**3GPP TSG RAN WG1 #100bis R1-200xxxx**

**e-Meeting, April 20th – 30th, 2020**

**Source: Ad-Hoc Chair (AT&T)**

**Title: Chairman's Notes of AI 7.2.11.9**

**Agenda Item:** **7.2.11.9**

**Document for:** **Endorsement**



#### 7.2.11.9 UE features for NR mobility enhancements

[R1-2001870](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2001870.zip) Summary on UE features for NR mobility enhancements Moderator (AT&T)

[100b-e-NR-UEFeatures-Mobility-02] Email discussion/approval proposal 2 ~~and proposal 5~~ (high priority item) in [R1-2001870](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2001870.zip) by 4/24 – Ralf (ATT)

**Proposed Agreement:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21-2 | UE power sharing for DAPS HO | ALT 1) Indicates support of dynamic UL power sharing during DAPS-HO operation.    ALT 2) Indicates support of UL power sharing mode during DAPS-HO operation. | DAPS  (Note: RAN2 feature) | Yes | N/A | ALT 1) The UE is only able to perform semi-static power allocation for source and target cell, or to drop the transmission to the source.    ALT 2) The UE is only able to to drop the transmission to the source. | Per BC | No | N/A | N/A |  | ALT 1) Optional with capability signalling      ALT 2) Optional with capability signalling. UE can report any combination of {Semi-static-mode1, Semi-static-mode2,Dynamic1, Dynamic2} |

**Proposal:**

* Regarding UL power control for DAPS-HO, use the same capability structure and corresponding constraints of MRDC, while separate capabilities for DAPS would be defined.
  + There will be a total of three FGs, e.g., in addition to 21-2 two more components 21-2a and 21-b are introduced
  + All details are FFS

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21-2 | Basic UE power sharing for DAPS HO | Support of semi-static power sharing mode1 | DAPS  (Note: RAN2 feature) | Yes | N/A | The UE is only able to to drop the transmission to the source. | Per BC | No | N/A | N/A |  | Optional with capability signalling |
| 21-2a | Semi-static UL power sharing mode 2 for DAPS HO | Support of semi-static power sharing mode 2 | 21-2 | Yes | N/A |  | Per BC | No | N/A | N/A |  | Optional with capability signalling |
| 21-2b | Dynamic UL power sharing for DAPS HO | Support of dynamic power sharing  1) Supported scenario for dynamic power sharing  2)T\_offset | 21-2 | Yes | N/A |  | Per BC | No | N/A | N/A |  | Optional with capability signalling  1) {Synch DAPS HO only, Sync and Async DAPS HO}  2) {short, long} |

[100b-e-NR-UEFeatures-Mobility-01] Email discussion/approval proposal 1 (high priority item) in [R1-2001870](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2001870.zip) by 4/24 – Ralf (ATT)

* Note: “FL Proposal 5“ in R1-2001870 can be discussed within the scope of this email discussion

**Agreement: Replace the existing FG 21-1 with the following two new FGs 21-1a and 21-1b**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21-1a | Intra-frequency DAPS HO | Support of  intra-frequency DAPS-HO    1) Support of simultaneous DL reception of PDCCH and PDSCH from source and target cell in DAPS-HO    2) Support of PDCCH blind decoding capability in the first MCG and second MCG. | DAPS  (Note: RAN2 feature) | Yes | N/A | The network cannot configure UE with DAPS HO | Per Band | No | N/A | N/A |  | [Optional with capability signalling] |
| 21-1b | Inter-frequency DAPS HO | Support of  inter-frequency DAPS-HO    1) Support of simultaneous DL reception of PDCCH and PDSCH from source and target cell in DAPS-HO    2) Support of PDCCH blind decoding capability in the first MCG and second MCG. | DAPS  (Note: RAN2 feature) | Yes | N/A | The network cannot configure UE with DAPS HO | Per BC | No | N/A | N/A |  | [Optional with capability signalling] |

* Components, components candidate values and other details are FFS

[100b-e-NR-UEFeatures-Mobility-03] Email discussion/approval proposal 3 (high priority item) in [R1-2001870](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2001870.zip) by 4/24 – Ralf (ATT)

**FL Proposal 3 (21-2a):**

**Alt. 1: Delete FG 12-2a**

**Alt. 2:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ~~21-2a~~ 21-4 | UL transmission cancellation | Indicates support of cancelling UL transmission to the source cell | DAPS  (Note: RAN2 feature) | Yes | N/A | UL transmission cancellation is up to UE implementation | Per BC for inter-frequency case,  Per Band for intra-frequency case | No | Yes | N/A |  | Optional with capability signalling |

What is the situation in the MobEnh AI and how does it impact this discussion esp. in light of Huawei’s comment “Whether UE can cancel the uplink transmission primarily depend on the timeline defined. If the timeline is loose enough, there is no need to define UE capability.”

[100b-e-NR-UEFeatures-Mobility-04] Email discussion/approval proposal 4 (high priority item) in [R1-2001870](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2001870.zip) by 4/24 – Ralf (ATT)

**Agreement: Delete FG 12-3 from the Rel. 16 NR UE feature list**

[R1-2001633](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2001633.zip) Discussion on UE feature for NR mobility enhancements ZTE

[R1-2001832](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2001832.zip) Views on Rel-16 UE features for NR mobility enhancements MediaTek Inc.

[R1-2002023](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2002023.zip) UE feature for NR Mobility Enhancement Intel Corporation

[R1-2002157](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2002157.zip) UE features for NR mobility enhancement Samsung

[R1-2002354](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2002354.zip) Views on NR mobility ehancement UE feature Apple

[R1-2002478](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2002478.zip) On UE features for NR Mobility Enhancements Nokia, Nokia Shanghai Bell

[R1-2002495](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2002495.zip) Mobility UE features Ericsson

[R1-2002570](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2002570.zip) Discussion on Mobility Enhancements UE features Qualcomm Incorporated

[R1-2002594](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_100b\Docs\R1-2002594.zip) Rel-16 UE features for mobility enhancement Huawei, HiSilicon