Joint ITU-T/ OASIS Workshop and Demonstration of
Advances in ICT Standards for Public Warning
Geneva, 19-20 October 2006

Co-chairs' Highlights and Actions List

This Workshop and Demonstration was announced through Telecommunications Standardization Bureau (TSB) Circular 98, which also stated the specific objectives:

- To review progress concerning public warning since 2003, including the Tampere Convention

- To demonstrate the availability and effectiveness of interoperable technologies based on the OASIS Common Alerting Protocol (CAP) content standard which is applicable to all alerts and notifications in disasters and emergency situations

- To identify existing standardization gaps, including authorization and authentication of public warnings and the attendant implications for public policy

- To prepare an action list for filling gaps and promoting public warning standardization, and identify key players that could collaborate in such work.

The following **Highlights** reflect the review of progress, demonstrations of technology, and identification of standardization gaps as these were extracted from the main points in the various presentations and discussions during the Workshop and Demonstration.

Highlights:

− Collaborative actions are necessary to ensure that standards-based, all-media, all-hazards public warning becomes an essential infrastructure component available to all societies worldwide. This requires cooperation among the relevant standards development organizations and includes substantial international cooperation with users and industry (emergency alert needs are similar worldwide; industry and customers want interoperable solutions; solutions deployable worldwide will reduce the unit cost).

− Official sources of public warnings can be overwhelmed with telecommunications traffic when major disasters occur. These sources can now take advantage of the announced no-charge offer to mount copies of authoritative, authenticated, public alerts in CAP format by any official source worldwide. One such offer was announced in the workshop by the provider of the Google Earth / Neopolitan Networks infrastructure.

− A wide range of CAP-based technical solutions for public warning are already on the market: from CAP-driven sirens: to dissemination using multiple communication media including distinctive telephone rings, SMS messages over cell phones, broadcast radio and television, among others; and to tools for analysis and display of CAP alerts.

− The following are among the important considerations when designing public warning solutions: inter-jurisdictional, national, and regional cooperation; involvement of the user community in identifying requirements and ascertaining value; need for support of multiple language in message delivery; involvement of vendors; aiming for low-tech solutions to ensure relevance for people without access to sophisticated receiving devices; systems to be designed up-front with security in mind to retain public trust in alerts and warning; interoperability to be enhanced by common elements and open, international standards.

− Undue hesitation or failure to warn may be traceable in some cases to the lack of a recognized "standard of practice" for the issuance of public warnings by official sources.

− If it is desired to have more countries ratify the Tampere Convention, then better outreach is needed to national telecomm regulators and governments.

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– More regulators should get involved in discussions of the topic of public warning and emergency telecommunications.

– It is appropriate to promote further use and development of data messaging standards and supporting infrastructure, as well as to reach other systems and network infrastructures, including at the international level.

– There is no one technology that would satisfy all service and performance expectations; multi-channel message delivery is needed.

– The management of telecommunications capabilities is crucial during disasters that degrade the infrastructure, especially where the infrastructure may have been minimal beforehand. This includes avoiding overload in processing and delivering warning messages, prioritization of calls, network management and provisioning, and infrastructure restoration.

– Certain specific details among implementors of CAP should be further discussed, also taking interoperability and backward compatibility in consideration. Also, the GLIDE (GLobal IDEntifier) is noted as a scheme in use for assigning unique values of the CAP identifier.

The following **Actions List** was extracted from the main points in the various presentations and discussions during the Workshop and Demonstration.

Actions List:

– Coordinate actions to ensure that standards-based, all-media, all-hazards public warning becomes an essential infrastructure component; within ITU this includes the Partnership Coordination Panel on Telecommunications for Disaster Reduction (PCP-TDR).

– Complete the actions necessary to publish the CAP standard also as an ITU-T Recommendation.

– Join efforts in increasing support of the CAP standard in various communications systems (in particular those defined by ITU-T, e.g. H.323, IP Cablecom and NGN).

– Join efforts to promote the deployment of CAP, e.g.:

  o Increase awareness of the CAP specification, for example by preparing a joint ITU-T/ITU-D handbook.

  o Support liaisons with ITU-D and developing countries regarding standardization work in public warning and emergency telecommunication.

  o Suggest appropriate forums in which regional coordination for CAP implementation can be encouraged.

  o Promote the use of authoritative and authenticated dissemination facilities for CAP alerts (such as the Google Earth infrastructure showcased at the workshop)

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− Take measures to facilitate a globally harmonized deployment of Cell Broadcast technology, working within the international standards process and relevant standards bodies as appropriate:

　o Drawing on expert input from interested parties, develop and disseminate information on actual use at present and potential applicability and constraints of Cell Broadcast

　o On the basis of contributions from the ITU-T membership, study as appropriate the feasibility and advisability of allocation of "emergency alert Message source Identifiers (MI)" for Cell Broadcast in systems worldwide, aiming at international coordination of MI assignment. Workshop participants of the Dutch and Wisconsin (USA) trial systems held an ad hoc meeting and the Wisconsin system agreed to use MI 920, as in the Dutch test system, in the interim pending engagement by the relevant standards committee.

− Engage standards-makers with the WHO program implementing the International Health Regulations (IHR) to explore in depth how IHR can leverage the standards work already done and influence future directions.

− Suggest mechanisms that will encourage development and dissemination of Best Practices concerning CAP implementation and warning system design more generally. Such mechanisms should give special attention to institutional and technological constraints on public warning capabilities in developing countries.

− Invite ITU member states to put proposals in the upcoming ITU Plenipotentiary Conference to incorporate into Plenipotentiary Resolution 36 language to highlight the importance of the standards work on public warning, for example with the following items:

　o *Add a "Considering"*
　the discussions held at the 19-20 October 2006 Joint ITU-T/ OASIS Workshop and Demonstration of Advances in ICT Standards for Public Warning

　o *Add a "Further convinced (b)"*
　that an international standard for communication of alert and warning information can assist in the provision of effective and appropriate humanitarian assistance and in mitigating the consequences of disasters, in particular in developing countries

　o *Add a "Instructs the Directors of the Bureaus"*
　to collaborate with organizations that are working in the area of standards for communication of alert and warning information in order to study the appropriate inclusion of such standards in ITU's work and their dissemination, in particular in developing countries

　o *Add a "Invites Member States"*
　to undertake collaborative actions to assure that standards-based, all-media, all-hazards public warning becomes an essential infrastructure component available to all societies worldwide, including developing countries in particular.

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