3GPP TSG-SA Meeting #26. Athens, Greece, 13th ñ 16th December 2004.

Tdoc SP-040881

Source: Ericsson, Nokia, Nortel Networks, Siemens, TIM, Vodafone

Title: WID for Combining CS and IMS services & Capability Detection

and Exchange mechanism

Agenda item: 7.2.3

Document for: INFORMATION / APPROVAL

The Tdocs **SP-040742** and **SP-040747** contains proposed updates to the SA1 and SA2 WIDs on Combinational Services. Although the documents are addressed to the same feature, the content of these WIDs differ in respect to the level of detail. The intention of this document is to harmonize the SA1 and SA2 WID by combining them into one single WID addressing a feature for Combining CS speech and IMS services as a Feature.

It is proposed that the WID in this document replaces both the proposals in SP-040742 and SP-040747.

The SA 1 work on this topic is documented in TR 22.979 which is submitted for approval by SA #26 in SP SP-040740.

The SA 2 work so far on this topic is documented in TR23.899, which is submitted for information to SA #26 in SP-04748. The draft TR 23.899 is becoming more than 80% stable seen from the perspective of Phase 1 and technical specification work can start. Phase 1 will address capabilities that are already supported by the current set of specifications or require limited standardization needs. The Phase 1 capabilities are Radio Capability Exchange; SIP OPTIONS based capability exchange, SIP INVITE based capability exchange, adding IMS media component towards an ongoing call and adding CS speech call towards an ongoing IMS session.

From analysis of the current SA 1 and SA 2 TRs, it is proposed to elaborate on the stage 2 (i.e. new TR 23.9de) and appropriate CRs to current specs. It is not believed that there is any need for dedicated new stage 1 or stage 3 TRs/TSs for this feature.

It is proposed to create the attached new WID reflecting the work for CSI Phase 1. The Phase 2 specs shall be continued within the current feasibility WID.

An open question is which WG should lead the work (SA 1 or SA 2).

Work Item Description

Title

Specification of Combining CS and IMS services & Capability Detection and Exchange mechanism.

1 3GPP Work Area

	Radio Access
X	Core Network
X	Services

2 Linked work items

Feasibility Study on IMS services using CS bearers (SP-040479)

3 Justification

The current TR 23.899 has been progressed substantially so that the specification of combining CS and IMS services can be initiated. The TR 23.899 concludes a recommended architecture solution to be specified to address the combinational requirements including the identified need for radio/terminal capability exchange.

The specification of CSI Phase 1 is needed to address the urgent market needs to make IMS services available to the end-users. This specification will enable fast deployment scenarios for IMS services that are build on existing service such as CS calls and IMS sessions.

4 Objective

The objective is to elaborate on the stage 1 and stage 2 (i.e. new TR 23.9de) and appropriate CRs to current specifications addressing the details of those CSI phase 1 capabilities as identified in TR 23.899 that are already supported by the current set of specifications or require limited standardization needs. These CSI phase 1 capabilities are:

- Radio capability exchange;
- SIP based terminal capability exchange;
- E.164 number exchange in SIP (if it can be accomplished in time)
- Adding IMS session to an ongoing CS call;
- Adding CS speech call to an ongoing IMS session.

The capabilities shall support interoperability between different operator networks and roaming.

It is assumed that a Building Block Work Item will exist for the stage-3 specification work.

5 Service Aspects

Impacts of Supplementary Services during a multimedia session should be investigated.

6 MMI-Aspects

None presently identified

7 Charging Aspects

Inter-operator accounting and roaming charging aspects will be considered for combined CS calls and IMS sessions.

8 Security Aspects

The restriction and disclosure of terminal capabilities should be investigated.

9 Impacts

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

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

				New sp	ecifications		
Spec No.	Title		Prime rsp. WG	2 nd ary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 23.9de			SA2		SA#27	SA#28	Detailed description of combining CS and IMS services and Radio/Terminal capability detection and exchange mechanisms
			Affe	cted exist	ing specificati	ions	
Spec No.	CR	Subject			Approved a	t plenary#	Comments
22.228					TS SA#28		Exchange of service capabilities between the UEs
22.115					TS SA#28		Inter-operator accounting and roaming charging aspects will be considered for combined CS calls and IMS sessions
23.228					TS SA#28		Terminal Capability Detection and Exchange
23.221					TS SA#28		Radio Capability Exchange
		Others t.b.d.					
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11 Work item rapporteur(s)

TBD

Work item leadership

TBD (SA1 or SA2)

13 Supporting Companies

Ericsson, Huawei, Nortel Networks, Orange, TeliaSonera, TIM, Vodafone, Siemens, Nokia

14 Classification of the WI (if known)

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

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

Stage 3 Specification of Combining CS and IMS services & Capability Detection and Exchange mechanism.

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

form change history:
v1.11.0: includes those changes from v1.8.0 agreed at SP-25.
v1.10.0: full circle
v1.9.0: a clean sheet
v1.9.0: includes comments from RAN, CN and T #24; also includes comments from SA#24
v1.7.0: includes comments from RAN, CN and T #24; also includes i early implementationi data
v1.6.0: includes comments made during review period prior to TSG#24
v1.5.0: includes comments made at TSGs#23 (Phoenix)
v1.4.0: offered to SA#23 for approval
v1.3.0: offered to CN#23, RAN#23 and T#23 for comments
DRAFT4 v1.3.0: 2004-03-09: Incorporation of comments from Leaders list
DRAFT3 v1.3.0: 2004-02-19: Incorporation of comments from MCC members
DRAFT2 v1.3.0: 2002-07-04: "USIM" box changed to "UICC apps"
2003-05-28: spelling of i rapporteuri corrected
2002-07-04: "USIM" box changed to "UICC apps"