



Call for Interest and selection procedure

12 January 2021

Space Exchange Switzerland

Brief Overview

Switzerland has been actively involved in the space sector since the early days. It is a competitive and reliable partner in this field, both within Europe and across the globe. Thanks to its innovative strength and precision technology, Switzerland has gained a solid and acknowledged position in strategically significant fields. It has been the aim of our skilled scientists and entrepreneurs to make cutting-edge science happen and to transfer the resulting applications into the economy for the benefit of society.

Switzerland puts its national interests into practice through selected international cooperation: mainly through participation in selected programmes of the European Space Agency (ESA) as well as through additional European and international space cooperation. Complementary national activities are implemented for the following purposes: to ensure that the competences of the Swiss-based research structures involved in ESA-related activities are sustainable; to create conditions that enable Swiss industry to take part in calls for tender for European institutional programmes; and to help strengthen technical competencies in established scientific and technological fields.

Against this background, SERI/SSO has put together a portfolio of clearly defined tasks and functions that support the further development of space in Switzerland, but which are not part of SERI/SSO's core tasks¹:

- Facilitate the organisation of professional training (especially courses for specialists) in the field of space;
- Organise space related outreach activities and support ESA outreach events (e.g. Astronaut visits, talks by ESA experts) in Switzerland;
- Encourage exchange and mobility of students and young professionals to ESA;
- Organization of regular national events in the space sector for professionals (in support of SERI);
- Support to SERI for stakeholder consultations in the space sector;
- Support to SERI for technology harmonization (advisor role without ministerial duties);
- Scientific NPOC (National Point of Contact) for satellite images, incl. professional / technical support for Earth observation programmes; (Starting 1.1.2022)

¹ Strategos: External evaluation of the Swiss Space Center, Final report, September 2019



Scope of the activities of the Space Exchange Switzerland

These functions shall be established in the form of a clearly defined and self-contained service offer with a set of mandated activities. They shall be hosted by a Swiss higher education institute² as the leading hosting entity, which may lead a consortium of several higher education institutes, under the umbrella name of "Space Exchange Switzerland" (SXS) and will be established by means of an agreement with the leading hosting entity ("Leading House"), after a three step selection process described below.

The SXS activities will be mandated to a consortium led by a Leading House for a period of 5 years, with yearly reporting and payment milestones and a yearly review of a proposal for a work programme for the next year.

The activities to be mandated under the umbrella of the SXS are the following:

Training

- Facilitate, in cooperation with professional associations and educational institutions, the organisation of professional training (especially courses for specialists) in the field of space;

Outreach

- Identify, in coordination with SERI, information events suitable for the younger generation, with the aim of raising awareness about workshops and events organized by ESA.

Encourage exchange and mobility of students and young professionals to ESA

- Encourage master and PhD student thesis by Swiss individuals at ESA as well as internships;
- Inform about young graduate trainee opportunities at ESA and support ESA recruitment events in Switzerland, such as "Be a Star in ESA's Universe";
- Liaise with ESA and Movetia to establish tailor made exchange programmes; and
- Organise further outreach events aimed at increasing the awareness of career opportunities at ESA

Organization of national events in the space sector

Overall responsibility for organization, advertisement and implementation of the events on behalf of the SERI:

- Organization of 2 minor and 1 major space related event over the funding period of 5 years:
 - for the industrial and scientific community;
 - in coordination with and under the auspices of the SERI/SSO; and
 - in cooperation with other partners from the national scientific and innovation ecosystem

SERI support for stakeholder consultations in the space sector

Upon specific request by the SERI/SSO:

- Plan, organize and implement stakeholder consultations (4-5 over the period of 5 years) in the space sector, e.g.
 - in view of ESA Council at Ministerial Level; or
 - in view of potential opportunities for participation in missions and programs implemented by ESA

Technical support for technology harmonization in the frame of ESA (Technology Harmonization Advisory Group THAG)

Support the Swiss Delegation to ESA in a scientific and technical advisor role with the following tasks:

- Participate in the THAG mapping and roadmap meetings (total 4 meetings p.a.),

² Cantonal University, Federal Institute of Technology or University of Applied Science

- Preparation of the mapping meeting presentations for Switzerland,
- Review the technical dossiers,
- Identify the Swiss companies which have an interest and contact them to join the meeting as expert and present their work,
- Issue reports and assessment of the technological potential of new actors and potential new niches, based on the technology harmonization activities
- Monitor and report on the evolution of the non-dependence strategy of the European Union in the area of Space technologies (Joint Task Force on Critical Space Technologies between ESA, European Commission and the European Defence Agency EDA).
- Establish and maintain a network of research institutes and Swiss businesses whose services, products or activities target ESA, and make this information available to SERI;
- Provide the network and in particular newcomers with targeted information on opportunities for tenders and advice on how to respond, complementary to information provided by ESA (particularly SME Office);

Scientific NPOC

From 1.1.2022 onwards, the leading hosting entity for the SXS activities shall also have overall responsibility for the Scientific NPOC (National Point of Contact) for satellite images, incl. professional / technical support for Earth observation programmes. The Leading House of the SXS shall coordinate closely with and identify synergies to the current activities of the scientific NPOC (National Point of Contact) for satellite images, with a view to consolidating and integrating the NPOC hosting entity and activities within the consortium starting from 1.1.2022. To that end, both entities shall identify common activities of interest, particularly in the areas of

- Promotion of the use of earth observation data
- Outreach, Space careers promotion
- Training
- Network activities Stakeholder consultations
- Technical and scientific support to SERI

While the leading hosting entity of the SXS activities shall be responsible for a coordinated approach to these activities in the context of its overall mandate for outreach, the current hosting entity of the NPOC will be, within its existing mandate, responsible for the implementation of these activities related to Earth Observation. No additional funding shall be foreseen for the necessary coordination.

Call conditions

Demonstrated scientific and technical expertise related to Space

The consortium in charge of the SXS activities must be able to demonstrate strong technical and scientific expertise related to Space. It must also have the proven skills needed to coordinate and manage the set of activities mandated under the SXS umbrella.

Demonstrated network related to space

The consortia must enjoy a solid and demonstrated international network related to space, particularly with the institutional actors (European Space Agency ESA), as well as with national actors (Industry, Academia, and Government).

Structure and funding

Beyond the tasks defined here, the activities undertaken under the Space Exchange Switzerland umbrella shall exclude all other tasks or activities. Staff involved in the Space Exchange Switzerland activities shall not participate in any projects or calls for proposals financed by third-party funds [not directly related to the activities mandated under the SXS umbrella].

Applicants must demonstrate how their hosting organization (see formal requirements) will accommodate within its existing organizational structures the staff in charge of the activities to be undertaken. A strict separation and containment of these activities with respect to other activities, particularly related to space, must be demonstrated and implemented.

Financial requirements are determined according to the specific proposals of the Leading House and proposed work plan, according to the scope of activities outlined below. SERI assumes that it will make an annual contribution of CHF 700'000 to 1'000'000 (subject to approval of its own budget by Parliament).

Formal requirements

Eligibility requirements

Proposals can be submitted by Swiss higher education institutes³ as the hosting entity.

Commitment

The higher education institution to which the Leading House is linked must issue a written commitment on the type and scope of support for the planned Space Exchange Switzerland.

This commitment must also confirm that the persons involved in the activities under the umbrella of SXS, including, if applicable, persons from consortium partners, will devote at least [60%] of their individual working time to SXS activities and that any further engagement will not create conflicts of interest.

Completeness and submission deadlines

Documents (outlines, applications) must meet formal requirements and will be critically examined by the SERI. Given the international nature of the Space Exchange Switzerland, documents should ideally be drafted in English. They must be submitted on official forms no later than the established submission deadline.

Submission process

There are three steps in the submission process:

- A. Submission and assessment of outlines;
- B. Presentation and discussion of plans with SERI; and
- C. Submission of definitive application.

A. Outlines

Outlines must be sent to SERI using the template provided. They must follow the pre-determined structure and may not exceed ten pages in length. An outline must include information about the following:

- Commitment of the higher education institution
- Draft work plan for the first 18 months;
- Coordination and operational management of the Space Exchange Switzerland activities;
- Budget planning

The deadline for outline applications is 28.02.2021. Applications must be signed and submitted in both hardcopy and electronic form to the following address:

State Secretariat for Education, Research and Innovation SERI
Swiss Space Office
Einsteinstrasse 2
3003 Bern

The electronic version must be sent to the following e-mail address:

space@sbfi.admin.ch

³ Cantonal University, Federal Institute of Technology or University of Applied Science

B. Presentation and discussion

The applicants considered in the first selection round will be requested to present and discuss their project to SERI on 09.03.2021. This presentation should last for around 30 minutes. The follow-up discussion with SERI serves to clarify expectations of all parties and help with preparations for submission of applications. Those applicants whose hosting organizations are deemed suitable will be asked to submit a formal funding application.

C. Application

The formal funding application is more detailed than the outline and takes the feedback received from discussion with SERI after the project presentation.

The content should follow the structure of the application form. The application must include the following information:

- Confirmation of Commitment of the higher education institution;
- Draft work plan for the first 18 months;
- Coordination and operational management of the Space Exchange Switzerland activities;
- Budget planning;
- CV's of key personnel

The deadline for full funding applications is 08.04.2021 (Midnight). Applications must be unbound, signed and submitted in both hardcopy and electronic form to the following address:

State Secretariat for Education, Research and Innovation SERI
Swiss Space Office
Einsteinstrasse 2
3003 Bern

The electronic version must be sent to the following e-mail address:

space@sbfi.admin.ch

Selection process

Assessment of the content of outlines and applications is preceded by a formal verification conducted by SERI. Any submissions that do not meet formal requirements will not be processed further. Formal requirements include:

- Confirmation of Commitment of the higher education institution;
- Submission by the established deadline;
- Use of the official form, completeness of documentation;

A. Assessment of Outlines

Outlines are intended to ascertain the overall suitability of the proposal. The assessment is carried out by SERI.

During the initial assessment, the following criteria are important:

- Suitability and quality of hosting entity;
- Plausibility of objectives relating to the objectives of the SXS;
- Demonstrated scientific and technical expertise related to Space

B. Presentation/Discussion

SERI will notify applicants in writing of the outcome of the outline assessment. Applicants with good chances of success will be asked to present their project to SERI representatives. The presentation will be followed by feedback and discussion. Applicants will then be requested to submit a definitive application including the points highlighted during the discussion.

C. Assessment of applications

Applications will be assessed on the basis of SERI requirements. The purpose of the assessment is to select one hosting entity for the Space Exchange Switzerland activities. The following criteria will be considered:

- Expertise of the applicants;
- Quality of implementation objectives;
- Geographic distribution of the consortium; and
- Budget relevance and plausibility.

The designated contact person will be notified in writing. Approval of the application will result in negotiation of a contract between the higher education institution and the Confederation.

Timetable

- 12.01.2021 Start call
- 28.01.2021 10:00-11:30 Online Workshop
- 28.02.2021 (Midnight) Outline Submission Deadline
- 08.04.2021 (Midnight) Full Application Submission Deadline
- Evaluation & Decision April 2021
- Preparation of contractual document and draft performance agreement for the first 1.5 years of operation Mai 2021
- Signing of the Contract for the Space Exchange Switzerland June 2021
- Start Juli 2021

Contact persons

The Swiss Space Office will handle questions related to this Call for Interest and selection procedure:

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