**3GPP TSG-RAN WG4 Meeting #111 *R4-240xxxx***

**Fukuoka, Japan, May – 24 May 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.858** | **CR** |  | **rev** |  | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Adding a summary sentence in sub-clause 12.2.1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Charter Communications Inc. | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_duplex\_evo-Core | | | | |  | ***Date:*** | | | 2024-05-20 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-18 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In paragrapgh 12.2.1 North America, we propose to add a summary sentence, “Therefore, it is expected that new SBFD operators in AMBIT band or in C-Band will seek a fair coexistence with legacy TDD operating in CBRS band.” | | | | | | | | |
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| ***Summary of change:*** | | Adding a statement, “Therefore, it is expected that new SBFD operators in AMBIT band or in C-Band will seek a fair coexistence with legacy TDD operating in CBRS band.” | | | | | | | | |
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| ***Consequences if not approved:*** | | CBRS band will be interfered by SBFD operation in AMBIT and C-Band . | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 12.2.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  |  | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  |  | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  |  | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

### *<< Start of changes >>*

### 12.2.1 North America

In the United States, TDD network operators operating in proximal geographic areas in adjacent bands are encouraged and sometimes required to synchronize their networks and coordinate their TDD configurations to avoid mutual interference. Unsynchronized operation is allowed, more stringent regulation parameters have not been specified for such case but, again, operators would have to work their differences to avoid any claim to Federal Communications Commission (FCC) and Innovation, Science and Economic Development Canada (ISED). FCC requires 3450 – 3550 MHz service (AMBIT band) licensees to negotiate with 3550 – 3700 MHz (CBRS band) licensees to enable TDD synchronization across these services [55]-[56]. Notice that the term TDD synchronization refers to aligning TDD uplink and downlink slots. FCC recognizes the potential for harmful interference from a high-power AMBIT band downlink transmission to a CBRS band uplink. Licensees in the 3700 – 3980 MHz band (C-Band) are encouraged to explore synchronization of TDD operations to minimize interference between adjacent band services [57].

The shared band 48/n48 (3550 – 3700 MHz), also known as the CBRS band, requires spectrum sharing among three tiers of users controlled by one or multiple spectrum access systems (SASs) [58]. Coexistence, including TDD synchronization, among cellular users within the band is supported by OnGo Alliance coexistence requirements set forth in OnGo-TS-2001 [59].

The ISED Canada is reallocating portions of the 3500 to 4200 MHz band as TDD bands for cellular use. The ISED is considering TDD synchronization as a means of facilitating sharing and co-existence with adjacent band services [60].

Currently there are no specific regulatory requirements for SBFD operation in North America. Some SBFD operations result in similar interference scenarios as found in unsynchronized TDD systems. The potential coexistence risk introduced by SBFD may break the standard body agreement on TDD synchronization by OnGo Alliance coexistence requirements set forth in OnGo-TS-2001 [59]. Therefore, it is expected that new SBFD operators in AMBIT band or in C-Band will seek a fair coexistence with legacy TDD operating in CBRS band.

### *<< End of changes >>*