Source:	**SA5 (Telecom Management)**	
Title:	**Rel-6 CR 32.411 (PM IRP Requirements)**	
Document for:	**Decision**	
Agenda Item:	**7.5.3**	

Doc-1st-	Spec	CR	R	Phase	Subject	Cat	Ver	Doc-2nd-	Workitem
SP-040271	32.411	003	-	Rel-6	Clarify threshold alarm trigger condition – Align with 32.401 and ITU-T Q.822	F	6.2.0	S5-046464	OAM-PM

CR-Form-v7

CHANGE REQUEST

| ⌘ | **32.411** CR **003** | ⌘ **rev** | **-** | ⌘ | Current version: | **6.2.0** | ⌘ |

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

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

Title: ⌘	Clarify threshold alarm trigger condition – Align with 32.401 and ITU-T Q.822	
Source: ⌘	**SA5** (Ericsson, edwin.tse@ericsson.com, ulf.hubinette@ericsson.com)	
Work item code:⌘	OAM-PM	**Date:** ⌘ 14/05/2004
Category: ⌘	**F**	**Release:** ⌘ Rel-6

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: ⌘	Threshold alarm trigger is not aligned with TS 32.401 and ITU-T Q.822 Q3 Interface Performance Management.
Summary of change:⌘	Clarify the use of threshold trigger condition so that it aligns with ITU-T Q.822 definition and with TS 32.401. Add the threshold value "crossed" as threshold alarm (including clearing) trigger. Align the terms IRPManager and IRPAgent with the terminology definition of TS 32.102.
Consequences if not approved: ⌘	The threshold alarm trigger would not be aligned with ITU-T Q.822 definition and not aligned with TS 32.401.

Clauses affected: ⌘	2, 5.2, 5.3, 5.4 and 5.5

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

Other comments: ⌘	

Change in Clause 2

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 TS 32.6xx: "Telecommunication management; Configuration Management (CM)".

[2]   3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".

[3]   3GPP TS 32.102: "Telecommunication management; Architecture".

[4]   3GPP TS 32.401: "Telecommunication management; Performance Management (PM); Concept and requirements".

[5]   3GPP TS 32.111-2 to -4: "Telecommunication management; Fault Management; Parts 2-4: Alarm Integration Reference Point (IRP)".

[6]   3GPP TS 32.30x: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP)".

[7]   3GPP TS 32.341: "Telecommunication management; File Transfer (FT) Integration Reference Point (IRP): Requirements".

[8]   3GPP TS 32.412: "Telecommunication management; Performance Management (PM) Integration Reference Point (IRP): Information Service (IS)".

[9]   ITU-T Q.822 Stage 1, Stage 2 and Stage 3 Description for the Q3 Interface – Performance Management (04/94).

End of change in Clause 2

5.2 Management of network performance measurements

The IRP-Manager shall be able to request the IRP-Agent to:

- Collect specific performance measurements on specific network resources. The network resources, whose performance measurements are to be managed or collected, must have been modelled by the 3GPP Network Resource IRP or vendor-specific extended NRM and must be visible via the Bulk or Basic CM IRP.

- Collect the performance measurements in a file. The data format of this file shall be specified in the 3GPP defined set of PM Specifications.

- Emit notification announcing the availability of such file(s).

- Create measurement jobs.

- Suspend, Resume, and Stop running measurement jobs.

- Define measurement job schedule, including the definition of the recording interval(s), job start time and job stop time.

- Stop scheduled measurement jobs.

- Report status of the running and scheduled measurement jobs (as response to corresponding queries from the IRPManager IRP manager).

It is noted that the IRP-Agent can only derive or determine the value of a performance measurement at the end of a granularity period (status inspection and discrete event registration). The IRP-Agent may also have to reset the value of a performance measurement at the beginning of a granularity period. The above IRP-Agent behaviours are dependent on the nature of the performance measurement types (cumulative counter, status inspection, gauge, and discrete event registration).

5.3 Management of threshold alarms

The IRP-Manager shall be able to request the IRP-Agent to:

- Set threshold values to specific performance measurements of specific network resources.

- Emit an alarm notification (including clearing) when:
  - (a) indicating threshold(s) reached or crossed if the threshold value(s) is equalled orhave been crossed and not just reached, in a similar fashion as that defined in [9]
  or
  - (b) the threshold value(s) have been reached.

  It is the IRPAgent's choice to support (a) or (b) (but not both). The support is on an IRPAgent system wide basis and is not on a per threshold basis. The IRPAgent's behaviour regarding which approach (i.e., (a) or (b) above) to use, shall be the same for emitting alarms and for clearing alarms.

5.4 Management of measurement events

The IRP-Manager shall be able to:

- Subscribe to notifications that carry threshold alarms and information on the availability of performance measurement data files.

5.5 Management of measurement files

The IRP-Manager shall be able to:

- Manage the transfer of data files containing performance measurement data.

- Request a list of available files, including the specification of filter.

For information:

The requirements for measurement file management may be satisfied by a separate File Transfer IRP.

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End of change in Clauses 5.2 - 5.5
End of document

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Annex A (informative):
Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Sep 2002	S_17	SP-020500	--	--	Submitted to TSG SA#17 for Information	1.0.0	
Jun 2003	S_20	SP-030294	--	--	Submitted to TSG SA#20 for Approval	2.0.0	6.0.0
Sep 2003	S_21	SP-030432	001	--	Expansion of the requirements for threshold alarms on bounded variables	6.0.0	6.1.0
Dec 2003	S_22	SP-030649	002	--	Add PM IRP compliance clause	6.1.0	6.2.0