Standardization Activity on Emergency Telecommunication System in ITU-T

Ichiro Murase, Masayasu Murano
Mitsubishi Research Institute, Inc.,
Hiroyuki Ohno
Communications Research Laboratory

September 11th, 2001

► Collapse of the WTC towers destroyed many telephone switch and cellular antenna

► Serious congestion was reported in New York City and Washington, DC

► more than 18.000 GETS calls

► GETS: NCS's Government Emergency Telecommunications Service

    ▪ NCS: National Communications System

What is TDR

► TDR is "Telecommunications for emergency, disaster relief and mitigation operations"

► ITU defines TDR:

  ▪ *a telecommunication capability that will facilitate the use of public telecommunication services and systems by authorities for communications during emergency, disaster relief and mitigation operations.*

TDR is not ETS

	Regional	National	International
Authority to Authority	Regional HF	National HF network	
	Satellite Communication		
	GETS, etc.		
	UNHCR, IFRCC, NGOs		
Citizen to Citizen	IAA		
	Voice mail		
Citizen to Authority	911, 119, 112 national emergency call, ETS		
Authority to Citizen	Regional Broadcasting	TV, Radio	
	Internet news		

Target of TDR

Requirement of TDR

► Under discussion!

► Various requirement has been provided:

- International Organizations: United Nations, UNHCR, UNICEF, IFRC, NATO, etc.

- National Authorities: police, fire authorities, military organizations, and other organizations authorized by gov.

- NPOs: T´el´ecoms Sans Fronti`eres, M´edecins Sans Fronti`eres, etc.

Requirement of TDR (cont.)

► Universal connectivity

► Security

► Availability

► Accessibility

► Network priority

► Mobility

► Cost effective

Current implementations relating TDR

► Japan's Prioritized Telephone Service

- "Saigai Yusen Denwa" developed by NTT (for PSTN), NTT DoCoMo (for mobile), et.al
- To fulfill government regulations

► US's GETS and WPS

► UK's GTPS, ACCOLC and ECN

► Canada's PAD and HPC

Standardization activities relating TDR

► ITU
  - ITU-R: M.DR.CIRC, M.PPDR, M.1042-1, etc.
  - ITU-D: Handbook on Disaster Communications
  - ITU-T -> next slide

► IETF: Internet Emergency Preparedness (ieprep)

► ETSI: Emergency Telecommunications (EMTEL)

► ATIS T1

► TIA

Standardization activities relating TDR in ITU-T

► SG2: service and operational requirements and definition for TDR.

  ▪ E.106, E.QSC, E.TE

► SG4: network management aspects.

  ▪ M.ets, M.QoS

► SG9: TDR capabilities over CATV

► SG11: signaling requirements to support TDR capabilities

  ▪ Q.IEPS, etc.

Standardization activities relating TDR in ITU-T (cont.)

► SG12: QoS and performance aspects
  ▪ G.107, G.109, G.1010, P.561, P.562

► SG13: network architecture and interworking
  ▪ NGN-2004, Y1541,Y.roec

► SG16: multimedia service architecture, protocols and framework for TDR
  ▪ H.460.4, H.priority, H.SETS
  ▪ F. Series -> next slide

► SG17: security for TDR
  ▪ X.800 Series

Standardization activities relating TDR in ITU-T F.Series

► We are working for F.Series

- F.ETS
  - ► System framework, requirements and system concept
- F.706
  - ► International Preference Scheme for Multimedia Services in Support of Disaster Relief Operations and Mitigation
- F.MMCTDR
  - ► Multimedia Service Concept to support TDR

Past and Future of F.Series