**3GPP TSG-WG SA2 Meeting #152-e *S2-220xxxx***

**Elbonia, August 17 – 26, 2022**

Title: [DRAFT] LS on provisioning flying state information for the legacy device in UAM

Response to: -

Release: Release 18

Work Item: TEI18

Source: [LG Uplus to be] SA2

To: RAN3

Cc: RAN1, RAN2

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Attachments: S2-2206024, S2-2206026r01

**1. Overall Description:**

Korea government plans to initiate UAM (Urban Aerial Mobility) service from the second half of 2024, when is aligned with the commercial timeline of Rel-18. In order to support the government commercialization plan, one issue should be resolved that legacy UE (i.e. Rel-15/16/17 UE, and not a UAV UE) riding an aerial vehicle can take a data service similar as on the ground, where at least voice quality should be maintained as sufficient level.

In SA2 TEI18 discussion, Korean operators propose the flying state information from 5GC to Access Node as a candidate solution (S2-2206024, S2-2206026r01). In the solution, the flying state information could be delivered through UE context modification procedure, where the flying state information would consist of UE ID, vehicle on-boarding indicator, and GNSS information. By the flying state information, RAN node can distinguish a flying UE in an aerial vehicle from the normal ground UE and then, it could apply an appropriate radio access solutions such as CoMP operation, beam direction change, etc, for the flying UE.

Majority companies address this concept should be aligned with RAN WG since the flying state information is delivered to gNB. Hence, SA2 kindly asks the delivery of this flying state information to gNB is available by Rel-18 RAN work such as TEI18 WI.

**2. Actions:**

**To RAN3:**

**ACTION:** SA2 kindly asks RAN3 whether the delivery of the flying state information to gNB from 5GC is available by Rel-18 RAN work such as TEI 18 WI.

**3. Date of Next TSG SA WG2 Meetings:**

TSG-SA2 Meeting #153e Oct 10 – 14, 2022 Elbonia

TSG-SA2 Meeting #154 Nov 14 – 18, 2022 TBD