

The Common Alerting Protocol (CAP)

Background

The Common Alerting Protocol (CAP) is a simple and general format (XML-based data format) for emergency alerting and public warning.

CAP is being developed by US Department of Homeland Security, the National Weather Service and the Federal Communications Commission. It is a public alert system designed for "all-hazards" (addressing weather events, earthquakes, tsunamis, volcanoes, public health, power outages, etc.) and for "all-media" (addressing communications media such as sirens, cell phones, faxes, radio, television, and various other digital communication networks including the Internet) through common standards on category of hazard, alert level, etc..

It has been adopted by Canada, Italy and Sri Lanka and is being implemented by other countries such as Australia, and South Africa, all of them for their Public Alert and Warning System. Private companies such as Google and MS are aggregators of the CAP system.

Regarding the UN system, the International Telecommunication Union (ITU) has adopted in 2007 the Common Alerting Protocol as an OASIS¹ standard through its Recommendation X.1303. The standard CAP format has been promoted by both WMO and ITU to other UN bodies concerned by disaster and emergency management and to the public worldwide.

Relationship with GGIM work

The Global Geospatial Information Management (GGIM) initiative is an intergovernmental process to effectively coordinate ongoing work in the wide field of geospatial information, to help to develop common approaches and to bring geospatial information to bear on global policy issues related to climate change, disaster and emergency management, humanitarian assistance, environmental protection, health prevention, etc. More specifically, GGIM aims to propose actions to guide the development of principles, policies, methods and mechanisms for standardization, interoperability and sharing of geospatial data, and to help countries develop the full potential of the geospatial information and the underlying technology and to make it accessible to and effectively used by a broad range of users.

There is a general recognition that standards are a building block for any location-based framework, the foundation of a geospatial information infrastructure. Therefore, GGIM can provide a forum where countries can discuss the CAP system and share the various country practices. Furthermore, the GGIM initiative, led by the UN which has the mandate for standardization, can promote CAP as a good example of common standards and of sharing best practices to address hazards and disasters at an early stage by countries and societies at national, regional and global level.

¹ Organization for Structured Information Standards