

# WMO Role in CAP Implementation

2019 CAP Workshop, Mexico, Mexico D.F.

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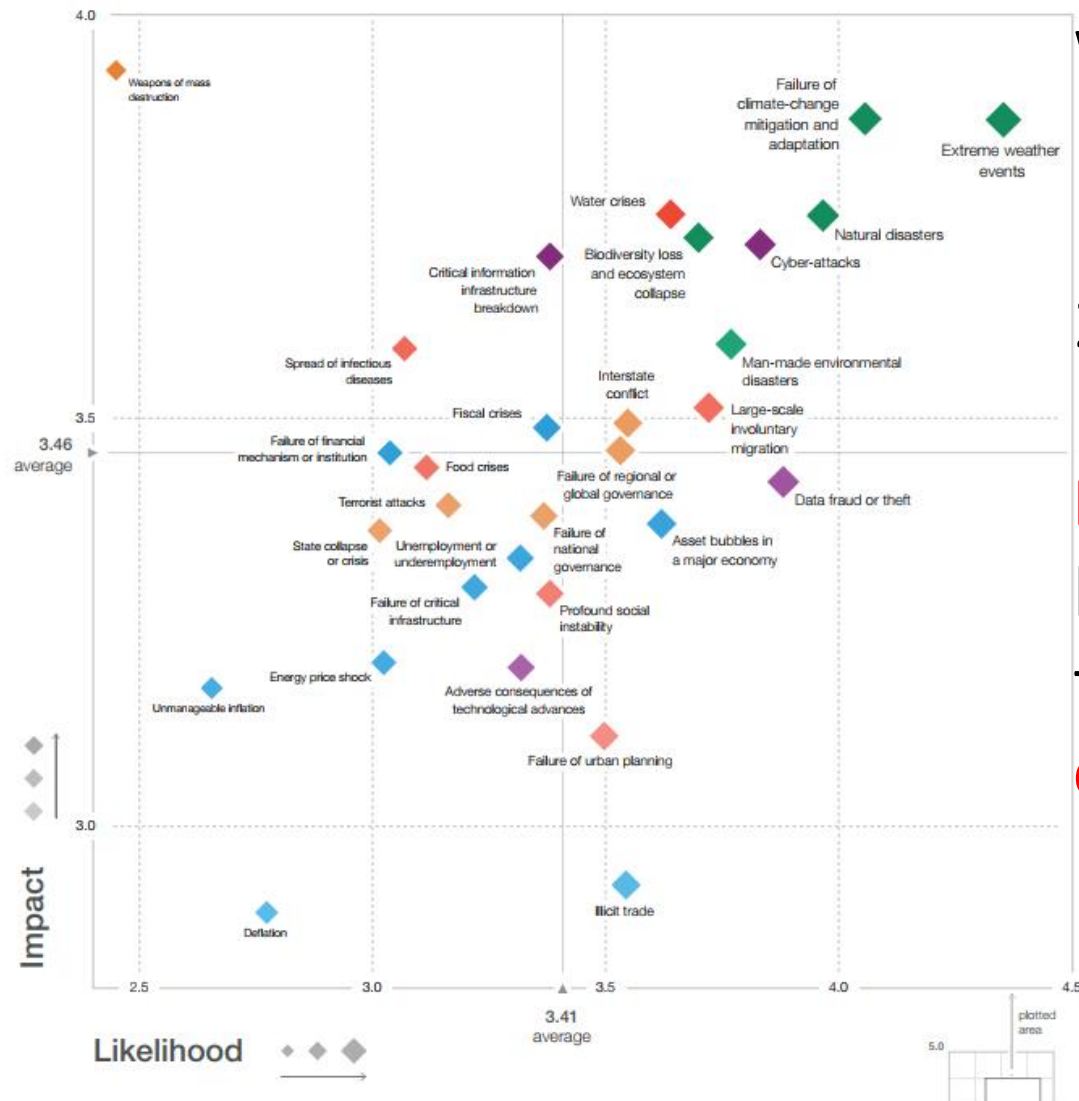
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World Meteorological Organization  
Organisation météorologique mondiale

# Weather risks are the top economic risks

The Global Risks Report 2019 14th Edition

Figure I: The Global Risks Landscape 2019



World Economic Forum Global Risks Perception Survey 2018–2019:

**Extreme weather** has been ranked as the **risk of greatest concern**

# 17th Session of WMO Congress



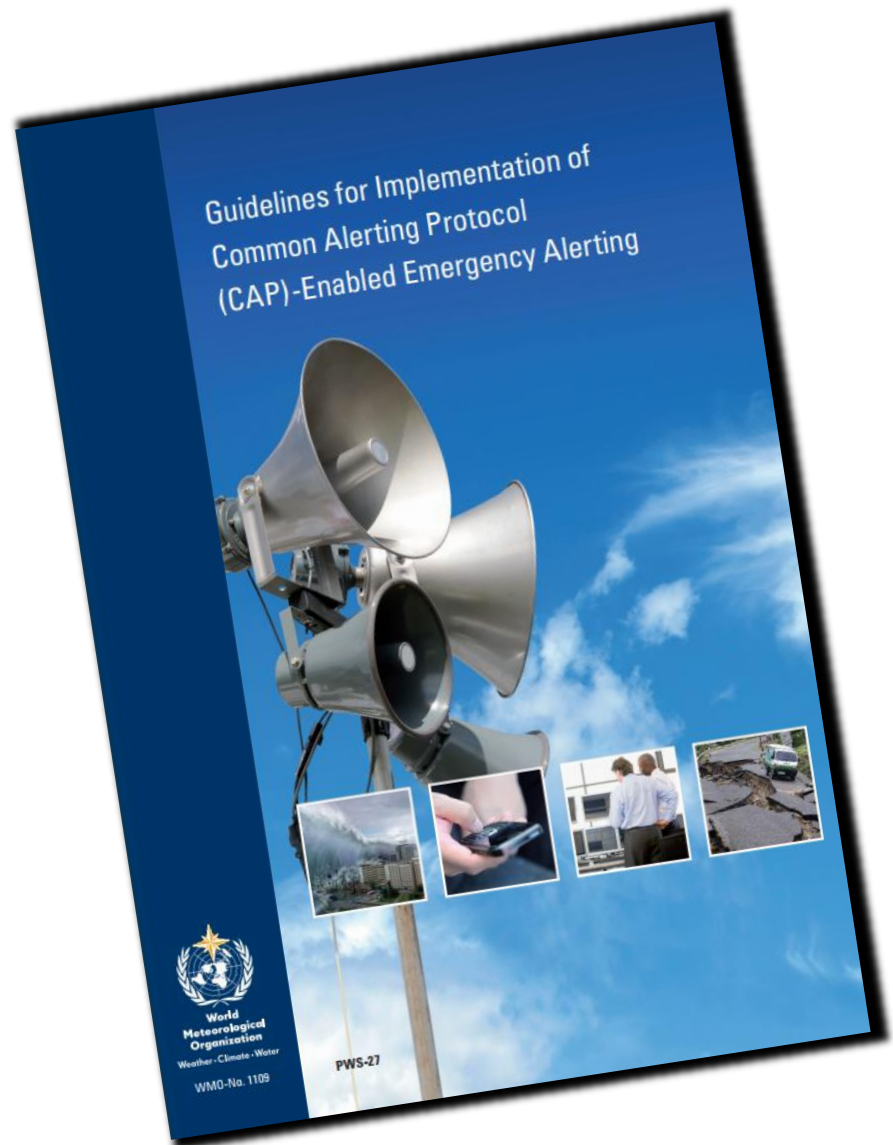
Ref. Cg-17 (2015) paragraph 3.1.59: “Congress stressed the need for further guidance to Members on their conversion of weather warnings into CAP format and for enhanced technical assistance to Members, as needed, for the implementation of the CAP standard”.



# Guidelines

## **“Guidelines for Implementation of Common Alerting Protocol (CAP)-Enabled Emergency Alerting”**

(WMO No. 1109)



# TECHNICAL MEETING ON CAP

(WMO HQ, Geneva, December 2018)

- Meeting of Experts on CAP (including **ITU**) under the auspices of the WMO CBS/OPAG-PWSD.
- CAP Implementation status in WMO Member countries;
- WMO Catalogue of Hazards and Extreme Events;
- Perspectives of Technical Experts on the difficulties/challenges in tailoring the use of CAP, specially in the context of moving to Impact based Forecast and Warning Services (IBFWS);
- Perspectives from EUMETNET, METEOALARM and U.S.A. NWS;
- Enhancing the uptake of CAP and the Register of WMO Members Alerting Authorities by WMO Members;
- The optimization of the On-line training in CAP;
- ITU and WMO related issues on the CAP standard; and,
- Round table discussion to clarify and define points of difficulty and to decide on actions.

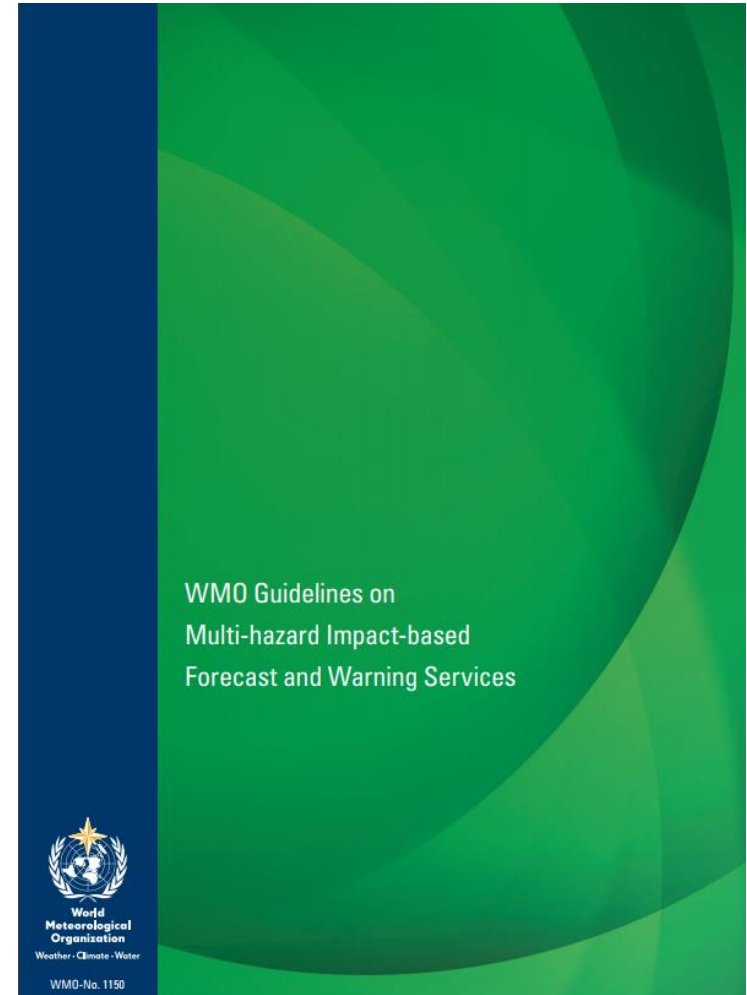


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# TECHNICAL MEETING ON CAP

(WMO HQ, Geneva, December 2018)

- 1) Agreed to prepare **an addendum** to the “WMO Guidelines on Multi-Hazard Impact-Based Forecast and Warning Services” (WMO No.1150) to:
  - define CAP usage in a manner consistent with IBFWS; and,
  - Allow for the international exchange of hydro-meteorological warning messages for aggregation and also for the promotion of cross-border coordination.



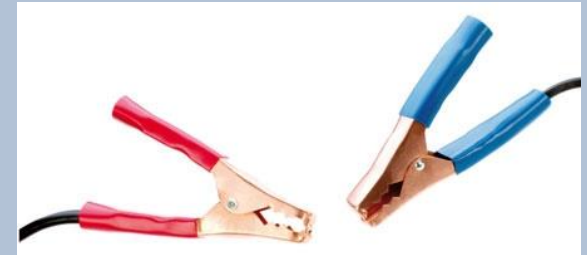
# TECHNICAL MEETING ON CAP

(WMO HQ, Geneva, December 2018)

- 2) Agreed to prepare a guidance document “**The Road to CAP**” with a specific focus on the use of CAP in the context of meteorological and hydrological warnings.
- Possible support from WMO Members and Teams with CAP-based experience,
  - Publication to deal with how the <**Urgency**> parameter should be used within the context of NMHS warnings, how **Colour** relates to the three CAP parameters (Urgency, Severity and Certainty), among other matters.

# Implementation of CAP facilitated by WMO

- WMO through PWSD Programme assists Members through the «CAP Jump-start» arrangement:
  - Experts visit NMHSs and provide training and freeware;
  - LDCs and SIDS are supported.



WMO CAP Jump-start  
([Link to more information](#))



# Implementation of CAP facilitated by WMO

## ➤ In-contry, Sub regional, Regional trainings:

- In-country CAP training: Burundi, Rwanda and Uganda (July 2019)
- Eastern African countries: Regional Training Workshop on Severe Weather Forecasting and Delivery of Warning Services, (under HIGHWAY project) (Kenya, Feb. 2019)
- Saudi Arabia and Middle Eastern Region
- CAP Workshop, Lao PDR and Vietnam (Oct. 2018)
- WMO RA III (South America) IBFWS and CAP Workshop (Sept. 2018)
- CAP Jump-Start Workshops Curaçao, Grenada, St. Lucia, Dominica, St. Kitts and Nevis & Saint Maarten (Feb. 2018)
- Common Alerting Protocol (CAP) Jump-Start Workshop SIDS, Pacific - Palau, Federated States of Micronesia, Fiji, Tuvalu, Niue, and Nauru- (July 2017)



# Implementation of CAP facilitated by WMO

- Continuously assisting WMO Member countries participation in **CAP International Workshops** (2019 - 6 countries assisted).
- **Leveraging PWSD funded projects:**
  - Severe Weather Forecasting Demonstration Project (SWFDP) (Norway, Korea, etc.)
  - Climate Risk & Early Warning Systems (CREWS) (Pacific, S.E Asia, Caribbean, Africa)
  - HIGH impact Weather Lake System (known as HighWAY (Kenya, Uganda, Tanzania, Rwanda, Burundi)

# Online Training Platform

- CAP Online Training Platform developed in 2019
- Consultations on commencement of CAP e-training with WMO ETR Programme.  
<https://etrp.wmo.int/course/index.php?categoryid=51>

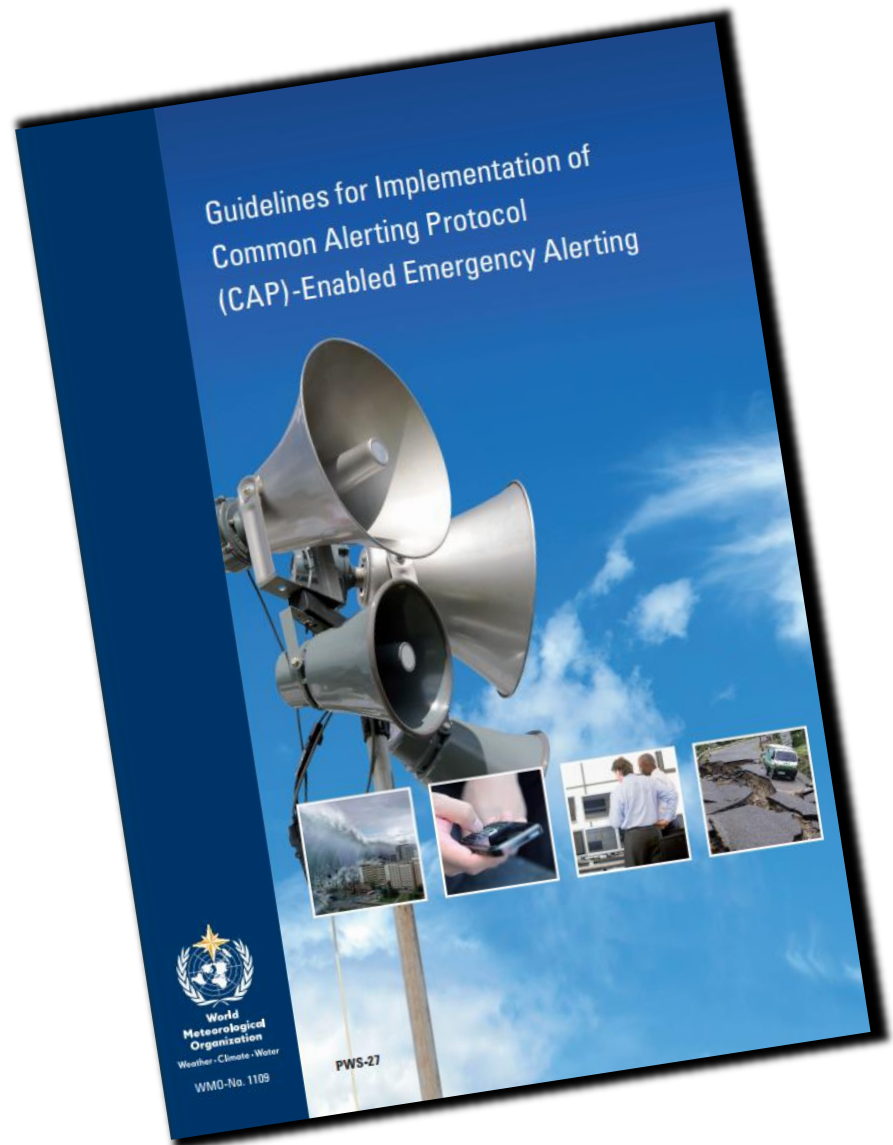
# Online CAP Editing Platform

Cloud-based CAP editor developed by Eliot Christian within the <https://cap.alert-hub.org>,

# Guidelines

## **“Guidelines for Implementation of Common Alerting Protocol (CAP)-Enabled Emergency Alerting”**

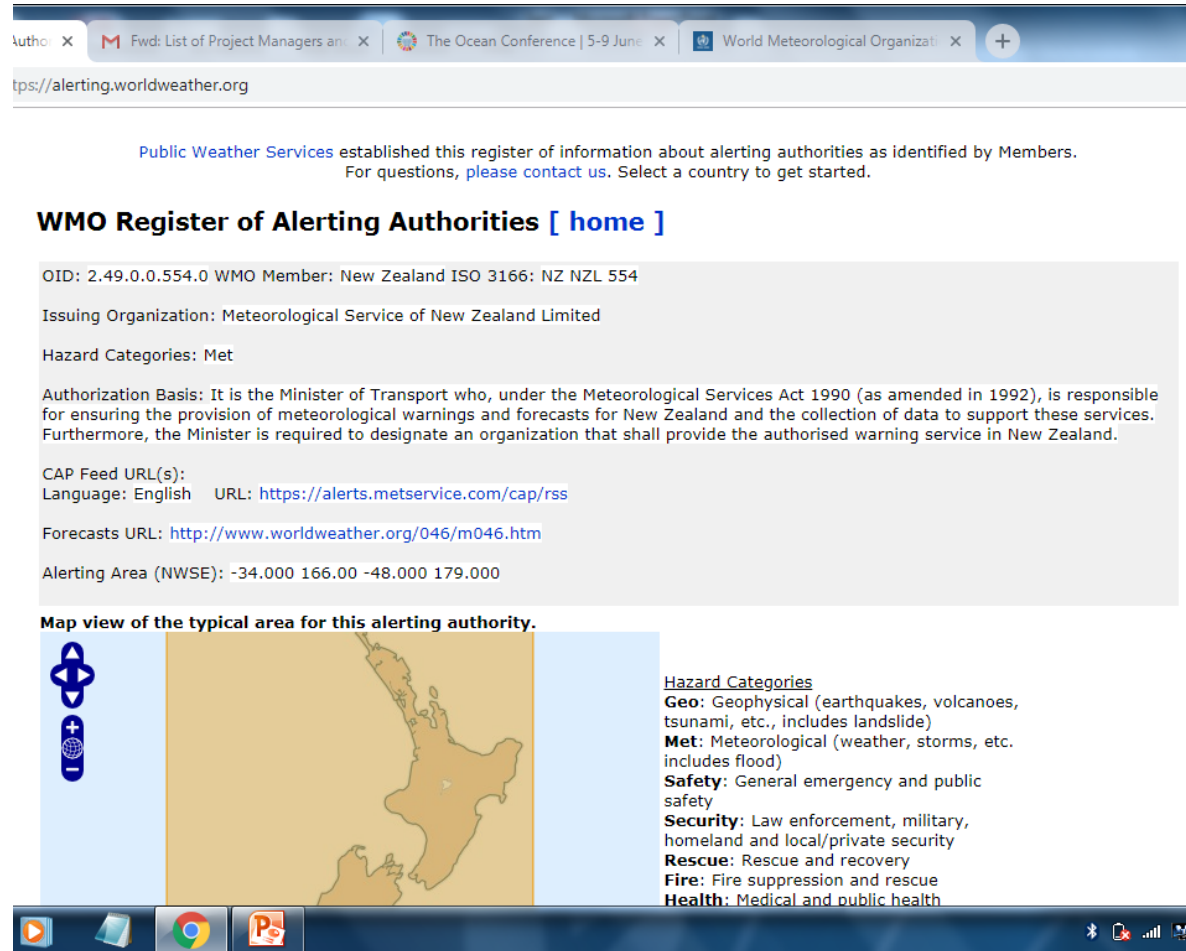
(WMO No. 1109)





# WMO Register of Alerting Authorities

WMO working closely with Hong Kong Observatory (HKO) to assist Members with the Register



The screenshot shows a web browser window with the URL <https://alerting.worldweather.org>. The page title is "WMO Register of Alerting Authorities [ home ]". The main content area displays information for a specific alerting authority, identified as New Zealand. The details include:

- OID: 2.49.0.0.554.0 WMO Member: New Zealand ISO 3166: NZ NZL 554
- Issuing Organization: Meteorological Service of New Zealand Limited
- Hazard Categories: Met
- Authorization Basis: It is the Minister of Transport who, under the Meteorological Services Act 1990 (as amended in 1992), is responsible for ensuring the provision of meteorological warnings and forecasts for New Zealand and the collection of data to support these services. Furthermore, the Minister is required to designate an organization that shall provide the authorised warning service in New Zealand.
- CAP Feed URL(s):  
Language: English URL: <https://alerts.metservice.com/cap/rss>
- Forecasts URL: <http://www.worldweather.org/046/m046.htm>
- Alerting Area (NWSE): -34.000 166.00 -48.000 179.000

Below the text, there is a section titled "Map view of the typical area for this alerting authority." which includes a map of New Zealand. To the right of the map, there is a list of hazard categories with their descriptions:

- Hazard Categories**
- Geo:** Geophysical (earthquakes, volcanoes, tsunamis, etc., includes landslide)
- Met:** Meteorological (weather, storms, etc. includes flood)
- Safety:** General emergency and public safety
- Security:** Law enforcement, military, homeland and local/private security
- Rescue:** Rescue and recovery
- Fire:** Fire suppression and rescue
- Health:** Medical and public health

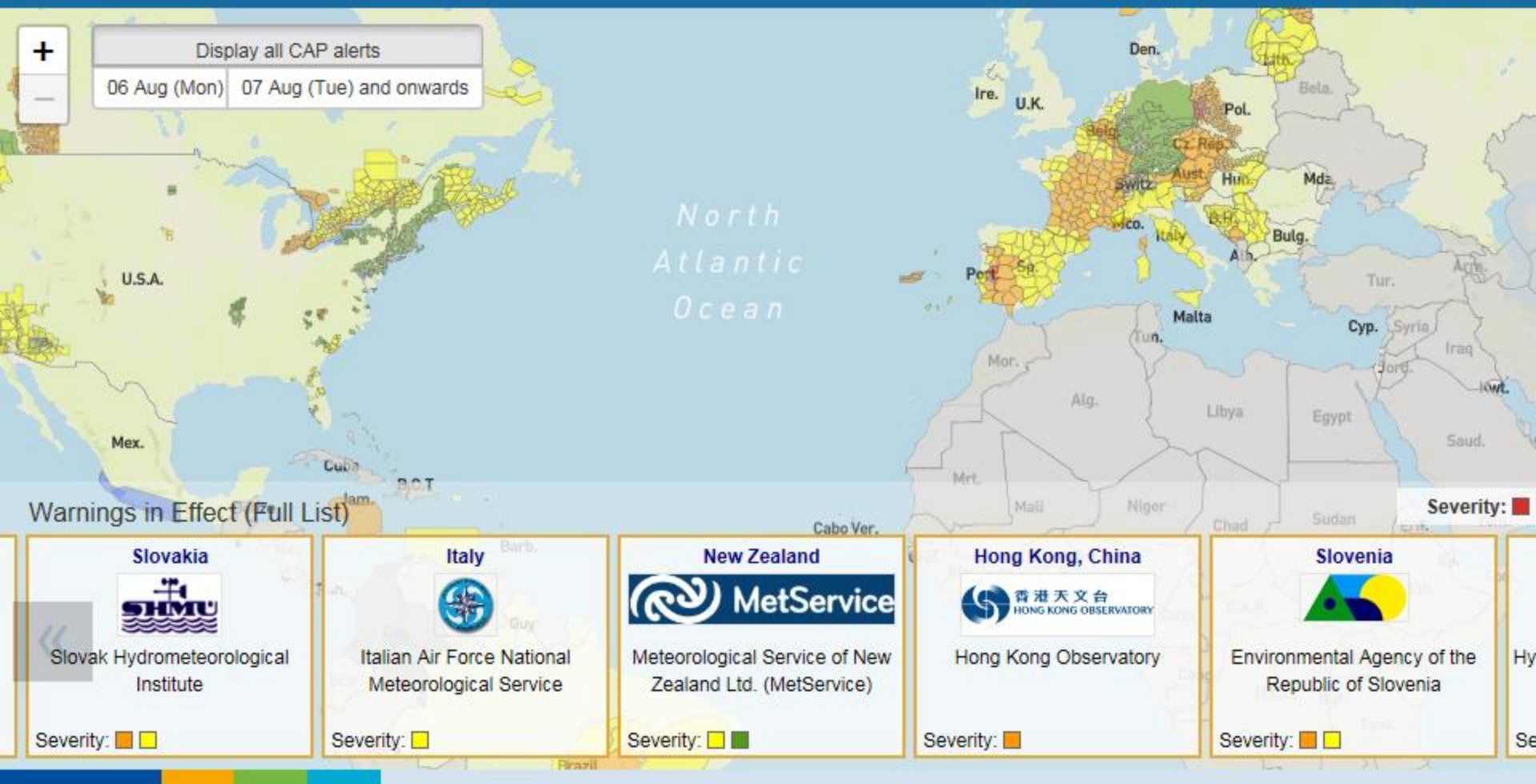


WORLD  
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Weather - Climate - Water

# Severe Weather Information Centre 2.0 (Beta)

Home | Tropical Cyclones | Severe Weather Observations



# WMO Global Multi-hazard Alert System (GMAS)

- GMAS under development as an authoritative source of warnings and information related to high-impact weather, water, ocean and climate events
- To provide authoritative information and advice to UN agencies, humanitarian communities, national disaster management, etc.

# Cg-18, 2019

- WMO RA II (Asia) to establish a pilot project in order to enhance the capabilities for meteorological DRR, including a regional **WMO Global Multi-hazard Alert System** (GMAS-Asia), based on the implementation of the **Common Alerting Protocol (CAP)** and the experience of the Hong Kong Observatory (HKO) in hosting the websites of the **WWIS (World Weather Information Service)** and the **SWIC (Severe Weather Information Centre)**, coordinated by the China Meteorological Administration (CMA) and HKO.





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# WMO Global Multi-hazard Alert System (GMAS)

- **Live Feed Widget** developed through collaboration of PWS and CPA of WMO and Hong Kong Observatory (HKO)



- You can see it at:  
[https://www.wmo.int/pages/index\\_en.html#alertwidget](https://www.wmo.int/pages/index_en.html#alertwidget)



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# Thank you



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