from the outset of a project is crucial** to maximise the uptake, scalability and long-term sustainability of research outcomes within the European innovation ecosystem.

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MOZART

IT TAKES SOFTNESS TO PURSUE CONCRETE
SUSTAINABILITY GOALS



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WHO WE ARE



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