Work Item Description

Title: Priority Service

There is a need to provide authorized users access to, preferential treatment through, and egress from the network during crisis situations when the service might be restricted due to damage, congestion, or other faults. This work item proposes that a feasibility study be performed to outline the technical requirements, scope of work required, and perform a gap analysis to determine the extent existing 3GPP specifications can support these Priority Services requirements. If it is determined that providing for this service is feasible, then this work item will continue forward to encompass future work.

1 3GPP Work Area

X	Radio Access
X	Core Network
X	Services

2 Linked work items

List of linked work items to be determined by the Feasibility Study.

3 Justification

Governmental, military, civil authorities and other essential users of public telecommunications networks have a need for telecommunications in crisis situations. These (voice and data/multimedia) communications, which are regarded as essential, will be needed at the same time as the public will be attempting to establish more sessions (voice and data/multi-media) and while the networks might be restricted due to damage, congestion or faults. ITU-T Recommendation E.106, International Emergency Preference Scheme (IEPS) and ITU-T Draft Recommendation F.706, International Emergency Multimedia Service (IEMS) describe end-to-end functional requirements for priority telecommunication services that will support communications during crisis situations. In addition, other industry standards describe priority access and routing requirements (e.g., Service Accessibility, eMLPP, PACA) that could support Priority Services.

4 Objective

Provide a secure and manageable mechanism to identify priority users and mark their communications from access and call set up through call completion. In the case of communications terminating on a mobile device, priority service includes priority egress. The network will then provide preferential treatment to these essential communications such as, but not limited to guarantee call completion/high probability of call completion, guaranteed quality of service, and exemption from restrictive management controls.

A feasibility study would outline the technical requirements, scope of work required, and perform a gap analysis to determine the extent existing 3GPP specifications can support these Priority Services requirements.

5 Service Aspects

ITU-T Recommendation E.106, International Emergency Preference Scheme (IEPS) and ITU-T Draft Recommendation F.706, International Emergency Multimedia Service (IEMS) describe end-to-end functional requirements for priority telecommunication services and should be considered for the service aspects of this feasibility study.

3G TS 22.011, Service Accessibility, describes priority access capabilities.

3G TS 22.067, enhanced Multi-Level Precedence and Pre-emption service (eMLPP) – Stage 1.

3G TS 23.067, enhanced Multi-Level Precedence and Pre-emption service (eMLPP) – Stage 2.

ANSI T1.706-1997, Stage 1 Service Description for Personal Communications Service—Enhanced Priority Access and Channel Assignment (PACA-E) Supplementary Service.

ANSI T1.714-2000, Stage 2 Service Description for Personal Communications Service—Enhanced Priority Access and Channel Assignment (PACA-E) Supplementary Service.

ANSI/TIA/EIA-664, Cellular Feature Descriptions, describes Priority Access and Channel Assignment (PACA) capabilities.

6 MMI-Aspects

To be determined by the Feasibility Study. The network might be required to inform the user changes to their status, (e.g., initiation of a priority service call/session, a change to a queue status, termination of a priority call/session).

7 Charging Aspects

To be determined by the Feasibility Study. A new charging mechanism might be required to charge users for priority service.

8 Security Aspects

To be determined by the Feasibility Study. Protection from unauthorized use will be required, but it is unknown at this time if current security features are sufficient.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes	X		X	X	
No					
Don't know		X			

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item raporteurs

Biplab K. Pramanik, Telcordia Technologies; telephone: +1-732-758-3258; email: bpramani@telcordia.com

James J. Garrahan, Telcordia Technologies; telephone: +1-732-758-5227; email: j.garrahan@telcordia.com

12 Work item leadership

SA

13 Supporting Companies

AT&T Wireless
Cingular
National Communications System
Telcordia
SBC Communications
VoiceStream

14 Classification of the WI (if known)

To be determined by the Feasibility Study.

	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

To be determined by the Feasibility Study.

14b The WI is a Building Block: parent Feature

To be determined by the Feasibility Study.

14c The WI is a Work Task: parent Building Block

To be determined by the Feasibility Study.