

National Oceanography Centre

# GROOM II - DESIGNING THE TECHNICAL FRAMEWORK OF A FUTURE MAS EUROPEAN RESEARCH INFRASTRUCTURE

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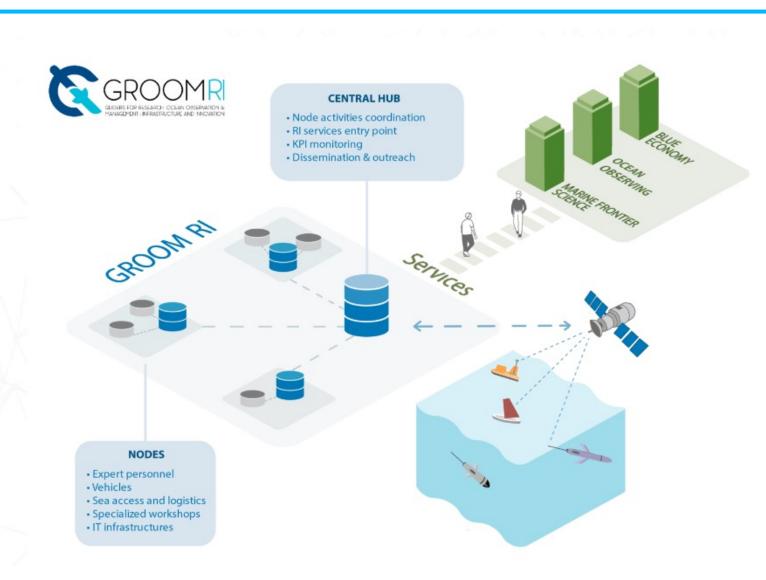
### WAIT?, WHAT IS GROOM II?, AND GROOM RI?











### THE ESFRI ROADMAP





### 3. PREPARATION

Preparatory Phase, business & construction plan, political and financial support secured, data policy & data management, cost book plan, legal entity identification

### H2020 GROOM II

2. DESIGN

design study, business case, political and financial support obtained, common access policy, top-level breakdown of costs, governance and HR policy

### EGO COST Action & FP7 GROOM

### 1. CONCEPT DEVELOPMENT

concept screening, consortium formation, access policy and funding concept, scientific and project leadership

2011-2014

### 4. IMPLEMENTATION

site construction and deployment of organisation and legal entity, recruitment, IPR & innovation policies, operation and upgrade plan, secure funding for operation

### 5. OPERATION

frontier research results, services to scientific community, outreach, continuous upgrade of instrumentation and methods, political and financial support for long-term operation

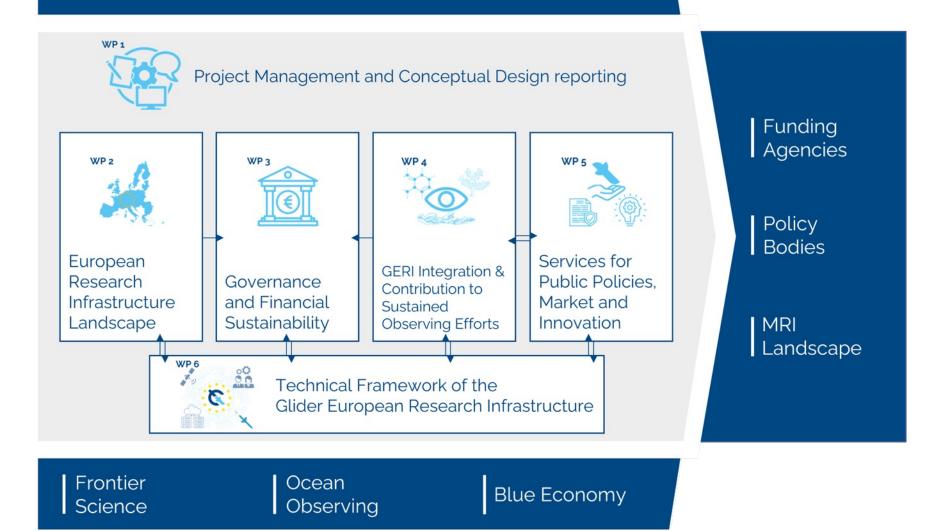
### 6. TERMINATION

e.g. dissolution, dismantling of facilities and resurrection of site, reuse, merger of operation and organisation, or major upgrade

### **PROJECT STRUCTURE**



#### **Advisory Board**





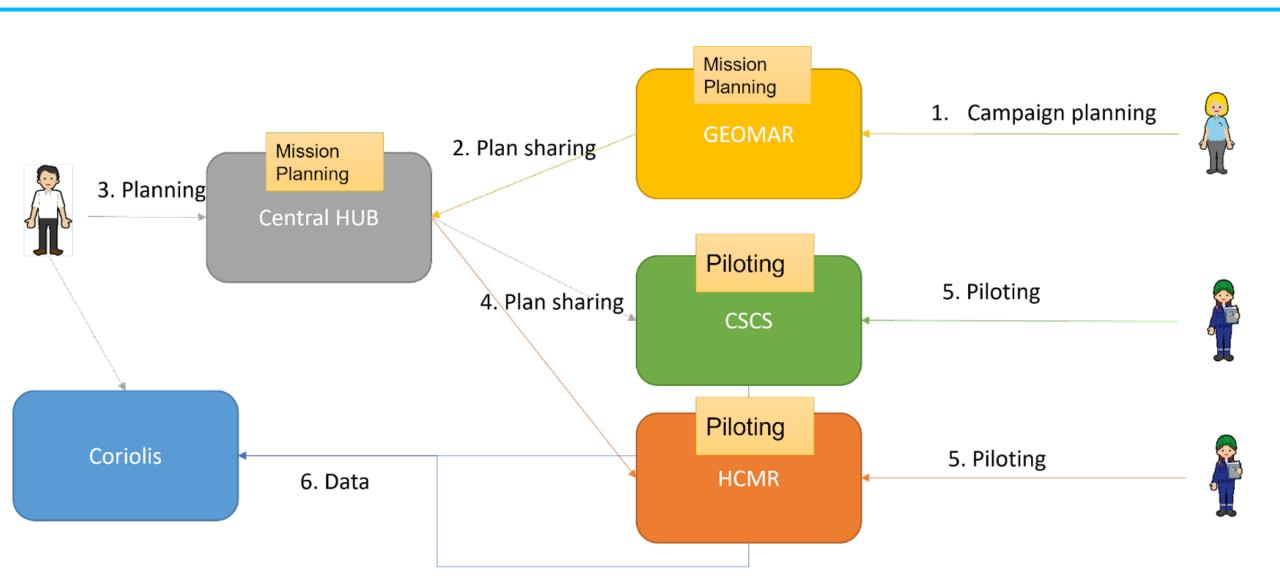


## CHALLENGES TO BUILD THE TECHNICAL FRAMEWORK

### **CHALLENGE 1 - A DISTRIBUTED RI**



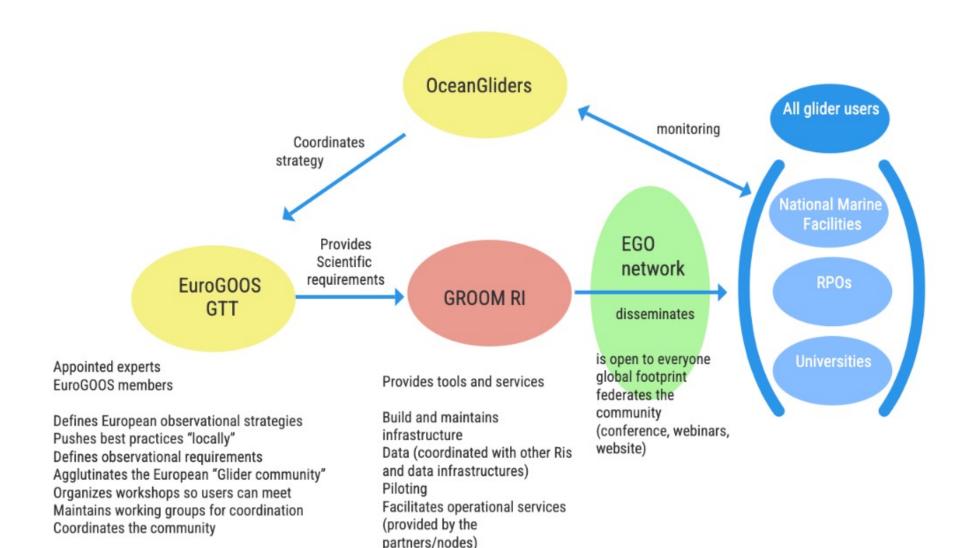




### CHALLENGE 2 – OFFER ADDED VALUE TO A DISPERSE COMMUNITY



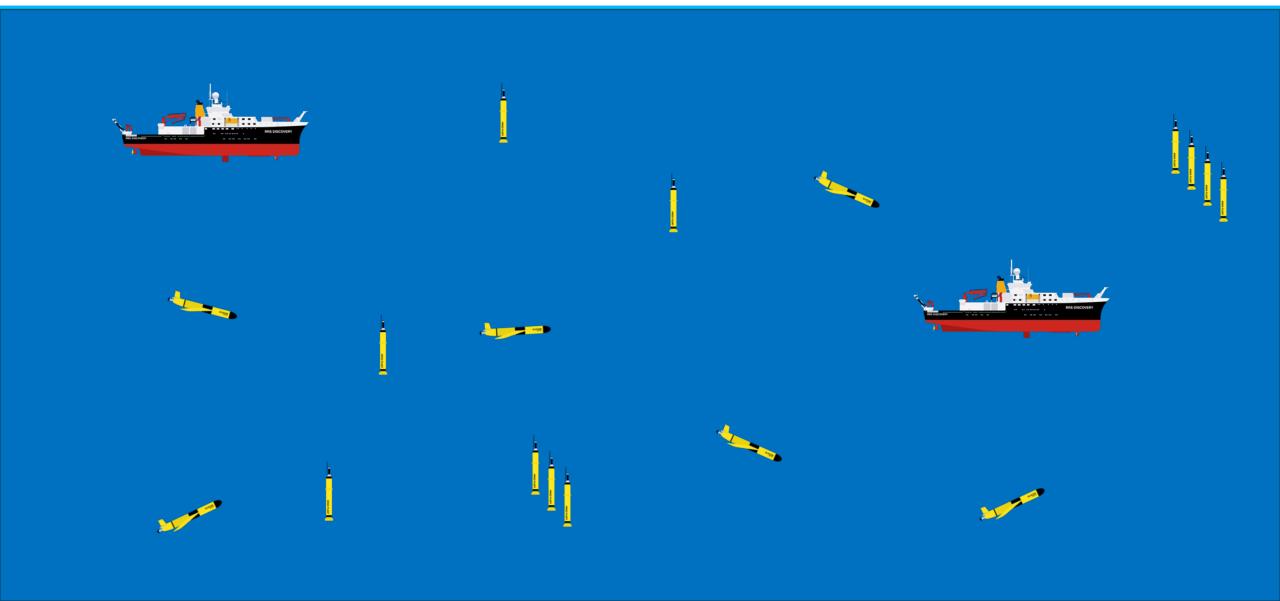




### **CHALLENGE 3 – FIT FOR PURPOSE FOR THE FUTURE**



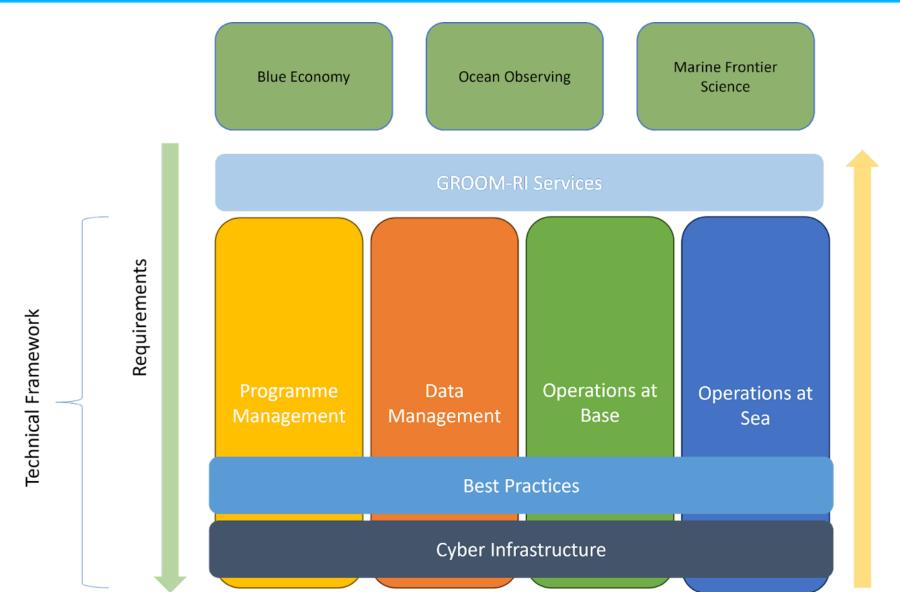




### THE GROOM RI TECHNICAL FRAMEWORK







**FAIR Data** 

### THE TECHNICAL FRAMEWORK AS A WORKFLOW





Programme management

Data management

Operations at base

Operations at sea

**FAIR Data** 

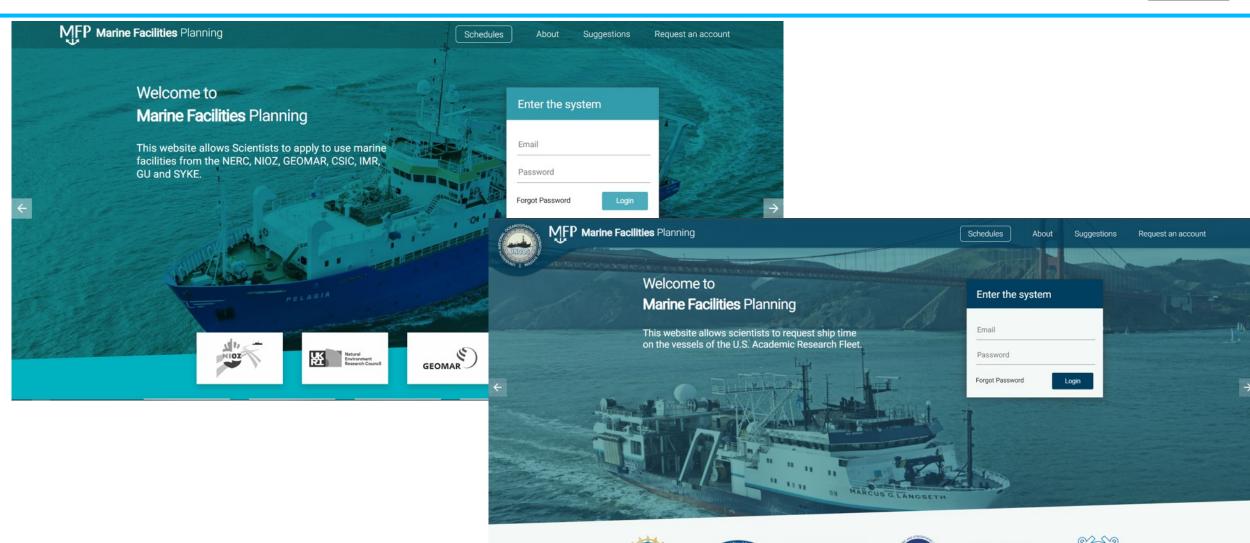
**Best Practices** 

Cyber Infrastructure

### PROGRAMME MANAGEMENT



















### **DATA MANAGEMENT ROADMAP**



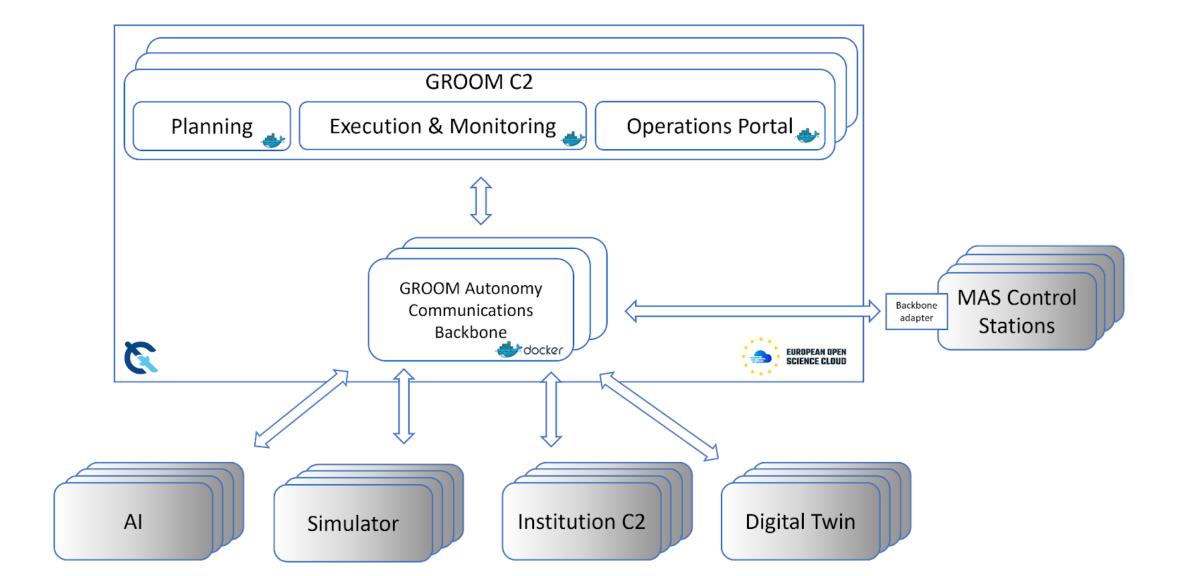


Research Infrastructu data management	re 1-2 years	5 years	10 years
Infrastructure	<ul> <li>Proposed structure for future developement (cloud-native services &amp; open-source community development)</li> <li>International agreement</li> <li>Define the data portal's scope</li> </ul>	<ul> <li>Operational exemplars of DAC &amp; GDAC managed whith open-source community &amp; deployed in EOSC</li> <li>Tools and services aligned with international policies</li> <li>Operational data portal</li> </ul>	Open source solutions for DAC & GDAC management (OceanGliders community)     Unambiguous and seamless data flows
Tools and services	<ul> <li>Scoping of FAIR data</li> <li>Meeting with OceanGliders 1.0 format</li> <li>Data visualisation requirements</li> <li>WIS 2.0 - BUFR implementation</li> <li>RTQC consensus on standard tests</li> <li>Integration data methodologies into OBS framework</li> </ul>	<ul> <li>FAIR data alignment with IOC data policy</li> <li>Data visualisation and user interface for priority</li> <li>WIS 2.0 - BUFR implemented</li> <li>RTQC - standard tools</li> <li>DMQC - 1-2 EOVs + cloud native tools</li> <li>Alignment and publication of data methodologies whit OBS framework</li> </ul>	<ul> <li>Data visualisation and user interface to meet the diverse range of users</li> <li>RTQC- Operational BGC RTQC</li> <li>DMQC - 90% of observed EOVs allowing for new ones to come through + cloud native tools</li> <li>Sustainable &amp; efficient route for new EOVs</li> </ul>
Network management	Agreement of the scope of MAS     Scope tools to harmonize metadata management & planning tools for EOOS observations	<ul> <li>Sensor and platform metadata integrated into the EOOS</li> <li>Complete vocabulary collections</li> <li>Agreement of the scope of MAS</li> <li>Tools to harmonize metada management &amp; planning tools for observations accross marine RI</li> </ul>	<ul> <li>Planning and network management integrated in the EOOS</li> <li>Globally recognised processes to entrain new sensors and platforms</li> </ul>
Network evolution	<ul> <li>New networking groups on emerging sensors and platforms</li> <li>Scope processes to entrain new sensors and capabilities</li> </ul>	Process to entrain new sensors and capabilities as part of wider OG activity	Globally recognised processes to entrain new sensors and platforms
Skills and training	Data skills audit	Training courses on the gaps in data skills	Training network and activities
The GROOM RI user community	Define the user community	Establish coordination groups and committees	Sustainable data user community

### PILOTING CYBER-INFRASTRUCTURE







### **OPERATIONS AT BASE AND SEA**











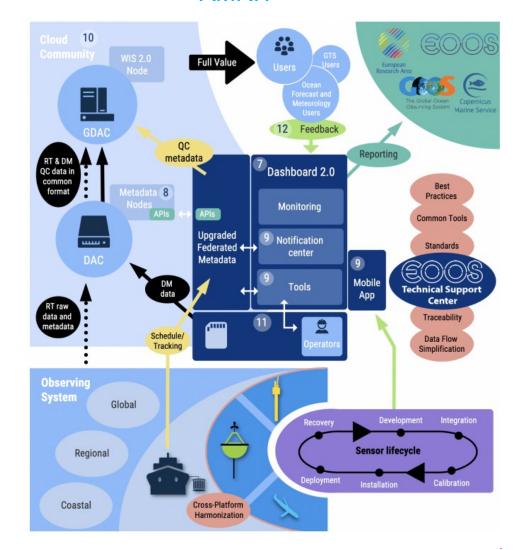
**Endorsement** 

### **LEGACY**

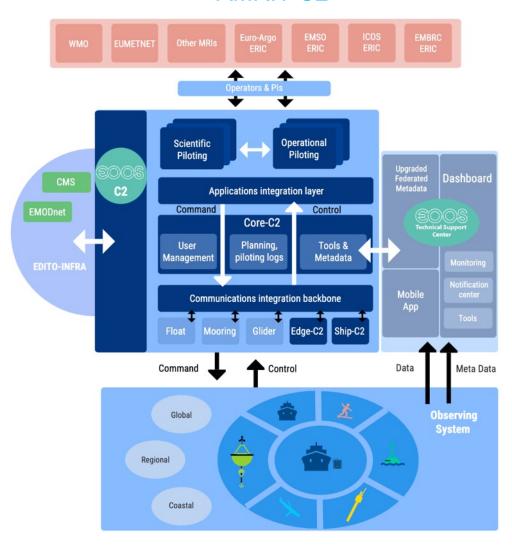




#### **AMRIT**



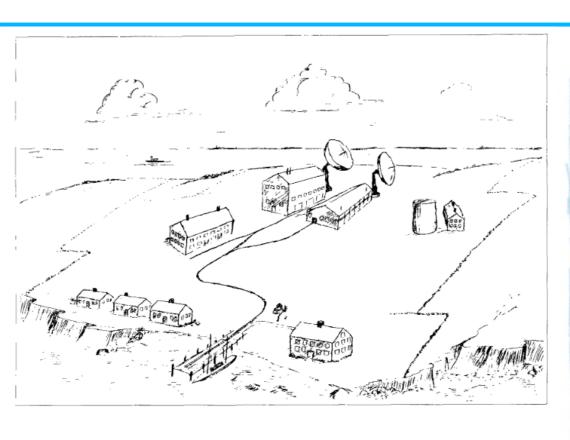
#### **AMRIT-C2**

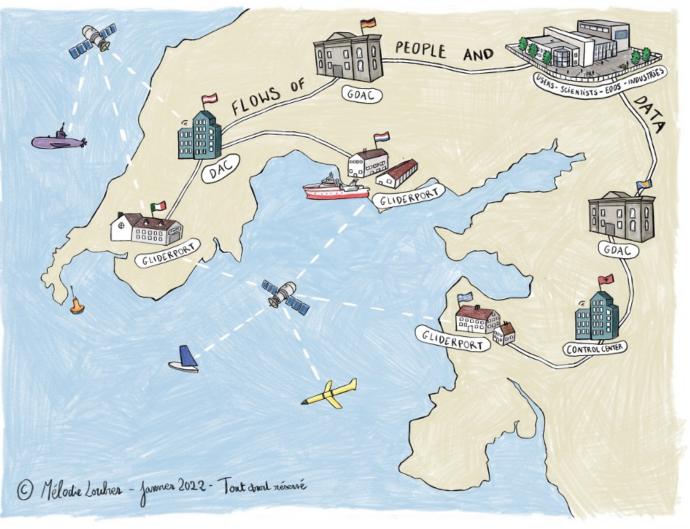


### THE FUTURE









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### THANK YOU

For more information, please get in touch with us:

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