

2019 Common Alerting Protocol (CAP) Implementation Workshop

17 - 18 October 2019 in Mexico City, Mexico

The 2019 Common Alerting Protocol (CAP) Implementation Workshop will be 17- 18 October in Mexico City at the Justice Superior Court of Mexico City. The host of this Workshop is the [Secretariat of Integral Risk Management and Civil Protection](#). In the same venue, a CAP "Train the Trainers" session will be held all day on 16 October.



Everyone interested in emergency alerting is welcome: managers, technical staff, media, etc., including those in government, non-governmental organizations (NGOs), and commercial organizations. There is no charge to participate.

The Workshop co-sponsors are the [International Association of Emergency Managers \(IAEM\)](#), the [International Federation of Red Cross and Red Crescent Societies \(IFRC\)](#), the [International Telecommunication Union \(ITU\)](#), the [OASIS standards organization](#) and the [World Meteorological Organization \(WMO\)](#). These Workshops focus on emergency alerting as enabled by the CAP standard, ITU-T Recommendation X.1303. At the Workshops, implementers of CAP and other associated organizations discuss common issues and how best to leverage the expanding adoption of CAP.

Some 22 presentations will address a wide range of topics, presented by experts around the world.

Google will present an update on its CAP-enabled Public Alerts channel. Google will also suggest practices to make alerts as impactful as possible.

WMO will present on integrating CAP in Climate Risk and Early Warning Systems (CREWS). The objective of CREWS is to significantly increase access to early warning systems and risk information in Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

WMO will also talk about its new CAP certification program, with self-directed training modules using Moodle (see [CAP Basics course](#)). WMO will present on incorporation of CAP into WMO Technical Regulations. These Regulations apply to all WMO Member states as signatories to the WMO treaty. The addition of CAP would be helpful to countries that need an external incentive to justify their CAP investments. WMO will also note that CAP is a key component in "Impact-based Forecasting", which has been a trending topic among weather agencies in various nations. WMO's Global Multi-hazard Alerting System

(GMAS) will be a topic as well. A major component of GMAS is the WMO Alert Hub that aggregates CAP alerts issued by WMO Members. A related initiative is the updated [Severe Weather Information Center \(SWIC 2.0\)](#)

IFRC will present on the 'What Now' service, which uses the [IFRC Public Awareness and Public Education \(PAPE\) messaging](#) to better inform people on what actions to take during an emergency. IFRC will provide updates on its free [Universal App Program](#), which includes the CAP-based Hazards App for disseminating public alerts.

A speaker from Valencia, Spain, will describe the [beAWARE](#) European project. The idea is to collect and integrate heterogeneous data from responders and people in danger, thereby enhancing situational awareness and providing decision support services to crisis management.

ITU Development Bureau (ITU-D) will describe its Emergency Telecommunications roles, including ITU guidance to address CAP when preparing National Emergency Telecommunications Plans.

Participants will hear from the [OASIS Emergency Management Technical Committee \(EM TC\)](#) about efforts to seek consensus on common CAP "event" terms and criteria to distinguish those highest priority CAP alerts that should be sent immediately to all people in an affected area. During the CAP Workshop, the OASIS EM TC will meet by conference call and participants can join.

A regional initiative, "CAP in the Caribbean", will be the topic of a presentation by the Caribbean Institute for Meteorology and Hydrology. A range of programs involving CAP will be addressed in a presentation by the United States Agency for International Development (USAID).

Various national systems will be featured as well. There will be a presentation on using CAP for Cultural Heritage in Italy. Brazil will present its CAP system, and discuss a proposed Alert Hub for all of South America. Canada's CAP implementation experience will be a presentation topic. China's National Early Warning Release System, a very large-scale CAP-based multi-hazards warning system, will be presented. India's Centre for Development of Telematics will present its CAP implementation, which is now at an advanced stage of development. CAP as implemented in Taiwan Social Media will be a presentation topic. A presenter from Cuba will present on how CAP is being implemented there.

Our Mexico City host will present public policy aspects of CAP implementation, and a separate presentation will focus on experiences in Baja California. There will also be a presentation focused on Public Awareness challenges in the context of CAP-enabled alerting in Mexico City. Mexico at the national level will present aspects of its CAP-enabled alerting systems. This includes using CAP in its Earthquake Early Warning system. In such systems, earthquake detection triggers warnings sent electronically to warn people before destructive ground motion arrives.

For sudden-onset events like earthquakes, Cell Broadcast can reach immediately all cell phones in the alerting area. Not only is it fast, cell broadcast reaches all phones--even phones not subscribed to a cellular service. This helps avoid leaving out anyone in the alerting area.

Another topic will address CAP messages over MQTT, the publish/subscribe protocol developed for the "Internet of Things". There will also be an update on the free and open source Filtered Alert Hub (FAH, see <http://alert-hub.org>). The current version of FAH uses Rabbit MQ and can use MQTT. Part of the NOAA Big Data Project, the FAH Team includes AccuWeather, Amazon Web Services, Facebook, Global Disaster Alert and Coordination System, IBM/The Weather Company, Knowledge Integration Ltd, MeteoAlarm, OASIS EM TC and WMO's Hong Kong Observatory. The FAH initiative also offers a cloud-based CAP Editor for creating and publishing emergency alerts. The tool, at <https://cap.alert-hub.org/> is initialized for about 200 alerting authorities. Anyone can use it as a "Guest"; actual publishing of alerts is restricted to authorized persons.

The CAP Editor tool will be used in a hands-on exercise as part of a lesson in CAP [Train the Trainers sessions](#) on October 16. Those sessions will also cover: the basics of CAP and how it serves interoperability; getting and displaying CAP alerts from alerting authorities and aggregators; making and validating CAP; and, disseminating CAP via traditional methods, the Internet, and new media. A survey of other CAP implementations now underway or newly launched, as well as new developments in some of the existing CAP implementations will be included (see status report: [CAP Implementation by Country](#)).

CAP Implementation Workshops are technical meetings conducted in English without interpretation. These meetings do not set policy; they are intended solely for information sharing among experts. Accordingly, participants

represent themselves and need not be formally associated with organizations. Registration is strongly encouraged for administrative and planning purposes. Participants from any WMO Member agency should follow guidance in the announcement [Letter from WMO Secretariat](#).

The Workshop and the training session will be held in the Justice Superior Court of Mexico City at Niños Héroes 121, Col. Doctores 06720, Ciudad de México (red circle in map below).



See also the [2019 Workshop website](#). Material from previous CAP Workshops is at these links:

- [2018 Hong Kong, China](#)
- [2017 Rome, Italy](#)
- [2016 Bangkok, Thailand](#)
- [2015 Rome, Italy](#)
- [2014 Negombo, Sri Lanka](#)
- [2013 Geneva, Switzerland](#)
- [2012 Montréal, Canada](#)
- [2011 Geneva, Switzerland](#)
- [2009 Geneva, Switzerland](#)
- [2008 Geneva, Switzerland](#)
- [2006 Geneva, Switzerland](#)

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