



Internationalise your R&I Ideas -

Internationalisation Initiatives

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Internationalisation Unit – MCST

Mission:

To strengthen international collaboration amongst local and foreign researchers and stakeholders





Objectives:

- Expand international strategic partnerships
- Promote international research collaboration
- Science diplomacy
- Enhance Malta's attractiveness as an R&I destination

PRIMA – Cross-cutting considerations

Projects go beyond the **'conventional' topics** of PRIMA. Examples include:

- Innovative sensor technology for smart irrigation
- SMART technologies to improve water quality
- IoT based platforms to provide services in relation to replication and adaptability to different crop growth and location
- Information technology platform to provide a holistic croplivestock water management system
- GIS IT technologies (Geographical Information System) platforms
- for ground water management
 - Devising computer management simulated tools to improve resilience of farm animals
 - Decision support IT tools to assess safety issues in food production
 - Manufacturing technologies in the food drying industry





PRIMA – National Considerations (Section 2)

Who can apply?

- Industrial entities
- Public entities
- Research and Knowledge Dissemination organisations

Project duration up to 3 years

National Budget €500,000





PRIMA – National Considerations (Section 2)

1. Application submission on PRIMA **submission platform** by Proposal Coordinator

2. Each National Applicant needs to submit a National Administrative Form to <u>eusubmissions.mcst@gov.mt</u>

Call opening – 5th February 2020 (TBC)



Deadline for pre-proposal submission (Section 2) – 1st April 2020*



*Deadline for pre-proposal submission (Section 1) - **15th April 2020**

Aid Intensity				
Non-State Aid (non-economic)	State Aid – <i>de minimis</i>	State Aid - GBER		
	 75% of eligible costs incurred on the project Remaining 25% to be financed by beneficiary (not in-kind) Capping of €200k - 3 years (current rolling year) N.B – Undertakings registered under primary NACE code A (primary production – agriculture & aquaculture) are not eligible under <i>de minimis</i> 	Project must fall in one of these categories: a) Fundamental Research b) Industrial Research c) Experimental Development 100% of the eligible costs for fundamental research 50% of the eligible costs for industrial research 25% of the eligible costs for experimental development Aid intensities for Industrial Research & Experimental Development - up to 80% depending on size of entity & collaborative nature of project		

Type of Eligible Cost	Non-State Aid (non-economic)	State Aid – <i>de</i> <i>minimis</i>	State Aid - GBER
Personnel Costs	 Funded roles: 1. Project Mana 2. Researcher 3. Operational Assistant Already employ which up to 109 No capping on sworking directly Hourly rates for	ager Technician / Resea yed - up to 20% of % can go to project specifically employ y on the project und in national rule	rch Support project value (of management) yed personnel

Type of Eligible Cost	Non-State Aid (non-economic)	State Aid - <i>de minimis</i>	State Aid - GBER
Specialised equipment and research consumables	Costs of equipment project (including set Overall value of cor exceed 30% of proje	t specifically used for oftware) nsumables typically cannot ect value	Depreciation of equipment costs are only eligible Overall value of consumables typically cannot exceed 30% of project value

Type of Eligible Cost	Non-State Aid (non-economic)	State Aid - <i>de</i> <i>minimis</i>	State Aid - GBER
Travel and Subsistence	Consortium me International Co (1 person / trav	etings & onferences rel)	Travel not an eligible cost

Type of Eligible Cost	Non-State Aid (non- economic)	State Aid - <i>de minimis</i>	State Aid - GBER
Costs of IP and knowledge transfer activities	Costs of knowl licensed from o	edge transfer activities a outside sources at arm's	nd patents bought or length conditions

Type of Eligible Cost	Non-State Aid (non- economic)	State Aid - <i>de minimis</i>	State Aid - GBER
Other Operating Expenses	Other operating expense be approved by Council	es incurred directly as a l beforehand at applicatio	result of the project (to on stage).

Type of Eligible Cost	Non-State Aid (non- economic)	Regulation A (de minimis) State Aid	Regulation B (GBER) State Aid
Subcontracted activities	Subcontracted activities project value, provided before subcontracting to	s shall be allowed up to a that prior approval is atta o ensure fair procuremer	limit of 10% of the aned from the Council at procedures

Type of Eligible Cost	Non-State Aid (non- economic)	State Aid - <i>de minimis</i>	State Aid - GBER
Overheads	Overheads will be cover costs of: 1. Subcontracting 2. Items of equipment a 3. Consumables above = Equipment costing more Capping of €500 is for to	red at 10% of direct eligik above €5000 €5000 e than €5000, capping is otal cost of consumables	ole costs, excluding the at €500 per piece. if this exceeds €5000.

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PRIMA – National Considerations (Section 2) Ineligible Costs

- Expenses which are recoverable through other funding mechanisms.
- Re-purchase of equipment originally procured through other funding mechanisms.
- Purchase of equipment from partners or their subsidiaries.
- Standard office equipment.
- Personnel hours for travelling.
- Travel and Subsistence is an ineligible cost in relation to applications submitted under GBER



PRIMA – Facilitation Calls

- PRIMA Proposal Writing Assistance
- PRIMA Networking Assistance Opportunities









Marine & Maritime Technologies for a New Era



Aim:



Projects funded directly by the EC are often quite large and complex, disheartening certain applicants (especially SMEs) whilst on the other hand national funding programmes offer limited opportunities to collaborate with foreign partners, especially is cross-border funding is impossible – the **cofund** instrument finds a balance to achieve cross-border collaboration in a an effective way

Create critical mass and focus **excellence** on precompetitive breakthroughs which can benefit marine and maritime industries in general and make to more competitive in the long term

Bring **industry** and **research** actors across borders together to strengthen Europe's economic position underpinning Blue Growth.





Funds R&I projects in the field of Marine & Maritime Technologies:

Priority Area 1: Environmentally friendly maritime technologies

Priority Area 2: Innovative concepts for ships &n offshore structures

Priority Area 3: Automation, sensors, monitoring & observations

Priority Area 4: Advanced manufacturing & production

Priority Area 5: Safety & security





<u>Priority Area 1</u>: Environmentally friendly maritime technologies

- Emission reduction
- Energy efficiency
- Noise & vibration reductions
- Innovative propulsion & powering systems (e.g. fully electric ships)
- Technologies for sensitive regions





Priority Area 2: Innovative concepts for ships & offshore structures

- Novel materials
- Biofouling & corrosion protection
- Structures
- New vessel design incl. inland water vessels
- Improved models for marine vehicles & structures
- Oil & Gas
- Deep sea mining



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Priority Area 3: Automation, sensors, monitoring & observations

- Technologies for detection & removal of munition
- Intelligent predictive maintenance systems
- Sensor development
- Underwater technology







Priority Area 4: Advanced manufacturing & production

- Digitalisation & automation of production
- Optimisation of production: improved & novel production technologies
- Circular economy concepts
- Intelligent / innovative interacting components
- Human machine interaction, Augmentation and Virtual Reality





Priority Area 5: Safety & Security

- Individual safety concepts harmonised with navigational requirements
- ICT tools for monitoring & optimisation of maritime operations
- Hinterland connection through inland waterways
- Early warning & accident management systems
- Evacuation & rescue concepts
- Decision support systems
- Improved operations
- Applications for increased fire safety





Type of Research Funded (National)

Industrial Research

Planned research or critical investigation aimed at the acquisition of **new knowledge** and **skills** for developing **new products**, **processes** or **services** or for bringing about a **significant improvement** in existing products, processes or services. It comprises the creation of components parts of complex systems, and may include the construction of prototypes in a laboratory environment or in an environment with simulated interfaces to existing systems as well as of pilot lines, when necessary for the industrial research and notably for generic technology validation





Type of Research Funded*

• Experimental Development

Acquiring, combining, shaping and using **existing** scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. This may also include, for example, activities aiming at the conceptual definition, planning and documentation of new products, processes or services. Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real life operating conditions where the primary objective is to make further technical improvements on products, processes or services that are not substantially set. This may include the development of a commercially usable prototype or pilot which is necessarily the final commercial product and which is too expensive to produce for it to be used only for demonstration and validation purposes. Experimental development does not include routine or periodic changes made to existing products, products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements



FRA-NET COFUND

*Fundamental Research is not funded

Eligible Entities (National):

- Academia
- Cooperative
- Research & knowledge dissemination organisation
- NGO
- Non-profit Making
- Public Entity
- Professional Body
- Registered Company
- Registered Partnership









Call Budget

Total Call budget - €13 Million

National Budget - €300,000

Participating Countries

Belarus, Belgium, France, Germany, Malta, Norway, Poland, Romania,

Spain, South Africa, Turkey





Other Considerations:

Consortium of **at least 2** different partners from at least 2 of the participating countries

Coordinator or Partner Status (Coordinator to keep in mind National

Regulations of other partners)

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No limit on number of MT participants in one project

Participation of at least 1 industrial partner is MANDATORY



Application Stage:

2 Stage submission: Pre-proposal & Full Proposal

Pre-proposal deadline – **27th March 2020** Full Proposal submission opening – **2nd June 2020** Full proposal deadline – **4th September 2020** Start of successful projects – **Early 2021**

Participation of at least 1 industrial partner is MANDATORY



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Application Submission

1. Application submission on MarTERA **submission platform** by Proposal Coordinator

2. Each National Applicant needs to submit a National Administrative Form to <u>eusubmissions.mcst@gov.mt</u>







Scientific Evaluation Process

Excellence (Threshold: 3/5)

- Relevance to MarTERA Priority Areas
- Sound concept & quality of objectives
- Innovation level
- Quality of the S&T approach, methodology and work plan



Scientific Evaluation Process

Impact (Threshold: 3/5)

- To what extent the proposed project is suitably ambitious in terms of its strategic impact on reinforcing competitiveness or on solving societal or environmental problems at European and regional level
- To what extent the exploitation and / or dissemination strategies are adequate to ensure optimal use of the project results
- Added value of European transnational co-operation





Scientific Evaluation Process

Implementation (Threshold: 3/5)

- Quality & effectiveness of the work plan, the consortium, the management structures & procedures
- Appropriateness of the allocation of tasks, ensuring that all participants have a valid role & adequate resource in the project to fulfil the role
- Appropriateness of the allocation & justification of the resources to be

committed (budget, staff, equipment etc).





Partner Searches

B2match tool MarketPlace section -

https://martera-brokerage-event-2020.b2match.io/marketplace

Brokerage event – 13th February 2020 in Leuven, Belgium

MCST matchmaking









National Participation in MarTERA project



<u>Partners</u>: University of Aveiro, Portugal; Aquabiotech Ltd, Malta; SINTEF industry, Norway

Development of Smart Nanostructured Layers for Sensing Corrosion in Aquatic Structures







Upcoming Internationalisation Opportunities in 2020





Bilateral Call between **MSCT** and the Ministry of Science & Technology of the Republic's People of China (**MOST**)





Bilateral R&I Projects:

- Maritime Services &/or Maritime Technology &/or Aquaculture
- Transport
- Digital Technologies





Upcoming National Call Budget:

- Maritime Services &/or Maritime Technology &/or Aquaculture - €200K
- Transport €200k
- Digital Technologies €200K

Proposed launch date – First / Second quarter of 2020





Main Rules for Participation:

- Proposal to be **novel** and clearly shows the **added benefit** of the bilateral collaboration. Balance of the work foreseen.
- Cooperation Agreement & IP Agreement
- At least 1 legal entity from **MT** and 1 from **China**
- Chinese participants have their own National Rules
- No upper limit on eligible consortium size (however each side must have 1 PI)





Main Rules for Participation:

- Joint eligibility must be ensured
- MT and Chinese PIs will each submit a National Application to their respective funding agency
- Project duration Maximum of 2 years





Project selected for funding under 2019 Call

SEAM – Surface Engineering for Additive Manufactured parts used in Marine Transportation

Participants: University of Malta & Southeast University









Aim - to identify new and improve existing ways of bringing **bio-based products** and **services** to the market and find new ways of creating value from in the blue bioeconomy.

- Developing innovative uses of underutilised and waste material from fisheries and aquaculture to achieve zero waste;
- Using **biotechnology** and **ICT** to develop smart, efficient, traceable food systems and create synergies between aquaculture and fisheries
- Unlock the potential of microbiomes to support growth in aquaculture, fisheries, and food processing and biotechnology;
- Apply the latest developments in ICT (IoT, machine learning, big data); creating predictive tools to improve the identification and targeting of biodiversity "hot-spots" in the oceans (omics based technologies);
- Exploring synergies with land-based production in areas such as food and feed production and processing, biorefining, bioenergy, biomaterials, chemicals and nutrients and maximise the use of aquatic bioresources in terrestrial value chains;
- Improving aquaculture and wild harvesting of stocks by support for the creation of innovative feeds, improved brood stocks, by introducing new species, defining stock baselines, and assessing stocks and by encouraging the adoption of novel production technologies.

Project selected for funding under 2019 Call

AquaTech4Feed – Novel sustainable aquaculture technologies for the production of innovative feeds for improved fish stocks

Participants: Greece, Malta (UOM), Italy, Ireland, Germany & Spain



Upcoming 2020 Blue Bio Call

Proposed launch date – June 2020

National Budget - €300,000

Participating Countries and Eligible Thematic Areas - **TBC**







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