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# **Swiss Space Center**

# **Terms of Reference**

Revised by:

#### **Board of Directors**

Marc Gruber

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Swiss Space Center



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# **RECORD OF REVISIONS**

Issue / Rev.	Date			
issue / Rev.	Date			
1/0	21.09.2012			
2/0	01.11.2012			
3/0	06.11.2012			
4/0	22.11.2012			
5/0	05.12.2012			
6/0	31.10.2013			
7/0	03.10.2015			
8/0	26.03.2020			

for EPFL: for ETH:

Marc Gruber Detlef Günther

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### **ACRONYMS AND ABBREVIATIONS**

AA Annual Assembly

BoD Board of Directors

CSEM Centre Suisse d'Electronique et de Microtechnique

Empa Swiss Federal Laboratories for Materials Science and Technology

EPFL École Polytechnique Fédérale de Lausanne

ESA European Space Agency

ETH Eidgenössische Technische Hochschule Zürich

RTO Research and Technology Organisation

SC Steering Committee

SERI State Secretariat for Education, Research and Innovation SERI

SSC Swiss Space Center

SSIP Swiss Space Implementation Plan

SSO Swiss Space Office

UAS University of Applied Sciences



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### 1 BACKGROUND AND MISSION

# 1.1 Background

The Space Center EPFL was created in 2003,

- to federate needs, resources, opportunities and purposes;
- to strengthen the position of its partners in the Space domain, from an institutional, academic and industrial point of view;
- to support the implementation of the Swiss Space Policy.

The Space Center EPFL was formally dissolved on December 1<sup>st</sup>, 2011 by the unanimous vote of the Space Center EPFL Steering Committee to dissolve itself and to transfer its on-going activities to the newly created Swiss Space Center (SSC). The SSC is the continuation of the EPFL Space Center whose role has been broadened to cover a larger national scope.

The three founding institutions, i.e. the Swiss Space Office (SSO) and the Swiss Federal Institutes of Technology in Lausanne and Zürich (EPFL, ETH) have set-up the SSC in its current form.

### 1.2 Mission

The Swiss Space Center contributes to the implementation of the Swiss Space Policy. It provides a service supporting institutions, academia and industry to access space missions and related applications, and promote interaction between these stakeholders. Its main tasks are

- to network Swiss research institutions and industries on national and international levels in order to establish focused areas of excellence internationally recognized for both space R&D and applications;
- to facilitate access to and implementation of space projects for Swiss research institutions and industries for established actors as well as for newcomers;
- to provide education and training;
- to promote public awareness of space.



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### 2 MEMBERSHIP

# 2.1 Membership categories

SSC members shall be classified in three categories:

#### Academic institution

whose main mission is education, research, and the transfer of technology and knowledge

Public higher education institutions (ETH, EPFL, Universities, UAS, ...)

#### Industry

whose main mission is the production and sale of goods and services

Companies with commercial goals

#### Research and Technology Organization (RTO)

Whose main mission is to provide research and development, technology and innovation services to industries, government and other organizations to ensure sustainable development of society

Public or non-profit research and technology organizations (CSEM, Empa, ...)

# 2.2 Applications

Applications for Membership shall be submitted to the SSC. They shall contain all information as listed in annex 1.

Applications for membership are processed by the Steering Committee. They will be accepted if the requestor

- is a Swiss institution/company. Criteria for evaluating the Swissness of a company are the ones as stipulated in the ESA Convention<sup>1</sup>.
- is actually or potentially involved in space activities (space/ground/user segment).

# 2.3 Membership fees and benefits

The annual membership fees will be established according to the status of the member and the following rules:

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Annex V 'Industrial Policy', Art. II.3: 'The question whether an enterprise should be considered to belong to one of the Member States shall be settled in the light of the following criteria: location of the enterprise's registered office, decision-making centres and research centres, and territory on which the work is to be carried out. ... '



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Academic institution

CHF 5'000 per institution

Industry

CHF 1'000 start-up (in principle for two years)

CHF 5'000 < 2 MCHF annual turnover in the space domain CHF 10'000 < 10 MCHF annual turnover in the space domain CHF 20'000 > 10 MCHF annual turnover in the space domain

RTO

CHF 5'000 per institution

Members may contribute funds in addition to the basic membership fees in order to cover activities that are provided by the SSC exclusively for a particular member ('Third party activities', see chapter 4.2.2).

SSC Members enjoy the following benefits:

- participation in the vote for a representative of its membership category for the Steering Committee;
- participation in the Annual Assembly;
- preferential rates for events organized by the SSC;
- participation in working groups;
- participation in the SSC members' network.



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### 3 ORGANIZATION

# 3.1 Governing bodies

The SSC has three distinct governing bodies:

- the Board of Directors
- the Steering Committee
- the Annual Assembly.

Their tasks, composition and functioning is described below. Their roles with respect to the strategic and operational governance documents are listed in annex 2.

#### 3.1.1 Board of Directors

#### **Tasks**

The Board of Directors (BoD) is the ultimate authority for all matters concerning the SSC (managerial, financial, strategy, human resources, ...). The Board of Directors

- issues the Terms of Reference and approves any amendments thereof;
- · defines the Strategic Guidelines;
- appoints the Director of the SSC;
- approves
  - o the Strategic Plan
  - the SC Activity Report
  - o the Work Plan
  - the SSC Activity Report
  - o the Financial Plan
  - the Annual Budget
  - o the Financial Report;
- approves
  - cooperation activities between the SSC and foreign actors;
  - o agreements with non-member entities.

The BoD delegates the operational supervision of the SSC to the Steering Committee. It litigates matters of discord that could occur between the Steering Committee and the SSC Director.



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#### Composition

The BoD consists of a representative of ETH and EPFL. ETH and EPFL each designate one of their vice-presidents as members. A third member may be elected by these two permanent members for a period of two years.

A representative of the SSO will be attending the meetings as a standing Member of the board without voting right.

The Chairperson of the Steering Committee and the Director of the SSC may be invited by the Chairperson for specific agenda points.

#### Chair

The Chairperson of the BoD is alternatively the representative from ETH or EPFL, on a two years rotational basis.

#### **Secretariat**

The Secretariat for the BoD is provided by the SSC.

#### **Rules of Procedure**

The Rules of Procedure, frequency of meetings, etc. of the BoD are agreed between its members. Decisions are taken by consensus.

### 3.1.2 Steering Committee

#### **Tasks**

The Steering Committee (SC) supervises the SSC. It is responsible for the strategic governance of the SSC and ensures that the SSC follows the strategic and financial directives issued by the BoD. The Steering Committee

- establishes the Strategic Plan based on the Strategic Guidelines, and submits it to the BoD for approval;
- defines the contents of the Work Plan;
- analyses and recommends to the BoD for approval
  - o the SSC Activity Report
  - the Financial Plan
  - the Annual Budget
  - the Financial Report;
- approves new members of the SSC;
- authorizes projects that are not in line with the work plan agreed upon by the BoD;
- edits the SC Activity Report.

In order to do so, the Steering Committee



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- identifies/debates/evaluates state of the art technologies and scientific domains in which the Swiss Space community is active or could gain new perspectives;
- identifies key leading technologies in these domains and proposes ways to reach the required level of expertise within Switzerland;
- reinforces collaboration between its members and proposes coordination activities and projects;
- collects inputs from the whole Swiss Space Community.

For the fulfilment of its tasks, the SC may set up ad hoc or permanent working groups and defines their mandates as well as their rules of procedure.

The Steering Committee reports to the BoD and to the Annual Assembly.

#### Composition

The SC is composed of six members coming respectively from ETH, EPFL, one academic representative, two industrial representatives, and one RTO representative.

The academic, industrial and RTO representatives are elected by the respective member category by simple majority of the voting members. The quorum is achieved if the majority of the respective member category participates in the vote (exception: academic members from EPFL and ETH do not participate in the vote, are not eligible, and are not counted for the quorum). Members are elected for a two-year period. Re-election is possible twice. The vote is organised by the SSC Director in due time before the Annual Assembly takes place.

The SSC Director is invited by the Chairperson on a case-by-case basis without the right to vote.

The SC may invite experts for specific points of the agenda, or for the fulfilment of specific tasks.

A representative of the SSO will be attending the meetings as a standing Member of the SC without voting right.

#### Chair

The Chairperson of the SC is alternatively the representative from EPFL or ETH, on a two years rotational basis.

The Chairperson represents the interests of the SC and works in close collaboration with the SSC Director to implement the strategic plan.

#### Secretariat

The Secretariat for the SC is provided by SSC.

#### **Rules of Procedure**

The SC will meet at least three times a year to fulfil its tasks. Decisions are taken by consensus. If no consensus can be reached, simple majority of members present will decide, with the chair having the casting vote.

The SSC secretary will keep the minutes of the meeting including a list of actions.



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### 3.1.3 Annual Assembly

#### **Tasks**

The Annual Assembly (AA) is the yearly gathering of all Members of the SSC for information exchange and networking. The AA

- · takes note of
  - o the SSC Activity Report
  - o the SC Activity Report;
- provides comments about
  - o the Strategic Plan
  - o the Work Plan.

The Annual Assembly may be complemented by an annual meeting that is open to all Swiss space actors, whether they are SSC members or not.

#### Composition

The Annual Assembly includes all members of the SSC.

#### Chair

The Annual Assembly is chaired by the Director of the SSC.

#### **Secretariat**

The Secretariat for the Annual Assembly is provided by the SSC.

#### **Rules of Procedure**

The Annual Assembly meets once a year.



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# 3.2 SSC Director

The SSC Director is the Chief Executive Officer of the SSC. He or she takes all measures necessary for the management of the SSC, the execution of its tasks and the fulfilment of its purpose. The Director

- contributes to the establishment of the Strategic Plan;
- contributes to the establishment of, and implements the Work Plan;
- establishes
  - o the Financial Plan
  - o the Annual Budget
  - o the Financial Report;
- edits the SC Activity Report;
- chairs the Annual Assembly;
- organizes the vote for the academic and industrial representative in the Steering Committee.

The SSC Director reports to the Steering Committee, which acts on behalf of the Board of Directors.



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### 4 ACTIVITIES

# 4.1 Activity areas

The SSC as a truly national and neutral entity will carry out all its activities in the principle of fairness between members and non-members of the SSC. The SSC shall ensure that it does not distort competition between Swiss entities.

According to its mission, the SSC's activities are mainly carried out in the following three areas: promotion, academia, and consulting.

### 4.1.1 Space promotion / awareness / networking

The SSC will actively support the promotion/awareness/networking of space activities in Switzerland, in particular through the organization of public events, dissemination of general information on space opportunities (in particular ESA related), forwarding of space calls, etc.

The SSC will provide administrative and programmatic support for the response to calls for space projects.

#### 4.1.2 Academic activities

The SSC's 'academic activities' may encompass academic activities in a strict sense such as the provision of curricula at Bachelor or Master level, the hosting of Theses and student projects (possibly under governance of academic institutions outside EPFL and ETH), exchange of professors, etc. Furthermore, 'academic activities' may also cover lectures, seminars, workshops and training courses that are open to industry.

# 4.1.3 Consulting activities

The SSC will offer consulting activities in areas where the SSC has a unique competence in Switzerland. Requests for consulting services where the necessary expertise exists in Switzerland outside the SSC, the requestor is relayed to those entities having the relevant expertise (members or non-members).

The SSC provides its services to members at incurred costs. Services that are provided to non-members are calculated in line with industrial practice, but in any case not at lower prices than incurred costs.

Consulting activities are exclusively reported by the SSC Director to the Board of Directors.



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# 4.2 Funding of activities

Depending on the funding source, the SSC's activities are divided into 'core activities' and 'third party activities'.

#### 4.2.1 Core activities

Core activities are those activities that are defined by the founding institutions. They include in particular:

- support to the implementation of the Swiss Space Policy (Mandat de Prestations SSO-SSC);
- tasks defined by EPFL and ETH (e.g. education in Space Technology, etc.).

### 4.2.2 Third party activities

Third party activities are all those activities that are funded by parties other than the founding members. They include activities that are

- funded under the membership contract but exceed the basic services for members (see chapter 2.3);
- funded under a dedicated contract with Swiss actors (members or non-members) or foreign actors. Cooperation activities with foreign actors need the prior approval from the BoD.



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# **5 AMENDMENTS**

Any amendment of this document, with the exception of Annex 1 that may be revised by the Steering Committee, needs the unanimous approval of the BoD.



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### Annex 1: Information to be provided by applicants for membership

- Name of company/institution
- Address
- Legal status and nationality
- URL
- Organization/organigram
- No. of staff
- Annual turnover
  - o overall
  - o related to space
- Point of contact
  - o name
  - o phone no.
  - o email address
- Main areas of activities
  - overall
  - related to space
- Key competences
  - o overall
  - o related to space
- Motivation for joining the SSC
- Intended activities within SSC
- Remarks



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### **Annex 2: SSC Governance Documents**

Title Description	Description	Role of				D	
	Description	SSC Director	Board of Directors	Steering Committee	Annual Assembly	Frequency	Due date
Terms of Reference	All aspects of governance	takes note and implements	Author	takes note and implements	takes note and implements	as needed	
Strategic Guidelines	Should cover next five to ten years		Author	takes note and implements		as needed	
Strategic Plan	Motivation and justification (e.g. ESA requirements, evolving international context) for work plan. Living document with a two- to five-year projection; based on - the BoD's Strategic Guidelines - the Swiss Space Implementation Plan (SSIP)	comments (2) <sup>2</sup>	approves (4)	Author (1)	comments (3)	annually	30 November

<sup>-</sup>

<sup>&</sup>lt;sup>2</sup> Figures in parentheses indicate the sequence of activities.



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Title	Description	Role of				Due dete	
		SSC Director	Board of Directors	Steering Committee	Annual Assembly	Frequency	Due date
Work Plan	Description of activities planned to be carried out for the coming two years, based on - SC Strategic Plan - directives from founding members - Working Group reports	Author 2: <b>How</b> shall it be implemented? (2) implements	approves (4)	Author 1: What shall be done? (1)  major elements may be contributed by Working Groups	comments (3)	annually	30 November
SC Activity Report	Detailed report		approves (2)	Author (1)	takes note (3)	annually	30 November
SSC Activity Report	High level description of activities carried out in the past year (Executive Summary for public distribution)  Confidential third party activity information is to be included in a separate annex for the attention of the BoD only.	Author	approves	analyses / recommends	takes note	annually	30 November
Financial Plan	Living document with a two- year projection	<u>Author</u>	approves	analyses / recommends		semi-annually	
Annual Budget		<u>Author</u>	approves	analyses / recommends		annually	31 October
Financial Report	Detailed report	<u>Author</u>	approves	analyses / recommends		semi-annually	