

TSG-SA WG 1 (Services) Meeting #16
Victoria, Canada, 13 – 17 May 2002

S1-021190
Agenda Item: 5.6

Title: SA1 Position Statement related to ITU-T request for information on activities related to Emergency Telecommunications Services (ETS)

Source: SA1

With reference to: S1-021018 Draft new Question Q.ets/16 on Emergency Telecommunications Service (ETS)

Contact Information:

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References: For the latest copies of TR 22.950, TS 22.146, and TS 22.174 please refer to www.3gpp.org

1. Overall Description

SA1 has received information from ITU-T SG 16 on Draft new Question Q.ets/16 on ETS.

The position of SA1 on the request for information concerning our current activities addressing issues related to emergency telecommunications is as follows:

SA1 has responsibility in the following areas:

Organization	Subject	Document	Status
3GPP TSG SA WG1	Priority Service Feasibility Study	TR 22.950	Work in progress, 3GPP Release 6
3GPP TSG SA WG1	Multimedia Broadcast and Multicast Services	TS 22.146	3GPP Release 6
3GPP TSG SA WG1	Push Services	TS 22.174	3GPP Release 6

Priority Service Feasibility Study (TR 22.950)

The high-level requirements for the Priority Service Feasibility Study were derived from ITU-T Recommendation E.106, draft F.706, and regional requirements. In addition, TR 22.950 identifies several other 3GPP documents (e.g., TS 22.067, 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; enhanced Multi-Level Precedence and Pre-emption (eMLPP) – Stage 1 (Release 4)) that provide capabilities to support emergency telecommunications.

Multimedia Broadcast and Multicast Services (TS 22.146)

Multimedia Broadcast/Multicast Service (MBMS) is a unidirectional point-to-multipoint service in which data is transmitted from a single source entity to a group of users in a specific area.

SA1 believes, that MBMS could be considered useful in the context of Emergency Telecommunications Services to inform / warn mobile subscribers in specific areas about irregular situations.

Push Services (TS 22.174)

SA1 believes, that Push Services could be considered useful in the context of Emergency Telecommunications Services to inform / warn mobile subscribers in specific areas about irregular situations.

Attached: S1-021018 Liaison Statement from ITU SG16.

LS36/16

QUESTIONS: Draft new Question Q. ets/16
SOURCE: SG16
TITLE: Draft new Question Q. ets/16 on Emergency Telecommunications Service (ETS)

LIAISON STATEMENT/COMMUNICATION

**TO: TSAG, ITU-T SGs 2, 3, 4, 9, 11, 12, 13, 17, and SSG. ITU-R and ITU-D and
Communication to IETF, ETSI (Tiphon, MESA and 3GPP), WGET, GDIN, Red
Cross,**

APPROVAL: SG16 (Geneva, 5-15 February 2002)
FOR: Action
DEADLINE: October 2002

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1. Study Group 16 has drafted a new proposed question to serve as an umbrella for the work in ITU-T for the development of global standards to support an Emergency Telecommunications Service (ETS). It is recognized that there is activity already underway in many ITU-T Study Groups and other SDOs. It is essential, however, that there is an overview of this work to ensure consistency and fulfilment of the many requirements that have been recognized. The specific tasks identified to be accomplished by this question are:
 - Develop an emergency telecommunications system concept,
 - Develop an emergency telecommunications requirements Recommendation,
 - Develop a systems framework that shows how the various components needed to support emergency telecommunications requirements interwork.
2. Request the addressees of this liaison provide information about their activities underway or proposed that address issues for emergency telecommunications. It is proposed that this question will include a table that indicates who is addressing what related activities related to emergency communication issues. Below is a sample form for inserting the information into a table:

Study Group or Org.;	Subject	Recommendation	Status

Draft new Question Q.ets/16 – Emergency Telecommunications Service

Background and justification

Unexpected natural and manmade disasters can occur any place, any time. Rapid response to organize and coordinate recovery operations is essential to save lives and restore the community infrastructure. Disaster recovery activities depend upon availability and access to telecommunication resources. However, telecommunication networks often experience severe stress during these events due to high traffic demands and infrastructure damage. Therefore, emergency operations require preferential use of available network services to ensure that effective communications can be achieved.

The Tampere Convention on the Provision of Telecommunication Resources for Disaster mitigation and Relief Operations convened in Tampere, Finland, during June 1998 reached a number of important decisions. The following are extracts from the preamble of the convention report:

“recognizing that the magnitude, complexity, frequency and impact of disasters are increasing at a dramatic rate, with particularly severe consequences in developing countries,

recalling that humanitarian relief and assistance agencies require reliable, flexible telecommunication resources to perform their vital tasks,

further recalling the essential role of telecommunications resources in facilitating the safety of humanitarian relief and assistance personnel,

.....

concerned about the impact of disasters on communication facilities and information flows...

reaffirming the absolute priority accorded emergency life-saving communications in more than fifty international regulatory instruments, including the Convention of the International Telecommunications Union,

.....”

A Second Tampere Conference on Disaster Communications (CDC-2001) was held in Tampere, Finland, 28-30 May 2001. The concluding opinions of the conference were very similar to those expressed above.

The telecommunications infrastructure is rapidly evolving from a circuit-switched to a packet-based technology for a completely new generation of networks. Provisions for preferential treatment of emergency telecommunications traffic need to be incorporated in the new network standards that are being developed. The emergency provisions in the standards can then be incorporated in new equipment designs and deployed for operation in the new networks.

Therefore, the necessity for retrofitting existing systems is minimized. Emergency services can be activated through the execution of Service Level Agreements (SLAs) between the service customer (emergency operations activities) and the service provider.

SG16 has developed draft new Recommendation F.706, Service Definition for International Emergency Telecommunications Service (IEMS) to extend E.106 for multimedia services over new network technologies. Future emergency communications are expected to use multimedia applications extensively.

Many different standards development activities will be involved in myriad aspects of establishing a global emergency telecommunications capability. There is many dimensions to be addressed in achieving an effective solution for emergency telecommunications. In addition to considering technical aspects, issues associated with user requirements, operational, policy, legal, and regulatory aspects also need to be addressed. Cooperation and liaison among the many interest areas is essential to ensure consistency and completeness in the provisioning of an effective emergency telecommunications capability.

This question is intended to serve as an umbrella for development of an emergency telecommunications systems concept and development of a requirements framework. Liaisons with many ITU-T Study Groups, ITU-R, ITU-D, and other related standards activities will be essential to the success of endeavor.

Study items

- Study impact on telecommunications from disaster events
- Identify requirements/applications of emergency telecommunication users
- Identify types/modes of telecommunications for emergencies
- Define the capabilities and priority aspects needed for emergency telecommunications
- Identify means of interchange of emergency data for distributed databases
- Identification of specific types and sources of information needed to provide emergency telecommunication services, including the means of conveyance
- Identify security aspects for authentication of users and prevention of minterference with ETS traffic

- Identify who is dealing with various aspects (technical and other) related to emergency telecommunications

Specific task objectives with expected time-frame of completion

- Develop an emergency telecommunications systems concept – first draft May 2003
- Develop an emergency telecommunications requirements Recommendation – first draft May 2003
- Develop an systems framework that shows how various components needed to support the emergency telecommunications requirements interwork – January 2004

Relationships

ITU-T Study Groups 2, 3, 4, 9, 11, 12, 13, 17, and SSG

ITU-R – need to identify specific Working Groups and questions of interest

ITU-D - need to identify specific areas of interest

UN Working Group on Emergency Telecommunications (WGET)

Global Disaster Information Networks (GDIN)

Internet Engineering Task Force (IETF) – IAB, IESG, ieprep Working Group

European Telecommunications Standardization Institute (ETSI) Projects MESA, TIPHON, and 3GPP

Asia-Pacific Telecommunity Standardization Program (ASTAP) Expert Group on Public Disaster Relief Communications

User organizations – UN, Red Cross, and others to be identified
