**3GPP TSG-RAN WG2 Meeting #131** **draft R2-2507285**

**Bengaluru, India, 25th - 29thAugust 2025**

**Title:** LS on S&F mode indications to NAS

**Response to:** -

**Release:** Rel-19

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

**Source:** RAN2

**To:** CT1, SA2

**Cc:** -

**Contact person:** Siva Vakeesar

Siva.Vakeesar@sateliot.com

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

**Attachments:** -

1 Overall description

RAN2#131 had discussion on the following:

* It has been escalated that currently there is no coordination between AS and NAS in terms of selecting a suitable cell and as a result what is suitable from AS may turn out to be unsuitable to NAS. This will unnecessarily prolong cell (re)selection process while unnecessarily draining battery energy of IoT devices. **At the moment AS of a UE knows whether a detected cell operates in the S&F mode and a corresponding Satellite ID, while the NAS has the S&F monitoring List.**  For AS to select a suitable cell, related cell (re)selection behaviour needs to be specified in TS 36.304 while ensuring NAS passes the S&F monitoring list on to AS. If, on the other hand, for NAS to consider appropriate cell, AS needs to pass whether the detected cell operates in the S&F mode and a corresponding satellite ID. **RAN2#131 has already agreed to pass S&F mode indication of a detected cell on to upper layers and specify related UE behaviour in TS 36.331.** Hence, RAN2 believes that the only information that is required for NAS to assist in selecting a suitable cell is Satellite ID of a detected cell such that it would be compared against the contents of S&F monitoring list available at the NAS level. In this respect,
	1. **RAN2 asks whether the Satellite ID information broadcast in SIB should be sent to NAS so that NAS can help AS select a suitable cell on time without wasting energy of a UE.**
* Also, for the S&F monitoring list to be useful, there needs to be consistency in terms of Satellite ID being used in AS (e.g., SIB31/SIB32/SIB33) and NAS. This means that the same identifier has to be used at the AS and NAS levels when it refers to the same satellite. In this respect, RAN2#131 agreed on the following in principle:
1. **Stage-2 description in 36.300 to state that the satellite identifier values used at the AS-level (e.g., satellite identifiers included in SIB messages) and the NAS-level (e.g. satellite identifiers included in the S&F Monitoring list) are set consistently, i.e. with the same value, when they refer to the same satellite**

2 Actions

**ACTION:** RAN2 respectfully asks CT1 to take above information 1) and 2) into account, consider possible specification changes in NAS (if required) and provide answer for 1).

3 Dates of next TSG RAN WG2 meetings

TSG RAN WG2 Meeting #131bis 2025-10-13 ~ 2025-10-17 Prague, CZ

TSG RAN WG2 Meeting #132 2025-11-17 ~ 2025-11-21 Dallas, US