

Welcome to the Space Research Fund Information Session.

- Please mute your microphone/ cameras switched off.
- You can ask questions in the Q&A at the end of the session.
- This session will be recorded.
- Session will commence at 12:05.
- Agenda:
 1. Space Research Fund Presentation
 2. Technical Presentation by ESA
 3. Q&A Session



GOVERNMENT OF MALTA
MINISTRY FOR RESEARCH,
INNOVATION AND THE CO-ORDINATION
OF POST COVID-19 STRATEGY



The Malta Council for
Science & Technology

**NATIONAL
SPACE FUND**



Space Research Fund 2021

A scheme in collaboration with
the European Space Agency



GOVERNMENT OF MALTA
MINISTRY FOR RESEARCH,
INNOVATION AND THE CO-ORDINATION
OF POST COVID-19 STRATEGY



The Malta Council for
Science & Technology



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European Space Agency

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Space Research Fund



Scope

Financial support for R&D&I in the downstream Earth Observation (EO) sector to tackle societal challenges in Malta.
Capacity building measure to jump start the EO sector.

Who can apply?

All Maltese Legal Entities:

Private Entity or
Public Entity or
Public Research & Dissemination Organisation

Research Streams

Stream 1: (TRL 1 to 4)

Stream 2: (TRL 5+)

Up to €150,000

de minimis or GBER or State Aid Not Applicable

Project Duration

20 months across two stages.

Eligible Costs

Personnel (Salaries)
Specialized Equipment
Consumables
Subcontracting
and more

Typical Consortium Compositions

Sole Beneficiary
Public – Private
Public – Public
Private – Private

Space Research Fund – Types of Personnel

A multidisciplinary team is required:

- Remote Sensing Competencies – people who can interpret EO data.
- Scientists – varies **according to thematic area chosen** e.g. agronomists, geologists, environmental.
- Engineers – **designing and deploying in situ sensors** (land, sea or air), weather stations etc.
- ICT personnel with **Artificial Intelligence** and **Computer Vision** competencies.
- Personnel with **specific licences** (such a drone flying permits).
- **Expertise from abroad** – Earth Observation is at an embryonic stage in Malta. Participation of foreign companies and/or consultants is allowed by a reasonable justification (subcontracting).



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sentinel-1

→ **RADAR VISION**



sentinel-2

→ **COLOUR VISION**



sentinel-3

→ **A BIGGER PICTURE**



sentinel-4

→ **EUROPEAN AIR MONITORING**



sentinel-5p | sentinel-5

→ **GLOBAL AIR MONITORING**



sentinel-6

→ **SURFING THE SEAS**

IMP: Utilization and exploitation of existing European Union EO infrastructures.

[Click here: Discover our satellites](#)

Typical Applications

Diverse data = diverse thematic areas, e.g.:

- Atmospheric Monitoring (air quality and atmospheric composition)
- Marine Environment Monitoring (marine safety, sustainable fisheries, sea surface temperature)
- Land Monitoring (Land-use, precision agriculture, cultural heritage)
- Climate and weather monitoring
- Emergency (Mapping of floods, search and rescue)



Funded Thematic Areas

2018

- Data fusion and hydrodynamical modelling of the Maltese coastal areas.
- Developing crop patterns to optimise agricultural processes.

2019

- Detection of Chlorophyll and Total Suspended Matter around Malta.
- Cultural Heritage.
- Air quality monitoring and weather prediction.

2020

- Monitoring of Land Change in Coastal Areas
- Detection of water usage in agricultural processes.

[Visit our website for more information about the projects.](#)



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Three Funding Modalities

In a consortium, each partner must opt to only one type of funding modality.

- State Aid Not Applicable (Public Entities):
 - Funding Rate 100%, up to € 150,000*
- State Aid De Minimis (Private Entities – Option 1):
 - Funding Rate 100%, up to € 150,000* (€200,000 limit over 3 fiscal years)
- State Aid GBER (Private Entities – Option 2):
 - Up to €150,000* (funding rate depends on type of research but no limits).

*direct and indirect costs inclusive



If applying under State Aid Not Applicable:

The Applicant intends to:

- publicise widely the results of the research.
- license on non-discriminatory terms any IPR (Intellectual Property Rights).
- any income from the licensing of IPR shall be reinvested in the primary educational and research activities of the Beneficiary.
- ensure that no funds provided cross-subsidises any economic activities.



Important notes for consortia:

- One of the partners should be the **Lead Partner**.
- Lead Partner is to appoint the **project coordinator**.
- **Foreign entities** may participate as partners but are not eligible for funding.

Important notes for consortia:

- Overall portion of funding for any individual Partner must be $\leq 75\%$ of the project grant;
- Combined funding for any group of Partners within a category (Public Entities or Private Entities) must be $\leq 75\%$ of the project grant.



De Minimis – State Aid Funding Modality

- Funding Rate 100%, up to € 150,000 (€200,000 limit over 3 fiscal years)

Year 1	Year 2	Year 3
€ 100,000	€ 60,000	€ 40,000

Year of Award

The maximum a single **undertaking** can claim in Year 3



De Minimis – State Aid Funding Modality

- Funding Rate 100%, up to € 150,000 (€200,000 limit over 3 fiscal years)

				Year of Award
Year 1	Year 2	Year 3	Year 4	
€ 100,000	€ 60,000	€ 40,000	€ 100,000	

The maximum a single **undertaking** can claim in Year 4



Project Value and Project Grant

- Project Value is the total value of the project.
- Project Grant is the funding requested from MCST.
- Project Value = Project Grant means 100% funding rate.
- Project Value > Project Grant means a funding rate of $\frac{\text{Project Grant} \times 100\%}{\text{Project Value}}$

GBER – Funding Modality

- Three categories:
 - a) Fundamental Research – 100% Eligible Costs
 - b) Industrial Research – 50% Eligible Costs
 - c) Experimental Research – 25% Eligible Costs

GBER – Funding Modality

Bonuses:

- a) By **10% increase for medium-sized enterprises** and by **20% increase for small enterprises**.
- b) By **15%** if one of the following conditions is fulfilled:
 - i. The project involves **effective collaboration**:
 - Between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70% of the eligible costs, or
 - Between an undertaking and one or more research and knowledge-dissemination organizations, where the latter bear at least 10% of the eligible costs and have the right to publish their own research results;
 - ii. The **results of the project are widely disseminated** through conferences, publications, open access repositories, or free or open-source software.



Project Management

And disbursement of funds...

Stage 2
Prefinancing

End of Project:

- Technical Report
- Financial Audited Report

Stage 1 – 12 Months

Stage 2 - 8 Months

Stage 1 budget must be less than 80% of the project grant!

Stage 1
Prefinancing

- Stage 1
- Technical Report
 - Financial Report

Disbursing Retention
Grant (20% of the Project
Grant)



Rules on Financing - Eligible Direct Costs

- **Existing Personnel:** $\leq 20\%$ of the Project Value.
- **Management Costs:** $\leq 10\%$ of the Project Value (comprised of existing personnel)
- **New Personnel** does not form part of the above limits.
- **Consumables** $\leq 30\%$ of the Project Value.
- **Subcontracting Activities** $\leq 25\%$ of the Project Value.
- **Specialised Equipment** (for the purposes of the project)
- **Scientific Information** (access to databases and publications).
- **Travel** (not eligible under GBER)



Rules on Financing - Indirect Costs

Overheads will be covered at **10% of direct eligible costs**, excluding the costs of:

- subcontracting (**no indirect costs**)
- items of equipment above €5000 → €500 per piece.
- consumables above €5000 → €500 for total amount of consumables.

Rules on Financing – 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 within the consortium;
- Standard office equipment/ stationery;
- Organising a conference.
- Personnel hours for travelling.
- Non-exhaustive list

Rules on Deliverables (Mandatory)

- Publish 2 articles in a local media platform (newspapers and magazines etc...)
- Contribute to space-related outreach events held in Malta as directed by MCST.
- A minimum of 2 interim progress meetings per Stage between the beneficiary and MCST, substantiated with a presentation.
- Stage 1 and End of Project Technical Reports.
- Stage 1 Financial Report and End of Project Financial Audit Report.

Rules on Deliverables (Recommended)

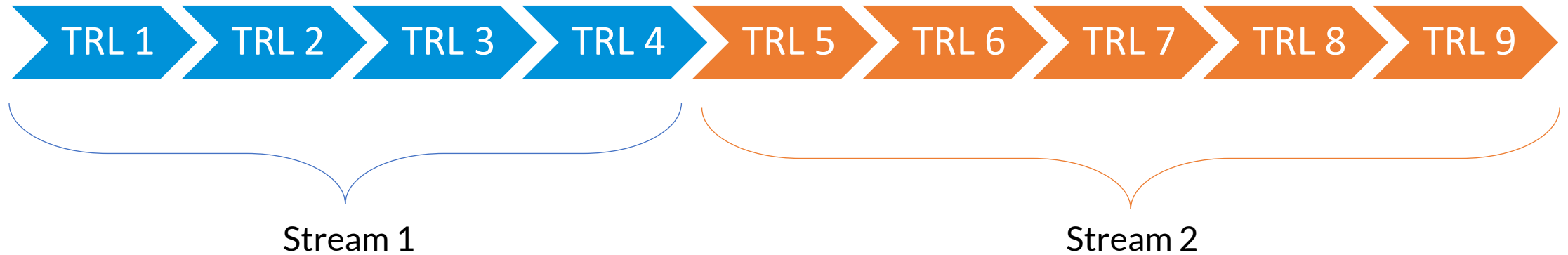
- Scientific Publications in international open access journals
- Presentation/s at international conferences/s
- The attainment of degrees (e.g. Level 7 and Level 8)
- Additional outreach activities.
- Commercial commitments (technology transfer license or innovations)
- Collaborations with third-party entities and must be supported by a recent letter of intent (such third-parties are not eligible for funding).

Processing the Proposal

- 3 Stages:
 - Stage 1: Admin Compliance (ensuring completeness).
 - Stage 2: Evaluation
 - Stage 3: Due diligence (private entities).

Stage 2: Evaluation

- There are two streams to consider. Choose one:



Stage 2: Evaluation

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

https://artes.esa.int/sites/default/files/ARTES_TPD_TRL_Definitions.pdf



Stage 2: Evaluation

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

Content Evaluation Criteria

Excellence, Impact and Implementation

To be eligible for funding, a proposal shall obtain:

- **Pass mark (50%)** within each criterion
- **>65% overall** (*Excellence + Impact + Implementation*)

Content Evaluation Criteria

Excellence, Impact and Implementation

	Stream 1 Technology Concept Research (TRL 1 to 4)	Stream 2 Applied Technology Development (TRL 5+)
Excellence	40%	25%
Impact	30%	45%
Implementation	30%	30%
Total	100%	100%

The criteria is the same for both streams



Excellence (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.
- **Innovation potential** and adequacy of **TRL maturity** by the end of the project.
- Quality of the **technical development steps**.

Impact (Stream 1: 30%, Stream 2: 45%) -1 of 2

- 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**.

Impact (Stream 1: 30%, Stream 2: 45%) -2 of 2

- Extent to which the proposed solution benefits the **eventual 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.**



Implementation (Stream 1 and 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.



Submitting a Proposal

- **Deadline to apply: 18th June, COB.**
- The selection and funding of proposals under this Programme shall be on a **competitive basis**;
- Any deviations must be approved by MCST prior to submitting the proposal.

Submitting a Proposal

- This is an **abridged version of the Rules of Participation**.
- MCST can provide administrative assistance to ensure completeness of the proposal.
- Technical assistance can be provided through a **1-1 session with an ESA expert**.
- **Projects must start between September and October of 2021.**
- Contact us for further information.



Thanks for listening

- Call documents can be found here:

<https://mcst.gov.mt/space-directorate/space-research-fund/>

- Proposals and other associated documents must be submitted here:

space.mcst@gov.mt

- Any queries or to set-up 1-1 with ESA: isaac.massa@gov.mt