| **Issue number** | **Copied existing specification text.**  **Text should be unique, so that it can be easily found in the specification.**  **If needed, add also the new text.** | **Comment/description/**  **correction** | **Proposed resolution** | **Comments** |
| --- | --- | --- | --- | --- |
| 5 | Section 3.1 Definitions | Definitions for IOT NTN are missing  **Ephemeris:** A set of parameters that describe the movement of an NTN node over time.  **Geosynchronous Orbit:** Earth-centred orbit at approximately 35,786 kilometres in altitude above Earth’s surface and synchronised with Earth’s rotation. A geostationary orbit is a non-inclined geosynchronous orbit, i.e in the Earth’s equator plane.  **Non-geosynchronous orbit**: Earth-centred orbit with an orbital period that does not match Earth’s rotation on its axis. This includes Low Earth Orbit (LEO) and Medium Earth Orbit (MEO).  **Non-terrestrial networks:** An E-UTRAN consisting of eNBs, which provide non-terrestrial LTE access to UEs by means of an NTN payload embarked on a space-borne NTN vehicle and an NTN Gateway.  **Quasi-earth fixed cell:** An NTN cell fixed with respect to a certain geographic area on the earth during a certain time duration. This can be provided by beam(s) covering one geographic area for a finite period and a different geographic area during another period (e.g., the case of NGSO satellites generating steerable beams).  **Satellite:** a space-borne vehicle orbiting the Earth that carries the NTN payload. | PropAgree | [Rapporteur-v04]: Captured in Rapporteur CR v00 |
| 6 | Section 3.2 Abbreviations | Abbreviations for IOT NTN are missing  GSO Geosynchronous Orbit  NGSO Non-Geosynchronous Orbit | PropAgree | [Rapporteur-v04]: Captured in Rapporteur CR v00 |
| 7 | *Section 6.3.5 EphemerisOrbital Parameters*  ***anomaly***  Satellite orbital parameter: Mean anomaly M at epoch time, see NIMA TR 8350.2 [X]. Unit in radian.  Value range 0...2π by step of 2π \* 2-24. Actual value = IE value \* (π \* 2-23)  ***eccentricity***  Satellite orbital parameter: eccentricity e, see NIMA TR 8350.2 [X].  Value range 0...0.015 by step of 0.015 \* 2-19. Actual value = IE value \* (0.015 \* 2-19).  ***inclination***  Satellite orbital parameter: inclination i, see NIMA TR 8350.2 [X]. Unit in radian.  Value range -π/2…π/2 by step of π/2 \* 2-19. Actual value = IE value \* (π \* 2-20).  ***longitude***  Satellite orbital parameter: longitude of ascending node Ω, see NIMA TR 8350.2 [X]. Unit in radian.  Value range 0...2π by step of 2π \* 2-21. Actual value = IE value \* (π \* 2-20).  ***periapsis***  Satellite orbital parameter: argument of periapsis ω, see NIMA TR 8350.2 [X]. Unit in radian.  Value range 0...2π by step of 2π \* 2-24. Actual value = IE value \* (π \* 2-23).  ***semiMajorAxis***  Satellite orbital parameter: semi major axis α, see NIMA TR 8350.2 [X]. Unit in meter.  Value range 6500000….43000000 by step of 2-33. Actual value = 6500000 + IE value \* (43000000 – 6500000) \* 2-33 | Change ‘IE’ to ‘field’ | PropAgree | [Rapporteur-v04]: Captured in Rapporteur CR v00 |
| 8 | *Section 6.3.5 EphemerisStateVectors*  ***positionX, positionY, positionZ***  X, Y, Z coordinate of satellite position state vector in ECEF. Unit in meter.  Value range 43620761…43620760 by step of 1.3. Actual value = IE value \* 1.3.  ***velocityVX, velocityVY, velocityVZ***  X, Y, Z coordinate of satellite velocity state vector in ECEF. Unit in meter/second.  Value range -7864…7863 by step of 0.06. Actual value = IE value \* 0.06. | Change ‘IE’ to ‘field’ | PropAgree | [Rapporteur-v04]: Captured in Rapporteur CR v00 |
| 10 | ***ul-SyncValidationDuration***  Validity duration of the satellite ephemeris data and common TA parameters, i.e. maximum time during which the UE can apply the satellite ephemeris without acquiring new satellite ephemeris, see TS 36.213 [23]. Unit in s.  Value *s5* corresponds to 5 seconds, value *s10* corresponds to 10 seconds and so on. | “Unit in s” is not so clear, suggest to change to “Unit in seconds.” | PropAgree | [Rapporteur-v04]: Captured in Rapporteur CR v00 |
| 11 | offsetThresholdTA-r17 ENUMERATED {  ms05, ms1, ms2, ms3, ms4, ms5, ms6 ,ms7,  ms8, ms9, ms10, ms11, ms12, ms13, ms14, ms15}  OPTIONAL, -- Need OR  ***offsetThresholdTA***  Offset for TA reporting as specified in TS 36.321 [6]. | Value of ms05 is not clear and there is no explanation on the values in the field description.  offsetThresholdTA-r17 ENUMERATED {  ms0dot5, ms1, ms2, ms3, ms4, ms5, ms6 ,ms7,  ms8, ms9, ms10, ms11, ms12, ms13, ms14, ms15}  OPTIONAL, -- Need OR  ***offsetThresholdTA***  Offset for TA reporting as specified in TS 36.321 [6]. Value *ms0dot5* corresponds to 0.5 millisecond, value *ms1* corresponds to 1 millisecond and so on. | PropAgree | [Rapporteur-v04]: Captured in Rapporteur CR v00 |
| 12 | |  | | --- | | ***EphemerisStateVectors* field descriptions** | | ***positionX, positionY, positionZ***  X, Y, Z coordinate of satellite position state vector in ECEF. Unit in meter.  Value range 43620761…43620760 by step of 1.3. Actual value = IE value \* 1.3. | | The negative sign is missed from the lower point of the value range of *positionX, positionY, positionZ*  “43620761” should be “-43620761” | PropAgree | [Rapporteur-v04]: Captured in Rapporteur CR v00 |