

First Fixed Call For Proposals Under Plan For European Cooperating States (PECS) In Malta

ESA CFP/5-50032/23/NL/MH

11th September 2023

09:00 Introduction (Malta delegation)

09:30 Introduction – (ESA)

Quick overview of ESA

Accession overview and what is PECS and what is the purpose of PECS

10:00 The Basics of ESA Procurement (ESA)

11:15 **Objectives of the PECS Call (ESA)**

14:00 How to prepare a successful proposal (technical part)

16:00 How to prepare a successful proposal (management, cost and contractual part)

17:30 End of day

Objectives of the PECS Call

The key goals are:



- To increase the national space competences in industry, academia and through education
- To enable ESA and the ECS to working together on concrete activities
- To associate the ECS with ESA programmes, activities and use of ECSS via dedicated Announcements of Opportunities
- To prepare in the most efficient manner to potentially become an Associate Member

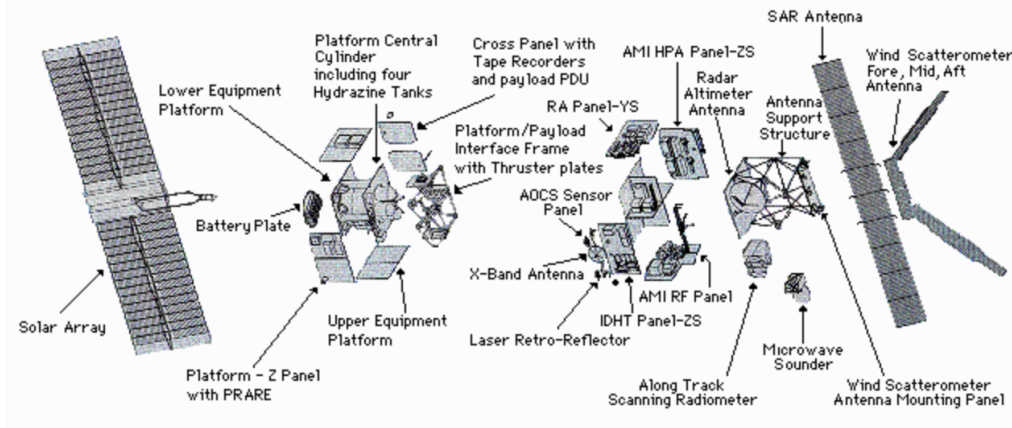
What this means:

- Raise awareness and improve space related education
- Spin out academic research to industry
- Improve the knowledge, skills and experience in space ('build the company CV')
- Develop products and services that can be sold on a recurring basis (build 'sustainable' business)
- Build international cooperations, connections and supply chains

Note: PECS does this via contracts that fund mainly manpower/IPR development – it does not fund infrastructure

Type B) Research and Development Activities: design, development and demonstration of a recurring upstream product or service or a satellite data based downstream service with potential for use in ESA optional programmes and/or commercial missions/ customers.
The start TRL shall be at least 3.

Examples for activities under this Activity Type could be e.g. spacecraft components, services...



Type C) Space (downstream) Applications. Products and services making use of ESA/ European space infrastructure that is already existing or scheduled for operation in the near term. The goal is to make steps towards the introduction of a product to a first customer and to enter into customers supply chain.

The start TRL shall be at least 4.

Examples for activities under this Activity Type could be e.g. agriculture, mapping services...



Type D) Preparatory activities: Feasibility studies, de-risking activities, conceptual design work, proof of concept and simple breadboard activities (e.g. feasibility studies, market surveys, user requirements definition and breadboard demonstrators) aimed at supporting national competitiveness or the initial steps of a product development for Space with potential for use on future ESA or commercial missions.

Examples for activities under this Activity Type could be e.g. requirements identification, first concept / feasibility studies ...

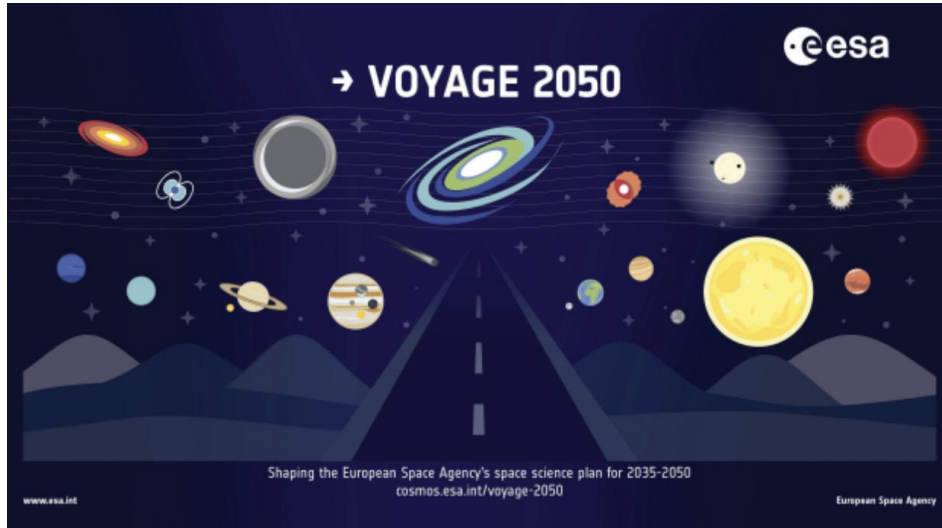
Type E) Education activities: covers activities aimed at raising awareness about space technologies and their practical application and space science amongst the public, government, local industry, schools and universities with the aim of increasing young people's motivation to choose space related education and industry as a career and encouraging the uptake of the use of space based services. Also covers the development of tertiary education programmes in space education (BSc, MSc)

Examples for activities under this Activity Type could be e.g. courses for primary, secondary, tertiary schools, space weeks...



Type F) Space science activities: supporting the involvement of Maltese researchers leading to potential of future involvement in ESA science mission core team and publication of peer reviewed scientific papers. Involvement of an international partner is considered essential.

Examples for activities under this Activity Type could be work leading to new science cooperations, science publications...



Using the Activity Types – product or service development example

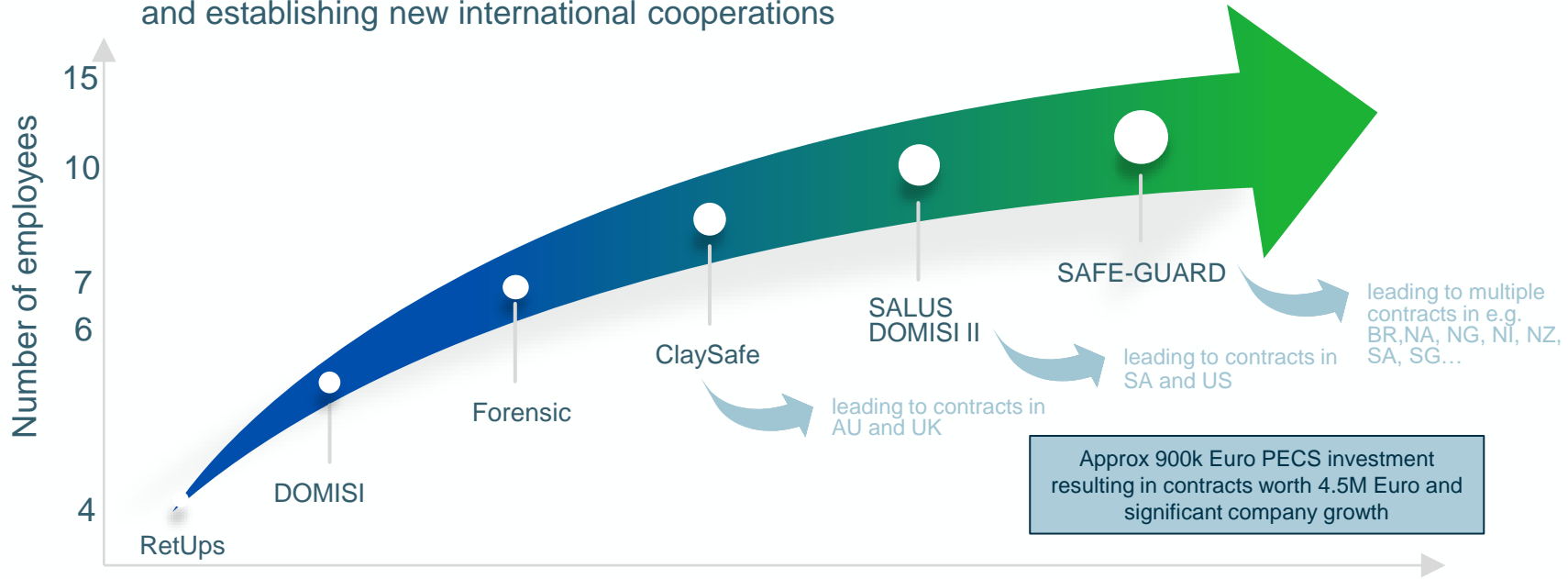
Starting point	Activity Type	Example scope of work	Typical result
Have an idea, market is unknown, no customer contact yet, feasibility not fully demonstrated.	Type D) Preparatory	Market survey of competitors/ existing solutions Identification and discussion with potential customers to find real needs Conceptual designs Analytical and BB feasibility demonstrations	Clear requirements spec for a competitive product. Conceptual design with key feasibility issues demonstrated.
Clear requirements spec for a competitive product. Conceptual design with key feasibility issues demonstrated.	Type A) Research and Development	Perform the preliminary design work, manufacture and test prototypes, finalise full and complete requirement specification, demonstrate all key features	Fully functional and tested prototype, detailed and complete requirement spec and product data sheet
Fully functional and tested prototype, clear customer strongly engages	Type B) Downstream Applications	Tailoring of the prototype to the customer, finalisation of the design, full testing and calibration, demo at customer premises	Customer ready to commit to buy.

Example of how to use PECS to fund capability development

Geofem (Cyprus)

- 2017: first (unsuccessful) experience with ESA
- Since 2018: 7 successful bids with ESA
- Since 2020: expanding services in new areas / countries (e.g. UK, US, SA) and establishing new international cooperations

→ PECS



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