

# Space Research Fund

An Earth Observation Research Programme administered by the Malta Council for Science and Technology with the technical support of the European Space Agency

Programme Parameters 2018  
Version 1.0

*April 2018*

## Scope of this Document

The purpose of this document is to provide an outline of the *Space Research Fund 2018* programme and the related eligibility and funding parameters. The first call for applications of this programme shall be opened on 7<sup>th</sup> May 2018, with all relevant documentation published on the Council website <http://mcst.gov.mt/>

While this document is not the rules for participation, and shall not be regarded as such, it provides potential applicants with the means to ideate and seek collaborators ahead of the call for applications.

## Objectives of this Fund

The potential of Earth Observation (EO) data, including free and open datasets made available through Copernicus, the EU Earth Observation programme, can only be fully exploited by value-adding downstream services, which are tailor made to specific public and commercial needs. Such solutions, often encompassing research and development at the intersection of science and ICT, translate the unprocessed and raw data delivered from EO satellites and other in-situ sensors into information that is usable by the end user.

This *Space Research Fund* shall provide financial support for research, development and innovation in the downstream Satellite EO sector, specifically projects that deal with the processing and exploitation of data collected through EO satellites. This is a concrete capacity building measure within the Maltese downstream Satellite EO sector with the prime objective of achieving a critical mass of knowledge within the sector. Grants shall be awarded on the basis of yearly competitive calls for 20-month projects.

## Projects Scope and Thematic Areas

Scope of project proposals funded under this call:

- Utilization and exploitation of existing European Union EO infrastructures, in particular the Copernicus Programme, and avoidance of duplication (unless a specific local need requires local installations)
- Leveraging Malta's geographic location, topography and demography with relevance to EO test bed opportunities
- Ensuring international relevance of research to reduce competitiveness and capability barriers for Maltese entities to acquire European-projects and clients

- Exhibiting potential to leverage further funding through other streams to complement the programme size
- Development of technologies that are close to market or market-deployable
- Demonstration of the potential economic benefits of the proposals, converging academic research with industrial application of the technologies.

Project proposal thematic areas across the programme may include, but are not limited to the following:

- Themes aligned to the local Smart Specialisation Strategy, such as: Resource Efficient Buildings, Aquaculture, Maritime Services, Tourism Product Development, ICT as an innovation, Health and Aviation & Aerospace
- Maritime surveillance beyond current EU programmes and services
- Tackling migration challenges beyond current EU programmes and services
- The Blue Economy and the related conservation and sustainable use of the seas
- Urban Area Management and related sustainable development
- Supporting Smart Cities development and tackling related challenges
- Improve spatial resolution challenges of current Earth Observation Satellite systems
- Atmosphere-related research

It is to be noted that the above list is non-exhaustive, and project proposals not aligned to the above thematic areas, but proposing solutions to important alternative challenges may be acceptable.

## Research Streams

The Space Research Fund accepts proposals under two different streams:

- Stream 1: Technology Concept Research (TRL 1 to 4)
- Stream 2: Applied Technology Development (TRL 5+)

Technology Readiness Level (TRL) definitions as relevant to this programme are defined in Table 2. While the parameters in this document are applicable to both streams, applicants are to consider the guidelines in **Table 1** when choosing their stream in the application form. Such guidelines will be taken into consideration during evaluation.

	<b>Stream 1 (TRL 1 to 4)</b> Technology Concept Research	<b>Stream 2 (TRL 5+)</b> Applied Technology Development
<b>Beneficiary*</b>	It is recommended that the beneficiary or consortium includes at least one <b>research</b> or <b>knowledge dissemination organisation</b> .	The beneficiary or consortium <b>must include</b> an <b>end user</b> of the technology under development. Furthermore, it is recommended that the beneficiary or consortium includes at least one <b>industrial entity</b> .
<b>Research Prospects and Impacts</b>	Prospects of the proposal have a <b>medium importance</b> . It is recommended that the proposal makes reference to an eventual case study or end-user of the research being proposed.	Prospects of the proposal have a <b>high importance</b> under this stream. A credible route to commercialisation which promises a saleable product rooted in the needs of the end user is important.

\*A beneficiary can be either a sole participant or a consortium of partners.

**Table 1: Stream guidelines**

<b>Space Research Fund Stream</b>	<b>TRL</b>	<b>Applications and Services</b>
<b>Stream 2</b> <b>Applied Technology Development</b>	<b>9</b>	Application/service operationally deployed and used by paying customers
	<b>8</b>	Application/service completed and validated, commercial offer ready
	<b>7</b>	Trials with customers/users to validate utilisation and business models
	<b>6</b>	Demonstration of prototype in relevant environment, price policy identified
	<b>5</b>	Application/service verified using operational elements, customers/users not involved
<b>Stream 1</b> <b>Technology Concept Research</b>	<b>4</b>	Application/service verification in laboratory environment, market segment(s) and customers/users identified
	<b>3</b>	Concept analysis performed and target market identified
	<b>2</b>	Application/service concept formulated, market opportunities not yet addressed
	<b>1</b>	Scientific Research

**Table 2: TRL definitions (ESA)**

## Programme Parameters

- The 2018 call for applications under both streams of this fund shall be opened on 7<sup>th</sup> May 2018, with all relevant documentation published on the Council website <http://mcst.gov.mt/>
- The programme is open to all Maltese entities. Foreign entities are eligible to participate in this programme, but are not eligible for funding. Nonetheless, the participation of foreign entities is to be duly justified.
- The selection and funding of proposals under this programme shall be on a competitive basis. The highest scoring proposals across both streams will be selected for funding and the number of funded projects will correspond to the funds available under the programme.
- This programme operates under the *de Minimis State Aid regime* (Commission Regulation (EU) No 1407/2013), which stipulates that a single undertaking cannot receive more than €200,000 in aid over any 3-year period through schemes operating under this regime. Applicants should ensure and declare they are eligible for the requested grant under State Aid rules before submitting an application.
- While research duration is expected to be 16-18 months, a duration of twenty (20) months is being allocated to allow for necessary recruitment and ordering of equipment, software and required datasets.
- For the purposes of funding and reporting, a project submission shall be divided into two stages. *Stage 1*, which starts on the project start date, shall be equal to twelve (12) months duration. *Stage 2*, which may commence when the Council approves the attainment of deliverables associated with Stage 1, shall have a duration of eight (8) months. Funding requested for any one stage shall not exceed 80% of the project grant.

## Funding Parameters

- The grant shall cover 100% of the total eligible costs of the project, capped to a maximum of €150,000. Additionally, the minimum possible funding requested for a project shall not be less than €75,000. If the beneficiary is a consortium the amount of funds stated are across the consortium.
- At the beginning of each stage, the Council will provide the relevant pre-financing to the lead beneficiary. This will include both direct and indirect eligible costs.
- A retention consisting of 20% of the project grant shall be withheld by the Council and only released upon successful completion of the project and approval of all mandatory deliverables. This retention is deducted from the funds allocated to Stage 2 and from the preceding stage, if necessary.

## Evaluation Criteria

Project applications will be evaluated through a three-step process:

- Administrative compliance: Firstly, proposals are checked for compliance with the guidelines detailed in the call advert and associated documentation. Projects that are administratively compliant shall pass to the next step.
- Content Evaluation: The evaluation board shall evaluate the content of project proposals based on the criteria detailed in the next section. Proposals shall obtain a mark >65% over all 3 criteria (Excellence, Impact, Implementation), while obtaining a pass mark (50%) within each of the three criteria, shall pass to the next step.
- Due Diligence: This step involves an investigation of the applicant entities prior the signing the Grant Agreement.

For a project to be eligible for funding it must pass all three steps.

## Content Evaluation Criteria

The Evaluation board shall be evaluating application content across three criteria: Excellence, Impact and Implementation. The weighting of each criterion depends on the stream chosen at application stage:

- Stream 1: Technology Concept Research (TRL 1 to 4)
- Stream 2: Applied Technology Development (TRL 5+)

### Excellence Criterion

Stream 1: /40

Stream 2: /25

- Clarity of the definition of sector problem areas and pain points.
- Scientific validity of the proposed solution and clarity of technical objectives.
- Quality of engineering approach.
- Innovation potential and adequacy of TRL maturity by the end of the project.

### **Impact Criterion**

Stream 1: /30

Stream 2: /45

- Potential of publications and patents resulting from the project and likelihood of any generated Intellectual Property being retained in Malta.
- Extent to which the proposed idea exhibits a competitive advantage over existing technologies including foreign markets.
- Credibility of the route to eventual commercialisation.
- Coherency of economic, employment and investment impacts with respect to the project ambition and funding requested.
- Extent to which the proposed solution helps increase competitiveness of end users.
- Extent to which the proposal leverages new personnel and exhibits evidence of growth of critical mass of knowledge.
- Extent to which the proposal is leveraging local favourable conditions that promote Malta as a test-bed for EO-related research.
- Quality of dissemination and exploitation of project results.

### **Implementation Criterion**

Stream 1: /30

Stream 2: /30

- Adequacy of the background and experience of the entity/entities related to the particular field concerned.
- Complementarity of the different consortium partners in delivering the project objectives.
- Coherence and effectiveness of the work plan, including proposed work packages, deliverables and allocation of resources.
- Appropriateness of the management structures and procedures, including risk and innovation management.