

**3GPP TSG CN Plenary Meeting #13
Beijing, China, 19th - 21st September 2001**

Tdoc NP-010446

Source: TSG CN WG 2
Title: LSs sent from CN2 since TSG#12 meeting
Agenda item: 6.2.1
Document for: Information

Introduction:

This document contains 2 agreed LSs sent from TSG CN WG2, that are forwarded to TSG CN Plenary meeting #12 for information only.

Meeting	Doc-2nd-Level	Source	Tdoc Title	Comments
CN2#19	N2-010576	CN2	Liaison Statement on "Unique GGSN Addresses"	To: CN4, CC: SA2, SA5
CN2#19	N2-010582	CN2	Liaison Statement on MAP Messages for GPRS Mobility Management event notifications.	To: CN4

Title: Liaison Statement on "Unique GGSN Addresses"
Source: TSG CN WG2
To: TSG CN WG4
cc: TSG SA WG2, TSG SA WG5

Contact Person:

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1. Overall Description:

Within their CAMEL specifications (Release 99 and later) for GPRS interactions TSG CN WG2 is using the Charging ID received from the GGSN for the PDP context together with the GGSN Address for control plane to identify uniquely a PDP context and a CDR in the SGSN as well in the SCP. Mostly the first received GGSN address for control plane will be used within the CAMEL procedures.

It was assumed by TSG CN WG2 at their CN2 meeting in Paris, November 2000, that the GGSN address is unique during the complete PDP context. Later on it was specified that the GGSN address for control plane is to be used for CAMEL purposes.

During the last CN 4 meeting Puerto Rico TDoc N4-010576 was discussed. It was indicated that different GGSN addresses can be used during a single PDP context.

Example: 23.060 v3.8.0, Figure 33: Inter SGSN Routing Area Update Procedure.

In this figure the new SGSN receive a SGSN Context Response (flow 2.). This SGSN Context Response may contain a "PDP Context"; see 29.060 v3.9.0, subclause 7.5.4 SGSN Context Response. This PDP Context may contain a GGSN Address for control plane, see 29.060 v3.9.0, subclause 7.7.29 PDP Context.

During Inter SGSN Routing Area Update the new SGSN receives also an Update PDP Context Response (flow 6.). This Update PDP Context Response may contain a "GGSN Address for Control Plane"; see 29.060 v3.9.0, subclause 7.3.4 Update PDP Context Response.

So in total the new SGSN may receive two GGSN Addresses for control plane.

If there would be a second and further Inter SGSN Routing Area Update again new GGSN addresses for control plane might be received in the new SGSNs. It might now be that none of those two is identical to the very first one.

The most important point is that those two GGSN Addresses for control plane may be different. This was indicated during the CN4 discussion.

If for CAMEL purposes different GGSN Address for control plane can be received in different SGSNs for the same PDP context CAMEL does not have the possibility to identify uniquely the PDP context.

2. Actions:

ACTION: TSG CN WG2 asks TSG CN WG4 group as a matter of urgency to clarify the issue and to answer the following questions:

- 1) Can the GGSN address for control plane change during an Inter SGSN Routeing Area Update Procedure for a particular PDP context? Note: Are there other procedures during which the GGSN address may change?
- 2) If the GGSN address changes does the new GGSN allocate a new charging ID?
- 3) If the address changes, does it also mean that the actual GGSN has changed? It may be that the GGSN address changes, but that the charging ID is unique in respect to the single actual GGSN.

3. Date of Next CN2 Meetings:

CN2_19 9th – 13th July 2001 Dresden, Germany.

CN2_20 15th – 19th October 2001 U.K.

Title: Liaison Statement on MAP Messages for GPRS Mobility Management event notifications.
Source: TSG CN WG2
To: TSG CN WG4
cc:

Contact Person:

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1. Overall Description:

TSG CN WG2 is in the process of defining the CAMEL Phase 4 feature "GPRS Mobility Management". This feature entails, amongst others, the sending of a "GPRS Mobility Management event notification" from the SGSN to the gsmSCF. This notification shall be a MAP Operation.

CAMEL Phase 3 contains already the feature "Mobility Management". As part of that feature, an MSC/VLR may send a Mobility Management event notification to the gsmSCF. That notification is defined in 3GPP TS 29.002 for R99 as a MAP Operation ("NoteMM-Event").

TSG CN WG2 has defined two means of introducing the GPRS Mobility Management event notification in 3GPP TS 29.002 for Rel-5:

- (1) Introduction of a new MAP Operation. This new MAP Operation shall be specific for the Mobility Management event notifications from the SGSN to the gsmSCF.
- (2) Enhancement of the existing MAP Operation ("NoteMM-Event"). The enhancement should presumably be done in a backwards compatible way, so the Application Context of the current MAP Operation does not require a version increase.

2. Actions:

ACTION: TSG CN WG2 seeks the advice from TSG CN WG4 on the following question:

Shall the GPRS Mobility Management notification from SGSN to gsmSCF be a new, dedicated MAP Operation or shall the GPRS Mobility Management notification from SGSN to gsmSCF be an enhancement of the current NoteMM-Event MAP Operation?

TSG CN WG2 realises that both approaches have their specific advantages and disadvantages. However, since the conveyance of the GPRS Mobility Management notification from SGSN to gsmSCF is by and large a MAP signalling matter, TSG CN WG2 shall follow the advice from TSG CN WG4 on this issue. The decision taken by TSG CN WG4 will also affect the description of this feature in 3GPP TS 23.078.

Attached to this Liaison Statement (included in the .zip file) are two CN2 contributions:

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| N2-010537 | CR on Rel-5 29.002, "Mobility management for GPRS subscriber" (source: Siemens). This contribution proposes the enhancement of the existing Mobility Management event notification MAP Operation. |
| N2-010552 | CR on Rel-5 29.002, "Introduction of GPRS Mobility Management event notification subscription information" (source: Ericsson). This contribution proposes the introduction of a new, dedicated GPRS Mobility Management event notification MAP Operation. |

These contributions are for information only; they have not been presented at TSG CN WG2 yet. TSG CN WG2 would like to receive the requested advice from TSG CN WG4 before proceeding with the relevant contribution.

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