

Resources KPI - RI Staff



RESOURCES

RI Staff	
Indicator	Work input of RI supporting staff
Rationale	Permanent, competent and multidisciplinary personnel is a necessity for development, operations and maintenance of RI
Metrics	<ul style="list-style-type: none">• Number of personnel working in the RI (supporting)• 100% permanent employees, other personnel• Competences /expertise (list)
Frequency/time	Annually
Detailed methodology *	n.a.
Workload **	Medium
Synergies	AKA FIRI reporting, annual reporting of partner institutes

* Optional

** Estimated burden of data collection and reporting

Resources KPI - Funding of RI



RESOURCES

RI Funding	
Indicator	Funding for the RI
Rationale	The success and sustainability of RI depends on the 1) budgetary funding of a partner institute, which reflects the institute's commitment, and 2) the ability to receive funding from external, competitive sources
Metrics	<ul style="list-style-type: none"> • Institutes own funding supporting RI, € • External funding for projects directly supporting RI buildup, data provision, and maintenance, € • External funding from marine infrastructure projects, directly supporting RI, € • Funding received from the Academy of Finland, € • Specific large investments, €
Frequency/time	2022-23
Detailed methodology *	AKA FIRI requirements
Workload **	High +
Synergies	AKA FIRI reporting, reporting of the partner institutes

* Optional

** Estimated burden of data collection and reporting

Resources KPI - Funding of collaborative projects



RESOURCES

RI Funding	
Indicator	Funding for collaborative projects
Rationale	Objective of FINMARI consortium is to facilitate synergies among the specific research niches of the partner institutions and to strengthen the multidisciplinary and synergetic RI development and collaborative marine research
Metrics	<ul style="list-style-type: none">• Number of collaborative projects (2 or more partners involved)• Funding for collaborative projects, €
Frequency/time	2022-23
Detailed methodology *	n.a.
Workload **	Medium
Synergies	AKA FIRI reporting, reporting of the partner institutes

* Optional

** Estimated burden of data collection and reporting

Activity KPI – Infra development



ACTIVITY

Infra Development (1) Biodiversity in pelagic communities and benthic habitats in shallow coastal waters	
Indicator	Implementation of infrastructure investment on schedule
Rationale	FINMARI advances the implementation phase in which the FIRI2021 project aims at bridging significant gaps in the present research infrastructure by acquisition of equipment and updating of instrument networks and systems on theme “Biodiversity in pelagic communities and benthic habitats in shallow coastal waters”
Metrics	Readiness level of by 31.12.2022 and 31.12.2023 (RL1-7)
Frequency/time	2022, 2023
Detailed methodology *	<p>Acquisition of (selected, most important per partner)</p> <ol style="list-style-type: none"> 1. Particle analyser for observing pico- and nano-sized organisms 2. Image analyser for observing larger zooplankton 3. Laboratory facilities and field equipment for molecular biology, for observation of changes in biodiversity of aquatic organisms, fish movements and habitat selection in coastal key habitats, and endangered, threatened and alien species (4. Ultra-high frequency multibeam echo-sounder for studies on high-resolution morphology of the sediment-water interface, and high-resolution surveys of GHG in sediments and the water column (gas ebullition etc., see the next section) 5. Diving scooters for habitat mapping and setting up experiments 6. Software for analysis of drone data 7. Acoustic and passive integrated transmitter (PIT), telemetric tagging and tracking systems and loggers for observing fish communities and movements 8. Microscopy system for age determination of Baltic herring populations
Workload **	High
Synergies	

* Optional

** Estimated burden of data collection and reporting

Activity KPI – Infra development



ACTIVITY

Infra Development (2) Land-littoral-offshore interactions and sea-atmosphere-benthic interactions

Indicator	Implementation of infrastructure investment on schedule
Rationale	FINMARI advances the implementation phase in which the FIRI2021 project aims at bridging significant gaps in the present research infrastructure by acquisition of equipment and updating of instrument networks and systems on theme “Land-littoral-offshore interactions and sea-atmosphere-benthic interactions”
Metrics	Readiness level of by 31.12.2022 and 31.12.2023 (RL1-7)
Frequency/time	2022, 2023
Detailed methodology *	<p>Acquisition of (selected, most important per partner)</p> <ol style="list-style-type: none"> 1. WEGAS system and floating measurement platform including instruments for continuous and 2. online observations of GHG in the water and at the water-sediment interface in shallow coastal waters 3. Light benthic lander, hyperspectral backscatter sensor for in situ measurements of suspended particle composition 4. Towed transient electromagnetic profiler for locating and investigating sites of submarine groundwater discharges 5. Automated profiling buoy for water column observations: updating the UTU buoy for 6. reliability, quality control, data harmonization and maintenance 7. Glider with sensors (CTD, fluorometer -cdom, backscatter, chlorophyll- and oxygen, LISST200x) to improve regular observations of T/S/O+BGC and joint use of autonomous platforms 8. Instruments and components for building new generation ferry-box and automated samplers for research vessels
Workload **	High
Synergies	

* Optional

** Estimated burden of data collection and reporting

Activity KPI – Infra development



ACTIVITY

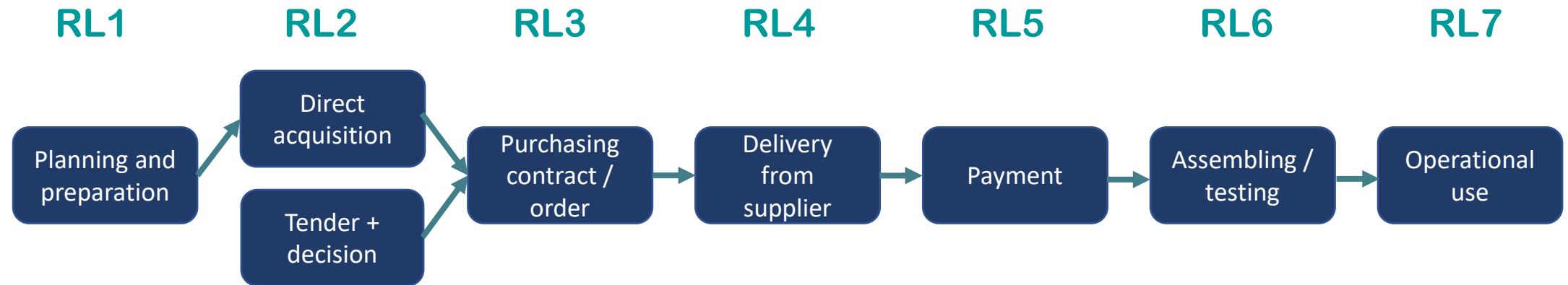
Infra Development (3) Safeguarding ecosystem services, blue growth and green transition in a changing climate

Indicator	Implementation of infrastructure investment on schedule
Rationale	FINMARI advances the implementation phase in which the FIRI2021 project aims at bridging significant gaps in the present research infrastructure by acquisition of equipment and updating of instrument networks and systems on theme “Safeguarding ecosystem services, blue growth and green transition in a changing climate”
Metrics	Readiness level of by 31.12.2022 and 31.12.2023 (RL1-7)
Frequency/time	2022, 2023
Detailed methodology *	<p>Acquisition and building of (selected, most important per partner)</p> <ol style="list-style-type: none"> 1. Finalizing modern mesocosm and experimental laboratory facilities to include automated systems to manipulate and sensors to monitor experimental conditions 2. Equipment for pilot-scale biomass harvesting, photobioreactor and upgrading of LED illumination for building Blue Growth capacity in SYKE-MRC indoor mesocosm facility 3. Analysator for dissolved inorganic carbon (DIC) and a Fast Repetition Rate Fluorometer (FRRF) for measurement of the carbonate system and phytoplankton productivity
Workload **	High
Synergies	

* Optional

** Estimated burden of data collection and reporting

Procurement process and the Readiness Level (RL) as KPI metrics of FINMARI



Activity KPI – Data Management



ACTIVITY

Metadata	
Indicator	<i>To be worked out by the Data working group</i>
Rationale	
Metrics	
Frequency/time	
Detailed methodology	
Workload **	
Synergies	

* Optional

** Estimated burden of data collection and reporting

Activity KPI – Data management



ACTIVITY

QA /QA methods jointly developed and shared

Indicator	QA / QC methods jointly developed and shared
Rationale	
Metrics	
Frequency/time	
Detailed methodology*	
Workload **	
Synergies	

To be worked out by the Data working group

* Optional

** Estimated burden of data collection and reporting

Activity KPI – Open access



OUTPUTS

Use of RI	
Indicator	Use of RI
Rationale	Research Infrastructures (RI) are facilities that provide resources and services for research communities to conduct research and foster innovation. They are open for external users.
Metrics	<ol style="list-style-type: none">1. Number of working days of facility users: internal (own institute)2. Number of working days of facility users: external3. Data downloads (tbd by the Data working group)
Frequency/time	2022-23
Detailed methodology *	Distributed by user base categories (AKA FIRI criteria)
Workload **	Medium
Synergies	AKA FIRI reporting, reporting of the partner institutes

* Optional

** Estimated burden of data collection and reporting

Activity KPI – Open access



OUTPUTS

FINMARI Open access protocol	
Indicator	Development of open access protocols to facilities, services (and data) in schedule
Rationale	All FINMARI partners provide physical or remote access to their platforms. The access procedures will be improved and the services more efficiently advertised to the existing and new users. The FINMARI Open Access will include practicalities and formalities for the open access to work in the facilities.
Metrics	Readiness of the protocol (projected work) in % by 31.12.2022 and 31.12.2023
Frequency/time	2022-23
Detailed methodology *	The work will be projected, and milestones and deliverables are followed.
Workload **	Medium
Synergies	AQUACOSM RI, JERICO RI, ...

* Optional

** Estimated burden of data collection and reporting

Output KPI – Scientific excellence



OUTPUTS

Scientific publications	
Indicator	Number and quality of scientific publications
Rationale	Indicator of the quality and volume of the science performed. International peer-reviewed journals have strict review process and wide impact in the scientific community.
Metrics	Number of ALL publications in peer-reviewed scientific journals Quality: publications categorized using the JUFO system Number of FINMARI collaborate publications
Frequency/time	Yearly in 2022 and 2023
Detailed methodology *	Picked from the publication lists of partner institutes <i>+ FINMARI mentioned in the acknowledgements</i>
Workload **	Low
Synergies	AKA FIRI requirements

* Optional

** Estimated burden of data collection and reporting

Output KPI – Scientific excellence



OUTPUTS

Academic theses	
Indicator	Number of academic theses
Rationale	
Metrics	Number of PhD theses Number of MSc theses
Frequency/time	Yearly in 2022 and 2023
Detailed methodology *	Picked from the lists of partner institutes
Workload **	Low
Synergies	AKA FIRI requirements

* Optional

** Estimated burden of data collection and reporting

Output KPI – Outreach and communication



OUTPUTS

Outreach & communication	
Indicator	Popular articles, TV and radio performances, videos of the RI, SOME visibility, visitors on FINMARI web pages
Rationale	To become sustainable over time, research infrastructures must increase their visibility. Their communication must be consistent, engage stakeholders, communicating messages and sharing outcomes effectively and understandably.
Metrics	Number of popular articles, TV and radio performances Number of video watches (YouTube) Analytics from the FINMARI Twitter, and www Google analytics
Frequency/time	Yearly in 2022 and 2023
Detailed methodology *	tbd
Workload **	Medium
Synergies	AKA FIRI requirements, AQUACOSM RI, JERICO RI

* Optional

** Estimated burden of data collection and reporting

Output KPI – Outreach and communication



OUTPUTS

FINMARI Researcher Day	
Indicator	FINMARI Researcher day
Rationale	FINMARI Researcher Day is a key conference in Finnish marine research. It has already developed into a tradition and is a valued event for disseminating results of marine research in Finland, and lately also internationally.
Metrics	Number of attendees, score from feedback 'questionnaire', SAB and Board feedback
Frequency/time	Yearly in 2022 and 2023
Detailed methodology *	tbd
Workload **	Low
Synergies	

* Optional

** Estimated burden of data collection and reporting

References

- Griniece, E., et.al., RI-PATHS, <https://doi.org/10.5281/zenodo.395004>
- Report of the ESFRI WORKING GROUP ON MONITORING OF RESEARCH INFRASTRUCTURES PERFORMANCE (WG MONITORING)
- Doran GT 1981 There's a S.M.A.R.T. way to write management's goals and objectives Management Review 70
- LifeWatch ERIC
- EMBRC ERIC
- ICOS ERIC
- EIROOS RI
- POSEIDON RI