



COSMOS4HE

Guidelines for Newcomers



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1. What can you expect from this document?

This document provides short cut guidance to accelerate your journey into Horizon Europe funding opportunities for Space research and innovation activities.

2. Information and resources required to submit a proposal

2.1 What should you know when considering EU funding?

Horizon Europe

Horizon Europe is the current “EU framework research and innovation programme” running from 2021 to 2027. It comprises several parts with practically all thinkable research and innovation (R&I) fields and phases. Elements of the programme are specifically focused on certain fields / topics, others are cross-cutting and therefore open with regards to the R&I field.

Space R&I is mainly supported under “Cluster 4”

The most relevant element dedicated to Space related R&I is placed within “Cluster 4” which comprises “Digital, Industry & Space”. Other Space dedicated funding opportunities can be found within the programme of the [European Innovation Council](#) (EIC). In addition, there are calls in other fields which can be of interest as they use Space data – climate research, transport, agriculture, security or the like. For more information on how to find these please see below under “The Funding and Tender Portal”. More information on Space based applications are provided by the [EUSPA](#). See also their [EO and EGNSS Market Report](#).

Funding instruments

The EU works with different kinds of grants and with tenders / procurements. The vast majority of funds within Horizon Europe is implemented through grants. Tenders / procurements are rather the exception from the rule.

Most grants are implemented as “Research & Innovation Actions” (RIA) or “Innovation Actions” (IA). The latter is aimed at closer to market activities (“less research, if any”). To help define the different stages of technology maturity, the European Commission (COM) uses “[Technology Readiness Levels](#)” (TRLs) which originally derive from Space research. TRLs span from 1 (first steps through first studies) to TRL 9 (market ready). Accordingly, most Cluster 4 R&I is covering TRLs between 3 and 6¹.

While tenders / procurements typically include a profit margin for the bidders, grants follow the principle of an own contribution from the proposers. This is implemented through a limited funding rate. “Funding elements” are differentiated in “direct” costs (everything that

¹ For Space parts that need to be tested and validated in orbit (TRL 7), the COM is offering its IOD/IOV programme which is implemented with Horizon Europe budget through the European Space Agency (ESA).

is specifically needed for the particular project implementation) and “indirect” costs (also called “overhead”, i.e. costs that occur but which are not project specific – like room rent, heating, power supply, etc.). For RIAs 100% of direct costs are reimbursed, indirect costs are limited to 25% of the direct costs. For IAs direct costs are limited to 70% for private enterprises (non-profit organisations can still get 100%), reimbursement of indirect costs is limited to 25% of the direct costs granted (i.e. of the 70%). Through this concept, the COM aims to ensure participants’ own interest in the activities. If you have to invest your own resources, you’re motivated to make use of the results and not just participate in grant funding activities.

Who may participate?

It is important to note that for RIAs and IAs, consortia of at least three partners are needed. These need to be independent of each other and placed in different EU member states (at least one of them) or “Associated Countries”². Partners from other countries (the third group of countries after EU Member States and Associated Countries) may participate but in addition to the core partners. Typically, they would have to bring their own budget, but there are exceptions for low income countries or if it is specifically mentioned in the topic text, or in cases where their involvement is for particular mutual benefit.

Some calls are restricted

Article 22.5 of the legal basis for Horizon Europe (its “regulation”) allows the European Commission to restrict particular calls with critical relevance and thus just consider participants from EU member states and / or from dedicated other groups of countries. Space calls in particular are frequently restricted. Related information can be found in the call specifications.

Principle of best proposal

While ESA is working with a “juste retour” or “fair return” principle which provides a certain guarantee that “what a country pays in it gets back”, Horizon Europe applies a “best proposal” principle³. A well-balanced group of evaluators is assessing the submitted proposals per “sub call” (every sub call has its own call title including an identifier). The experts give rates to each proposal and finally agree on a ranking list⁴ – again per sub call. The availability of funds then decides how many proposals from the top of this ranking list can be chosen for funding⁵.

² Associated Countries (AC) have agreements with the European Commission on Horizon Europe through which they pay in to the programme and therefore may participate almost like EU member states. A list of recent ACs (published on 1/4/2023) can be found [here](#). Any updated list will be available on the Funding and Tender portal under [Reference documents](#).

³ To make sure that potentially less competitive countries do not lose out, the COM introduced the so called “[Widening programme](#)” within HE.

⁴ A first check of submitted proposals makes sure that these are eligible (one could say “complete and fitting”). Through their rates evaluators then also decide if proposals are worth to be funded. For this, thresholds are implemented for each evaluation criterion. Just proposals passing these thresholds end up on the ranking list.

⁵ Sometimes, remaining or additional budget becomes available and allows few more proposals to be funded.

2.2 What budgets are we speaking about?

The total budget for HE is in the order of 1 trillion Euro. For Cluster 4, a total budget of 15 billion Euro had been earmarked. For “Destination 5” / Space a total amount of 1.7 billion Euro is expected but unconfirmed, as this would mean that some core topics are underfunded.

Under Destination 5, the budget per sub call (i. e. per call title or number) is in the order of a few to several million Euro. The COM always indicates an expected order of budget per project which can be found in the call specifications. It spans from less than one million Euro up to some 20 million Euro. A “typical order” might be 2-4 million Euro. Proposers can deviate from these amounts but would have to address this within their proposals. The greater the deviation from the suggested funded amount, the higher the risk becomes there is an impact on the evaluation score, and the proposal is not considered for funding.

2.3 The Funding & Tenders Portal

The key interface for almost everything related to Horizon Europe is the “[Funding & Tender Portal](#)”, a website run by the European Commission comprising information and guidance, partner search, a repository where you can register as an expert to be considered as an evaluator, a database including tools to search call results and create statistics, etc.

The portal is also the interface to submit proposals and administrate projects. For this, and to use the full range of services, you need a personal account, an “EU Login” which requires [registration](#).

If your organization wants to join a proposal as partner it needs to be registered and receive a “Participant Identification Code” (PIC). For this, your organization needs to nominate a person which serves as an interface for the registration and for potential updates – a “Legal Entity Appointed Representative” (LEAR).

HaDEA and EUSPA as project management agencies

Project management agencies are responsible for the practical implementation of Cluster 4 funding. They check the submitted proposals, organize the evaluation procedure and finally manage / administrate the projects on EU side. For Cluster 4, the “[Health and Digital Executive Agency](#)” (HaDEA, located in Brussels, Belgium) was set up. It covers most topics of the Cluster. For Space / Destination 5 there is also the [European Union Space Programme Agency](#) (EUSPA, located in Prague, Czech Republic). It is foremost responsible for Space services and application topics but also for the SME sub-programme CASSINI.

ESA is also working for the implementation of some parts

The European Space Agency is not an organization of the EU. It was established long before the EU started Space activities. The COM is making use of its long-term experience and outstanding expertise for a range of upstream (one could say “space hardware”) activities. Via agreements, ESA is responsible for the development of next generation technologies for Copernicus, Galileo & EGNOS as well as the new secure satellite communication initiative IRIS² (read “IRIS squared” for “Infrastructure for Resilience, Interconnectivity and Security by

Satellite”) and for the implementation of the IOD/IOV activities. ESA is mainly using tenders for implementation, which can be found on the [esa-star portal](#) but also at the EU’s Funding & Tenders Portal.

2.4 Where can you find support?

Many organisations run their own internal support staff. If you don’t have this there are other sources for help, including specific services in your country or private for-profit ones, which we will not introduce here. The following ones are available Europe-wide and beyond:

National Contact Points

Since you found this document you will probably be aware of the network of National Contact Points (NCPs) for Space, [COSMOS4HE](#). We NCPs provide dedicated support for applicants and other interested parties of Horizon Europe. Space NCPs focus on Destination 5 of Cluster 4. We’re offering a news service for which you can register, social media, information and matchmaking events, partner search support and direct you to your national NCP.

The [Horizon Europe NCP Portal](#) provides a wide range of additional and useful information for you. It is maintained by the national coordinators of NCP networks and Legal & Financial NCPs. The latter are experts on participation rules and other administrative questions.

European Enterprise Network

Small and Medium Enterprises (SMEs), can also benefit from consultancy support of the [European Enterprise Network](#) (EEN). Their “Aeronautics & Dual use” Sector Group comprises EEN advisors which have a focus on the related areas. EEN is running a useful “[Partnering Opportunities](#)” tool.

EU helpdesk

The [EU helpdesk](#) answers questions related to the Funding & Tender Portal as well as on the application or implementation aspects related to projects. You can also find help on the registration process of your organization.

2.5 How can you find partners for your projects?

If you don’t have your partners yet, ideally, at least some with EU funding experience, there are many ways to find some.

Matchmaking / brokerage events

Matchmaking / brokerage events are frequently attached to information days (see below). Here you can register with your profile and search other profiles to make contact with. Through the Covid crisis, online matchmaking became an established approach. Now, more and more physical events are being organized, but often with hybrid participation so online attendance is still an option. The profiles are searchable online and sometimes you can still arrange bilateral meetings up to the call deadline.

Sometimes, information and brokerage events also have pitching opportunities. Here you can briefly present your profile and what you're looking for.

Funding & Tender Portal

There are two useful options for partner search at the Funding & Tender Portal.

1. The [Horizon Dashboard](#) allows searching data on successful participants. The tool is quite complex, but there are tutorials on the site on how to use it and search for different types of data. Nevertheless, it is good practice to join forces with those who were already successful in the area that you are aiming at.
2. You can enter your own [partner search](#) on every call topic you're interested in. You can find such searches linked to every individual topic, however, there is no dedicated quality check, so results can vary in detail and alignment to the subject. Nevertheless, the European Commission services are constantly improving their tool and since it's easy, there is no reason to ignore this opportunity.

European Enterprise Network

EEN – the above mentioned Partnering Opportunities tool can also be useful for project partner search. Furthermore, EEN partners frequently organize exchanges or matchmaking events, sometimes in collaboration with the NCPs.

2.6 How can you get more detailed information on the EU calls?

Information days are used by the [European Commission](#) and our NCP network [COSMOS4HE](#) to provide specific briefings on the call content. It is beneficial to have the opportunity to ask questions or simply learn a bit more about the background of certain topics. Furthermore, information days typically help networking (see above on partner search).

3. Additional key references relevant for Space (destination 5) proposals

Depending on the topic of your interest, there are a number of references that you should be aware of. A must know is the EU Space Programme. But there are also certain policies, strategies or specific activities. Below you will find a list of recommended references.

Beyond space specific things to know there are the general EU priorities (Europe's top political priorities) to be known. These are frequently referred to:

- "a European Green Deal"
- "a Europe fit for the digital age"
- "a Stronger Europe in the World"
- "Supporting our European way of life"

Space specific references comprise, amongst others:

[EU Space Programme](#) – an important part of Destination 5 contributes to research and innovation needs coming from the EU Space Programme, which comprises Earth Observation (Copernicus), navigation (Galileo and EGNSS) as well as Space Situational Awareness (Space Surveillance and Tracking, Space Weather and Near Earth Objects) and Governmental Satellite Communication (Govsatcom).

[EU SST](#) – The Space Surveillance and Tracking part of the EU Space Programme is mainly covered by a consortium of EU Member States which, in short, is sharing resources and data to help protecting satellites from space debris.

[IRIS²](#) (read “Iris squared”) – the initiative for secure satellite communication is also reflected in Destination 5. Since IRIS² was introduced after its publication, it is not an official part of the EU Space Programme. Nevertheless, Govsatcom will be part of IRIS². A further important element will be Quantum Key Distribution (QKD) which is envisaged to be used for encrypting data.

[CASSINI](#) - the “Space Entrepreneurship Initiative”, comprises access to finance, matchmaking, prizes, hackathons and business accelerator programme aiming at supporting innovation – particularly through SMEs.

[Space Strategy for Europe](#) – this document is from 2016 so is becoming less relevant as new policies and programmes come into force. The related link on the COM website is not working and there is no clear reference to it. However, it’s still the most recent official strategy and provides useful context to current space activity.

[EU Space Strategy for Security and Defence](#) (EU SSSD) – this document is from 2023 and confirms the strong link between Space and Defence. It also refers to **Space Traffic Management** (“rules for Space”) which EU institutions as well as international partners are discussing. The EU also aims at an EU Space law defining related rules.

[European Defence Fund](#) – this fund also provides opportunities for Space research and innovation.

[EU Space Technologies for Non-dependence](#) approach – while this idea has been followed for many years, it has become even more relevant during the course of recent geopolitical events. Many technologies needed for Space infrastructure are not available from European sources. Such dependencies can have negative impacts on Europe’s security and economy. Therefore, the EU is putting efforts to reduce the list of non-EU available technologies. This approach is taken together with ESA and the European Defence Agency (EDA) through a **Joint Task Force**. This group prioritises the most urgent technologies and the resulting document is used by the EU for their yearly calls.

[Future Space Ecosystem](#) – this funding line is a merger of former themes for in-space operations / robotics (supported through an activity called [PERASPERA](#)) and in-space propulsion ([EPIC](#)). It aims at a wide scale of technologies and concepts for future space infrastructure.

[EU Space Research and Innovation Strategy](#) – while recent more technology-oriented EU funding under Destination 5 (Space) within Cluster 4 is oriented on a Strategic Research and Innovation Agenda (SRIA), the EU is now aiming at a more comprising approach. With the EU

Space Research and Innovation Strategy, the responsible unit within DG DEFIS wants to comprise as much all-EU Space R&I activities as possible. This even includes activities which are under other DGs' responsibilities. The new Strategy aims at calls starting in 2025 but also at the next EU Framework Research and Innovation Programme starting 2028.

[STARS*EU](#) – this EU funded project is supporting DG DEFIS. It is recommended to register on their website to be informed about workshops and other events.

[Copernicus User Forum](#) - this group is comprising stakeholders using Copernicus related services. They're discussing needs and give recommendations on the evolution of the system and its services.

[User Consultation Platform](#) – this group is complementing the Copernicus User Forum on EGNSS (satellite navigation) and Govsatcom (satellite communication). It is organized by the EU Agency for the Space Programme.

Space Partnership – there are different types of EU partnerships which are all based on agreements between the EU institutions and the partners. For Space, a co-programmed partnership was agreed. Scope, scale and governance had been agreed with EU member states. In the meantime, the partners are founding an association which will sign a Memorandum of Understanding with the EU. The idea is that the partners will provide the road map for selected parts of Destination 5 related to a budget of 150 million Euro.

4. You did not find answers on your newcomer questions?

Please feel free to contact COSMOS4HE team at cl4@praxinetwork.gr. This can also help us to improve and update this short guide.