2023 Common Alerting Protocol (CAP) Implementation Workshop and Training
10-12 October in Geneva

The International Federation of Red Cross and Red Crescent Societies (IFRC) is hosting the 2023 Common Alerting Protocol (CAP) Implementation Workshop and Training. Both events will be at the IFRC headquarters building: Chemin des Crêts 17, Petit-Saconnex, 1209 Geneva, Switzerland. The Training will be 10 October, 9:00-17:00 CEST and the Workshop will be 11 - 12 October, 9:00-17:00 CEST. Click here to register. For those who cannot participate in person, Webinar call-in instructions will be sent to everyone registered. Documents pertaining to the Workshop and Training are posted to the Workshop website.

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

This Workshop is co-sponsored by the International Association of Emergency Managers (IAEM), IFRC, the International Telecommunication Union (ITU), the OASIS standards organization and the World Meteorological Organization (WMO).

CAP Implementation 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.

Today, 84% of the world's population lives in a country with at least one national CAP feed operational, and another 7% have a CAP feed in a test status. CAP implementation by country is shown in this zoomable map and in the static map below.

Sadly, developing nations and small nations have lagged behind other nations in their uptake of CAP. This gap in uptake inspired the Call to Action on Emergency Alerting, endorsed by the Workshop hosts and co-sponsors plus the United Nations Office for Disaster Risk Reduction (UNDRR), and the World Broadcasting Unions (WBU), among others. The Workshop will likely hear presentations focusing on CAP implementation in some of those nations, which could be models for nations still lacking a CAP system.

The UN ‘Early Warnings for All’ Action Plan, launched at COP 27 intends “to ensure every person on Earth is protected by early warning systems within five years”. This global initiative builds on the worldwide CAP infrastructure. Specifically, Pillar 3 of the Plan has actions to “Establish CAP editor and Alert Hub to further enhance multi-hazard CAP based emergency alerting”, ITU and IFRC, as well as WMO have leadership roles in the UN Action Plan, and might make presentations giving details on their progress.

The UN Action Plan work involving CAP-enabled alerting also dovetails with the new WMO Global Multi-hazard Alert System (GMAS). GMAS is likely to be covered within a presentation by WMO.

The CAP community provided this input to the UN Global Digital Compact: “Timely warning of life-critical emergencies is essential to public communication services.” Its many endorsements can be seen here.

The Workshop might hear presentations about some related work ongoing in Europe. For instance, the EU-Alert system for public warnings, which is now mandatory across Europe, is being implemented through national CAP-based alerting systems.

A new CEN Workshop Agreement addresses: “Requirements and recommendations for social media early warning messages in crisis and disaster management”. It includes this requirement in regard to CAP: “To ensure consistency, clarity and completeness of the messages disseminated simultaneously across
different channels, the social media early warning messages and related notifications shall refer to the persistent unique URL of the CAP message. The CAP message serves as the legal, public document for any public alert published by a government agency, so it makes sense that every social media message for an emergency must link to that, from a legal perspective.

New technologies will be featured in some of the presentations. Everbridge might provide an update on its proposed CAP-focused Public Warning Chatbot.

Travelers Information Services Association could present a status update on implementations of the TPEG2 Emergency Alerts and Warnings (EAW) standard. This standard helps enable CAP alerts, such as are aggregated by CAP Alert Hubs, to go directly to in-vehicle navigation systems, such as Garmin, Tom-Tom, and those offered by car manufacturers worldwide. These CAP alerts inform drivers so they can re-route to avoid danger. This is a mature technology, embedded in millions of devices worldwide.

The Workshop might hear presentations about CAP in the context of SAFERS, the European project focused on public alerting for forest fires. Floods could also be a presentation topic, perhaps with special attention to the Flash Flood Guidance System. Also, updates might be presented on the topic of the WMO Severe Weather Forecasting Programme (SWFP) which helps 80+ developing countries to strengthen their capacity to deliver improved forecasts and warnings.

As in prior CAP Workshops, one or another presentation is likely to touch on the use of CAP for issuing "Impact-Based Warnings". CAP and Impact-Based Forecasting are complementary, as was emphasized in an article in a 2022 WMO Bulletin entitled “Communicating for Greater Impact”.

It seems likely that Google Crisis Response would present an update on how its internal processes are evolving with regard to their leveraging of CAP alerts published by alerting authorities around the world.

The Workshop will very likely hear from the ITU Development Bureau about its CAP-related activities in support of its Emergency Telecommunications roles. This includes ITU guidance calling on each nation to address CAP implementation as part of its National Emergency Telecommunications Plan (NETP).

There will be an update on work of the OASIS Emergency Management Technical Committee.

The CAP Training Day will be 10 October, 09:00-17:00 CEST. The opening two sessions will cover the basics of CAP, a quick survey of operational CAP implementations, and, hands-on creation of a CAP alert.

IFRC will likely discuss and perhaps preview, its new CAP Editor freeware, now under development.

Participants in the CAP Training Day will get an overview of version 2.0 of the Common Policies and Practices document. It references major CAP Services such as Google Crisis Response, MeteoAlarm, meteoblu, IFRC Alert Hub, WMO Alert Hub, and WMO Severe Weather Information Centre.

Training Day participants will hear about the Esri “CAP Connector” tool that transforms a near-real-time CAP Alert Hub feed into a dynamic GIS Feature Layer. When implemented on a general GIS service like the Esri GeoEvent Server, such a service facilitates analysis and supports functions such as geofencing.

The CAP Training Day might also have another session concerning CAP Over Mobile Networks. This will discuss trade-offs between location-based Short Message Service (SMS) and Cell Broadcast.

The CAP Training is open to participants in the CAP Workshop, by e-mail to Eliot.J.Christian@gmail.com. All registered participants will also get Webinar call-in instructions for the Training.

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 necessary to receive the required password for the video conference. Participants from any WMO Member agency should note guidance in the Workshop announcement Letter from WMO Secretariat.

Materials from the 15 prior CAP Implementation Workshops are available at these links:

- 2022 Amsterdam, The Netherlands
- 2021 Geneva, Switzerland (remote only)
- 2020 Geneva, Switzerland (remote only)
- 2019 Mexico City, Mexico
- 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

**Program Committee of the 2023 CAP Implementation Workshop:**

- **Chair** Eliot Christian
- **IAEM** Beth Armstrong
- **IFRC** Nathan Cooper
- **ITU** Vanessa Gray
- **OASIS** Elysa Jones
- **WMO** Vicente Vasquez

Contact the Program Committee by e-mail to Eliot.J.Christian@gmail.com