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Title: Corrections on Camel Rel-6

Agenda item: 9.21

Document for: APPROVAL

Doc-2nd-Level	Spec	CR	Rev	Phase	Subject	Cat	Ver_C
N4-050361	23.078	762	1	Rel-6	CR 693 not implemented	F	6.4.1

3GPP TSG-CN WG4 Meeting #26 Sydney, AUSTRALIA. 14th to 18th February 2005.

N4-050361

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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.

**** First Modified Section ****

4.6.1.8 Initial DP

4.6.1.8.1 Description

This IF is generated by the gsmSSF when a trigger is detected at a DP in the BCSM, to request instructions from the gsmSCF.

4.6.1.8.2 Information Elements

(Note: IEs in the NC columns in this IF may need further study.)

Information element name	MO	MF	MT	VT	NC	NP	Description
Additional Calling Party Number	O	O	С	С	-	С	This IE contains the calling party number provided by the access signalling system of the calling user or received from the gsmSCF due to the previous CAMEL processing.
Bearer Capability	M	ψ	U	Q	1	C	This IE indicates the type of the bearer capability connection to the user. If Bearer Capability 2 is present, then it indicates the preferred bearer capability for a SCUDIF (as defined in 3GPP TS 23.172 [27]) call.
Called Party Number	С	M	M	M	-	M	This IE contains the number used to identify the called party in the forward direction. For MO and MF calls this IE is used in the case of TDP Route_Select_Failure (this is the destination number used to route the call) and in the case of TDP Busy and TDP No Reply (this is the MSISDN when the destination number used for the call is an MSRN, or in the case of unsuccessful call establishment received from the HLR via the MAP interface, otherwise it is the number used to route the call). For VT calls when there is no forwarding pending this is the MSISDN received in the Provide Roaming Number; if the MSISDN is not available, the basic MSISDN is used. For the MT and VT call case when there is call forwarding or call deflection pending, this is the MSISDN, i.e. not the forwarded-to or deflected-to number. If the Initial DP IF is sent at TDP Route_Select_Failure or TDP Analysed_Information then the NatureOfAddress indicator may contain a national-specific value. For some national-specific NatureOfAddress indicator values the length of the digit part of the destination address may be zero.

Information element name	MO	MF	MT	VT	NC	NP	Description
Called Party BCD Number	С	-	-	-	-	-	This IE contains the number used to identify the called party in the forward direction. It is used for an MO call in all cases except in the case of TDP Route_Select_Failure. For the TDP Collected_Information, the number contained in this IE shall be identical to the number received over the access network. It may e.g. include service selection information, such as * and # digits, or carrier selection information dialled by the subscriber. For the TDP Analysed_Information, the number contained in this IE shall be the dialled number received over the network access or received from a gsmSCF in a Connect IF, Service selection information, such as * and # digits may be present (see subclause 4.2.1.2.2); carrier selection information dialled by the subscriber is not present.
Calling Party Number	М	С	С	С	-	С	This IE carries the calling party number to identify the calling party or the origin of the call.
Calling Partys Category	М	С	С	С	-	С	This IE indicates the type of calling party (e.g., operator, pay phone, ordinary subscriber).
CallGap Encountered	С	С	С	С	-	С	This IE indicates the type of gapping which has been applied to the related call. This IE shall be present only if a call gapping context is applicable to the Initial DP IF.
Call Reference Number	M	М	M	M	-	M	This IE may be used by the gsmSCF for inclusion in a network optional gsmSCF call record. It has to be coupled with the identity of the MSC which allocated it in order to define unambiguously the identity of the call. For MO calls, the call reference number is set by the serving VMSC and included in the MO call record. For MT calls, the call reference number is set by the GMSC and included in the RCF call record in the GMSC and in the MT call record in the terminating MSC. For VT calls, the call reference number is set by the GMSC and included in the RCF call record in the GMSC and in the MT call record in the GMSC and in the MT call record in the terminating MSC. For MF calls, the call reference number is set by the GMSC and included in the CF record in the forwarding MSC. For the setting of the Call Reference Number for NP calls, see the corresponding call case above (MO, MT, VT or MF).
Cause	С	С	С	С	-	-	This IE indicates the cause specific to the armed BCSM DP event. This IE is applicable to DP Route_Select_Failure and DP T_Busy. The cause may be used by the gsmSCF to decide how to continue the call handling.
Event Type BCSM	М	М	М	М	-	М	This IE indicates the armed BCSM DP event, resulting in the Initial DP IF.
Ext-Basic Service Code	C	C	C	C	-	C	This IE indicates the type of basic service, i.e. teleservice or bearer service. If Bearer Capability 2 is present, then it indicates the basic service which corresponds to the preferred bearer capability for a SCUDIF (as defined in 3GPP TS 23.172 [27]) call.

Information element name	MO	MF	MT	VT	NC	NP	Description
High Layer Compatibility	U	Ф	Q	Ф	-	d)	This IE indicates the type of the high layer compatibility, which will be used to determine the ISDN-teleservice of a connected ISDN terminal.
IMSI	M	M	M	M	-	S	This IE identifies the mobile subscriber. For the NP case, the IMSI is mandatory if the new party is initiated in an MO, MF, MT, or VT call, otherwise it shall be absent.
IP SSP Capabilities	С	С	С	С	-	С	This IE indicates which SRF resources are supported within the gsmSSF and are available. If this IE is absent, it indicates that no gsmSRF is attached and available.
Location Information	М	-	С	М	-	-	This IE is described in a table below.
Location Number	M	С	С	С	-	-	For mobile originated calls this IE represents the location of the calling party. For all other call scenarios this IE contains the location number received in the incoming ISUP signalling.
MSC Address	M	М	М	М	-	M	For MO calls, the MSC Address carries the international E.164 address of the serving VMSC. For MT calls, the MSC Address carries the international E.164 address of the GMSC. For VT calls, the MSC Address carries the international E.164 address of the serving VMSC. For MF calls, the MSC Address carries the international E.164 address of the forwarding MSC. For NP case, see the corresponding call case above (MO, MT, VT or MF).
GMSC Address	-	М	-	М	-	S	For MF calls, the GMSC Address carries the international E.164 address of the GMSC. For VT calls, the GMSC Address carries the international E.164 address of the GMSC. For NP calls, the GMSC Address is mandatory if the new party is initiated in an MF call or in a VT call, otherwise it shall be absent. The GMSC Address carries the international E.164 address of the GMSC.
Carrier	S	S	S	S	-	S	This IE is described in a table below. This IE may be present when the VPLMN and the HPLMN of the subscriber are both North American. For MO calls, this IE shall identify any carrier that was explicitly selected by the calling subscriber. If no carrier was explicitly selected, this IE shall contain the calling subscriber's subscribed carrier. For MT and VT calls, the IE shall contain the carrier subscribed to by the called subscriber. For MF calls, the IE shall contain the carrier subscribed to by the forwarding subscriber.
Original Called Party ID	С	С	С	С	-	-	This IE carries the dialled digits if the call has met call forwarding on the route to the gsmSSF. This IE shall also be sent if it was received from the gsmSCF due to previous CAMEL processing.
Redirecting Party ID	С	С	С	С	-	-	This IE indicates the directory number the call was redirected from. This IE shall also be sent if it was received from the gsmSCF due to previous CAMEL processing.
Redirection Information	С	С	С	С	-	-	This IE contains forwarding related information, such as the redirection counter.

Information element name	МО	MF	MT	VT	NC	NP	Description
Service Key	М	М	М	М	-	М	This IE indicates to the gsmSCF the
							requested CAMEL Service. It is used to address the required application within the gsmSCF.
Subscriber State	-	-	С	С	-	-	This IE indicates the status of the MS. The states are: - CAMEL Busy: The MS is engaged on a transaction for a mobile originating or terminated circuit-switched call. - Network Determined Not Reachable: The network can determine from its internal data that the MS is not reachable. - Assumed Idle: The state of the MS is neither "CAMEL Busy" nor "Network Determined Not Reachable". - Not provided from VLR.
Time And Timezone	M	М	М	М	-	М	This IE contains the time that the gsmSSF was triggered, and the time zone in which gsmSSF resides.
Call Forwarding SS Pending	-	-	С	С	-	-	If the Initial DP IF is sent from the GMSC, then this IE shall be present in the following cases: - The GMSC has received an FTN in the 1st Send Routeing Info ack IF from the HLR The GMSC has received an FTN in the 2nd Send Routeing Info ack IF from the HLR and no relationship with the gsmSCF exists at that moment The GMSC has received the Resume Call Handling IF from the VMSC and no relationship with the gsmSCF exists at that moment. If the Initial DP IF is sent from the VMSC, then this IE shall be present in the following cases: - Conditional call forwarding is invoked and no relationship with the gsmSCF exists at that moment Call Deflection is invoked and no relationship with the gsmSCF exists at that moment.
Forwarding Destination Number	-	-	С	С	-	-	This IE contains the Forwarded-to-Number or the Deflected-to-Number. It shall be present if the Call Forwarding SS Pending IE is present, otherwise it shall be absent.
Service Interaction Indicators Two	С	С	С	С	-	С	The IE is described in a table below. This IE is present if it is received in the ISUP message or due to previous CAMEL processing.
CUG Index	С	-	-	-	-	С	See 3GPP TS 23.085 [22] for details of this IE.
CUG Interlock Code	С	С	С	С	-	С	This IE shall be set according to 3GPP TS 23.085 [22] unless modified by the gsmSCF via the Connect or Continue With Argument IFs.
Outgoing Access Indicator	С	С	С	С	-	С	This IE shall be set according to the 3GPP TS 23.085 [22] unless modified by the gsmSCF via the Connect or Continue With Argument IFs.
MS Classmark 2	С	-	-	-	-	-	This IE contains the MS classmark 2, which is sent by the MS when it requests access to setup the MO call or responds to paging in the CS domain.
IMEI (with software version)	С	-	-	-	-	-	This IE contains the IMEISV (as defined in 3GPP TS 23.003 [7]) of the ME in use by the served subscriber.

Information element name	МО	MF	MT	VT	NC	NP	Description
Supported CAMEL Phases	М	М	М	М	М	М	This IE indicates the CAMEL Phases
Offered CAMEL4 Functionalities	М	M	M	M	M	М	supported by the GMSC or the VMSC. This IE is described in a table below.
Offered CAMEL4 Functionalities	IVI	IVI	IVI	IVI	IVI	IVI	This IE is described in a table below. This IE indicates the CAMEL phase 4
							functionalities offered by the GMSC or the
							VMSC.
Bearer Capability	<u>M</u>	<u>C</u>	<u>C</u>	<u>C</u>	Ξ	<u>C</u>	This IE indicates the bearer capability
							connection to the user. For a SCUDIF call (as defined in 3GPP TS 23.172 [Error!
							Reference source not found.]) this IE
							indicates the Bearer Capability of the
Bearer Capability 2	С	С	С	С			preferred service. This IE indicates the type of the bearer
Bearer Capability 2					_	_	capability of the less preferred service for a
							SCUDIF call connection to the user. If Bearer
							Capability 2 is present, then it indicates the
							less preferred bearer capability for a SCUDIF (as defined in 3GPP
							TS 23.172 [27]) call.
Ext-Basic Service Code	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>		<u>C</u>	This IE indicates the basic service, i.e.
							teleservice or bearer service. For a SCUDIF
							call this IE indicates the basic service of the
Ext-Basic Service Code 2	С	С	С	С	_	_	preferred service. This IE indicates the type of basic service of
Ext Basis Gol vice Gode 2							the less preferred service for a SCUDIF call-
							i.e. teleservice or bearer service. If bearer
							Capability 2 is present, then it indicates the basic service which corresponds to the less
							preferred bearer capability for a SCUDIF
							call.
High Layer Compatibility	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	Ξ	<u>C</u>	This IE indicates the high layer compatibility,
							which will be used to determine the ISDN- teleservice of a connected ISDN terminal.
							For a SCUDIF call this IE indicates the high
							layer compatibility of the preferred service.
High Layer Compatibility 2	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	Ξ	<u>C</u>	This IE indicates the high layer compatibility
							of the less preferred service for a SCUDIF call.
Low Layer Compatibility	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>		С	This IE indicates the low layer compatibility,
	_	_		_	_	_	which will be used to determine the ISDN
							bearer capability of a connected ISDN
							terminal. For a SCUDIF call this IE indicates the Low Layer Compatibility of the preferred
							service.
Low Layer Compatibility 2	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	=	<u>C</u>	This IE indicates the low layer compatibility
							of the less preferred service for a SCUDIF
Enhanced Dialled Services	S	S	_	_	S	S	call. This IE indicates that the gsmSCF may use
Allowed							the Enhanced Dialled Services (EDS).
							This IE shall be included if and only if all of
							following four conditions are fulfilled:
							- this IF is sent due to triggering on DP Analysed Information; and
							- the EDS functionality is offered for this
							call (as indicated in the Offered CAMEL4
							Functionalities); and
							- there is no more than one outgoing leg within this call; and
							- there is no other CAMEL dialogue active
							for the leg for which this IF is sent.
User-to-User Service activation	0	0	0	0	-	-	This IE may be sent if it is received in a call
request							control message. See 3GPP TS 23.087 [45], 3GPP TS 24.008 [30], and ETSI
		1		Ī			EN 300 356-1 [40] for details of this IE.

Information element name	MO	MF	MT	VT	NC	NP	Description
User-to-User Information	0	0	0	0	-	-	This IE may be sent if it is received in a call
							control message. See 3GPP TS 23.087 [45],
							3GPP TS 24.008 [30], and ETSI
							EN 300 356-1 [40] for details of this IE.

Offered CAMEL4 Functionalities contains the following information elements:

Information element name	Status	Description
Initiate Call Attempt	S	This IE indicates that the gsmSCF may send to the gsmSSF the Initiate Call Attempt IF.
Split Leg	S	This IE indicates that the gsmSCF may send to the gsmSSF the Split Leg IF.
Move Leg	S	This IE indicates that the gsmSCF may send to the gsmSSF the Move Leg IF.
Disconnect Leg	S	This IE indicates that the gsmSCF may send to the gsmSSF the Disconnect Leg IF.
Entity Released	S	This IE indicates that the gsmSSF will send to the gsmSCF the Entity Released IF, when appropriate.
DFC With Argument	S	This IE indicates that the gsmSCF may send to the gsmSSF the Disconnect Forward Connection With Argument IF.
Play Tone	S	This IE indicates that the gsmSCF may send to the gsmSSF the Play Tone IF.
DTMF Mid Call	S	This IE indicates that the gsmSCF may instruct the gsmSSF to arm the O_MidCall or T_MidCall DP. The gsmSCF may instruct the gsmSSF to automatically re-arm the DP, when encountered.
Charging Indicator	S	This IE indicates that the Charge Indicator IE may be present in the Event Report BCSM IF reporting the O_Answer or T_Answer DP.
Alerting DP	S	This IE indicates that the gsmSCF may instruct the gsmSSF to arm the O_Term_Seized or Call_Accepted DP.
Location At Alerting	S	This IE indicates that the Location Information IE shall be present (if available) in the Event Report BCSM IF reporting the O_Term_Seized or Call_Accepted DP.
Change Of Position DP	S	This IE indicates that the gsmSCF may instruct the gsmSSF to arm the O_Change_Of_Position or T_Change_Of_Position DPs. The gsmSCF may instruct the gsmSSF to automatically re-arm the DP, when encountered.
OR Interactions	S	This IE indicates that the gsmSCF may send to the gsmSSF the Basic OR Interrogation Requested IE in the Connect or Continue With Argument IF. This IE indicates that the Route Not Permitted IE may be present in the Event Report BCSM IF reporting the O_Abandon DP.
Warning Tone Enhancements	S	This IE indicates that the gsmSCF may send to the gsmSSF the Burstlist IE (within the Audible Indicator IE) in an Apply Charging IF.
CF Enhancements	S	This IE indicates that the Forwarding Destination Number IE may be present in the Event Report BCSM IF reporting the T_Busy or T_No_Answer DP.
Criteria for Change Of Position DP	S	This IE indicates that the gsmSCF may send to the gsmSSF in the Request Report BCSM Event IF criteria for reporting the report of O_Change_Of_Position or T_Change_Of_Position.
Subscribed Enhanced Dialled Services	S	This IE indicates that Subscribed Enhanced Dialled Services is offered.
Serving Network Enhanced Dialled Services	S	This IE indicates that Serving Network Enhanced Dialled Services is offered.
Service Change DP	S	This IE indicates that the gsmSCF may instruct the gsmSSF to arm the O_Service_Change or T_Service_Change DPs. The gsmSCF may instruct the gsmSSF to automatically re-arm the DP, when encountered.

Location Information is defined in 3GPP TS 23.018 [12]. The following differences apply:

Information element name	МО	MF	MT	VT	NC	NP	Description
Location Number	-	ı	С	С	-	-	See 3GPP TS 23.018 [12].
Service area ID	C,E		C,E	C,E	-	-	See 3GPP TS 23.018 [12].
Cell ID	C,E	-	C,E	C,E	-	-	See 3GPP TS 23.018 [12].
Geographical information	С	ı	С	С	-	-	See 3GPP TS 23.018 [12].
Geodetic information	С	-	С	С	-	-	See 3GPP TS 23.018 [12].
VLR number	М	ı	С	M	-	-	See 3GPP TS 23.018 [12].
Age Of location information	M		С	С	-	-	See 3GPP TS 23.018 [12].
Current Location Retrieved	-	ı	-	-	-	-	Not applicable
Location area ID	C,E	-	C,E	C,E	-	-	See 3GPP TS 23.003 [7].

Information element name	MO	MF	MT	VT	NC	NP	Description
Selected LSA Identity	S	-	S	S	-	-	This IE indicates the LSA identity associated
							with the current position of the MS. It shall
							be present if the LSA ID in the subscriber
							data matches the LSA ID of the current cell.
							In the case of multiple matches the LSA ID
							with the highest priority shall be present.
							See 3GPP TS 23.073 [18].
							This IE shall be present if available and
							SoLSA is supported, otherwise it shall be
							absent.

Carrier contains the following information elements:

Information element name	MO	MF	MT	VT	NC	NP	Description
Carrier Identification Code	M	M	M	M	-	М	This IE uniquely identifies a North American
							long distance carrier.
Carrier Selection Information	M	M	M	M	-	М	This IE indicates the way the carrier was
							selected, i.e.:
							- dialled
							- subscribed

Service Interaction Indicators Two contains the following information elements:

Information element name	MO	MF	MT	VT	NC	NP	Description
Forward Service Interaction Indicator	С	С	С	С	-	С	This IE is described in a table below.
HOLD Treatment Indicator	С	-	-	С	-	С	This IE indicates whether the CAMEL subscriber can invoke HOLD for the call.
CW Treatment Indicator	С	-	-	С	-	С	This IE indicates whether CW can be applied for a call to the CAMEL subscriber whilst this call is ongoing.
ECT Treatment Indicator	С	-	-	С	-	С	This IE indicates whether the call leg can become part of an ECT call initiated by the CAMEL subscriber.

Forward Service Interaction Indicator contains the following information elements:

Information element name	МО	MF	MT	VT	NC	NP	Description
Conference Treatment Indicator	O	С	С	С	-	С	This IE indicates whether the call leg can become part of a MPTY call initiated by the called subscriber.
Call Diversion Treatment Indicator	С	С	С	С	-	С	This IE indicates whether the call can be forwarded using the Call Forwarding or Call Deflection supplementary services.

**** End of Modified Section ***