

**TSG-RAN Meeting #14**  
**Kyoto, Japan, 11 - 14 December 2001**

**RP-010772**

**Title:** Agreed CRs (Rel-4) to TS 25.323

**Source:** TSG-RAN WG2

**Agenda item:** 8.2.4

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Version	Versio	Workite
R2-012629	agreed	25.323	039		Rel-4	Management of Full Header transmission	F	4.2.0	4.3.0	TEI4

## CHANGE REQUEST

⌘ **25.323** CR **039** ⌘ rev - ⌘ 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

<b>Title:</b>	⌘ Management of Full Header transmission		
<b>Source:</b>	⌘ TSG-RAN WG2		
<b>Work item code:</b>	⌘ TEI4	<b>Date:</b>	⌘ 29 November 2001
<b>Category:</b>	⌘ <b>F</b> Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	<b>Release:</b>	⌘ REL-4 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)

<b>Reason for change:</b>	⌘ As explained in R2-012539, the Full header transmission should be controlled to improve the efficiency.
<b>Summary of change:</b>	⌘ A new section (5.1.2.X) is added.
<b>Consequences if not approved:</b>	⌘ Inefficient behavior.

<b>Clauses affected:</b>	⌘ 5.1.2.3 (new)
<b>Other specs affected:</b>	⌘ <input checked="" type="checkbox"/> Other core specifications ⌘ 25.322 <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
<b>Other comments:</b>	⌘

### 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](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://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.

## 5.1.2 IP Header Compression (RFC 2507)

The detailed operation of the RFC 2507 header compression protocol is specified in IETF RFC 2507 [6]. The mechanisms related to error recovery and packet reordering are also described in RFC 2507. These mechanisms shall be included in the functionality of the header compression supported by PDCP. The implementation of the RFC 2507 header compression functionality is not covered in this specification and is left to the implementation.

### 5.1.2.1 Context identifiers

Context identifiers for RFC 2507 shall only be included in the RFC 2507 packet types format, as defined in [6].

### 5.1.2.2 Mapping of PID values for RFC 2507

PID values shall be mapped to the RFC 2507 header compression packet types in the order presented in Table 2 below where "n" is the number of PID values already mapped to other protocol packet types.

**Table 2: Mapping of PID values for RFC 2507 header compression protocol**

PID value	Optimisation method	Packet type
n+1	RFC 2507	Full header
n+2	RFC 2507	Compressed TCP
n+3	RFC 2507	Compressed TCP non-delta
n+4	RFC 2507	Compressed non-TCP
n+5	RFC 2507	Context state

### 5.1.2.3 Management of Full Header transmission

Transmission of a full header packet may be controlled by the lower layer information.

For a TCP stream, if the PDCP receives from lower layer the information of failed transmission of a single packet, the PDCP may send the next packet as a full header.

For a non-TCP stream, if the PDCP receives from lower layer the information of successful transmission of a full header packet, the PDCP may stop sending a full header packet that contains the same full header as previously transmitted one.