**3GPP TSG-WG SA2 Meeting #141E e-meeting *S2-2007334r03***

**Elbonia, October 12 – 23, 2020 (revision of S2-200xxxx)**

**Title: [DRAFT] LS on NR Aerial Features for Unmanned Aerial Vehicles**

**Response to:**

**Release: Rel-17**

**Work Item: FS\_ID\_UAS**

**Source: SA WG2**

**To: RAN WG**

**Cc: RAN WG2, RAN WG3**

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

**Attachments:** None

# 1 Overall description

SA2 has worked on a study item FS\_ID\_UAS on UAV (Unmanned Aerial Vehicles) which addresses system enablers for supporting Unmanned Aerial Systems Connectivity, Identification, and Tracking, including:

- a mechanism for Unmanned Aerial Vehicles (UAV) controller and UAV(s) identification and tracking in the 3GPP system;

- this includes how the 3GPP system can provide support for UAV to ground identification (e.g. to authorized third parties such as police devices);

- a mechanism to support UAV controller and UAV(s) authorization and authentication by UTM;

- a mechanism to handle unauthorized UAVs and revocation of authorization (e.g. lack of connectivity to carry the UAV command and control messages, denied registration, etc.) that enables the system to keep track of and control UAV(s).

SA2 has assumed the presence of the LTE aerial features added by RAN in previous releases and has discussed the need for support aerial features for NR in order to enable deployment of UAV over NR.

SA2 is of the opinion that without support for NR aerial features the 5GS support for UAVs in Rel-17 specifications will be incomplete. SA2 would like to raise awareness of this issue so that RAN can consider how to address this discrepancy.

# 2 Actions

**To RAN**

**ACTION: SA2 kindly asks RAN to keep the above into account, and consider how to address the discrepancy due to the current lack of Rel-17 framework in RAN for work on NR aerial features.**

# 3 Dates of next TSG SA WG2 meetings

https://www.3gpp.org/dynareport/Meetings-S2.htm?Itemid=443