Source:	**SA1**
Title:	**CRs to 22.115 on SMS on GPRS and GSM, charging aspect (Rel-5)**
Document for:	**Approval**
Agenda Item:	**7.1.3**

CR-Form-v7

CHANGE REQUEST

⌘ **22.115 CR 011** ⌘ **rev** **-** ⌘ 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: ⌘	SMS on CS and PS domain, charging aspect	
Source: ⌘	Ericsson	
Work item code: ⌘	TEI	***Date:*** ⌘ 10/4/2003
Category: ⌘ **F**		***Release:*** ⌘ Rel-5

Use one of the following categories:
   F *(correction)*
   A *(corresponds to a correction in an earlier release)*
   B *(addition of feature),*
   C *(functional modification of feature)*
   D *(editorial modification)*
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

Use one of the following releases:
  2   *(GSM Phase 2)*
  R96 *(Release 1996)*
  R97 *(Release 1997)*
  R98 *(Release 1998)*
  R99 *(Release 1999)*
  Rel-4 *(Release 4)*
  Rel-5 *(Release 5)*
  Rel-6 *(Release 6)*

Reason for change: ⌘	The SMS service can be supported both over CS and PS domain. Since commercial issue may prevent some operators to support SMS over GPRS in their networks (even though the support is mandated in the standard) and the end user may think that she is using GPRS as bearer when using the SMS service the charging issue needs to be highlighted. Since CR S1-020237 was approved the need to point out the charging aspect more clear is needed. The CR in S1-020237 states that the UE, if it fails to send the SMS over GPRS, shall switch to sending the SMS over CS for an implementation dependent time. After this time the UE may again revert to trying to send the SMS over GPRS.
Summary of change: ⌘	Text added to warn operators that users normally cannot influence the domain being used to send an SMS.
Consequences if not approved: ⌘	End user confusion since the end users might not be able to control costs.

Clauses affected: ⌘	Chapter 4.		

		Y	**N**		
Other specs affected: ⌘			X	Other core specifications	⌘
			X	Test specifications	
			X	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.

4.3.1.2　　　Charging Principles For User Session Components

A number of different components can comprise a session. These components may be added or dropped from an ongoing session by any participating party. These components should be individually identifiable for charging purposes.

Generally, the party that adds a component should be responsible for the payment for the use of the component. However, it should also be possible to charge all users that need an increase in resource to handle the component. An example is 2 users in an audio session where one of the users upgrades the session to videophone session. Both users could be charged extra for the use of the video component as this requires extra resource at both ends.

Possible components are:

- Voice

- Audio (real time)

- Audio (streaming)

- Video (real-time)

- Video (streaming)

- Data (download/upload)

- Data interactive eg web browsing

- Messaging (SMS text type)

- E-mail

- Data stream (unspecified content) This is where the network operator acts as a "bit-pipe"

It must be possible to charge for each of these components separately in a session with the options shown in the table below.

It must be possible for operators to be able to charge for individual components of sessions even if there is no identificable service. For example a proprietary codec may be used to set up an "end-to-end" speech session where the network operator acts as a "bit-pipe". In this case, it should be possible for the operator to charge for this differentially. This type of component is called "datastream" in the table below.

It might not be possible to apply some of the charging mechanism and type options described below depending on the capability of the networks used.

NOTE: When charging for SMS over CS and PS domain, operators should be aware that the customer may not have any choice over the domain used.

COMPONENT	CHARGING MECHANISM OPTIONS	CHARGING TYPE OPTIONS
Voice	Charging principles as described in section 4.3.1.1	Charging by duration of session Charging by QoS requested and/or delivered One-off set-up charge
Real time Audio and Video	Charging principles as described in section 4.3.1.1	Charging by duration of session Charging by QoS requested and/or delivered One-off set-up charge
Streaming Audio and Video	Charged to the initiator of the request Charged to the sender of the audio or video	Charging by duration of session Charging by volume of data, optionally QoS-differentiated One-off set-up charge
Data (upload or download)	Charged to the initiator of the request Charged to the sender of the data	Charging by duration of session Charging by volume of data, optionally QoS-differentiated One-off set-up charge
Interactive Data	Charged to the initiator of the session	Charging by duration of session Charging by volume of data, optionally QoS-differentiated One-off set-up charge
Messaging (SMS text type)	Charged to the initiator of the message Charged to the recipient of the message	Charging by event (eg like SMS) Charging by volume of data
Unspecified content (data stream)	Charged to the initiator of the session Charged to all parties involved	Charging by duration of session Charging by volume of data (sent & received), optionally QoS-differentiated One-off set-up charge