3GPP TSG CN Plenary Meeting #16
Marco Island, USA, 5th – 7th June 2002

Tdoc NP-020201

Source: TSG CN WG 2

Title: LSs sent from CN2 since TSG#15 Meeting

Agenda item: 6.2.1

Document for: Information

Introduction:

This document contains 2 Liaison Statements agreed by TSG CN WG2, that are forwarded to TSG CN Plenary meeting #16 for information only.

Meeting	Doc-2nd-Level	Source	Tdoc Title	Comments
CN2#23	N2-020447	CN2	Reply to Liaison Statement "Annex of Information Tables (A.1, A.2, A.3 and A.4) in 22.078"	To: SA1
CN2#24	N2-020605	CN2	Liaison Statement on the removal of charging notification from CAMEL Phase 4	To: SA1

3GPP TSG CN WG2 Meeting #23   **Tdoc N2-020447**
Helsinki, Finland, 8th April – 12th April 2002

Title:	**Reply to Liaison Statement "Annex of Information Tables (A.1, A.2, A.3 and A.4) in 22.078"**
Source:	**CN2**
To:	**TSG-SA WG 1**
Cc:	
Response to:	

Contact Person:
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Attachments: N2-020448: Rel-5 23.078-CR "Correction of Information Tables (A.1, A.2, A.3 and A.4)"

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1. Overall Description:

TSG-CN WG 2 like to thank SA1 for their Liaison statement "Annex of Information Tables (A.1, A.2, A.3 and A.4) in 22.078", TDoc S1-020626 of the TSG-SA WG 1 (Services) meeting #15 in Saalfelden, Austria, 11-15th February 2002.

During their meeting in Helsinki, Finland, between 8th April – 12th April 2002, CN2 considered the incorporation of the tables of Annex A of 22.078 (A.1, A.2, A.3 and A.4) into the CAMEL Stage 2 specifications, namely 3GPP TS 23.078 on "Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2".

For 22.078 CAMEL Phases 3 and 4 TSG CN2 came to the conclusion that all information contained in those tables is already included in 23.078 for the corresponding phase in the description of information flows and information elements. Furthermore it is also specified in 23.078 when and under which conditions this information shall be sent. As already all information is included in 23.078 CN2 concluded that those tables do not need to be copied again into 23.078 specifications.

Furthermore CN2 also concluded that the information mentioned in the textual description of "Procedures for SMS" is also considered in the corresponding 23.078 stage 2.

2. Actions:

CN2 proposes that SA1 remove those tables in CAMEL Phase 4 22.078 Annex A and the text related to the information in "Procedures for SMS". For CAMEL Phase 3 (Release 99 and Release 4) CN2 leave this removal or other appropriate correction to the decision of SA1.

CN2 provide as Attachment a proposal on the Rel-5 22.078 CR "Correction of Information Tables (A.1, A.2, A.3 and A.4)".

3. Date of Next CN2 Meetings:

Meeting	Date	Location
3GPP CN2-#24	13 – 17 May 2002	Budapest, Hungary
3GPP CN2-#25	29 July - 2 August 2002	Helsinki, Finland

CR-Form-v5.1

CHANGE REQUEST

| ⌘ | **22.078** CR **???** | ⌘ **rev** | **-** | ⌘ | Current version: | **5.6.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network **X**

Title: ⌘	Correction of Information Tables (A.1, A.2, A.3 and A.4)	
Source: ⌘	CN2	
Work item code: ⌘	CAMEL4	*Date:* ⌘ 11. April 2002
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)*

Reason for change: ⌘	22.078 V5.6.0 Annex A "Information Tables" contains several tables showing the information which is sent by or shall be reported to the CSE respectively at various events. However those tables are incorrect. SA1 discussed that this information in those tables is more appropriate in a stage 2 document. This stage 2 specification which includes all the information of 22.078 Annex A is 3GPP 23.078 "Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2". Furtheron, this stage 2 includes also the functional specification which ensures that the information is send when appropriate and if available.

For "Procedures for SMS" there are no such tables. However the information is contained in the text itself. |
| *Summary of change:* ⌘ | Delete those information tables of annex A and the references to these tables.

Furthermore, remove this information in the text for "Procedures for SMS". |
| *Consequences if not approved:* ⌘ | Wrong CAMEL Phase 3 functionality and duplicate specification of information. |

Clauses affected: ⌘		
Other specs affected: ⌘	☐ Other core specifications ⌘	
	☐ Test specifications	
	☐ 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.

5.3   Call set-up request procedure

5.3.1   Procedure when dialled digits have been collected

The purpose of this procedure is to detect a call set-up request at the point where digits have been collected but not analysed, and to allow the CSE to modify the handling of the call set-up request.

If (according to the CSI):

- The subscriber is provisioned with a CAMEL based originating service; and

- The call set-up request occurs; and

- The criteria are satisfied.

Then the VPLMN/IPLMN shall suspend call processing, make contact with the CSE and await further instructions.

~~For mobile originated calls the information listed in table: A-1 (Call set-up request procedure 1) shall be provided to the CSE if available.~~

~~For forwarded calls the information listed in table: A-1 (Call set-up request procedure 2) shall be provided to the CSE if available.~~

When the VPLMN/IPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below.

- Perform charging activities;

- Activate subsequent control service events for the call. The CSE shall have the possibility to send the following information:

    - The subsequent service event which shall be detected and reported:

        - Called party alert;

        - Called party connection;

        - Call disconnection;

        - Calling party abandon;

        - Unsuccessful call establishment. In the case of no answer the CSE may provide a no answer timer;

        - Mid call event (DTMF or out of band information). The CSE shall specify the digit string(s) or the out of band information for which the instruction is valid. Out-band information may be detected during alerting phase of the call.

    - The party in the call for which the event shall be detected and reported (calling or called party);

    - The type of monitoring (control or notification).

- Order in-band user interaction;

- Send charging notifications. $(CAMEL4$)

There shall be no restriction regarding the order of the above instructions or the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Bar the call (i.e. release the call prior to connection);

- Continue the call processing;

- Continue the call processing with modified information. ~~The CSE shall have the possibility to send the information listed in table: A-2 (Call set up request procedure 1)~~;

- Continue the handling of the calling party without routeing the call to the destination. &(CAMEL4$).

5.3.2 Procedure for subscribed dialled services

The purpose of this procedure is to detect a call set-up request at the point where the called party number has been compared with the dialled services information, and allow the CSE to modify the handling of the call set-up request. Triggering of this procedure shall happen immediately after the procedure when dialled digits have been collected.

5.3.2.1 Initiation of contact with the CSE

If (according to the CSI):

- The subscriber is provisioned with a CAMEL based originating service; and

- The call set-up request occurs; and

- The criteria are satisfied.

Then the VPLMN/IPLMN shall suspend call processing, make contact with the CSE and await further instructions.

Contact with the CSE shall (if necessary) be made in this manner before network dialled services are invoked.

~~For mobile originated calls the information listed in table: A-1 (Call set up request procedure 3) shall be provided to the CSE if available.~~

~~For forwarded calls the information listed in table: A-1 (Call set up request procedure 4) shall be provided to the CSE if available.~~

5.3.2.2 Further processing of the call

When the VPLMN/IPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN/IPLMN to act as described below:

- Perform charging activities The CSE is only allowed to send e-values (refer to sect. 15.1, 'CSE controlled e-values') and include free format data in Call Data Records (refer to sect. 15.2, 'Inclusion in charging records of information received from the CSE');

- Order in-band user interaction. (Interaction between the service triggered from previous triggering may be needed to avoid duplicated guidance etc.).

Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Release the call;

- Continue the call processing;

- Continue the call processing with modified information:~~. The CSE shall have the possibility to send the information listed in table: A-2 (Call set up request procedure 2).~~

- release the call.

Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Allow the call processing to continue unchanged;

- Allow the call processing with modified information;~~. The CSE shall have the possibility to send the information~~
  ~~listed in table: A-2 (Call set up request procedure 2);~~

- Release the call.

— Next modified section —

5.5 Unsuccessful call establishment

The purpose of this procedure is to manage an outgoing call set-up at the time when the call establishment is unsuccessful.

If no control relationship for the given call exists and

- The unsuccessful call establishment procedure is defined as an initial service event (according to the CSI); and

- The call attempt is unsuccessful; and

- The triggering criteria are satisfied.

Then the VPLMN/IPLMN shall suspend call processing, make contact with the CSE and await further instructions.

If a relationship for the given call already exists and the CSE has activated this subsequent service event for this call and the unsuccessful call establishment event occurs the VPLMN/IPLMN shall:

- Suspend call processing, notify the CSE and await further instructions, or

- Notify the CSE and continue call processing.

In both cases above the following information shall be provided to the CSE:

- Event met;

- Type of monitoring;

- Cause for unsuccessful call establishment:

  - Not reachable;

  - Busy;

  - No answer;

  - Route select failure.

If the unsuccessful call procedure is armed as an initial service event, ~~the information listed in table: A-1 (Unsuccessful call establishment (MO)) shall also be provided to the CSE if available. A~~a new relationship is opened only if triggering criteria are fulfilled and no relationship already exists for the same CSI.

When the VPLMN/IPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN/IPLMN to act as described below:

- Perform charging activities;

- Activate subsequent control service events for the call. The CSE shall have the possibility to send the following information:

  - The subsequent service event which shall be detected and reported:

    - Called party alert;

    - Called party connection;

    - Call disconnection;

    - Calling party abandon;

- Unsuccessful call establishment. In the case of no answer the CSE may provide a no answer timer;

- Mid call event (DTMF or out of band information). The CSE shall specify the digit string(s) or the out-band information for which the instruction is valid. Out-band information may be detected during alerting phase of the call. The detection of the mid call event shall be limited to the VPLMN.

- The party in the call for which the event shall be detected and reported (calling or called party);

- The type of monitoring (control or notification).

- Order in-band user interaction;

- Send charging notifications. $(CAMEL4$)

There shall be no restriction regarding the order of the above instructions or the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Release the call;

- Continue the call processing;

- Continue the call processing with modified information. ~~The CSE shall have the possibility to send the following information listed in table: A-2 (Unsuccessful call establishment (MO)).~~

— Next modified section —

5.8 Call disconnection procedure

The purpose of this procedure is to manage the actions on disconnection of an established call. This procedure is applicable to any party in the call.

If the CSE has activated this subsequent service event for this call and the call disconnection event occurs the VPLMN/IPLMN shall:

- Suspend call processing, notify the CSE and await further instructions, or

- Notify the CSE and continue call processing.

The following information shall be provided to the CSE:

- Event met;

- The party in the call for which the event is reported;

- Type of monitoring;

- Disconnection reason.

When the VPLMN/IPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN/IPLMN to act as described below:

- Perform charging activities

- Activate subsequent control service events for the call. The CSE shall have the possibility to send the following information:

  - The subsequent service event which shall be detected and reported:

    - Called party alert;

    - Called party connection;

    - Call disconnection;

    - Calling party abandon;

- Unsuccessful call establishment. In the case of no answer the CSE may provide a no answer timer;

- Mid call event (DTMF or out of band information). The CSE shall specify the digit string(s) or the out-band information for which the instruction is valid.

- The party in the call for which the event shall be detected and reported (calling or called party);

- The type of monitoring (control or notification).

- Order in-band user interaction;

- Send charging notifications. $(CAMEL4$)

There shall be no restriction regarding the order of the above instructions or the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Continue the call processing, i.e. release the call;

- Continue the call processing with modified information. ~~The CSE shall have the possibility to send the information listed in table: A 2 (Call disconnection procedure (MO)).~~

— Next modified section —

6.3 Incoming call request procedure

The purpose of this procedure is to detect an incoming call request and allow the CSE to modify the handling of the incoming call.

If (according to the CSI):

- The subscriber is provisioned with a CAMEL based terminating service; and

- The incoming call request event occurs

Then the IPLMN/VPLMN shall suspend call processing, make contact with the CSE and await further instructions.

~~For mobile terminated calls the following information listed in table: A 1 (Incoming call request procedure) shall be provided to the CSE if available.~~

When the IPLMN/VPLMN has made contact with the CSE, the CSE shall be able to instruct the IPLMN to act as described below:

- Perform charging activities;

- Activate subsequent control service events for the call. The CSE shall have the possibility to send the following information:

  - The subsequent service event which shall be detected and reported:

    - Called party alert;

    - Called party connection;

    - Call disconnection;

    - Calling party abandon;

    - Unsuccessful call establishment. In the case of no answer the CSE may provide a no answer timer.

    - Mid call event (DTMF or out of band information). The CSE shall specify the digit string(s) or the out of band information for which the instruction is valid.

  - The party in the call for which the event shall be detected and reported (calling or called party);

  - The type of monitoring (control or notification).

- Suppress tones and announcements which may be played to the calling party, if an unsuccessful call establishment occurs.

- Order in-band user interaction.

- Send charging notifications.

There shall be no restriction regarding the order of the above instructions or the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Bar the call (i.e. release the call before connection);

- Continue the call processing;

- Continue the call processing with modified information;. The CSE shall have the possibility to send the information listed in table: A 2 (Incoming call request procedure);

- Continue the handling of the calling party without routeing the call to the destination. &(CAMEL4$).

If the CSE instructs the IPLMN/VPLMN to continue the call processing with a changed called party number, the CSE shall indicate whether the resulting call shall be treated by the IPLMN/VPLMN as a forwarded call. Any forwarded call resulting from a CSE Call Forwarding service may cause an invocation of any mobile originated CAMEL based service in the IPLMN/VPLMN.

If the CSE instructs the IPLMN to allow the call processing with modified information, the CSE may send to the IPLMN an alerting pattern in order to alert the called subscriber in a specific manner. This alerting pattern shall be transferred to the VPLMN.

— Next modified section —

6.5   Unsuccessful call establishment

The purpose of this procedure is to manage an incoming call set-up at the time when the call establishment is unsuccessful.

If no relationship for the given call exists and

- The unsuccessful call establishment procedure is defined as an initial service event (according to the CSI); and

- The call attempt is unsuccessful; and

- The triggering criteria are satisfied

Then the VPLMN/IPLMN shall suspend call processing, make contact with the CSE and await further instructions.

If a relationship for the given call already exists and the CSE has activated this subsequent service event for this call and the unsuccessful call establishment event occurs the VPLMN/IPLMN shall:

- Suspend call processing, notify the CSE and await further instructions, or

- Notify the CSE and continue call processing.

In both cases above the following information shall be provided to the CSE:

- Event met;

- Type of monitoring;

- Cause for unsuccessful call establishment:

    - Not reachable;

    - Busy;

    - No answer;

- Forwarding notification.

If the unsuccessful call establishment procedure is armed as an initial service event, ~~information listed in table: A.1 (Unsuccessful call establishment (MT)) shall be provided to the CSE additionally if available.~~ and

~~When~~ the IPLMN/VPLMN has made contact with the CSE, the CSE shall be able to instruct the IPLMN to act as described below:

- Perform charging activities;

- Activate subsequent control service events for the call. The CSE shall have the possibility to send the following information:

    - The subsequent service event which shall be detected and reported:

        - Called party alert;

        - Called party connection;

        - Call disconnection;

        - Calling party abandon;

        - Unsuccessful call establishment. In the case of no answer the CSE may provide a no answer timer;

        - Mid call event (DTMF or out of band information). The CSE shall specify the digit string(s) or the out of band information for which the instruction is valid.

    - The party in the call for which the event shall be detected and reported (calling or called party);

    - The type of monitoring (control or notification).

- Order in-band user interaction.

There shall be no restriction regarding the order of the above instructions or the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Release the call;

- Continue the call processing;

- Continue the call processing with modified information. ~~The CSE shall have the possibility to send the information listed in table: A.2 (Unsuccessful call establishment (MT)).~~

— Next modified section —

6.8 Call disconnection procedure

The purpose of this procedure is to manage the actions on disconnection of an established call.

If the CSE has activated this subsequent service event for the call and the call disconnection event occurs the IPLMN/VPLMN shall:

- Suspend call processing, notify the CSE and await further instructions, or

- Notify the CSE and continue call processing.

The following information shall be provided to the CSE:

- Event met;

- The party in the call for which the event is reported;

- Type of monitoring;

- Disconnection reason.

When the IPLMN/VPLMN has made contact with the CSE, the CSE shall be able to instruct the IPLMN/VPLMN to act as described below.

- Perform charging activities;

- Activate subsequent control service events for the call. The CSE shall have the possibility to send the following information:

    - The service subsequent event which shall be detected and reported:

        - Called party alert;

        - Called party connection;

        - Call disconnection;

        - Calling party abandon;

        - Unsuccessful call establishment. In the case of no answer the CSE may provide a no answer timer;

        - Mid call event (DTMF or out of band information). The CSE shall specify the digit string(s) or out of band information for which the instruction is valid.

    - The party in the call for which the event shall be detected and reported (calling or called party);

    - The type of monitoring (control or notification).

- Order in-band user interaction.

There shall be no restriction regarding the order of the above instructions or the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instruction:

- Continue the call processing, i.e. release the call;

- Continue the call processing with modified information. ~~The CSE shall have the possibility to send the information listed in table: A-2 (Call disconnection procedure (MT)).~~

— Next modified section —

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7 Procedures for serving network dialled services

The purpose of this procedure is to detect a match between the called party number and a stored network service number at the call set-up request. It is to allow the CSE to modify the handling of the call set-up request. If this procedure is triggered it shall happen after processing of Subscribed Dialled Services triggered via the CSI. If any other CAMEL dialogue has changed the called party number then the modified called party number is used for conditional triggering check.

7.1 Initiation of contact with the CSE

If:

- The call set up request occurs, and

- The call set up request procedure is passed, and

- The PLMN is provisioned with network based service information

Then the VPLMN shall suspend call processing, make contact with the CSE and await further instructions.

~~For mobile originated calls the following information listed in table: A-1 (Procedures for serving network dialled services 1) shall be provided to the CSE if available.~~

~~For forwarded calls the information listed in table: A-1 (Procedures for serving network dialled services 2) shall be provided to the CSE if available.~~

7.2 Further processing of the call

When the serving network has made contact with the CSE, the CSE shall be able to instruct the serving network to act as described below:

- Release the call;

- Continue the call processing;

- Continue the call processing with modified information;~~. The CSE shall have the possibility to send the information listed in table: A-2 (Procedures for serving network dialled services 2);~~

- Perform charging activities (the CSE is only allowed to include charging data in the Call Data Record);

- Order in-band user interaction. (Interaction between the service triggered from previous triggering may be needed to avoid duplicated guidance etc.)

Further processing of the call continues as detailed in Section 5.3, and the CSE contact initiated at this procedure is terminated.

— Next modified section —

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8 Procedures for Call Party Handling - $(CAMEL4$)

CPH procedures only apply to speech telephony (TS11) as defined in TS 22.003 [10].

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), 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 have the possibility to send the information listed in table A.2 (CSE initiated call set-up).~~

If the CSE sends a request to initiate a new call leg the events relating to unsuccessful call establishment and answer should 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.

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.

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.

~~The CSE shall have the possibility to send the information listed in table A-2 (CSE initiated call set-up).~~

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.

— Next modified section —

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9 Procedures for SMS

9.1 Criteria for contact with the CSE $(CAMEL4$)

It shall be possible for the HPLMN to specify criteria which must be satisfied before the CSE is contacted.

The following criteria may be defined:

9.1.1 CSI criteria applicable at Short message delivery

9.1.1.1 CSI criteria applicable at SM delivery when MT SM attempt has been received

CSI criteria may be defined for a subscriber for the MT SM delivery.

- Criterion on the status report;

    This criterion can indicate:

    - The VPLMN shall trigger only in the case of a status report;

    - The VPLMN shall not trigger in the case of a status report.

When this criterion is not present this criterion is regarded as satisfied.

9.2 Short message submission request procedure

The purpose of this procedure is to detect an SMS set-up request and to allow the CSE to modify the handling of the SMS set-up request.

The SMS set-up request may be circuit switched based or packet switched based.

If (according to the CSI):

- The subscriber is provisioned with a CAMEL based SMS originating service; and

- The SMS set-up request occurs

Then the VPLMN shall suspend SMS processing, make contact with the CSE and await further instructions.

~~For mobile originated SMS the following information shall be provided to the CSE if available:~~

- ~~Event met;~~

- ~~IMSI;~~

- ~~Short Message handling information:~~

  - ~~Message Type Indicator.~~

- ~~Validity Period Format;~~

- ~~Status Report Request;~~

- ~~User Data Header;~~

- ~~Reply Path;~~

- ~~Protocol Identifier;~~

- ~~Data Coding Scheme;~~

- ~~Validity Period;~~

- ~~SMSC address;~~

- ~~Calling Party Number;~~

- ~~Service Key;~~

- ~~Location information of the calling subscriber;~~

- ~~Time and time zone;~~

- ~~Called Party Number;~~

- ~~IMEI (with software version);~~

- ~~MS class (only if the short message is submitted in the CS domain);~~

- ~~GPRS MS class (only if the short message is submitted in the PS domain).~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below.

- Perform charging activities;

- Activate subsequent control service events for the SM submission. The CSE shall have the possibility to send the following information:

  - The subsequent service event which shall be detected and reported:

    - Successful SM submission to the SMSC

- Unsuccessful SM submission to the SMSC;

- The type of monitoring.

There shall be no restriction regarding the order of the above instructions. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Bar the SM submission;

- Continue the submission;

- Continue the SM submission with modified information. The CSE shall have the possibility to send the following information:

    - Called Party Number;

    - Calling Party Number;

    - SMSC address.

If the SM submission is barred, the served subscriber shall be informed.

9.3 Successful Short Message submission procedure

The purpose of this procedure is to detect the successful submission of a Short Message (SM) to the SMSC and to inform the CSE about it.

If the successful SM submission event occurs then the VPLMN shall suspend processing, make contact with the CSE and await further instructions or send a notification and continue.

~~The following information shall be provided to the CSE, if available:~~

~~- Event met;~~

~~- Type of monitoring.~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below:

- Perform charging activities.

Once the CSE has concluded performing charging activities, it shall issue the following instruction:

- Continue the processing.

9.4 Unsuccessful Short Message submission procedure

The purpose of this procedure is to detect the unsuccessful submission of a Short Message (SM) to the SMSC and to inform the CSE about it.

If the unsuccessful SM submission event occurs then the VPLMN shall suspend processing, make contact with the CSE and await further instructions or send a notification and continue.

~~The following information shall be provided to the CSE, if available:~~

~~- Event met;~~

~~- Type of monitoring.~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below:

- Perform charging activities.

Once the CSE has concluded performing charging activities, it shall issue the following instruction:

- Continue the processing.

9.5 Short message delivery request procedure $(CAMEL4$)

The purpose of this procedure is to detect a SMS set-up request and allow the CSE to modify the handling of the SMS set-up request.

The SMS set-up request may be circuit switched based or packet switched based.

If according to the CSI:

- The subscriber is provisioned with a CAMEL based SMS terminating service, and

- The SMS set-up request occurs

~~For mobile terminated SMS the following information shall be provided to the CSE if available:~~

- ~~Event met;~~

- ~~IMSI;~~

- ~~Short Message handling information:~~

    - ~~Message Type Indicator;~~

    - ~~User Data Header;~~

    - ~~Protocol Identifier;~~

    - ~~Data Coding Scheme;~~

    - ~~SMSC address;~~

    - ~~Calling Party Number;~~

    - ~~Service Key;~~

    - ~~Time and time zone;~~

    - ~~Called Party Number;~~

    - ~~More Messages To Send;~~

    - ~~Status Report Status (indicates what happened to the earlier SM that was requested to have status report).~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below.

- Perform charging activities;

- Activate other control service events for the SM delivery. The CSE shall have the possibility to send the following information:

    - The service event which shall be detected and reported:

        - Successful SM delivery to the MS;

        - Unsuccessful SM delivery to the MS.

There shall be no restriction regarding the order of the above instructions. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Bar the SM delivery;

- Continue the delivery;

- Continue the SMS delivery with modified information. The CSE shall have the possibility to send the following information:

- Calling Party Number.

If the SM delivery is barred, the SMSC shall be informed.

9.6 Successful Short Message delivery procedure $(CAMEL4$)

The purpose of this procedure is to detect the successful delivery of a Short Message (SM) to the MS and to inform the CSE about it.

If the successful SM delivery event occurs then the VPLMN shall suspend processing, make contact with the CSE and await further instructions or send a notification and continue.

~~The following information shall be provided to the CSE, if available:~~

> ~~- Event met;~~

> ~~- Type of monitoring.~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below:

- Perform charging activities.

Once the CSE has concluded performing charging activities, it shall issue the following instruction:

- Continue the processing.

9.7 Unsuccessful Short Message delivery procedure $(CAMEL4$)

The purpose of this procedure is to detect the unsuccessful delivery of a Short Message (SM) to the MS and to inform the CSE about it.

If the unsuccessful SM delivery event occurs then the VPLMN shall suspend processing, make contact with the CSE and await further instructions or send a notification and continue.

~~The following information shall be provided to the CSE, if available:~~

> ~~- Event met;~~

> ~~- Type of monitoring.~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below:

- Perform charging activities.

Once the CSE has concluded performing charging activities, it shall issue the following instruction:

- Continue the processing.

9.8 Charging Procedures

9.8.1 Inclusion of Free Format data in CDR

The CSE may send free format data to the VPLMN, for inclusion in a CDR.

When sending the free format data to the VPLMN, the CSE may instruct the VPLMN to

- Overwrite the existing data in the CDR with the newly received free format data, or

- Append the newly received free format data to the existing data in the CDR.

— Next modified section —

10.3   Attach procedure

The purpose of this procedure is to detect a request from a GPRS subscriber to attach to the data network and allow the CSE to modify the handling of the attach request.

If (according to the CSI):

- The subscriber is provisioned with a CAMEL based service, relevant for GPRS data transmission; and

- The attach request is set as a trigger detection; and

- The attach request occurs

Then the VPLMN shall suspend attach processing, make contact with the CSE and await further instructions.

~~The information listed in table: A-3 (Attach) shall be provided to the CSE, if available.~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below:

- Activate subsequent control service events for the period being attached to the data network. The CSE shall have the possibility to send the following information:

  - The subsequent service event which shall be detected and reported:

    - PDP Context Establishment request;

    - PDP Context Establishment Acknowledgement;

    - Change of position (session);

    - Detach;

    - Type of monitoring

  - Perform charging activities (amongst others defining a time threshold). The charging activities shall apply to the GPRS Session.

There shall be no restriction regarding the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Reject the attachment request;

- Continue the processing.

— Next modified section —

10.4   PDP Context Establishment

The purpose of this procedure is to manage a request from the subscriber to activate a Packet Data Protocol. . Multiple contacts to the CSE may be made in parallel due to PDP Context Establishment events being detected whilst a GPRS subscriber is attached to the network. If either (according to the CSI):

- The subscriber is provisioned with a CAMEL based service relevant for GPRS data transmission; and

- The PDP activation request is set as a trigger detection, and

- The PDP Activation request occurs

Or the CSE has activated this service event for the attached subscriber and the PDP activation event occurs then the VPLMN shall either

- Suspend processing, make contact with the CSE and await further instructions, or

- Send a notification and continue.

When the PDP Context Establishment event occurs, it shall be reported as a Subsequent Service Event, if armed by the CSE. If it is not armed by the CSE, it shall be reported as an Initial Service Event, if statically armed in the subscription information.

The information listed in table: A-3 (PDP Context Establishment) shall be provided to the CSE if available.

- The column marked as '*Initial Service event*' indicates the elements to be reported when the PDP Context Establishment is reported as an *Initial Service Event*.

- The column marked as '*Subsequent Service Event*' indicates the elements to be reported when the PDP Context Establishment is reported as a *Subsequent Service Event*.

— Next modified section —

10.5 PDP Context Establishment Acknowledgement

The purpose of this procedure is to manage a confirmation from the GGSN to activate a Packet Data Protocol. Multiple contacts to the CSE may be made in parallel due to PDP Context Establishment Acknowledgement events being detected whilst a GPRS subscriber is attached to the network.

If either (according to the CSI):

- The subscriber is provisioned with a CAMEL based service relevant for GPRS data transmission, and

- The PDP Context Establishment acknowledgement is set as a trigger detection point, and

- The PDP Context Establishment Acknowledgement request occurs

Or the CSE has activated this service event for the attached and / or active subscriber and the PDP activation acknowledgement event occurs then the VPLMN shall either

- Suspend processing, make contact with the CSE and await further instructions, or

- Send a notification and continue.

When the PDP Context Establishment Acknowledgement event occurs, it shall be reported as a Subsequent Service Event, if armed by the CSE. If it is not armed by the CSE, it shall be reported as an Initial Service Event, if statically armed in the subscription information.

The information listed in table: A-3 (PDP Context Establishment Acknowledgement) shall be provided to the CSE if available.

- The column marked as '*Initial Service event*' indicates the elements to be reported when the PDP Context Establishment Acknowledgement is reported as an *Initial Service Event*.

- The column marked as '*Subsequent Service Event – PDP Context*' control relationship*' indicates the elements to be reported when the PDP Context Establishment Acknowledgement is reported as a *Subsequent Service Event* within a PDP Context control relationship.

- The column marked as '*Subsequent Service Event – GPRS Session I*' indicates the elements to be reported when the PDP Context Establishment Acknowledgement is reported as a *Subsequent Service Event within a GPRS Session control relationship*, whereby this event is the first event to be reported for this PDP Context.

- The column marked as '*Subsequent Service Event – GPRS Session II*' indicates the elements to be reported when the PDP Context Establishment Acknowledgement is reported as a *Subsequent Service Event within a GPRS Session control relationship*, whereby the PDP Context Establishment for this PDP Context was already reported.

— Next modified section —

10.6.1 Intra-SGSN Change of Position

If the CSE has activated this service event and a change of position occurs, the VPLMN shall send a notification and continue.

~~Table A-4, columns 1 and 2, lists the information which shall be provided to the CSE, if available.~~

10.6.2 Inter-SGSN Change of Position

If this event is statically armed and the inter-SGSN change of position event occurs, then the VPLMN shall suspend processing, make contact with the CSE and await further instructions.

~~Table A-4, columns 3 and 4, lists the information which shall be provided to the CSE, if available.~~

When the VPLMN has made contact with the CSE, the CSE shall be able to instruct the VPLMN to act as described below:

- Activate subsequent control service events for the life of the PDP context or GPRS Session. The CSE shall have the possibility to send the following information:

    - The subsequent service event which shall be detected and reported:

        - PDP Context Establishment;

        - PDP Context Establishment Acknowledgement;

        - Change of position (PDP Context);

        - PDP deactivation;

        - Change of Position (Session):
          This subsequent service event may be armed only if the Change of Position Initial Service Event was reported for a GPRS Session;

        - Detach:
          This subsequent service event may be armed only if the Change of Position Initial Service Event was reported for a GPRS Session.

    - Type of monitoring.

- Perform Charging Activities (amongst others defining a data or time threshold).
  GPRS Session related charging activities may be instructed only if the Change of Position Initial Service Event was reported for a GPRS Session.

There shall be no restriction regarding the order of the above instructions or the number of times each of the above instructions can be repeated. Once the CSE has concluded issuing the above instructions, it shall issue one and only one of the following instructions:

- Release the PDP Context;

- Release the GPRS Session;
  The Release GPRS Session instruction may be given only if the Change of Position Initial Service Event was reported for a GPRS Session.

- Continue the processing.

— Next modified section —

Annex A (normative): Information Tables

A.1 Information provided to the CSE

The following table shows the information which is sent to the CSE at various events. The numbers reflect the applicable CAMEL phase (1, 2, 3, 4).

	Call set-up request procedure 1 (section	Call set-up request procedure 2 (section	Call set-up request procedure 3 (section	Call set-up request procedure 4 (section	Unsuccessful call establishment (MO)	Unsuccessful call establishment (MT)	Incoming call request procedure	Procedures for serving network dialled services	Procedures for serving network dialled services
Event met	1	1	3	3	3	3	1	3	3
IMSI	1	1	3	3	3	3	1	3	3
Calling Party Number	1	1	3	3	3	3	1	3	3
Calling Party Category	1	1	3	3	-	3	1	3	3
Additional Calling Party Number	-	1	-	3	-	3	1	-	3
Called Party BCD Number	1	-	3	-	3	-	-	3	-
Called Party Number	-	1	-	3	-	3	1	-	3
Original Called Party Number	-	1	-	3[*1]	-	3	1	-	3[*1]
Redirecting (Party) Number	-	1	-	3	-	3	1	-	3
Redirection Information	-	1	-	3	-	3	1	-	3
Service Key	1	1	3	3	3	3	1	3	3
ISDN Bearer Capability	1	1	3	3	3	3	1	3	3
High Layer Compatibility	1	1	3	3	3	3	1	3	3
Basic Service Code	1	1	3	3	3	3	1	3	3
Call Identification Information	1	1	3	3	3	-	-	3	3
Location Information of the Calling Subscriber	1	-	3	-	3	-	-	3	-
Location Number of the Calling Subscriber	-	-	-	-	-	3	1	-	-
Location information of the called subscriber	-	-	-	-	-	3	1	-	-
Subscriber State of the called subscriber	-	-	-	-	-	3	1	-	-
Cause	-	-	-	-	3	3	-	-	-
Time and Time Zone Information	2	2	3	3	3	3	2	3	3
Calling Party LSA (if available)	3	-	3	-	-	-	-	3	-
MS class	4	4							
IMEI (with software version)	4		4						
NAEA Carrier Identification Code (CIC)	2	2	3	3	3	3	2	3	3
NAEA Carrier Selection Information (pre-subscribed or on demand)	2	2	3	3	3	-	2	3	3
CUG Index if received from the calling subscriber	3	-	-	-	-	-	-	-	-
CUG Interlock Code	-	3	-	-	-	-	3	-	-
CUG Outgoing Access Indicator	-	3	-	-	-	-	3	-	-

Table A-1: Information transferred towards the CSE

[*1]: If any other CAMEL dialogue has modified the called party number then the modified number is reported to the CSE of dialled services.

A.2 Information sent by the CSE

The following table shows the information which is sent by the CSE at various events. The numbers reflect the applicable CAMEL phase (1, 2, 3 or 4).

	Call set-up request procedure 1 (section 5.3.1)	Call set-up request procedure 2 (section 5.3.2.2)	Unsuccessful call establishment (MO)	Call disconnection procedure (MO)	CSE Initiated Call set-up procedure	Incoming call request procedure	Unsuccessful call establishment (MT)	Call disconnection procedure (MT)	Procedures for serving network dialled services	
Called Party Number	1	3	2	2	4	1	2	2	3	
Calling Party Number	-	-	-	-	4	-	-	-	-	
Calling Party Category	1	3	2	2	4	1	2	2	3	
Calling IMSI	-	-	-	-	4	-	-	-	-	
ISUP CUG information	-	-	-	-	-	-	-	-	-	
Additional Calling Party Number	1	3	2	2	4	1	2	2	3	
Original Called Party Number	1	3	2	2	-	1	2	2	3	
Redirection Party Number	1	3	2	2	-	1	2	2	3	
Redirection Information	1	3	2	2	-	1	2	2	3	
Alerting Pattern	-	-	-	-	4	2	-	-	-	
ISDN Access related Information	-	-	-	-	4	-	-	-	-	
ISDN Bearer Capability	-	-	-	-	4	-	-	-	-	
High Layer Compatibility	-	-	-	3	4	-	-	-	-	
Basic Service Code	-	-	-	3	4	-	-	-	-	
Called Party to be Created	-	-	-	-	4	-	-	-	-	
New Call Segment	-	-	-	-	4	-	-	-	-	
In Service Compatibility Response	-	-	-	-	4	-	-	-	-	
Service Interaction Indicators Two	-	-	-	-	4	-	-	-	-	
Location Number	-	-	-	-	4	-	-	-	-	
NAEA Carrier Identification Code (CIC)	2	2	2	2	4	2	2	2	3	
NAEA Carrier Selection Information (pre-subscribed or on demand)	2	2	2	2	4	2	2	2	3	
NAEA Originating Line Identification (OLI)	2	2	2	2	4	2	2	2	3	
NAEA Charge Number (CN)	2	2	2	2	4	2	2	2	3	
CSE Address	-	-	-	-	-	-	-	-	-	
CUG Interlock Code	3	3	-	-	4	3	-	-	-	
CUG Outgoing Access Indicator	3	3	-	-	4	3	-	-	-	
Service Interaction Indicators	3	3	-	-	-	3	-	-	-	
Optimal Routeing interrogation required indicator	4	4	-	-	-	-	-	-	-	
Call Reference	-	-	-	-	4	-	-	-	-	-

Table A-2: Information sent by the CSE

A.3 GPRS Information provided to the CSE

Table A.3 shows the information which shall be reported to the CSE at various GPRS events. The numbers reflect the applicable CAMEL phase (3, 4).

	Attach	PDP Context Establishment (Initial Service Event)	PDP Context Establishment (Subsequent Service Event)	PDP Context Establishment Ack (Initial Service Event)	PDP Context Establishment Ack (Subsequent Service Event – PDP Context relationship)	PDP Context Establishment Ack (Subsequent Service Event – GPRS Session Relationship I) – **note 1**	PDP Context Establishment Ack (Subsequent Service Event – GPRS Session relationship II) – **note 2**
Event met	3	3	3	3	3	3	3
Type of monitoring	-	-	3	-	3	3	3
MSISDN	3	3	-	3	-	-	-
IMSI	3	3	-	3	-	-	-
Service Key	3	3	-	3	-	-	-
Location information, at least to the resolution of Routing Area of the attaching subscriber	3	3	3	3	-	3	-
Time stamp information	3	3	3	3	-	3	-
Time zone information	3	3	3	3	-	3	-
GPRS MS Class (**note 3**)	3	3	-	3	-	-	-
IMEI (with software version)	4	4		4			
PDP transport protocol, i.e. IP or X.25	-	3	3	3	-	3	-
Quality of Service (requested)	-	3	3	3	-	3	-
Quality of Service (subscribed)	-	3	3	3	-	3	-
Quality of Service (negotiated)	-	-	-	3	3	3	3
Destination address information	-	3	3	3	-	3	-
GPRS charging ID	-	-	-	3	3	3	3
GGSN Address	-	-	-	3	3	3	3

Table A-3: GPRS Information transferred to the CSE

Note 1: PDP Context Establishment Ack (Subsequent Service Event – GPRS Session relationship I): The PDP Context Establishment event for this PDP Context has not been reported.

Note 2: PDP Context Establishment Ack (Subsequent Service Event – GPRS Session relationship II): The PDP Context Establishment event for this PDP Context has been reported.

Note 3: GPRS MS Class: Subparameter MS RadioAccessCapability is not supported in case of UTRAN.

Table A.4 shows the information which shall be reported to the CSE at the Change of Position events. The numbers reflect the applicable CAMEL phase (3).

~~Table A-4: GPRS Information reported to the CSE~~

	~~Intra Change of Position PDP Context, (Subsequent Service Event)~~	~~Intra Change of Position Session (Subsequent Service Event)~~	~~Inter Change of Position PDP Context, (Initial Service Event)~~	~~Inter Change of Position Session (Initial Service Event)~~
~~Event met~~	~~3~~	~~3~~	~~3~~	~~3~~
~~Type of monitoring~~	~~3~~	~~3~~	~~–~~	~~–~~
~~MSISDN~~	~~–~~	~~–~~	~~3~~	~~3~~
~~IMSI~~	~~–~~	~~–~~	~~3~~	~~3~~
~~Service Key~~	~~–~~	~~–~~	~~3~~	~~3~~
~~Location information, at least to the resolution of Routing Area of the attached subscriber~~	~~3~~	~~3~~	~~3~~	~~3~~
~~Time stamp information~~	~~–~~	~~–~~	~~3~~	~~3~~
~~Time zone information~~	~~–~~	~~–~~	~~3~~	~~3~~
~~GPRS MS Class (**note 1**)~~	~~–~~	~~–~~	~~3~~	~~3~~
~~PDP transport protocol, i.e. IP or X.25~~	~~–~~	~~–~~	~~3~~	~~–~~
~~Quality of Service (requested)~~	~~–~~	~~–~~	~~3~~	~~–~~
~~Quality of Service (subscribed)~~	~~–~~	~~–~~	~~3~~	~~–~~
~~Quality of Service (negotiated)~~	~~–~~	~~–~~	~~3~~	~~–~~
~~Destination address information~~	~~–~~	~~–~~	~~3~~	~~–~~
~~GPRS Charging ID~~	~~–~~	~~–~~	~~3~~	~~–~~
~~GGSN Address~~	~~–~~	~~–~~	~~3~~	~~–~~

~~Note 1: GPRS MS Class: Subparameter MS RadioAccessCapability is not supported in case of UTRAN.~~

— End of Document —

Title:	Liaison Statement on the removal of charging notification from CAMEL Phase 4
Source:	CN2
To:	SA1
Cc:	
Response to:	

Contact Person:
    Name: Sumio Miyagawa
    Tel. Number: + 43 51707 21381
    E-mail Address: sumio.miyagawa@siemens.com

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1. Overall Description:

TSG CN WG2 evaluated the current completeness of the charging notification feature in the CAMEL Phase 4 (Rel-5) and discussed the possibility of the completion during the current CN2 meeting, which is the last meeting before the CN#16 Plenary meeting where the formal release of CAMEL Phase 4 specifications are approved.

CN2 felt that;
- There was no active supporter for the charging notification, and
- There were quite number of open issues to be resolved, however
- Very limited solution could be seen, therefore
- The completion of this feature within this meeting is most unlikely.

Therefore, **CN2 recommends the removal of charging notification from the CAMEL Phase 4.**

At the same time, CN2 have looked the CR S1-020944 which had been created by Siemens to remove the charging notification, and concluded that the CR properly reflected the will of CN2. CN2 have endorsed the CR.

2. Actions:

To SA1 group.

ACTION: CN2 recommends SA1 group to accept the CR submitted by Siemens. (If the CR is approved, then CN2 will remove the charging notification in a future meeting)

3. Date of Next CN2 Meetings:

CN2_24	8th -12th April 2002, Budapest, Hungary
CN2_25	29th July – 2nd August 2002, Helsinki, Finland
CN2_26	23rd –27th September, USA