**3GPP TSG-SA WG6 Meeting #62 S6-243129**

**Maastricht, Netherlands, 19th – 23rd August 2024 (revision of S6-243xxx)**

**Source: Nokia**

**Title: Pseudo-CR on Evaluation of existing IOPS work**

**Spec: 3GPP TR 23.700-09, v0.1.0**

**Agenda item: x.x**

**Document for: Approval**

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**1. Introduction**

In Rel-17 work on Mission critical services support in the Isolated Operation for Public Safety (IOPS) mode of operation has led to solutions described in 3GPP TS 23.180.

This original IOPS technical specification (3GPP TS 23.180) was defined to support 4G networks, but as other mission critical services it was described rather agnostic to the type of network access.

This pCR is related to KI#x to evaluate the existing IOPS work, which aims to study existing IOPS solutions described in 3GPP TS 23.180. As a result, it summarieses what changes are needed to 3GPP TS 23.180 to use it for a generic IOPS solution using 3GPP access methods.

**2. Reason for Change**

< Explain the reason for change (mandatory)>

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TR 23.700-09, v0.1.0.

\* \* \* First Change \* \* \* \*

### 7.1.x Solution #x: Re-using existing IOPS work from 3GPP TS 23.180

#### 7.1.x.1 General

This clause is related to KI#x to evaluate the existing IOPS work and aims to study existing IOPS solutions described in 3GPP TS 23.180. As a result, this clause summarises what changes are needed to 3GPP TS 23.180 to use it for a generic IOPS solution using 3GPP access methods.

#### 7.1.x.2 Analysing 3GPP TS 23.180 clause by clause

Clause 1: Scope - Martin

* References to 3GPP TS 23.401 and E-UTRAN to be deleted
* Additional text required describing the generic IOPS principle

Clause 2: References - All

* References to 3GPP TS 23.401 and 3GPP TS 23.468 to be deleted, if not refenced any longer in the document

Clause 3: Definitions and abbreviations - All

* The definition of IOPS mode of operation and the reference towards 3GPP TS 23.401 Annex K requires new text describing the generic access mode principle.
* Abbreviations to EPC and EPS to be deleted, if no longer used in the document

Clause 4: Introduction - Rana

* The sentence on using EPS as defined 3GPP TS 23.401 is to be replaced by a statement describing that the IOPS solution is access agnostic.

Clause 5: Architecture requirements – Rana

* No changes needed; text is already generic.

Clause 6: Involved business relationships - Rana

* No changes needed; text is already generic.

Clause 7: Functional model – Rana

* IOPS EPS to be removed from Figure 7.3.2-1, Figure 7.3.2-2 and Figure 7.3.4-1.
* The text in clause 7.4.1.3 on instantiating an GCS AS described in 3GPP TS 23.468 to be converted into an example.
* The text in clause 7.5.1.3 on Reference point MCPTT-IOPS-2 (between the IOPS MC connectivity function and the MCPTT client) to be converted so that MBMS is mentioned as example only.
* The text in clause 7.5.1.4/5 on Reference point MCPTT-IOPS-3 (between the IOPS distribution function and the MCPTT/MCData client) to be converted so that SGi reference point is mentioned as example.
* The text in clause 7.5.1.6/7 on Reference point MCPTT-IOPS-4 (between the IOPS distribution function and the MCPTT client) to be converted so that MBMS is mentioned as example only.
* The text in clause 7.5.1.8/9 on Reference point MCPTT-IOPS-5/6 (between the IOPS MC connectivity function and the 3GPP system): Remove IOPS from title, indicating EPS and MB-2 as examples only.

Clause 8: Identities - nothing

* No changes needed; text is already generic.

Clause 9: Application of functional model to deployments - Cuili

* Last sentence in clause 9.1 Overview to be deleted.
* Clause 9.2.2 IOPS EPS is to replace by generic text describing point-to-point and point-to-multipoint bearer service capabilities, EPS may stay as an example.

Clause 10: Procedures and information flows

* Martin Table 10.2.2.3-1 in NOTE 1, replace EPS/PDP connection establishment by IP address is provided by the underlaying access network.
* Cuili Clause 10.4 Use of MBMS transmission must be re-written and replaced by generic text describing multicast transmissions, MBMS may stay as an example for clarity. Same applies for the information flows and procedures in this clause.
* Harish Clause 10.5.1.3 IOPS group call setup, change MBMS by multicast (several places) and in Note 2 remove EPS.
* Harish Clause 10.5.1.4 IOPS emergency group call setup, change MBMS by multicast (several places) and in Note 4 remove EPS.
* Harish Clause 10.5.3.1 IOPS floor control (IP connectivity functionality), replace MBMS by multicast.
* Harish Clause 10.5.3.3 IOPS floor control during silence, change MBMS by multicast (several places).
* Mark Clause 10.6.1.4 IOPS group standalone SDS using signalling control plane, change MBMS by multicast. In step 3 replace MBMS by multicast.
* Mark Clause 10.7 MC IOPS notification, specifically in table 10.7.2.1-2 in Note 1 and Note 3 replace MBMS by multicast. In clause 10.7.3 in Note 2 within the MC IOPS notification procedure, replace MBMS by multicast.

Clause Annex A: Configuration data for the support of MC services in the IOPS mode of operation - Martin

* No changes needed; text is already generic.

#### 7.1.x.3 Solution evaluation

The above analyses of 3GPP TS 23.180 shows that this specification can easily be re-used to describe a generic IOPS solution.

The functional model (clause 7) is already generic, same applies for most of the other clauses like 1, 2, 3, 4 and 9. Some even not require any changes as clause 5, 6, 8 and Annex A. The mayor effort is required on clause 10.4 on Use of MBMS which must be completely re-written.

\* \* \* End of Change \* \* \* \*