

ONE YEAR REVIEW

May 2022

CALL TO ACTION ON EMERGENCY ALERTING

To scale up efforts to ensure that by 2025 all countries have the capability for effective, authoritative emergency alerting that leverages the Common Alerting Protocol (CAP), suitable for all media and all hazards.

When Call to Action on Emergency Alerting was launched a year ago in April 2021, about 70% of the world's population lived in a country with at least one national-level CAP news feed. Today, that percentage stands at 74%, because eleven more countries began publishing CAP alerts. Half of the world's countries still do not have a CAP enabled system. Most of them are small, although 38 countries without CAP have more than 10 million people and six have over 100 million people. Many countries without CAP lack the resources needed for resilience and count as some of the most vulnerable to disasters. The world's changing climate will increase the likelihood that weather-related events turn into disasters.

Up to date, 18 internationally operating organizations and companies plus Vint Cerf as an individual have endorsed the Call to Action on Emergency Alerting. This document highlights the process towards the Call to Action as they have been put forward by the endorsers themselves, either in written format or in the [WSIS Forum 2022, Session 238: The Global Call to Action on Emergency Alerting](#).

Alert-Hub.org

In the year since the Call to Action on Emergency Alerting was launched, only eleven new countries/territories have begun publishing an operational CAP feed: British Virgin Islands, Burkina Faso, Costa Rica, Cote D'Ivoire, Gambia, Iran, Mali, Mauritius, Niger, Seychelles, Tunisia, and Uganda. All eleven are among the 30 countries/territories using the free CAP Editor tool provided by Alert-Hub.Org CIC. The CAP Editor tool is also in testing status by 31 other countries/territories.

Alert-Hub.Org was informed that its Hub was tested as the source for sending alerts directly to in-vehicle navigation systems, such as Garmin, Tom-Tom, and the navigation systems specific to different car manufacturers worldwide. These alerts inform drivers so they can reroute to avoid danger areas. This is a mature technology, embedded in millions of devices. In addition to CAP, the technology uses the ISO standard "TPEG2 Emergency Alerts and Warnings".

Alert-Hub.Org is also working on technology to make a dynamic Geographic Information System (GIS) Feature Layer that provides the contents of a near-real-time CAP alert feed. Such a CAP-Feed-to-GIS-Feature service will greatly facilitate analysis and support important functions such as geofencing. Also, because many emergency operations are based on GIS data, this will make it much easier to include CAP alerts in those operations.

Alert-Hub.Org has begun to seek consensus on a document that clearly states many of the Common Policies and Practices across the major operators of CAP Alert Hubs.

IFRC

Through the Alert Hub Initiative, the IFRC and the global Red Cross Red Crescent network continues its efforts to strengthen and expand the use of the Common Alerting Protocol globally. Together with providing Public Awareness and Public Education actionable messages to be integrated into emergency alerts, 18 RCRC National Societies in Africa, the Caribbean and Europe are engaging with partners across the disaster management sector to further strengthen the use of CAP and to ensure that communities everywhere receive the most timely, reliable and effective emergency alerting possible, and can thereby safeguard their lives and livelihoods.

The IFRC emphasizes collaboration at global, regional and national level to increase the collective impact towards effective early warning systems. Linkages to Anticipatory Action initiatives provide concrete opportunities to enhance the dissemination of alerting information. Increasing and diversifying the communication and dissemination of emergency alerts supports response capabilities across disaster management actors and enables self-action by

individuals, households and communities in the face of an emergency. Collaborations with WMO, Google, the Anticipation Hub, ITU, Alert-Hub.org and others are seen as key to further strengthen the use of CAP for effective, authoritative emergency alerting globally.

Everbridge

Everbridge is progressing the Call to Action on Emergency Alerting by facilitating the adoption of CAP as the interface between civil authorities to operators, globally. We are currently providing nationwide public alerting to 20+ countries around the world through our Everbridge Public Warning Platform (PWP). In addition to this, Everbridge is an Alert Origination Software Provider having successfully demonstrated IPAWS capabilities for the United States' Integrated Public Alert & Warning System (IPAWS) managed by the Federal Emergency Management Agency (FEMA). The CAP protocol is offered to our customers and prospect organizations that need to implement the interface between the Public Warning Platform and a warning message dissemination system. In 2021, our global PWP was renewed or adopted by six countries, in addition to the existing fourteen, growing our global footprint to twenty nationwide systems. In Europe and the rest of the world (for the US-specific case please see below), CAP is quickly becoming the interface standard between civil authorities to operators for their Everbridge nationwide Public Alerting system. We help our customers define their specific implementation of the CAP protocol, which is a template and not an implementable protocol. Some elements in CAP that are specified as optional are mandatory for the purpose of generating a meaningful warning message. For other elements, the usage needs to be specified in detail in order to be meaningful. Before CAP can be used as a protocol for the interface between the PWP and message disseminator, the meaning and usage of relevant CAP parameters needs to be agreed. We actively guide and inform our customers of the operationalization requirements for such implementation, facilitating its diffusion. The PWP also provides output adapters to publish alerts to social media such as Twitter and Facebook. Both Twitter and Facebook provide their own API, which is not based on CAP. WWW.EVERBRIDGE.COM In the United States, FEMA has formally adopted CAP standards for public alerting and for public safety organizations' information exchange. FEMA has also recognized Everbridge Suite as successfully demonstrating capabilities for IPAWS, including but not limited to, the ability to create CAP-compliant messages for mobile, TV, radio, audio, and Internet-based devices. In addition, Everbridge Suite enables approved authorities to send geo-targeted warnings and alerts to the public through one single interface across mobile, TV, radio, and Internet-based services. Everbridge also supports Collaborative Operating Group (COG-to-COG) capabilities to send these CAP messages to other alerting authorities who have access to IPAWS. Not only has Everbridge worked closely with FEMA to support the adoption of CAP standards, but

Everbridge has also worked to create interfaces that are secure and easy to use under pressure to avoid changes or false alarms. 2. Going forward, where do you see key opportunities to further strengthen and expand the use of CAP for emergency alerting? Everbridge PWP is actively facilitating CAP diffusion as the preferred basic interface between all CAP-enabled systems. An example is the design of innovative machine learning applications – such as a chatbot – which learns about current and ongoing emergencies using a CAP interface from the public warning system or any other CAP-enabled system, and collects in a structured and automated fashion the peak in responses from civil society, supporting the work of responders. Innovation in CAP diffusion is developed by Everbridge autonomously, as well as through the participation to a consortium of researchers and practitioners in the Horizon 2020 EU-funded Research grant we are a member of until the end of 2023: Project-ENGAGE. This research platform provides visibility to the usefulness of CAP as a standard interface throughout Europe as well as in Israel. Another example Everbridge uses to strengthen use of CAP is the research into DAB+ as a CAP-enabled way to communicate emergencies via digital radio and supporting multi-media content. In general, we estimate that soliciting adopting Governments to produce and publish publicly annual reports of CAP, which are triggered along the CAP reporting standard of frequency and severity would be a useful blueprint for other prospective adopters for research and comparative purposes.

OpenBroadcaster

In the last 12 months, in response to global supply chain issues, we re-purposed with open source software, our existing hardware line, so LMD and end users didn't have to upgrade to scarce and expensive gear to obtain access to newer features. We saved customers significant money and prevented computers from needlessly going into the landfill. Our public production Open Source code supports POLLY AI neural machine learning languages, in addition to being able to carry CAP alerts in Indigenous dialects to localized remote communities.

We have been receiving reports from Indigenous broadcasters with whom we work, describing the value and relevance of their local FM radio station being more trusted than all other social media platforms combined.

Our talented open source user community optimized the core code for visualization, re-factored for performance and security releases, including additional functionality supporting CAP Alert switching for video. Pyrate 3 CAP Alerting is running on low cost Raspberry Pi computers at community radio stations CHFR, Hornby Island, BC and CKUT, Montreal, Quebec.

Expanded accessible support enables web server alerting interfaces for international languages Hindi and Bangla in addition to English, Estonian, Spanish and Thai, with multilingual Demo Sites for evaluating CAP play back.

All calls, no action; talk of calls not followed up by tangible actions.

Huge segments of the population are being left out by governments, who do not see the value of using existing community FM radio to provide CAP alert information in Indigenous languages. Worse still are well intentioned agencies “tire kicking”; asking for multiple meetings, quotes and proposals, then blowing their unused budgets on office supplies, instead of leaving something tangible. I’m speaking about the rest of the world that does not have cell phones or the internet. I’m talking about refugee camps and reserves, where we warehouse entire populations for many years without access to local information. Even in North America, there are huge expanses not covered by cell phones, but have large existing coverage by FM radio and millions of FM receivers. What about indigenous people living off the land in their villages that only have FM radio as their primary source of information, in languages other than their local dialect?

How may we be more inclusive and alert the rest of the world?

Recommend the Carcross Tagish First Nation, Tagish Fire Hall and the Yukon Government’s Emergency Measures Organization endorse this “Call to action on Emergency Alerting” who are all under increased pressure to provide timely information about forest fires, climate crisis and flooding in the Southern Lakes region, this year and many more to come.

Not everyone in rural Yukon is glued 24/7 to social media with an expensive cell phone. Just ask the survivors of [Portapique, Nova Scotia](#) Canada.