**Remaining Open Issues in R-18 IoT-NTN**

**36.321 (MAC) CR**

#### HARQ enhancements

#### DL HARQ feedback and UL HARQ modes impact on drx-inactivity timer on more than one HARQ processes (considering RAN1’s LS-response)

#### RAN2 impact of RAN1’s working assumption of DCI overridden indication

#### For UL multiple TB scheduling in eMTC and NB-IoT, whether to allow different HARQ mode

#### Whether HARQ mode can be configured for PUR

#### UL HARQ mode configuration for UL SPS

#### GNSS operation enhancements

#### Whether and on which condition GNSS validity duration report MAC CE will trigger RACH

#### Exact priority of remaining GNSS measurement validity duration report MAC CE

#### Format of UL MAC CE for GNSS validity duration reporting and DL MAC CE for GNSS measurement

#### Use of DL LCID for GNSS Measurement Command and UL LCID for GNSS Validity Duration

#### Configuring GNSS timers using X and Y introduced by RAN1

#### UE behavior corresponding to (i) GNSS measurement start (ii) UL transmission allowed or not after the current GNSS validity duration expiry (iii) SR / RACH trigger upon GNSS measurement complete.

**36.331 (RRC) CR**

#### GNSS operation enhancements

* Condition for entering RRC Idle (i.e., GNSS invalid, considering duration X and Y)
* How to determine gap length and which spec (PHY/MAC/RRC) to capture
* The start of autonomous gap, e.g., “after X expires on top of GNSS validity duration expiry” or X is included within the GNSS validity duration
* Whether the reference to 5.5.x in RRC running CR needs to be removed

#### SIB

* Whether to add PCI list for each satellite assistance information
* Whether t-ServiceStartNeigh is per neighbor cell/per frequency/per satellite or the earliest time among all neighbor cells
* Whether the reacquisition of SIBxx during T318 is loosely specified (as in current running CR) or made optional and left as a note
* Whether to have separate reference locations for fixed/moving cells or add cell type indication
* Whether to have a separate t-Service-r18 (apart from the R17 IE) to differentiate between Connected mode UE measurements and Idle mode UE measurements initiation

#### Measurements/mobility

* Whether to allow joint configuration among time/location/RSRP-based measurements in RRC Idle/Connected, and if allowed, the intended UE behavior
* UE behavior on absence of the list of frequency/cells in new SIBxx.
* Absence of satellite ID in SIB 3 and SIB5. Whether satellite ID should be in SIB4
* Current signalling for eMTC Connected measurements initiation: 1) time-based in SIB3, 2) location-based in SIB31, 3) RSRP-based (legacy) in measObject. Whether to have optimization to avoid reacquisition of SIB3 for eMTC UEs

#### Discontinuous coverage

* Whether to capture a note in RRC about “UE may directly go to RRC\_IDLE after RLF is triggered, if there is not enough time for the UE to finish the procedure of RRC re-establishment due to the discontinuous coverage”
* Additional satellite information for UE
* Autonomous RRC Release

**36.304 (Idle mode) CR**

* Specification impact related to paging monitoring based on SA2 solution related to eDRX for DC.
* SIBXX content for cell reselection procedure (If any).
* Differentiation of reference location for earth fixed and earth moving case.  [For alignment of 36.304 and 36.331 with NR]