WORLD METEOROLOGICAL ORGANIZATION

COMMON ALERTING PROTOCOL (CAP)
IMPLEMENTATION WORKSHOP

WMO HEADQUARTERS, GENEVA, SWITZERLAND
23-24 APRIL 2013

FINAL REPORT

## 1.	INTRODUCTION AND SCOPE OF THE WORKSHOP

The Common Alerting Protocol (CAP) Implementation Workshop was held at the World Meteorological Organization (WMO) headquarters, Geneva, Switzerland, from 23 to 24 April 2013. The Workshop was organized by the WMO Public Weather Services (PWS) Programme, which is responsible for developing service delivery capacities and capabilities of National Meteorological and Hydrological Services (NMHSs) of WMO Members. The focus of PWS includes how official alerting authorities disseminate alerts and warnings to the public, the media and the Disaster Management and Civil Protection Authorities.

The Workshop was a technical meeting among experts, chaired by Mr Eliot Christian, Adviser to WMO on CAP. The Workshop addressed various aspects of CAP including: experience gained in implementing CAP by various countries; the tools for dissemination by major aggregators of alerts and warnings, as well their needs for improved application of CAP; the efforts that CAP sponsoring organizations are taking to advance the CAP standard and its uptake as a standard of communicating all alerts through all media.

The full content of all the presentations is contained in the Documentation Plan of the Workshop, which shows linked materials for all topics. It can be accessed at:

http://www.wmo.int/pages/prog/amp/pwsp/CAP_2013_en.htm .

Brief biographies of the presenters at the Workshop are at:

http://www.wmo.int/pages/prog/amp/pwsp/Presentations.html .

The Workshop was attended by 70 participants from 38 countries, and they are listed at:

http://www.wmo.int/pages/prog/amp/pwsp/documents/PrLOP_CAP-IW-2013_INF.6.doc .

## 2.	SPONSORS OF THE WORKSHOP

The Workshop was sponsored by the International Telecommunications Union (ITU), Organization for the Advancement of Structured Information Standards (OASIS), and WMO. The Workshop was opened on behalf of the WMO Secretary-General by Mr Peilang Shi, the Officer in Charge of the Weather and Disaster Risk Reduction Services (WDS) Department of WMO. The WMO PWS Programme presented the International Register of Alerting Authorities. It also presented the CAP Jump-Start initiative, and how WMO was leveraging the Severe Weather Forecasting and Demonstration Project (SWFDP) of WMO to increase the uptake of CAP by NMHSs in many countries.

Mr Bilel Jamoussi addressed participants on behalf of ITU. Mr Jamoussi indicated that ITU regards the CAP Workshops as part of a joint effort to develop integrated early warning systems based on modern technologies. ITU cited Resolution 136 of the Plenipotentiary Conference on International Telecommunication Union held in Guadalajara, 2010. This resolution addresses the use of telecommunications/information and communication technologies for monitoring and management in emergency and disaster situations for early warning, prevention, mitigation and relief.

Dr Laurent Liscia made an address on behalf of sponsor organization OASIS. Dr Liscia presented remotely, welcoming the participants and acknowledging the history and value of these workshops. Documents identifying best practices for CAP were noted as deliverables requested in 2012 and now available for public review. The Chair of the OASIS Emergency Management Technical Committee, Ms Elysa Jones, presented a summary of the versions of CAP

and responses to prior workshop actions. This included the results of a recent ballot to bring CAP version 1.2 to the ITU for reconciliation with ITU-T Recommendation X.1303.

3. MAJOR OUTCOMES OF THE WORKSHOP

3.1 The Workshop underscored the ever-increasing importance of online companies to supplement traditional broadcast and print media. In this regard:

(a) the Google representative presented how official CAP warnings are disseminated using their search or map tools, through the Google Public Alerts initiative, which is based on CAP;

(b) ValueClick presented their newly launched initiative that interrupts advertising to show official CAP warnings;

(c) the U.S. National Weather Service (NWS) and others showed CAP alerts disseminated over cellular networks; and

(d) Pinkerton presented valuable insights on their capability to monitor risk information to allow for machine learning algorithms to automatically generate relevant CAP messages.

Because CAP messages can be specifically geo-targeted, these, and other online media, can display alerts only to people in the specific alerting area and in the online user's own language. It was demonstrated that alerting authorities that implement CAP are now getting huge benefits at minimal cost because CAP enables online companies to help them disseminate warnings even more effectively.

3.2 The WMO representative noted that meteorological and hydrological matters pertinent to CAP should leverage WMO technical coordination mechanisms, such as its Commission on Basic Systems (CBS).

3.3 The representative of China indicated that China was exploring how best to adopt CAP in particular cases, including the use of CAP in Tropical Cyclone alerting, as well as the need for tsunami alerting templates. Another participant noted that it would be useful for others to know what adaptations are made by countries when they adopt CAP to their particular situations. This was considered part of the general theme of CAP Profiles, addressed later in this report.

3.4 In the discussion of MeteoAlarm, it was noted that this pan-European system should be referenced somehow in the International Register of Alerting Authorities. Noting that MeteoAlarm is operated by the Network of European Meteorological Services (EUMETNET) and the somewhat analogous European Organization for the Exploitation of Meteorological Satellites (EUMETSAT) is already entered in the Register, the matter of registering MeteoAlarm was referred to the Chief of the WMO PWS, Ms Haleh Kootval.

3.5 The need for symbols in public alerting to overcome some of the linguistic and language barriers were brought up in 2011 and resurfaced in 2012. Sahana Software Foundation presented a case for research and development in this regard, especially the use of CAP with pictogram-based alerts on mobile phones indicating the hazard and response action combined.

3.6 The Workshop noted four recent documents about CAP implementation. The first two listed here were produced by the Document and Collateral Subcommittee of the OASIS Emergency Management Adoption Technical Committee (EMA-TC).

(a)   A guidance document on CAP Elements Usage can be accessed at:
http://docs.oasis-open.org/emergency-adopt/cap-elements/v1.0/cnprd01/cap-elements-v1.0-cnprd01.pdf .

(b)   A guidance document on CAP Feeds can be accessed at:

http://docs.oasis-open.org/emergency-adopt/cap-feeds/v1.0/cnprd01/cap-feeds-v1.0-cnprd01.pdf .

(c)   A Technical Advisory Note on CAP file size constraints was produced in 2012 by Canada. It can be accessed at:

https://www.oasis-open.org/committees/download.php/45483/TechnicalAdvisoryNote-v11-fina(JP).docx

(d)   Guidelines for Implementation of Common Alerting Protocol (CAP)-Enabled Emergency Alerting (WMO-No. 1109, PWS-27) was recently published by WMO. It is accessible at:

http://library.wmo.int/opac/index.php?lvl=notice_display&id=14699

3.7   Participants noted with interest the use of CAP with space weather alerting, which is a hazard type much discussed among the public recently.

3.8   The Workshop noted four of the demonstration sites referenced in presentations:

(a)   Pinkerton's dashboard used at the Boston Marathon bombing investigation, accessible in May 2013, with username: Bostonexp and password 2ws7ygv, at:

http://www.pinkertontieslink.com ;

(b)   The Swan Island TIES situational awareness system (www.swanisland.net), built on CAP and presented by Mr Peter O'Dell, is accessible, with username: wmo_cap and password !Wmocap1, at: http://www.tieslink.com ;

(c)   SimpleCAP, a free CAP alert origination tool accessible at:

http://simplecap.alertsense.com ; and

(d)   A one-month free trial of the Jixel tool for CAP messaging accessible at:

http://demo.jixel.eu .

3.9   The Workshop raised issues which they requested to be addressed in the CAP Subcommittee of the OASIS EM-TC, which had scheduled a side meeting that was to take place immediately following this Workshop. This included the following four issues:

(a)   Providing a best practices guide for CAP Profiles development and use: Some participants would like to see a persistent location for CAP profiles to be stored and registered as well as a method for validation.

(b)   Future CAP enhancements regarding support for structured data: Google had expressed the immediate need for a CAP mechanism to incorporate structured information defined elsewhere that provides useful additional detail;

(c)   Best practices guidance for urgency/severity/certainty settings in different circumstances and for alert templates for various hazards; and,

(d)   An approach for dealing with units information as part of the CAP parameter value.

3.10   The Workshop participants briefly discussed the timing and venue for the next CAP Implementation Workshop. It was proposed, and some participants voiced concurrence, the next Workshop could be held about June 2014, in Southeast Asia (perhaps Sri Lanka). There the year 2014 is especially significant, as it is the 10-year marks the anniversary of the 2004 Indian Ocean tsunami.

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