**3GPP TSG RAN WG1 Meeting #106-e R1-210xxxx**

e-Meeting, August 16-27, 2021

**Agenda Item: 7.2.2**

**Source: Moderator (Nokia)**

**Title: Feature lead summary#1 on NR-U Channel Access Procedures**

**Document for: Discussion and Decision**

# **Introduction**

The corrections proposed for NR-U Channel Access Procedures at RAN1#106-e are summarized in Section 2:

# **Preparation phase**

The correction proposed in TDocs [1-7] are summarized below.

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| **TDoc** | **CR summary** | **FL recommendation** |
| [**R1-2106441**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2106441.zip) | 1. **Change of COT initialization according to MIIT consultation in 37.213**   Add an optional value of duration *Tf* = 18*us* in section 4.1.1 and section 4.2.1.1 to meet the minimum idle channel assessment of at least 27*us* in China for LBE device.  Add an optional value of sensing duration *T*mc =27*us* in section 4.1.6.2 and section 4.2.1.0.4 to meet the minimum idle channel assessment of at least 27*us* in China for LBE device.  The channel sensing requirement for channel is changed from “Type 2 channel access ” to at least sensing interval *T*mc in section 4.2.1.0.4, where *T*mc = 25us by default or 27us in China for LBE device.  Add an optional vaule of sensing slot duration T*sl* = 18us in section 4.3 to meet the minimum idle channel assessment of at least 18*us* in China for FBE device.  “9us” is deleted in Table 7.3.1.1.1-4AinTS 38.212to align the changes in section 4.3 in TS 37.213   1. **Alignment of the unit of cg-COT-SharingOffset-r16 in 38.331 and 37.213**   In Section 4.1.3, “DL transmission X= *cg-COT-SharingOffset-r16* “->“DL transmission X= *cg-COT-SharingOffset-r16\*14”*   1. **Editorial changes to 37.213**   In Section 4.2.1.0.3, "DL transmission" -> "DL transmissions"  In Section 4.2.1.2.1, " one  slot sensing slot" -> "one sensing slot"  In Section 4.2.2.2, “not been for”-> “not been used for “  In Section 4.3 “assess”->”access”, “Clause”->”clause” | 1) Discuss in the meeting together with \*  2) Straightforward correction  3) Straightforward corrections |
| [**R1-2106507**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2106507.zip) | **Discussion related to the issue 1) in R1-2106441** | \* |
| [**R1-2106510**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2106510.zip) | **Change of COT initialization according to MIIT consultation in 38.212**  “9us” is deleted in Table 7.3.1.1.1-4Ato align the changes in section 4.3 in TS37.213 | \* |
| [**R1-2107010**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2107010.zip) | **Editorial correction on the channel access for type-2 random access**  Remove the duplicated sentence “as defined in Table 7.3.1.1.1-4 in TS 38.212” in Clause 8.2A. | Straightforward correction (also included in R1-2108051) |
| [**R1-2107236**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2107236.zip) | **Definition of “a channel” in Section 4.0 of 37.213**  To make correspondence between the ‘channel’ and the 20MHz band defined in RAN4 by adding “corresponding to the sub-band defined in [TS 38.101-1]. 4.0 General Unless otherwise noted, the definitions below are applicable for the following terminologies used in this specification:  - A channel, corresponding to a sub-band defined in [TS 38.101-1], refers to a carrier or a part of a carrier consisting of a contiguous set of resource blocks (RBs) on which a channel access procedure is performed in shared spectrum. | Discuss in the meeting |
| [**R1-2108049**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2108049.zip) | **Correction on channel access type and CP extension indication**   1. Removed the if condition so that “otherwise” is correctly against operation with shared spectrum channel access. 2. Add” if ChannelAccessMode-r16 = "dynamic" is provided” to title of Table 7.3.1.1.1-4. 3. Correct typo of Table 7.3.1.1.1.4A to Table 7.3.1.1.1-4A. | Straightforward correction |
| [**R1-2108051**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2108051.zip) | **Correction on ChannelAccess-CPext field in RAR**  Remove the duplicated sentence “as defined in Table 7.3.1.1.1-4 in TS 38.212” in Clauses 8.2 and 8.2A. | Straightforward correction (partial overlap with (R1-2107010) |

# **References**

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| 1 | [**R1-2106441**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2106441.zip) | Changes of channel access procedure in TS 37.213 | Huawei, HiSilicon |
| 2 | [**R1-2106507**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2106507.zip) | Discussion on the impact of MIIT consultation to channel access procedure | Huawei, HiSilicon |
| 3 | [**R1-2106510**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2106510.zip) | Changes of channel access procedure according to MIIT regulation in TS 38.212 | Huawei, HiSilicon |
| 4 | [**R1-2107010**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2107010.zip) | Editorial correction on the channel access for type-2 random access | ZTE, Sanechips |
| 5 | [**R1-2107236**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2107236.zip) | Draft CR on LBT bandwidth | OPPO |
| 6 | [**R1-2108049**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2108049.zip) | Correction on channel access type and CP extension indictaion | ASUSTeK |
| 7 | [**R1-2108051**](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_106-e/Docs/R1-2108051.zip) | Correction on ChannelAccess-CPext field in RAR | ASUSTeK |