3GPP TSG-RAN WG3 #114-e R3-215842  
Online, 1-11 November 2021

Agenda Item: 31.2.6

Source: Ericsson (moderator)

Title: CB: # 39\_CSI-RSConfigExchange

Document for: Discussion

# Introduction

**CB: # 39\_CSI-RSConfigExchange**

**- RAN3 to discuss on a solution for adding the CSI-RS request indication. An example of specification implementation is to add an Additional Measurement Timing Configuration List Request Indicator IE in X2AP and XnAP Cell and Capacity Assistance Information IEs? Ericsson, China Telecom, ZTE**

**- Initiate node indicates the list of NR-CGIs for which the CSI-RS configuration information are required in X2/Xn SETUP REQUEST, X2/Xn CONFIGURATION UPDATE messages? Huawei**

**- Provide Stage 3 CRs, if agreeable**

(E/// - moderator)

# To the chair’s notes (Draft)

**R3-21XXXX, R3-21XXXX are endorsed**

# Discussion on RAN1 LS and progress

In this TEI discussion, following the previous discussion on CSI-RS information exchange in [1], it is proposed to add an indicator in the request message from the source node for CSI-RS information.

Two proposals have been presented for this purpose for Xn and X2:

* **Option 1 [2]:** 
  + Include an *Additional Measurement Timing Configuration List Request Indicator* IE in *Cell and Capacity Assistance Information NR* IE [3] with criticality "C"
* **Option 2 [3]:**
  + Initiating node indicates the list of NR-CGIs for which the CSI-RS configuration information are required in X2/Xn SETUP REQUEST, X2/Xn CONFIGURATION UPDATE messages

**Do companies have any preference on the above options?**

|  |  |
| --- | --- |
| **Company** | **Comment** |
| Ericsson | Option 1 is lacking the support in NG-RAN NODE CONFIGURATION UPDATE message, since the *Cell and Capacity Assistance Information NR* IE (9.2.2.41) is not included in that message. Maybe a simple way is to include 9.2.2.41 in NG-RAN NODE CONFIGURATION UPDATE message. In that case it will be possible to re-use existing IEs. |
| Huawei | Actually, we are not against option 1. The main issue of option 1 is that it links this function to the cell and capacity assistance information function which is optional.  In case the two nodes does not have X2/XN message size issue, the *Cell and Capacity Assistance Information NR* IE will be not present which leads to our CSI-RS request function not working. |
| ZTE | Prefer to include 9.2.2.41 in NG-RAN NODE CONFIGURATION UPDATE message |
| China Telecom | Agree with Ericsson and ZTE. Prefer to include 9.2.2.41 in NG-RAN NODE CONFIGURATION UPDATE message. |
| Nokia | Prefer option 2. In line with HW we think it is better to decouple this new functionality and the cell and capacity assistance information function. So we prefer the overall approach proposed in 5036, but propose to include the request info in the gNB-part of the messages. Also, due to limited extendability of current IEs, we also propose to make an extendable IE which could cover other similar cases in the future. In order to better show the details we have uploaded a draft TP - please check (draft R3-21xxxx Xn ReqInd.docx).  For option 1 (5414), we believe the new IE can't be conditional, or if it is conditional we would need e.g. an additional codepoint "ignore" to be included when 9.2.2.41 is used according to its original purpose. And we would also need to add 9.2.2.41 to Configuration Update, which comes in conflict with the existing *Cell Assistance Information NR* IE (9.2.2.17). So all in all we don't believe option 1 is the best way forward. |

# Conclusion (draft)

# References

1. R3-214274, CB: # 118\_CSIRSConifg, Ericsson (moderator)
2. R3-215413, Addition of the CSI-RS request from the source node (Ericsson, China Telecom, ZTE, Nokia, Nokia Shanghai Bell)
3. R3-215035, Discussion on CSI-RS configuration request (Huawei, China Telecom, China Unicom)