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**Source:** SA1  
**Title:** CRs to 22.078 on SCUDIF corrections for CAMEL interworking (Rel-5/Rel-6)  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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Meeting	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Current	Vers New	SA1 Doc
SP-24	SP-040284	22.078	171	-	Rel-5	F	SCUDIF corrections for CAMEL interworking	5.13.0	5.14.0	S1-040509
SP-24	SP-040284	22.078	172	-	Rel-6	A	SCUDIF corrections for CAMEL interworking	6.4.0	6.5.0	S1-040510

3GPP TSG CN WG2 Meeting #32  
Atlanta, USA, 16<sup>th</sup> – 20<sup>st</sup> Feb 2004

N2-040164

CR-Form-v7
<b>CHANGE REQUEST</b>
⌘ <b>22.078 CR 171</b> ⌘ rev <b>-</b> ⌘ Current version: <b>5.13.0</b> ⌘

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

<b>Title:</b>	⌘ SCUDIF corrections for CAMEL interworking		
<b>Source:</b>	⌘ SA1 (CN2)		
<b>Work item code:</b>	⌘ SCUDIF	<b>Date:</b>	⌘ 13/05/2004
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)	2	(GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)	R96	(Release 1996)
	<b>B</b> (addition of feature),	R97	(Release 1997)
	<b>C</b> (functional modification of feature)	R98	(Release 1998)
	<b>D</b> (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

<b>Reason for change:</b>	⌘ SCUDIF interaction with CAMEL Call Party Handling (CPH) and CAMEL user interaction is undefined.
<b>Summary of change:</b>	⌘ It is proposed that CSE/SCP may create legs only when the call is known to be a speech call. The user interaction is also defined. In a multimedia phase or under uncertainty UI shall not be connected. CAMEL warning tone and flexiple warning to can be ordered in ApplyCharging for a SCUDIF call. If the multimedia is used at the time when the tone timer expires then SSP shall not connect the tone.
<b>Consequences if not approved:</b>	⌘ Call Party Handling and CAMEL user interaction would cause problems in a SCUDIF call.

<b>Clauses affected:</b>	⌘ 8, 21										
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table> Other core specifications Test specifications O&M Specifications	Y	N	X			X		X	⌘ 23.172-CR022	
Y	N										
X											
	X										
	X										
<b>Other comments:</b>	⌘ - In Rel-7 the IW shall be defined more clearly when CSE changes the basic										

service. The CWA arrives at last operation to SSP, thus all the CPH is when MSC/SSP considers the call as SCUDIF call...

- 23.172 will just refer to 22.078.

## -- First modified section --

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# 8 Procedures for Call Party Handling

Call Party Handling (CPH) procedures only apply to speech telephony (TS11) as defined in TS 22.003 [10]. [For a SCUDIF call see clause 21.](#)

CPH procedures apply to MO, MF, MT, VT and CSE initiated calls. If the served subscriber is involved in a CPH configuration controlled by her CSE, then any further MO or MT call setup request involving the served subscriber shall be handled by a separate relationship with the served subscriber's CSE. This new relationship may lead to the creation of a further CPH configuration for the served subscriber. The service logic for one CSE relationship is not necessarily aware of what is happening in another CSE relationship involving the same served subscriber.

It is not required to transfer a leg or a group of legs between separate CPH configurations.

Where service logic involves Call Party Handling procedures, the Service Interaction Indicators Two parameter should be used to manage interactions with Supplementary Services (CF, CD and MPTY for each call leg and ECT and HOLD for the served subscriber).

The CSE shall be able to add parties to, or remove parties from, the group. Each party in this group can communicate with all other parties in the group. The IPLMN/VPLMN shall support at least 6 parties (of which one may be a Specialised Resource Function) in a group.

If a control relationship exists, the CSE may order in-band user interaction with any held call party at any point during the active phase of the call leg.

Charging activities shall be possible during a CPH configuration as indicated in clause 15.

## 8.1 CPH procedures for an existing call

### 8.1.1 Creating additional parties in the call

The purpose of this procedure is to allow the CSE to create additional parties in a call at any point during that call. The CSE initiated call leg shall be created in the held state in the IPLMN/VPLMN of the served subscriber.

If a control relationship exists, it shall be possible for the CSE to instruct the IPLMN/VPLMN of the served subscriber to initiate a new call leg to an additional party. The new call leg shall form part of the existing CPH configuration.

If a CSE initiated new call leg is created within a CAMEL relationship for a mobile originated call (MO case) or for a mobile terminating call in the VPLMN (VT case), then the CSE initiated new leg in the VPLMN shall be subject to the Outgoing Call Barring Supplementary Services and the Outgoing Operator Determined Barring categories. However the CSE shall be able to instruct the VPLMN to suppress the invocation for the new leg of conditional barring of outgoing calls by the call barring supplementary service and operator determined barring as indicated in subclause 18.8.

The CSE shall be able to instruct the IPLMN to suppress the triggering of terminating CAMEL-based services in the IPLMN for the additional party.

If the CSE sends a request to initiate a new call leg, then the events relating to unsuccessful call establishment and answer shall be armed by the CSE to maintain a control relationship.

### 8.1.2 Placing an individual call party on hold

The purpose of this procedure is to allow the CSE to instruct the IPLMN/VPLMN to place an individual call party on hold.

The CSE may instruct the IPLMN/VPLMN to put a call party on hold at any point during the active phase of the call leg if a control relationship exists.

The CSE shall be able to instruct the IPLMN/VPLMN to send a notification towards the held party indicating that she has been placed on hold. The notification shall be a tone or an announcement.

NOTE: This procedure does not use the HOLD supplementary service, however the notification message sent to the MS may be the same as for the HOLD supplementary service. The CSE may use other procedures instead of, or as well as, instructing the IPLMN/VPLMN to send a tone or announcement to notify the held party that she has been placed on hold.

### 8.1.3 Releasing call parties

The purpose of this procedure is to allow the CSE to instruct the IPLMN/VPLMN to release an individual call party or all the call parties in a CPH configuration.

The CSE may instruct the IPLMN/VPLMN to release all the call parties in a CPH configuration at any point in a call if a control relationship exists.

The CSE may instruct the IPLMN/VPLMN to release an individual CSE initiated call party at any point in a call if a control relationship exists.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN not to route the call directly to the destination, then the CSE may instruct the IPLMN/VPLMN to release the calling party at any point in a call if a control relationship exists.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN to proceed with the call as normal then the CSE may instruct the IPLMN/VPLMN to release the calling party or the called party during the active phase of the call only.

The release of the served subscriber shall not necessarily lead to the disconnection of the other parties in the CPH configuration.

### 8.1.4 Connecting an individual call party to the group

The purpose of this procedure is to allow the CSE to instruct the IPLMN/VPLMN to connect an individual call party to the group.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN not to route the call leg directly to the destination, then the CSE may instruct the IPLMN/VPLMN to connect a held call party to the group at any point during the alerting and active phases of the call leg if a control relationship exists.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN to proceed with the call as normal then the CSE may instruct the IPLMN/VPLMN to connect a held call party to the group at any point during the alerting and active phases of the call leg if a control relationship exists and at least one call leg in the group has reached the active phase.

If the CSE has initiated the call, it may instruct the IPLMN/VPLMN to connect another held call party to the group at any point during the alerting and active phases of the call leg.

The CSE shall be able to instruct the IPLMN/VPLMN to send a notification towards the previously held party indicating that she has been connected to the group. The CSE shall be able to instruct the IPLMN/VPLMN to send a notification towards the other party or parties in the group indicating that an additional party has been connected to the group. The notification shall be a tone or an announcement.

NOTE: The CSE may use other procedures instead of, or as well as, instructing the IPLMN/VPLMN to send a tone or announcement to notify the previously held party that she has been connected to the group. The same principle applies to the notification towards the other party or parties in the group.

## 8.2 Creating a new call

The purpose of this procedure is to allow the CSE to create a new call to the served subscriber.

It shall be possible for the CSE to instruct the IPLMN/VPLMN of the served subscriber to initiate a new call on behalf of the served subscriber. The IPLMN/VPLMN shall have the possibility to reject this request. The CSE shall be able to instruct the HPLMN to suppress the invocation of Incoming call barrings for a CSE initiated call.

The CSE shall be able to instruct the HPLMN to suppress the triggering of terminating CAMEL-based services in the VPLMN for the served subscriber.

The CSE shall be able to instruct the IPLMN to suppress the triggering of terminating CAMEL-based services in the IPLMN for the served subscriber.

If the CSE sends a request to initiate a call, the events relating to unsuccessful call establishment and answer should be armed by the CSE to maintain a control relationship.

## **--For information --**

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### **14 Subscriber interactions with the CSE**

#### **14.1 Announcement and tones insertion**

As a part of the following procedures, it shall be possible for the CSE to order the playing of announcements or tones to the calling subscriber:

- The call set-up request procedure;
- The unsuccessful call establishment procedure;
- The called party connection procedure;
- The call disconnection procedure;
- The incoming call request procedure;
- The called party alert reporting procedure.

In the active phase of the call leg and in the mid-call procedure it shall be possible for the CSE to play tones and/or announcements to any held party or the group as specified in clauses 5, 6 and 8. It shall be possible to play tones efficiently using local tone generators.

The HPLMN operator is responsible for the administration of announcements. If there is an appropriate bilateral agreement the VPLMN operator may also administer announcements.

#### **14.2 Voice prompting and information collection**

As a part of the call set-up request procedure, unsuccessful call establishment procedure, call disconnection procedure and incoming call request procedure it shall be possible for the CSE to order voice prompting and information collection to the calling subscriber. It shall not be possible to collect information from the user as part of the originating CAMEL handling for a forwarded call.

In the active phase of the call leg and in the mid-call procedure it shall be possible for the CSE to order voice prompting and information collection towards any held party as specified in clauses 5, 6 and 8.

#### **14.3 Subscriber interaction by using USSD**

It shall be possible for the CSE to initiate the sending of a USSD message to the served subscriber at any time. It shall be possible for the CSE to receive a served subscriber initiated USSD message at any time (see TS 22.030 [3] and TS 22.090 [4]).

## --Next modified section --

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### 21 ~~Reserved clause~~ Interactions with video call and SCUDIF call

The CSE may invoke CPH procedures only if one of the following conditions is fulfilled:

- The call has made fall-back to speech; Or,
- The preferred service is speech and the less preferred service is prevented.

The CSE may initiate user interaction or order in-band tone only if one of the following conditions is fulfilled:

- The preferred service is speech at the call establishment phase; Or,
- The selected service is speech at the call establishment phase or active phase of the call.

For a SCUDIF call the CAMEL warning tone and flexible tone may be ordered by the CSE. At the time of tone connection the VPLMN/IPLMN shall not connect the tone if the multimedia is currently being used.



3GPP TSG CN WG2 Meeting #32  
Atlanta, USA, 16<sup>th</sup> – 20<sup>st</sup> Feb 2004

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<b>CHANGE REQUEST</b>
⌘ <b>22.078 CR 172</b> ⌘ rev <b>-</b> ⌘ Current version: <b>6.4.0</b> ⌘

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<b>Source:</b>	⌘ SA1 (CN2)		
<b>Work item code:</b>	⌘ SCUDIF	<b>Date:</b>	⌘ 13/05/2004
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ Rel-6
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Use <u>one</u> 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)	

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The CSE shall be able to instruct the IPLMN to suppress the triggering of terminating CAMEL-based services in the IPLMN for the additional party.

If the CSE sends a request to initiate a new call leg, then the events relating to unsuccessful call establishment and answer shall be armed by the CSE to maintain a control relationship.

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The purpose of this procedure is to allow the CSE to instruct the IPLMN/VPLMN to place an individual call party on hold.

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NOTE: This procedure does not use the HOLD supplementary service, however the notification message sent to the MS may be the same as for the HOLD supplementary service. The CSE may use other procedures instead of, or as well as, instructing the IPLMN/VPLMN to send a tone or announcement to notify the held party that she has been placed on hold.

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The release of the served subscriber shall not necessarily lead to the disconnection of the other parties in the CPH configuration.

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The purpose of this procedure is to allow the CSE to instruct the IPLMN/VPLMN to connect an individual call party to the group.

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### **14 Subscriber interactions with the CSE**

#### **14.1 Announcement and tones insertion**

As a part of the following procedures, it shall be possible for the CSE to order the playing of announcements or tones to the calling subscriber:

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The HPLMN operator is responsible for the administration of announcements. If there is an appropriate bilateral agreement the VPLMN operator may also administer announcements.

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## --Next modified section --

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