**3GPP TSG-SA5 Meeting #148-e S5-233502rev3**

**e-Meeting, 17th-25th April, 2023**

**Source: China Unicom**

**Title: Add Conclusion and recommendation for Issue #4**

**Document for: Approval**

**Agenda Item: 6.8.3**

# 1 Decision/action requested

***The group is asked to approve the proposal.***

# 2 References

[1] 3GPP TR 28.832 v0.3.0: “Management Aspects of URLLC”

[2] 3GPP TS 28.541: “Management and orchestration; 5G Network Resource Model (NRM);”

# 3 Rationale

It was approved in SP-220146 to study the management aspects of URLLC and this contribution proposes to add conclusion and recommendation the following issue in Study on management aspects of URLLC.

- Issue#5.4: Configuration of reliability in slice profiles and service profile

# 4 Detailed proposal

This contribution proposes to make the following changes in [1].

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| **1st Change** |

# 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 TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 22.104: “Service requirements for cyber-physical control applications in vertical domains; Stage 1”

[3] 3GPP TS 22.261: “Service requirements for the 5G system; Stage 1”

[4] 3GPP TS 38.211: “NR; Physical channels and modulation”

[5] 3GPP TS 38.212: “NR; Multiplexing and channel coding”

[6] 3GPP TS 38.213: “NR; Physical layer procedures for control”

[7] 3GPP TS 38.214: “NR; Physical layer procedures for data”

[8] 3GPP TS 38.300: “NR; NR and NG-RAN Overall Description; Stage2”

[9] 3GPP TS 38.321: “NR; Medium Access Control (MAC) protocol specification”

[10] 3GPP TS 38.323: “NR; Packet Data Convergence Protocol (PDCP) specification”

[11] 3GPP TR 38.824: “Study on physical layer enhancements for NR ultra-reliable and low latency case (URLLC)”

[X] 3GPP TS 28.541: “Management and orchestration; 5G Network Resource Model (NRM);”

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| **2nd Change** |

6 Conclusion and Recommendation

6.X Issue #X: Configuration of reliability in slice profiles and service profile

This issue identifies an disalignment between the diffrerent requirements for UL and DL defined on reliability in TS 22.261[3] and the single reliability attribute used in slice and service profiles defined in TS 28.541[X].

TS 22.261[3] specifies service requirements for the 5G system. Clause 7.6.1 defines some use cases of URLLC. The first use case of table 7.6.1-1 has different requirements for uplink and downlink reliability. However, the existing service profile and slices profiles in TS 28.541[X] can’t support for configuring different reliabilities for UL and DL because there is only one reliability attribute in either service and slice profiles.

The corresponding solution tries to addresses the above issue by enhancing the reliability related attribute used in slice and service profiles from one single reliability attribute to two separate reliability attributes representing UL and DL respectively for URLLC. Detailed description about the solution is in clause 5.4.2. It is recommended to make some enhancement on NRM refered to this solution in the future normative

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| NOTE: Even though this study is about URLLC, the attributes are also applicable for reliability requirement for non URLLC services.**End of changes** |