Emergency Alerting Policy Workshop

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http://events.oasis-open.org/home/cap/2012

Comments & Questions of Alerting Policy Workshop

Emergency Alerting Policy Workshop

Foreword

(by Norm Paulsen, Environment Canada)

As agreed among the Workshop organizers, the range of alerting policy issues and challenges to be discussed at this Workshop was deliberately left open and loose. We had hoped to hear a variety of the challenges and concerns from a broad spectrum of agencies and organizations.

Some participants raised governmental policy challenges as generalized suggestions and opinion. Many discussions, without consensus, also occurred on practical challenges such as word meanings, multiple languages, security, message duration, common look and feel, aggregation and re-origination of alerts.

Furthermore, participant presentations addressing a variety of alerting systems, countries and organizations could be described as ranging from the early stages (e.g., identifying the need for an alerting system) to quite advanced stages (e.g., multiple partners reconciling diverse roles and responsibilities). In the systems developed to date, a variety of practices have been employed to solve some of the challenges and these practices employed often didn't align with each other nor have many found widespread acceptance.

Introduction

This report has been compiled by the Workshop planning committee and attempts to summarise the main points arising from the presentations and ensuing discussions. It does not purport to be a full and accurate record of everything that was said during the Workshop.

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General Comments

The following are a summary of some of the comments made by presenters at the Emergency Alerting Policy Workshop. The items in this Comments section were not viewed as having a direct impact on government policy, but may lead to follow-on actions.

1. Emergency disaster trends of INCREASING number, size & impact

The cost impact in property damage is increasing, and the frequency and severity of disasters may also increase in the future. This is added incentive for government agencies to find ways to work together especially in cross-border, but also in cross-functional methods.

2. Communication interoperability is essential, and increasingly more capable with more modes of dissemination and devices

3. Social Media providing new opportunities and challenges for government authorities

Social media is providing rich new opportunities, but also new problems for governmental agencies to respond to new ways that alerts and warnings can be distributed and consumed and how disaster situation feedback info can be obtained. Some discussion was held on how to provide finer grain levels of warning information, which impacts the policies adopted around how agencies implement CAP within their emergency alerting systems and policies.

4. Implementation of CAP (and other emergency standards) can enable an application-based solution

a. Changes the dynamics of government's role

Most government systems are built from specific requirements. The implementation of an interoperable data exchange standard enables an application-based solution, which allows people to build interoperable applications – beyond what any original requirements might have specified..

b. Sparks innovation and enables creativity for new solutions

Defining the data exchange interface allows for innovation in software application user interface design. Also, new applications can be created to address the needs of specific, target user groups.

Educational Comments:

These following comments reflect suggestions made in the workshop emphasizing the need for more educational material.

5. Need a better understanding of urgency, severity, certainty

Descriptions and examples of how these terms are being used was seen as beneficial for agencies in order for them to implement in a consistent fashion. Websites and applications that re-purpose alerts and warnings need more specifics about the relative importance of the different types of alerts and warnings, especially as indicated by levels of urgency, severity & certainty.

6. Need more international good/example practices used for alert generation

Sharing policies and practices between governments is important to bring about further adoption of emergency alerting standards. Training in good practices for originators of alerts & warnings needs to include how to use CAP elements that might vary across implementations.

7. Need clear Q&A of Policy Issues related to CAP

a. There is not always one “best” practice or policy that applies to every geography or alerting event. Publishing a Frequently Asked Questions (FAQ) and Answers that would highlight why certain policies and practices were chosen by different implementers of CAP would help other organizations.

b. Will enable more global uptake (e.g. hydrology community)

   Different countries and global communities of interest are seeking guidelines on how to implement CAP and other emergency (e.g. EDXL) standards.

8. Examples on use of Social Media is helpful

The open source project Sahana and Google.org Crisis Response Project provided info on their current uses of CAP and EDXL-SitRep. It would be helpful to alert originating authorities to be provided with further examples of how alerts and status responses can be better utilized.

9. Don't over-regulate and thus stifle creativity

A data exchange format focuses on what information is being exchanged between two different computer software applications, but also identifies optional fields. How that data is captured or displayed should be left to the application and not specified in the standard. Discussions occurred around when to adopt a common look, feel, and/or sound of alert symbols.

10. Natural tension between tight standards vs. loose standards

For software developers, good standards are the common floor to innovation. The more things are left to interpretation, the harder it is for different vendor applications to achieve interoperability with other vendors. Be sure there is a diverse and wide range of participants at the table when standards are being developed; technologists, users and policy makers.

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Questions of Policy

1. Some participants perceive a need to clarify their use of the terms Informing, Alerting, and Warning

Different emergency management actors use these terms differently and clarification would be useful where their respective work overlaps. A global platform, such as Google Maps needs consistent terminology, which hazard experts may need to harmonize.

2. Some participants perceive a need to standardize event codes and terms

Alerting authorities should publish descriptions of event codes and other warning terms. This is especially helpful when other applications or websites re-purpose alerts and warnings to an audience who may not know exactly what is meant.

3. Is a CAP Profile needed for specific CAP implementations

There was discussion at the Workshop about whether a CAP Profile is really needed for country-specific or other types of implementations. In other words, does a country-specific list of Event Codes and Location Codes require a full CAP Profile?

4. More attention needed in maintaining the Register of Alerting Authorities

WMO maintains a Register of Alerting Authorities, and it is up to each country to identify in the Register the alerting authorities for their country.

http://www-db.wmo.int/alerting/authorities.html

5. Need clarification on overlapping jurisdictions with respect to hazard footprint and alert footprint

The alerting originator may need to restrict the geographical scope of their alert based on restrictions to their alerting authority. Cross-jurisdictional authorities may be needed to insure that the alert is conveyed to all populations within the footprint of the actual hazard.

6. How to notify and utilize citizen volunteers

Community volunteers [e.g. Community Emergency Response Teams (CERT)] are increasingly seen as valuable resources to respond in emergencies. New tools and channels may need to be used by alerting authorities to be able to include trained citizen volunteers in alerts sent to responders (see Sahana Software Foundation). Also, citizen volunteers can be utilized to rapidly gather information on the status of hazards and disasters as well as the resources needed.

7. User preferences

Governmental authorities originating alerts often have to include multiple sets of information (e.g. different language translations of the alerting text) in alert messages. Other applications/tools/websites could re-purpose the alerts and warning information based upon user selected options.

a. What should citizen be allowed to select and opt-out

The USA IPAWS CMAS program is enabling alerts to be sent to cell phone users over the cellular broadcast channel. Cellular handset manufacturers and carriers are providing some options for what level of alerts a mobile user can select or chose to opt-out. Policies, guidelines and examples should be published so users can be educated about what to expect from different options, and what alerts are considered “broadcast intrusive”.

8. Some participants advocated a fact-based (not speculative) approach to policies

a. Policy/procedure choices based on real-world experience

Instead of basing governmental policies for alerts and warnings on speculation of what may happen, factual data on severity and frequency of hazards and disasters is often the best source to be sure the policy is balanced with realistic expectations.

9. CAP implementation can be accompanied by a review of policies, procedures and practices

For authorities implementing emergency alerting standards, the process often enables them to review existing policies, practices and guidelines. This review also enables a consideration of how best to embrace new technologies and capabilities (e.g. social media, mobile devices). CAP implementation does not require such policy reviews.

10. Consider message origination authentication based on roles

Authentication of both originators and distributors of alerts is essential. Authorities need to be clearly delineated. Some authorities have chosen to list the alert message originator by the role and then utilize their local systems to track which individual was signed on to an account that initiated such alerts for accountability. Other suggested options could be described in practice examples.

11. Update, Cancel, Expires

a. There was discussion on how to handle the expiration of an alert to a given geographical target audience, especially for rapidly moving hazards (e.g. weather related). The examples and rationale of these different choices should be documented and published. Policy issues could document how these terms are implemented.

b. It is essential for alerting authorities to track the metrics for how populations respond to their alerts and to seek and document feedback on what worked and what didn't work.

12. What is a modification of a CAP message?

Under what circumstances should an update to an alert result in a new CAP alert message, and when is a CAP message "update" considered appropriate.

a. Semantic text

If an alert message is issued initially in one language (e.g. English) and then when that text is translated in additional languages, should the same message be sent as an "update" with additional Info blocks containing the translated text? Examples and usage guidelines were deemed to be helpful.

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Follow-up Activities

- **OASIS Emergency Management TC**
  - Document when a CAP Profile is needed
  - Provide clear definitions & examples of event codes and alerting terms
  - Provide clearer definition & examples of urgency, severity, certainty
- **OASIS Emergency Management Adoption TC**
  - **Collateral & Documents SC:** develop CAP Usage document to more clearly describe CAP terminology as provided by EM TC.
  - **Outreach & Education SC:** work with ITU and WMO to determine what additional material would be useful in their educational processes to countries interested in implementing CAP.
  - **Outreach & Education SC:** engage discussions on how to build an "example practices" living document/website where suggestions and examples from those authorities and organizations who have implemented CAP can be gathered and made available for new adopters.
  - **Events & Demo SC:** work with OASIS staff and representatives from other organizations to help plan appropriate follow-on workshops and events.
- **OASIS eGov Member Section**
  - Identify how transformational government practices can guide alerting authorities in a policy review related to implementing emergency alerting and response standards.

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- **ITU**

  Will continue to:

  - coordinate on revisions of CAP Recommendation ITU-T X.1303;
  - support work on CAP implementation;
  - provide capacity building efforts of CAP; and
  - promote the implementation of CAP.

- **WMO**

  - Provide education and FAQ
  - Encourage more usage of Register of Alerting Authorities
  - Host future CAP Workshop

Author's note: Although no plans for a subsequent workshop have been finalized, the feeling with the organizing committee is that a follow on workshop possibly titled"A Convergence of Practices" would garner significant interest. Spring 2013, possibly in Geneva at the WMO is being discussed.