3GPP TSG RAN WG2 Meeting #131 R2-250xxxx
Bangalore, India, August 25th– 29th, 2025

**Agenda item: 8.5.1**

**Source: Ericsson**

**Title: Report of [POST130][107][NES] (Ericsson)**

**Document for: Discussion and Decision**

# 1 Introduction

This is a summary document on collection of comments to TS 38.331 CR during below running CR discussion:

* **[POST130][107][NES] (Ericsson)**

 **Scope:** Update 38.331 running CR (also including this meeting’s agreements and latest other RAN WGs’ inputs) and remaining essential RRC open issues (including to continue discussion and make conclusion on P7, P12, P13, and P14 from R2-2504704).

 **Intended outcome:** 38.331 running CR and remaining essential RRC open issues (including discussion summary on P7, P12, P13 and P14 from R2-2504704).

**Deadline:** Long email discussion.

DL for the email discussion is 8th of August. Please try to provide your input by end of 5th August to allow time to discussion/resolution.

# 2 Contact Points

Respondents to the email discussion are kindly asked to fill in the following table.

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| Company | Name | Email Address |
| OPPO | Qianxi Lu | qianxi.lu@oppo.com |
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# 3 FFSs or ENs in running RRC CR

5.2.1

Editor’s note: FFS if anything is needed for OD-SIB1

**Q1: Is there a need to add text for OD-SIB1 in Section 5.2.1 or can the EN be removed?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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5.2.2.2.2

Editor’s note: FFS phrasing for paging adaptation pos only, that is those occasions that are not also configured for legacy.

**Q2: Which option or option modified is preferred?**

1. **Adress the aspect in 5.2.2.2.2 as in current running CR or slightly modify the text in that section.**
2. **Delete the additions from 5.2.2.2.2 and add in the following field descriptions instead:**

**pagingAdaptation-NS**

Number of paging occasions per paging frame for paging adaptation. The UE supporting paging adaptation ignores this field in RRC\_CONNECTED and uses *ns* instead when monitoring paging occasions.

**pagingAdaptationNAndPagingFrameOffset**

Used to derive the number of total paging frames in T (corresponding to parameter N in TS 38.304 [20]) and paging frame offset (corresponding to parameter PF\_offset in TS 38.304 [20]). A value of oneSixteenthT corresponds to T / 16, a value of oneEighthT corresponds to T / 8, and so on. The UE supporting paging adaptation ignores this field in RRC\_CONNECTED and uses *nAndPagingFrameOffset* instead when monitoring paging occasions..

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| **Company** | 1. **or b)**
 | **Rapporteur response** |
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**5.2.2.3.3x**

Editor’s note:

FFS: if there is need to emphasize it is normal uplink

**Q3: Can the EN be removed or is further discussion needed?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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**5.2.2.3.3x**

Editor’s note:

FFS reference for where are the details on how UE is obtaining SIB1, possibly RAN1 specification

**Q4: Add a reference to TS 38.213 Section 23 or remove the EN?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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***SIBxx***

Editor’s note:

FFS to group some parameters under subIEs like frequencyInfoUL

**Q5: Please comment if current structure is fine or suggest a grouping?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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***SIBxx***

Editor’s note:

FFS to separate IE OD-SIB1 as own IE, for review purposes it is here now.

**Q6: Keep IE OD-SIB1 under SIBxx or not?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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***SIBxx***

Editor’s note:

FFS: value for maxNrofODSIB1, maxPCI, od-sib1-windowStartOffset

**Q7: Suggest values for these parameters or indicate if another WG needs to be liaised?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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***SIBxx***

Editor’s note:

FFS: optionality of the parameters

**Q8: Suggest optionality values for these parameters or indicate if another WG needs to be liaised, or confirm current?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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***IE CellGroupConfig***

Editor’s note:

FFS value for maxNrofOD-SSB

**Q9: Suggest value for this parameter or indicate if another WG needs to be liaised?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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***DownlinkConfigCommonSIB***

Editor’s note:

FFS: The values for *pagingAdaptationFirstPDCCH-MonitoringOccasionOfPO* firstPDCCH-MonitoringOccasionOfPO for paging adaptations.

**Q10: Please see Q14a and Q14b in Section4 for the FFS.**

***UE-RadioPagingInfo***

Editor’s note: FFS details

**Q11: Preference is to move this into capability email discussion, please respond if you agree/disagree?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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***si-BroadcastStatus***

Indicates if the SI message is being broadcasted or not. Change of *si-BroadcastStat*us should not result in system information change notifications in Short Message transmitted with P-RNTI over DCI (see clause 6.5). The value of the indication is valid until the end of the BCCH modification period when set to *broadcasting.* When *SIB19* is scheduled in an NTN cell, the *si-BroadcastStatus* for the mapped *SIB19* is set to *broadcasting*. When *SIB22* is scheduled in an ATG cell, the *si-broadcastStatus* for the mapped *SIB22* is set to *broadcasting*. FFS: how to capture that a CONNECTED MODE UE supporting OD-SIB1 who is in a cell that does not broadcast SIB1, understands that the stored SIB1 is the latest SIB1. E.g. “The UE supporting OD-SIB1 in RRC\_CONNECTED considers the stored SIB1 as the latest SIB1.”

**Q12: Can “The UE supporting OD-SIB1 in RRC\_CONNECTED considers the stored SIB1 as the latest SIB1” be added to the field description of *si-BroadcastStatus* to address the FFS?**

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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# 5 RRC CR

Further comments on the RRC CR.

Please review carefully the field descriptions of the L1 parameters which are in many cases based on the excel input as a starting point.

For example, the *OD-SSB-Config* field descriptions contain terminology like case#1, case#2 and always-on SSB which should be rewritten.

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| **Company** | **Detailed comments RRC CR** | **Rapporteur response** |
| OPPO001 | Within OD-SIB1-Config***carrierFreq***Identifies the carrier frequency for which this configuration is valid.[OPPO] Do I understand it correctly that it should be mapped to the R1 parameter list of “ Indicate the absolute radio frequency channel number (ARFCN) for SSB of the cell the UL WUS configuration would apply”, where the yellow part helps to clarify the targeted frequency, since ‘carrier-frequency’ is unclear. |  |
| OPPO002 | sib1-RequestResources-r19 SEQUENCE (SIZE (1..maxSIB1-Message)) OF SIB1-RequestResources-r19,[OPPO] it comes from SI-RequestConfig, si-RequestResources SEQUENCE (SIZE (1..maxSI-Message)) OF SI-RequestResourcesBut there is a single target for **SIB1**, so the sequence is not needed in our understanding. |  |
| OPPO003 | RACH-ConfigSIB1-r19 ::= SEQUENCE { prach-ConfigurationIndex-r19 INTEGER (0..255), msg1-FDM-r19 ENUMERATED {one, two, four, eight}, msg1-FrequencyStart-r19 INTEGER (0..maxNrofPhysicalResourceBlocks-1), zeroCorrelationZoneConfig-r19 INTEGER(0..15), preambleReceivedTargetPower-r19 INTEGER (-202..-60), preambleTransMax-r19 ENUMERATED {n3, n4, n5, n6, n7, n8, n10, n20, n50, n100, n200}, powerRampingStep-r19 ENUMERATED {dB0, dB2, dB4, dB6}, ra-ResponseWindow-r19 ENUMERATED {sl1, sl2, sl4, sl8, sl10, sl20, sl40, sl80}}[OPPO] it seems we can directly reuse RACH-ConfigGeneric rather than redefining a new IE. |  |
| OPPO004 | SIB1-RequestResources-r19 ::= SEQUENCE { sib1-ra-PreambleStartIndex-r19 INTEGER (0..63), sib1-ra-AssociationPeriodIndex-r19 INTEGER (0..15) OPTIONAL, -- Need R sib1-ra-ssb-OccasionMaskIndex-r19 INTEGER (0..15) OPTIONAL -- Need R}[OPPO] it seems we can directly reuse SI-RequestResouces rather than redefining a new IE. |  |
| OPPO005 |  firstPDCCH-MonitoringOccasionOfPO-r19 CHOICE { sCS15KHZoneT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS30KHZoneT-SCS15KHZhalfT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS60KHZoneT-SCS30KHZhalfT-SCS15KHZquarterT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS120KHZoneT-SCS60KHZhalfT-SCS30KHZquarterT-SCS15KHZoneEighthT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS120KHZhalfT-SCS60KHZquarterT-SCS30KHZoneEighthT-SCS15KHZoneSixteenthT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS),  sCS480KHZoneT-SCS120KHZquarterT-SCS60KHZoneEighthT-SCS30KHZoneSixteenthT-SCS15KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS480KHZhalfT-SCS120KHZoneEighthT-SCS60KHZoneSixteenthT-SCS30KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS480KHZquarterT-SCS120KHZoneSixteenthT-SCS60KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS480KHZoneEighthT-sCS120KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS480KHZoneSixteenthT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS) } OPTIONAL -- Need R ]] } [[ pagingAdaptationFirstPDCCH-MonitoringOccasionOfPO-r19 CHOICE { sCS15KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS30KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS60KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS120KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS), sCS480KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPO-perPF-r19)) OF INTEGER (0..FFS) } OPTIONAL, -- Cond OtherBWP  pagingAdaptationFirstPDCCH-MonitoringOccasionOfPEI-O-r19 CHOICE { sCS15KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPEI-perPF-r19)) OF INTEGER (0..FFS), sCS30KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPEI-perPF-r19)) OF INTEGER (0..FFS), sCS60KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPEI-perPF-r19)) OF INTEGER (0..FFS), sCS120KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPEI-perPF-r19)) OF INTEGER (0..FFS), sCS480KHZoneThirtySecondT SEQUENCE (SIZE (1..maxPEI-perPF-r19)) OF INTEGER (0..FFS) } OPTIONAL -- Cond InitialBWP-Paging ]] }[OPPO] Compared with the implementation in PDCCH-ConfigCommon, it seems the yellow part is the delta part, we wonder whether the two need to be aligned, e.g., remove the yellow part. |  |
| OPPO006 | [OPPO] In OD-SSB-Config, there are multiple fields od-ssb-absoluteFrequency od-ssb-PositionsInBurst od-ssbSubcarrierSpacingod-ssb-physCellIdod-ss-PBCH-BlockPowerThey are all marked as *For Case #2 (i.e., Always-on SSB is periodically transmitted on the cell), if absent, od-ssb-PositionsInBurst is the same as ssb-PositionsInBurst provided in ServingCellConfigCommon.*Now this restriction however is reflected in different ways for different fields. It is suggested using a unified solution.***od-ssb-absoluteFrequency***Indicates the frequency of the OD-SSB when the frequency is different from *absoluteFrequencySSB* configured in IE *FrequencyInfoDL* for this serving cell. Additional restrictions as described in subclause 4.4. of TS38.213.***od-ssb-PositionsInBurst***Indicates the time domain positions of the transmitted SS-blocks for OD-SSB in a half frame with SS/PBCH blocks as defined in TS 38.213 [13], clause 4.1. For Case #2 (i.e., Always-on SSB is periodically transmitted on the cell), if absent, *od-ssb-PositionsInBurst* is the same as *ssb-PositionsInBurst* provided in *ServingCellConfigCommon*.

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| *ODssbOnly* | The field is optionally present, Need R, for serving cell that does not have SSB. It is absent otherwise. |

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| OPPO007 | [OPPO] For OD-SSB-Config, is the following parameter missing?

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| od-ssb-physCellId | New | 　 | Indicate physical cell identity of a cell in the cell list, for Case #1, i.e., no always-on SSB on this serving cell |

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| OPPO008 | ***od-smtc***Primary measurement timing configuration (see clause 5.5.2.10) to be used instead of *smtc1* configured in *servingCellMO* in IE *servingCellConfig* when this OD-SSB is activated.[OPPO] Compared with 130 conclusion, seems the following part is missing* (modified) The UE applies the OD-SSB specific SMTC when the OD-SSB is activated and SCell is activated.
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| OPPO009 | ***servingCellMO****measObjectId* of the *MeasObjectNR* in *MeasConfig* which is associated to the serving cell when this OD-SSB is activated activated instead of *servingCellMO* in IE *ServingCellConfig.*[OPPO] typo |  |
| OPPO010 | ***valueKforAssociationPatternPeriodsForPRACH***The value of Kmask used for mapping of mask index to association periods per Kmask association pattern periods (See TS 38.213, subclause 8.1) used to identify the subset of the additional PRACH resources applicable at least for adaptation for DCI 1\_0 with P-RNTI. Absence of this field indicates the value *1*.[OPPO] Based on our R1, this is also applicable to C-RNTI case. |  |
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# 4 Remaining open issues from R2-2504704 P7, P12, P13, P14

Q13a. Please comment on whether the maximum offset value for *pagingAdaptationFirstPDCCH-MonitoringOccasionOfPO-r19* field parameter is extended to 32 radio frames:

1. at symbol level
2. at slot level
3. by restricting the maximum value range of *pagingAdaptationFirstPDCCH-MonitoringOccasionOfPO-r19* field parameter for different SCS corresponding to *pagingAdaptationNAndPagingFrameOffset-r19* (i.e. N)
4. by restricting the configuration to evenly distributed POs, i.e., the first PO position among 8 POs and the interval between them.
5. other

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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Q13b: Please comment on which values should be adopted, i.e., x

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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Q14a. Please comment on whether the maximum offset value for *pagingAdaptationFirstPDCCH-MonitoringOccasionOfPEI-O-r19* field parameter is extended to 32 radio frames:

1. at symbol level
2. at slot level
3. by restricting the maximum value range of Rel-19 *pagingAdaptationFirstPDCCH-MonitoringOccasionOfPEI-O-r19* field parameter for different SCS corresponding to *pagingAdaptationNAndPagingFrameOffset-r19* (i.e. N)
4. by restricting the configuration to evenly distributed POs, i.e., the first PO position among 8 POs and the interval between them.
5. other

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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Q14b: Please comment on which values should be adopted, i.e., x

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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Q15a: Please comment on whether the following parameters should be introduced for Rel-19 PEI configuration:

1. po-NumPerPEI-r19
2. payloadSizeDCI-2-7-r19
3. pei-FrameOffset-r19
4. subgroupsNumPerPO-r19
5. subgroupsNumForUEID-r19

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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Q15b: Please comment on whether the same value ranges as for legacy PEI should be used for the following parameters (if agreed to be introduced per Q15a above) for Rel-19 PEI configuration:

1. po-NumPerPEI-r19
2. payloadSizeDCI-2-7-r19
3. pei-FrameOffset-r19
4. subgroupsNumPerPO-r19
5. subgroupsNumForUEID-r19

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| **Company** | **Detailed comments on FFSs** | **Rapporteur response** |
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# 6 Conclusion