

Source: TSG CN WG 1
Title: CR to Rel-5 on Work Item IMS-CCR towards 24.229,- CR290r1
Agenda item: 8.1
Document for: APPROVAL

Introduction:

This document contains 1 CR, Rel-5 Work Item "IMS-CCR", that have been agreed by TSG CN WG1, and are forwarded to TSG CN Plenary meeting #18 for approval.

Spec	CR #	Rev	CAT	Rel	Tdoc Title	Meeting	TDoc #	C_Version
24.229	290	1	C	Rel-5	Emergency Service correction	N1-27	N1-022461	5.2.0

CR-Form-v7

CHANGE REQUEST

⌘ **24.229** **CR** **290** ⌘ rev **1** ⌘ Current version: **5.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Emergency Service correction		
Source:	⌘ Nokia		
Work item code:	⌘ IMS-CCR	Date:	⌘ 14/11/2002
Category:	⌘ C	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)	R98	(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Rel-4	(Release 4)
		Rel-5	(Release 5)
		Rel-6	(Release 6)

Reason for change:	⌘ In IMS Rel-5 emergency sessions are not supported and the UE should use the CS domain instead. There is a need for an error-handling mechanism in the network for the case when the UE cannot identify the call as an emergency call and still attempts to establish an emergency call via IMS network.
Summary of change:	⌘ The UE inserts PLMN-id (MCC, MNC) to every INVITE request. This provides the necessary information for the P-CSCF to separate emergency service numbers from others.
Consequences if not approved:	⌘ There would not be error-handling implementation in the network for the case when the UE cannot identify the call as an emergency call and still attempts to establish an emergency call via IMS network. In these error cases, the UE cannot be guided to use CS domain instead of PS domain for emergency calls.

Clauses affected:	⌘ 3.2, 5.2.10										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> </table>	Y	N		X		X		X	Other core specifications	⌘
Y	N										
	X										
	X										
	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘										

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

*** *First Modification* ***

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

1xx	A status-code in the range 101 through 199, and excluding 100
2xx	A status-code in the range 200 through 299
AS	Application Server
APN	Access Point Name
AUTN	Authentication TokeN
B2BUA	Back-to-Back User Agent
BGCF	Breakout Gateway Control Function
c	conditional
CCF	Charging Collection Function
CDR	Charging Data Record
CK	Ciphering Key
CN	Core Network
CSCF	Call Session Control Function
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name System
DTD	Document Type Definition
ECF	Event Charging Function
GCID	GPRS Charging Identifier
GGSN	Gateway GPRS Support Node
GPRS	General Packet Radio Service
i	irrelevant
I-CSCF	Interrogating CSCF
ICID	IM CN subsystem Charging Identifier
IK	Integrity Key
IM	IP Multimedia
IMS	IP Multimedia core network Subsystem
IMSI	International Mobile Subscriber Identity
IOI	Inter Operator Identifier
IP	Internet Protocol
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
ISC	IP multimedia Subsystem Service Control
ISIM	IMS Suscriber Identity Module
m	mandatory
MAC	Message Authentication Code
<u>MCC</u>	<u>Mobile Country Code</u>
MGCF	Media Gateway Control Function
MGW	Media Gateway
<u>MNC</u>	<u>Mobile Network Code</u>
MRFC	Multimedia Resource Function Controller
MRFP	Multimedia Resource Function Processor
PDP	Packet Data Protocol
PLMN	Public Land Mobile Network
PSTN	Public Switched Telephone Network
n/a	not applicable
o	optional
P-CSCF	Proxy CSCF
PDU	Protocol Data Unit
RAND	RANdOm challenge
RES	RESponse
RTP	Real-time Transport Protocol
S-CSCF	Serving CSCF
SDP	Session Description Protocol
SGSN	Serving GPRS Support Node

SIP	Session Initiation Protocol
SLF	Subscription Locator Function
SQN	SeQuence Number
UA	User Agent
UAC	User Agent Client
UAS	User Agent Server
UE	User Equipment
UICC	Universal Integrated Circuit Card
URI	Universal Resource Identifier
URL	Universal Resource Locator
USIM	UMTS Subscriber Identity Module
x	prohibited
XML	eXtensible Markup Language

*** *Next Modification* ***

5.2.10 Emergency service

The P-CSCF shall inspect the Request URI of all INVITE requests from the UE for known emergency numbers and emergency URLs from a configurable list based on the MCC and MNC received in the P-Access-Network-Info header of the received INVITE request. If the P-CSCF detects that the Request-URI of the INVITE request includes an matches one of the emergency numbers in this list, the INVITE request shall not be forwarded. The P-CSCF shall answer the INVITE request with a 380 (Alternative Service) response.

The 380 (Alternative Service) response shall contain a Content-Type header field with the value set to associated MIME type of the 3GPP IMS XML body as described in subclause 7.6.1.

The 3GPP IMS XML body shall contain an <alternative-service> element that indicates the parameters of the alternative service. The <type> child element shall be set to "emergency" to indicate that it was an emergency call. An operator configurable <reason> child element shall be included with a reason phrase.

~~The P-CSCF shall have a configurable list of emergency numbers and emergency URLs (e.g. sos@domain). The list is used to determine whether the INVITE is destined for an emergency centre or not.~~