

Source: SA WG5

Title: CRs to 3G Performance Management (32.104)

Document for: Approval

Agenda Item: 7.5.3

Doc-1st-Level	Doc-2nd-Level	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	Work item
SP-000517	S5-000479	32.104	008		R99	F	Clarification of measurement definition template	3.3.0	3.4.0	OAM-PM

Annex C (normative): Performance Measurement Requirements Summary

The present document is valid for all measurement types provided by an implementation of a 3G network. These may be measurement types defined within this annex, measurements defined within other standards bodies, or vendor specific measurement types.

Only measurement types that are specific to 3G networks are defined within this annex. I.e. vendor specific measurement types and measurements related to "external" technologies used in 3G networks, such as ATM or IP, are not covered. Instead, these could be applied as described by the other, "external" standards bodies (e.g. ITU-T or IETF) or according to manufacturer's documentation.

C.1 Measurement Definition Template

C.1.1 Template Specification

Following is the template used to describe the measurements contained in this annex.

C.x.y. Measurement Name (section header)

This is a descriptive name of the measurement type that is specified as clause C.x.y of the present document.

a) Description

This section contains aAn explanation of the measurement operation;

b) Collection Method

This section contains tThe form in which this measurement data is obtained:

- CC (Cumulative Counter);
- GAUGE (dynamic variable), used when data being measured can vary up or down during the period of measurement;
- DER (Discrete Event Registration), when data related to a particular event are captured every nth event is registered, where n can be 1 or larger;
- SI (Status Inspection).

c) Condition

This section contains tThe condition which causes the measurement result data to be updated;

This will be defined by identifying protocol related trigger events for starting and stopping measurement processes, or updating the current measurement result value. Where it is not possible to give a precise condition, then the conditional circumstances leading to the update are stated.

d) Measurement Result (measured value(s), Units)

This section contains aA description of expected result value(s) (e.g. a single integer value).

e) Measurement Type

This section contains aA short form of the measurement name specified in the header, which is used to identify the measurement type in the result files;

f) Measurement Object Instance

The "measObjInstId" field identifies the measured object class and its instance, e.g. trunk1 means object class is trunk and instance #1 is being measured. The object class and instance values used for this purpose shall be in accordance with 3GPP TS 32.106 [3], i.e. the NE/resource object model (defined in the Basic CM IRP

Information Model - 3GPP TS 32.106-5) and naming conventions (defined in the Name Convention for Managed Objects - 3GPP TS 32.106-8). This parameter, if applicable, shall be provided in the measurement job.

g) **Switching Technology**

This section contains tThe Switching domain(s) this measurement is applicable to, i.e. Circuit Switched and/or Packet Switched.

C.1.2 Examples of measurement definitions

The following measurement definitions examples correspond to those used in the XML example file in annex D. Though these examples relate to measurements defined in GSM 12.04, they are mentioned here for illustrative purposes only.

C.x. Measurements collected by the RNC

C.x.1. Measurements related to the RNC

C.x.2. Measurements related to cells

C.x.2.1. Attempted TCH seizures

a) Description

This measurement counts the number of attempts by UEs to seize a traffic channel.

b) Collection Method

CC

c) Condition

Transmission of "ASSIGNMENT COMMAND" Message to the MS, (GSM 04.08).

d) Measurement Result (measured value(s), Units)

A single integer value;:

e) Measurement Type

attTCHSeizures

f) Measurement Object Instance

cell= <cellID> (to be aligned with the object model in 3GPP TS 32.106-5).

Example : Cell=997

(the complete RDN can then be constructed prefixing the nedn : System=UTRANNetwork,RNC=123, Cell=997)

g) Switching Technology

Valid for circuit and packet switching;:

C.x.2.2. Successful TCH seizures

a) Description

This measurement counts the number of successful traffic channel seizures by the UEs.

b) Collection Method

CC

c) Condition

Receipt of "ASSIGNMENT COMPLETE" Message from the MS; (GSM 04.08);:

d) Measurement Result (measured value(s), Units)

A single integer value;

e) Measurement Type

succTCHSeizures

f) Measurement Object Instance

cell= <cellID> (to be aligned with the object model in 3GPP TS 32.106-5).

Example : Cell=997

(the complete RDN can then be constructed prefixing the nedn : System=UTRANNetwork,RNC=123, Cell=997)

g) Switching Technology

Valid for circuit and packet switching;

C.x.2.3. Attempted Immediate Assignment Procedures**a) Description**

This measurement provides the number of attempted immediate assignment procedures.

b) Collection Method

CC

c) Condition

Receipt of "CHANNEL REQUIRED" Message.

The establishment causes are: "EMERGENCY CALL", "CALL RE-ESTABLISHMENT", "ANSWER TO PAGING", "ORIGINATING CALL", "LOCATION UPDATING", "ONE PHASE PACKET ACCESS", "SINGLE BLOCK PACKET ACCESS" and "OTHER PROCEDURES" as defined in (GSM 04.08).

d) Measurement Result (measured value(s), Units)

A single integer value;

e) Measurement Type

attImmediateAssignProcs

f) Measurement Object Instance

cell= <cellID> (to be aligned with the object model in 3GPP TS 32.106-5).

Example : Cell=997

(the complete RDN can then be constructed prefixing the nedn : System=UTRANNetwork,RNC=123, Cell=997)

g) Switching Technology

Valid for circuit and packet switching;

C.x.2.4. Successful Immediate Assignment Procedures**a) Description**

This measurement provides the number of successful immediate assignment procedures.

b) Collection Method

CC

c) Condition

Transmission of "IMMEDIATE ASSIGN COMMAND" Message.

This message contains either an "IMMEDIATE ASSIGNMENT" Message or an "IMMEDIATE ASSIGNMENT EXTENDED" Message. If an "IMMEDIATE ASSIGNMENT EXTENDED" Message is transmitted, the counter shall be incremented by two, because that Message contains assignment information for two mobiles (GSM 04.08).

d) Measurement Result (measured value(s), Units)

A single integer value:

e) Measurement Type

succImmediateAssignProcs

f) Measurement Object Instance

cell= <cellID> (to be aligned with the object model in 3GPP TS 32.106-5).

Example : Cell=997

(the complete RDN can then be constructed prefixing the nedn : System=UTRANNetwork,RNC=123, Cell=997)

g) Switching Technology

Valid for circuit and packet switching: