3GPP TSG CN Plenary Meeting #21 **NP-030336**
17th - 19th September 2003. Frankfurt, Germany.

Source: TSG CN WG3

Title: CRs on Rel-5 Work Item E2EQoS.

Agenda item: 8.5

Document for: APPROVAL

Introduction:

This document contains **2** CRs on **Rel-5 Work Item E2EQoS,** including the corresponding mirror CRs (as required).

These CRs have been agreed by TSG CN WG3 and are forwarded to TSG CN Plenary meeting for approval.

WG_tdoc	Title	Spec	CR	Rev	Cat	Rel	C_Ver
N3-030621	Response to remove decision	29.207	106	2	F	Rel-5	5.4.0
N3-030537	Response to remove decision	29.208	044		F	Rel-5	5.4.0

3GPP TSG-CN WG3 Meeting #29 ***Tdoc ⌘N3-030537***
Sophia Antipolis, France, 25th – 29th August 2003.

CR-Form-v7

CHANGE REQUEST

⌘ **29.208** **CR** **044** ⌘ **rev** **-** ⌘ Current version: **5.4.0** ⌘

*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 ☒

Title:	⌘	Response to remove decision
Source:	⌘	TSG_CN WG3 [Nokia]
Work item code:	⌘	E2EQoS
Date:	⌘	29/08/2003
Category:	⌘	**F**
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)*
Rel-6	*(Release 6)*

Reason for change:	⌘	A collision with the COPS-PR RFC. The RFC states the following: "…the PEP MUST respond to each and every DEC with a corresponding solicited RPT." However, the relevant Report (RPT) message as a response to the Remove_decision (DEC) message in Go interface is missing from TS 29.208.
Summary of change:	⌘	The Report (RPT) message as a response to the Remove_decision (DEC) message is added.
Consequences if not approved:	⌘	TS 29.208 does not comply with the relevant IETF RFC on COPS-PR, which compromises the compliancy of implementations.

Clauses affected:	⌘	6.3.1

Other specs affected:	⌘	Y	N		⌘	
		X		Other core specifications	⌘	TS 29.207
			X	Test specifications		
			X	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/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.

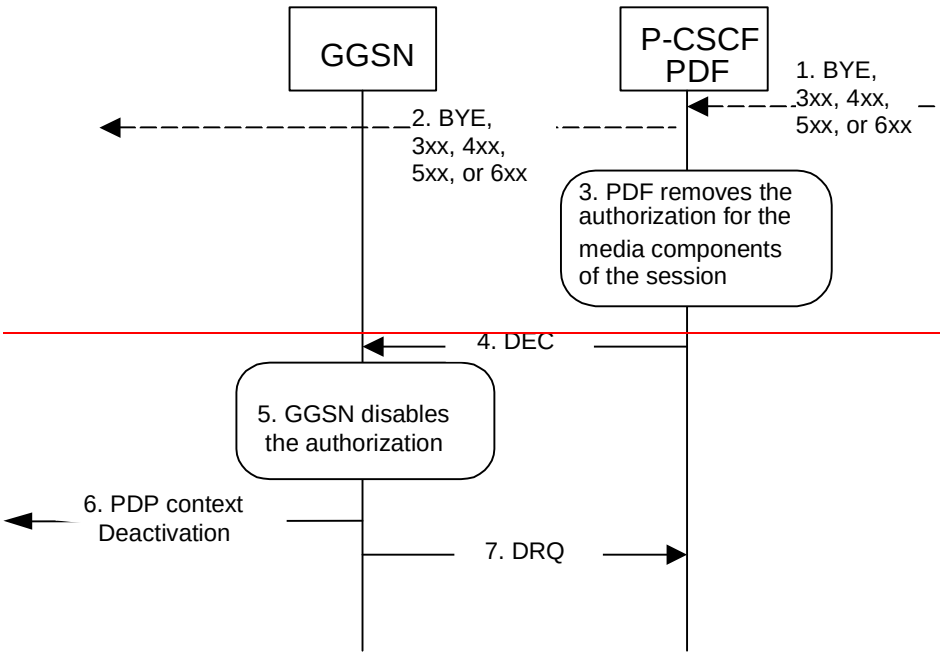
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be

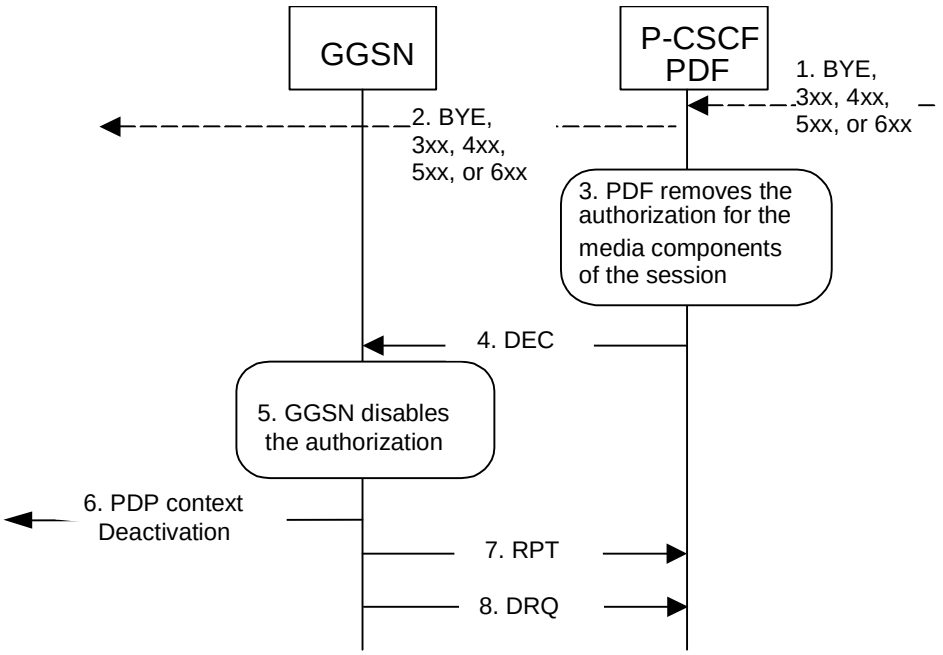
downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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.

6.3.1 Mobile initiated session release / Network initiated session release

Figure 6.3.1 presents the "Revoke Authorization for UMTS and IP Resources" at upon Mobile initiated session release / Network initiated session release to both the Mobile Originating (MO) side and the Mobile Terminating (MT) side. The session release may be signalled by a SIP BYE message or any SIP 3xx redirect response, or any 4xx, 5xx, or 6xx SIP final error response.





1. A SIP BYE message, a SIP 3xx redirect response, or any 4xx, 5xx, or 6xx SIP final error response is received by the P-CSCF.
2. P-CSCF forwards the BYE message, or the SIP 3xx redirect response, or any 4xx, 5xx, or 6xx SIP final error response.
3. PDF removes the authorisation for the media component(s) of this session, which it authorized previously.
4. PDF sends COPS DEC message(s) to the GGSN including client handle(s), which identifies the PDP context(s) to be deactivated.
5. GGSN receives the COPS DEC message, and disables the use of the authorized QoS resources.
6. GGSN initiates deactivation of the PDP context(s) used for the IP multimedia session, in case the UE has not done it before.
7. GGSN sends COPS RPT message(s) back to the PDF.
8~~7~~. GGSN sends COPS DRQ message(s) ~~back~~ to the PDF.

Figure 6.3.1: Revoke authorization for GPRS and IP resources - Mobile initiated session release / Network initiated session release to both Mobile Originating (MO) and Mobile termination side

3GPP TSG-CN WG3 Meeting #29 ***Tdoc ⌘N3-030621***
Sophia Antipolis, France, 25th – 29th August 2003.

CR-Form-v7

CHANGE REQUEST

⌘ **29.207** **CR** **106** ⌘ **rev** **2** ⌘ Current version: **5.4.0** ⌘

*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 ☒

Title:	⌘	Response to remove decision
Source:	⌘	TSG_CN WG3 [Nokia]
Work item code:	⌘	E2EQoS
Date:	⌘	29/08/2003
Category:	⌘	**F**
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)
Rel-6 (Release 6)

Reason for change:	⌘	A collision with the COPS-PR RFC. The RFC states the following: "…the PEP MUST respond to each and every DEC with a corresponding solicited RPT." However, the relevant Report (RPT) message as a response to the Remove_decision (DEC) message in Go interface is missing from TS 29.207. Incomplete descriptions of messages.
Summary of change:	⌘	The Report (RPT) message as a response to the Remove_decision (DEC) message is added. Message descriptions corrected.
Consequences if not approved:	⌘	TS 29.207 does not comply with the relevant IETF RFC on COPS-PR, which compromises the compliancy of implementations.

Clauses affected:	⌘	6.3.2

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	TS 29.208
			X	Test specifications		
			X	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/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.

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.

6.3.2 Message description

The following messages and events are available on the Go interface (after the initial policy provisioning described in subclause 6.3.1.5):

- Authorisation_Request (REQ) (GGSN→PDF):

  This event allows the GGSN to request authorisation data from the PDF. It contains the following information:

  - Client Handle;
  - Binding Information.

  The R-type = 0x08 for configuration request is used here and M-type = 0x02 create event state is used here.

- Authorisation_Decision (DEC)(PDF→GGSN), contains an INSTALL decision:

  This event provides the GGSN with the relevant authorisation data. The event contains the following information:

  - Client Handle;
  - ICID(s) (only in the initial Authorisation_Decision). Only one ICID is transferred in this Release. The form of the ICID is defined in 3GPP TS 32.225 [21];
  - Unidirectional set (this parameter shall appear once for each direction (uplink and downlink)):
    - Direction indicator;
    - "Authorised QoS";
    - Gate description (this parameter shall appear once for each required gate for this direction):
      - Filter Specification - The information about the authorised IP end points addresses and ports is detailed below. The Filter Specification parameters are:
        - Source IP address;
        - Destination IP address;
        - Source ports;
        - Destination ports;
        - Protocol ID.

          The Source and Destination ports are described with a range consisting of a minimum and maximum value. If only one port is authorised, the minimum value and maximum value of the range are identical.

          A filter specification describing more than one IP flow shall be only used in case of identical Protocol IDs, IP addresses and successive port numbers (e.g. RTP and RTCP flow of a media component). Furthermore, the gate status of all IP flows described by this filter specification shall be identical, too.

          The Base and IP Filter definitions from the IETF Framework PIB [15] shall be used in the 3GPP Go PIB to represent the filter specification. Only a subset of the available filter attributes shall be used. The attributes frwkIpFilterDscp, and frwkIpFilterFlowId in the filter description shall have their values set to –1, indicating a "match-all" wildcard condition, in effect a "not used" condition. The attribute frwkBaseFilterNegation shall have its value set to "false" to indicate not using negation, in effect a "not used" condition. The GGSN shall ignore them if they are set otherwise. Wildcarding of filter elements is detailed in Annex B.
      - Gate status (opened/closed)

  The R-type = 0x08 for configuration request is used here and M-type = 0x02 create event state is used here.

- Authorisation_Failure (DEC) (PDF→GGSN), contains an INSTALL and a REMOVE decision:

  This event provides the GGSN with an indication of an authorisation failure, and may carry additional reason details. The event contains the following information:

  - Client Handle;
  - Authorisation failure (including any provided reason information).

  The R-type = 0x08 for configuration request is used here and M-type = 0x04 terminate event state is used here.

- Gate Decision (DEC) (PDF→GGSN), contains an INSTALL decision:

  The Gate Decision indicates to the GGSN the new status of the gate(s) established for a client handle (PDP context). The gate status indicates to the GGSN that the gate shall be opened or closed. Only the gate(s) for which the status is changed are indicated by this event. The event contains the following information:

  - Client Handle;
  - Unidirectional set (this parameter shall appear once for each direction for which gates are being updated (uplink and/or downlink)):
    - Direction indicator;
    - Gate description (this parameter shall appear once for each gate to be modified for this direction) :
      - Filter Specification - The information about the authorised IP end points addresses and ports is detailed below. The Filter Specification parameters are:
        - Source IP address;
        - Destination IP address;
        - Source ports;
        - Destination ports;
        - Protocol ID.

          The Source and Destination ports are described with a range consisting of a minimum and maximum value. If only one port is authorised, the minimum value and maximum value of the range are identical.

          A filter specification describing more than one IP flow shall be only used in case of identical Protocol IDs, IP addresses and successive port numbers (e.g. RTP and RTCP flow of a media component). Furthermore, the gate status of all IP flows described by this filter specification shall be identical, too.

          The Base and IP Filter definitions from the IETF Framework PIB [15] shall be used in the 3GPP Go PIB to represent the filter specification. Only a subset of the available filter attributes shall be used. The attributes frwkIpFilterDscp, and frwkIpFilterFlowId in the filter description shall have their values set to –1, indicating a "match-all" wildcard condition, in effect a "not used" condition. The attribute frwkBaseFilterNegation shall have its value set to "false" to indicate not using negation, in effect a "not used" condition. The GGSN shall ignore them if they are set otherwise. Wildcarding of filter elements is detailed in Annex B.
      - Gate status (opened/closed)

NOTE: The opening of the gate may occur at the same time / be part of the authorisation decision event.

The R-type = 0x08 for configuration request is used here and M-type = 0x03 update event state is used here.

- Report (RPT) (GGSN→PDF):

  ~~Authorisation_report; Gate_report:~~

The GGSN sends a COPS RPT message as a response to a decision (DEC) message back to the PDF reporting that it enforced or not the Authorisation_Decision or, the Authorization_Failure_Decision (Authorization_Report) or the Gate_Decision (Gate_Report).

The events contain the following information:

- Client Handle;
- Success / Failure.

~~- The Authorization_report of the initial Authorisation_Decision includes:~~

— In addition, the Authorization_report of the initial Authorisation_Decision includes:

- GCID;
- GGSN address.

- Report of state changes:

  The GGSN sends the report of state change message to the PDF reporting that the maximum bit rate for the PDP context is modified to 0 kbps or that the maximum bit rate for the PDP context is changed from 0 kbps.

  The event contains the following information:

  - Client Handle;
  - Maximum bit rate (set to 0 kbps / changed from 0 kbps).

- Delete ~~r~~Request ~~s~~State (DRQ) (GGSN→PDF):

  The GGSN informs the PDF via the delete request state message, that the PDP context is deactivated and the request state identified by the client handle is no longer available/relevant at the GGSN, so the corresponding state shall also be removed at the PDF.

  The DRQ message includes the reason why the request state was deleted.

  The event contains the following information:

  - Client Handle;
  - Reason code: "Tear", Sub-code: deactivation of the PDP context.

- Remove_Decision (DEC) (PDF→GGSN):

  The PDF uses the Remove_Decision to inform the GGSN that the PDF revokes the authorized resources for the client handle (PDP context). The Remove_Decision is a specific Decision message with the COPS Decision Flags object set to 0x02 ("Request-State" flag) and the Command-Code set to "REMOVE"~~"Remove"~~; see IETF RFC 3084 [8].

  The event contains the following information:

  - Client Handle.

  The R-type = 0x08 for configuration request is used here and M-type = 0x04 terminate event state is used here.