3GPP TSG CN Plenary Meeting #24 NP-040279
2nd – 4th June 2004 Seoul, KOREA.

CR-Form-v7

CHANGE REQUEST

⌘ **29.061 CR 109** ⌘ **rev 5** ⌘ Current version: **6.0.0** ⌘

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

Proposed change affects: (UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title: ⌘ RADIUS Enhancements on the Gi interface to enable QoS correlation

Source: ⌘ Nokia

Work item code: ⌘ TEI_6 ***Date:*** ⌘ 31/05/2004

Category: ⌘ **B** ***Release:*** ⌘ Rel-6

Use one of the following categories:	*Use one of the following releases:*	
F *(correction)*	*2*	*(GSM Phase 2)*
A *(corresponds to a correction in an earlier release)*	*R96*	*(Release 1996)*
B *(addition of feature),*	*R97*	*(Release 1997)*
C *(functional modification of feature)*	*R98*	*(Release 1998)*
D *(editorial modification)*	*R99*	*(Release 1999)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.	*Rel-4*	*(Release 4)*
	Rel-5	*(Release 5)*
	Rel-6	*(Release 6)*

Reason for change: ⌘ Operators use the information provided in the RADIUS messages by the GGSN to perform authentication, authorization and billing function. In order to allow the operator to correctly correlate QoS with the appropriate session, additional information is needed on the GGSN RADIUS interface.

Summary of change: ⌘ To export the required information, a new 3GPP Vendor Specific Attibutes is defined:

3GPP-Packet-Filter: this attribute contains the packet filters used on the GGSN for this PDP context. These packet filters may come from the TFT provided by the MS.

This attribute can optionnaly be sent in the Accounting Request START, Interim-Update.

Consequences if not approved: ⌘

Clauses affected: ⌘ 16.4.7

Other specs affected: ⌘

Y	N		
	X	Other core specifications	⌘
	X	Test specifications	
	X	O&M Specifications	

Other comments: ⌘

How to create CRs using this form:

Comment [H1]: Enter the specification number in this box. For example, 04.08 or 31.102. Do not prefix the number with anything . i.e. do not use "TS", "GSM" or "3GPP" etc.

Comment [H2]: Enter the CR number here. This number is allocated by the 3GPP support team. It consists of at least three digits, padded with leading zeros if necessary.

Comment [H3]: Enter the revision number of the CR here. If it is the first version, use a " -".

Comment [rh4]: Does 6.0.0 exist? I could only find 5.8.0 as the latest version.

Comment [H5]: Enter the version of the specification here. This number is the version … [1]

Comment [H6]: For help on how to fill out a field, place … [2]

Comment [H7]: Mark one or more of the boxes with an X.

Comment [H8]: SIM / USIM / ISIM applications.

Comment [H9]: Enter a concise description of the s … [3]

Comment [H10]: Enter the source of the CR. This is ei … [4]

Comment [H11]: Enter the acronym for the work item … [5]

Comment [H12]: Enter the date on which the CR was … [6]

Comment [H13]: Enter a single letter corresponding … [7]

Comment [H14]: Enter a single release code from th … [8]

Comment [H15]: Enter text which explains why the cha … [9]

Deleted: when IMS, SBLP

Deleted:

Deleted: or other services are used

Comment [H16]: Enter text which describes the most … [10]

Deleted: , or retrieved from the PDF via Go (if SBLP is used)

Comment [H17]: Enter here the consequences if this C … [11]

Deleted: Billing for streaming services will become complex.

Comment [H18]: Enter the number of each clause wh … [12]

Comment [H19]: Tick "yes" box if any other specificat … [13]

Comment [H20]: List here the specifications which are af … [14]

Comment [H21]: Enter any other information which m … [15]

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.

Comment [H22]: This is an example of pop-up text.

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

Change in Clause 16.4.7

16.4.7 Sub-attributes of the 3GPP Vendor-Specific attribute

Table 7 describes the sub-attributes of the 3GPP Vendor-Specific attribute of the Access-Request, Access-Accept, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update and Disconnect-Request messages.

Table 7: List of the 3GPP Vendor-Specific sub-attributes

Sub-attr #	Sub-attribute Name	Description	Presence Requirement	Associated attribute (Location of Sub-attr)
1	3GPP-IMSI	IMSI for this user	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
2	3GPP-Charging-Id	Charging ID for this PDP Context (this together with the GGSN-Address constitutes a unique identifier for the PDP context).	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
3	3GPP-PDP Type	Type of PDP context, e.g. IP or PPP	Conditional (mandatory if attribute 7 is present)	Access-Request Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
4	3GPP-CG-Address	Charging Gateway IP address	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
5	3GPP-GPRS-Negotiated-QoS-Profile	QoS profile applied by GGSN	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
6	3GPP-SGSN-Address	SGSN IP address that is used by the GTP control plane	Optional	Access-Request, Accounting-Request START, Accounting-

Sub-attr #	Sub-attribute Name	Description	Presence Requirement	Associated attribute (Location of Sub-attr)
		for the handling of control messages. It may be used to identify the PLMN to which the user is attached.		Request STOP, Accounting-Request Interim-Update
7	3GPP-GGSN-Address	GGSN IP address that is used by the GTP control plane for the context establishment. It is the same as the GGSN IP address used in the GCDRs.	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
8	3GPP-IMSI-MCC-MNC	MCC and MNC extracted from the user's IMSI (first 5 or 6 digits, as applicable from the presented IMSI).	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
9	3GPP-GGSN-MCC-MNC	MCC-MNC of the network the GGSN belongs to.	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
10	3GPP-NSAPI	Identifies a particular PDP context for the associated PDN and MSISDN/IMSI from creation to deletion.	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP Accounting-Request Interim-Update
11	3GPP-Session-Stop-Indicator	Indicates to the AAA server that the last PDP context of a session is released and that the PDP session has been terminated.	Optional	Accounting Request STOP
12	3GPP-Selection-Mode	Contains the Selection mode for this PDP Context received in the Create PDP Context Request Message	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
13	3GPP-Charging-Characteristics	Contains the charging characteristics for this PDP Context received in the Create PDP Context Request Message (only available in R99 and later releases)	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
14	3GPP-CG-IPv6-Address	Charging Gateway IPv6 address	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP,

Sub-attr #	Sub-attribute Name	Description	Presence Requirement	Associated attribute (Location of Sub-attr)
15	3GPP-SGSN-IPv6-Address	SGSN IPv6 address that is used by the GTP control plane for the handling of control messages. It may be used to identify the PLMN to which the user is attached.	Optional	Accounting-Request Interim-Update Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
16	3GPP-GGSN-IPv6-Address	GGSN IPv6 address that is used by the GTP control plane for the context establishment.	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
17	3GPP-IPv6-DNS-Servers	List of IPv6 addresses of DNS servers for an APN	Optional	Access-Accept
18	3GPP-SGSN-MCC-MNC	MCC and MNC extracted from the RAI within the Create PDP Context Request or Update PDP Context Request message.	Optional	Access-Request, Accounting-Request START, Accounting-Request STOP, Accounting-Request Interim-Update
19	3GPP-Teardown-Indicator	Indicate to the GGSN that all PDP contexts for this particular user and sharing the same user session need to be deleted.	Optional	Disconnect Request
20	3GPP-IMEISV	International Mobile Equipment Id and its Software Version	Optional	Accounting-Request START, Access-Request
21	3GPP-Packet-Filter	Packet Filter used for this PDP context, as received from the MS in the TFT.	Optional	Accounting-Request START, Accounting-Request Interim-Update

The RADIUS vendor Attribute is encoded as follows (as per RFC 2865 [38])

Bits

Octets	8	7	6	5	4	3	2	1
1	Type = 26							
2	Length = n							
3	Vendor id octet 1							
4	Vendor id octet 2							
5	Vendor id octet 3							
6	Vendor id octet 4							
7-n	String							

n ≥ 7

3GPP Vendor Id = 10415

The string part is encoded as follows:

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type =							
2	3GPP Length = m							
3 –m	3GPP value							

m ≥ 2 and m ≤ 248

The 3GPP specific attributes encoding is clarified below.

1 - 3GPP-***IMSI***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 1							
2	3GPP Length= m							
3-m	IMSI digits 1-n (UTF-8 encoded)							

3GPP Type: 1

n ≤15

Length: m ≤ 17

IMSI value: Text:

This is the UTF-8 encoded IMSI; The definition of IMSI shall be in accordance with 3GPP TS 23.003 [40] and 3GPP TS 29.060 [24]. There shall be no padding characters between the MCC and MNC, and between the MNC and MSIN. If the IMSI is less than 15 digits, the padding in the GTP information element shall be removed by the GGSN and not encoded in this sub-attribute.

2 - 3GPP-***Charging ID***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 2							
2	3GPP Length= 6							
3	Charging ID value Octet 1							
4	Charging ID value Octet 2							
5	Charging ID value Octet 3							
6	Charging ID value Octet 4							

3GPP Type: 2

Length: 6

Charging ID value: 32 bits unsigned integer

3 - 3GPP-***PDP type***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 3							
2	3GPP Length= 6							
3	PDP type octet 1							
4	PDP type octet 2							
5	PDP type octet 3							
6	PDP type octet 4							

3GPP Type: 3

Length: 6

PDP type value: Unsigned 32 bits integer

PDP type octet possible values:

0 = IPv4

1 = PPP

2 = IPv6

4 - 3GPP-***Charging Gateway address***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 4							
2	3GPP Length= 6							
3	Charging GW addr Octet 1							
4	Charging GW addr Octet 2							
5	Charging GW addr Octet 3							
6	Charging GW addr Octet 4							

3GPP Type: 4

Length: 6

Charging GW address value: Address

5 - 3GPP-***GPRS Negotiated QoS profile***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 5							
2	3GPP Length= L							
3 -L	UTF-8 encoded QoS profile							

3GPP Type: 5

Length: L ≤ 33 (release 5) or L ≤ 27 (release 99) or L = 11 (release 98)

QoS profile value: Text

UTF-8 encoded QoS profile syntax:

"<Release indicator> – <release specific QoS IE UTF-8 encoding>"

<Release indicator> = UTF-8 encoded number :

"98" = Release 98

"99"= Release 99

"05"= Release 5

<release specific QoS profile UTF-8 encoding> = UTF-8 encoded QoS profile for the release indicated by the release indicator.

The UTF-8 encoding of a QoS IE is defined as follows: each octet is described by 2 UTF-8 encoded digits, defining its hexadecimal representation. The QoS profile definition is in 3GPP T S 24.008 [54].

The release 98 QoS profile data is 3 octets long, which then results in a 6 octets UTF-8 encoded string.

The release 99 QoS profile data is 11 octets long, which results in a 22 octets UTF-8 encoded string.

The release 5 QoS profile data is 14 octets long, which results in a 28 octets UTF-8 encoded string.

6 - 3GPP-***SGSN address***

	Bits							
Octets	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
1	3GPP type = 6							
2	3GPP Length= 6							
3	SGSN addr Octet 1							
4	SGSN addr Octet 2							
5	SGSN addr Octet 3							
6	SGSN addr Octet 4							

3GPP Type: 6

Length: 6

SGSN address value: Address

7 - 3GPP-***GGSN address***

	Bits							
Octets	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
1	3GPP type = 7							
2	3GPP Length= 6							
3	GGSN addr Octet 1							
4	GGSN addr Octet 2							
5	GGSN addr Octet 3							
6	GGSN addr Octet 4							

3GPP Type: 7

Length: 6

GGSN address value: Address

8 - 3GPP-***IMSI MCC-MNC***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 8							
2	3GPP Length= n							
3	MCC digit1 (UTF-8 encoded)							
4	MCC digit2 (UTF-8 encoded)							
5	MCC digit3 (UTF-8 encoded)							
6	MNC digit1 (UTF-8 encoded)							
7	MNC digit2 (UTF-8 encoded)							
8	MNC digit3 if present (UTF-8 encoded)							

3GPP Type: 8

Length: n shall be 7 or 8 octets depending on the presence of MNC digit 3

MS address value: text

This is the UTF-8 encoding of the MS MCC-MNC values. In accordance with 3GPP TS 23.003 [40] and 3GPP TS 29.060 [24] the MCC shall be 3 digits and the MNC shall be either 2 or 3 digits. There shall be no padding characters between the MCC and MNC.

9 - 3GPP-***GGSN MCC-MNC***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 9							
2	3GPP Length= n							
3	MCC digit1 (UTF-8 encoded)							
4	MCC digit2 (UTF-8 encoded)							
5	MCC digit3 (UTF-8 encoded)							
6	MNC digit1 (UTF-8 encoded)							
7	MNC digit2 (UTF-8 encoded)							
8	MNC digit3 if present (UTF-8 encoded)							

3GPP Type: 9

Length: n shall be 7 or 8 octets depending on the presence of MNC digit 3

GGSN address value: text

This is the UTF-8 encoding of the GGSN MCC-MNC values. In accordance with 3GPP TS 23.003 [40] and 3GPP TS 29.060 [24] the MCC shall be 3 digits and the MNC shall be either 2 or 3 digits. There shall be no padding characters between the MCC and MNC.

10 - 3GPP-***NSAPI***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 10							
2	3GPP Length= 3							
3	NSAPI							

3GPP Type: 10

Length: 3

NSAPI value: text

It is the value of the NSAPI of the PDP context the RADIUS message is related to. It is encoded as its hexadecimal representation, using 1UTF-8 encoded digit.

11 - 3GPP-***Session Stop Indicator***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 11							
2	3GPP Length= 3							
3	1 1 1 1 1 1 1 1							

3GPP Type: 11

Length: 3

Value is set to all 1.

12 - 3GPP-***Selection-Mode***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 12							
2	3GPP Length= 1							
3	UTF-8 encoded Selection mode string							

3GPP Type: 12

Length: 3

Selection mode value: Text

The format of this attribute shall be a character string consisting of a single digit, mapping from the binary value of the selection mode in the Create PDP Context message (3GPP TS 29.060 [24]). Where 3GPP TS 29.060 [24] provides for interpretation of the value, e.g. map '3' to '2', this shall be done by the GGSN.

13 - 3GPP-***Charging-Characteristics***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 13							
2	3GPP Length= 6							
3-6	UTF-8 encoded Charging Characteristics value							

3GPP Type: 13

Length: 6

Charging characteristics value: Text

The charging characteristics is value is the value of the 2 octets value field taken from the GTP IE described in 3GPP TS 29.060 [24], subclause 7.7.23.

Each octet of this IE field value is represented via 2 UTF-8 encoded digits, defining its hexadecimal representation.

14 - 3GPP-***Charging Gateway IPv6 address***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 14							
2	3GPP Length= 18							
3	Charging GW IPv6 addr Octet 1							
4	Charging GW IPv6 addr Octet 2							
5-18	Charging GW IPv6 addr Octet 3-16							

3GPP Type: 14

Length: 18

Charging GW IPv6 address value: IPv6 Address

15 - 3GPP-***SGSN IPv6 address***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 15							
2	3GPP Length= 18							
3	SGSN IPv6 addr Octet 1							
4	SGSN IPv6 addr Octet 2							
5-18	SGSN IPv6 addr Octet 3-16							

3GPP Type: 15

Length: 18

SGSN IPv6 address value: IPv6 Address

16 - 3GPP-***GGSN IPv6 address***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 16							
2	3GPP Length= 18							
3	GGSN IPv6 addr Octet 1							
4	GGSN IPv6 addr Octet 2							
5-18	GGSN IPv6 addr Octet 3-16							

3GPP Type: 16

Length: 18

GGSN IPv6 address value: IPv6 Address

17 - 3GPP-***IPv6-DNS-Servers***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 17							
2	3GPP Length= m							
3-18	(1st) DNS IPv6 addr Octet 1-16							
19-34	(2nd) DNS IPv6 addr Octet 1-16							
k-m	(n-th) DNS IPv6 addr Octet 1-16							

3GPP Type: 17

Length: m = n × 16 + 2; n ≥ 1 and n ≤ 15; k = m-15

IPv6 DNS Server value: IPv6 AddressThe 3GPP-IPv6-DNS-Servers Attribute provides a list of one or more ('n') IPv6 addresses of Domain Name Server (DNS) servers for an APN. The DNS servers are listed in the order of preference for use by a client resolver, i.e. the first is 'Primary DNS Server', the second is 'Secondary DNS Server' etc. The attribute may be included in Access-Accept packets.

18 - 3GPP-***SGSN MCC-MNC***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 18							
2	3GPP Length= n							
3	MCC digit1 (UTF-8 encoded)							
4	MCC digit2 (UTF-8 encoded)							
5	MCC digit3 (UTF-8 encoded)							
6	MNC digit1 (UTF-8 encoded)							
7	MNC digit2 (UTF-8 encoded)							
8	MNC digit3 if present (UTF-8 encoded)							

3GPP Type: 18

Length: n shall be 7 or 8 octets depending on the presence of MNC digit 3

SGSN address value: text

This is the UTF-8 encoding of the RAI MCC-MNC values. In accordance with 3GPP TS 23.003 [40] and 3GPP TS 29.060 [24] the MCC shall be 3 digits and the MNC shall be either 2 or 3 digits. There shall be no padding characters between the MCC and MNC.

19 - 3GPP-***Teardown Indicator***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 19							
2	3GPP Length= 3							
3	spare							TI

3GPP Type: 19

Length: 3

If the value of TI is set to "1", then all PDP contexts that share the same user session with the PDP context identified by the NSAPI included in the Delete PDP Context Request Message shall be torn down. Only the PDP context identified by the NSAPI included in the Delete PDP context Request shall be torn down if the value of TI is "0".

20 -3GGP- **IMEISV**

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP Type = 20							
2	3GPP Length = 18							
3	IMEISV digits 1 - n							

3GPP Type: 20

n = 16 where TAC = 8 digits SNR = 6 digits & SVN = 2 digits

21 - 3GPP-***Packet-Filter***

Bits

Octets	8	7	6	5	4	3	2	1
1	3GPP type = 21							
2	3GPP Length= n							
3-z	Packet Filter							

3GPP Type: 21

Length: n

Each 3GPP-Packet-Filter attribute contains only one packet filter. Multiple 3GPP-Packet-Filter attributes can be sent in one RADIUS Accounting Request message.

When the GGSN sends the packet filter information, the RADIUS message shall carry ALL (or none) of the packet filters. The GGSN derives these packet filters from the TFT (Traffic Flow Template – see 3GPP TS 24.008).

Packet Filter Value:

8	7	6	5	4	3	2	1	
Packet filter identifier								Octet 1
Packet filter evaluation precedence								Octet 2
Length of Packet filter contents								Octet 3
Direction of Packet Filter								Octet 4
Packet filter contents								Octet 5
								Octet m

Direction Value:

00000000: Dowlink

00000001: Uplink

The packet filter content is defined below:

Type	Value
1: IPv4 source address type	shall be encoded as a sequence of a four octet *IPv4 address* field and a four octet *IPv4 address mask* field. The *IPv4 address* field shall be transmitted first
2: IPv6 source address type	shall be encoded as a sequence of a sixteen octet *IPv6 address* field and a sixteen octet *IPv6 address mask* field. The *IPv6 address* field shall be transmitted first
3: Protocol identifier/Next header type	shall be encoded as one octet which specifies the IPv4 protocol identifier or IPv6 next header
4: Single destination port type	shall be encoded as two octet which specifies a port number
5 : Destination port range type	shall be encoded as a sequence of a two octet *port range low limit* field and a two octet *port range high limit* field. The *port range low limit* field shall be transmitted first
6 : Single source port type	shall be encoded as two octet which specifies a port number

7: Source port range type	shall be encoded as a sequence of a two octet *port range low limit* field and a two octet *port range high limit* field. The *port range low limit* field shall be transmitted first
8: Security parmeter index type (IPv6)	shall be encoded as four octet which specifies the IPSec security parameter index
9: T ype of service/Traffic class type	shall be encoded as a sequence of a one octet *Type-of-Service/Traffic Class* field and a one octet *Type-of-Service/Traffic Class mask* field. The *Type-of-Service/Traffic Class* field shall be transmitted first
10: Flow label type (IPv6)	shall be encoded as three octet which specifies the IPv6 flow label. The bits 8 through 5 of the first octet shall be spare whereas the remaining 20 bits shall contain the IPv6 flow label

End of Change in Clause 16.4.7

Page 1: [1] Comment [H5] **Explanation of field**

Enter the version of the specification here. This number is the version of the specification to which the CR will be applied if it is approved. Make sure that the latest version of the specification (of the relevant release) is used when creating the CR. If unsure what the latest version is, go to http://www.3gpp.org/specs/specs.htm.

Page 1: [2] Comment [H6] **Explanation of field**

For help on how to fill out a field, place the mouse pointer over the special symbol closest to the field in question.

Page 1: [3] Comment [H9] **Explanation of field**

Enter a concise description of the subject matter of the CR. It should be no longer than one line. Do not use redundant information such as "Change Request number xxx to 3GPP TS xx.xxx".

Page 1: [4] Comment [H10] **Explanation of field**

Enter the source of the CR. This is either (a) one or several companies or, (b) if a (sub)working group has already reviewed and agreed the CR, then list the group as the source.

Page 1: [5] Comment [H11] **Explanation of field**

Enter the acronym for the work item which is applicable to the change. This field is mandatory for category F, B & C CRs for release 4 and later. A list of work item acronyms can be found in the 3GPP work plan. See http://www.3gpp.org/ftp/information/work_plan/ .
The list is also included in a MS Excel file included in the zip file containing the CR cover sheet template.

Page 1: [6] Comment [H12] **Explanation of field**

Enter the date on which the CR was last revised. Format to be interpretable by English version of MS Windows ® applications, e.g. 19/02/2002.

Page 1: [7] Comment [H13] **Explanation of field**

Enter a single letter corresponding to the most appropriate category listed below. For more detailed help on interpreting these categories, see the Technical Report 21.900 "TSG working methods".

Page 1: [8] Comment [H14] **Explanation of field**

Enter a single release code from the list below.

Page 1: [9] Comment [H15] **Explanation of field**

Enter text which explains why the change is necessary.

Page 1: [10] Comment [H16] **Explanation of field**

Enter text which describes the most important components of the change. i.e. How the change is made.

Page 1: [11] Comment [H17] **Explanation of field**

Enter here the consequences if this CR was to be rejected. It is necessary to complete this section only if the CR is of category "F" (i.e. correction).

Page 1: [12] Comment [H18] **Explanation of field**

Enter the number of each clause which contains changes.

Page 1: [13] Comment [H19] **Explanation of field**

Tick "yes" box if any other specifications are affected by this change. Else tick "no". You MUST fill in one or the other.

Page 1: [14] Comment [H20] **Explanation of field**

List here the specifications which are affected or the CRs which are linked.

Page 1: [15] Comment [H21] **Explanation of field**

Enter any other information which may be needed by the group being requested to approve the CR. This could include special conditions for it's approval which are not listed anywhere else above.