3GPP TSG CN Plenary Meeting #16 **NP-020257**
5th – 7th June 2002 Marco Island, USA.

Source: TSG CN WG4

Title: CR on Rel-5 Security enhancement

Agenda item: 8.6

Document for: APPROVAL

Introduction:

This document contains a CR on Rel-5 Work Item ”SEC1”, that have been agreed by TSG CN WG4, and are forwarded to TSG CN Plenary meeting #16 for approval.

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.060	319	2	N4-020705	Rel-5	Reference to 3GPP TS 33.210 for protection of GTP	C	5.1.0

3GPP TSG CN WG4 Meeting #14 **N4-020705**
Budapest, Hungary, 13th – 17th May 2002

CR-Form-v6.1

CHANGE REQUEST

⌘	29.060	CR	319	⌘ rev	2	⌘	Current version:	5.1.0	⌘
Spec Title:	GPRS Tunnelling Protocol (GTP) across the Gn and Gp Interface								⌘

*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 3GPP TS 33.210 for protection of GTP.
Source:	⌘	CN4
Work item code:	⌘	SEC1
Date:	⌘	2002-05-03
Category:	⌘	C
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:	⌘	In the current version of 29.060 IPsec is referred to for security. This should be replaced by a reference to the TS 33.210, which contains a framework and architecture for GTP security. Section 12 is changed to include both the Gn and the Gp interface.
Summary of change:	⌘	Change of references.
Consequences if not approved:	⌘	Not referring to the correct TS.

Clauses affected:	⌘	2 12
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/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.

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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 TR 21.905: "3G Vocabulary".

[2] 3GPP TS 23.003: "Numbering, addressing and identification".

[3] 3GPP TS 23.007: "Restoration Procedures".

[4] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service Description; Stage 2".

[5] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols-Stage 3".

[6] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[7] 3GPP TS 25.413: "UTRAN Iu interface RANAP signalling".

[8] 3GPP TS 33.102: "Security Architecture".

[9] 3GPP TS 43.020: " Security related network functions".

[10] 3GPP TS 43.064: " Overall description of the GPRS Radio Interface; Stage 2".

[11] 3GPP TS 44.064: " Mobile Station - Serving GPRS Support Node (MS-SGSN) Logical Link Control (LLC) Layer Specification".

[12] STD 0005: "Internet Protocol", J. Postel.

[13] STD 0006: "User Datagram Protocol", J. Postel.

[14] RFC 1700: "Assigned Numbers", J. Reynolds and J. Postel.

[15] RFC 2181: "Clarifications to the DNS Specification", R. Elz and R. Bush.

[16] 3GPP TS 23.007: "Restoration Procedures".

[17] 3GPP TS 23.121: "Architectural Requirements for Release 1999".

[18] 3GPP TS 32.215 : "Charging data description for the packet switched domain".

[19] 3GPP TS 23.236: "Intra Domain Connection of RAN Nodes to Multiple CN Nodes".

[20] 3GPP TS 33.210: “Network Domain Security”.

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~~12 Inter-PLMN GTP Communication over the Gp Interface~~

~~No security is provided in GTP to protect the communication between different GPRS networks. The security is provided, if needed, between the Border Gateways in different GPRS networks by operator agreements. A security mechanism that may be considered is for example IP Security.~~

12 Security provided to GTP Communication over Gn and Gp Interfaces

Protection of GTP communication over Gn and Gp interfaces shall be provided according to security mechanisms defined in 3GPP TS 33.210 [20]. ~~When the Gp interface interconnects to pre-Rel-5 nodes, operators must configure the nodes in order to achieve secure communication.~~