
Source: SA1
Title: Release 5 CRs to 22.101 on service delivery and emergency calls
Document for: Approval
Agenda Item: 7.1.3

SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-020552	22.101	098	1	Rel-5	F	Clarification of IMS service delivery (for rel 5)	5.6.0	5.7.0	S1-021780
SP-020552	22.101	100	1	Rel-5	F	Additional download functionality to emergency call procedures	5.6.0	5.7.0	S1-021776

CR-Form-v7	
CHANGE REQUEST	
⌘ 22.101 CR 098 ⌘ rev 1 ⌘	Current version: 5.6.0 ⌘

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:	⌘ Clarification of IMS service delivery		
Source:	⌘ SA1 (IMS SWG)		
Work item code:	⌘ IMS	Date:	⌘ 13/08/2002
Category:	⌘ F	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:	⌘ Currently the access to IM Subsystem requires a subscription to PS domain services. The current wording of stage 1 for IMS doesn't reflect explicitly the need of a PS subscription.
Summary of change:	⌘ A clarification is added, stating that IMS services are subject to a subscription to PS domain services.
Consequences if not approved:	⌘ Access to IMS service will remain ambiguous and potentially misleading.

Clauses affected:	⌘ 15.1										
Other specs affected:	<table border="1" style="font-size: x-small;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="background-color: yellow;"> </td> <td style="background-color: yellow;">N</td> </tr> <tr> <td style="background-color: yellow;"> </td> <td style="background-color: yellow;">N</td> </tr> <tr> <td style="background-color: yellow;"> </td> <td style="background-color: yellow;">N</td> </tr> </table>	Y	N		N		N		N	Other core specifications	⌘
	Y	N									
		N									
	N										
	N										
		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.

15 Relationship between subscription and service delivery

15.1 Subscription

A subscription describes the commercial relationship between the subscriber and the service provider.

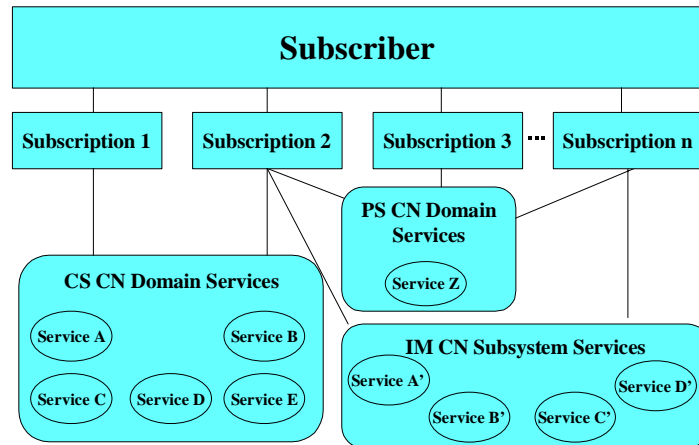


Figure 4: Subscriber, subscription and services relationship

A subscription to an network operator may provide the user with access to one or more domains. A Subscription shall identify the set of services, within particular domains, to which the user has access (see figure 3); each subscription may specify a different set of services. These services may be provided by the CS CN Domain and/or a PS CN Domain and/or an IM CN subsystem. Subscriptions relate to services such as Basic Services (e.g. Teleservices, Bearer services), GPRS services and IM-Services (IP-based multimedia services), which are typically provided by network operators, and to value added services which typically are provided by network operators and/or other entities that provide services to a subscriber . Subscription to IP Multimedia Services shall be dependent on a subscription to PS CN Domain services.

The subscription identifies:

- the services and related services information that are made available to the subscriber by the service provider ;

In addition a subscription to a network operator may identify:

- the domains to which the user has been granted access by the network operator. In particular, the GPRS service profile and information on the allowed QoS parameter ranges shall be contained in the subscription.
- the identity of the subscriber within these domains.

Note: The identity of a subscriber in the CS CN domain and PS CN domain (e.g. her IMSI) may potentially be different to her identity in the IM CN subsystem

CR-Form-v7

CHANGE REQUEST

⌘ **22.101 CR 100** ⌘ rev **1** ⌘ Current version: **5.6.0** ⌘

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:	⌘	Additional download functionality to emergency call procedures		
Source:	⌘	SA1 (Vodafone)		
Work item code:	⌘			Date: ⌘ 06/08/2002
Category:	⌘	F	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:	⌘	The current stage one requirement was recently changed in order to align it with the stage three specification of a particular mechanism. That mechanism does not work correctly, particularly when the GGSN is in the HPLMN.		
Summary of change:	⌘	Emergency calls are not supported via an IM CN Subsystem and instead the UE shall use the CS domain to establish an emergency call. This change adds the possibility that the UE can be responsible to decide whether or not the dialled number is an emergency number according the stored list of emergency numbers in the UE. The network may update the list of emergency numbers known to the UE.		
Consequences if not approved:	⌘	Home control of services in the IM CN Subsystem does not work, and future solutions for providing a full emergency call service via the IM CN Subsystem become difficult to design.		

Clauses affected:	⌘	10.1 and 10.4										
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;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	X	X	X	X	X	X	Other core specifications	⌘
Y	N											
X	X											
X	X											
X	X											
		Test specifications										
		O&M Specifications										

Other comments: ☞ SA1 has sent a liaison statement to SA2 asking about the practicality of implementing a solution for this requirement quickly in release 5.

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10 Emergency Calls

10.1 General requirements

It shall be possible to establish an emergency speech call. Emergency calls will be routed to the emergency services in accordance with national regulations for where the subscriber is located. This may be based upon one or more default numbers stored in the ME. It shall be allowed to establish an emergency call without the need to dial a dedicated number to avoid the mis-connection in roaming case, such as menu, by use of a 'red button', or a linkage to a car air bag control. Emergency Calls shall be supported by the UE without a SIM/USIM being present. No other type than Emergency calls shall be accepted without a SIM/USIM.

The Emergency service is required only if the UE supports voice.

Note: It will be left to the national authorities to decide whether the network should accept emergency calls without the SIM/USIM.

It shall be possible to initiate emergency calls to different emergency call centers, depending on the type of emergency. The following types of emergency calls shall be possible:

- Police
- Ambulance
- Fire Brigade
- Marine Guard
- Mountain Rescue
- Spare, at least [three] different types

When a SIM/USIM is present, subscriber specific emergency call set-up MMI shall be provided. The Home Environment operator shall specify preferred emergency call MMI(s) (e.g. 911 for US citizens or 110, 118 and 119 for Japanese citizens). This shall be stored in the SIM/USIM and the ME shall read this and use any entry of these digits to set up an emergency call. It shall be possible to store more than one instance of this field.

Note: Release '98 and earlier SIM cards have the capability to store additional emergency call set-up MMI. However in many cases this has not been used.

It shall be possible to tie any emergency call number, specified in the preferred emergency call MMI(s) above, to any single emergency call type or to any combination of emergency types. The association between emergency numbers and emergency call type shall be able to be programmed by the Home Environment operator into the SIM/USIM.

Example:

19	Police (Albania)
100	Police and Fire Brigade (Greek cities)
100	Ambulance and Fire Brigade (Belgium)
112	Police and Ambulance (Italy)
112	General emergency call, all categories (Sweden)
115	Fire Brigade (Italy)
114	Ambulance (Austria)

Note: if the UE does not recognise the emergency call MMI(s) (i.e. the dialled number is not stored in SIM/USIM) but the serving network recognises the dialled number as an emergency call number used in the country, a normal call set up takes place over the radio interface and after the serving network has recognised the emergency number the call is routed as an emergency call.

When a SIM/USIM containing stored emergency numbers is present, only those numbers are identified as emergency numbers, i.e. default emergency numbers stored in the ME are ignored.

The following emergency numbers shall be stored in the ME for use when no emergency numbers are stored in the SIM: 000, 08, 112, 110, 911 and 999.

Note: Emergency numbers stored in the ME, for use when no emergency numbers are stored in the SIM, should not overlap with existing service numbers used by any operator.

The user friendly MMI which specifies the type of emergency directly (e.g. menu) should be supported for use in any (i.e. home or visited) PLMN to avoid the mis-connection in roaming case. This shall be allowed to both with and without SIM/USIM being present.

The following emergency numbers shall be stored in the ME for use without SIM/USIM: 000, 08, 112, 110, 118, 119, 911 and 999.

The serving network may download additional emergency numbers to the UE in order to ensure that local emergency numbers are known to the UE. The UE shall regard these emergency numbers as valid in that country (as identified by the MCC) and shall discard them when a new country is entered.

NEXT MODIFIED SECTION

10.4 Emergency calls when attached to an IM CN subsystem

Emergency calls are not supported via an IM CN subsystem.

If the UE does recognise the emergency call MMI(s) (i.e. the dialled number is stored in USIM/ME), then the UE shall use the CS CN domain to attempt to establish the emergency call..

If the UE does not recognise the emergency call MMI(s) (i.e. the dialled number is not stored in USIM/) but the serving network recognises the dialled number as an emergency call number used in the country then the IM CN subsystem shall inform the UE to use a CS CN domain for emergency services.