



# Announcement of Opportunity for Interdisciplinary Scientists in the EnVision mission

<b>Reference</b>	<b>ESA-SCI-DIR-AO-009</b>
<b>Issue</b>	<b>1</b>
<b>Revision</b>	<b>0</b>
<b>Date of Issue</b>	<b>24/06/2024</b>



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## 1 INTRODUCTION

### 1.1 Purpose and scope

This Announcement of Opportunity (AO) solicits the participation of the scientific community to augment the scientific return of the EnVision mission. It addresses the participation of Interdisciplinary Scientists (IDS) and is issued jointly by ESA and NASA.

EnVision is an interdisciplinary mission to the planet Venus, led by ESA and carried out in partnership with NASA. The primary goal of EnVision is to provide a holistic view of Venus, from its inner core up to the upper atmosphere, to understand why Earth’s closest neighbour is so different. EnVision aims to characterise Venus’ core and mantle structure, surface, and atmosphere, and to study past geologic processes, potential current-day activity and Venus’s climate evolution. The mission will also enable the search for evidence of liquid water in Venus’s ancient past. The evolution of the atmosphere and interior of Venus are coupled, emphasising the need to study the atmosphere, surface, and interior of Venus as a system. The EnVision scientific payload consists of five instruments and one experiment (see AO-D2) to address the mission science objectives.

The aim of this AO is to appoint up to six IDSs for the EnVision mission, of which four scientists based in ESA Member States and two scientists based in the USA. The IDSs will be appointed for a first period of three years, renewable. ESA will not fund the activities of the IDSs (travel costs to attend meetings, etc.) and each proposer is responsible for securing their own funding.

Additional calls for IDSs positions could be foreseen at a later stage. A separate call will be issued in the future for Guest Investigator positions.

The schedule for this AO cycle is given in Table 1.

**Table 1: AO schedule and deadlines**

Date	Event
24 June 2024	Release of this AO
30 July 2024 at 12:00 hrs (noon) CEST	Mandatory Letter of Intent due
24 September 2024 at 12:00 hrs (noon) CEST	Proposals due
Q4 2024	Appointment of IDSs

### 1.2 Background Documentation and information

[AO-D1] EnVision Science Management Plan (SMP).

[AO-D2] EnVision Definition Study Report (Red Book).



### **1.3 Mission summary and IDS tasks**

A mission summary is included in Section 2 of [AO-D1], and a more detailed description of the mission science objectives, the instruments, and the overall mission design and operations is given in [AO-D2].

The EnVision Science Management Plan (SMP) [AO-D1] defines the top-level scientific management of the mission, and describes the respective roles of the parties involved, the data products, the data products delivery scheme and the data rights. It also defines modes of participation of the scientific community in the EnVision programme, including IDSs.

IDSs are expected to focus their efforts on scientific cross-fertilisation. Therefore, they should be experts in overarching science themes connected to the mission objectives and take advantage of synergistic use of the data delivered by several experiments. IDSs should not reflect instrument specific domains but cover science themes such as, for instance, the evolution and current state of Venus' surface and interior; ongoing active geological processes; and the coupling between the Venus surface and atmosphere. IDSs are expected to be heavily involved with and/or have a leading role in the scientific activities of the mission. Additionally, IDSs will support developing strategies for maximizing the science return from the instrument payloads, such as combining the different datasets to address the EnVision science objectives. They will also support the optimization of the scientific performance of the instrument and spacecraft. IDSs may also wish to undertake specific and time-limited tasks in areas such as modelling of the planet and its environment, mission planning, and science operation planning.

The IDSs, as part of their role, will participate in the EnVision Science Working Team (SWT) activities, including attending the regular SWT meetings and participating in topical working groups as needed. The SWT Terms of Reference are described in [AO-D1].

## **2 ELIGIBILITY AND APPOINTMENT CONDITIONS**

This call is open to scientists based in ESA Member States and the USA. Scientists leading or involved in the programmatic, scientific, or technical management of the EnVision instruments or being responsible for hardware or software development and procurement activities, as well as other SWT members, are excluded from this call, while instrument or experiment Co-Investigators (Co-Is) are eligible for IDS positions.

The proposals for an IDS should demonstrate the candidate's expertise in one or more of the EnVision core science fields [see AO-D1 and AO-D2] and must describe clearly the scientific case, the relevance of the contribution to the mission, and the data sets needed to address their proposed contributions, according to the expected role of IDSs as outlined in Section 1. The proposals should also include an explicit mention of the time commitment to the proposed activities (the expected commitment should be not less than 0.15 FTE – Full-Time Equivalent) and the endorsement and financial support (as needed) from the head of the applicant's institution and/or the respective funding institution to the application. IDS applicants will have to guarantee participation in the SWT meetings (on average two



meetings per year are expected) and in any other activity associated with the IDS appointment.

The successful candidates will be appointed for a first period of three years, renewable. The IDS appointment is *ad personam*.

Each selected IDS will be required to submit short annual reports of their EnVision related activities to ESA and NASA.

Should IDS positions become vacant, they will be filled through new competitive calls. ESA and NASA will decide at the end of the three-year term whether the IDS will be renewed.

### **3 LETTER OF INTENT**

Prospective proposers must submit a mandatory Letter of Intent (LoI) by the deadline indicated in Table 1. Proposals not preceded by a corresponding LoI will not be considered. LoIs are limited in length to two A4 pages (minimum font size 11 pt), and their purpose is to allow preparation for the evaluation process.

Letters of intent must be structured to contain the following information:

- Proposal title;
- Name and contact information of proposer;
- Concise description of the scientific objectives.

It is understood that the proposal's content may evolve between submission of the LoI and submission of the actual proposal.

### **4 CONTENTS OF THE PROPOSAL**

Proposals submitted in response to the AO are limited in length to 10 A4 pages (minimum font size 11 pt), and must contain the following information:

- A cover letter stating the proposal title, proposer's name and affiliation, and explicitly mentioning the proposer's title, position, and contact information (max. 1 page);
- A brief curriculum vitae also including the 10 most relevant publications (max. 2 pages);
- A description of the scientific expertise relevant to the EnVision science objectives described in [AO-D2] (max. 2 pages);
- A description of the proposed scientific investigation and a statement concerning the time availability (max. 5 pages).

In addition, the proposal must include (in the same file, but in addition to the maximum 10 pages of the proposal):

- Letters of Endorsement, signed by the proposer's Head of Institute and/or relevant funding agency/institution, with the endorsement to the proposer's application and the



explicit support with respect to the proposed activities and the availability of funding, facilities and infrastructure, as needed to the proposer for the accomplishment of the IDS tasks.

A privacy notice, available on the submission portal, provides a comprehensive overview of the measures taken to safeguard and handle personal data submitted in response to this Announcement of Opportunity.

## **5 EVALUATION CRITERIA**

The following criteria will be used (in no particular order) in assessing and evaluating individual proposals:

- Candidate's competence and experience relative to the EnVision science objectives;
- The scientific value of the proposal, and the level to which it identifies specific competences and their relevance to the EnVision Science objectives and the Science Working Team tasks described in the Science Management Plan;
- Adequacy of the time that the candidate intends to devote to activities related to the IDS role;
- Adequacy of resources available to the candidate to carry out activities related to the IDS role.



## 6 LETTERS OF INTENT AND PROPOSALS SUBMISSION

Letters of Intent and Proposals must be submitted electronically in PDF format (file size cannot exceed 10 MB) according to the instructions on the following web page:

<https://cosmos.esa.int/web/envision-ids-2024>

and according to the deadlines listed in Table 1.

Proposers will receive confirmation upon successful receipt of their Letters of Intent and Proposals.

### **Further queries should be addressed to:**

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## ACRONYMS

AO	Announcement of Opportunity
CEST	Central European Summer Time
Co-I	Co-Investigator
ESA	European Space Agency
FTE	Full Time Equivalent
IDS	Interdisciplinary Scientist
LoI	Letter of Intent
NASA	National Aeronautics and Space Administration
SMP	Science Management Plan
SWT	Science Working Team