

**3GPP TSG CN Plenary Meeting #14
Kyoto, Japan. 12th - 14th December 2001.**

Tdoc NP-010573

Source: TSG CN WG3
Title: CRs on Rel-4 Work Item CSSPLIT
Agenda item: 8.3
Document for: APPROVAL

Introduction:

This document contains **4** CRs on **Rel-4** Work Item "**CSSPLIT**", that have been agreed by TSG CN WG3, and are presented to TSG CN Plenary meeting #14 for approval.

| NP Tdoc | WG Tdoc | Subject | Spec | CR | Rev | Cat | Phase | C_Ver | WI |
|----------------|----------------|---|-------------|-----------|------------|------------|--------------|--------------|-----------|
| NP-010573 | N3-010424 | Correction of inconsistency regarding RTP clock frequency | 29.414 | 004 | | F | Rel-4 | 4.2.0 | CSSPLIT |
| NP-010573 | N3-010579 | Correction of scope clause | 29.414 | 005 | 1 | F | Rel-4 | 4.2.0 | CSSPLIT |
| NP-010573 | N3-010580 | Correction of scope clause | 29.415 | 002 | 1 | F | Rel-4 | 4.1.0 | CSSPLIT |
| NP-010573 | N3-010562 | Reference to lu UP | 29.415 | 004 | 1 | F | Rel-4 | 4.1.0 | CSSPLIT |

CR-Form-v4

CHANGE REQUEST

⌘ **29.414 CR 004** ⌘ ev **-** ⌘ Current version: **4.2.0** ⌘

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

| | | | |
|------------------------|--|-----------------|--|
| Title: | ⌘ Correction of inconsistency regarding RTP clock frequency | | |
| Source: | ⌘ CN3 | | |
| Work item code: | ⌘ CSSPLIT | Date: | ⌘ 09/10/01 |
| Category: | ⌘ F | Release: | ⌘ Rel-4 |
| | Use <u>one</u> 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 <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) |

| | |
|--------------------------------------|---|
| Reason for change: | ⌘ The specification currently allows to use 16000 Hz and multiples to be used as clock frequency within RTP, but provides IPBCP signalling only for 16000 Hz. |
| Summary of change: | ⌘ Restrict RTP clock frequency to 16000 Hz, no multiples |
| Consequences if not approved: | ⌘ Document is inconsistent, RTP timestamps can not be interpreted at receiving side. |

| | | | |
|------------------------------|---|---|--|
| Clauses affected: | ⌘ Section 6.2.3.1.8, Section 6.3.3.5 | | |
| Other specs affected: | <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications | ⌘ | |
| Other comments: | ⌘ | | |

First modified section

6.2.3.1.8 Timestamp

The timestamp shall be supplied by the source MGW of a RTP PDU. A clock frequency of 16000 Hz ~~or multiples of this value~~ shall be used. The sink MGW of a RTP PDU may ignore the timestamp or it may use it to obtain statistics about the link quality and / or to correct jitter.

CHANGE REQUEST

⌘ **29.415** **CR** **004** ⌘ rev **1** ⌘ Current version: **4.1.0** ⌘

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

| | | | |
|---|----------------------|--|--------------|
| Title: | ⌘ Reference to lu UP | | |
| Source: | ⌘ CN3 | | |
| Work item code: | ⌘ CSSPLIT | Date: | ⌘ 2001-11-26 |
| Category: | ⌘ F | Release: | ⌘ REL-4 |
| <p><i>Use one of the following categories:</i></p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> | | <p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p> | |

| | |
|--------------------------------------|---|
| Reason for change: | In 29.415 v 4.1.0 the release 99 version of 25.415 lu UP specification is used. Other specifications state that REL-4 functionality must be used on Nb. E.g. 23.153 v4.3.0 chapter 5.4.1 says: "Each MGW and RNC that supports TrFO shall support lu/Nb UP version 2." The reference to 25.415 release 99 has been introduced in a draft version of 29.415 when there was no REL-4 of 25.415 available. |
| Summary of change: | ⌘ To use the release 4 of lu UP specification. |
| Consequences if not approved: | ⌘ Misalignment between specifications. Failure of TrFO working. |

| | | | |
|------------------------------|---|---|--|
| Clauses affected: | ⌘ 2, 5 and 6 | | |
| Other specs affected: | <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> 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/3G_Specs/CRs.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://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

Start of first modified section

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.

For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

- [1] 3GPP TS 23.205: "Bearer Independent CS Core Network; Stage 2"
- [2] 3GPP TS 25.415 ~~v. 3.5.0~~: "UTRAN Iu Interface User Plane Protocols"
- [3] 3GPP TS 29.232: "Media Gateway Controller; Media Gateway interface; Stage 3"
- [4] 3GPP TS 29.414: "Core Network Nb Data Transport and Transport Signalling"
- [5] 3GPP TR 41.001: "GSM Release specifications"
- [6] 3GPP TR 21.905: "3G Vocabulary"
- [7] IETF RFC 1889: "RTP A Transport Protocol for Real Time Applications"
- [8] ITU-T I.366.1: "Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2"

End of first modified section

Start of second modified section

5 Transparent Mode, ~~version 1~~

This mode of operation is identical to that of the Iu UP protocol, see the corresponding section in 3GPP TS 25.415 [2].

End of second modified section

Start of third and last modified section

6 Support mode for predefined SDU sizes, ~~version 1~~

6.1 General

See the corresponding section in 3GPP TS 25.415 [2].

End of third and last modified section

CR-Form-v5

CHANGE REQUEST

⌘ **29.414 CR 005** ⌘ rev **1** ⌘ Current version: **4.2.0** ⌘

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

| | | | |
|------------------------|--|-----------------|--|
| Title: | ⌘ Correction to Scope clause | | |
| Source: | ⌘ CN3 | | |
| Work item code: | ⌘ CSSPLIT | Date: | ⌘ 19-11-01 |
| Category: | ⌘ F | Release: | ⌘ REL-4 |
| | Use <u>one</u> 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 <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) |

| | |
|--------------------------------------|---|
| Reason for change: | ⌘ Inconsistency between the CS CN logical architecture of the stage 2 and stage 3 specifications |
| Summary of change: | ⌘ Changed figure 1 by removing the T-SGW and changed HSS to HLR. Also added text to state that the specification does not preclude the implementation of a combined MGW and MSC server. |
| Consequences if not approved: | ⌘ Misalignment between CN3 and CN4 specifications. |

| | | | |
|------------------------------|---|---|--|
| Clauses affected: | ⌘ | | |
| Other specs affected: | <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications | ⌘ | |
| Other comments: | ⌘ | | |

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- 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.

1 Scope

The present document specifies the bearer data transport and bearer control protocols used between MGWs within the CS core network across the Nb Interface. The present document assumes that the implementation of the split of the call control and the bearer transport and control, as specified in 3GPP TS 23.205 [1], see figure 1. The User Plane protocol that uses this bearer data transport (Nb UP) is described in 3GPP TS 29.415 [3]. Note that the present document does not preclude an implementation of a combined MSC Server and MGW.

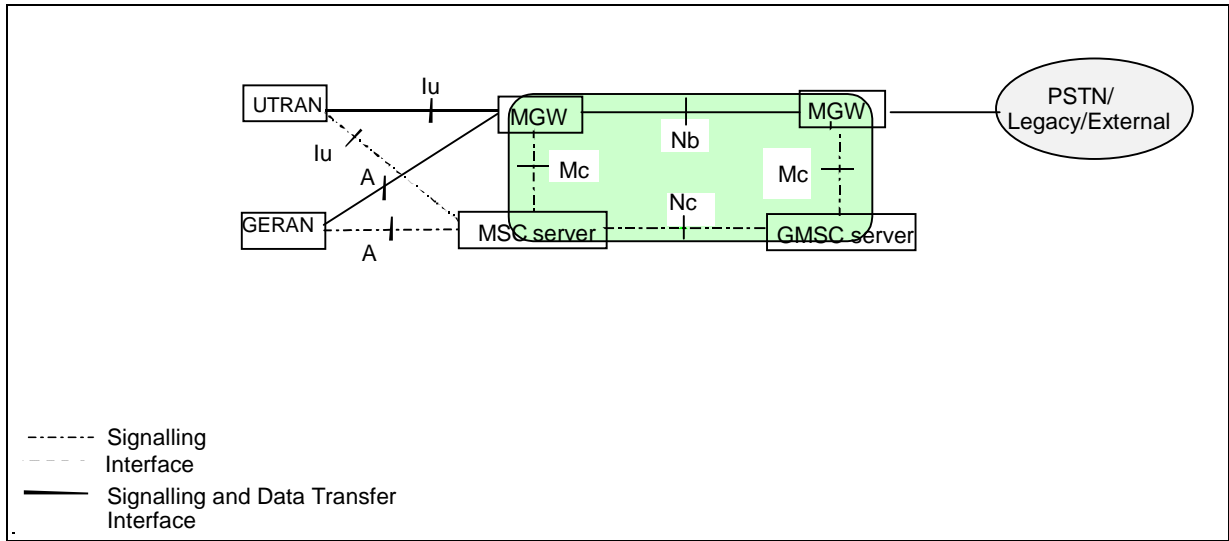
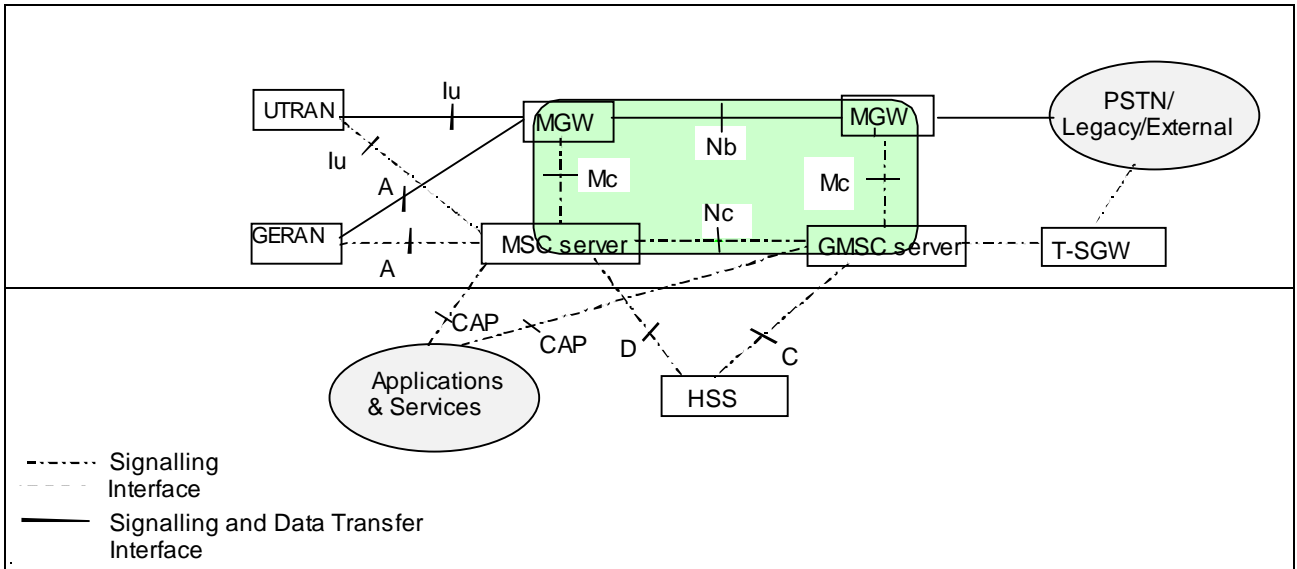


Figure 1: CS core network logical architecture

CR-Form-v5

CHANGE REQUEST

⌘ **29.415 CR 002** ⌘ rev **1** ⌘ Current version: **4.1.0** ⌘

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

| | | | |
|------------------------|--|-----------------|---|
| Title: | ⌘ Correction to Scope clause | | |
| Source: | ⌘ CN3 | | |
| Work item code: | ⌘ CSSPLIT | Date: | ⌘ 19-11-01 |
| Category: | ⌘ F | Release: | ⌘ REL-4 |
| | <i>Use one of the following categories:</i> 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. | | <i>Use one of the following releases:</i> 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: | ⌘ Inconsistency between the CS CN logical architecture of the stage 2 and stage 3 specifications. |
| Summary of change: | ⌘ Changed figure 1 by removing the T-SGW and changing HSS to HLR. Also added text to state that the specification does not preclude the implementation of a combined MGW and MSC server. |
| Consequences if not approved: | ⌘ Misalignment between CN3 and CN4 specifications. |

| | | |
|------------------------------|---|---|
| Clauses affected: | ⌘ 1 | |
| Other specs affected: | <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications | ⌘ |
| Other comments: | ⌘ | |

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- 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.

1 Scope

The present document specifies the user plane protocol of the bearer used between two MGWs within the CS core network, called the Nb UP protocol. The present document assumes the implementation of the split between call control and the bearer transport and control, as specified in 3GPP TS 23.205 [1], see figure 1. Note that the present document does not preclude an implementation of a combined MSC Server and MGW.

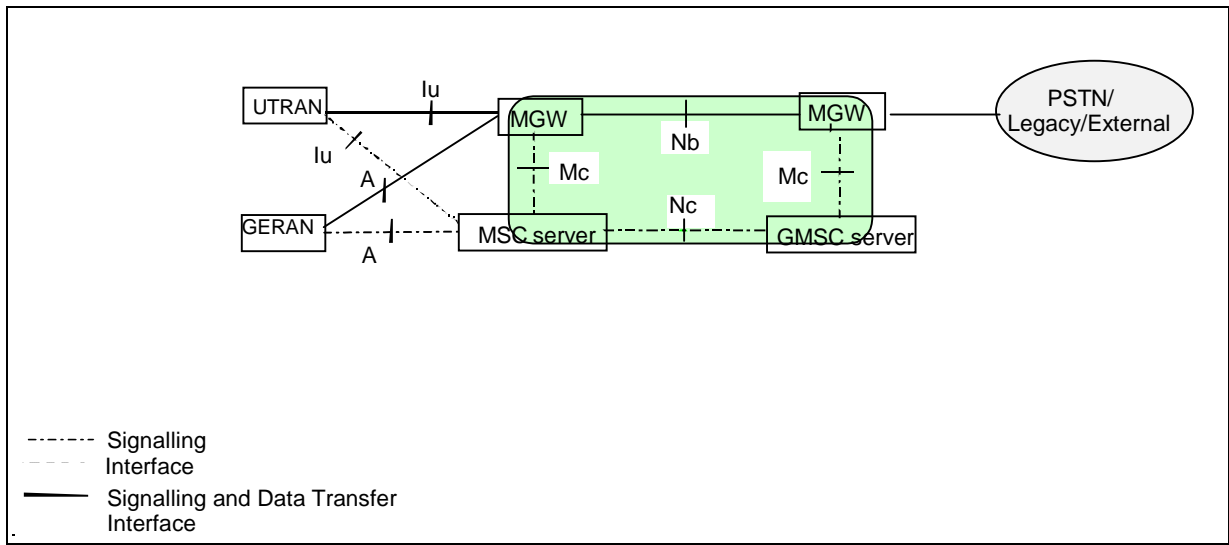
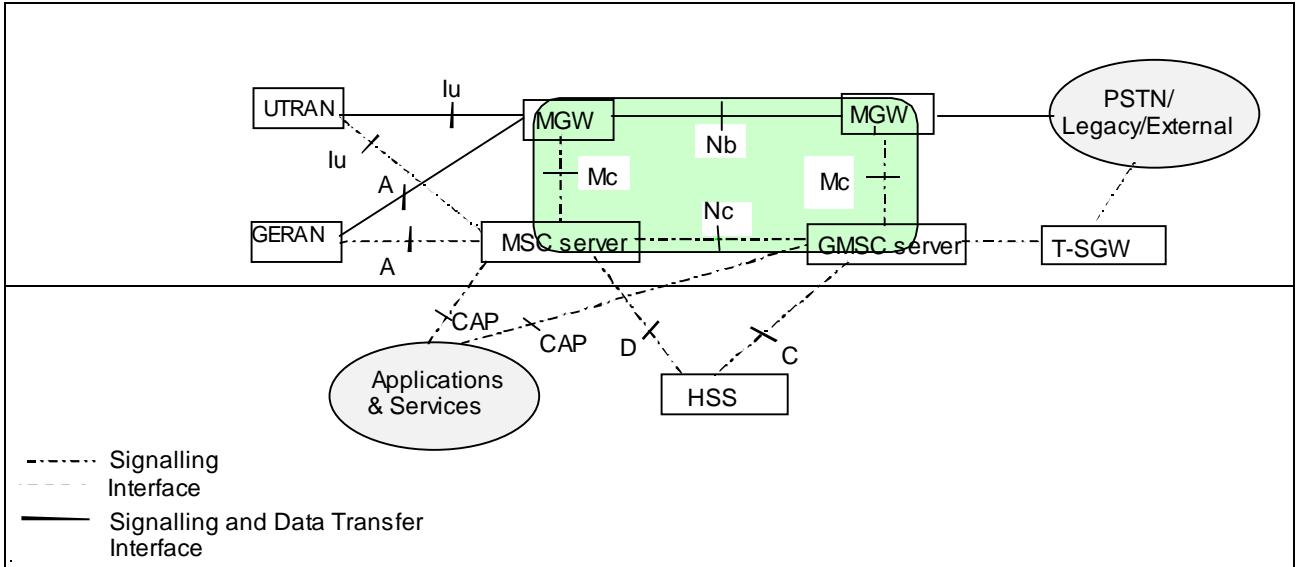


Figure 1: CS core network logical architecture