Dr. Fiona Devoy McAuliffe



University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

ROLE Senior Researcher Fellow – offshore renewable energy

ORGANISATION University College Cork (UCC)

PRESENTATION “About MARINERG-i”

SHORT INTRODUCTION

- *Managing application for MARINERG-i to join 2021 ESFRI roadmap*
- *Coordinating European projects including MARINERG-i_PP & VERTI-GO*
- *Research in logistics simulation and tech-economic analysis*

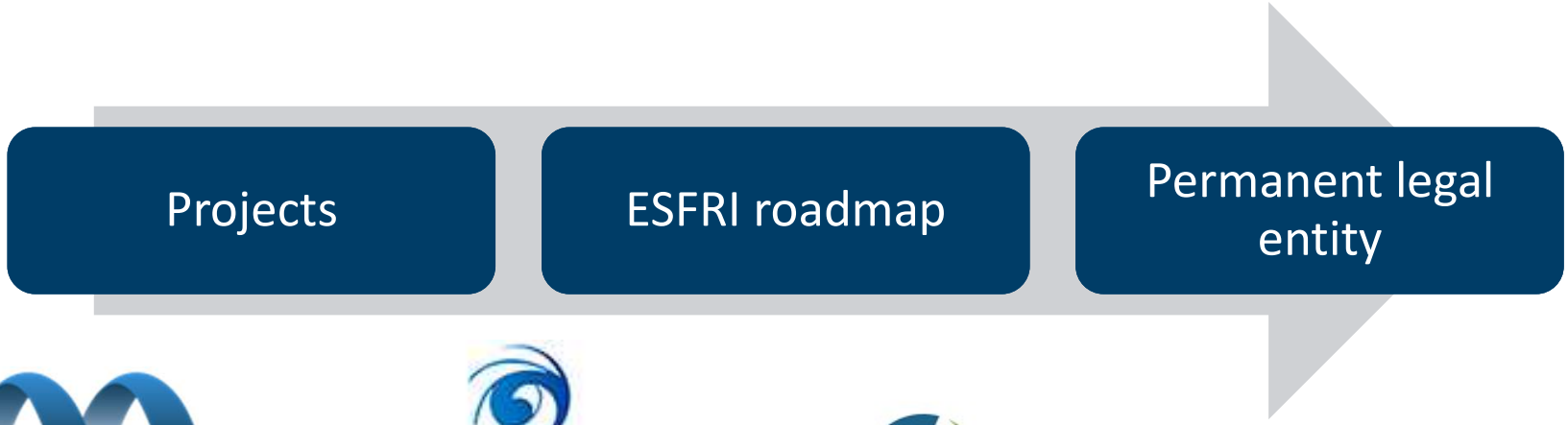
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GHENT UNIVERSITY · Coastal & Ocean Basin Ostend · BLUE CLUSTER



Stakeholder Workshop – Belgium
8th October 2026

The MARINERG-i_PP project has received funding from the European Union's Horizon Europe INFRADV programme under grant agreement No. 101128668



MARINET

BLUEGIFT

RISEnergy

MaRINET2

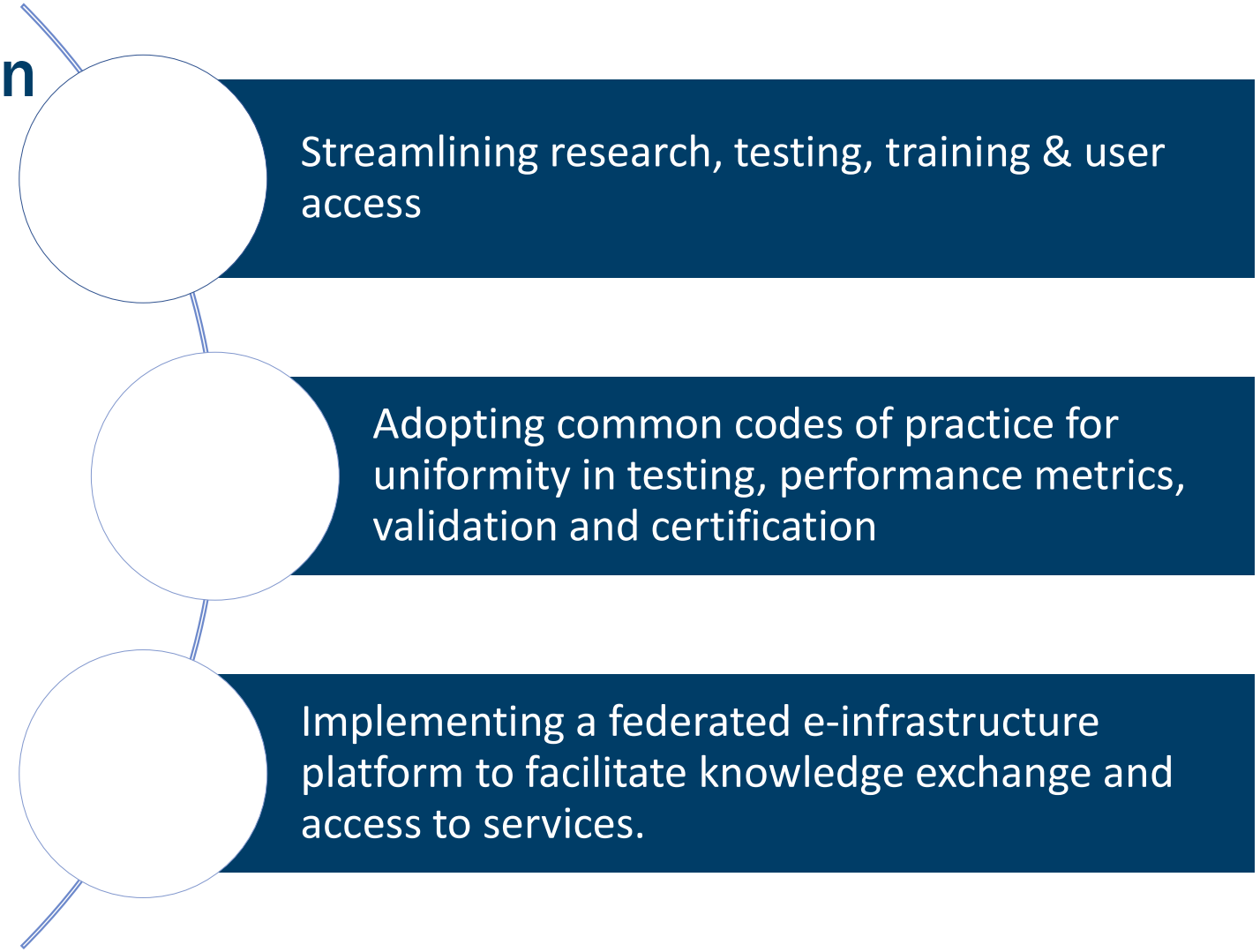
Interreg North-West Europe Ocean DEMO

marinerg-i

A Distributed Research Infrastructure (DRI) of testing infrastructures to accelerate the delivery of Offshore Renewable Energy (ORE).

Mission & Vision

Drive the development of innovative, investable ORE technologies by…



ESFRI Strategy Report on Research Infrastructures ROADMAP 2026

#ESFRIroadmap2026

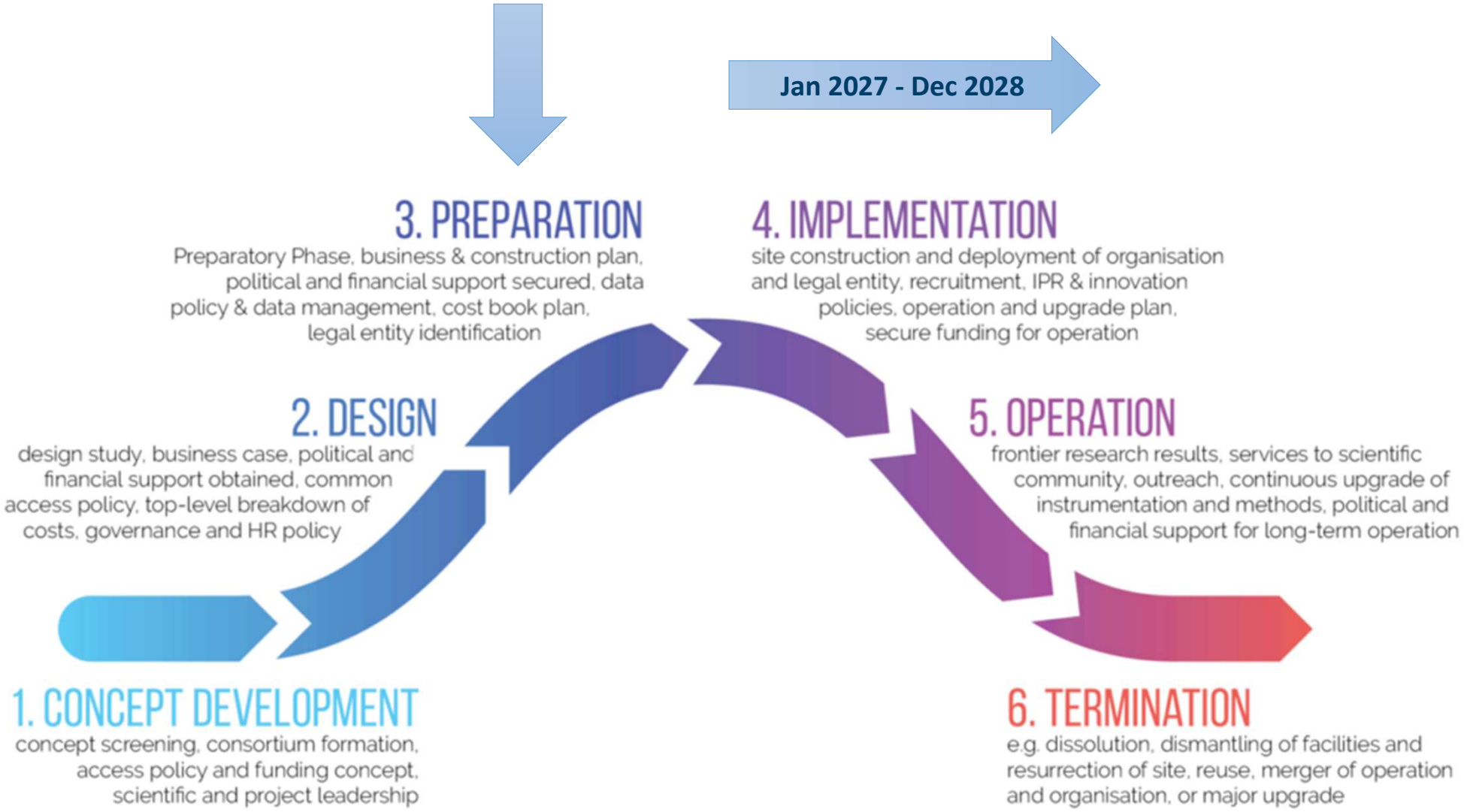
22 ESFRI PROJECTS and 41 ESFRI LANDMARKS

https://ri-portfolio.esfri.eu/

PAG 18

ESFRI PROJECTS

	NAME	FULL NAME	TYPE	LEGAL STATUS (Y)
DIGIT	EBRAINS	European Brain ReseArch INfrastructureS	distributed	AISBL, 2019
DIGIT	SLICES	Scientific Large-scale Infrastructure for Computing/ Communication Experimental Studies	distributed	
DIGIT	SoBigData++	European Integrated Infrastructure for Social Mining and Big Data Analytics	distributed	
ENERGY	IFMIF-DONES	International Fusion Materials Irradiation Facility - DEMO Oriented NEutron Source	single-sited	
ENERGY	MARINERG-i	Marine Renewable Energy Research Infrastructure	distributed	
ENVIRONMENT	DANUBIUS-RI	International Centre for Advanced Studies on River-Sea Systems	distributed	ERIC Step1
ENVIRONMENT	DiSSCo	Distributed System of Scientific Collections	distributed	
ENVIRONMENT	eLTER RI	Integrated European Long-Term Ecosystem, critical zone and socio-ecological system Research Infrastructure	distributed	
HEALTH & FOOD	EIRENE RI	Research Infrastructure for EnvIRonmental Exposure assessmeNt in Europe	distributed	
HEALTH & FOOD	EMPHASIS	European Infrastructure for Multi-scale Plant Phenomics and Simulation	distributed	
HEALTH & FOOD	EU-IBISBA	European Industrial Biotechnology Innovation and Synthetic Biology Accelerator	distributed	
HEALTH & FOOD	METROFOOD-RI	Infrastructure for promoting Metrology in Food and Nutrition	distributed	


Jan 2027 - Dec 2028
3. PREPARATION
Preparatory Phase, business & construction plan, political and financial support secured, data policy & data management, cost book plan, legal entity identification
4. IMPLEMENTATION
site construction and deployment of organisation and legal entity, recruitment, IPR & innovation policies, operation and upgrade plan, secure funding for operation
2. DESIGN
design study, business case, political and financial support obtained, common access policy, top-level breakdown of costs, governance and HR policy
5. OPERATION
frontier research results, services to scientific community, outreach, continuous upgrade of instrumentation and methods, political and financial support for long-term operation
1. CONCEPT DEVELOPMENT
concept screening, consortium formation, access policy and funding concept, scientific and project leadership
6. TERMINATION
e.g. dissolution, dismantling of facilities and resurrection of site, reuse, merger of operation and organisation, or major upgrade

MARINERG-i_PP partners





































Consiglio Nazionale
delle Ricerche



Laboratori d'Enginyeria Marítima
UPC - BARCELONATECH

marinerg-i

Membership

Ireland (Host) → UK → Belgium → Portugal

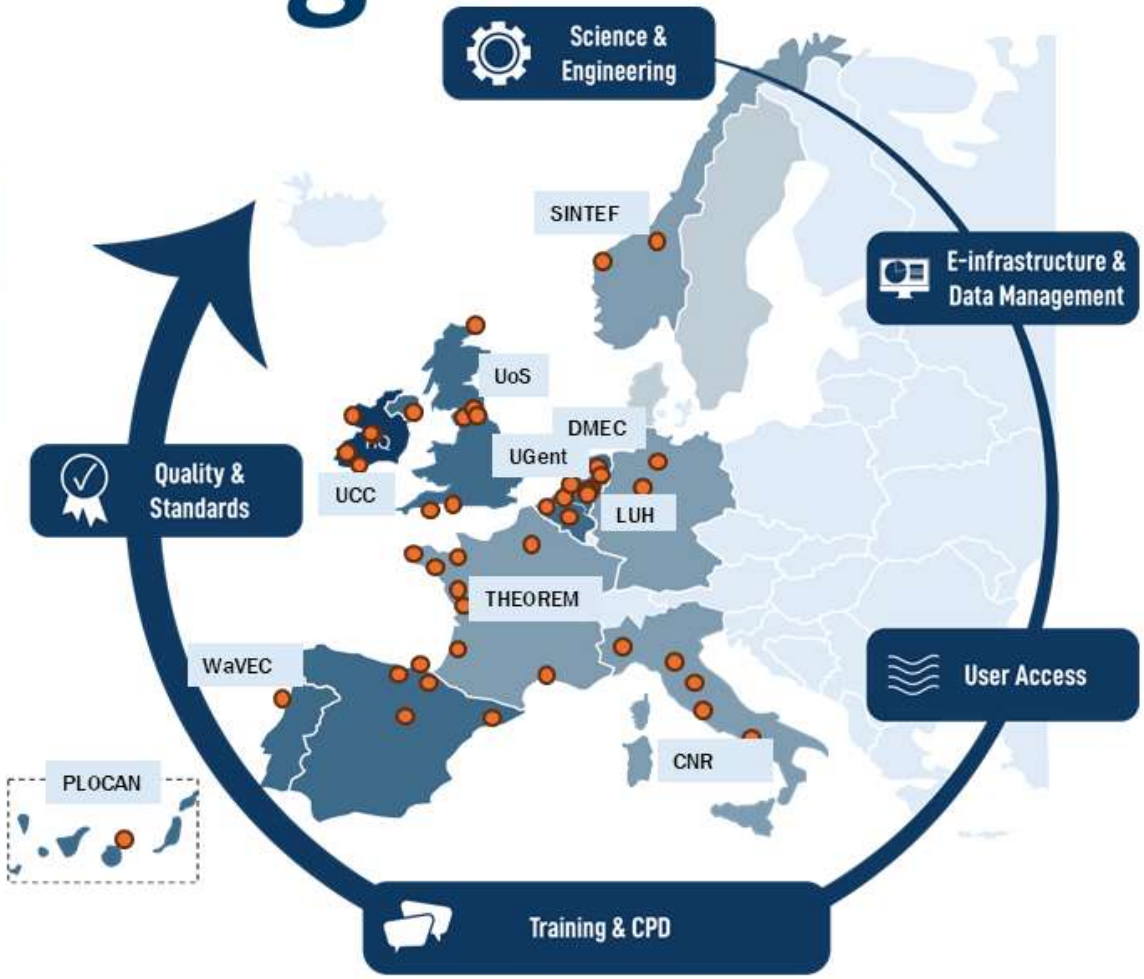
Spain → Netherlands → France → Italy

Norway → Germany → Sweden

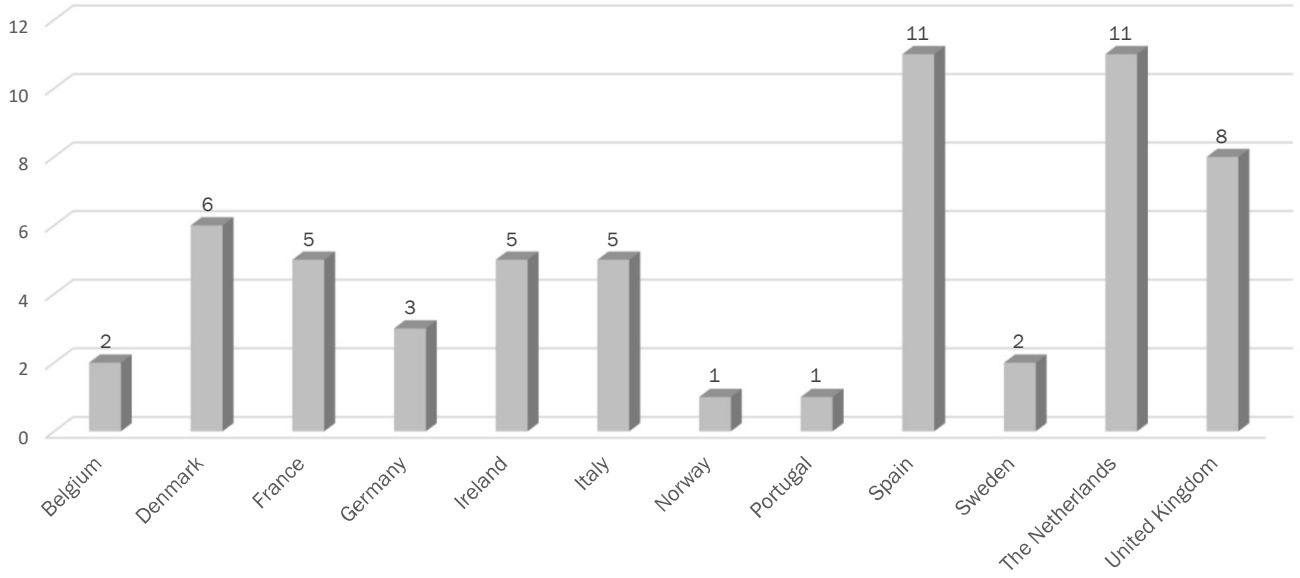
National Node

- Facilities

Service Group



Research Infrastructures



→ In total 60 facilities, 161 RIs ~30 still to engage

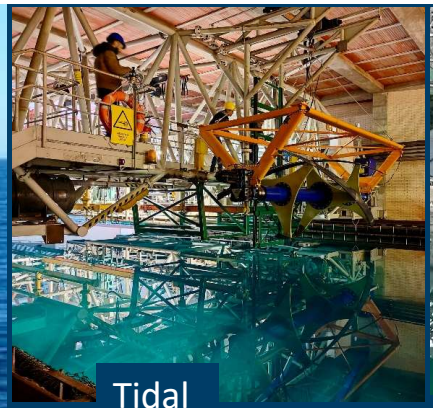
What will we cover?



Floating wind



Wave



Tidal



Floating solar



Mooring systems, anchors & components



Electrical: power quality, performance & grid integration



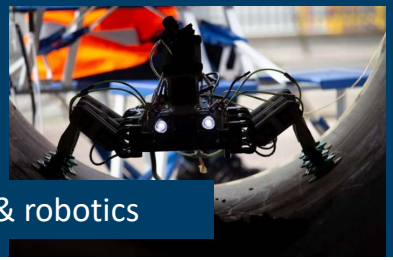
Drivetrains, Generators & Electrical components



Device Components



Logistics & robotics







Structures, Materials, Geotech & Manufacturing

Facility Scale	Focus Group					
	Wave	Tidal	Offshore wind	Solar (PV)	Electrical and Grid connection	Cross-Cutting
Small Lab	Wave flume	Current flume	Wind tunnel	Wave flume	Turbine emulator	Material testing bench
					Wave flume	
					PTO testing bench	
Large Lab	Wave basin	Current flume	Wind tunnel	Wave basin	Turbine emulator	Material testing bench, corrosion tanks
			Wave basin		Wave basin	
Medium Scale open sea test site	Sheltered bay Low-energetic test site	Sheltered strait or channel	Sheltered bay	Sheltered bay Low-energetic test site	PTO testing rig	Coastal corrosion testing facility
					Sheltered bay	Sheltered bay
Large Scale Open Sea test site	Offshore open area	Offshore open area Strait or channel	Offshore open area	Offshore open area	Offshore open area	Offshore open area

Services



ACCESS



FACILITY SELECTION



TECHNOLOGY DEVELOPMENT GUIDANCE



TRAINING (INTERNAL AND EXTERNAL)

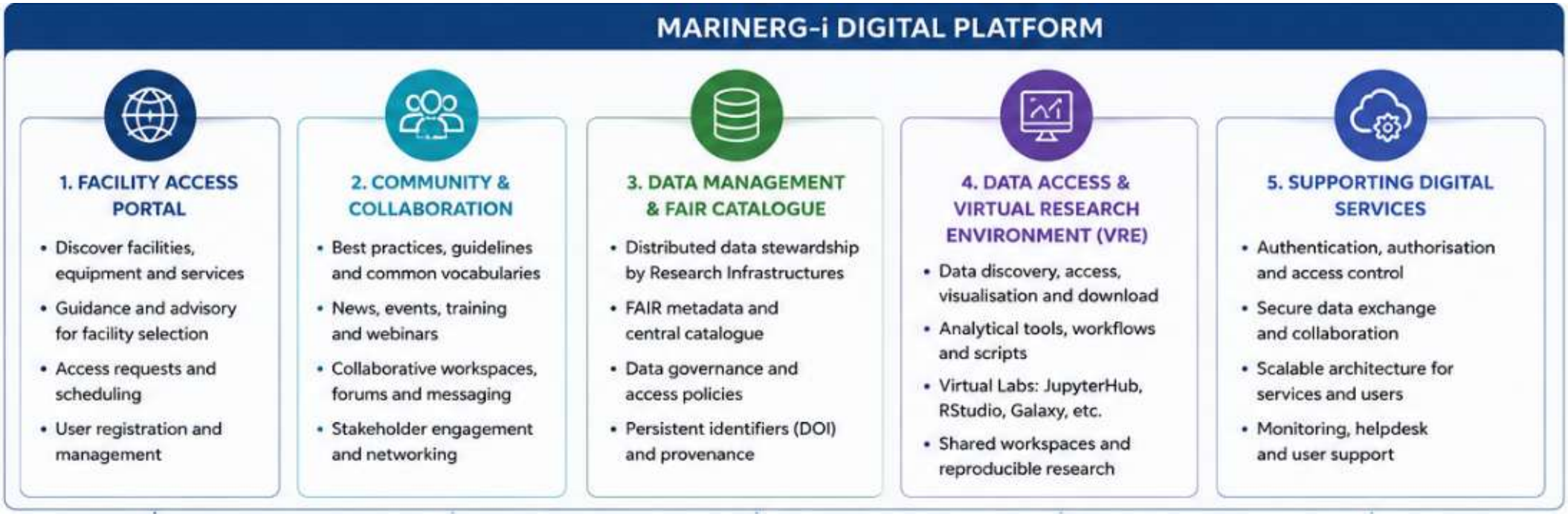


DATA PROCESSING, CURATION & ACCESS



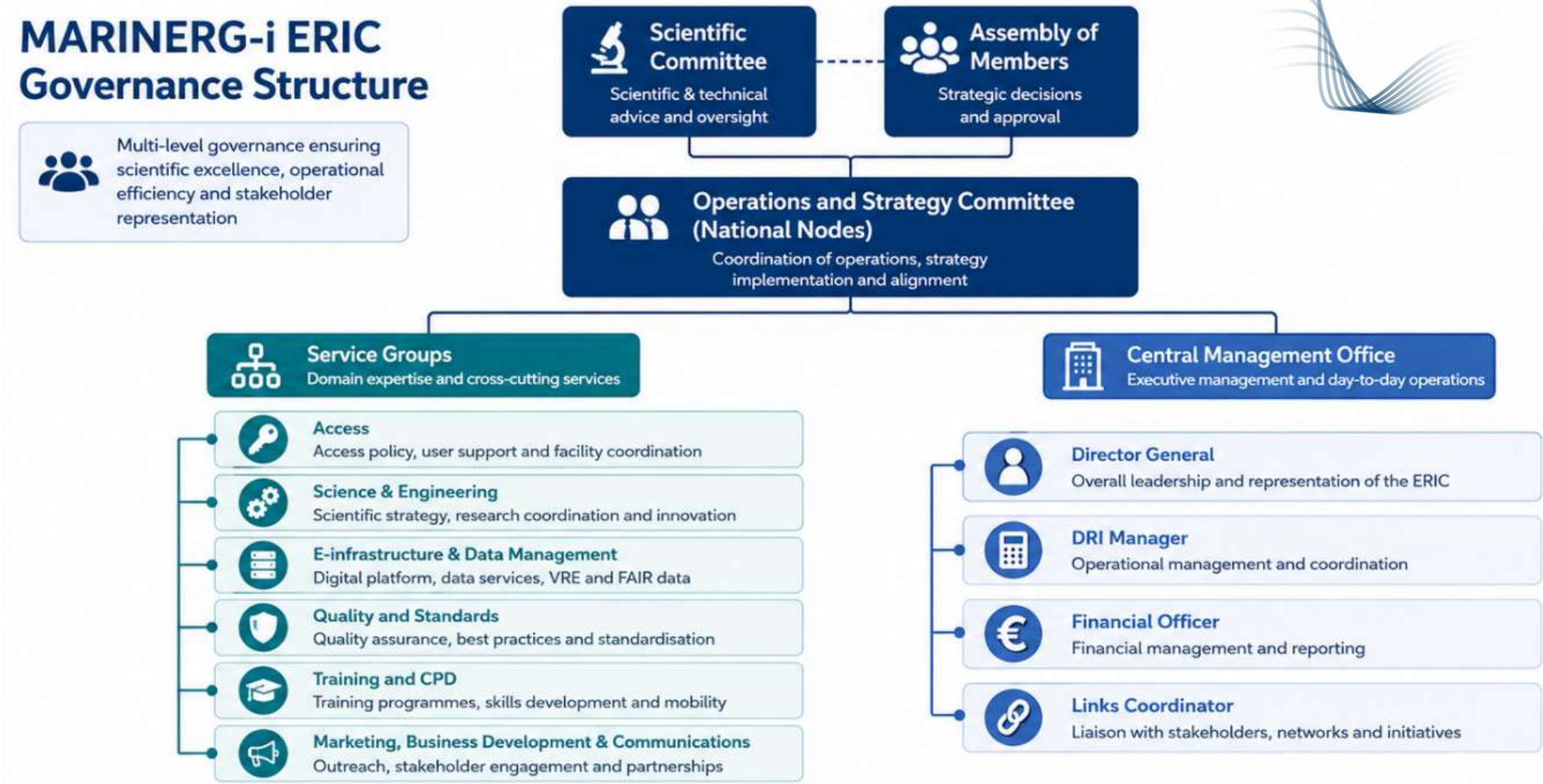
KNOWLEDGE BASED DISSEMINATION

E-infrastructure



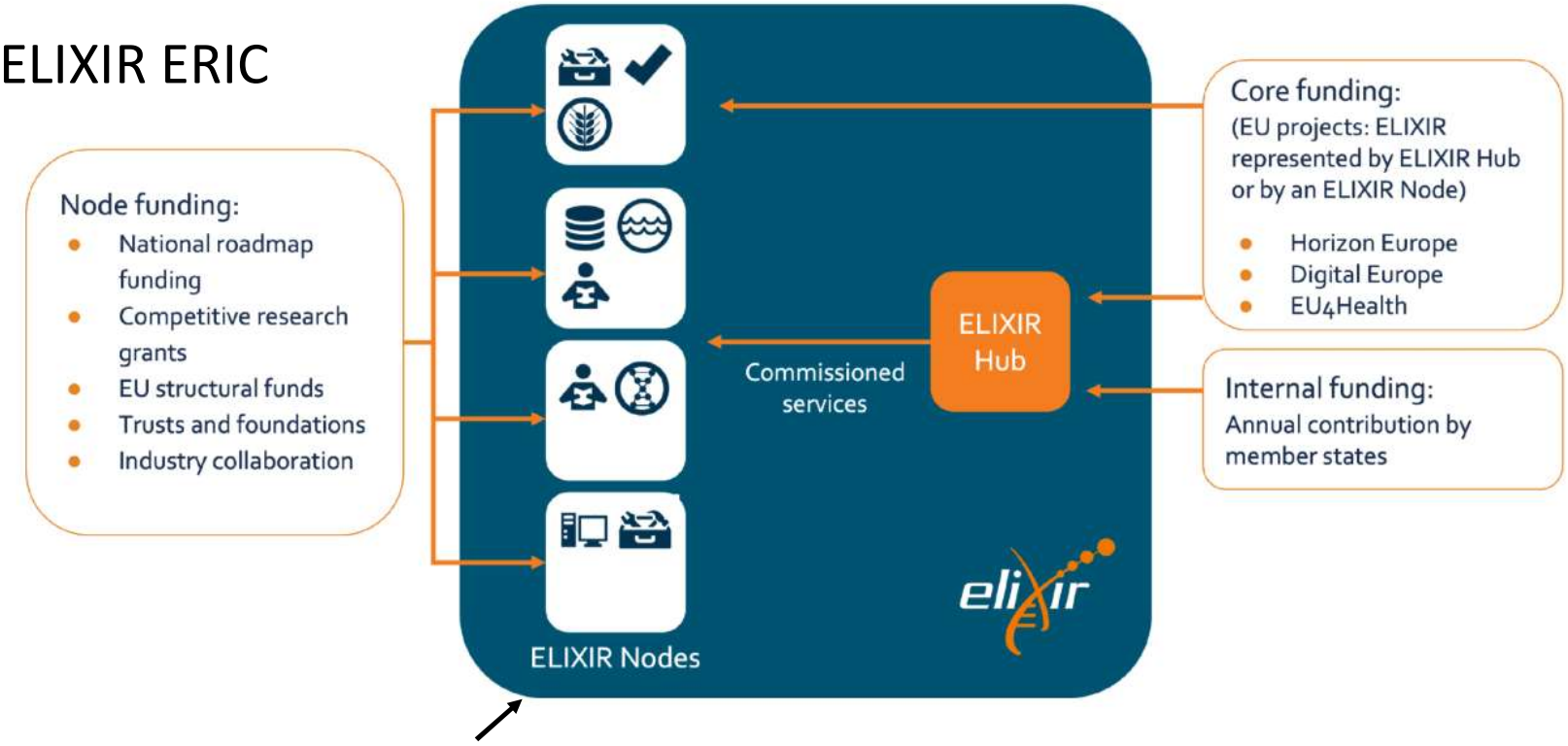
MARINERG-i ERIC Governance Structure

Multi-level governance ensuring scientific excellence, operational efficiency and stakeholder representation



Reviewing existing ERIC funding models

e.g. ELIXIR ERIC



In our case these nodes would be service groups

Funding Model

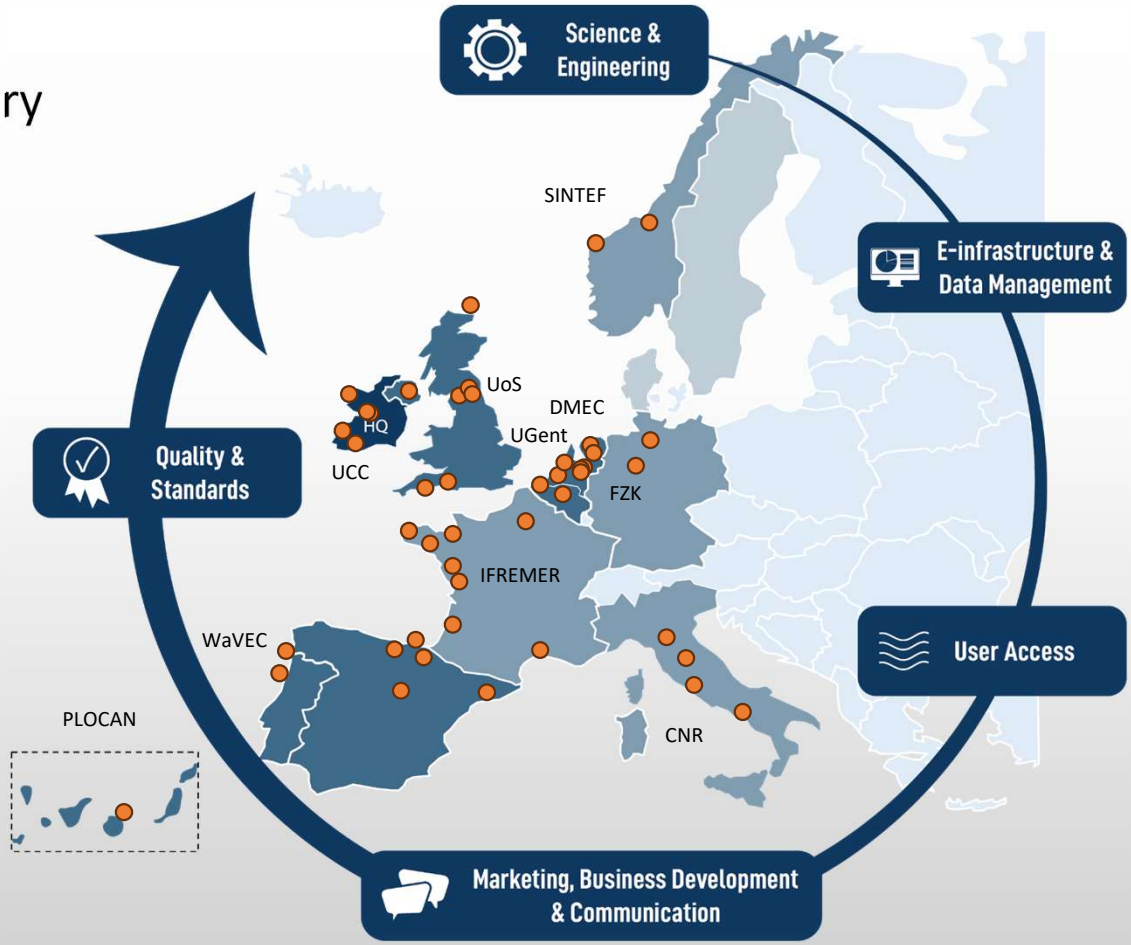
Central hub
Host fees, in-kind contributions & country membership fees

Core access activities
Research grants

Service Groups
Membership fees, research grants and in-kind contributions

National Nodes
As above plus national roadmap funding where available

DRI economic activities



Annual Income Required for Sustainability

Hosting Partner	1
Full Members	6
Observers	2
Hosting annual fee (€) / in-kind contributions	120,000
Membership annual fee (€)	40,000
Observer annual fee (€)	15,000
Membership income (€)	**390,000**

EU-funded Transnational Access (TNA) programmes and research projects e.g.

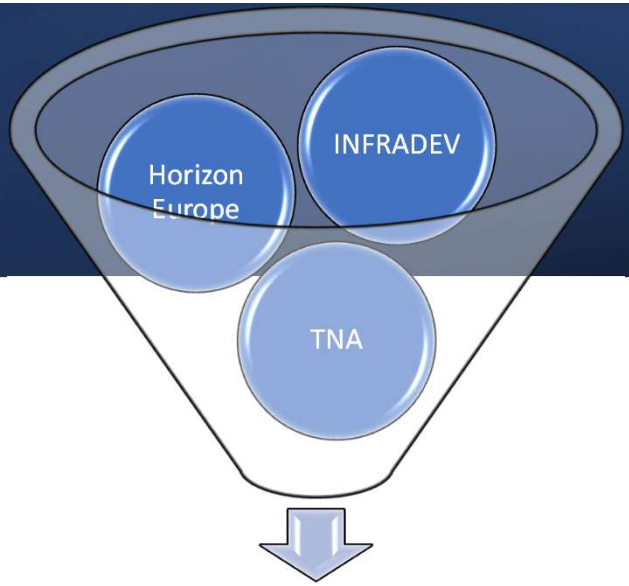
PRACE - €45.7m via PRACE-5IP; PRACE-6IP; HPC-GIG

ECCSEL ERIC – €24m via Geo-INQUIRE; STORIES

EU-SOLARIS - €19.5m via SOLARIZE; RISEnergy

ACTRIS - €15m via AMTO-ACCESS

EMSO ERIC - €14.5m via AQUARIUS



MARINERG-i ERIC



Timeline -> European Research Infrastructure Consortia (ERIC)



ERIC application October 2026

Government signatures



Established as a legal entity 2027

Adherence to statutes (signature/formal commitment)



Services: access programme 2028

Membership fees commence when entity established c. 2028