

MARITIME AI INNOVATION LAB

# Maritime AI InnovationLab

AI's Role in the Evolving Maritime Industry

# Maritime AI InnovationLab kicks off!



## Maritime partners

Providing use cases and data  
Validate developed modules  
Domain-specific knowledge

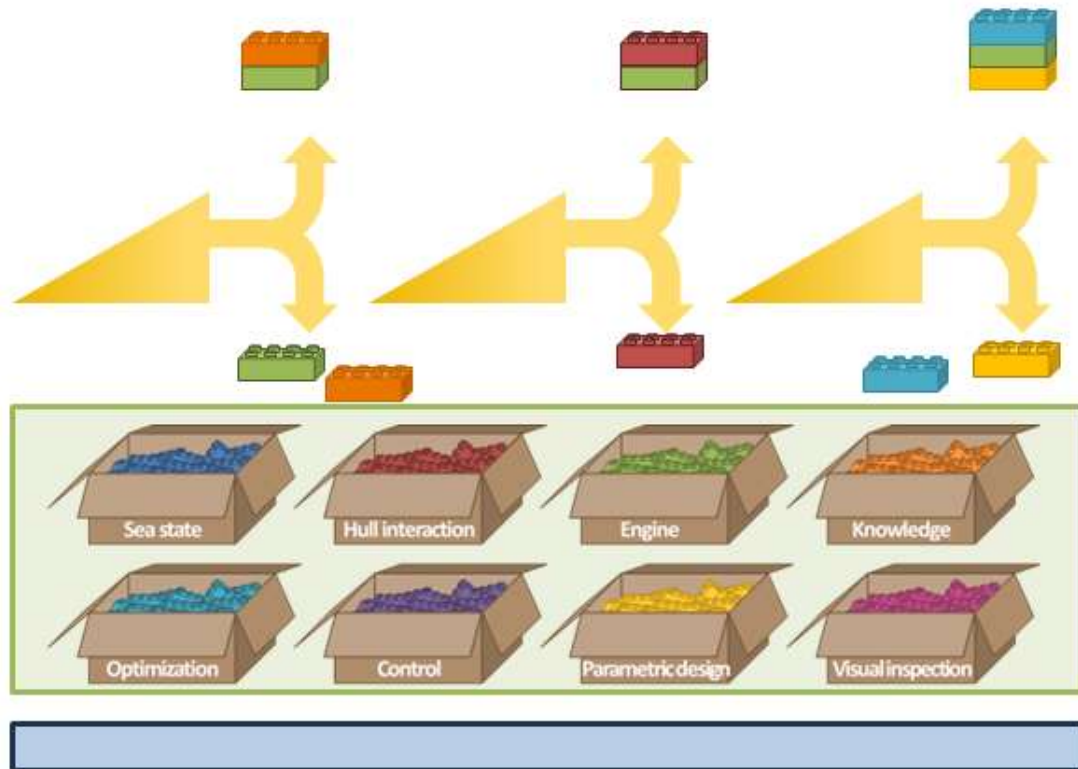
## Tracks

Collaboration between  
knowledge/tech partners and  
maritime industry  
Setting requirements, integration

## Knowledge/tech

Developing and maintaining  
technological modules  
Ensuring compatibility of modules  
AI-specific knowledge

## Lab management





Core partners

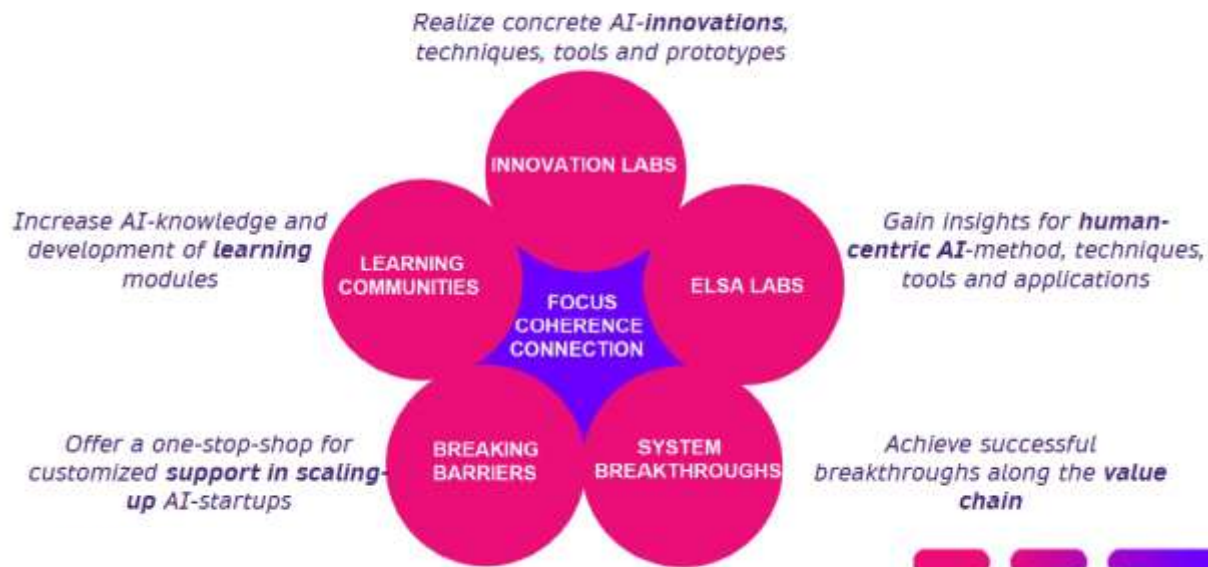
Cooperation partner



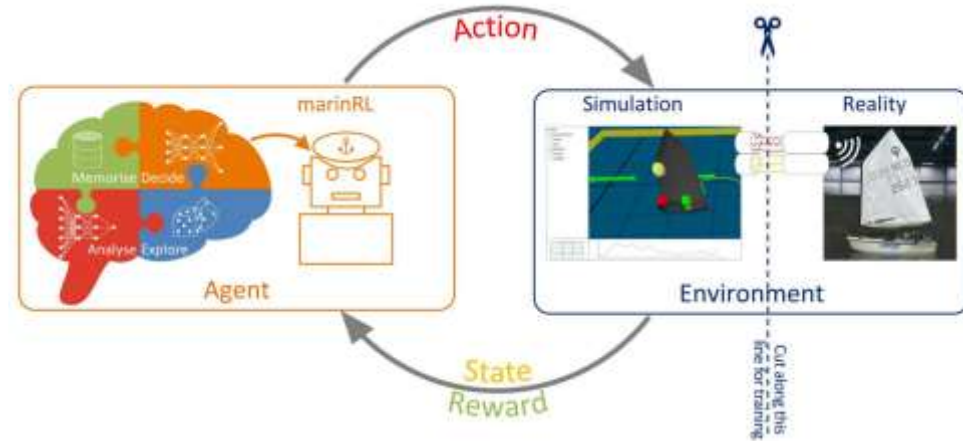
Flexible ring



Future Flexible ring



- Within the InnovationLab, a toolbox with AI techniques and tools will be developed. Together with physics based simulation tools, the toolbox will provide a powerful combination of techniques that can be used to solve practical challenges.



Practical example of simulated training and real testing  
<https://magazine.marin.nl/marin-report-139/ai-sail>

- Image processing for shipping and offshore applications
- Data driven performance optimization
- Control for complex systems

## IMAGE PROCESSING FOR SHIPPING AND OFFSHORE APPLICATIONS

INSPECTION • NAVIGATION • SAFETY MONITORING



## DATA DRIVEN PERFORMANCE OPTIMIZATION

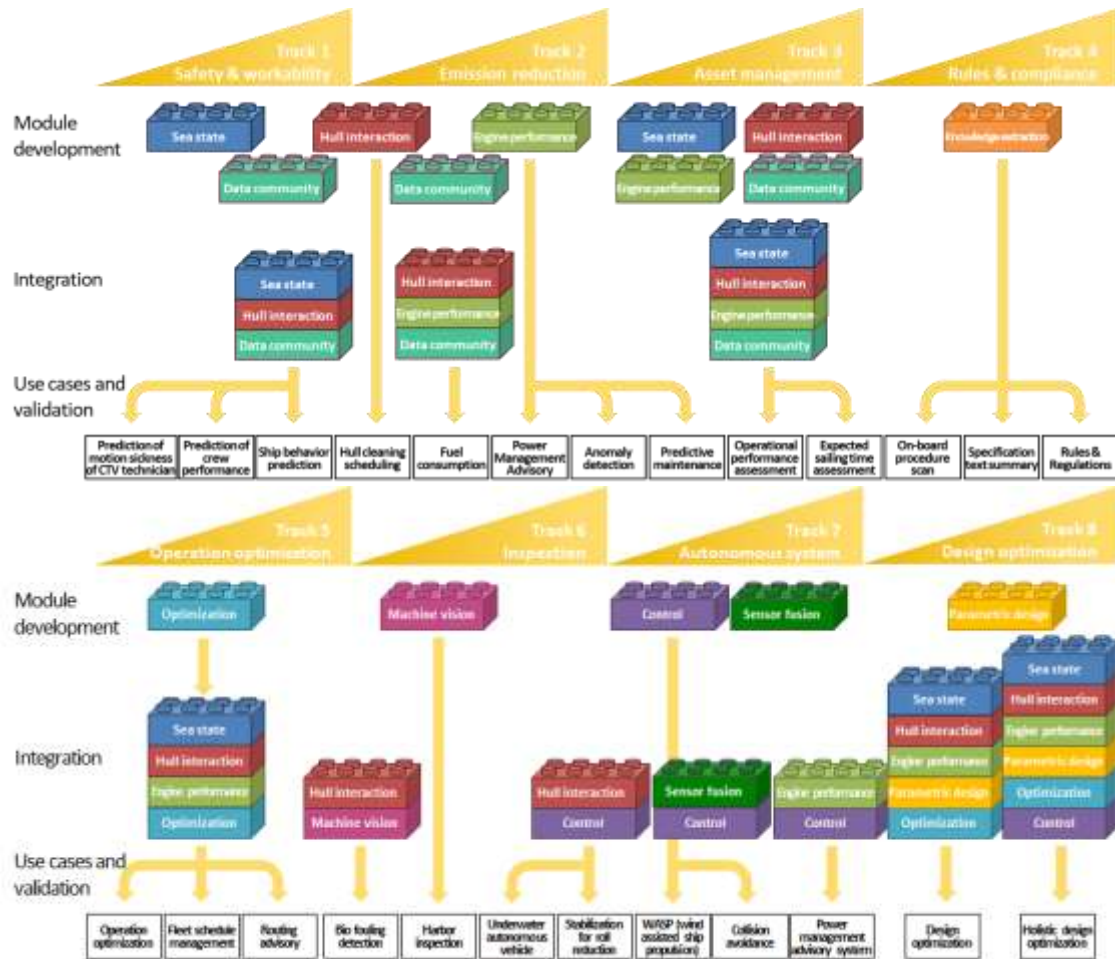


## CONTROL FOR COMPLEX SYSTEMS



- Target:
  - Starting 8-10 tracks
  - Starting one track every 6 months
  - Duration: max. 1.5 year per track
  - Target size: ~500 kEuro (total)
  - At least one core partner involved

# Vision of tracks



# First 2 tracks have started, but there is flexibility in track definition



Vision of CoPilot for Work package X

- Any Dutch nongovernmental party who:
  - Has a challenge that is difficult to solve with traditional means
    - OR -
  - Is an AI specialist in a certain field of AI
    - OR -
  - Has data, but finds it challenging to get insights from it

- Direct personnel costs: These are personnel costs incurred for the direct implementation of the project. The following 3 methods are accepted:
  - i. Integral cost methodology (IKS);
  - ii. Personnel costs + 50% overhead methodology;
  - iii. Fixed hourly rate of €60
- % subsidy based on personnel costs:
  - 100% for non-economic activities
  - 40% Experimental development
- Access to the network of knowledge, tools, data and companies!

- Proposals are judged on:
  - Foreseen result (up to TRL 5)
    - Technical challenge
    - Operational significance
    - Consortium in relation with the proposal
    - Achievability in indicated planning and budget
  - Fit for Maritime AI InnovationLab:
    - Development, building blocks
    - Business case / Value proposition
    - Relation to other tracks
    - Relation AIC4NL
  - Fit of the Maritime sector agenda:
    - Towards zero emission
    - Maritime data
    - Safe and smart shipping
    - Smart & circulair shipbuilding
    - Duurzame blauwe economie
    - Secure seas.
  - Dissemination intentions

# Let's get to work!

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The logo is a large, dark blue rounded rectangle containing the text 'MARITIME AI INNOVATION LAB' in orange. The text is stylized with a white circuit-like graphic that underlines and connects the letters. The graphic consists of horizontal lines, vertical lines, and a diagonal line that forms a 'Z' shape, with small white circles at the ends of the lines.