



Guidelines and information for entities applying for International Charter 'Space and Major Disasters' Membership

1. Introduction

This document provides information about the International Charter 'Space and Major Disasters' ('Charter') operational system for applicants interested in Charter Membership.

The Charter functions are described first, then the application guidelines are presented.

2. Understanding the Charter

2.1. What is the Charter?

The Charter is an international agreement among space agencies and space organizations to support with space-based data and information relief efforts in the event of emergencies caused by major disasters.

A major disaster is a large, often sudden event with high impact in terms of lives and/or infrastructure and environment. This event can be natural or man-made:

- Natural events: Earthquakes, Fires, Floods, Ice jams, Landslides, Tsunamis, Ocean storms, Volcanic eruptions
- Man-made events: Oil spills, Industrial accidents

Note that slow-onset disasters, such as droughts, are not covered by the Charter. Disasters resulting from armed conflicts are also not supported.

The Charter only supports the immediate response phase of a disaster. Charter activations generally last for about 1-4 weeks.

The text of the Charter (www.disasterscharter.org/web/guest/text-of-the-charter) requires the space agencies to cooperate in supplying data, information and services that will complement needs of States and communities in emergencies caused by disasters. The basis of this cooperation is voluntary (without exchange of funds), the cooperating agencies exercising their best efforts to fulfill their obligations towards the Charter and making available their space and associated ground resources for data acquisition and delivery. The agencies participate in the Charter without the need or obligation to expand their resources or incur any additional costs.

Their participation does not prevent them from providing data and services on their own to the users.

2.1.1. What entities can become a Charter Member?

The entities that can become Charter Members are space agencies or space system operators (Parties).

2.1.2. How do Members contribute to the Charter?

The general contribution of Members is laid down in Article IV of the Charter text (<https://www.disasterscharter.org>). In more specific terms the Members provide the following:

- The space services under the provisions of the Charter receive the highest priority, barring the priority accorded to the health and safety of the Member's respective Space Facilities.
- The Members deliver Earth Observation data.
- The Members provide the necessary staff to perform the Charter functions.
- The Members co-ordinate and assist each other where user requirements involve pooling of the available resources to facilitate:
 - Access to newly acquired multi-satellite data;
 - Access to data archives;
 - Delivery of data and information products;
 - Access to technological resources (telecommunication, data collection, navigation, etc.).

2.2. How does the Charter function?

2.2.1. Activation of the Charter

There are four different ways to activate the Charter:

- Direct activation: The only bodies authorized to directly request the Charter to be activated for a disaster occurring in their country are the 'Authorized Users' (AUs). They are typically civil protection agencies, governmental relief organizations, or other authorities with a mandate related to disaster management.
- Activation via an Authorized User on behalf of a user from another country without AU: Authorized Users can access the Charter to request support for a disaster in another country with which they cooperate for relief purposes.

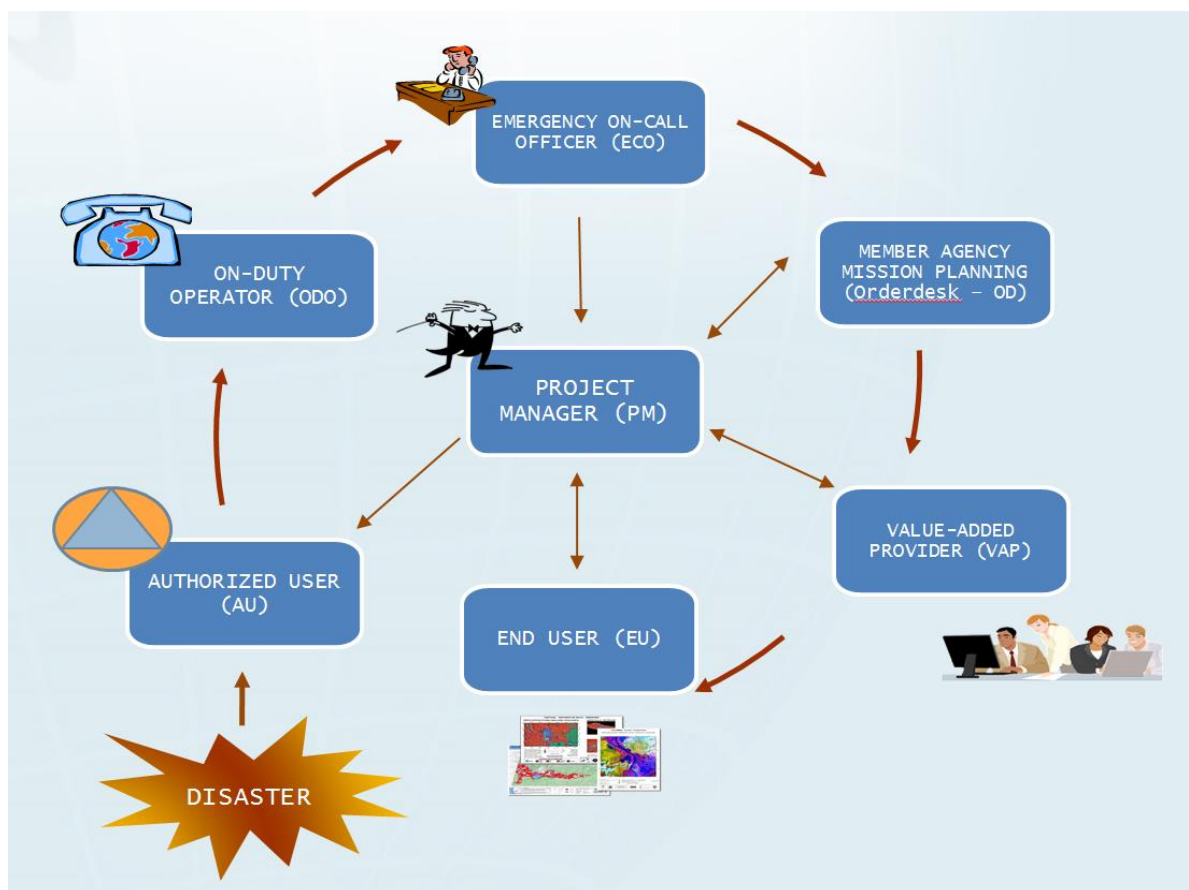
- Activation via the UN (United Nations) for UN users: The Charter has an agreement with UNOOSA (Vienna) and UNITAR/UNOSAT (Geneva) to provide support to UN agencies. UNOOSA and UNITAR/UNOSAT may submit requests on behalf of users from the United Nations.
- Activation for Asia Pacific users via Sentinel Asia: Sentinel Asia is a regional collaboration for satellite based emergency response in Asia Pacific. Since 2009 the Charter has granted the Asian Disaster Reduction Centre (ADRC) the right to submit activation requests on behalf of national users of Sentinel Asia.

Please visit the link below for more details:

<https://www.disasterscharter.org/web/guest/activating-the-charter>

2.2.2. Charter functional units

The following figure presents the Charter operation loop:



- The Authorized User (AU) is the body authorized to request the services of the Charter when a disaster occurs. This is done by submitting a completed User Request Form (URF).

- The On-Duty Operator (ODO) receives the activation requests from the AU. He checks the URF and verifies the identity of the caller. The ODO is available 24 hours/day and seven days per week.
- The Emergency On-Call Officer (ECO) receives the URF from the ODO and submits requests for the most appropriate satellite resources (new acquisitions and archive images) to the Member agencies' Order Desks. The ECO is also available 24/7. This function is performed by Charter Members on a rotational basis.
- The Order Desks (OD) of Charter Members program their respective satellites to acquire the requested data over the area affected by the disaster.
- The Project Manager (PM) coordinates the delivery of data and value-added products to the End User during the time of the activation. He is assigned by the Executive Secretariat at the beginning of each new activation. This function is performed on a voluntary basis.
- The End User (EU) is the organization which asks the AU to trigger the Charter on its behalf and uses the products during the emergency response phase. AU and EU may be the same entity.
- The Value-Added Provided (VAP) is the organization that is responsible for using the imagery provided by the Charter to create products for the End User.

2.2.3. Management of the Charter

2.2.3.1. Board Level

The Board is the governing body assigned with providing the administrative, operational and technical co-ordination needed to achieve co-operation among the various space agencies and space system operators under the Charter.

2.2.3.2. Executive Secretariat Level

The Executive Secretariat (ES) is the executive entity of the Charter and a Party's interface with the Charter operations. The ES is responsible for implementing the Charter, handling all requests/activations and arranging for the appropriate actions to be taken. The ES designs and proposes scenarios for each type of disaster. The ES identifies a Project Manager for each activation.

2.2.3.3. Lead Agency

The Lead Agency has the overall responsibility of the implementation of the Charter to oversee and coordinate its operations, administration, communications and external relations. The Charter Member that hosts a Board meeting becomes the Lead Agency for a period of approximately six months and until the following Board meeting.

2.2.3.4. Meetings and teleconferences

The Board and the ES meet in person twice every year. In between the meetings there are mid-term teleconferences of the Board and monthly teleconferences of the ES. As a rule, all Members are expected to participate in these meetings and teleconferences.

3. Becoming a Member of the Charter

3.1. How to become a new Member

In order to become a Member of the Charter, any space agency/space system operator which has this intention will have to apply following the process explained later in this document (paragraph 3.3).

The applicant has to be aware that being Member of the Charter requires several obligations/functions described in the next paragraph.

3.2. Membership requirements and privileges

- The Board, ES, PM (for activations of the AU from its own country if any), and Order Desk functions are mandatory requirements
- A Charter member country may identify an Authorised User
- The ECO (Emergency On-Call Officer) function is an important element of the Charter operational loop, but not all Members are required to participate. Members will be asked to consider ECO group participation if there is a need.
- In addition there is a Charter Communications Group in which participation is not mandatory but recommended.

3.3. Application process and integration of a new Charter Member

The application and integration process consists of several steps which will allow the Charter Board to:

1. evaluate the resources the candidate organisation proposes to provide to the Charter
2. confirm the operational readiness of their teams to contribute data in a timely manner, if the proposed resources are deemed a desirable contribution to the Charter.

The candidate organisation will be required to provide written information on their contribution to the Charter and present this information to the Board. Provided the resources proposed by the candidate organisation are deemed a desirable contribution to the Charter, the operational readiness to contribute these resources in a timely manner will be confirmed through a

qualification exercise carried out by Charter members. This will involve a site visit, a training session, and operational readiness testing.

Following these exchanges, the Charter member agencies will decide on the acceptance of the candidate organisation. It is the intention that this process should not exceed one year.

3.4. Applying for Charter Membership

The candidate organisation must provide the following written information to the Charter lead : a candidate organisation Implementation Plan for the Charter, candidate organisation Data Policy for the Charter and answers to a questionnaire.

3.4.1. What should be mentioned in the Implementation Plan?

The Implementation Plan will provide (a template is provided in Annex B)

- Commitment to the general requirements of the Charter, such as English as the working language, availability of qualified and sufficient personnel for the execution of the Charter commitments, planning of the candidate organization's space assets with the highest priority, provision of space data to the End Users free of charge, and acceptance of "no exchange of funds" rule for any Charter activity provided.
- Plan for supporting the different Charter functions.
- Details on the satellite resources, operational capabilities, and the long-term program of the applicant.
- Data provision in support to the Charter events

3.4.2. Data Policies

The applicant will provide its Charter Data Policy as applicable to the data they intend to provide to the Charter including the proposed licence if applicable.

3.4.3. Questionnaire

Annex C lists some general questions that the Applicant needs to answer about its space resources, links to disaster management authorities, and the role of the Project Manager (PM).

Annex A : List of acroynms

- AU Authorized User
- ECO Emergency On-Call Officer
- ES Executive Secretariat
- EU End User
- OD Oder Desk
- ODO On-Duty Operator
- PM Project Manager
- UN United Nations
- URF User Request Form
- VAP Value-Added Provider

Annex B : Implementation Plan template

[Party] Implementation Plan

[Month Year]

1. Introduction

Please provide the overview of [your Party] (e.g. history, mission, vision, etc.) and background to apply for the Membership.

2. Objective and Scope

Please define [your Party's] perspective for implementing the Charter on co-operation to achieve the co-ordinated use of space facilities in the event of natural or technological disasters.

Please mention which kind of details [your Party] will be described in this document.

* Note: The Charter seeks to pursue the following objectives:

- supply during period of crisis, to States and communities whose population, activities or property are exposed to an imminent risk, or are already victims, of natural or technological disasters, data providing a basis for a critical information for the anticipation and management of potential crises;
- Participation, by means of this data and of the information and services resulting from the exploitation of space facilities, in the organisation of emergency assistance or reconstruction and subsequent operations.

3. Role of [your Party] under the Charter

Please mention in detail which functions [your Party] will support (name and function of representatives if already known).

- Authorized User for Charter activation*
- Point-of-Access to Space Resources (Order Desk)*
- Participation in the Charter Board*
- Participation in the Charter Executive Secretariat / Technical Officer*
- Participation in the Charter Communications Group
- Project Management for selected Charter Calls (mandatory for activations of the AU from its own country*)

*Please note that functions marked with * are mandatory.*

4. Space Resources

Please describe [your Party's] Earth Observation satellite resources such as available satellites, operational capabilities, and long-term program, etc.

This description should answer the elements requested (questions 1 to 4) in the attached questionnaire (Annex C).

Annex C : Questionnaire

1. Please provide a short description of your current Earth Observation satellite(s), which would contribute to the Charter, indicating its expected remaining lifetime and system characteristics (revisit, swath width, spatial resolution, spectral bands etc.).
2. Will your EO system (space- and ground-based segments) be available to receive and execute, on a regular basis (typically 3-4 times per month), requests for acquiring and delivering EO data to the Charter?
3. Will your EO system (space- and ground-based segments) be able to deliver EO data in a rapid fashion (i.e. within hours up to a few days after request)?
4. The Charter deals with approximately 40 activations per year. Please confirm that you will be able to effectively contribute to these activations. Please provide a short description of your medium to long term Earth Observation program. Furthermore, confirm that future missions you may be engaged in developing might also contribute to the Charter.
5. Is your Party in contact with the national disaster management authority in your country which could become a Charter Authorised User (i.e. the nationally mandated disaster response organization that will be able to directly submit a request to activate the Charter)?
6. Is your Party currently involved in any activities concerning GIS or satellite-based mapping to support disaster response activities either in country or internationally?
7. The role of Project Manager (PM) is a very important role during each activation, but it is not always completely contained within Charter Agencies. The PM plans and delivers satellite imagery or products and communicates with the data providers and final user in order to ensure that the necessary maps have been produced and other tasks have been completed. As the PM is not assigned by default and is designated for each new activation on a voluntary basis:
 - do you have the capacity to provide a PM resource?
 - Are you in contact with other institutions in country that could ensure the PM function?