



CoE MARBLE

Centre of Excellence in Maritime Robotics
and Technologies for Sustainable Blue Economy

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- main **goal** - create a new “Centre of Excellence in Maritime Robotics and Technologies for Sustainable Blue Economy” (CoE MARBLE) that will engage Croatia in a path of sustainable innovative growth in blue economy
- strategic **vision** - put Croatia on the map of R&I excellence by becoming a European lighthouse and a role model in the field of maritime robotics and technologies



CoE MARBLE

Centre of Excellence in Maritime Robotics
and Technologies for Sustainable Blue Economy

University of Zagreb Faculty of Electrical Engineering and Computing (UNIZG-FER) is leading a **consortium** comprising of relevant quadruple helix actors of the Croatian blue economy ecosystem:

- **Ruđer Bošković Institute (RBI)** as representative of science end-users;
- **Maritime Innovation Cluster (MARINN)**, a cluster of maritime industry stakeholders;
- **DIH Agrifood Croatia (AFC)**, a hub of aquaculture stakeholders and end-users;
- **Croatian Ministry of Science and Education (MZO)**, a representative of policy makers, and

and leading partners

- **Norges teknisk-naturvitenskapelige universitet (NTNU)**, Norway
- **Consiglio Nazionale delle Ricerche (CNR)**, Italy



CoE MARBLE

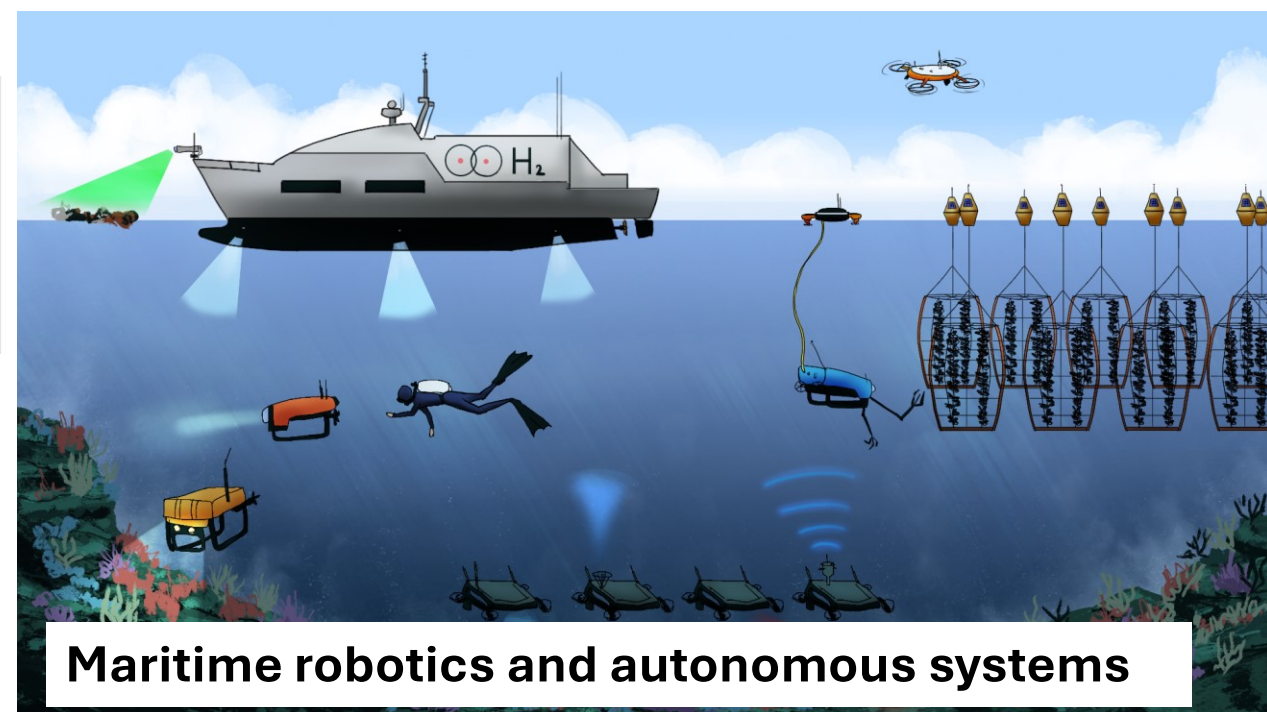
Centre of Excellence in Maritime Robotics
and Technologies for Sustainable Blue Economy



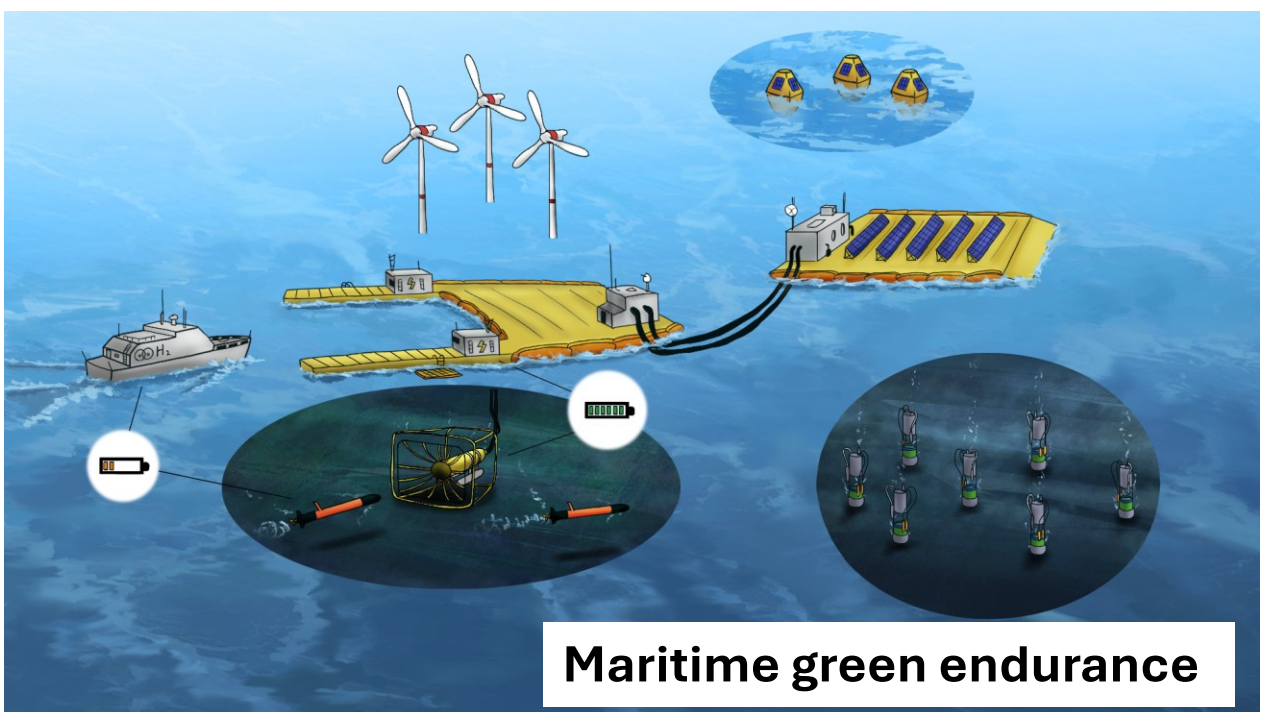
PARTICIPANTS

Grant Preparation (Beneficiaries screen) — Enter the info.

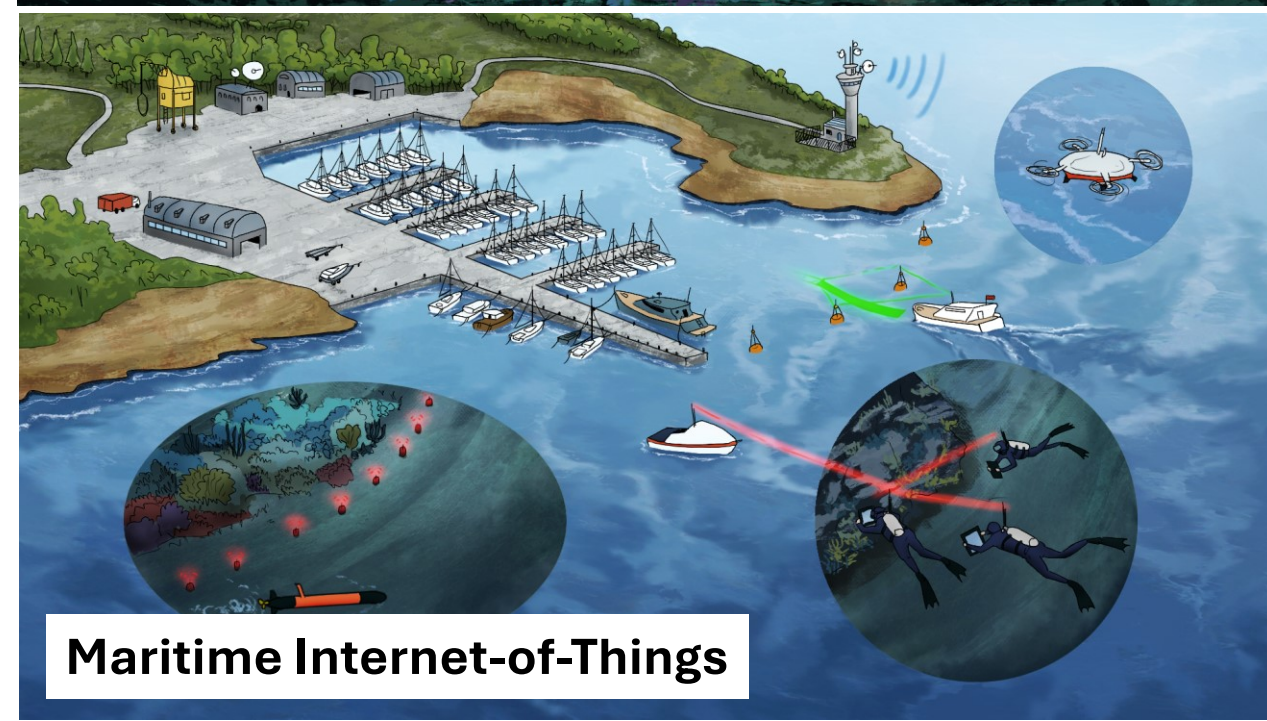
Number	Role	Short name	Legal name	Country	PIC
1	COO	UNIZG-FER	SVEUCILISTE U ZAGREBU FAKULTET ELEKTROTEHNIKE I RACUNARSTVA	HR	999876486
2	BEN	NTNU	NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU	NO	999977851
3	BEN	CNR	CONSIGLIO NAZIONALE DELLE RICERCHE	IT	999979500
4	BEN	RBI	RUDER BOSKOVIC INSTITUTE	HR	999875031
5	BEN	AFC	UDRUGA DIH AGRIHRANA HRVATSKA	HR	891064893
6	BEN	MARINN	MARINN - MARITIMNI INOVACIJSKI KLASITER	HR	884723712
7	BEN	MZOM	MINISTARSTVO ZNANOSTI, OBRAZOVANJA I MLADIH	HR	999825949
8	BEN	CoE MARBLE	Centar izvrsnosti MARBLE drustvo s ogranicenom odgovornoscu za istrazivanje i razvoj	HR	875803592



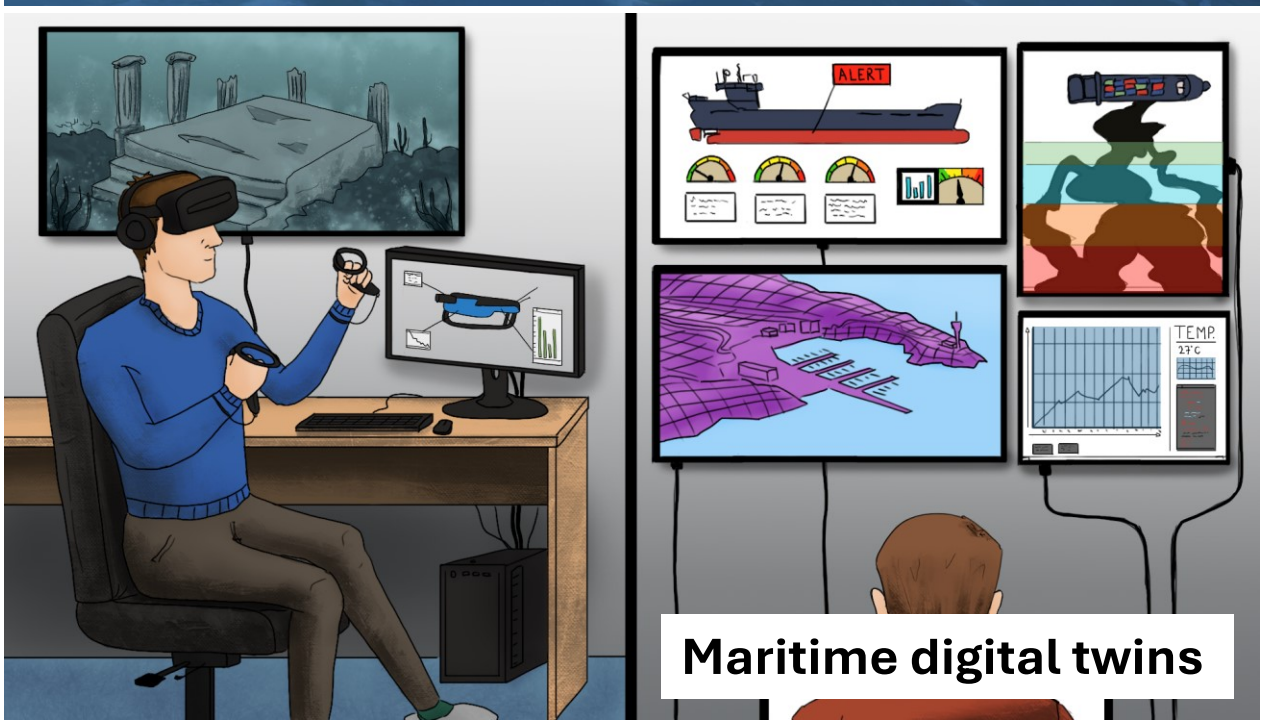
Maritime robotics and autonomous systems



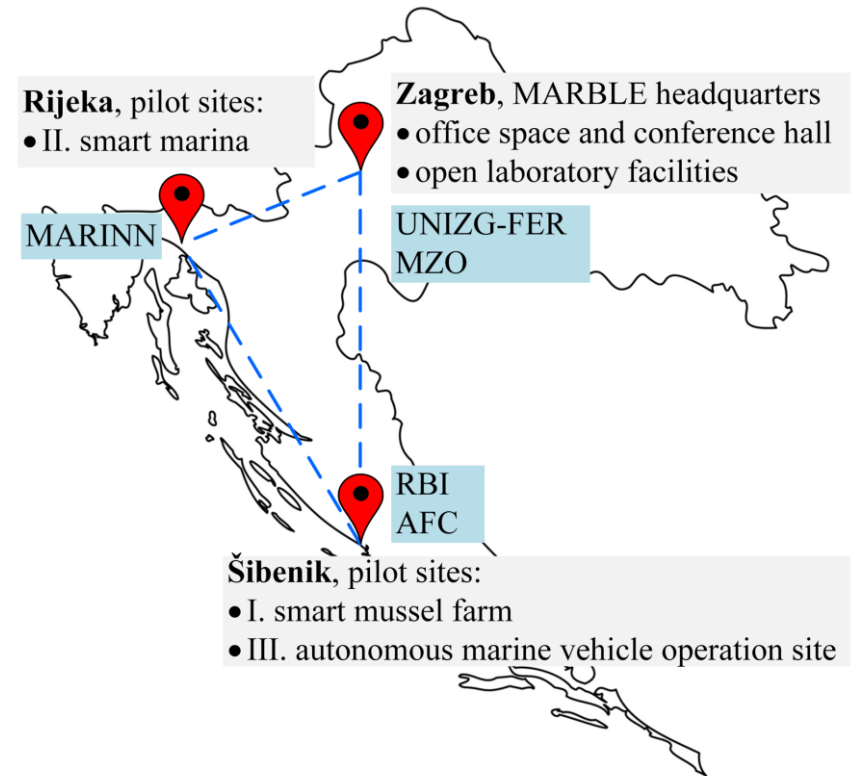
Maritime green endurance



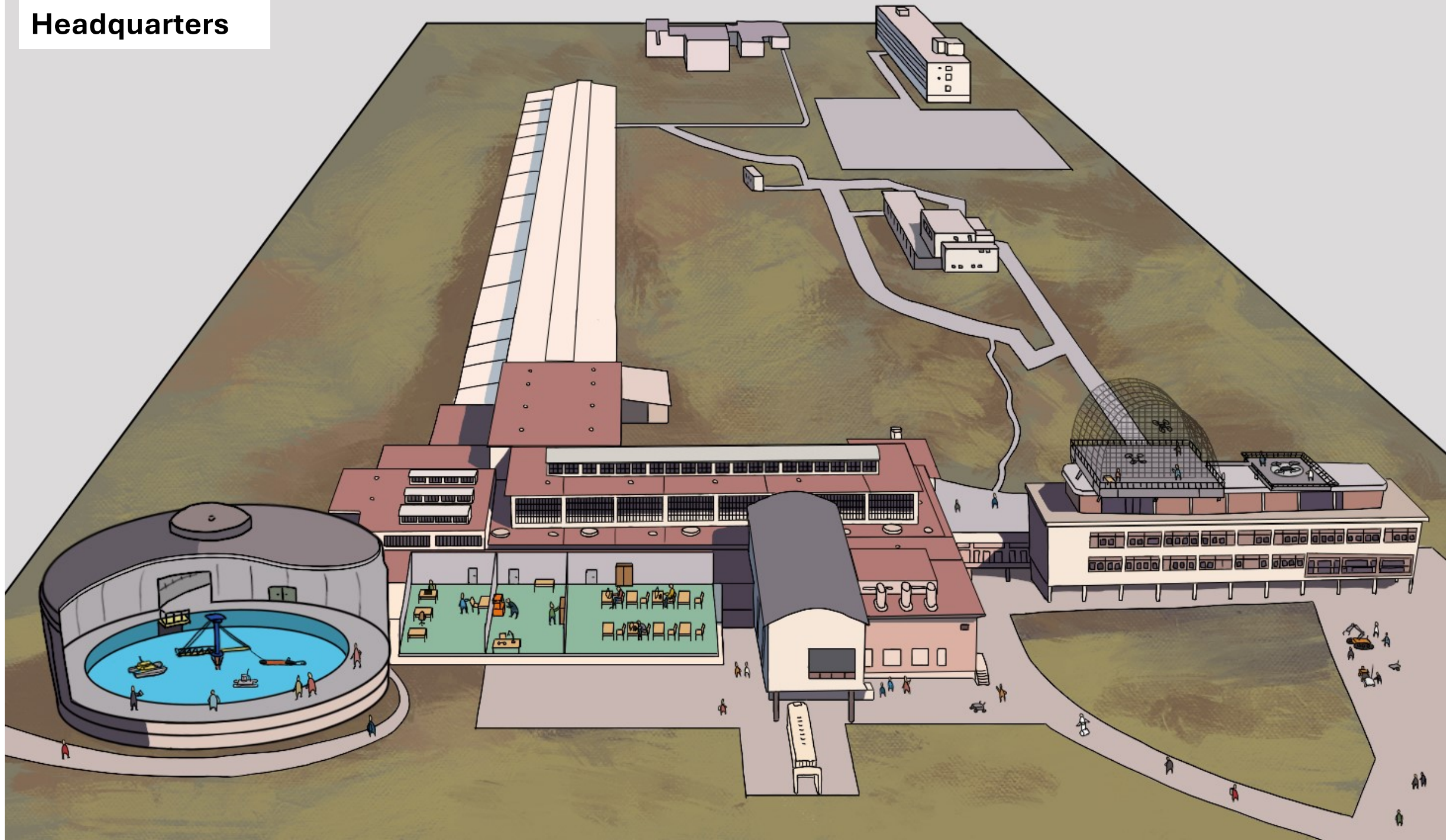
Maritime Internet-of-Things

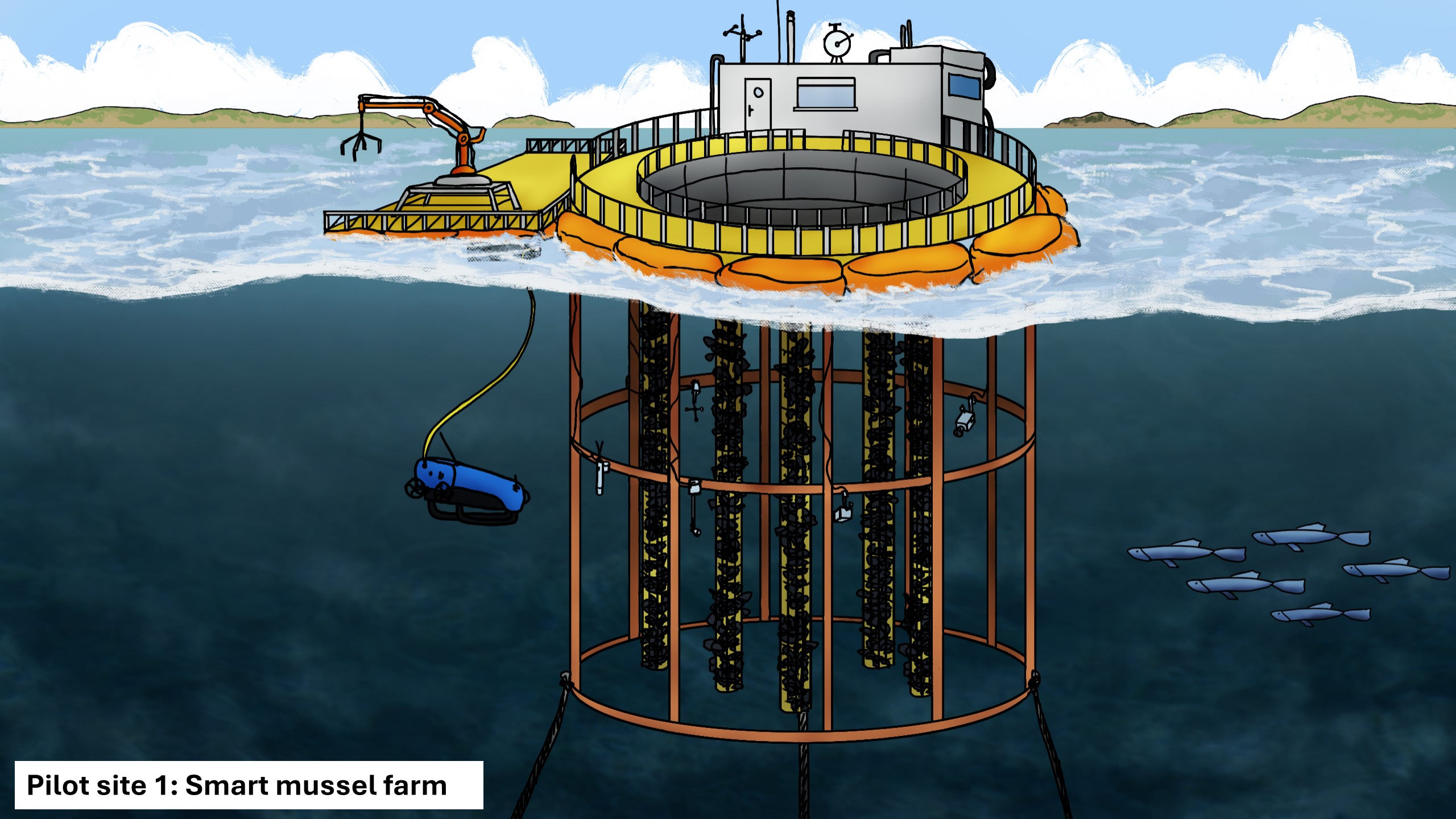


Maritime digital twins



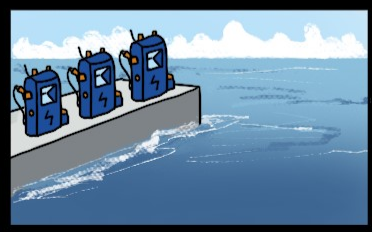
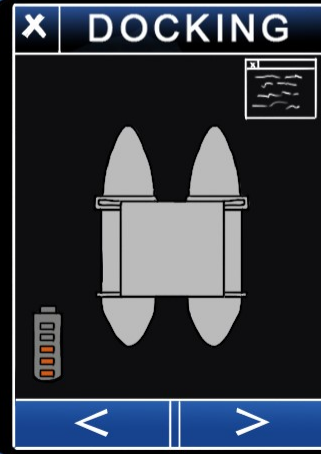
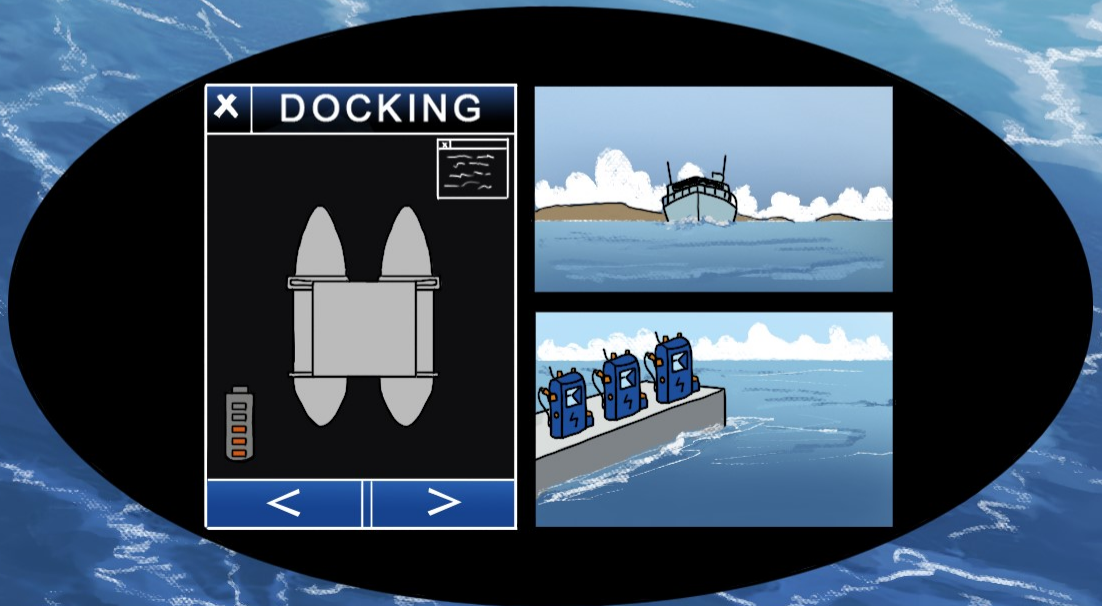
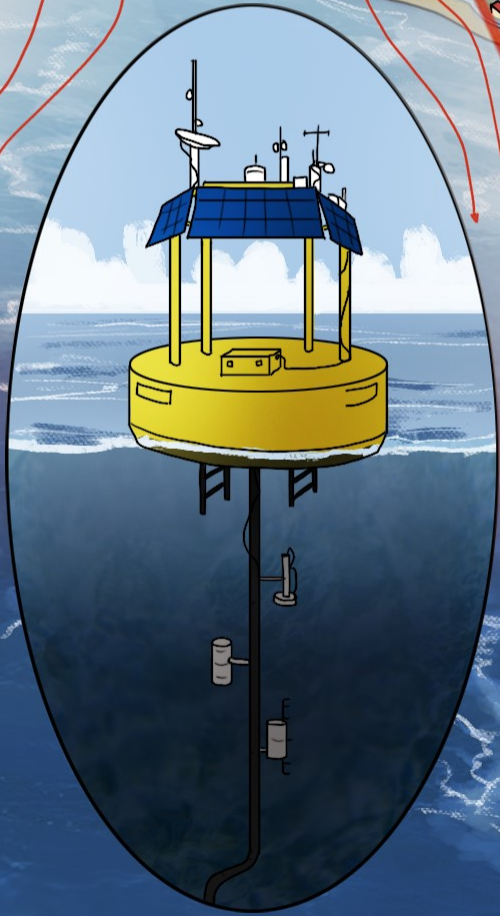
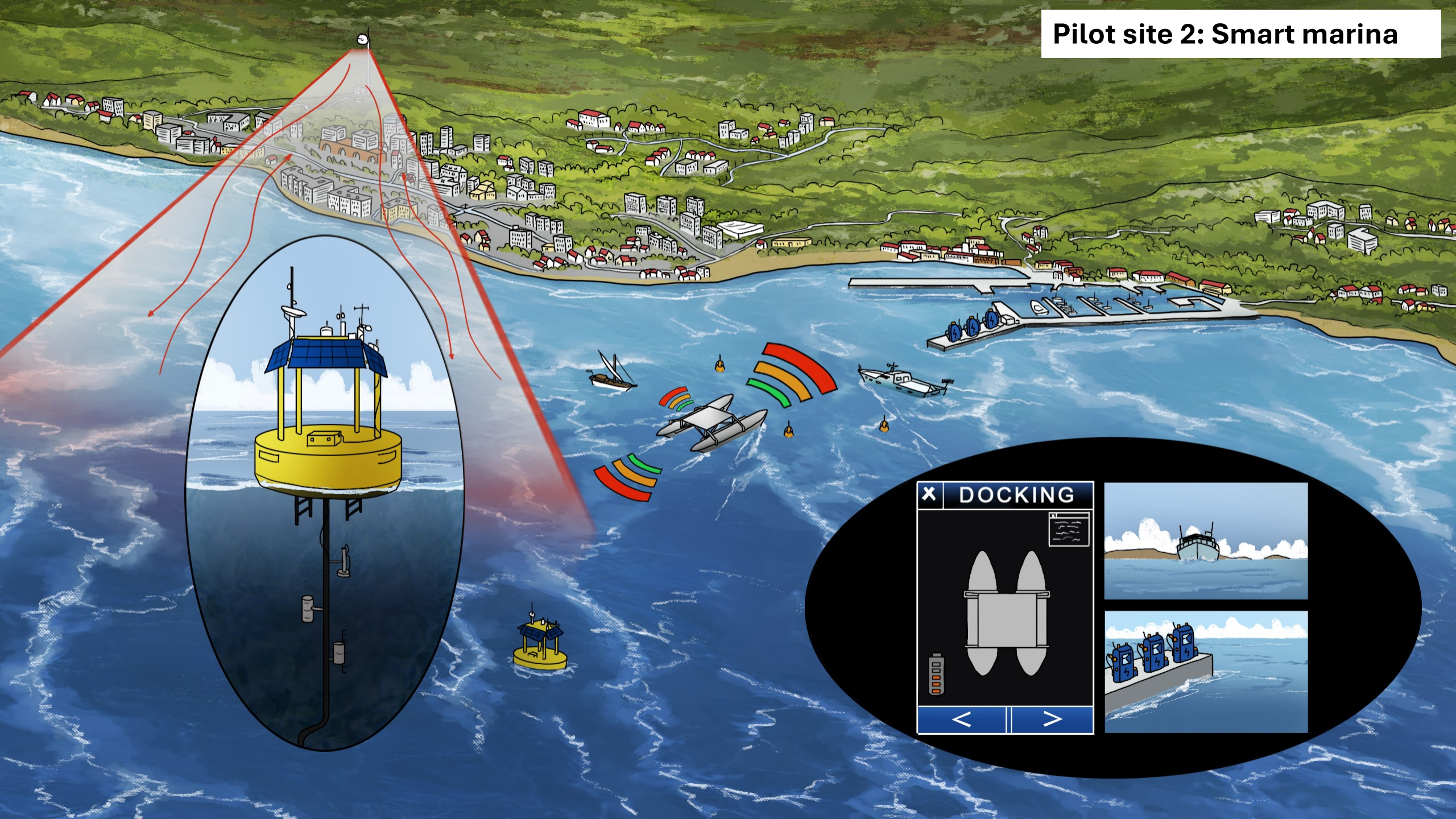
Headquarters

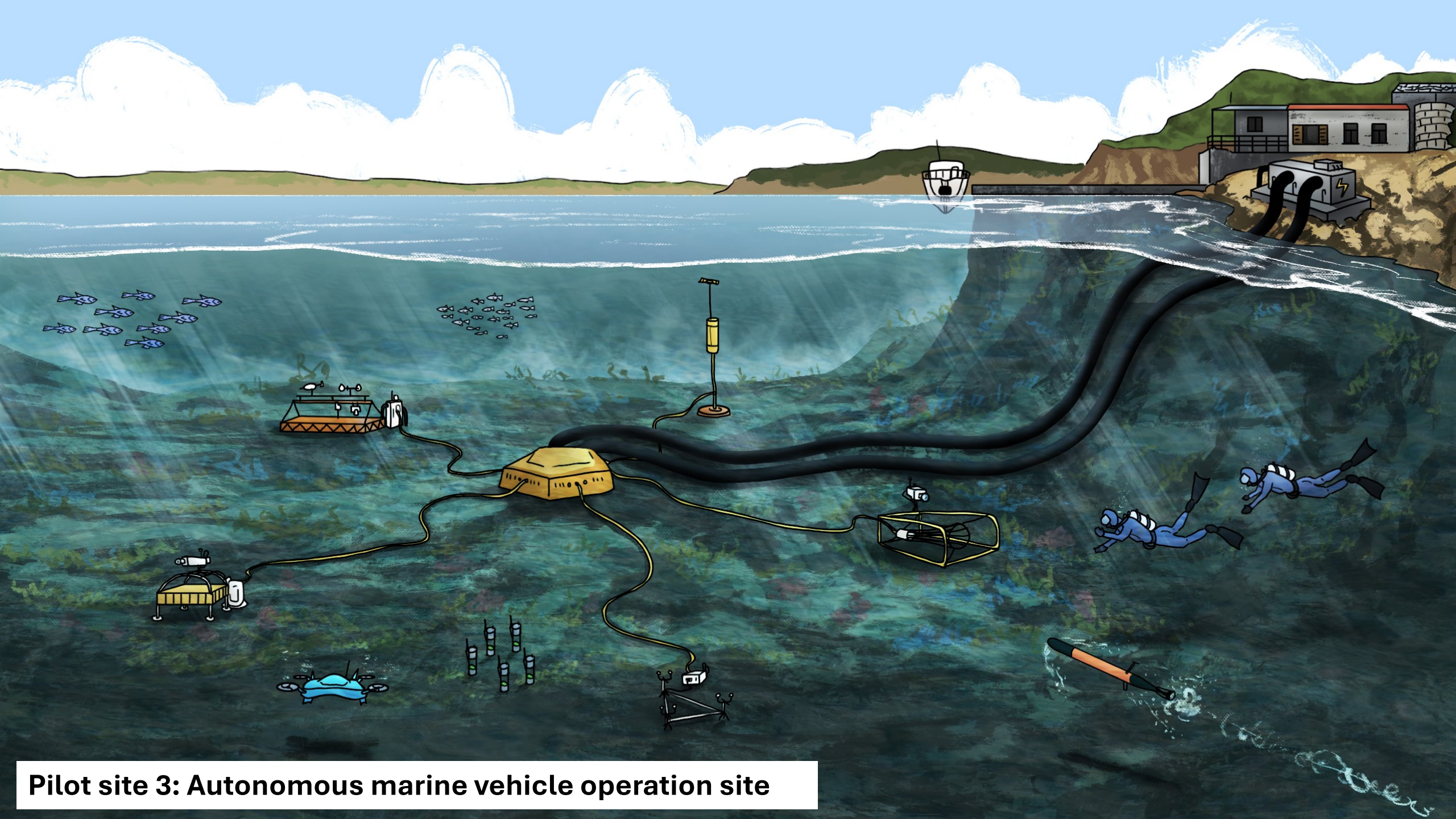




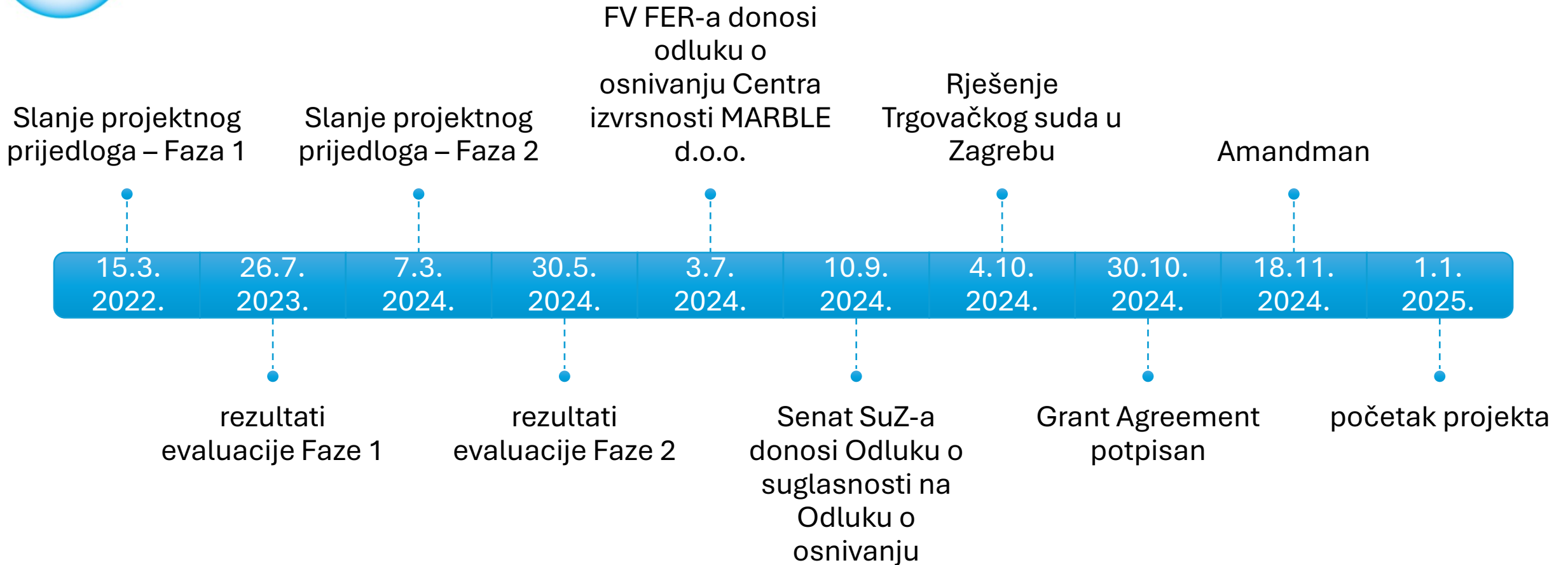
Pilot site 1: Smart mussel farm

Pilot site 2: Smart marina





Pilot site 3: Autonomous marine vehicle operation site





Evaluation Summary Report (“Howevers”)

- Criterion 1: Excellence
 - *The directions for the key research areas are well identified. However, the current state of the art with regards to maritime robotics and application and the strategy to develop scientific excellence beyond the state of the art are not fully elaborated upon.*
 - *The full autonomy of the envisaged CoE with regards to legal, administrative, operational, personnel and academic matters is properly demonstrated.*
 - *The measures for attracting and retaining international talent and the promotion of gender balance and diversity is properly addressed and quantified targets are also set. However, the proposed timing of the recruitments and slow build-up of staff is not properly justified...*



Evaluation Summary Report (“Howevers”)

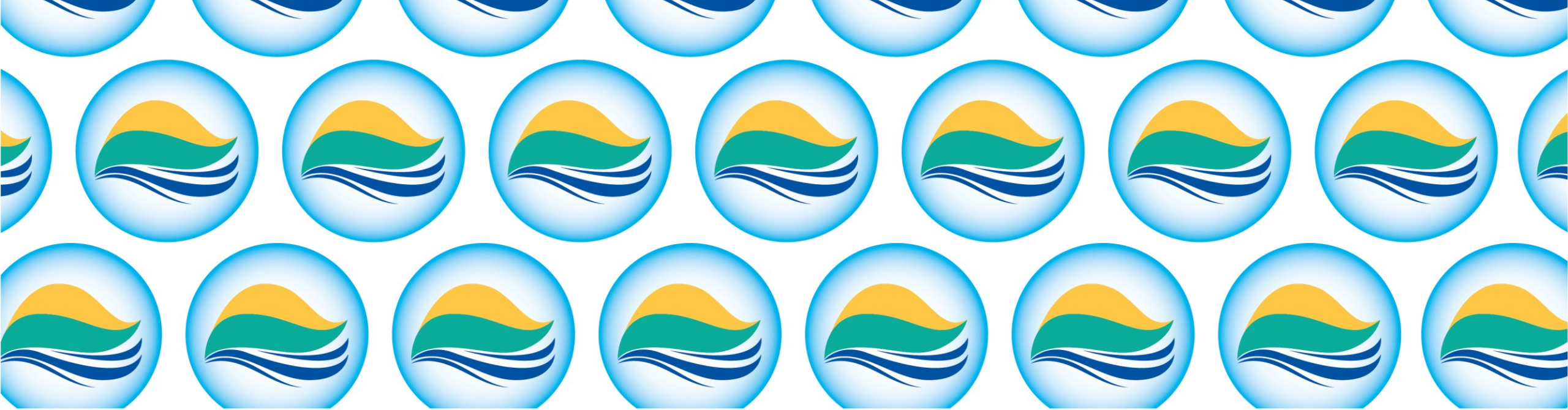
- Criterion 2: Impact

- *The plan for the long-term identifies diversified sources of income, such as competitive research projects, contracts with industrial partners and income from services. **However, it is not fully convincing...***
- *The significance of the project’s contribution to the expected outcomes and impacts specified in the Work Programme is appropriately defined. **However, the scale of the project’s contribution is insufficiently addressed. The assumptions underlying the targets for the impact KPIs are not fully detailed.***



Evaluation Summary Report (“Howevers”)

- Criterion 3: Quality and efficiency of the implementation
 - *The resources allocated in terms of effort and budget are overall appropriate. However, the resources assigned to communication are not fully clarified.*
 - *The critical risks related to project management, human resources and administration are adequate and the mitigation measures are overall appropriate. However, the scientific and technical risks are insufficiently addressed.*
 - *The roles of the participants are overall properly defined, with suitable resources. The participating organisations have access to the critical infrastructure needed. However, the rationale behind the distribution of the responsibilities between the coordinator and the leading institutions from abroad is not sufficiently explained.*



- 1. Autonomija**
- 2. Samoodrživost**
- 3. Strukturne reforme**



Autonomija

Under the call HORIZON-WIDERA-2025-ACCESS-01-01- two-stage, what means the autonomy of the centre?

For the future Centre of Excellence the autonomy mainly means being fully autonomous in decision making. Key strengths of it usually cover, among others, autonomy in recruitment/HR issues/salary setting for the Centre of Excellence, financial autonomy, i.e. separate budget line, separate infrastructure building for the Centre of Excellence, academic autonomy in terms of setting its own research agenda, and others.



Samoodrživost

- Kompetitivni projekti
- Projekti s industrijom
- Usluge na tržištu
- Donacije, investitori
- Podrška države
- ...

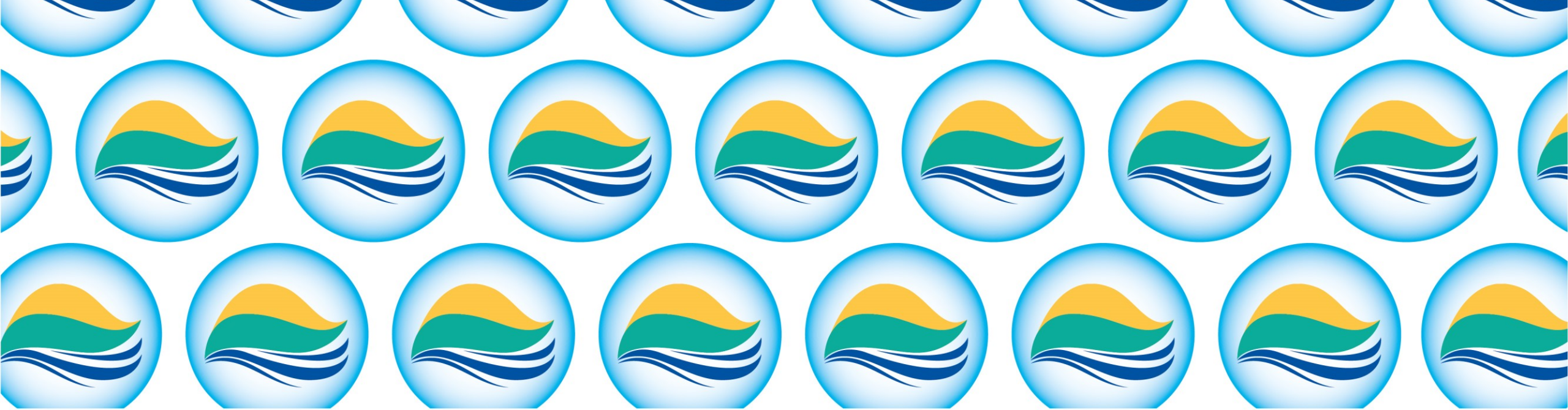


Strukturene reforme

- Expected impact:
 - ...
 - Structural changes leading to modernised and more competitive R&I systems in eligible countries;
 - ...



Prepreke?



Hvala

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