

**STRENGTHENING THE CAPACITY FOR
EXCELLENCE OF SLOVENIAN AND
CROATIAN INNOVATION ECOSYSTEMS
TO SUPPORT THE DIGITAL AND GREEN
TRANSITIONS OF MARITIME REGIONS**

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LASIM

17.10.2023

**Driving Innovation for Green, Digital,
and Smart Maritime Ecosystems**



**European
Commission**

Horizon Europe
European Union Funding
Grant agreement N°101087348



NCP_
WIDERA.NET



**Funded by
the European Union**

UL – FME

University of Ljubljana
Faculty of *Mechanical Engineering*



Established: in 1919

Members: 26 (3 Academies and 23 Faculties)

<https://www.uni-lj.si/study/members/>

Students: 40.607

Employees: 6.458 (in 20/21)

Chairs: **22**

Laboratories: **37**

Employees: **393**

Students: **1942**; 652 AP, 638 UG, 505 + 33 Master, 114 PhD (acad. year 20/21)

Graduates: **408**; 106 AP, 179 UG, 106 Master, 17 PhD (year 2020)



EU projects: RIA, IA, CSA

17/10/2023

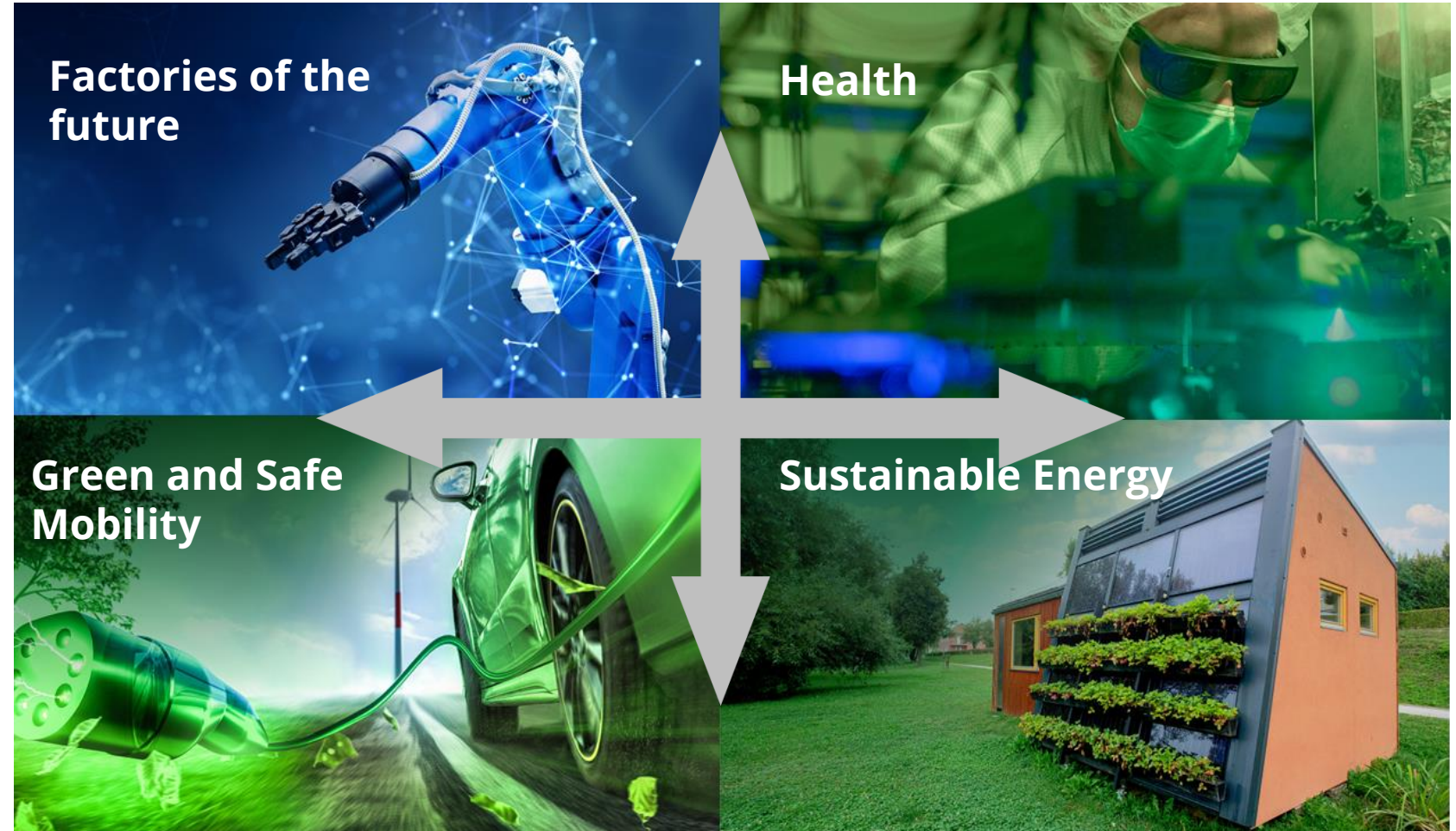
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RESEARCH TOPICS

- Smart Production and logistics
- Digitalization, Digital Transition,
- Digital Twins
- Industry 4.0
- Sustainable, Green

Strong collaboration with industry (projects, knowledge transfer, trainings and workshops, technology transfer)

Strategic partner with government (strategies, initiatives)



INNO2MARE AT A GLANCE

Horizon Europe: HORIZON-WIDERA-2022-ACCESS-04-01 — Excellence Hubs (CSA)

Funding: 4 985 150.00 EUR

Duration: 4 years

3 innovation ecosystems

19 project partners

Coordinator: University of Ljubljana, Slovenia

Start date: 1st January 2023



Proposal,
March 2022



Evaluation
summary
June 2022



Evaluation
report letter
July 2022



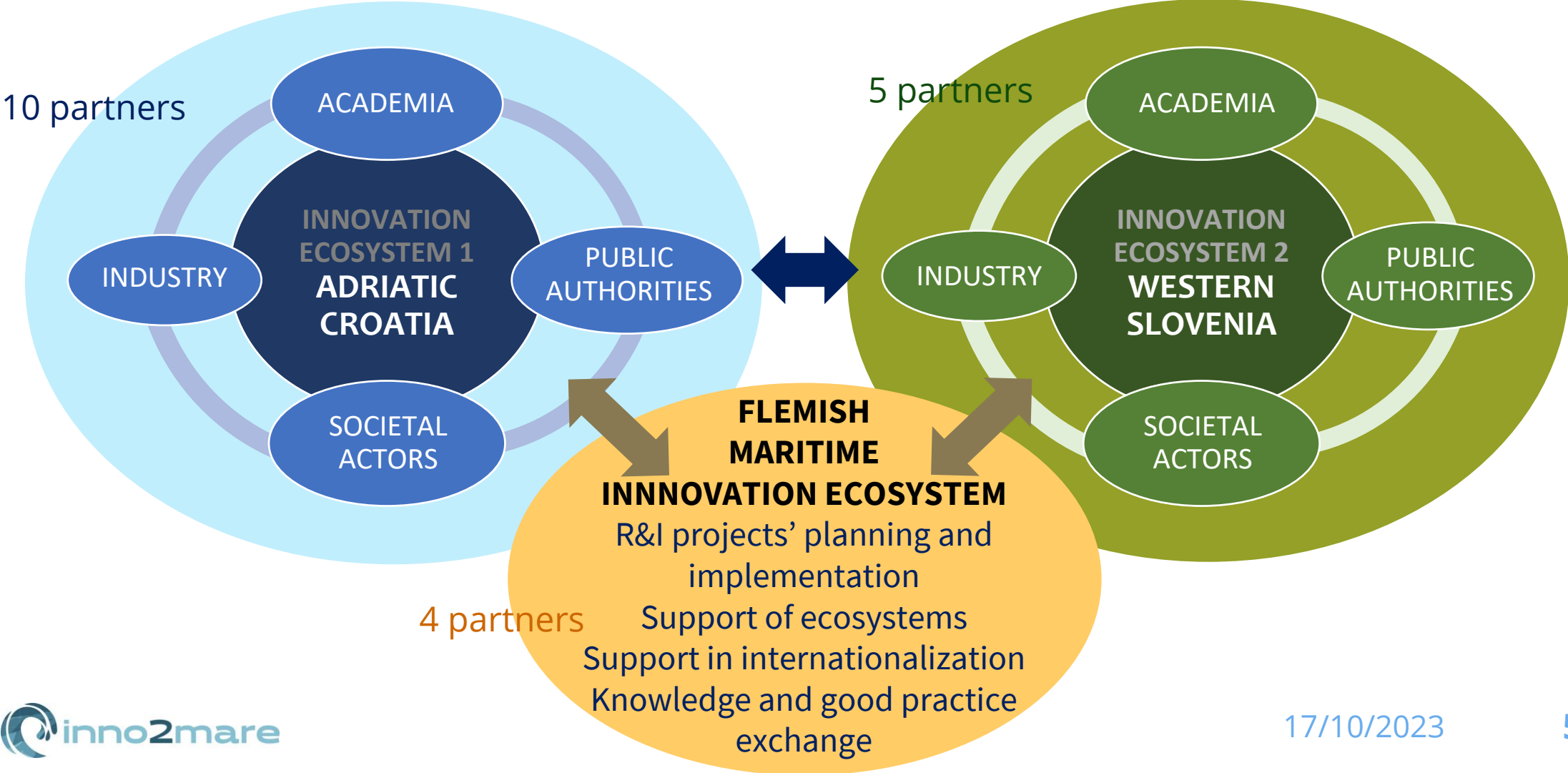
GA, CA
November
2022



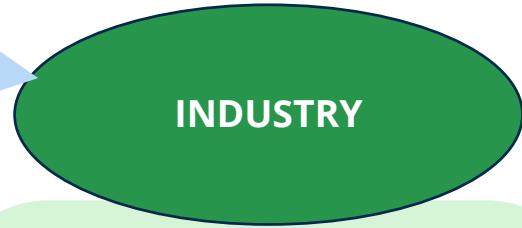
Project start
January
2023

PLACE-BASED INNOVATION ECOSYSTEMS

Defining the ecosystems main players



5 partners



University of Ljubljana (UL)

- **Faculty of Mechanical Engineering**
- Faculty of Electrical Engineering
- Faculty of Computer and Information science
- Faculty of Maritime Studies and Transport

University of Primorska, Koper

Digital Innovation Hub Slovenia
Competence Centre for Advanced Control Technologies KC STV, Ljubljana
LUI - Ljubljana University Incubator
Technology park Ljubljana Ltd.
ABC Accelerator

Smart industrial solutions
ISKRA Ltd.
Elektro Gorenjska, Inc.
Elektro Primorska, Inc.

ICT for maritime
BeelN Ltd.
DIGITEH Ltd.
QLECTOR Ltd.
Sentinel Marine solutions Ltd.

Marine engineering
Adriaing Ltd.
IAM Engineering Ltd.

Marinas and ports management
Port of Koper, Inc.

Business associations
Chamber of Commerce and Industry of Slovenia (GZS - Gospodarska zbornica Slovenije)



Western Slovenia region
Business Support Centre Kranj – Regional Development Agency of Gorenjska
Gorenjska Region
Primorska Region with the City of Koper
City of Ljubljana

Central government
Ministries of Science, Education and Sport;
Economic Development and Technology; SPIRIT (Slovenian Agency for Entrepreneurship)

Association for Technical Culture of Slovenia - ZOTKS

Association of societies for technical culture Kranj

8 partners
+
2 associated

RESEARCH & EDUCATION INSTITUTIONS

- University of Rijeka (UNIRI)**
 - EDIH Adria headquarters
 - **Faculty of Maritime Studies**
 - **Faculty of Engineering**
 - **Faculty of Informatics and Digital Technologies**
 - **Center for Artificial Intelligence and Cybersecurity**
- Universities of Pula, Zadar, Split and Dubrovnik

4-HELIX INTERMEDIARIES

- STEP RI Science and Technology Park of the University of Rijeka Ltd.**
- STARTUP Incubator of the City of Rijeka
- PORIN Rijeka Development Agency
- MarInn - Maritime Innovation Cluster
- Croatian Private Equity and Venture Capital Association (CVCA)

INDUSTRY

- Marine engineering**
MS Tech Ltd. (affiliated with **Maritime Center of Excellence Ltd.** and Lürssen Design Center Kvarner), AITAC Ltd., TSI Ltd., Navis Consult Ltd., IHC Engineering Croatia Ltd., Brodoplan, P.B.S. Ltd., Vard Design Liburna Ltd., Vertex B.S. Ltd., DE NAVAL Ltd., PROPLAN Ltd.
- Shipbuilding & repair services**
ISKRA brodogradilište 1 Ltd., VIKTOR LENAC Inc., 3. MAJ Inc., PMB Group Ltd., SCAM Marine Ltd., MKM Yachts Ltd.
- Marinas and ports management**
Adriatic Croatia International Club, Inc., Port of Rijeka, Inc., Ports of Ploče, Zadar, Šibenik, Split, Dubrovnik
- ICT for maritime**
BrightDock, Adricom, Modest Tree
- Business associations**
Association of Croatian Employers, Croatian Chamber of Economy

ADRIATIC CROATIA

GOVERNMENT BODIES

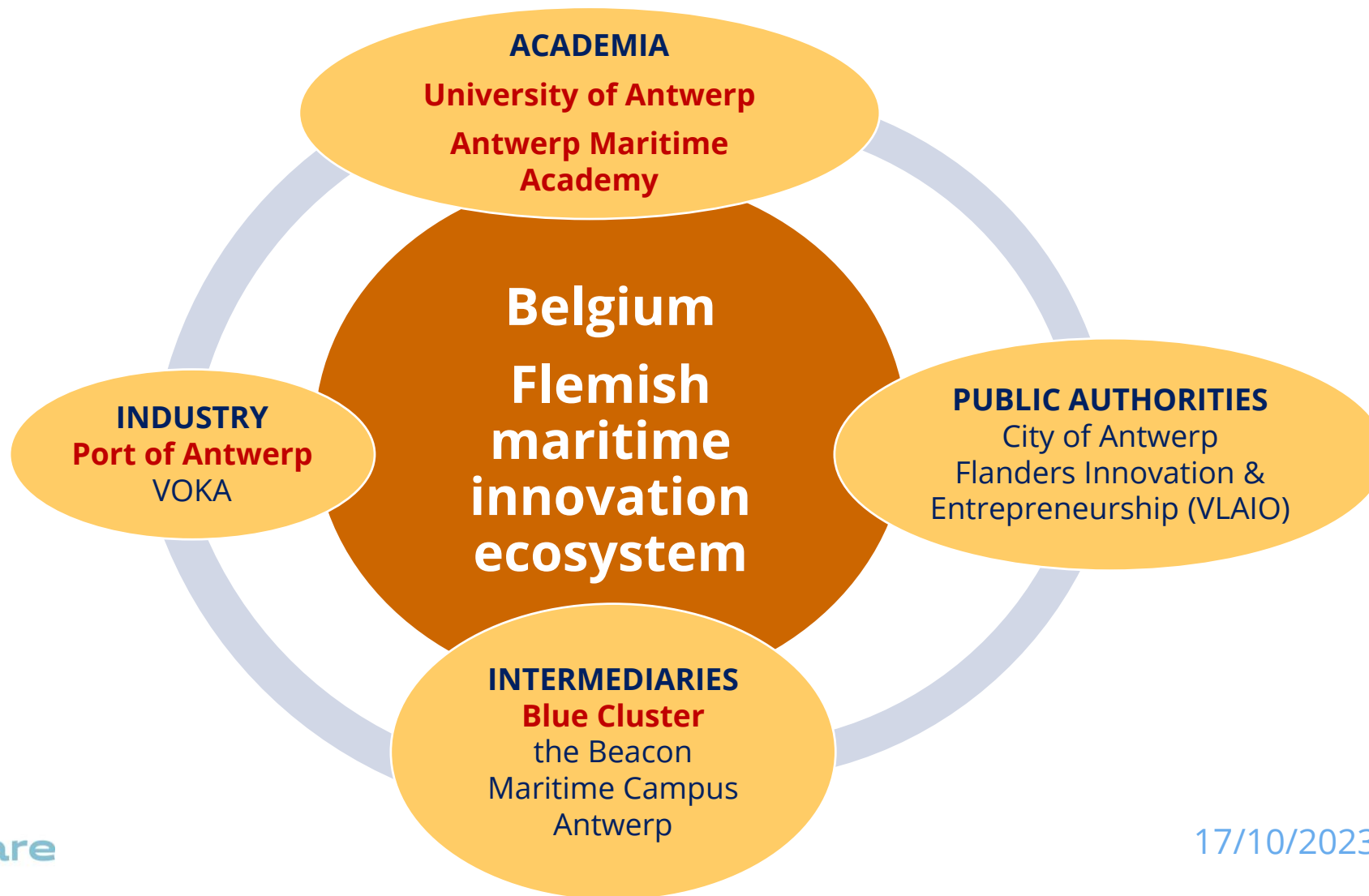
- Adriatic Croatia region**
Primorsko-Goranska County; **Prigoda - Regional Development Agency**
Regional Energy Agency Kvarner - REA
Cities of Rijeka, Pula, Zadar, Split, Dubrovnik
- Central government**
HAMAG - BICRO - Croatian Agency for SMEs, Innovations and Investments
Ministries of Economy and Sustainable Development; Maritime Affairs, Transport and Infrastructure; Regional Development and EU Funds; Science and Education

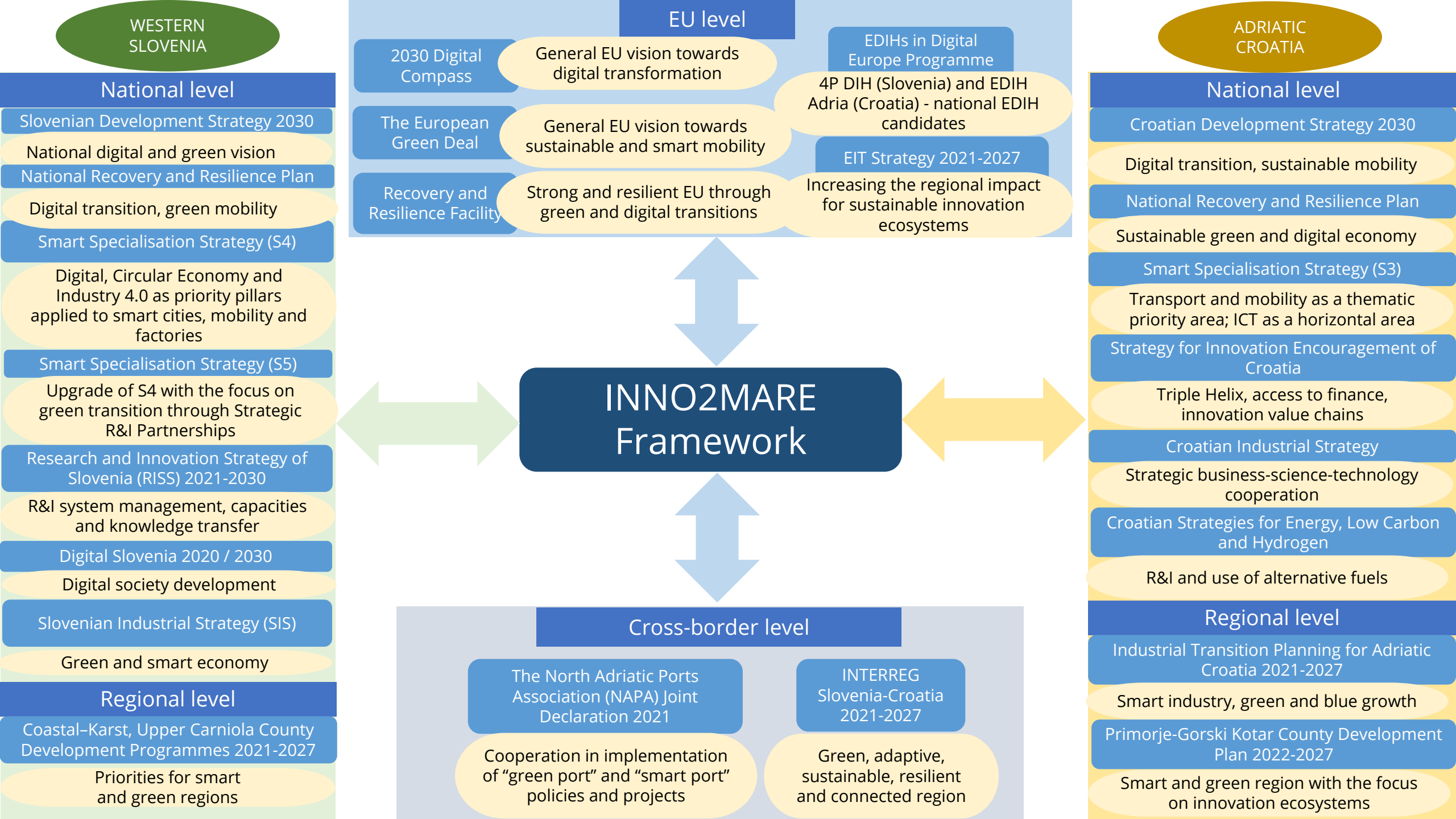
SOCIETAL ACTORS

- Centre of technical culture Rijeka (CTK)**
Urbanex, Split
- SMART - Association for the Development of Civil Society, Rijeka
- Croatian Hydrogen Association, Split

TRANSFER OF BEST PRACTICES FROM A TOP INNOVATION ECOSYSTEM

2 partners
+
2 associated





PARTNERS

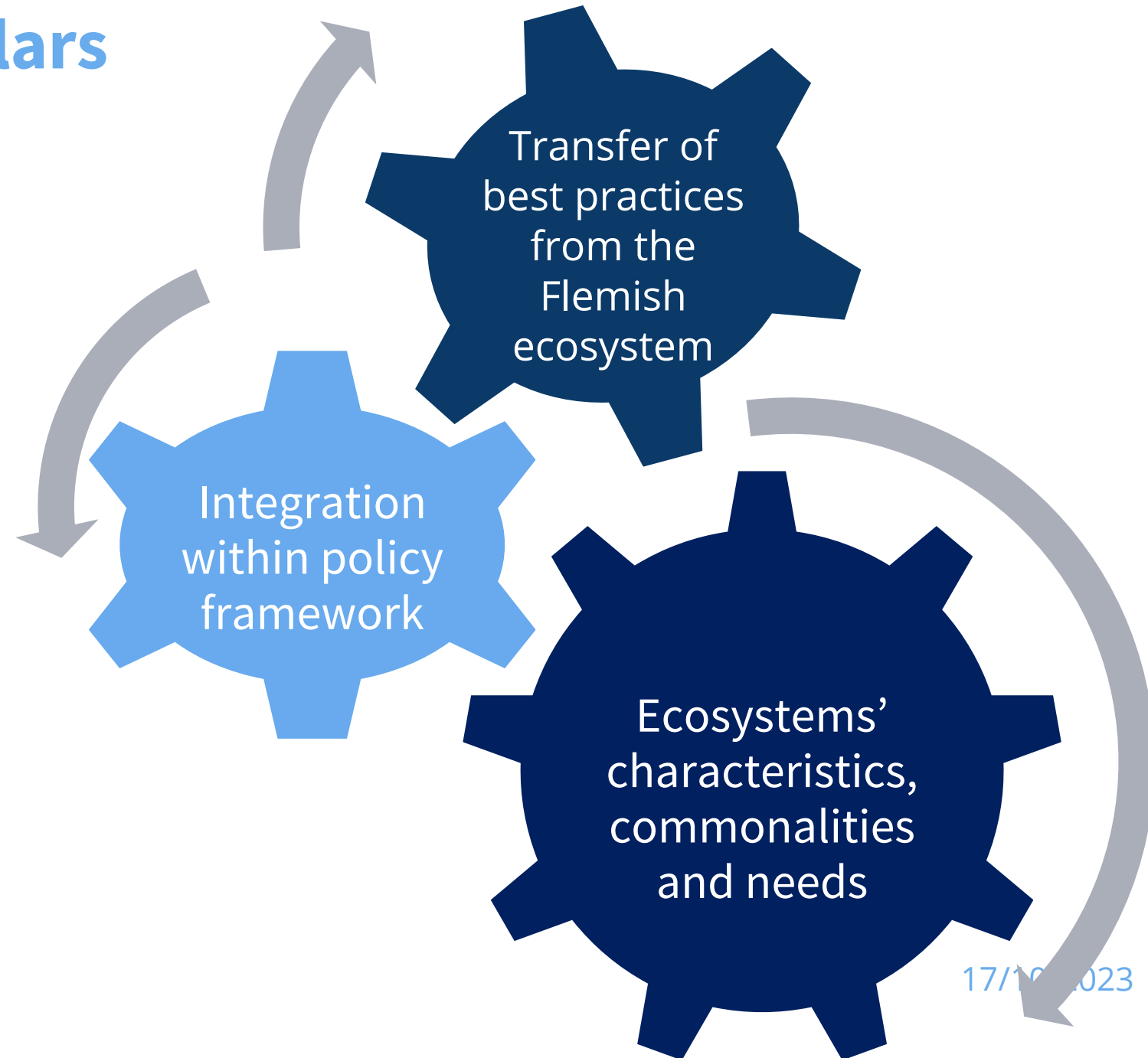


Coordinator

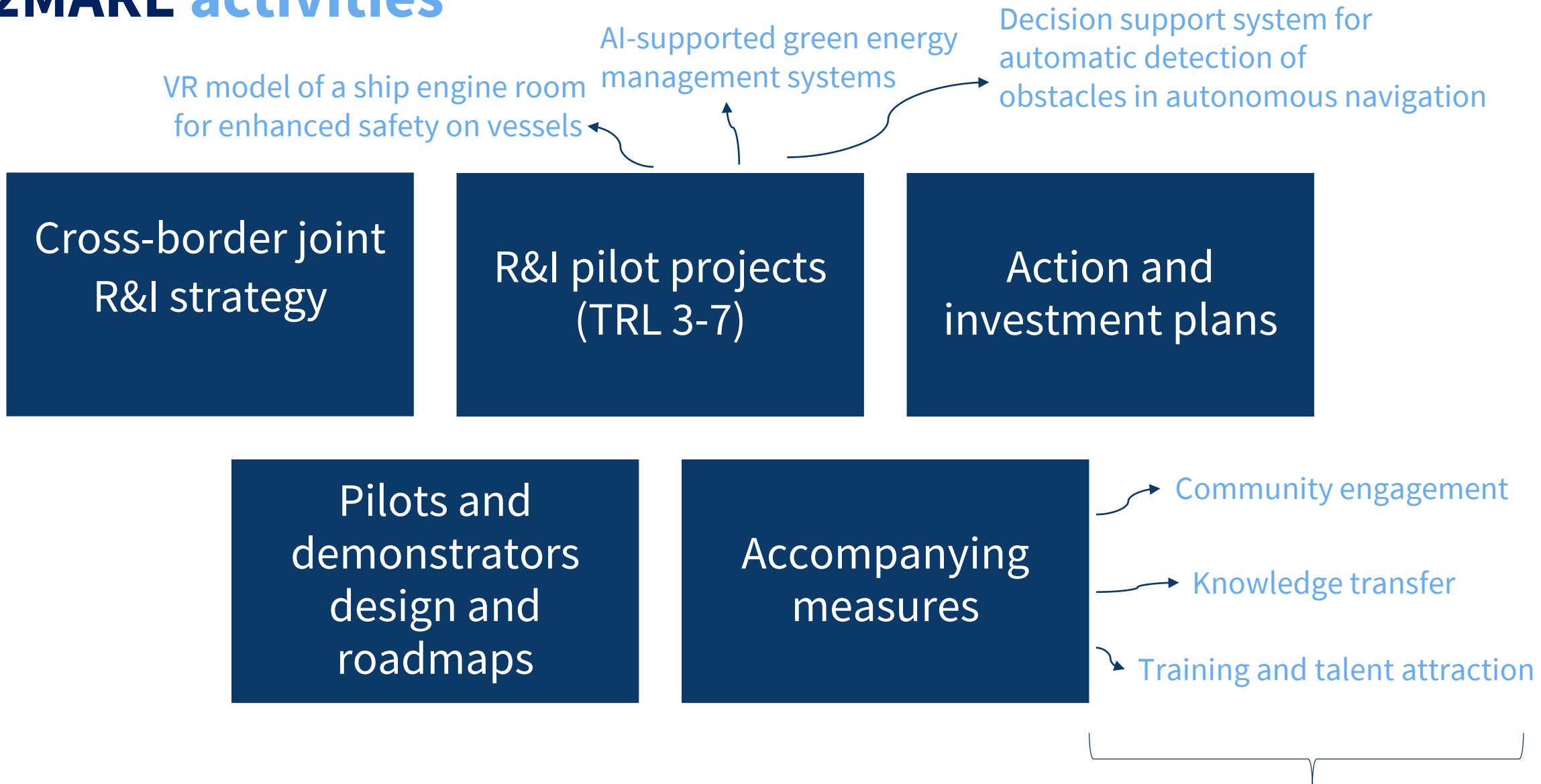
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Faculty of *Mechanical Engineering*



INNO2MARE pillars



INNO2MARE activities



**INNO2MARE
concept**

Joint action and investment plan

Cross-border joint R&I strategy

**Ecosystems' characteristics,
commonalities and needs**

**Integration within EU, national
and regional policy framework**

R&I pilot projects

Visibility raising & exploitation

**Transfer of best practices from the world-
class maritime innovation ecosystem**

Roadmaps for pilot projects

**Community engagement, knowledge
transfer, training and talent attraction**

ADDRESSING TWO MAIN PROBLEMS

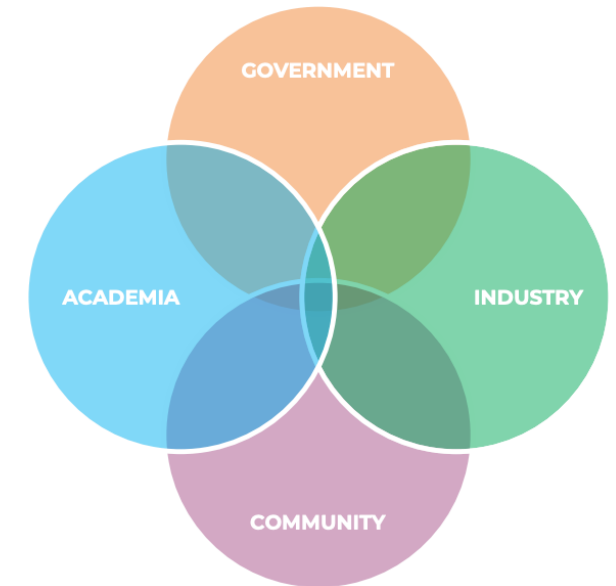
Core problem 1: Finding new and efficient ways **to stimulate the development and uptake of innovations** represents the key to the competitiveness and sustainability of maritime industries, and in so doing, their contribution to the green and digital transitions of Europe.

Core problem 2: There is an urgent need to mobilise resources towards a **strategic and coordinated approach** in the governance of the Western Slovenian and Adriatic Croatian maritime innovation ecosystems.

Strengthen the capacity for excellence of Western Slovenian and Adriatic Croatian innovation ecosystems through a set of jointly designed and implemented actions that will support the digital and green transitions of the maritime and connected industries.

MAIN CHALLENGES DURING THE PROPOSAL PREPARATION

- ✓ Do it by yourself or hire external project office (coordination of large number of partners, Quadruple helix structure).
- ✓ Finding all potential partners, capacity, expertise, capabilities of organizing events.
- ✓ Initial mapping of the ecosystem (partners, initiatives, strategies).
- ✓ Widening countries – two project teams working in parallel, coordination and meetings.
- ✓ From RIA and IA to CSA, Coordination, Support actions (defining all activities and events in accordance to the partners capacity and call requirements).
- ✓ Do we need supporting ecosystem, is this a benefit not only for the project consortium structure but also for the project execution?
- ✓ Defining WHO will be responsible for WHAT, not only the WP leading, taking into account the capacity of the partners.
- ✓ Defining the proper Pilot projects based on past collaboration and future needs.
- ✓ Defining the budget for the proposed activities (Purchase costs).



TIPS, OBSTACLES, ...

- ❖ Knowing all relevant EU, National and Local initiatives, strategies is the base.
- ❖ Knowing the technological and other gaps, current situation, collaboration with government and local community, industry.
- ❖ Start with preparation early enough (the idea has to mature, it takes time).
- ❖ Checking the potential partners in terms of administrative data that are required for the GA preparation (PIC, ...).
- ❖ Highlighting the relation to EU, national and local directives, initiatives and strategies.

APPRECIATED BY THE EVALUATORS

- ✓ Objectives corelated to the call, very clear, sound, measurable, verifiable and achievable (17 KPIs).
- ✓ Effective quadruple helix approach within the two innovative ecosystems based in the widening countries and efficient support from the non-widening country on each of the individual components of the helix.
- ✓ Joint action plan and investment plan for the future sustainability of the Excellence Hub is carefully prepared.
- ✓ Pilot projects carefully selected to achieve significant progress in the maritime industry. All relevant technological approaches integrated.
- ✓ Pre-planning for pilots and demonstrators is lead by an experienced company (scale-u, implementation, after-project activities).



Thank you



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