The International Charter

"Space and Major Disasters"

UNIVERSAL ACCESS

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Charter ES Member

SAARC DMC (IU), GIDM, Ahmedabad, India - 4-Dec-2019

Purpose

An international agreement by Satellite Operators to provide priority access to satellite data in the event of Major Disasters.

Founded by Space Agencies in 1999 following UNISPACE III.
Declared operational November 13, 2000.

- Disaster response
- Multi-satellite - Free Data - Priority & fast access
- Satellite Tasking and Archive data
- Data processing to pre-determined level

Charter Members

Charter Satellites

ABAE	VRSS-1
CNES	PLEIADES, SPOT
CNSA	CBERS-4, GF-1, GF-2, GF-3, GF-4, FY-3C
CONAE	SAOCOM
CSA	RADARSAT-2
DLR	TerraSAR-X/TanDEM-X
	RapidEye
DMC	UK-DMC2
ESA	Sentinel-1, Sentinel-2, PROBA-V
EUMETSAT	Meteosat, Metop
ISRO	Cartosat-2, Resourcesat-2, Resourcesat-2A
INPE	CBERS-4
JAXA	ALOS-2, KIBO HDTV-EF
KARI	KOMPSAT-2, KOMPSAT-3, KOMPSAT-3A, KOMPSAT-5
NOAA	POES, SUOMI-NPP, GOES
PLANET	Planetscope
ROSCOSMOS	RESURS-DK, METEOR-M, KANOPUS-V, KANOPUS-V-IK, RESURS-P
UAESA	DubaiSat-2
USGS	Landsat-7, Landsat-8, QuickBird, WorldView, Geoeye
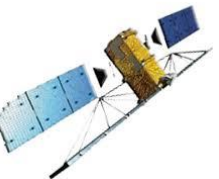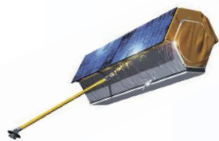
Disasters Types Supported

Designed to address requests concerning major disasters caused by:

Natural events

Earthquakes

Fires

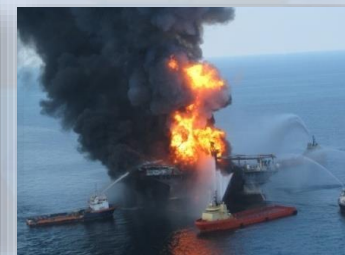Floods

Ice jams

Landslides

Tsunamis

Ocean storms

Volcanic eruptions

Man-made events
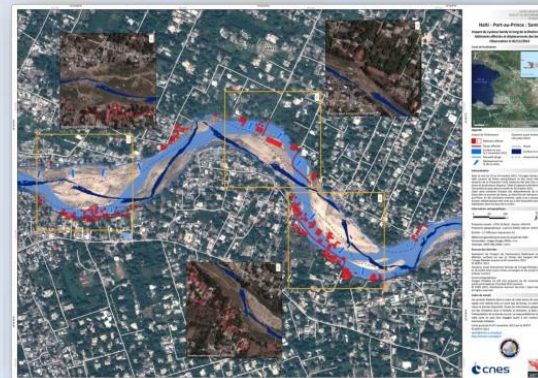
Oil spills

Industrial accidents

Authorized Users

The only bodies authorized to **directly** request the Charter to be activated are **Authorized Users** - AUs

1. Must be a **national disaster management authority** or its delegated agency in that country

2. Must have the **capacity to download and use maps**

3. Must be able to **submit and pursue an activation request in English**

Mechanisms to Activate the Charter

- **Direct**: The bodies authorized to directly request the Charter to be activated for a disaster occurring in their country are the 'Authorized Users' (AUs). Typically civil protection agencies, governmental relief organizations, or other authorities with a mandate related to disaster management.

- **Via an Authorized User on behalf of a user from another country** without AU: Authorized Users can request support for a disaster in another country with which they cooperate for relief purposes.

- **Via the UN for UN users**: The Charter has an agreement with UN OOSA (Vienna) and UNITAR/UNOSAT (Geneva) to provide support to UN agencies. UN OOSA and UNITAR/UNOSAT may submit requests on behalf of users from the United Nations.

- **Asia Pacific users via Sentinel Asia**: Sentinel Asia is a regional collaboration for satellite based emergency response in Asia Pacific. The Asian Disaster Reduction Centre (*Since 2009*) can submit activation requests on behalf of Sentinel Asia's national users.

Charter Operational Loop

Processes the info received.
Sends the tasking requests to the agencies' Mission Planner.
Sends the PM a dossier with the summary of the performed actions

Verifies the identity of the caller and the completeness of the Request.
Sends the URF to the ECO

Sends to the ODO the User Request Form (URF).
The AU can also submit requests on behalf of an End User

Emergency on-Call Officer

Member Agencies Mission Planners

Executive Secretariat

ESA
CNES
CSA

On-Duty Operator

Project Manager

Value Adder

The PM, nominated by the Executive Secretariat, contacts the AU/EU to collect more information on the disaster and assesses their needs.
Reviews the dossier prepared by the ECO and requests more satellite tasking as needed.
Receives the products from the agencies' order desk and prepare Value Added Products (VAPs)

Authorized User

End User

DISASTER

Final Value Added Products are delivered to the final user

Further processes and interprets the data, and delivers VAPs to the EU via the PM
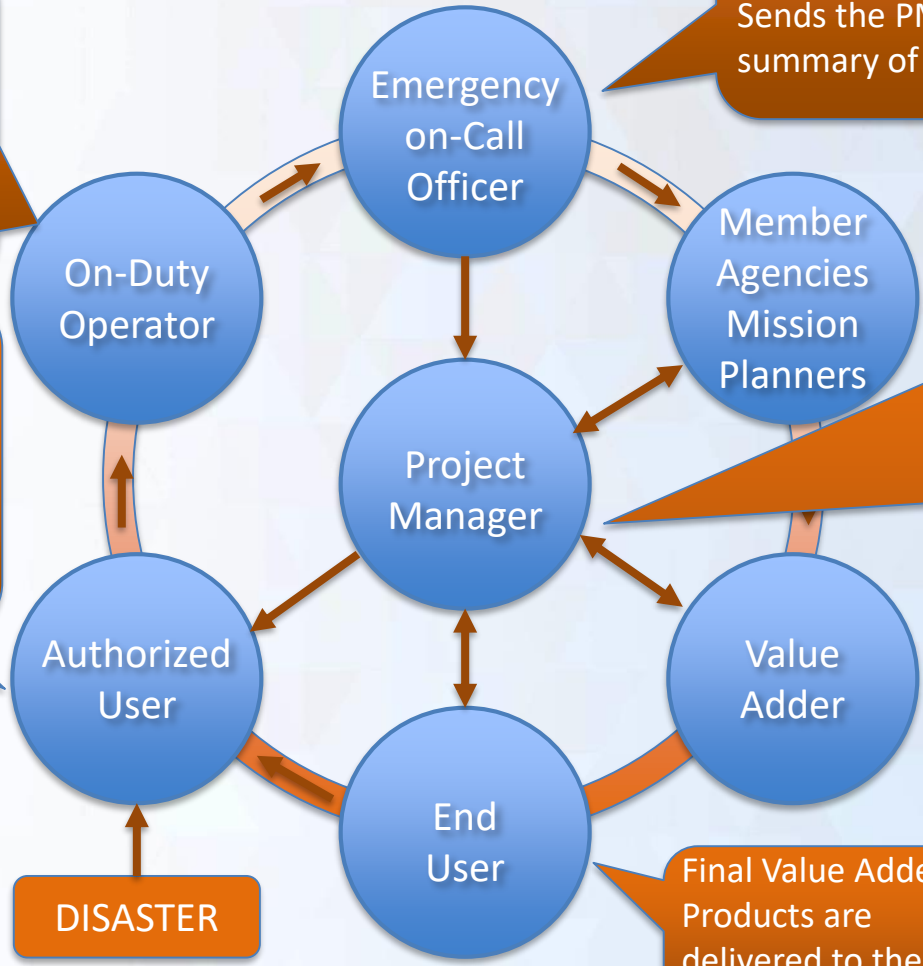
Charter Activations (by type)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Sub-totals	
Solid Earth	**Earthquake**		3	1	3	5	3	2	5	4	3	5	5	3	4	1	5	4	7	2	4	*69*	
	Landslide	1	1	2	2			1			4	2	1		1	6	2		2	1	2	*28*	**133**
	Volcano		1	1	2	2	1	1	2	3	3	2	2	1	3	2	4	1		4	1	*36*	
Technological	**Oil spill**		3	2				4	3			1	1		1	1	1					*17*	
	Others					1						3				2	2		2	1	1	*12*	**29**
Weather / Atmospheric	**Fire**				5	1	2		4	2	4	1	3	2	2	3	2	4	5	3	6	*49*	
	Flood/Ocean wave*		3	8	4	9	13	16	22	24	19	26	17	25	24	20	17	16	16	14	17	*310*	
	Ice/Snow hazard									1			1	1			1					*4*	**469**
	Storm/Hurricane**			1	2	3	6	1	8	7	7	10	2	9	3	5	5	11	13	7	6	*106*	
	Total / year	1	11	15	18	21	25	25	45	40	40	51	32	40	38	41	38	36	45	32	37		
	TOTAL																					**631**	

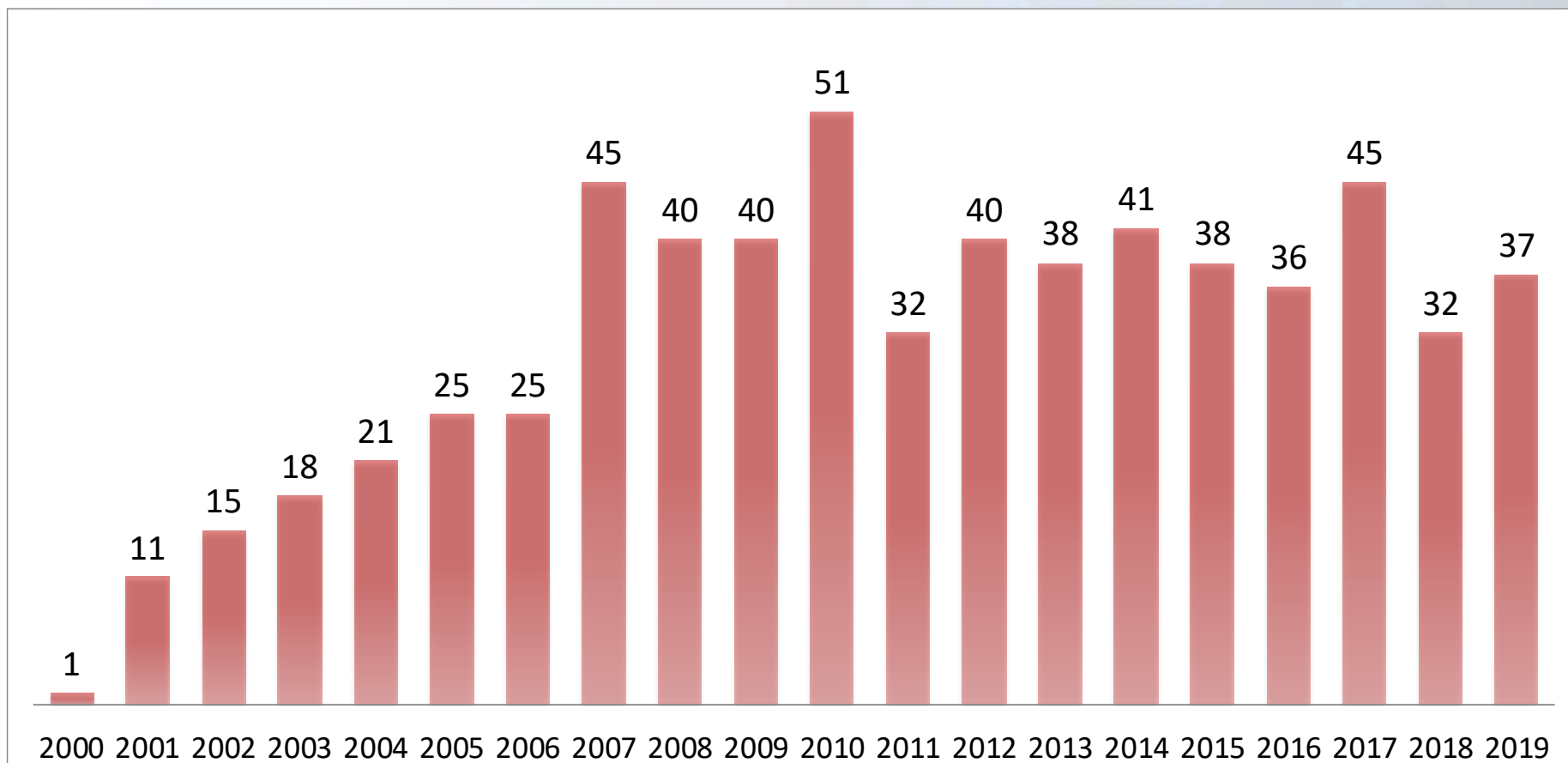*Includes solid earth related phenomenon of a tsunami.

**Includes all wind type storms (hurricane, cyclone, typhoon and tornado).
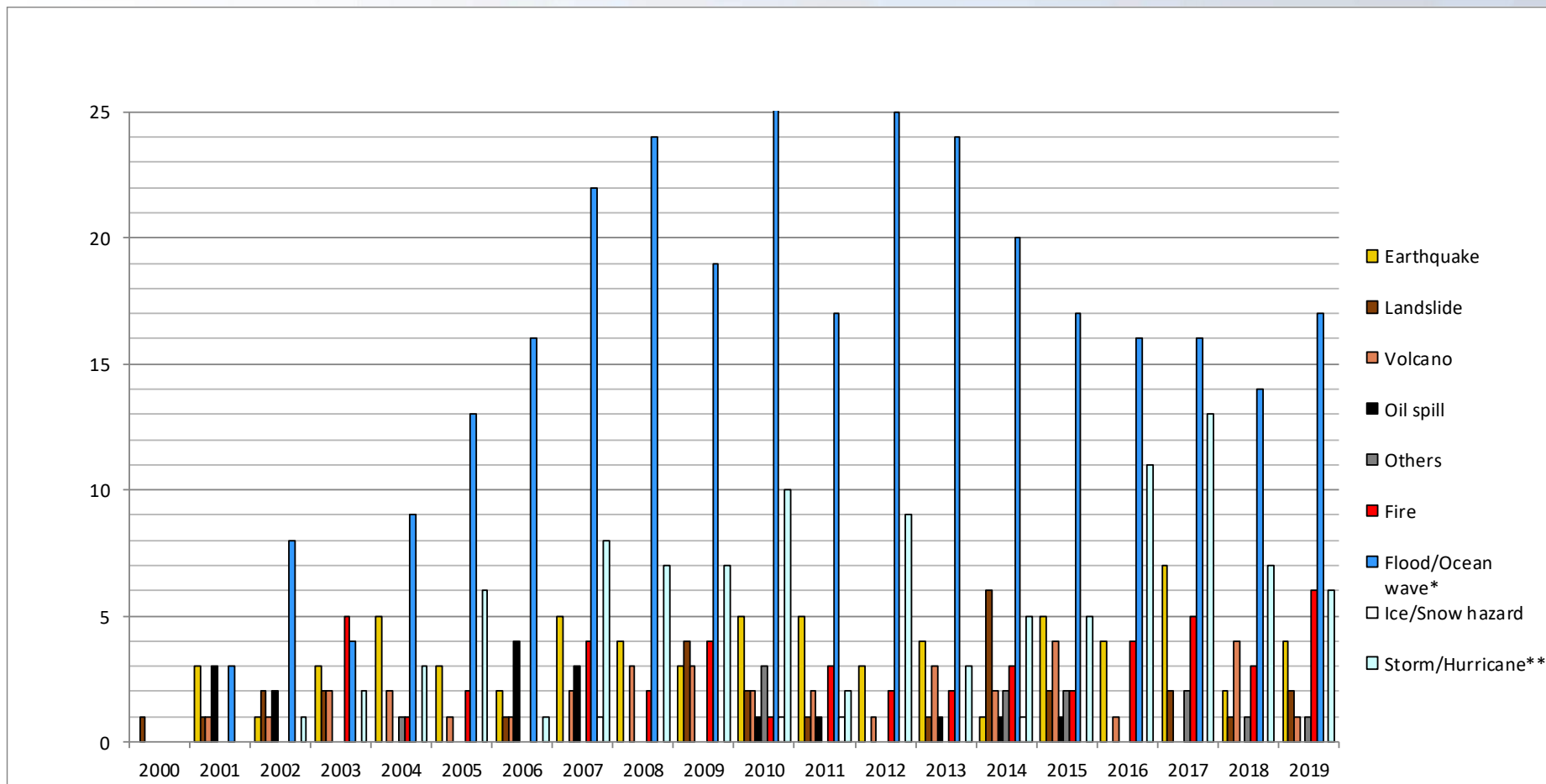
Number of Activations

November 2000 to November 2019:

631 **Charter Activations**

2000-2019 Distribution of Activations by Hazard Type

Legend:
- Earthquake
- Landslide
- Volcano
- Oil spill
- Others
- Fire
- Flood/Ocean wave*
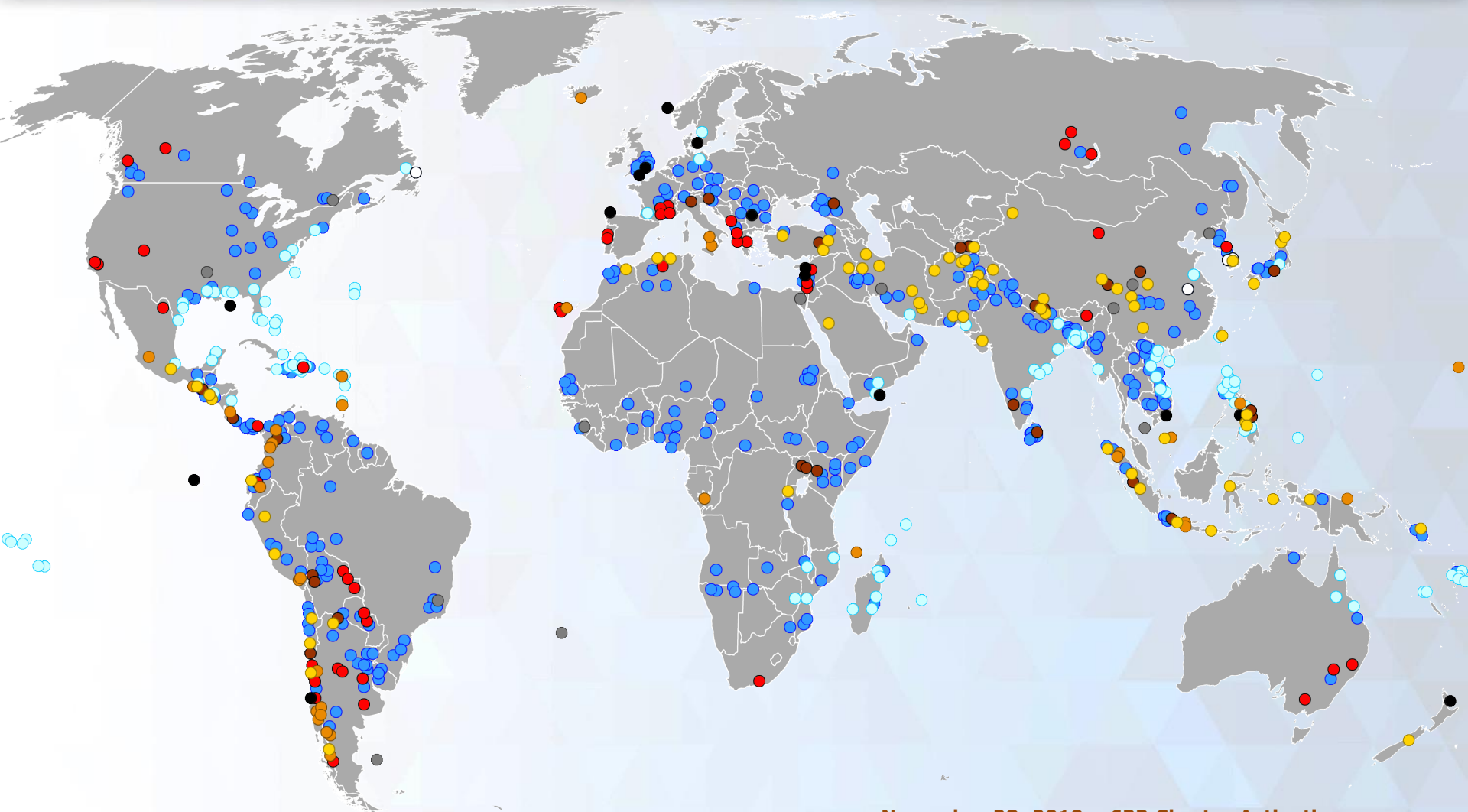- Ice/Snow hazard
- Storm/Hurricane**

November 13, 2019 – 631 Charter Activations

*Includes solid earth related phenomenon of a tsunami.
**Includes all wind type storms (hurricane, cyclone, typhoon and tornado).
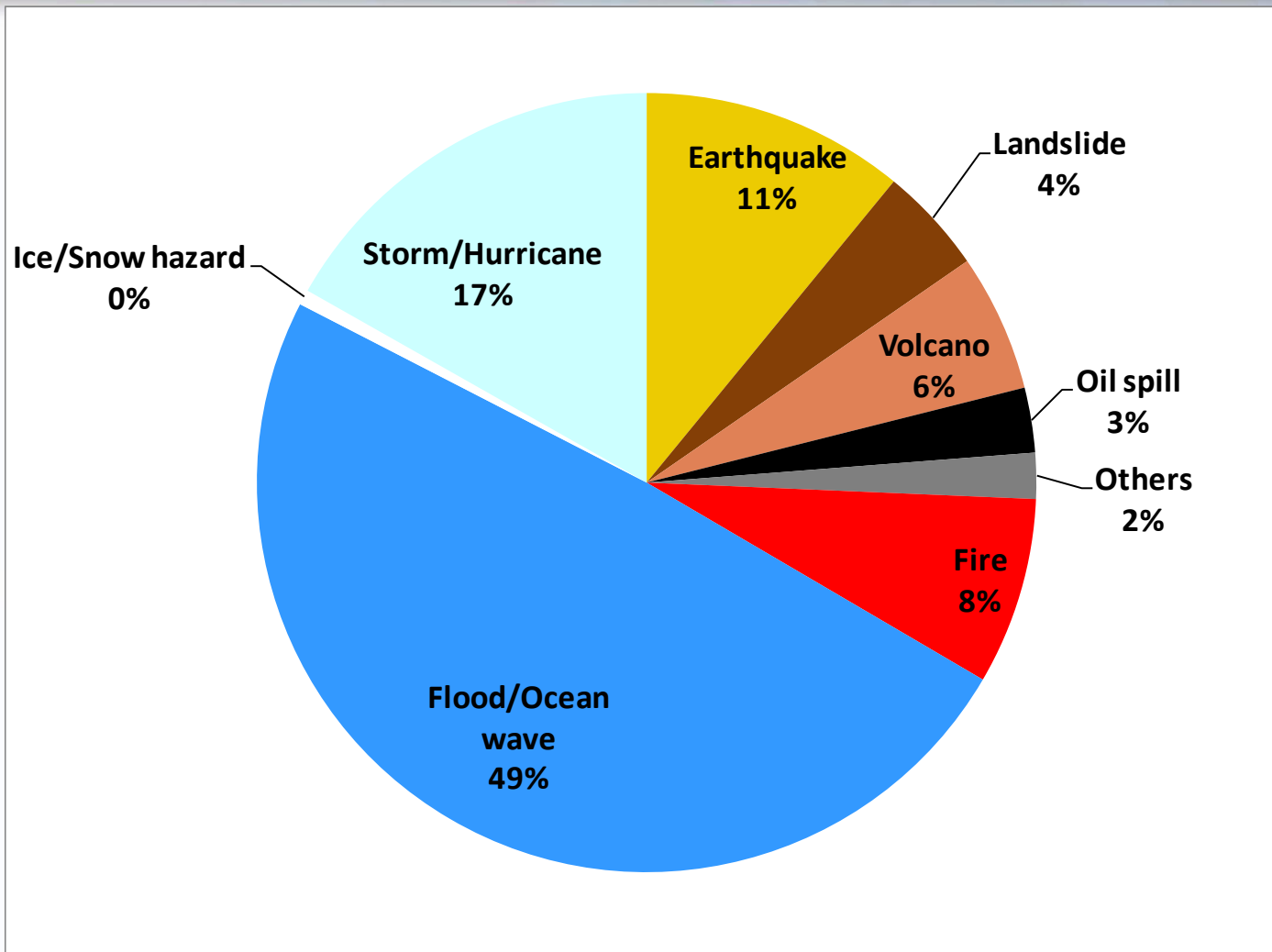
Charter Activations (by distribution)

November 28, 2019 – 633 Charter Activations

Legend: ● **Earthquake** ● **Landslide** ● **Volcano** ○ **Storm/hurricane** ● **Flood/ocean wave** ○ **Ice/snow hazard** ● **Fire** ● **Oil spill** ● **Other**

Activations by Disaster Type

Charter Summary Facts

- Space technologies can deliver key information that brings benefit to the definition, planning, implementation, monitoring & assessment of disaster relief operations.

- The Charter is focused on the immediate response phase and services of national disaster management centres and the International Humanitarian community (e.g. UN).

- It is growing: 631 disasters covered since 2000 in 125 countries worldwide.

- Building on a decade of success in making satellite data available to users for disaster response, the Charter is now opening its doors even wider with Universal Access.

- Universal Access benefits national users in countries beyond those of the Charter members, who were previously unable to make direct requests to the Charter during emergency situations.

- Currently, there are 30 new AUs were nominated thanks to the UA process in the following countries: Australia, Belarus, Bolivia, Cameroon, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Eswatini, Ghana, Guatemala, Haiti, Iraq, Madagascar, Malawi, Myanmar, New Caledonia, Pakistan, Paraguay, Peru, Solomon Islands, South Africa, Sri Lanka, Sudan, Thailand, Togoo, Tunisia, Uruguay and Zimbabwe and the list is growing.
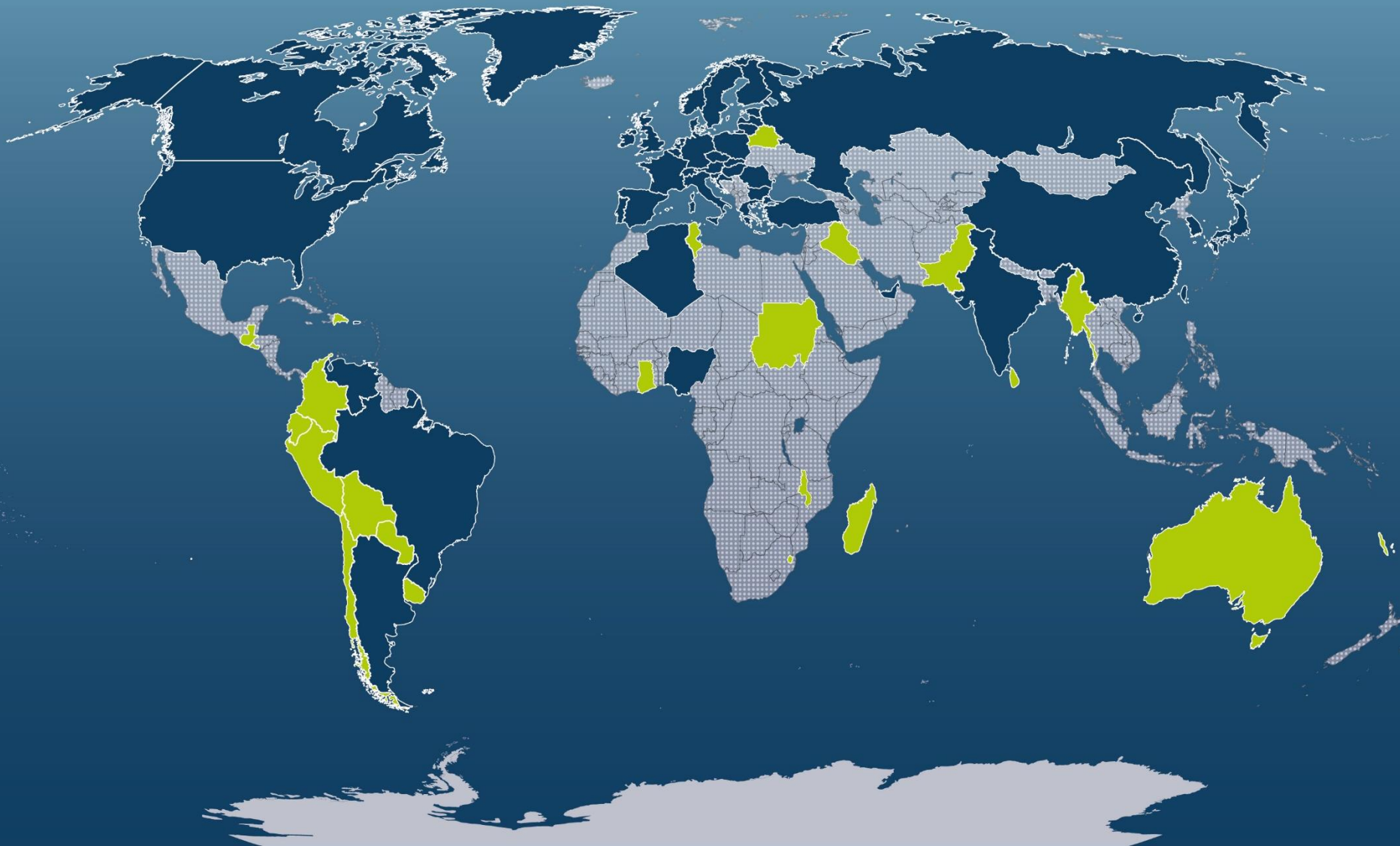
Universal Access
Already 23 countries since 2012

Become an Authorised User

A registration form* (in English, French and Spanish) is available for national authorities to express interest in becoming a Charter Authorized User.

1. The candidate fills in the questionnaire providing all required information.

2. The questionnaire, *with an official cover letter from the organisation,* must be sent to:
   ExecutiveSecretariat@disasterscharter.org

3. The request is assessed by the Charter members.

*The form **may be downloaded** together with the

Universal Access Information brochure from the Charter website:

www.disasterscharter.org/web/guest/activating-the-charter

or **www.disasterscharter.org/web/guest/home**

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Contact Charter Webmaster at

webmaster@disasterscharter.org

www.disasterscharter.org

Emergency enquiries from users requiring direct access to Charter resources should be addressed to:

ExecutiveSecretariat@disasterscharter.org

General requests for information should be addressed to

webmaster@disasterscharter.org