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II. ITU-T

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1994

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II. ITU-T

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(Study Group: SG)

(ETS)

SG

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1. ITU-T TDR (Q.I/16)

2000 E.106 2001 ETS/TDR SG
 , SG17 , SG13
 NGN ,
 , ITU-T ETS/TDR
 . ITU-T
 SG16 Study Group Questions Q.ets/16
 ITU-T Study Group
 . 2003 2
 TSAG(Telecommunication Standardization Advisory Group) Q.I/16(Use
 of public telecommunication services for emergency and disaster relief operations)
 TDR
 ,
 , Q.I/16 TDR ITU-T SG
 Q.I/16 가
 Q.I/16
 SG17
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 TDR . Q.I/16
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 - SG 2 ETS/TDR
 - ETS/TDR
 - SG17
 - ETS/TDR
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- ETS/TDR
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- ETS/TDR

2. SG2

SG2 ,
 . E.106, 'Description of and Emergency Preference Scheme (IEPS)' 2000 4 17 , 2004 "International Emergency Preference Scheme(IEPS) for disaster relief operations" . SG2

TDR SG16 Q.I/16
 . SG2 Question 3/2 TDR
 SG16 Q.I/16 (TDR SG2 SG16
 TDR). Q.3/2 가 가 E.106 .
 2003 2 TSAG SG2 Q.3/2 SG16 Q.I/16
 TDR ,
 ITU-R, ITU-T, ETSI, ISO/IEC, T1, APT TDR Partnership Coordination Panel
 . SG2 [4].
 - E.106, "IEPS for disaster relief operations" , PSTN, ISDN PLMN

(Priority dial tone, priority call setup etc.)

IEPS E.105

3. SG4

TMN(Telecommunication Management Network)
 . (ETS) SG4
 (Customer Service Management interface specification)

M.ets(Network and Service Management Requirements for Information Interchange Across the TMN X-interface for the International Emergency Telecommunication Service)

M.3350

가 , Telecom-ISAC(Information Sharing and Analysis Center) [5].

- M.3350, “TMN Service Management Requirements for Information Interchange across the TMN X-interface to Support Provisioning of Telecommunication Capabilities for Disaster Relief Operations and Mitigation”:

TMN-X

4. SG9

SG9

J ITU . SG9 IP . SG9
IPCablecom . SG9
. SG9

ETS

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- J.160, “Architectural framework for the delivery of time-critical services over cable television networks using cable modem”:

TV 가

5. SG11

SG11

. SG11 PSTN

BICC SG11 ETS
SS7 BICC ETS international code point
SS7/ISDN/ISUP G.760 가 , BICC
Q.1900 , B-ISDN Q.2700 가 .

6. SG12

SG12
QoS SG12

- G.107, "The E-model, a computational Model for use in transmission planning":
E - Model [7].
- G.109, "Definition of categories of speech transmission quality":
R [8].
- G.1010, "End user Multimedia QoS catagories":
QoS [9].

7. SG13

SG13 IP
. SG13 IP ETS . ETS

(Emergency Telecommunication Service in Next-Generation Networks)가 Q1/13
, Y.roec(Frameworks on Network Requirements and Capabilities to Support Emergency
Communications Over Evolving Circuit Switched and Packet Switched Networks)
, Y.1271 . SG13

- Y.1271, "Framework(s) on network requirements and capabilities to support
emergency communications over evolving circuit-switched and packet-switched
networks":
PSTN ,
Capability [10].

- Y.1541, "Network Performance objectives for IP-based services": IP

QoS ,
[11].

8. SG16

SG16 , , IP
H.323
, H.248

F.706, Service Description for an
International Emergency Multimedia Service(IEMS) . 2002 2
SG16 . F.706 PSTN, ISDN PLMN

E.106(IEPS) ,
(IEMS) . ETS IEPS
IEMS . SG16 ETS
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가 (NS/EP) .
H.460.4(Call priority designation for H.323 calls) H.323
, ETS .
H.priority .
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SG16

- F.706, "Service Description for an International Emergency Multimedia Service":

IEMS , , ,
[12].

- H.460.4, "Call priority designation for H.323 calls": H.323

, H.323 VoIP ETS
[13].

- F.ETS:
- H.Priority:
- H.SETS:

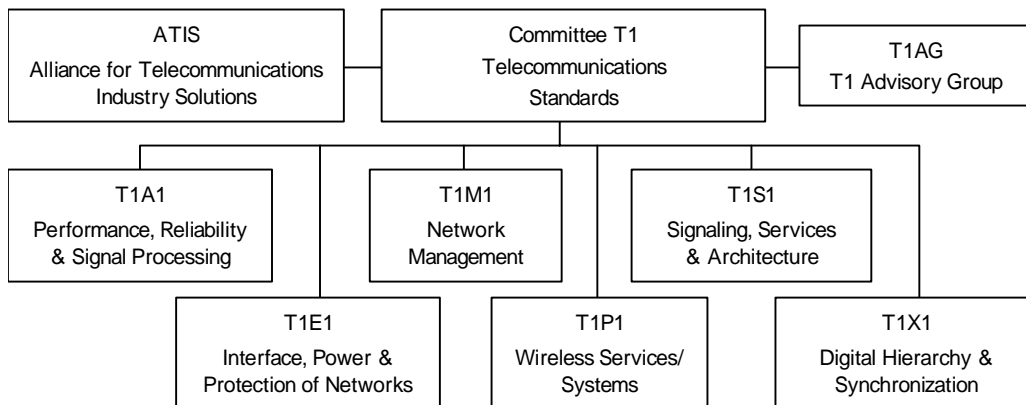
9. SSG

SSG(Special Study Group) 'IMT-2000 and Beyond'

. SSG . SSG ITU-R
 . SSG IMT-2000
 . ETS

III. T1

1984 2 T1 ATIS(Alliance for Telecommu-
 nications Industry Solutions) 21 Committee 2004 3 29
 T1 Committee Committee . ATIS
 350 1,100 가 ATIS 21 Committee



T1A1 - Performance and Signal Processing
 T1P1 - Wireless/Mobile Services and Systems
 T1S1 - Services, Architectures and Signaling
 T1E1 - Interfaces, Power and Protection of Networks
 T1M1 - Internetwork Operations, Administration, Maintenance & Provisioning
 T1X1 - Digital Hierarchy and Synchronization

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. T1 T1AG(T1 Advisory Group)

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[14].

1. T1A1

T1A1 T1 ,

T1A1/2003-004R1 (Overview of Standards in support of emergency Communications Service)

T1A1

- T1A1.2/2003-102, "IP Network Traffic Priorities and ETS/TDR": PSTN

(GETS) , IP QoS , IP

CAC(Call Admission Control),

IP . CAC

Priority Level 5 가 .

1.

2. E911

3. 가 (VPN)

4.

5. Best Effort

- T1A1.2/2003-105, "Reliability and Survivability aspects of Emergency Telecommunications Service": NCS 14 가

, T1A1.2/2003-105

Reliability/Availability, Survivability/Endurability, Restorability

- T1A1.2/2003-109R1, "User Plane Security Guidelines for ETS":

가 . T1A1

2. T1M1

T1M1

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(Operating And Management & Provisioning)

T1M1 T1M1.5 (SWG) 2002 6

T1M1.5 T1M1

- T1M1.5/2003-030, "Proposed Analysis Phase Modeling Requirements in support of draft ITU-T Recommendation M.3350":

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- T1M1.5/2003-032R2, "Internetwork Operations-Guidelines for Network Management of the Public Telecommunications Networks under Disaster Conditions":

PSN(Public Switched Network) American National Standard T1.202

(IP, ATM,)

- T1.211-2001, "Information Interchange-Structure and Coded Representation of National Security and Emergency Preparedness(NS/EP) Telecommunications Service Priority (TSP) Codes for the North Telecommunications System": 가 -

TSP ,

3. T1P1

T1P1

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ITU-T SSG 3GPP . T1P1
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 GSM North America

- T1P1.5/99-436, "Comments on change requests to GSM 02.30 regarding emergency calling codes": GSM North America

4. T1S1

T1S1 Enhanced Priority
 T1S1
 ISUP BICC

- T1S1/2003-271, Proposed Changes to Baseline 109, "User Plane Security Guidelines for ETS":
 T1A1

- T1S1/2003-373, "Ways to Authenticate ETS Users":
 T1A1

- T1S1.3/2003-130R1, T1S1.7/2003-254R1, "Baseline Text for Technical Report Service Description of ETS":
 (PSTN, Packet based Network, wireless Network, Satellite Networks, IP cable Network)

Flow,

- T1S1.3/2003-153, T1S1.7/2003-308, "Signalling System No.7(SS7)-Emergency Telecommunications Service(ETS)":
 No.7 ISUP BICC

3. TR-45

TR-45(Mobile and Personal Communications Public 800 Standards)

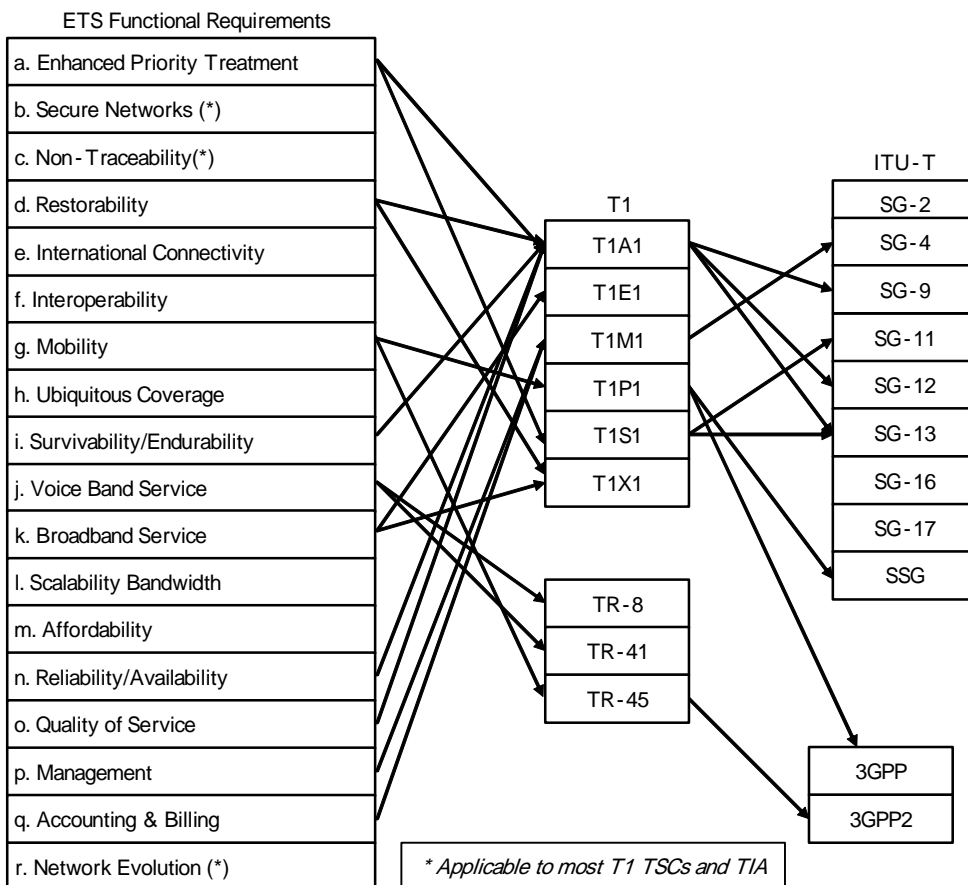
TR-45 ITU-T SSG IMT-2000 and Beyond

3GPP2

- TR-45.2, J-STD-036-A-1, "Enhanced Wireless 911 Phase 2":

V.

NCS 14



(2) ETS

T1 Committee . T1A1 subcommittee 가
 4 가 가 18 가

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a. Enhanced Priority Treatment	가 가 , NS/EP
b. Secure Networks	,
c. Non - Traceability	,
d. Restorability	dml , 가 back-up
e. International Connectivity	가 가 가
f. Interoperability	, PSTN 가 가
g. Mobility	(re-deployable) 가 (transportable),
h. Ubiquitous Coverage	가
i. Survivability/Endurability	가 ()
j. Voice - Band Service	PSTN
k. Broadband Service	imaging, Web access, multimedia). (e.g., video,
l. Scaleable Bandwidth	가 ,
m. Affordability	,
n. Reliability/Availability	가 ,
o. QoS	QoS
p. Management	(OSS)
q. Accounting & Billing	billing accounting
r. Network Evolution	

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- [2] Telecommunication for Disaster Relief, 2003,. Session3, ‘ITU- T Project on Telecommunications for TDR,’ ITU- T
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- [4] ITU-T Rec. E.106, "International Emergency Preference Scheme(IEPS) for disaster relief operations"
- [5] ITU-T Rec. M.3350, "TMN Service Management Requirements for Information Interchange across the TMN X-interface to Support Provisioning of Telecommunication Capabilities for Disaster Relief Operations and Mitigation"
- [6] ITU-T Rec. J.160, "Architectural framework for the delivery of time-critical services over cable television networks using cable modem"
- [7] ITU-T Rec. G.107, "The E-model, a computational Model for use in transmission planning"
- [8] ITU-T Rec. G.109, "Definition of categories of speech transmission quality"
- [9] ITU-T Rec. G.1010, "End user Multimedia QoS categories"
- [10] ITU-T Rec. Y.1271, "Framework(s) on network requirements and capabilities to support emergency communications over evolving circuit-switched and packet-switched networks"
- [11] ITU-T Rec. Y.1541, "Network Performance objectives for IP-based services"
- [12] ITU-T Rec. F.706, "Service Description for an International Emergency Multimedia Service"
- [13] H.460.4, "Call priority designation for H.323 calls"
- [14] Telecommunication for Disaster Relief, 2003,. Session4, 'Overview of ETS in Committee T1', Arther Webster, US Department of Commerce, NTIA/ITS
- [15] T1A1.2/2003-004R1, Draft Technical Report "Overview of Standards in Support of Emergency Telecommunications Service(ETS)"