3GPP TSG-RAN WG1 Meeting #108-e R1-22xxxxx

e-Meeting, February 21st – March 3rd, 2022

**Title: DRAFT** ReplyLS on NTN-specific SIB

**Release:** Release 17

**Work Item:** NR\_NTN\_solutions

**Source:** Huawei (to be: RAN1)

**To:** RAN2

**Cc:**

**Contact Person:** Jussi Kahtava

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**Attachments:** None

**1. Overall Description:**

RAN1 thanks RAN2 for the liaison letter introducing the new NTN-specific SIB (SIBx) which is scheduled by SIB1. After reviewing the information RAN1 respectfully informs the following:

1. RAN1 has no concern with the list of nine parameters of serving cell information
2. RAN1 proposes two additional parameters (ntnPolarizationDL and ntnPolarizationUL) to be added into the parameters of serving cell information, which can be found in the following RAN1 agreements

RAN1#105-e meeting:

Agreement:

For explicit indication of polarization information for DL by the network, support indication in SIB

* FFS: Signaling details for indication in SIB

Agreement:

* Polarization information for UL may be indicated in SIB by the network
* UE assumes a same polarization for UL and DL, when the UL polarization information is absent.
* FFS: Signaling details for indication in SIB

RAN1#106-e meeting:

Agreement:

When polarization signalling is present in SIB

* SIB indicates DL and/or UL polarization information using respective polarization type parameters to indicate: RHCP or LHCP or linear
* FFS: whether polarization signalling is per SSB

With respect to the validity duration, RAN1 understanding is that it only applies to ephemeris and common TA parameters, and the other parameters follow the normal SI modification procedure.

RAN1 looked at the recent RAN2 agreement on system information update:

1. Update of ephemeris and common TA information does not affect the value tag and does not trigger SI modification procedure.
2. The ntnUlSyncValidityDuration applies to the whole SIBX. UE acquires the updated SIBX when the timer expires. FFS whether to also include it in the LS to RAN1. FFS if this applies only to Connected mode or to idle mode UE as well

From this agreement RAN1 has the understanding that there is no ambiguity for UEs with respect to applying the parameters other than ephemeris and common TA. These other parameters would apply from the start of the next modification period. RAN1 respectfully asks RAN2 to confirm this understanding.

**2. Actions:**

**To RAN2 group:**

**ACTION:** RAN1 respectfully requests RAN2 to take the above into account.

**3. Date of Next TSG-RAN WG1 Meetings:**

TSG-RAN WG1 Meeting #109-e 16 – 27 May 2022 Electronic Meeting

TSG-RAN WG1 Meeting #110 22 – 26 August 2022 Toulouse, France