**3GPP TSG-RAN WG3 #129 draft-R3-255770**

**Bengaluru, India, 25th - 29th Aug, 2025**

**Agenda Item: 17.2**

**Source: Ericsson (Moderator)**

**Title: Summary of offline discussions: Rel-19 Network Energy Saving**

**Document for: Discussion and Approval**

# Introduction

This document captures the breakoff discussion summary for Rel-19 Network Energy Saving.

# For Online discussion

2.1 Objective 1: Support on-demand SSB Scell

**Agreements: it is agreed that the below proposals are not needed:**

* Over Xn, exchange OD-SSB state and OD-SSB request
* The DU should inform the CU when the OD-SSB is being broadcast
* CU may request DU to send OD-SSB to obtain L3 measurements?

**Conclusion: there is no consensus for the below items.**

* Related to if to reuse Rel-18 Cells Allowed … List IE or a create new List for CU to indicate DU a list of cells for OD-SIB1 or do nothing:

**To be discussed online:**

* A new servingCellMO IE for OD-SSB should be introduced to the SCell To Be Setup List IE?

2.2 Objective 2: Support on-demand SIB1 for UEs

**Agreement 1: For the class 1 procedures:**

Change the procedure and message name from “UL WUS Configuration Provision” to “OD-SIB1 Configuration Provision”

Change from NR CGI at NG-RAN node1 (Naming FFS) to NES Cell ID

Change from NR CGI at NG-RAN node2 (Naming FFS) to Cell A ID

Please all TP using the name above for the procedure, messages

**Agreement 2: For the class 2 procedures:**

UL WUS CONFIGURATION PROVISION STATUS UPDATE => OD-SIB1 Configuration Provision Status Update

Please all TP using the name above for the procedure, messages

**Agreements 3: the structure of the class 2 message**

In the class 2 message “OD-SIB1 Configuration Provision Status Update”, it is agreed to include “NES Cell ID” as Mandatory presented.

This is a comment if we use “NES Cell” or “NES Cell ID”. After Moderator checking, in XnAP, we often use “xyz ID” as IE name.

Cell A ID is optionally presented.

**Agreement 4: to capture in the class 1 procedure that:**

If *Cell A ID* IE is included in the provision request, then Cell A gNB shall, if support, broadcast the OD-SIB1 configuration in the indicated Cell A.

**Agreements 5: to capture in the Class 2 procedure text:**

If *Cell A ID* IE is present, this message indicates that the indicated Cell A has stopped the broadcasting.

If *Cell A* *ID* IE is not present, then all the Cell A(s) have stopped the broadcasting for the given NES Cell.

**Agreement 6: The below proposals have no consensus, and we have agreed not to proceed.**

* the “Update option/code point” in the class 1 message OD-SIB1 Configuration Provision Request .
* Include multiple OD-SIB1 configurations in a REQUEST message (and partial success in RESPONSE message)
* NES gNB-CU sends a list of the Cell List OD-SIB1 status to NES gNB-DU over F1.
* Cell A to NES Cell to have a list of Cell status in the class 2 update over Xn
* Exchange OD-SIB1 provision capabilities

**To be discussed online:**

* Add Transaction ID to Xn requests or rely on the “NES Cell ID and Cell A ID” pair?

2.3 Objective 3: Common signal/channel transmissions pending to progress in other WGs

**Agreements: it is agreed that the below proposals are not needed:**

* For PRACH adaptation: impact on Rel-19 additional PRACH resources on the legacy RACH optimization feature
* For paging adaptation: the DU decides “paging energy saving mode” and informs the CU. gNB-DU informs the gNB-CU about not be transmitted Paging message over the air due to shortage of paging resources.

**To be discussed online:**

* Introduction of a new per-cell PEI adaptation indication over F1 needed?

# Discussion on Support on-demand SIB1 for UEs

Based on the input documents, the following are mentioned by the companies:

Part 1:

* Update class 1 procedures/messages names?
	+ use OD-SIB1, use UL WUS
	+ Update the IE names

HW, SS, CATT, ZTE, NEC: Align to Stage 2 to use OD-SIB1.

QC, Nokia, Ericsson: what is the purpose of the procedure. We do not need to change because other groups do. Prefer to keep

Agreement: Change UL WUS Configuration Provision => OD-SIB1 Configuration Provision

Please all TP using the name above for the procedure, messages

Agreement: Change NR CGI at NG-RAN node1 (Naming FFS) => NES Cell ID

Agreement: Change NR CGI at NG-RAN node2 (Naming FFS) => Cell A ID

Please all TP using the name above for the procedure, messages

* Update class 2 procedures/messages names?

NES: a new name “OD-SIB 1 Configuration Transmission Stop indication”

Nokia: No need to limit the purpose of this message. The status update could be a good name, even now we right now only have one code point to “stop”

Ericsson: agree that we should have a general naming.

Agreement: UL WUS CONFIGURATION PROVISION STATUS UPDATE => OD-SIB1 Configuration Provision status Update

Please all TP using the name above for the procedure, messages

* Add NES Cell ID in class 2 Xn message, is the NE Cell ID mandatory? Should the Cell A ID included, as Mandatory/optional?

Agreement:

NES Cell ID ( check ID is needed) is Mandatory presented;

Cell A is optionally presented. If Cell A is presented, this message indicates that the indicated Cell A has stopped the broadcasting. If Cell A is not presented, then all the Cell A(s) have stopped the broadcasting for the given NES Cell ID.

If Cell A is included in the provision request, then Cell A gNB shall, if support, broadcast the OD-SIB1 configuration in the indicated Cell A.

* Update the “UL UWS Configuration”, procedure supports it or explicit indication? both over Xn and F1?

QC, Huawei: We have decided to use Start/Stop

Agreement: No need to have the Update option.

* Add Transaction ID to Xn requests?
	+ Huawei, CATT, QC: Needed
	+ NEC, Nokia, Rakuten: with NES Cell ID and Cell A ID (optional in the response message).
	+ **Proposal: to discuss this online**

Part 2:

* Include multiple OD-SIB1 configurations in a REQUEST message (and partial success in RESPONSE message)? => We agree not to proceed on this
* NES gNB-CU sends a list of the Cell List OD-SIB1 status to NES gNB-DU over F1? We agree not to proceed on this
* Cell A to NES Cell a list of status update?

We agree not to proceed on this

* Exchange OD-SIB1 provision capabilities? =>

Huawei, Ericsson, Rakuten, ZTE: OAM works, as usual, to deal with the capabilities. There is no need.

NEC, Nokia, QC: OAM is suitable for static, we need.

Agreement: For Part 2, no Consensus on the above items. They are not need for the closing of this WID

Update the Stage 3 and Stage 2 CRs:

TS 38.300:

TS 39.420/38.470:

TS 38.401, a quick go through? (QC: R3-255255, Ericsson: R3-255580)

# 4 Discussion on Support on-demand SSB Scell

Based on the input documents, the following are mentioned by the companies:

* Does gNB-DU need information from gNB-CU the control/assistance information on performing OD-SSB S Cell operation mode?
* Reuse Rel-18 Cells Allowed … List IE or a new List or nothing?
	+ To do Nothing: Ericsson, QC, CATT, Nokia, SS, Rakuten
	+ Reuse the List: Huawei, NEC (TP to reuse the list)
	+ New List: Huawei, NEC, ZTE, Nokia, SS

**Conclusion: there is no consensus to do anything on the above**

* Over Xn, exchange OD-SSB state and OD-SSB request needed?

**Agreement: This is Not need**

* Other F1 impacts?
	+ The DU should inform the CU when the OD-SSB is being broadcast?

Huawei: needed as in RAN2, RRC could indicate the activation

Ericsson, Nokia, CATT, ZTE: there is no need, the similar Cell- DTRX in Rel-18. Nothing is needed.

**Agreement: This is Not need**

* + A new servingCellMO IE for OD-SSB should be introduced to the SCell To Be Setup List IE?

CATT, Huawei: RAN2 has introduced this in RRC message, needed in RAN3

Nokia: included in Cell-Config

Check if it is included in “Cell-Config” and legacy?

* + CU may request DU to send OD-SSB to obtain L3 measurements?

**Agreement: This is Not need**

# 5 Discussion on Support Common signal/channel transmissions

Based on the input documents, the following are mentioned by the companies:

* Introduction of a new per-cell PEI adaptation indication over F1

Huawei, CATT, ZTE, NEC, SS, CT: needed

Will discuss online

* For PRACH adaptation: impact on Rel-19 additional PRACH resources on the legacy RACH optimization feature
	+ Huawei, Ericsson, ZTE: it is dynamic, not need

**Agreement: This is Not need**

* For paging adaptation: the DU decides “paging energy saving mode” and informs the CU? gNB-DU informs the gNB-CU about not be transmitted Paging message over the air due to shortage of paging resources?

Huawei: gCU already aware that how paging resources are needed and the paging configuraitons. No need for the.

Ericsson: this is not an issue caused by Rel-19 NES paging enhancements

**Agreement: This is Not need**

# 6 Moderator Summary

# 7 Annex

# 8 Reference