**3GPP TSG RAN WG1 Meeting #92 R1-1801322**

**Athens, Greece, February 26th – March 2nd, 2018**

**3GPP TSG-RAN2 NR AH#0118 R2-1801658**

Vancouver, Canada, Jan 22-26, 2018

**Title:** LS on NR Idle Mode Measurements

**Release:** Rel-15

**Work Item:** NR\_newRAT-Core

**Source:** RAN2

**To:** RAN4, RAN1

**Contact Person:**

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# 1 Overall description

RAN2 has discussed cell quality measurements for NR Idle/Inactive mobility and agreed on the following:

1. *Cell selection criterion (S criterion) is applied to cell selection and reselection.*
2. *Both RSRP and RSRQ are considered in S criterion.*
3. *From RAN2 perspective compensation parameter(s) is needed to S criterion.*
4. *Cell reselection for intra frequency case and equal priority inter frequency case, criterion (R criterion) is applied to cell reselection.*
5. *Qhyst and Qoffset (including both cell specific and carrier specific one) can be applied to R criterion*
6. *RSRP is applied to R criterion*

The compensation in Agreement #3 is in reference to the following E-UTRAN parameter in 36.304:

|  |  |
| --- | --- |
| Pcompensation | If the UE supports the *additionalPmax* in the *NS-PmaxList*, if present, in SIB1, SIB3 and SIB5:  max(PEMAX1 –PPowerClass, 0) – (min(PEMAX2, PPowerClass) – min(PEMAX1, PPowerClass)) (dB);  else:  max(PEMAX1 –PPowerClass, 0) (dB) |

RAN2 would like to ask RAN4 whether a Pcompensation type parameter(s) is also needed in S-criteria for NR as in LTE and if there are any additional use cases and how it is applicable, e.g. for SUL.

Regarding RSRP and RSRQ measurements stated in Agreement 2, RAN2 would like to ask RAN1 and RAN4 if there have been any requirements introduced for the derivation of cell quality measurements in NR Idle/Inactive mode (e.g. the minimum number of samples to be considered).

In addition, RAN2 is considering to adopt a PLMN selection scheme for NR similar to LTE which has the following “high quality criterion” for a PLMN as captured in 36.304:

*If the UE can read one or several PLMN identities in the strongest cell, each found PLMN (see the PLMN reading in [3]) shall be reported to the NAS as a high quality PLMN (but without the RSRP value), provided that the following high quality criterion is fulfilled:*

*1. For an E-UTRAN and NB-IoT cell, the measured RSRP value shall be greater than or equal to -110 dBm.*

RAN2 would like to ask RAN1 and RAN4 what an appropriate minimum value for NR would be to substitute for the   
“-110dBm” used in E-UTRAN for PLMN selection criteria.

# 2 Actions

**RAN1/RAN4:**

RAN2 would like to ask RAN1 and RAN4 if there have been any requirements introduced for the derivation of cell quality measurements in NR Idle/Inactive mode (e.g. the minimum number of samples to be considered).

RAN2 would like to ask RAN1 and RAN4 what an appropriate minimum value for NR would be to substitute for the   
“-110dBm” used in E-UTRAN for PLMN selection criteria.

**RAN4:**

RAN2 would like to ask RAN4 whether a Pcompensation type parameter(s) is also needed in S-criteria for NR as in LTE and if there are any additional use cases and how it is applicable, e.g. for SUL.

# 3 Date of Next RAN2 Meetings:

RAN2#101 26th February – 2nd March 2018 Athens, Greece

RAN2#101-Bis 16th – 20th April 2018 Sanya, China