3GPP TSG-RAN WG3 Meeting #124 R3-243865

Fukuoka, Japan, 20th – 24th May 2024

**Title: [Draft] Reply LS on Support of Regenerative-based Satellite Access**

**Response to: S2-2405600/R3-243017**

**Release:** **Rel-19**

**Work Item: NR\_NTN\_Ph3-Core**

Source: ZTE (to be RAN3)

To: SA2

**Cc: RAN2**

**Contact Person:**

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**Send any reply LS to: 3GPP Liaisons Coordinator,** mailto:3GPPLiaison@etsi.org

1. **Overall Description:**

RAN3 thanks SA2 for their candidate mechanisms and assumptions on the Rel-19 study on 5G System enhancements for satellite access. RAN3 has discussed the issues and provides the corresponding feedback as below.

With respect to NG connection management:

Graceful removal of NG/S1 using legacy SCTP SHUTDOWN (RFC 4960) is not precluded.

NG Suspend/Resume mechanism requires both the satellite gNB/eNB and the AMF/MME to store a number of interface contexts for several hours, with significant power and memory impacts especially on the satellite payload.

RAN3 has not discussed the details of S1 connection since the Rel-19 IoT NTN WI has not started.

With respect to IP address changes due to soft feeder link switch:

As given in TS 38.412, the case of gNB IP address changes due to soft feeder link switch can be supported by the existing NGAP RAN Configuration Update procedure. While, the case of eNB IP address changes due to soft feeder link switch cannot be supported by the existing S1AP procedure.

With respect to mapped Cell ID handling:

RAN3 also thinks that the AMF/MME can treat the Mapped Cell ID as in previous releases.

**2. Actions:**

**To SA2 group.**

**ACTION:** RAN3 kindly asks SA2 to take the above into consideration.

**3. Date of Next RAN3 Meetings:**

TSG RAN WG3 Meeting #125 19th – 24th, Aug. 2024 Maastricht, The Netherlands