
Charter on the establishment of the Space for Climate Observatory (SCO)

Article 1 – Definitions	3
Article 2 – Guiding principles.....	4
Article 2.1. Best-efforts basis.....	4
Article 2.2. Consideration of End users.....	4
Article 2.3. Collaboration with Third parties	4
Article 2.4. Reporting of activities.....	4
Article 2.5. Exchange of knowledge and Open science.....	4
Article 3 – Objectives	4
Article 4 – Core functions.....	5
Article 5 – Nature of Signatories’ participation.....	5
Article 5.1. Role of Signatories	5
Article 5.2. Definition of Focal Points	5
§1 National Signatories	5
§2 International and regional Signatories	6
§3 Organisation of a Focal Point	6
Article 5.3. Role of Focal Points	6
Article 6 – Governance	6
Article 6.1. Steering Committee.....	6
Article 6.2. Programme Committee	7
Article 6.3. Secretariat.....	7
Article 7 – Implementation	8
Article 7.1. Work Programme	8
Article 7.2. SCO Projects	8
Article 7.3. Working Groups.....	9
Article 8 – Rules of Procedure	9
Article 9 – Finances.....	9
Article 10 – Request to join the Charter	9
Article 11 – Entry into Effect	10
Article 12 – Withdrawal	10
Article 13 – Amendments and Termination	10

Climate change is affecting every country on every continent. It is affecting lives and disrupting economies. Weather patterns are changing, sea levels are rising, and weather events are becoming more extreme. It is no longer time to speak about the “future” impacts of the changing climate. Looking ahead towards a period where significant re-thinking and re-structuring of the world is essential, humanity must use all available assets and place science, technology and innovation at the centre of all decision and policymaking.

The Signatories,

Recognising that space infrastructure offers a broad range of benefits in monitoring and understanding the Earth’s climate, and that space-based technologies and space-derived information play a key role in climate knowledge and science, thus supporting monitoring, early warning, mitigation, adaptation and, ultimately, resilience,

Emphasising that satellite technology is already demonstrating its unparalleled value by:

- Providing global data that enable a standardised and periodic global climate picture and, in particular, by contributing to more than half of the 54 Essential Climate Variables (ECVs) identified by the Global Climate Observing System (GCOS) that offer a more precise understanding of climate change and its drivers;
- Providing a wealth of data on the impact of climate change on the environment and on human activities, supporting informed decision making at local, national, regional and global level,

Convinced therefore that space-based information can contribute to effective climate action as data gained from satellites can be used to inform policies, strategies, and activities; to monitor the effectiveness of mitigation and adaptation plans; and to strengthen the capabilities of local and national communities to reduce their vulnerability to climate change,

Convinced that coordinating global efforts to promote the peaceful use of satellite technology can better harness space technology to tackle climate change, and increase the efficiency of its applications for sustainable and successful climate action at local level,

Recalling the *Joint Declaration of Interest for a Space Climate Observatory*, opened for signature on 17 June 2019, to address the need to step up international coordination to enable accurate assessment and monitoring of the consequences of climate change based on space and in situ observations as well as numerical models,

Mindful of the Space Climate Observatory *Terms of Reference* adopted on 30 January 2020 by its Steering Committee, as well as the decision within its fifth session to further proceed with the redaction of a Charter to define its governance,

Also recalling

- a. United Nations General Assembly Resolution 41/65 on *Principles of remote sensing of Earth from Space*, adopted on 03 December 1986, and notably Principle X according to which “remote sensing shall promote the protection of the Earth’s natural environment” and Principle XI stating that “remote sensing shall promote the protection of mankind from natural disasters”;
- b. *United Nations Framework Convention on Climate Change* (UNFCCC), adopted at the Rio Summit on 09 May 1992;
- c. United Nations General Assembly Resolution 70/1 on *Transforming our world: the 2030 Agenda for Sustainable Development*, adopted on 25 September 2015, which calls for the exploitation of a wide range of data, including Earth observation (EO) data and geospatial information, in order to support the sustainable development of nations and regions;
- d. The *Paris Agreement*, adopted on 12 December 2015 with the objective to strengthen the global response to the threat of Climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels. The agreement also aims at enhancing the

ability of countries to deal with the impacts of Climate change, through appropriate financial flows, a new technology framework and an improved capacity building framework;

Recognising the opportunity to complement and support the ongoing actions generated by the above-mentioned decisions and strategies for the benefit of all Signatories,

Hereby agree to establish a Charter for the Space for Climate Observatory (SCO) organising a non-binding international partnership supported by the active involvement of the Signatories, with the overarching goal to promote and facilitate the use of space technology for climate action by making available to interested users information, expertise, tools and applications related to monitoring, tracking and mitigating or adapting to impacts of climate change.

To this end, agree as follows:

ARTICLE 1 – DEFINITIONS

For the purpose of this Charter on the establishment of the SCO, the following terms have the meaning set forth below:

- “Charter” refers to this document, the *Charter on the establishment of the Space for Climate Observatory*;
- “End users” designate the individuals and organisations who directly use and benefit from SCO Projects to conduct their activities and/or receive information on climate-related issues of their local environment. End users are not necessarily Signatories, but can be;
- “Climate change” is defined as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”, as per Article 1 of the UNFCCC;
- “Climate action” is defined as efforts to reduce greenhouse gas emissions and “strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; integrate climate change measures into national policies, strategies and planning; improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”, as defined in Goal 13 “Take urgent action to combat climate change and its impacts” in United Nations General Assembly Resolution 70/1;
- “Local level” refers to a geographic area of a smaller size than the principal administrative division in a given country;
- “Open science” is defined following the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) *Recommendation on Open Science* (SC-PCB-SPP/2021/OS/UROS) adopted in November 2021, in particular as a construct aiming to make “scientific knowledge openly available, accessible and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community”;
- “Regional level” refers to a geographic area composed of two or more adjacent countries;
- “Projects” designate satellite-data derived applications for climate change monitoring, mitigation and adaptation defined precisely in Article 7.2 of this Charter;
- “Signatories” or “Signatory” designate the entities that have signed the Charter;
- “Third parties” designate individuals and organisations that are not Signatories to the Charter but whose expertise can be relevant to the objectives and activities of the SCO.

ARTICLE 2 – GUIDING PRINCIPLES

Article 2.1. Best-efforts basis

The Signatories contribute to the activities of this Charter on a best-effort basis to pursue the objectives stated in Article 3.

This Charter does not constitute a Treaty as defined in the *Vienna Convention on the Law of Treaties* adopted on 23 May 1969. This Charter and any activity under it do not affect any existing international rights and obligations of the Signatories.

Article 2.2. Consideration of End users

Projects are run in close coordination and cooperation between the involved Signatories and End users.

Article 2.3. Collaboration with Third parties

The involvement of Third parties is encouraged in all activities under this Charter.

Article 2.4. Reporting of activities

All Signatories share information on activities led under this Charter to achieve the agreed objectives specified in Article 3 and in the Work Programme (Article 7.1), in accordance with their national laws, regulations and procedures.

Article 2.5. Exchange of knowledge and Open science

The SCO aims at strengthening the collaboration between Signatories in order to facilitate the sharing of knowledge and expertise and to foster more active engagement through Local, national, Regional and international collaborative Climate action.

The activities of the SCO strive to pursue a general principle of Open science, subject to third parties' rights, specific restrictions formulated by each Signatories in accordance with national laws, regulations and procedures.

ARTICLE 3 – OBJECTIVES

Having in mind that space applications are essential tools for preparedness, adaptation, mitigation and resilience to the impacts of Climate change, the SCO aims to:

- (a) Support global Climate action enabled through space technology to facilitate collaborative activities at local, national, regional and international levels, and improve the understanding of processed space data and derived information for Climate action on Local, national, Regional and international levels if possible;
- (b) Develop capacities to study, monitor, mitigate and adapt to the impacts of Climate change at local, national, regional and international levels by using satellite-based tools in combination with field data and models;
- (c) Exploit the full potential of space technologies for Climate change monitoring, mitigation and adaptation to meet climate objectives, and increase awareness about its benefits and to monitor and to support the implementation of activities;
- (d) Establish mechanisms to facilitate, enable and support:
 - i. Exchanges on Climate actions supported by space applications;
 - ii. Sharing experiences, toolkits and methods on the application of space technology for Climate action;

- iii. The promotion of the use of good practices for using space technologies to meet climate objectives;
- (e) Reach a wide diversity of actors in both space and Climate change sectors to foster cooperation between space and government agencies; national, regional and international public organisations, institutions and agencies; academic and research institutions; potential End users; and national and international private sector organisations and institutions.

ARTICLE 4 – CORE FUNCTIONS

Signatories recognise that the following core functions are necessary to meet the objectives defined in Article 3 and work towards their implementation:

- (a) Coordinate Climate action enabled through space technology, in particular to allow the emergence or the support of SCO Projects satisfying the criteria defined in Article 7.2, as well as facilitate collaborative activities with End users and Third parties;
- (b) Share space data, knowledge, and applications;
- (c) Raise awareness on the role of space technology and applications to tackle climate issues;
- (d) Provide visibility to Climate action enabled through space technology, support their development and facilitate their implementation at local, national, regional and international level;
- (e) Foster international partnerships and mobilise resources.

ARTICLE 5 – NATURE OF SIGNATORIES’ PARTICIPATION

Article 5.1. Role of Signatories

Signatories can take part in the SCO activities through notably:

- the actions coordinated by their relevant Focal Points (Article 5.2);
- their overall effort in acting towards the implementation of the Work Programme (Article 7.1);
- their participation to Working Groups (Article 7.3);
- communicating and raising awareness on SCO activities.

All Signatories can get involved within SCO activities, regardless of their private or public nature. However, only Signatories of public nature may contribute to the governance of the SCO by assuming the role of Focal Points (Article 5.2).

Article 5.2. Definition of Focal Points

Focal Points act as intermediaries for the implementation of SCO activities. This role is assumed by Signatories of public nature whether the Signatory is attached to a country (§1), or is an international or regional organisation (§2). In both cases, the role is assumed in the exact same way.

§1 National Signatories

For national Signatories, i.e., Signatories directly affiliated to a country, the possibility to assume the role of a Focal Point, also called National Focal Point, depends on the number of Signatories pertaining to their country:

- If the Signatory is the first entity from their country to sign this Charter, it is de facto considered as the National Focal Point for this country, and will continue to assume this role after the signature of other entities from the same country;
- If two or more Signatories from the same country are willing to sign the Charter at the same time and no National Focal Point has already been set up, the aspiring entities should find an agreement to designate which one will assume the role of National Focal Point.

In case all Signatories from the same country unanimously express the desire to replace the entity acting as National Focal Point, they collectively notify the Secretariat and indicate the newly-designated National Focal Point.

§2 International and regional Signatories

International and regional organisations are automatically considered as Focal Points when signing the Charter, unless they do not wish to assume this role.

If such an organisation decided not to assume the role of Focal Point when signing the Charter, but is willing after its signature to increase its involvement within the SCO and become a Focal Point, it can submit a request to the Secretariat. The request will be examined by the Steering Committee and require a simple majority to be accepted.

§3 Organisation of a Focal Point

The functioning of a Focal Point is left entirely to the discretion of the involved Signatory of public nature, the only requirement being that at least one person pertaining to the entity is designated to carry out the functions defined below.

Article 5.3. Role of Focal Points

At their relevant level, Focal Points are tasked with:

- coordinating the involvement of Signatories within the SCO. In particular, Focal Points coordinate the emergence and support of SCO Projects at their level;
- relaying information from their level to all the Signatories and the Secretariat. In particular, Focal Points regularly inform the Secretariat about the actions achieved towards the objectives of the SCO. They also notify the Secretariat of requests to sign the Charter;
- relaying information from the SCO to their Signatories. In particular, Focal Points keep the Signatories informed of Steering Committee decisions and activities of interest;
- communicating on the SCO and its activities to the public.

Within the SCO, Focal Points represent Signatories in the Steering Committee (Article 6.1) and therefore take part in the decision-making of the SCO. Each Focal Point has one vote in the Steering Committee.

ARTICLE 6 – GOVERNANCE

Article 6.1. Steering Committee

The Steering Committee is the main decision-making body of the SCO and is composed of all Focal Points.

The Steering Committee holds ordinary meetings at least twice a year and extraordinary meetings at any other time deemed necessary by at least two-thirds of the Focal Points.

Decisions made by the Steering Committee include:

- the nomination of the Programme Committee (Article 6.2);
- the approval of the Work Programme (Article 7.1);
- the approval of Working Groups (Article 7.3);
- the examination of requests to join the Charter (Article 10).

Unless otherwise defined, decisions of the Steering Committee are adopted by a two-thirds majority of the Focal Points.

Article 6.2. Programme Committee

The Programme Committee is in charge of overseeing the implementation of the SCO activities, with the support of the Secretariat. In particular, it is responsible for:

- drafting the Work Programme (Article 7.1);
- ensuring that SCO Projects match the required criteria (Article 7.2);
- monitoring the work achieved within dedicated Working Groups (Article 7.3).
- monitoring the progress of SCO Projects and Working Groups activities towards the achievement of the objectives defined in Article 3 and detailed in the Work Programme;

The Programme Committee follows the Rules of Procedure adopted by the Steering Committee according to Article 8 of this Charter, considering that:

- The Programme Committee is composed of a restricted number of Focal Points, depending on the total number of Signatories;
- Nominations take place on a rotating basis, ensuring fair geographical representation and continuity;
- The composition of the Programme Committee is approved by a two-thirds majority decision of the Focal Points in the Steering Committee;
- The Programme Committee holds meetings at least four times a year.

Article 6.3. Secretariat

The Secretariat supports the SCO and its subsidiary bodies, and is in charge of administration, including but not limited to:

- Supporting and coordinating activities to facilitate the implementation of the Steering Committee decisions;
- Providing substantive secretariat services to the meetings of all subsidiary bodies;
- Gathering, compiling and publishing information related to the SCO activities and the progress made by every Signatories;
- Handling the overall communication of the SCO and its website;
- Enabling international cooperation and collaboration by being the entry point for any inquiries related to the SCO.

The Secretariat also works closely with the Programme Committee to oversee the progress of SCO activities.

The Secretariat is under the responsibility of one Signatory, who provides it as an in-kind contribution. Under the coordination of the responsible Signatory for the Secretariat, other Signatories may provide additional in-kind contributions to the Secretariat and its activities. The Secretariat's responsibility can be attributed to another Signatory by decision of the Steering Committee.

To ensure an efficient launch of SCO activities under this Charter, and given its role as initiator of the *Joint Declaration for a Space Climate Observatory*, it is proposed that the Secretariat be first provided by CNES.

ARTICLE 7 – IMPLEMENTATION

Article 7.1. Work Programme

The Work Programme contains the description of the activities conducted to implement the core functions defined in Article 4 and necessary to achieve the objectives defined in Article 3. The Work Programme also describes the approach taken in order to achieve the objectives of the SCO and to ensure that the SCO works smoothly. The Work Programme will be updated periodically in coherence with the Rules of Procedure (Article 8).

The Work Programme is drafted up by the Programme Committee, with the support of the Secretariat. It is approved by the Steering Committee.

The Work Programme is carried out by all the Signatories, with the help of Third Parties involved accordingly, throughout its execution.

The Work Programme, as detailed in the Rules of Procedure, includes the description of:

- the Secretariat activities;
- the SCO Project-related activities;
- the Working Groups activities;
- the in-house activities of the Signatories addressing SCO objectives and implementing SCO core functions.

Article 7.2. SCO Projects

SCO Projects designate satellite-based applications for Climate change monitoring, mitigation and adaptation supported by SCO Signatories and meeting the following criteria:

- C1. Addressing the needs of End users within a specific geographic area;
- C2. Proposing operational and practical software(s);
- C3. Making the best use of available satellite, environmental, climate, in situ and socio-economic data, at a resolution adapted to the problem;
- C4. Building on (pre-)operational and research infrastructures, services and local data provision;
- C5. Having a built-in potential for extending to several geographic areas.

SCO Projects are also encouraged to meet the following optional criteria:

- OC1. Federating a consortium of scientists, companies and/or public authorities able to generate new knowledge, innovative and effective core methodologies and practical tools for decision support;
- OC2. Promoting a methodology based on the state of the art including the latest developments in artificial intelligence and related computing infrastructures;
- OC3. Promoting the use of open-source tools and move towards an open final tool;
- OC4. Proposing funding schemes for Projects involving communities in their initial phase, and defining the scope of recourse to the private sector for future developments;
- OC5. Including an analysis of the associated business model;
- OC6. Considering international cooperation towards Least Developed Countries, as defined by the United Nations Department of Economic and Social Affairs, benefiting from development aid.

The emergence, support and communication of SCO Projects is supported by the Focal Point(s) in charge of it. Focal Points are encouraged to ask for international expertise within the SCO and its Signatories to assess and/or improve the Projects.

Information on the Projects, including but not limited to descriptions, partners, achievements, associated contact details, can be shared by the relevant Focal Points to the Secretariat, in order to be made available to the general public.

Article 7.3. Working Groups

Working Groups are consultative bodies that are formed to explore, discuss and/or provide recommendations on how to address specific themes relevant to the SCO objectives. All Signatories can take part in the activities of the Working Groups.

Requests to form a Working Group are notified to the Secretariat and are examined by the Steering Committee. Their approval requires a two-thirds majority.

The activities of the Working Groups can be supported by Third parties upon invitation of Focal Points.

ARTICLE 8 – RULES OF PROCEDURE

The Steering Committee defines the Rules of Procedure of the SCO to exhaustively clarify its implementation, as well as the attributions and responsibilities of each body defined in Article 6.

The Rules of Procedure will be adopted by consensus of the Steering Committee within a year of the entry into effect of the Charter. The adopted document may be revised by a two-thirds majority after its first adoption.

ARTICLE 9 – FINANCES

Each Signatory bears the cost of its own contributions to SCO activities. The activities under this Charter shall not involve any exchange of fund or payment among the Signatories.

ARTICLE 10 – REQUEST TO JOIN THE CHARTER

After the establishment of the SCO by the first Signatories of this Charter and its entry into effect, any entity desiring to contribute to the objectives under Article 3 through the core functions established in Article 4 and agreeing to respect the Guiding Principles laid out in Article 2 can request to join the Charter. The procedure depends on the nature of the entity:

- For national entities, the request should be made through the National Focal Point if already existing, as defined in Article 5.2, or directly addressed to the Secretariat if a National Focal Point has not yet been established in their country;
- For international or regional entities, the request should be addressed to the Secretariat directly.

This distinction applies equally to public and private entities. However, as stated in Article 5.2, private entities may not become Focal Points. Therefore, the existence of a Focal Point is a prerequisite for the involvement of national, private entities.

The Steering Committee examines requests to join the Charter within 180 days of their submission. In doing so, it considers, in particular, the significant contribution by the aspiring entity to help to achieve the objectives formulated in Article 3 of this Charter.

The request to join the Charter is decided upon a simple majority voting in the Steering Committee.

It is the intent of the Signatories to encourage the widest possible inclusion into the SCO activities.

ARTICLE 11 – ENTRY INTO EFFECT

The Charter on the establishment of the SCO will enter into effect on 1st September 2022, provided that it has been signed by at least one Signatory.

ARTICLE 12 – WITHDRAWAL

Any Signatory may withdraw from the SCO after notifying the other Signatory or Signatories and the Secretariat in writing of its intention to do so.

The withdrawal of a Signatory shall become effective 30 days after the receipt of the written notice from the Signatory by the Secretariat. The Secretariat notifies the Steering Committee of this request.

The withdrawing Signatory will use its best efforts to mitigate the adverse effects their withdrawal may have on the ongoing activities.

The Steering Committee may decide, through a two-thirds majority, to exclude a Signatory that would go against the SCO objectives and its activities as described in this Charter.

ARTICLE 13 – AMENDMENTS AND TERMINATION

This Charter on the establishment of the SCO may be amended, modified, superseded or terminated by a two-thirds majority of the Steering Committee. Any amendment or modification adopted will then be announced or transmitted to all Signatories by the Focal Points.

IN WITNESS WHEREOF, the undersigned have signed the Charter on the establishment of the Space for Climate Observatory in two copies, one for the Secretariat and one for the Signatory.

For

Date:

Signed in the English language and, for the purpose of this Signatory’s national obligations, in the [TBC] language, both versions being equally authentic.