Call for Ideas 2019

“To identify and demonstrate disruptive space innovations based on ideas and concepts”

The Swiss Space Office of the State Secretariat for Education, Research and Innovation of the Swiss Confederation (SERI/SSO) is initiating the fourth Call for Ideas to foster low Technology Readiness Level (typically TRL 1-2) research and development studies related to space activities.

Issued for the fourth time after 2013, 2015 and 2017, the objective of this Call is to identify and demonstrate disruptive space innovations based on ideas or concepts. Thanks to a short-term implementation and a relatively light administrative element, the selected studies shall focus on technical and scientific work.

The SERI/SSO has entrusted the Swiss Space Center (SSC) with the implementation of this Call for Ideas. The SSC will provide technical support to the studies as well as networking contacts with the aim to spur ideas towards innovative products, and developing niche sectors in Switzerland.
Objectives

The main objectives of this Call for Ideas are to foster and promote Swiss technological and scientific competences that have a clear potential for space products and applications. More particularly, this Call for Ideas aims:

- to foster the development of novel ideas and disruptive concepts related to the space sector;
- to trigger the interest of new coming entities, encouraging them to enter the space domain and evaluate the potential of their proposed idea;
- to better position Swiss academia and Small and Medium Enterprises¹ (SME) with regard to future European and global activities and
- to support the development of novel technologies and services for future space science and technology applications.

Topics

For this Call for Ideas, the Swiss Space Center invites submissions on the following topics:

- Technologies for ground-based and space infrastructure, from materials (e.g Micro-Nano Technologies or Materials, parts and processes) to (sub)-systems (e.g equipment, product or instrument),
- Applications ideas based on space assets, including those responding to user needs at the federal or regional level,
- Application domains with a high potential for innovation, especially, observation, telecommunication, navigation, space for climate, human spaceflight, life science.

The proposed topics can be genuinely novel space ideas or spin-ins from non-space application domains, including digitalisation. As a general rule, a transfer from non-space to the space domain decreases the Technology Readiness Level TRL (WEBLINK) of existing technologies by 1-2 levels.

These focal topics are based on the Swiss Space Implementation Plan SSIP 2018-2020 (Federal Department of Economic Affairs, Education and Research, 2017 WEBLINK).

Eligibility

The present “Call for Ideas” is open to all Swiss actors. In light of the above mentioned objectives, first consideration may be given to Swiss SMEs and to Swiss Universities, Swiss Federal Institutes of Technology (EPFL / ETH Zürich), and Universities of Applied Sciences (HES/FH). If you have any questions concerning your eligibility, please contact the Swiss Space Center (Julien Bonnaud).

¹ Entities with a registered seat in Switzerland and with 1-249 employees (full-time equivalents)
Format of the proposal

1. Cover letter
2. Technical & administrative proposal (10 pages max.)

The technical & administrative proposal shall be structured according to the following main sections:

- Technical and/or scientific objectives
- Description of the study
- Key personnel
- Financial aspects
- Payment plan (in principle 20% at kick-off, and 80% after reception of the final report)

Please note that detailed costing based on ESA PSS standard is not required.

Duration of the study and meetings/reviews

The proposed studies shall last for a maximum of 6 months from the kick-off to the delivery of the final report.

The following reviews are planned at contractor premises or by teleconference:

- Kick-Off meeting (date T0)
- Progress Meeting (date T0 + 3 months)
- Final Presentation (date T0 + 6 months)

Deliverables

A Final Report of the activity shall be provided to the Swiss Space Center at the end of the study, together with the presentations given during the reviews/meetings. The Final Report shall be self-standing and shall provide a complete description of all the work done during the activity. It shall cover the whole scope of the activity, i.e. a comprehensive introduction of the context, a description of the programme of work and report on the activities performed as well as the main results achieved. The deliverables shall be provided in electronic format (PDF).

Financial support

A maximum amount of 20'000 CHF is allocated to each selected study, to be considered as a unique subsidy which cannot be extended. The funding shall be used exclusively to pay salaries. No management or administrative costs are foreseen under this scheme. There is no direct follow-up funding foreseen in the frame of this Call for Ideas.

The financial support being a public subsidy, the Value-Added Tax (VAT) does not apply (Swiss law on the VAT: MWSTG/LTVA/LIVA Art. 18, WEBLINK).
**Intellectual property rights and confidentiality**

Intellectual property created in the study will remain with the proposer. In case the study is conducted by a consortium, an IP agreement must be submitted to the Swiss Space Center (attn. Julien Bonnaud) **3 working days before** the kick-off meeting.

With the exception of the title of the study and the lead entity, no information about the funded projects will be publicly available, unless prior written consent is obtained from the proposer(s).

**Evaluation**

During the evaluation exercise, consideration will be given to concepts and ideas with a clear potential in one or more of the following areas:

- scientific excellence,
- clear potential for commercialization,
- benefits for society and citizens,
- potential for use in key applications (high-end niche products).

The Swiss Space Center will perform the technical and scientific evaluation by setting up an internal evaluation board. If needed, the evaluation board may consult external experts for recommendations. The final selection will be made by the SERI/Swiss Space Office.

**Schedule**

- **11 March 2019:** Publication of the “Call for Ideas”
- **8 April 2019:** Deadline to submit the proposals to the Swiss Space Center
- **20 May 2019:** All participants are informed of the outcome of their submissions by the Swiss Space Center
- **June 2019:** Kick-off meetings / Start of studies
- **29 November 2019:** End of studies, Final Report submitted

**Submission of the proposals**

*Only proposals received by Monday 8 April 2019 at one o’clock pm (13:00) will be accepted for evaluation.* Proposals, written in English, shall be submitted in electronic format (PDF) to the following address:

EPFL  
Swiss Space Center  
Julien Bonnaud  
PPH 319, Station 13,  
CH-1015 Lausanne  
Tel: +41 21 693 73 72  
Email: julien.bonnaud@epfl.ch
Questions and requests for clarifications

All questions related to this Call for Ideas shall be submitted by email to Julien Bonnaud, at the latest 5 working days prior to the submission deadline. All applicable information will be published on the SSC’s website: WEBLINK