

Source: CN3
Title: CRs to Rel-6 on Work Item "End to End QoS"
Agenda item: 9.22
Document for: APPROVAL

Introduction:

This document contains 2 CRs to Rel-6 on Work Item "E2EQoS" that have been agreed by TSG CN WG3, and are forwarded to TSG CN Plenary for approval.

| WG_tdoc | Spec | CR | R | Cat | Title | Rel | C_Ver | Work Item |
|-----------|--------|-----|---|-----|---|-------|-------|-----------|
| N3-050144 | 29.208 | 095 | 1 | F | Essential clarification of the Scope for call flows | Rel-6 | 6.2.1 | E2EQOS |
| N3-050223 | 29.208 | 097 | 1 | F | Change of port number | Rel-6 | 6.2.1 | E2EQOS |

3GPP TSG-CN3 Meeting #35
 Sydney, Australia, 14th to 18th February 2005

Tdoc #N3-050144

| | |
|---------------------------|--------------------------|
| CR-Form-v7.1 | |
| CHANGE REQUEST | |
| # 29.208 CR 095 # rev 1 # | Current version: 6.2.1 # |

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

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|------------------------|---|-----------------|--|
| Title: | # Essential clarification of the scope for call flows | | |
| Source: | # Orange, Siemens. | | |
| Work item code: | # E2EQOS | Date: | # 02/02/2005 |
| Category: | # F | Release: | # REL-6 |
| | 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: Ph2 (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) Rel-7 (Release 7) |

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| Reason for change: | # It is an essential correction. The scope of TS 29.208 should be updated to specify that the call flows detailed in this document are usual cases. The list and details of these call flows are not exhaustive. |
| Summary of change: | # The following sentence is added in the scope of TS 29.208 The calls flows depicted in this Technical Specification represent usual cases, i.e. not all situations are covered. Detailed information provided in TS 29.207 [7] shall be taken into consideration. |
| Consequences if not approved: | # Confusing call flows that may appear as not detailed enough. |

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|------------------------------|---|---|---|---|---|---|---|---|---|
| Clauses affected: | # 1 | | | | | | | | |
| Other specs affected: | <table style="display: inline-table; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">Y</td> <td style="border: 1px solid black; padding: 2px;">N</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">#</td> <td style="border: 1px solid black; padding: 2px;">X</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">#</td> <td style="border: 1px solid black; padding: 2px;">X</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">#</td> <td style="border: 1px solid black; padding: 2px;">X</td> </tr> </table> Other core specifications # Test specifications # O&M Specifications # | Y | N | # | X | # | X | # | X |
| Y | N | | | | | | | | |
| # | X | | | | | | | | |
| # | X | | | | | | | | |
| # | X | | | | | | | | |

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.

*** FIRST MODIFICATION ***

1 Scope

The present specification [gives examples of](#) ~~shows~~ QoS signalling flows for resource reservation to provide end-to-end QoS. The flows are used as bases of developing QoS related protocol descriptions for new and existing specifications.

The present specification adds detailed flows of Service Based Local Policy (SBLP) procedures over the Go and Gq interfaces and their relationship with the bearer level signalling flows over the Gn interface.

[The calls flows depicted in this Technical Specification represent usual cases, i.e. not all situations are covered. Detailed information provided in TS 29.207 \[7\] shall be taken into consideration.](#)

The present specification also describes the mapping of QoS parameters among SDP, UMTS QoS parameters, and QoS authorization parameters.

*** END OF MODIFICATION ***

3GPP TSG-CN3 Meeting #35
Sydney, Australia, 14th to 18th February 2005

Tdoc #N3-050223

CR-Form-v7.1

CHANGE REQUEST

⌘ **29.208 CR 097** ⌘ rev **1** ⌘ Current version: **6.2.1** ⌘

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: | ⌘ Change of port number |
| Source: | ⌘ Orange |
| Work item code: | ⌘ E2EQOS |
| Date: | ⌘ 25/01/2005 |
| Category: | ⌘ F |
| | Use <i>one</i> 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 . |
| Release: | ⌘ REL-6 |
| | Use <i>one</i> of the following releases: |
| | Ph2 (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) |
| | Rel-7 (Release 7) |

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| Reason for change: | ⌘ As stated in TS 29.207, the "Session modification initiated decision" procedure may apply when a port number is changed. |
| | "A session modification may occur that modifies the media components without adding or removing media lines, for example, a change in the bandwidth for the media line, or a change to the port number." |
| | However, in TS 29.208 section 6.6, the corresponding call flows only indicate the change of the authorized QoS resources. Indeed, when a port number is changed, the QoS authorization remains the same but the packet classifiers change. The call flows for Session modification initiated SBLP authorization decision should cover the modification of packet classifiers (e.g. due to change of port number) as well as the change of QoS authorization. For an update of packet classifiers, the PDF should request the GGSN to install a new gate in replacement of the previous gate. |
| | In addition, a decision is necessary to command the opening of this new gate. The gate opening may be sent in the same decision (as stated in TS 29.207 section 5.2.1.4). Otherwise, the PDF should send the gate opening in a separate decision using the "Approval of QoS commit" procedure. |
| | "The open gate command may either be a part of the authorization decision or the PDF may provide a separate decision with the "Approval of QoS Commit" command to open the gate." |
| Summary of change: | ⌘ In Section 6.6 about "Session modification initiated SBLP authorization decision", the case of packet classifiers update (e.g. change of port number) is treated as a particular case: the COPS DEC message indicates the installation of the new gate |

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| | | in replacement of the previous gate. A note is added to describe the case when the gate opening is sent in the same decision or in a separate decision using the "Approval of QoS commit" procedure. |
| Consequences if not approved: | ⌘ | Incorrect treatment for packet classifiers update in "Session modification initiated SBLP authorization decision" procedure. |

| Clauses affected: | ⌘ | 6.6 | | | | | | | | |
|-------------------------------------|--------------------------|---|---|---|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| Other specs affected: | ⌘ | <table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ | Y | N | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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| <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | | |

How to create CRs using this form:

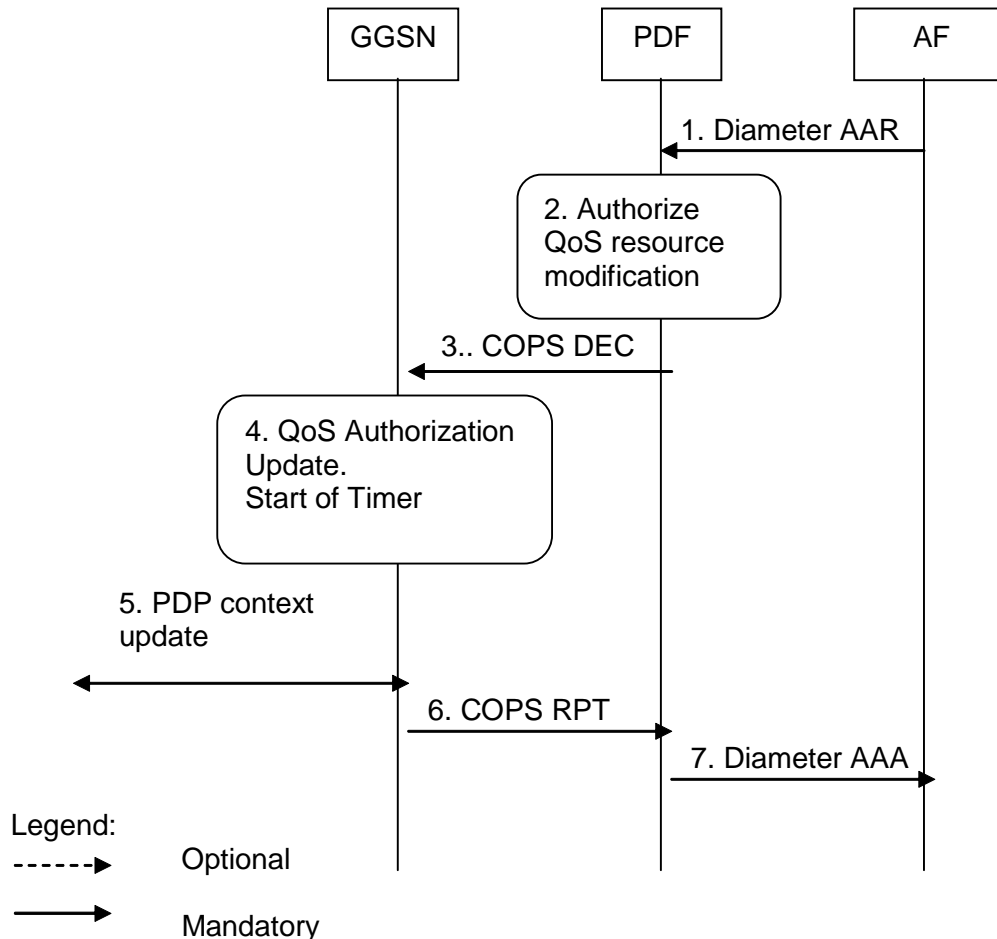
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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause co

*** FIRST MODIFICATION ***

6.6 Session modification initiated SBLP authorization decision

The GGSN receives an unsolicited authorization decision from the PDF, when a session is modified without adding or removing media components or IP flows (refer to 3GPP TS 29.207 [7]), i.e. when the binding information of the AF session remains unchanged. The authorization update operation through the Go interface, described in figure 6.6.1, is identical in the originating and terminating cases. If the existing QoS of the PDP context exceeds the updated authorised QoS and the UE does not modify the PDP context accordingly, the GGSN shall perform a network initiated PDP context modification to reduce the QoS to the authorised level.



1. The AF sends a Diameter AAR to the PDF to indicate the change in the session information
2. The PDF analyses the session information and updates the authorization accordingly.
3. The PDF sends a COPS DEC message to the GGSN to indicate the change of the authorised QoS resources (e.g. bandwidth) and/or the update of packet classifiers (e.g. port numbers).
If the session modification is related to packet classifiers, the COPS DEC message indicates the installation of the new gate in replacement of the previous gate.
Note: The gate opening may be sent in the same decision; in that case, the GGSN opens the related gate(s) and the procedure continues with step 6.
4. When the session modification is related to QoS authorization, the GGSN updates the QoS authorization information of the session and starts a timer to supervise the PDP context update.
5. If the existing QoS of the PDP context exceeds the updated authorised QoS and the UE does not modify the PDP context accordingly, the GGSN sends an Update PDP Context Request message to the SGSN after the expiry of the timer.
6. The GGSN sends a COPS RPT message back to the PDF.
7. The PDF sends an AAA to the AF.

Figure 6.6.1: Authorization update upon session modification

*** END OF MODIFICATION ***