**3GPP TSG-RAN WG4 Meeting #94-e *R4-2001308\_rev1***

**Electronic meeting, 24 February – 6 March 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.101-1** | **CR** | **253** | **rev** | **1** | **Current version:** | **15.8.2** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Introduction of the Annex modifiedMPR-Behaviour into the NR SA specification | | | | | | | | | |
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| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Core | | | | |  | ***Date:*** | | | 2020-02-20 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-15 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
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| ***Reason for change:*** | | Introduce the Annex on ModifiedMPR-behaviour into this NR SA specification TS 38.101-1 (moved from the NSA specification TS 38.101-3). The *modifiedMPRbehavior* is a field of the NR band capability in the supported NR band list that is part of the *UE-NR-Capability* IE. Hence this field is intended for MPR modification in an NR band, but can also be used for the said band if part of an EN-DC band combination. The table of the NR band-specific modified MPR behaviour should therefore be moved from 38.101-3 to 38.101-1.  The *modifiedMPRbehavior* bitmap can also be used for indicating support of new NS values for an NR band. | | | | | | | | |
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| ***Summary of change:*** | | Annex G: the Annex on ModifiedMPR-behaviour moved from TS 38.101-3 v15.7.0 and introduced here. The description of its applicability is modified to include changes that are NR band-specific and changes for an NR band part of an EN-DC configuration.  Text is added in the scope of the ModifiedMPR-behaviour bitmap to indicate UE support of additional NS values for existing bands. If the UE support of an NS value is mandatory for UE compliant to Rel-X, a Rel-X UE shall include the bitmap and set the corresponding bit to 1.  Each bit of the bitmap are conditioned on support of particular funtionality (e.g. DC\_(n)41AA UE EN-DC). Only UEs supporting this example band combination can set the bit to 1. Absence of the bitmap means that the UE does not support any of the requirements indicated by the bits.  In this version of the specification the UE may set the bits to ‘one’ for Band n41 and Band n71, a UE compliant with Rel-16 shall set them to 1. Likewise, a UE supporting a additional NS value for an existing NR band includes the bitmap with the corresponding bit set to 1. | | | | | | | | |
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| ***Consequences if not approved:*** | | The Annex ModifiedMPR-behaviour is not part of the relevant specification. If an MPR behaviour is modified for an NR band, this modification has to be made in the *NSA* specification.  Indication of new NS values supported is not possible. | | | | | | | | |
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| ***Clauses affected:*** | | Annex G | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
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| ***Other comments:*** | | The TS 38.101-3 CR 203 removes the Annex on ModifiedMPR-behaviour from TS 38.101-3. | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

*< start of changes >*

Annex G (normative): ModifiedMPR-Behavior

# G/H.1 Indication of modified MPR behavior

This annex contains the definitions of the bits in the field *modifiedMPR-Behavior* indicated per supported NR band in the IE *RF-Parameters* [7] by a UE supporting an MPR or A-MPR modified in a given version of this specification. A modified MPR or A-MPR behaviour can apply to a supported NR band in stand-alone operation (including CA and NN-DC operation) or in non-standalone operation with the said NR band as part of an EN-DC or NE-DC band combination. A modified A-MPR behaviour for a supported NR band can also indicate support of an NS value and an associated allowed A-MPR specified in a given version of this specification.

NOTE 1: In the present release, the *modifiedMPR-Behavior* is indicated [7] by an 8-bit bitmap per supported NR band.

Table G.1-1: Definitions of the bits in the field *modifiedMPRbehavior*

|  |  |  |  |
| --- | --- | --- | --- |
| NR Band | Index of field  (bit number) | Definition  (description of the supported functionality if indicator set to one) | Notes |
| n41 | 0 (leftmost bit) | - EN-DC contiguous intraband MPR as defined in clause 6.2B.2.1 of 38.101-3 v15.5.0 | - This bit must only be set to 1 by a UE supporting DC\_(n)41AA UE EN-DC |
| 1 | - EN-DC non-contiguous intraband MPR as defined in clause 6.2B.2.2 of 38.101-3 v15.5.0 | - This bit must only be set to 1 by a UE supporting DC\_41A\_n41A EN-DC |
| n71 | 0 (leftmost bit) | - EN-DC contiguous intraband MPR as defined in clause 6.2B.2.1 of 38.101-3 v15.5.0 | - This bit must only be set to 1 by a UE supporting DC\_(n)71AA UE EN-DC |

Annex H (informative): Void

*< end of changes >*