## Technical Specification Group Services and System Aspects Meeting #22, Maui, Hawaii, USA, 15-18 December 2003 TSGS#22(04) 0098

Source: SA1

Title: CR to 22.078 on CSE change basic service (Rel-7)

Document for: Approval

Agenda Item: 7.1.3

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Curre	Vers New	SA1 Doc
								nt		
SP-23	SP-040098	22.078	168	-	Rel-7	В	CSE change basic service	6.3.0	7.0.0	S1-040238

TSG-SA WG1 #23 S1-040238

Innsbruck, Austria, 12 - 16 Jan 2004

Agenda Item:

			CR-Form-v7								
CHANGE REQUEST											
×	22.078 CR 168	жrev - <sup>ж</sup>	Current version: 6.3.0								
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the \mathbb{K} symbols.											
Proposed change	Proposed change affects: UICC apps# ME Radio Access Network Core Network X										
IVIL Natio Access Network Core Network											
Title: #	CSE change basic service	e									
Source:   ** SA1 (China mobile )											
Work item code: ₩	CAMEL4		Date:								
Cotoromy	D		Dologo W Dol 7								
Category: #	<b>B</b> Use <u>one</u> of the following cate		Release: 器 Rel-7 Use <u>one</u> of the following releases:								
	<b>F</b> (correction)		2 (GSM Phase 2)								
	A (corresponds to a cor B (addition of feature),	rection in an earlier release)	R96 (Release 1996) R97 (Release 1997)								
	C (functional modification	on of feature)	R98 (Release 1998)								
	<b>D</b> (editorial modification		R99 (Release 1999)								
	Detailed explanations of the a se found in 3GPP <u>TR 21.900</u>	above categories can	Rel-4 (Release 4) Rel-5 (Release 5)								
	De Iouliu III 3GFF <u>TR 21.900</u>		Rel-6 (Release 6)								
Reason for change	器 Operators want to cl	hange basic service using	CSE.								
	An example is the o	ase where a subscriber h	as sufficient credit for a voice call								
	but insufficient credit for a video call. To permit charging cases where the B party										
	pays to receive the o	call, control is needed at b	ooth the A and B party's MSCs.								
Summary of chang			AMEL, allowing CSE to select								
		and less preferred bearer s the selected bearer servi	service. And MSC/SSP shall set up								
	the can according to	the selected bearer servi	ce.								
Consequences if	器 Operators can not ch	nange basic service via the	e flexible applications on CSE.								
not approved:											
Clauses affected:	<b>光</b> 1.										
Other energy	Y N  X Other core spe	acifications 99 00 07	0.00.070								
Other specs affected:	<ul><li>光 Other core spe</li><li>X Test specificat</li></ul>		8, 29.078,								
ancoica.	X O&M Specification										
Other comments:	<b>X</b>										

## 1 Scope

This standard specifies the stage 1 description for the CAMEL feature (Customised Applications for Mobile network Enhanced Logic) which provides the mechanisms to support services consistently independently of the serving network. The CAMEL features shall facilitate service control of operator specific services external from the serving PLMN. The CAMEL feature is a network feature and not a supplementary service. It is a tool to help the network operator to provide the subscribers with the operator specific services even when roaming outside the HPLMN.

If an IPLMN or VPLMN supports CAMEL Phase 4, it shall also provide the functionality of all previous CAMEL phases.

Phase 4 network signalling shall support interworking with CAMEL Phases 3 and 2.

The CAMEL feature is applicable

- To mobile originated and mobile terminated call related activities;
- To supplementary service invocations;
- To SMS MO, to GPRS sessions and PDP contexts, to the control of HLR subscriber data, to the control of network signalling load.

The mechanism described addresses especially the need for information exchange among the VPLMN, HPLMN and the CAMEL Service Environment (CSE) for support of such operator specific services. Any user procedures for operator specific services are outside the scope of this standard.

This specification describes the interactions between the functions of the VPLMN, HPLMN, IPLMN and the CSE.

The second phase of CAMEL enhances the capabilities of phase 1 where the following capabilities have been added:

- Additional event detection points;
- Interaction between a user and a service using announcements, voice prompting and information collection via in band interaction or USSD interaction;
- Control of call duration and transfer of Advice of Charge Information to the mobile station;
- The CSE can be informed about the invocation of the supplementary services ECT, CD and MPTY;
- For easier post-processing, charging information from a serving node can be integrated in normal call records.

The third phase of CAMEL enhances the capabilities of phase 2. The following capabilities are added:

- Support of facilities to avoid overload;
- Capabilities to support Dialled Services;
- Capabilities to handle mobility events, such as (Not-)reachability and roaming;
- Control of GPRS sessions and PDP contexts;
- Control of mobile originating SMS through both circuit switched and packet switched serving network entities.
- Interworking with SoLSA. (Support of Localised Service Area). Support for this interworking is optional.
- The CSE can be informed about the invocation of the supplementary services CCBS.

Detailed information is given in the respective sections.

The fourth phase of CAMEL enhances the capabilities of phase 3. The following capabilities are added:

- CAMEL support for Optimal Routeing of circuit-switched mobile-to-mobile calls;
- The capability for the CSE to create additional parties in an existing call;
- The capability for the CSE to create a new call unrelated to any other existing call;

- Capabilities for the enhanced handling of call party connections;
- The capability for the CSE to control sessions in the IP Multimedia Subsystem.
- Enhanced CSE capability for Dialled Services.
- The capability to report basic service changes during ongoing call.
- The CSE capability to select between preferred and less preferred bearer service.

With CAMEL Phase 4, it is possible that only a limited subset of the new functionalities is supported, in addition to the complete support of CAMEL Phase 3.