|  |  |
| --- | --- |
| **3GPP TSG RAN WG2#113-e** | **Draft R2-2102271** |
| **e-Meeting, 25th January - 5th February, 2021** | ***(Revision of R2-2102257)*** |

**Title:** ***[****Draft]*LS on IoT-NTN basic architecture

**Response to:** -

**Release:** Rel-17

**Work Items:** FS\_IoT\_NTN

**Source:** Eutelsat (to be changed to RAN WG2)

**To:** RAN3, SA2

**Cc:** RAN, CT1

**Contact Person:**

#### Name: Paul Simmons, Eutelsat

E-mail Address: [**psimmons-ext@eutelsat.com**](mailto:psimmons-ext@eutelsat.com)

**1. Overall Description:**

RAN2 has discussed architecture options for IoT\_NTN to connect to core network, and considers that the IoT-NTN RAN can connect to either an EPC or to a 5GCN. That is, both figures 1 and 2 below shall be supported in Release 17.

UE

E-UTRA(NTN)-Uu

-

EPC

S1

**E-UTRAN(NTN)**

Fig 1. Connection of E-UTRAN(NTN) to EPC (Enhanced Packet Core)

UE

E-UTRA(NTN)-Uu

-

5GCN

NG

**E-UTRAN(NTN)**

Fig 2. Connection of E-UTRAN(NTN) to 5G core network

Note 1: E-UTRAN(NTN) and E-UTRA(NTN) are respectively E-UTRAN and E-UTRA using a Non-Terrestrial radio link to the UE

**2. Actions:**

**To RAN3, SA2**

**ACTION:** RAN2 kindly would like RAN3 and SA2 to confirm our understanding of the core network connections to be supported for IoT-NTN in release 17

**3. Date of Next RAN WG2 Meetings:**

TSG-RAN WG2 Meeting #113-bis-e Apr .12 to Apr. 20, 2021 E-meeting

TSG-RAN WG2 Meeting #114-e May 19 to May 27, 2021 E-meeting