**[100b-e-NR-5G\_V2X\_NRSL-SYNC-04]**

**Email discussion/approval related to sync timing**

[100b-e-NR-5G\_V2X\_NRSL-SYNC-04] Email discussion/approval related to

* Slot number/sidelink timing derived from GNSS
* Resource sets for S-SSB transmission
* Timing determination of S-SSB

(a,k.a. issues 5,6,7) by 4/24, with potential TPs by 4/29 (CATT, Teng)

**Issue 5 Slot number/sidelink timing derived from GNSS**

***Proposal 7: When UE selects GNSS as the synchronization reference and offsetDFN is provided, the following TP is supported.***

**------------------------------------------------------ Start of Draft TP of 38.331--------------------------------------------------**

**5.8.12 DFN derivation form GNSS**

When the UE selects GNSS as the synchronization reference source, the DFN used for NR sidelink communication is derived from the current UTC time, by the following formulae:

*DFN*= Floor (0.1\*0.001\* (*Tcurrent* – *Tref – offsetDFN*)) mod 1024

*SubframeNumber*= Floor (0.001\*(*Tcurrent* –*Tref – offsetDFN)*) mod 10

*SlotNumber=* Floor (0.001\*(*Tcurrent – Tref – OffsetDFN*)\*2μ) mod 2μ

Where:

***Tcurrent*** is the current UTC time that obtained from GNSS. This value is expressed in ~~milliseconds~~ microseconds;

***Tref*** is the reference UTC time 00:00:00 on Gregorian calendar date 1 January, 1900 (midnight between Thursday, December 31, 1899 and Friday, January 1, 1900). This value is expressed in ~~milliseconds~~ microseconds;

***OffsetDFN*** is the value *sl-OffsetDFN* if configured, otherwise it is zero. This value is expressed in ~~milliseconds~~ microseconds;

μ=0/1/2/3 corresponding to the 15/30/60/120 khz SCS for SL respectively.

**-------------------------------------------------------- End of Draft TP of 38.331-------------------------------------------------**

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**Issue 7 Resource sets for S-SSB transmission**

***Proposal 9: The number of synchronization resource set is same as LTE-V2X. How to use the sync resource set follows the same mechanism as LTE-V2X.***

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**Issue 8 Timing determination of S-SSB**

Description: A UE should be able to determine the frame timing, slot timing, and symbol timing from a received S-SSB, and the specification reflecting this aspect is still not complete.

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