

# AQUARIUS

## Aqua Research Infrastructure Services

for the health and protection of our unique ocean, seas and freshwater systems



Funded by  
the European Union

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- Spread the Word!



AQUARIUS will **provide access to a comprehensive and diverse suite of integrated research infrastructures** to address challenges & explore opportunities for the sustainability of our marine & freshwater ecosystems.



- **4 years starting March 2024**
- **45 Partners (18 nations)**
- **€14.5 Million**

## About AQUARIUS



### Research infrastructure (RI)

- |   |  |   |       |
|---|--|---|-------|
| 1 | Research Vessels   | ◆ | 19u.  |
| 2 | Mobile Marine Observation Platforms<br>(Gliders, AUVs, USVs, ROVs, Ferrybox systems) | + | 12u.  |
| 3 | Fixed Marine Facilities<br>(Databuoys, seafloor observatories)                       | ○ | 12u.  |
| 4 | Experimental Research Facility   | ▲ | 8u.   |
| 5 | River and Basin Supersites   | ● | 8u.   |
| 6 | Aircrafts  |   | 3u.   |
| 7 | Drones   | ★ | 2u.   |
| 8 | Satellite Services   |   | 1u.   |
| 9 | Data Centers & Virtual Labs  | ▼ | +10u. |

Some RIs are situated beyond the borders of the displayed map (Greenland, Iceland, Canary Islands)

### Participating RIs





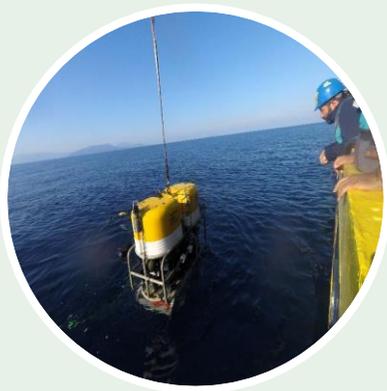
# 45 partners, 18 nations



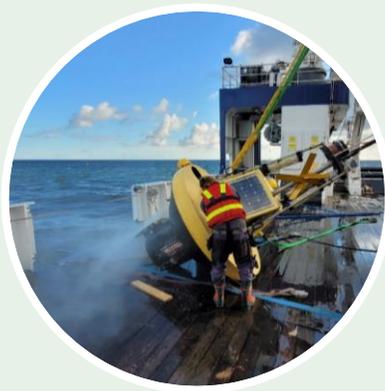


## AQUARIUS Aim

To provide **free & supported access to a comprehensive & diverse suite of 57 integrated research infrastructures** to address challenges & explore opportunities for the long-term sustainability of our marine & freshwater ecosystems.



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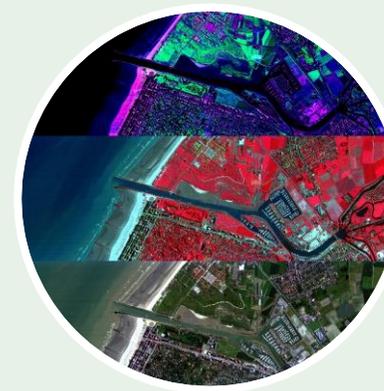
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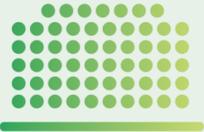


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## AQUARIUS objectives



- Provide single-point access to a **curated catalogue** of 57 diverse marine & freshwater research infrastructure services.



- Design, develop, & manage **2 Transnational Access Funding Calls**, providing free & supported access for selected projects to the research infrastructure.



- Deliver **scientific & technical training** to apply for & use the research infrastructures



- Ensure **advanced data management** to make data **FAIR** (Findable, Accessible, Interoperable, & Reproducible), according to open, global standards.



- Maximise **impact** ensuring that AQUARIUS & the projects it supports deliver to the goals of **the Mission 'Restore our Ocean & Waters by 2030.**



## Thematic & Geographical Scope

Thematic scope is informed by the Mission's objectives

Geographic scope corresponds to the Mission Lighthouse regions

EUROPEAN UNION

**EU MISSIONS**

**RESTORE OUR OCEAN & WATERS**

Concrete solutions for our greatest challenges

#EUmissions #HorizonEU #MissionOcean

To protect & restore marine & freshwater ecosystems & biodiversity

To make the sustainable blue economy carbon-neutral & circular

**Research infrastructure (RI)**

- 1 Research Vessels 19u.
- 5 River and Basin Supersites 8u.
- 6 Aircrafts 3u.
- 7 Drones 2u.
- 8 Satellite Services 1u.
- 9 Data Centers & Virtual Labs +10u.

**Participating RIs**

Some RIs are situated beyond the borders of the displayed map (Greenland, Iceland, Canary Islands)

Created by Seascope Belgium | CC BY-NC-ND 4.0 DEED

To prevent & eliminate pollution of our ocean, seas & waters

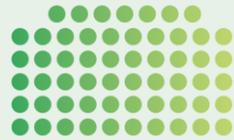
**Mission Lighthouses:** spaces of transformation to pilot, demonstrate, develop & deploy the Mission activities across the EU.



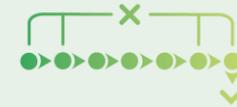
# Work packages & lead institutes



**WP1**  
Coordination & Project Management



**WP2**  
Transnational Access



**WP3**  
Research Infrastructure Call Design, Management, Evaluation & Access Platform



**WP4**  
Research Infrastructure Access Facilitation & Management & Governance



**WP5**  
Research Infrastructure Technical Training



**WP6**  
Data Management & Open Science Practices



**WP7**  
Impact: Dissemination, Exploitation & Communication



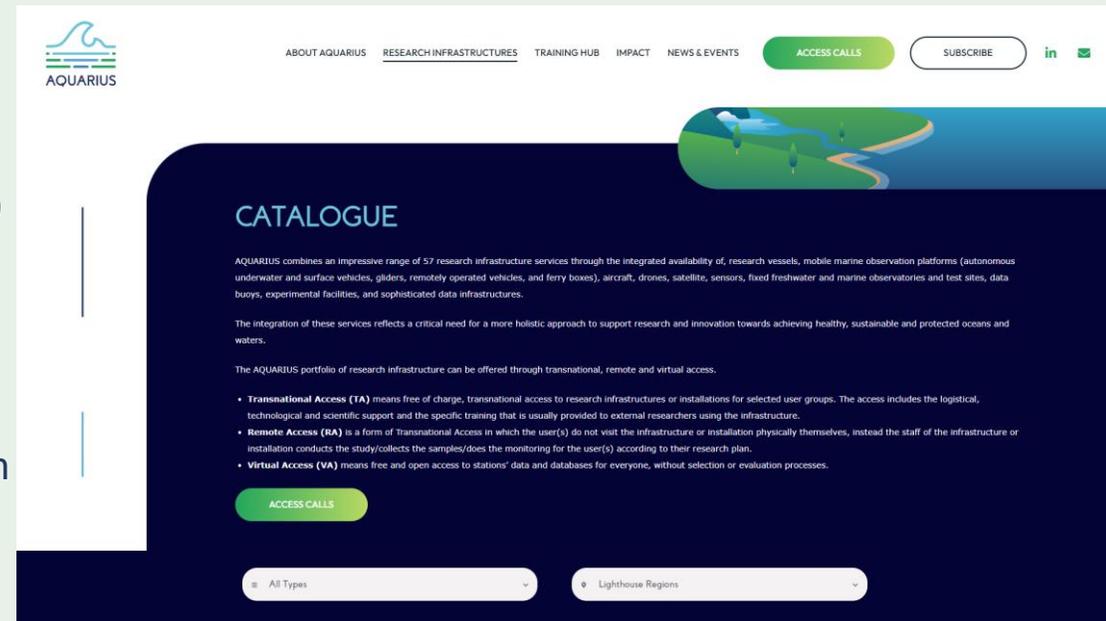


## Approach

AQUARIUS will provide single-point access to a curated catalogue of **57 research infrastructure** services

- Categorised by type & location (Mission Lighthouse)
- Modalities of access
- Technical specifications of infrastructure
- User requirements, training

By providing access to this range & diversity of research infrastructures **AQUARIUS** enables a more holistic approach to research & innovation that **contributes to healthy and sustainable marine and freshwater ecosystems.**



The screenshot shows the AQUARIUS website interface. At the top, there is a navigation menu with links for ABOUT AQUARIUS, RESEARCH INFRASTRUCTURES, TRAINING HUB, IMPACT, and NEWS & EVENTS. There are also buttons for ACCESS CALLS and SUBSCRIBE, along with social media icons for LinkedIn and Email. The main content area features a dark blue background with the title 'CATALOGUE' in white. Below the title, there is a paragraph of text describing the scope of the catalogue and the need for a holistic approach. A list of access types is provided, including Transnational Access (TA), Remote Access (RA), and Virtual Access (VA). At the bottom of the screenshot, there are two dropdown menus: one for 'All Types' and another for 'Lighthouse Regions'.

[aquarius-ri.eu/ri-catalogue](https://aquarius-ri.eu/ri-catalogue)



# Lighthouse Regions

## Atlantic/Arctic

## Baltic and North Sea

## Mediterranean Sea

## Black Sea

Type	Infrastructure	Provider
1) Research Vessels	Sarmiento De Gamboa	CSIC (ES)
1) Research Vessels	RV Sanna	GINR (GL)
1) Research Vessels	Thalassa	IFREMER (FR)
1) Research Vessels	Arni Friedrikson/ RV Bjarni	MFRI (IS)
1) Research Vessels	Celtic Explorer	MI (IE)
2) Mobile Marine Observation Platforms	HROV	IFREMER (FR)
2) Mobile Marine Observation Platforms	SmartBay Glider	MI (IE)
2) Mobile Marine Observation Platforms	UL_IROV	UL (IE)
2) Mobile Marine Observation Platforms	UL_MRE-ROV	UL (IE)
3) Fixed Marine Facilities	IMDBON	MI (IE)
3) Fixed Marine Facilities	SmartBay Observatory	MI (IE)
3) Fixed Marine Facilities	SmartBay Data Buoy	MI (IE)
3) Fixed Marine Facilities	Lehanagh Pool	MI (IE)
3) Fixed Marine Facilities	Plocan Test Site	PLOCAN (ES)
4) Experimental Research Facility	EMBRC-FR Research Facilities	EMBRC (FR)
4) Experimental Research Facility	EMBRC-PT Research Facilities	EMBRC (FR)
4) Experimental Research Facility	EMBRC-PT Research Facilities	EMBRC (FR)
4) Experimental Research Facility	RAS	MI (IE)
5) River & Basin Supersites	Newport Catchment	MI (IE)
7) Drones	UL Drone	UL (IE)

Type	Infrastructure	Provider
1) Research Vessels	Jakup Sverri	FMRI (DE)
1) Research Vessels	G.O. Sars	IMR (NO)
1) Research Vessels	Wim Wolff	NIOZ (NL)
1) Research Vessels	RV Belgica	RBINS (BE)
1) Research Vessels	RV Svea	SLU (SE)
1) Research Vessels	RV Aranda	SYKE (FI)
1) Research Vessels	Simon Stevin	VLIZ (BE)
2) Mobile Marine Observation Platforms	Baltic Gliders	FMI (FI)
2) Mobile Marine Observation Platforms	NorSOOP	NIVA (NO)
2) Mobile Marine Observation Platforms	Algaline	SYKE (FI)
2) Mobile Marine Observation Platforms	AUV Barabas	VLIZ (BE)
2) Mobile Marine Observation Platforms	Glider Yoko	VLIZ (BE)
2) Mobile Marine Observation Platforms	USV Adhemar	VLIZ (BE)
4) Experimental Research Facility	Utö	FMI (FI)
4) Experimental Research Facility	MESO&CAL	SYKE (FI)
5) River & Basin Supersites	Elbe Supersite	HEREON (DE)
6) Aircrafts	FLIS	CzechGlobe (CZ)
6) Aircrafts	CWIS-II	Vito (BE)
7) Drones	MAPEO	Vito (BE)
8) Satellite Services	Terrascope	Vito (BE)

Type	Infrastructure	Provider
1) Research Vessels	Gaia Blu	CNR (IT)
1) Research Vessels	RV Aegaeo	HCMR (GR)
1) Research Vessels	L'Europe	IFREMER (FR)
1) Research Vessels	RV Socib	SOCIB (ES)
1) Research Vessels	Tubitak Marmara	Tubitak Marmara (TR)
2) Mobile Marine Observation Platforms	Max Rover	HCMR (GR)
2) Mobile Marine Observation Platforms	Socib Gliders	SOCIB (ES)
3) Fixed Marine Facilities	CoCM	CNR (IT)
3) Fixed Marine Facilities	SICO	CNR (IT)
3) Fixed Marine Facilities	W1M3A	CNR (IT)
3) Fixed Marine Facilities	Poseidon Obs	HCMR (GR)
3) Fixed Marine Facilities	WIS	INGV (IT)
3) Fixed Marine Facilities	EZM3A	OGS (IT)
4) Experimental Research Facility	ISC-Lab	CNR (IT)
5) River & Basin Supersites	ICIEM Ebro Delta	UPC (ES)
6) Aircrafts	AIRS	OGS (IT)

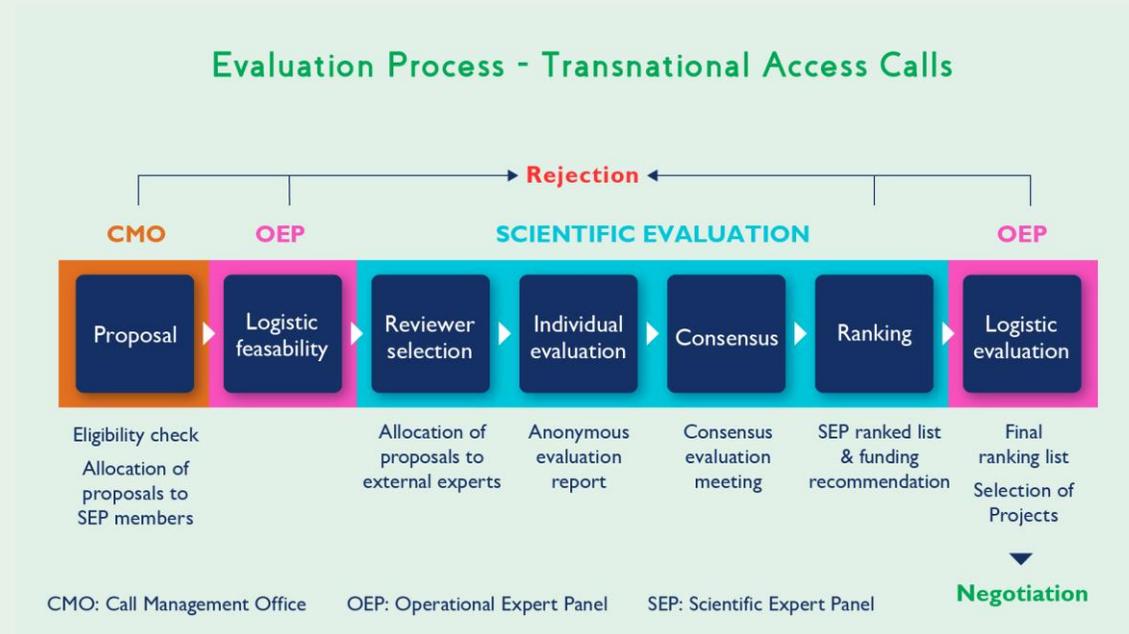
Type	Infrastructure	Provider
1) Research Vessels	Danubius-RI (RV Istros)	GeoEcomar (RO)
1) Research Vessels	Mare Nigrum	GeoEcoMar (RO)
5) River & Basin Supersites	Danubius-RI (Geochemistry)	GeoEcomar (RO)
5) River & Basin Supersites	Danubius-RI (Microplastics)	GeoEcomar (RO)
5) River & Basin Supersites	Danubius-RI (Mineralogy)	GeoEcomar (RO)
5) River & Basin Supersites	Danubius-RI (Water Chemistry)	GeoEcomar (RO)
5) River & Basin Supersites	EMSO-EUXINUS	GeoEcomar (RO)





# Approach

- AQUARIUS will launch two transnational access funding calls for research and innovation project proposals via a dedicated and user-friendly platform.
- Proposals must demonstrate how they will integrate multiple infrastructures and contribute to the defined Mission Ocean challenges.
- Calls are open to scientists from research and academia, from industry, and from citizen science groups, according to the defined eligibility criteria.



**Call 1 – Open: 11 November 2024 – 20 January 2025**  
**Call 2 – Open: 02 September 2025 – 28 October 2025**

[aquarius-ri.eu/access](https://aquarius-ri.eu/access)



## Technical Training

**Provide scientific & technical training for call applicants, selected projects & next-generation marine scientists.**

- Use of AQUARIUS calls access platform
- Technical & scientific support to use the research infrastructures
- Data management & stewardship
- Virtual access & analytics
- Floating University & Marine Internships for early career marine scientists

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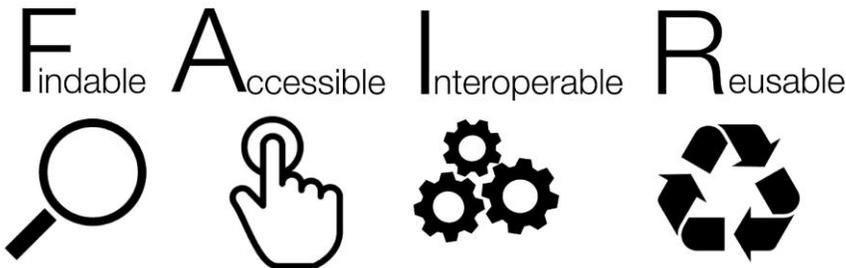
[aquarius-ri.eu/training](https://aquarius-ri.eu/training)



## Open Science, Open Data

### AQUARIUS will implement best practices in open science & open data making all data FAIR

- Mandatory open data strategy for selected projects
- Scientific teams will be invited to make use of the Blue-Cloud Virtual Research Environment
- All metadata & data will become part of the leading European & global data infrastructures

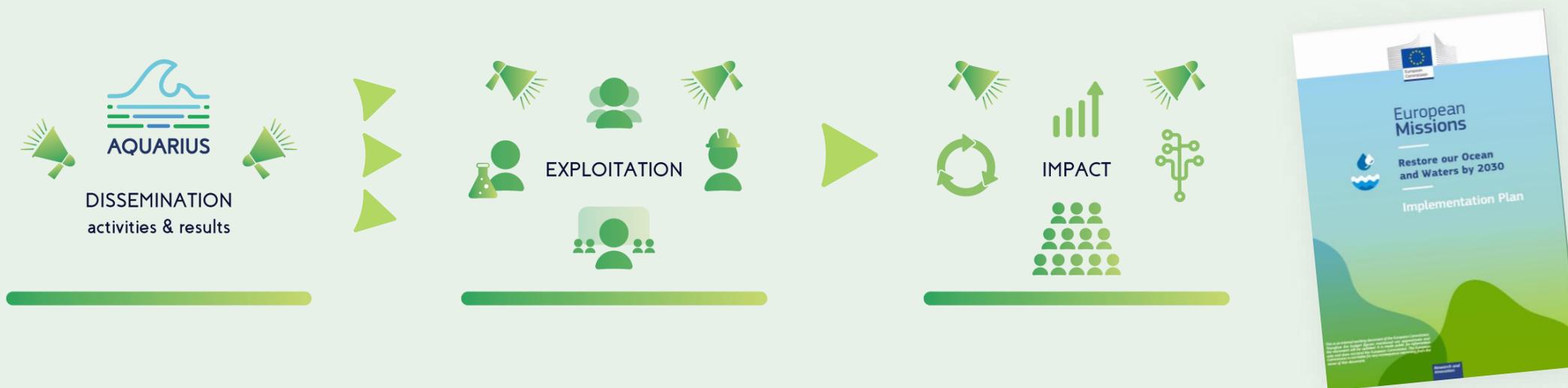


[aquarius-ri.eu/impact](http://aquarius-ri.eu/impact)

## Maximising Impact

### Providing transnational access to research infrastructure services

- Promote outreach and engagement of transnational calls
- Ensure wide communication & dissemination of AQUARIUS activities & results to target audiences
- Develop & activate pathways for uptake & exploitation of results
- Maximise the societal value and return on investment of AQUARIUS
- Create AQUARIUS legacy via strategic foresight and road-map to bridge the science-policy gap





## Stakeholder communities & key messages

“Enhanced & integrated research infrastructure capacity in EU, enabling holistic research & innovation delivering to EU & global policy goals.”



**Policy & decision-makers**



**EU Research Infrastructures**

“learn from practices in integrating and mobilizing diverse, large-scale research infrastructures services.”

“Awareness of & access to integrated research infrastructure services & innovations enabling more sustainable operations”



**Industrial communities and SMEs**



**Civil & wider society**

“Greater awareness of and access to Europe’s rich landscape of research infrastructure services and their societal value”



**Research scientists and academia**

“Awareness of & access to diverse EU RI services, technical training, data management skills and new scientific knowledge.”

Are you a scientist working in marine or freshwater research?

Are you an early career scientist and interested in training or internships?

**Apply to our transnational access funding calls!**

[aquarius-ri.eu](https://aquarius-ri.eu)

get in touch: [hello@aquarius.eu](mailto:hello@aquarius.eu)

stay informed & subscribe to our newsletter

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Integrating Research Infrastructures – Connecting Scientists – Enabling Transnational Access  
*For healthy and sustainable marine and freshwater ecosystems*



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**THANK YOU**