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**Newsletter #6** 

## User-centric solutions for a flexible and modular manufacturing in small and medium-sized shipyard

## Mari4\_YARD teaser

The Mari4\_YARD teaser is online



Watch the teaser!

News

The Mari4\_YARD Zenodo Community

You can find the project public deliverables, our scientific publications and the Mari4\_YARD dataset

Visit the Mari4\_YARD Community on Zenodo

# Events

#### **Future events**

# Mari4\_YARD 4th workshop

14 November 2024 at AIMEN (O Porrino, Pontevedra, Spain)

MARI4YARD

Funded by the European Union

#### Mari4\_YARD invite you to its 4th and last workshop

#### TRANSFORM THE SHIPBUILDING WITH MARI4\_YARD

Mari4\_YARD is set to host its 4th Workshop in O Porrino, Pontevedra, Spain. The event will take place on November 14th at AIMEN, Centro tecnologico, coordinator of the project.

**Registration is Now Open!** Don't miss this opportunity to learn more about the project and the latest advancements in shipbuilding technology.

**What is Mari4\_YARD?** Mari4\_YARD is a collaborative effort involving 18 partners from 9 European countries, including Spain, Germany, Croatia, Italy, Netherlands, Greece, Belgium, Portugal, and Poland. The project's mission is to develop user-centric solutions for flexible and modular manufacturing in small and medium-sized shipyards.

**Key Technologies** Mari4\_YARD is focused on developing innovative technologies to enhance shipbuilding efficiency and competitiveness:

- **Digital Solutions for 3D Modeling:** These solutions will streamline the retrofitting and repairing of vessels, reducing rework and changes by up to 60%.
- **Safe Robot-Based Solutions:** Collaborative robots will be integrated into the shipyard environment to improve efficiency and reduce process time.
- **AR/MR Tools:** Augmented and mixed reality tools will assist workers in positioning equipment and subassemblies with greater precision.
- **AI-Enhanced Exoskeletons:** Exoskeletons powered by AI will reduce worker fatigue and improve task quality and precision.

Why Mari4\_YARD? The project aims to strengthen the competitiveness of European small and medium-sized shipyards, creating new jobs and fostering economic growth. By focusing on user-centric solutions, Mari4\_YARD is poised to revolutionize the shipbuilding industry.

Date: November 14th, 2024

Time: 9:00 - 15:45

Location: AIMEN Centro de Aplicaciones Láser link: CAL location

Polígono Industrial de Cataboi, SUR-PPI-2 (Sector 2), Parcela 3, 36418 O Porriño, Pontevedra

**Register now for the workshop** 

#### **Past events**

#### Mari4\_YARD final event

## SAFER, SMARTER, STRONGER: MARI4\_YARD HUMAN-CENTRIC SHIPBUILDING

The final event provided valuable insights into the future of European shipyards. Top industry experts shared their visions, and live demonstrations showcased Mari4\_YARD's latest technological advancements in areas such as 3D modeling, digitalization, robotics,



augmented reality, and exoskeletons. Attendees also had the opportunity to network with key players in the European maritime sector.

As the shipbuilding industry continues to evolve, Mari4\_YARD's approach offers a promising model for overcoming challenges and driving a successful digital transformation. By prioritizing human wellbeing and embracing advanced

technologies, shipyards can position themselves for a prosperous future.

Some of the main takehome messages from our panelist Gabriel Mialocq from CINEA, Adele Lubcke from VSM and Methap Ozdemir from GISBIS.

"The priority is to modify the mindset of the shipyards' managers and operators to convince them to accept a revolution of the shipbuilding processes".

"The second aspect is to influence the youngest generations and motivate them to approach manual jobs like those in the shipbuilding industry, showcasing how easy is using the new technologies in the daily work".

"what about the women participation in the shipbuilding sector?"

"well, we need to tell other women our success story! that's the point, mainly more important than the digitalisation itself". Adele Lubcke said.

Enjoy the photo gallery!

### The project at a glance!

Mari4\_YARD is an EU-funded project that leverages the potential of the Internet of Things (IoT), mobile and ubiquitous ICT tools, and robotics to develop user-centric solutions for flexible and modular manufacturing and thus implement a novel connected shipyard.





Intuitive human-robot collaborative solutions in shared workspaces Handheld and portable AR/MR tools for assisting shipyard workers



Al-assisted exoskeletons for reducing fatigue and physical stress

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Portfolio of worked-centric tools to support labourintensive tasks Demostration of Mari4\_YARD approach at real-scale in SMEshipyard

## **The Consortium**





