**3GPP TSG-RAN3 #108-e R3-204068**

1st June – 12th June 2020

Online

Agenda Item: 09.3.8.1

Source: Ericsson

Title: SoD on Measurement gap deactivation over F1AP.

Document for: Discussion, Decision

# Introduction

In the previous meeting the issue of Measurement Gap deactivation was brought up in [1] and [2]. In this contribution we capture offline discussions on this issue as part of the following CB:

**CB: # 90\_MeasGapDeactivation**

**- need to consider when measgap does not include measgaptoaddlist IE**

**- further check details**

(E/// - moderator)

rev in [R3-204066](file:///C:\Users\eangcen\AppData\Local\Temp\Temp2_R3-203383.zip\Inbox\R3-204066.zip)

3385 rev in [R3-204067](file:///C:\Users\eangcen\AppData\Local\Temp\Temp2_R3-203383.zip\Inbox\R3-204067.zip)

Summary of offline disc [R3-204068](file:///C:\Users\eangcen\AppData\Local\Temp\Temp2_R3-203383.zip\Inbox\R3-204068.zip)

# For the Chairman’s Notes

Following agreements were proposed on the first round of offline discussion:

# Discussion

The use case we would like to analyse is the following. The gNB-DU has some specific measurement gaps configured. At some point though gNB-CU realizes some of those measurement gaps are no longer needed and wants them to be deactivated. The question we are trying to answer is how the gNB-CU informs the gNB-DU about its decision.

In TS 38.473 it can be seen that the IE used by the gNB-CU to inform gNB-DU of measurement gaps to be configured is the *MeasConfig* IE included in the *CU to DU RRC Information* IE.

*MeasConfig* IE consists of two types of information, the *MeasObjectToAddModList* IE, which specifies the list of frequencies for which the gNB-CU requests the gNB-DU to generate gaps and *measObjectToRemoveList* IE, which specifies a list of Measurement Object IDs for which measurement gaps shall be deactivated. However, TS38.473 does not provide guidance about which IE to use to deactivate gaps.

The proposal in [3] is to agree to a solution in line with the principles below

• gNB-CU indicates to gNB-DU that measurements gaps are to be activated or deactivated via including *MeasConfig* IE in *CU to DU RRC Information* IE

• Measurement gaps for frequencies included in *MeasObjectToAddModList* IE are to be activated

• Measurement gaps for frequencies previously configured at gNB-DU, if not included in *MeasObjectToAddModList* IE, are to be deactivated

• If gNB-CU includes *MeasConfig* IE, but it does not contain *MeasObjectToAddModList* IE, this is understood by the gNB-DU as a request to deactivate all the existing configured measurement gaps

• If the gNB-DU receives *CU to DU RRC Information* IE without the *MeasConfig* IE, it does not apply any change to the existing configured measurement gaps

The solution above allows a gNB-DU to be state-less with respect to measurement gaps. Namely, a gNB-DU does not need to store the frequency and cell for which a gap was assigned. Instead,, the gNB-DU adds/removes/modifies gaps purely on the basis of the information in *MeasObjectToAddModList* IE.

**Companies are invited to express their view on the problem and solutions above**

**Is the problem acknowledged:**

|  |  |  |
| --- | --- | --- |
| Company | ACK/NACK | Comments |
| Ericsson | ACK |  |
| Nokia | ACK |  |

**Comments on solution:**

|  |  |
| --- | --- |
| Company | Comments |
| Ericsson | A clarification is needed in terms of how the gNB-CU signals deactivation of measurement gaps. The simplest was to do so is to allow for state-less measurement gap configuration at the gNB-DU as proposed in [1],[2],[3]. |
| Nokia | Change is needed in our view. The item which we believe needs update in the CR in [3], is in order to account the following condition  “• If gNB-CU includes *MeasConfig* IE, but it does not contain *MeasObjectToAddModList* IE, this is understood by the gNB-DU as a request to deactivate all the existing configured measurement gaps” |

# Conclusion

# References

[1] R3-201909, “Discussion on Measurement Gap Deactivation”, Nokia , Nokia Shanghai Bell

[2] R3-201912, “Measurement Gap Deactivation”, Nokia , Nokia Shanghai Bell

[3] R3-203384, Measurement gap deactivation over F1AP CR 38.473 (Ericsson)