NES Comments file

Template:

# O004

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| O004 | NES, SLRelay | 1 | Applicability of PO bundling to SL Relay | R2-25xxxxx | OPPO (Qianxi) |  | V002 | ToDo |

**[Description]**: It is not clear whether the paging adapation (i.e., PO bundling) feature can be applied to SL Relay UE (first/last Relay) and Remote UE.

**[Proposed Change]**: R2 discuss and conclude the applicability of paging adapation (i.e., PO bundling) feature to SL Relay UE (first/last Relay) and Remote UE or not.

**[Comments]**:

# O005

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| O005 | NES, LPWUS | 1 | Applicability of PO bundling to LP-SS | R2-25xxxxx | OPPO (Qianxi) |  | V002 | ToDo |

**[Description]**: It is not clear whether the paging adapation (i.e., PO bundling) feature can be enabled together with LP-SS feature or not.

**[Proposed Change]**: R2 discuss and conclude the applicability of co-configuring paging adaptation and LP-SS feature.

**[Comments]**:

# X200

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X200 | NES | 1 | SMTC handling for OD-SSB | R2-25xxxxx | Xiaomi (Li Zhao) |  | V003 | ToDo |

**[Description]**: The existing text in 5.5.2.10 still needs to be further polished to reflect the mapping between the SMTC and the OD-SSB periodicity

**[Proposed Change]**: RAN2 to discuss and agree the following text.

“If *smtcxlist* is present, when OD-SSB is activated and the serving cell is activated, the UE shall setup SMTC according to the first configured field in *smtcxlist* for serving cell measurements on the corresponding configured measurement object as specified in 5.5.3.1, ifthe SS/PBCH block reception periodicity is configured as the first OD-SSB periodicity value of *od-ssb-Periodicity-r19*; the UE shall setup SMTC according to the second configured field in *smtcxlist* for serving cell measurements on the corresponding configured measurement object as specified in 5.5.3.1,if the SS/PBCH block reception periodicity is configured as the second OD-SSB periodicity value of *od-ssb-Periodicity* and so on”

**[Comments]**: [OPPO] It is not super clear to us how to handle this. Specifically: 1) If there is a periodicity for which there is no corresponding OD-SSB periodicity, following this rule, the SMTC has to be configured within smtcxlist (e.g., if there are OD-SSB configuration for ms5 and ms20, but there is no OD-SSB configuration for ms10), leading to unnecessary signaling overhead?

[Sharp]: Agree with the comments from OPPO. We think for simplicity, configured SMTC number in smtcxlist can be same as configured OD-SSB periodicity value number. For example, 4 OD-SSB configurations with 5ms OD-SSB periodicity, and 4 OD-SSB configurations with 20ms OD-SSB periodicity, then there are 2 OD-SSB periodicity values and 2 SMTC in smtcxlist. The potential change is as below:

If *smtcxlist* is present, when OD-SSB is activated and the serving cell is activated, the UE shall setup SMTC according to the first configured field in *smtcxlist* for serving cell measurements on the corresponding configured measurement object as specified in 5.5.3.1, ifthe SS/PBCH block reception periodicity is configured as the first value among OD-SSB periodicity value(s) in OD-SSB configuration(s) for the serving cell

# X201

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X201 | NES | 1 | Serving cell MO handling for OD-SSB | R2-25xxxxx | Xiaomi (Li Zhao) |  | V003 | ToDo |

**[Description]**: The existing text in 5.5.3.1 still needs to be further polished to make it more readable and solve the conflict between the level 2 “*absoluteFrequencySSB* is not configured” and level 3 “and *absoluteFrequencySSB* is configured in *ServingCellConfigCommon*”

**[Proposed Change]**: RAN2 to discuss and agree the following text.

The UE shall:

1> whenever the UE has a *measConfig*, perform RSRP and RSRQ measurements for each serving cell for which *servingCellMO* is configured as follows:

2> if the *OD-SSB-Config* is not configured:

3> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains an *rsType* set to *ssb* and *ssb-ConfigMobility* is configured in the *measObject* indicated by the *servingCellMO*, and *absoluteFrequencySSB* is configured in *ServingCellConfigCommon*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered RSRP and RSRQ per beam for the serving cell based on SS/PBCH block, as described in 5.5.3.3a;

4> derive serving cell measurement results based on SS/PBCH block, as described in 5.5.3.3;

3> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains an *rsType* set to *csi-rs* and *CSI-RS-ResourceConfigMobility* is configured in the *measObject* indicated by the *servingCellMO*:

4> if the reportConfig contains a reportQuantityRS-Indexes and maxNrofRS-IndexesToReport:

5> derive layer 3 filtered RSRP and RSRQ per beam for the serving cell based on CSI-RS, as described in 5.5.3.3a;

4> derive serving cell measurement results based on CSI-RS, as described in 5.5.3.3;

2> if the *OD-SSB-Config* and *absoluteFrequencySSB* are configured and *od-ssb-absoluteFrequency* is not configured, or:

2> if the *OD-SSB-Config* is configured, *absoluteFrequencySSB* is not configured and OD-SSB transmission is activated, or:

2> if the *OD-SSB-Config*, *absoluteFrequencySSB* and *od-ssb-absoluteFrequency* are configured and OD-SSB transmission is not activated:

3> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains an *rsType* set to *ssb* and *ssb-ConfigMobility* is configured in the *measObject* indicated by the *servingCellMO*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered RSRP and RSRQ per beam for the serving cell based on SS/PBCH block, as described in 5.5.3.3a;

4> derive serving cell measurement results based on SS/PBCH block, as described in 5.5.3.3;

3> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains an *rsType* set to *csi-rs* and *CSI-RS-ResourceConfigMobility* is configured in the *measObject* indicated by the *servingCellMO*:

4> if the reportConfig contains a reportQuantityRS-Indexes and maxNrofRS-IndexesToReport:

5> derive layer 3 filtered RSRP and RSRQ per beam for the serving cell based on CSI-RS, as described in 5.5.3.3a;

4> derive serving cell measurement results based on CSI-RS, as described in 5.5.3.3;

2> else if the *OD-SSB-Config*, *absoluteFrequencySSB* and *od-ssb-absoluteFrequency* are configured and OD-SSB transmission is activated:

3> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains an *rsType* set to *ssb* and *ssb-ConfigMobility* is configured in the *measObject* indicated by the *servingCellMO-OD*:

4> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport* and contains an *rsType* set to *ssb*:

5> derive layer 3 filtered RSRP and RSRQ per beam for the serving cell based on SS/PBCH block, as described in 5.5.3.3a;

4> derive serving cell measurement results based on SS/PBCH block, as described in 5.5.3.3;

3> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains an *rsType* set to *csi-rs* and *CSI-RS-ResourceConfigMobility* is configured in the *measObject* indicated by the *servingCellMO-OD*:

4> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport* and contains an *rsType* set to *csi-rs*:

5> derive layer 3 filtered RSRP and RSRQ per beam for the serving cell based on CSI-RS, as described in 5.5.3.3a;

4> derive serving cell measurement results based on CSI-RS, as described in 5.5.3.3;

1> for each serving cell for which *servingCellMO* is configured, if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains SINR as trigger quantity and/or reporting quantity:

2> if the *OD-SSB-Config* is not configured:

3> if the *reportConfig* contains *rsType* set to *ssb* and *ssb-ConfigMobility* is configured in the *servingCellMO*, and *absoluteFrequencySSB* is configured in *ServingCellConfigCommon*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered SINR per beam for the serving cell based on SS/PBCH block, as described in 5.5.3.3a;

4> derive serving cell SINR based on SS/PBCH block, as described in 5.5.3.3;

3> if the *reportConfig* contains *rsType* set to *csi-rs* and *CSI-RS-ResourceConfigMobility* is configured in the *servingCellMO*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered SINR per beam for the serving cell based on CSI-RS, as described in 5.5.3.3a;

4> derive serving cell SINR based on CSI-RS, as described in 5.5.3.3;

2> if the *OD-SSB-Config* and *absoluteFrequencySSB* are configured and *od-ssb-absoluteFrequency* is not configured, or:

2> if the *OD-SSB-Config* is configured, *absoluteFrequencySSB* is not configured and OD-SSB transmission is activated, or:

2> if the *OD-SSB-Config*, *absoluteFrequencySSB* and *od-ssb-absoluteFrequency* are configured and OD-SSB transmission is not activated:

3> if the *reportConfig* contains *rsType* set to *ssb* and *ssb-ConfigMobility* is configured in the *servingCellMO*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered SINR per beam for the serving cell based on SS/PBCH block, as described in 5.5.3.3a;

4> derive serving cell SINR based on SS/PBCH block, as described in 5.5.3.3;

3> if the *reportConfig* contains *rsType* set to *csi-rs* and *CSI-RS-ResourceConfigMobility* is configured in the *servingCellMO*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered SINR per beam for the serving cell based on CSI-RS, as described in 5.5.3.3a;

4> derive serving cell SINR based on CSI-RS, as described in 5.5.3.3;

2> else if the *OD-SSB-Config*, *absoluteFrequencySSB* and *od-ssb-absoluteFrequency* are configured and OD-SSB transmission is activated:

3> if the *reportConfig* contains *rsType* set to *ssb* and *ssb-ConfigMobility* is configured in the *servingCellMO-OD*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered SINR per beam for the serving cell based on SS/PBCH block, as described in 5.5.3.3a;

4> derive serving cell SINR based on SS/PBCH block, as described in 5.5.3.3;

3> if the *reportConfig* contains *rsType* set to *csi-rs* and *CSI-RS-ResourceConfigMobility* is configured in the *servingCellMO-OD*:

4> if the *reportConfig* contains a *reportQuantityRS-Indexes* and *maxNrofRS-IndexesToReport*:

5> derive layer 3 filtered SINR per beam for the serving cell based on CSI-RS, as described in 5.5.3.3a;

4> derive serving cell SINR based on CSI-RS, as described in 5.5.3.3;

**[Comments]**: [OPPO] if “and *absoluteFrequencySSB* is configured in *ServingCellConfigCommon*” is the main concern, it seems we should not relocate the bullets for “*absoluteFrequencySSB* are configured”, but just the one of “if the *OD-SSB-Config* is configured, *absoluteFrequencySSB* is not configured and OD-SSB transmission is activated” should be relocated, but that should rely on *servingCellMO-OD* so should combine with the branch of *servingCellMO-OD*? [OPPO2] After offline with Xiaomi, it seems the intention was to mandate using servingCellMO (rather than servingCellMO-OD) for the SSB-less case, i.e., does not pursue the case where the *ssbFrequency* in *servingCellMO* is different from *od-ssb-absoluteFrequency*. If so, OK to rely on *servingCellMO* for all SSB-less case, but good to clarify it using R2 conclusion to make it more explicit.

[Sharp]: “*absoluteFrequencySSB* is configured in *ServingCellConfigCommon*” and other conditions can be moved to the lower level to avoid too many duplicate texts:

3> if the *reportConfig* associated with at least one *measId* included in the *measIdList* within *VarMeasConfig* contains an *rsType* set to *ssb* and *ssb-ConfigMobility* is configured in the *measObject* indicated by the *servingCellMO*, and:

4> if the *OD-SSB-Config* is not configured and *absoluteFrequencySSB* is configured in *ServingCellConfigCommon*, or:

4> if the *OD-SSB-Config* and *absoluteFrequencySSB* are configured and *od-ssb-absoluteFrequency* is not configured, or:

4> if the *OD-SSB-Config* is configured, *absoluteFrequencySSB* is not configured and OD-SSB transmission is activated, or:

4> if the *OD-SSB-Config*, *absoluteFrequencySSB* and *od-ssb-absoluteFrequency* are configured and OD-SSB transmission is not activated:

*<Legacy behavior>*

*[Nokia] It seems procedural text does not work very well. So we would think we should have contributions from companies for coming meeting to consider how the procedural text should be written. It looks like the current text is missing the scenario when serving cell has only CSI-RS measurement in the MO and then we have also OD-SSB measurements.*

# X202

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X202 | NES | 1 | Classify parameters of OD-SIB1 | R2-25xxxxx | Xiaomi (Li Zhao) |  | V003 | ToDo |

**[Description]**: According to the parameter list from RAN1, some parameters related to OD-SIB1 should be configured per od-sib1-Config instead of per SIB1-RequestConfig, e.g., sib1-rsrp-ThresholdSSB-r19, locationAndBandwidth-r19, absoluteFrequencyPointA-r19, ul-FrequencyBandList-r19, ul-SubCarrierSpacing-r19, etc.

**[Proposed Change]**: RAN2 to discuss to move those parameters not related to SIB1-RequestConfig from SIB1-RequestConfig to od-sib1-Config.

**[Comments]**:[Nokia] I’m not sure on this one. RAN1 xls seems to be bit vague on this. So far to use current asn.1 seems Ok anyway as the xls points out that all the parameters in frequenciInfoUL are per WUS config. So we would not do this change until it is confirmed with Ran

[Huawei]: Agree with Xiaomi. We understand that RRC parameters are up to RAN2 to specify but we did not see the motivation for deviating from the RAN1 parameter list, in particular what was the reasoning of the current parameter placement in OD-SIB1-Config-r19 and SIB1-RequestConfig-r19.

[vivo] Maybe it’s safer to keep them as it is now, like the sib1-rsrp-ThresholdSSB-r19 and ul-SubCarrierSpacing-r19, which is per Uplink configured (NUL or SUL)?

# X203

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X203 | NES | 1 | Using NUL/SUL for OD-SIB1 request | R2-25xxxxx | Xiaomi (Haitao) |  | V002 | ToDo |

**[Description]**: Description on OD-SIB1 request for NUL and SUL repeat quite much and make spec messy.

**[Proposed Change]**: merge into a single procedure text for OD-SIB1 request on NUL and SUL.

**[Comments]**:Nokia: OK to merge but It would be good to see the proposal for this. IT does not seem to be trivial to do the merge

[vivo] *sib1-RequestConfigSUL* is optionally configured and thus it’s better not to merge them even it’s a little bit wordy. There are far more wordy procedural texts in RACH and Sidelink operation for instance...

# X204

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X203 | NES | 2 | sib1-PDCCH-RestrictionToPRACH-r19 | R2-25xxxxx | Xiaomi (Haitao) |  | V002 | ToDo |

**[Description]**: according to RAN1 agreement, this parameter should be optional. Currently it can only indicate TRUE.

**[Proposed Change]**: add OPTIONAL for this parameter.

**[Comments]**:

[Huawei]: Agree, this needs to be OPTIONAL, -- Need R

# O006

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| O006 | NES | 2 | How to handle the SSB-less case | R2-25xxxxx | OPPO (Qianxi) |  | V004 | ToDo |

**[Description]**: “This field is mandatory present if *od-ssb-absoluteFrequency* indicates different frequency than *absoluteFrequencySSB* of the serving cell.” It is not clear how to handle the case where *absoluteFrequencySSB* is not provided, i.e., SSB-less case.

**[Proposed Change]**: Extend the condition of servingCellMO-OD as “This field is mandatory present if od-ssb-absoluteFrequency indicates different frequency than ssbFrequency of the servingCellMO” to cover SSB-less SCell.

**[Comments]**:

# O007

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| O007 | NES | 2 | Optionality of fields for offset |  | OPPO (Qianxi) |  | V004 | ToDo |

**[Description]**: For the two fields *od-ssb-halfFrameIndex* and *od-ssb-SFN-Offset*, since it says “If the field is absent, the UE applies the value 0.” And since R1 RRC list does not say it has to be mandatory present, we wonder whether it is necessary to restrict that “The field is mandatory present, when *absoluteFrequencySSB* of the serving cell is absent.”

**[Proposed Change]**: We are fine with either way, yet good to have R2 conclusion on it since it was not from R1 RRC parameter list directly.

**[Comments]**:

# J001

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| J001 | NES | 1 | Align smtc between MCG and SCG |  | Sharp (LIU Lei) |  | V00x | ToDo |

**[Description]**: When OD-SSB is activated, smtcx is used to setup SMTC and when adapt SSB is activated, smtcy is used to setup SMTC, i.e., *smtc1* is replaced. Thus *smtcx/smtcy* configured by the MCG should be aligned with *smtc1* configured by SCG for the same *ssbFrequency*.

**[Proposed Change]**: The text proposal is as below:

- to ensure that, if a measurement object associated with the MCG has the same *ssbFrequency* as a measurement object associated with the SCG:

- for that *ssbFrequency*, the measurement window according to the *smtc1/smtcx/smtcy* configured by the MCG includes the measurement window according to the *smtc1* configured by the SCG, or vice-versa, with an accuracy of the maximum receive timing difference specified in TS 38.133 [14].

**[Comments]:**

# J002

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| J002 | NES | 1 | Update field description of *absoluteFrequencySSB* |  | Sharp (LIU Lei) |  | V00x | ToDo |

**[Description]**: If *od-ssb* is configured, the field *od-ssb-absoluteFrequency-r19* is mandatory present when *absoluteFrequencySSB* of the serving cell is absent, and it makes the UE can obtain timing on this SCell. Thus, the field description of *absoluteFrequencySSB* needs to be updated.

**[Proposed Change]**: The text proposal is as below:

***absoluteFrequencySSB***

Frequency of the SSB to be used for this serving cell. SSB related parameters (e.g. SSB index) provided for a serving cell refer to this SSB frequency unless mentioned otherwise. The CD-SSB of the PCell is always on the sync raster. Frequencies are considered to be on the sync raster if they are also identifiable with a GSCN value (see TS 38.101-1 [15] or TS 38.101-5 [75]). If the field is absent, the SSB related parameters should be absent, e.g. *ssb-PositionsInBurst*, *ssb-periodicityServingCell* and *subcarrierSpacing* in *ServingCellConfigCommon* IE. If the field is absent and *od-ssb* is not configured for this serving cell, the UE obtains timing reference from the intra-band SpCell or intra-band SCell if applicable as described in TS 38.213 [13], clause 4.1, or from the SpCell or an SCell indicated by *referenceCell,* or from the reference serving cell defined in TS 38.133 [14]. This is supported in case the SCell for which the UE obtains the timing reference is in the same or different frequency band as the cell (i.e. the SpCell or the SCell, respectively) from which the UE obtains the timing reference.

**[Comments]:**

[vivo] We understand that this issue has been raised in RAN1 but yet without discussion and conclusion. Companies have diversed view on whether OD-SSB feature can be co-existent with SSB-less feature. If they can be co-existent, whether and how to modify this part of description requries further discussion. ‘OD-SSB is not configured’ is only one of the cases, others include ‘OD-SSB is configured but not activated’ and blahblah... Moreover, is there any ‘default cell’ like concept in Rel-18 inter-band SSB-less SCell feature for R19 OD-SSB in RAN4? If yes, the discussion should be up to RAN4 or RAN1, but never in RAN2. We propose this issue to be raised and discussed in other WGs.

# C181

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C181 | NES | 1 | Cell selection case is missing in section 5.2.2.4.2x Actions upon reception of SIBxx |  | Rui  (CATT) |  | V008 |  |

**[Description]**: In section 5.2.2.4.2x Actions upon reception of SIBxx, Cell selection case is missing.

**[Proposed Change]**:

Upon receiving SIBxx, the UE shall:

1> store the SIBxx;

1> SIB1 request configuration in the SIBxx is valid for acquiring OD-SIB1 of this cell in accordance with clause 5.2.2.3.1;

1> SIB1 request configuration of another cell in this stored SIBxx is valid for acquiring OD-SIB during (re)selection to that cell, and after (re)selection to that cell if the stored SIBxx is a valid version for that cell in accordance with clause 5.2.2.2.1:

**[Comments]**: Nokia: looks valid proposal

[vivo] It’s not necessary. Both cell selection and cell reselection case has been embodied in 5.2.2.3.1, as the UE relies on kssb value to determine how it acquires SIB1, and thus ‘1> SIB1 request configuration in the SIBxx is valid for acquiring OD-SIB1 of this cell in accordance with clause 5.2.2.3.1;’ is sufficient.

# C182

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C182 | NES | 1 | Ambiguity on SFN of which cell is referring to by the filed od-ssb-SFN-Offset |  | Rui  (CATT) |  | V008 |  |

**[Description]**: In the field description of od-ssb-SFN-Offset, it is not clear SFN of which cell(e.g., SFN of pcell or SFN scell) is referred,there is a need to clarify it is the SFN of the scell.

**[Proposed Change]**:

***od-ssb-SFN-Offset***

Indicates SFN offset from the SFN which satisfies (SFN index \*10) modulo (OD-SSB periodicity) = 0, where SFN refers to the SFN of the NR serving cell. The network configures this field according to the field *od-ssb-Periodicity* such that the indicated system frame does not exceed the OD-SSB periodicity. If the field is absent, the UE applies the value 0.

**[Comments]**:

# C183

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C183 | NES | 1 | Incorrect description for the condition *ODssbOnly* |  | Rui  (CATT) |  | V008 |  |

**[Description]**: The condition *ODssbOnly* is used for field od-ssb-SubcarrierSpacing and od-ssb-PBCH-BlockPower.For case 1, od-ssb-SubcarrierSpacing and od-ssb-PBCH-BlockPower should be mandatory.so the description of *ODssbOnly* needs to be modified.

**[Proposed Change]**:

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| *ODssbOnly* | The field is mandatorily present when *absoluteFrequencySSB* of the serving cell is absent. It is absent otherwise. |

**[Comments]**: [OPPO] “If the field is absent, the UE applies the value *subcarrierSpacing* configured in IE *BWP*.”, “If the field is absent, UE applies the value *PBCH-BlockPower* configured in IE *ServingCellConfigCommon*.”, so seems there is already a way to handle SSB-less case rather than mandating the presence?

# C184

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C184 | NES | 1 | The needs of different ssb-ToMeasure configurations for OD-SSB |  | Rui  (CATT) |  | V008 |  |

**[Description]**: *Since the value of od-ssb-PositionsInBurst-r19* can be changed in different od-ssb-Config, it seems there is a need to configure different ssb-ToMeasure configurations correspondingly.

**[Proposed Change]**:

**[Comments]**:

# C185

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C185 | NES | 1 | The needs of the new field commonSearchSpaceListExt-r19 in *PDCCH-ConfigCommon* |  | Rui  (CATT) |  | V008 |  |

**[Description]**: It seems there is no need to have this new filed as it is exactly same as the legacy commonSearchSpaceListExt-r18,so the legacy field can be reused.It is suggested to remove commonSearchSpaceListExt-r19

**[Proposed Change]**:

**[Comments]**:

# N001

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| N001 | NES | 1 | Smtcy and smtcx description sseems to differ unnecessarily much. |  | Jarkko Koskela  (Nokia) |  | V009 |  |

**[Description]**: We should aim to align descriptions of smtcx/smtcy. For smtcy likely we do not need to talk how it is activated – that would simplify the text a lot. It seems obvious from elsewhere that DCI is used – no need to repeat that multiple times in the text.

**[Proposed Change]**: For example something like this (but we could contribute more proper TP to the meeting as this is not purely asn.1 problem):

If *smtcxlist* is present, when OD-SSB is activated and the serving cell is activated, the UE shall setup SMTC according to the first configured field in *smtcxlist* for serving cell measurements on the corresponding configured measurement object as specified in 5.5.3.1, ifthe SS/PBCH block reception periodicity is configured as SSB periodicity of the first OD-SSB configuration for the serving cell; the UE shall setup SMTC according to the second SMTC in *smtcx-list* for measurements on the corresponding *MeasObjectNR* if the SS/PBCH block reception periodicity is indicated as the second SSB periodicity in *od-ssb-Periodicity* and so on [RIL]: X200, NES.

If *smtcy-SSBAdapt* is present, when SSB adaptation is activated and the serving cell is activated, the UE shall setup SMTC according to the first configured field in *smtcy-SSBAdapt* for serving cell measurements on the corresponding configured measurement object as specified in 5.5.3.1, ifthe SS/PBCH block reception periodicity is configured as SSB periodicity of the first SSB adapatation configuration for the serving cell; the UE shall setup SMTC according to the second SMTC in *smtcy-SSBAdapt* for measurements on the corresponding *MeasObjectNR* if the SS/PBCH block reception periodicity is indicated as the second SSB periodicity in *adap-SSB-BurstPeriodicityList*

**[Comments]**:

# N002

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| N002 | NES | 1 | Sfn offset and halfframeindex are now common for all od-ssb configs. This may be wrong |  | Jarkko Koskela  (Nokia) |  | V009 |  |

**[Description]**: SFN offset and half frame index parameters are now common for all SSB configs. This is opposite to SSB adaptation configuration. It seems also counter intuitive that one cannot have OD\_SSB specific time domain parameters as one can have different periodicity?.

**[Proposed Change]**: Consider moving these two parameters to Od-ssb-config-r19 We encourage people to check with their Ran1 delegates what is the intention from Ran1.

**[Comments]**: [OPPO] Same view.

[vivo] Agree with Nokia.

# H125

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H125 | NES | 1 | Optionality of R19 PEI configurations |  | Huawei (Lili) |  | V012 |  |

**[Description]**: The R19 PEI configurations should be made optional.

**[Proposed Change]**:

PEI-Config-r17 ::= SEQUENCE {

po-NumPerPEI-r17 ENUMERATED {po1, po2, po4, po8},

payloadSizeDCI-2-7-r17 INTEGER (1..maxDCI-2-7-Size-r17),

pei-FrameOffset-r17 INTEGER (0..16),

subgroupConfig-r17 SubgroupConfig-r17,

lastUsedCellOnly-r17 ENUMERATED {true} OPTIONAL, -- Need R

...,

[[

po-NumPerPEI-r19 ENUMERATED {po1, po2, po4, po8} OPTIONAL, -- Need R

payloadSizeDCI-2-7-r19 INTEGER (1..maxDCI-2-7-Size-r17) OPTIONAL, -- Need R

pei-FrameOffset-r19 INTEGER (0..32) OPTIONAL -- Need R

]]

}

**[Comments]**: [OPPO] How to interpret the case where one specific parameter is absent (but the others are present?), considering [[]]] already provides optionality.

# H126

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H126 | NES | 1 | Serving cell OD-SSB measurements for deactivated SCell | R2-25xxxxx | Huawei (Lili) |  | V012 |  |

**[Description]**: According to RAN4 agreements, for deactivated SCell, during FMW, the OD-SSB measurement is based on the OD-SSB periodicity regardless of the configured *measCycleSCell*. In fact, we think RAN2 should go through all the cases (deactivated SCell, activated SCell) and make sure the RAN2 spec is aligned with RAN4 agreements (regarding OD-SSB measurements, AO-SSB measurements, neighbour cell measurements).

**[Proposed Change]**:

***measCycleSCell***

The parameter is used only when an SCell is configured on the frequency indicated by the measObjectNR and is in deactivated state, see TS 38.133 [14]. gNB configures the parameter whenever an SCell is configured on the frequency indicated by the *measObjectNR*, but the field may also be signalled when an SCell is not configured. Value *sf160* corresponds to 160 sub-frames, value *sf256* corresponds to 256 sub-frames and so on. This field is ignored for on-demand SSB measurements during fast measurement window.

**[Comments]**:

# H127

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H127 | NES | 1 | Which RA occasions to use when the configuration is absent in *RACH-ConfigDedicated* | R2-25xxxxx | Huawei (Lili) |  | V012 |  |

**[Description]**: In legacy spec, for CFRA, if *occasions* is absent, the corresponding field in *RACH-ConfigCommon* applies. With the introduction of additional RA resources, both legacy RA occasions and additional RA occasions can be configured in the *RACH-ConfigCommon*, it needs to be made clear which RA occasion is used when the field is absent in *RACH-ConfigDedicated*. Considering RAN2 has agreed that RACH adaptation is not applied for L3 HO command, the simplest way could be clarifying that legacy RA occasions (i.e. RA occasions not configured in *addlRACH-Config-Adaptation-r19*) are used when the field *occasions* is absent in *RACH-ConfigDedicated*.

**[Proposed Change]**:

***occasions***

RA occasions for contention free random access. If the field is absent, the UE uses the RA occasions configured in *RACH-ConfigCommon* (except the RA occasions configured in *addlRACH-Config-Adaptation* in *RACH-ConfigCommon*) in the first active UL BWP.

**[Comments]**:

# H100

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H100 | NES | 2 | frequencyBandList-r19 field |  | Huawei (Marcin) |  | V013 | ToDo |

**[Description]**:

This field should be mandatory for TDD based on Agreement (RAN1#121):

The frequencyBandList is mandatorily present in WUS configuration for TDD system, which refers to the IE within FrequencyInfoDL-SIB.

**[Proposed Change]**:

Add conditional mandatory presence for TDD.

**[Comments]**:

# H101

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H101 | NES | 2 | od-sib1-WindowDuration-r19 field |  | Huawei (Marcin) |  | V013 | ToDo |

**[Description]**:

this should be mandatory based on R1-2506622 and Agreement (RAN1#120bis)

From RAN1 perspective, for agreed UL WUS parameters, regarding their mandatory or optional presence and applicability to TDD and/or FDD, adopt the followings:

- PhysCellId and ARFCN-ValueNR are mandatory

- frequencyBandList and absoluteFrequencyPointA are present in IE FrequencyInfoUL for FDD (as in the legacy specification)

- K\_SSB is mandatory

- searchSpaceZero and controlResourceSetZero are mandatory

- ra-PreambleStartIndex, od-sib1-duration, offsetToTimeWindow are mandatory

**[Proposed Change]**:

Remove OPTIONAL, -- Need R

**[Comments]**:

# H102

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H102 | NES | 2 | locationAndBandwidth-r19 field |  | Huawei (Marcin) |  | V013 | ToDo |

**[Description]**:

This should be mandatory based on R1-2506622 and Agreement (RAN1#121):

The parameters ‘absoluteFrequencyPointA’, ‘offsetToCarrier’ and ‘locationAndBandwidth’ are mandatorily present in the UL-WUS configuration for both FDD and TDD system.

**[Proposed Change]**:

Remove OPTIONAL, -- Need R

**[Comments]**:

# H103

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H103 | NES | 2 | absoluteFrequencyPointA-r19 field |  | Huawei (Marcin) |  | V013 | ToDo |

**[Description]**:

This should be mandatory based on R1-2506622 and Agreement (RAN1#121):

The parameters ‘absoluteFrequencyPointA’, ‘offsetToCarrier’ and ‘locationAndBandwidth’ are mandatorily present in the UL-WUS configuration for both FDD and TDD system.

**[Proposed Change]**:

Remove OPTIONAL, -- Cond FDD

**[Comments]**:

# V500

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| V500 | NES | 1 | OD-SIB1 related text for reception of SI change or PWS notification |  | vivo  (Jianhui) |  | V015 | ToDo |

**[Description]**:

For the following procedural text, the RRC state description of ‘4> if the UE is in RRC\_IDLE or in RRC\_INACTIVE; or’ and ‘if the UE is in RRC\_CONNECTED while T311 is running:’ should be ahead of reception of SI change or PWS notification, as a UE in general RRC\_CONNECTED mode may also receive SI change or PWS notification and apply the same procedure ‘6> acquire the *SIB1* (see clause 5.2.2.2.2)*,* which is scheduled as specified in TS 38.213 [13];’

2> else if *SIB1* acquisition is required for the UE and *ssb-SubcarrierOffset* indicates that *SIB1* is not scheduled in the cell: [RIL]: V500, NES

3> if the UE has a stored valid version of *od-sib1-Config* for this cell as specified in clause 5.2.2.4.2x:

4> if the UE is in RRC\_IDLE or in RRC\_INACTIVE; or

4> if the UE is in RRC\_CONNECTED while T311 is running:

5> if the SIB1 acquisition is upon receiving an indication that the system information has changed or upon receiving a PWS notification:

6> acquire the *SIB1* (see clause 5.2.2.2.2)*,* which is scheduled as specified in TS 38.213 [13];

5> else:

6> perform the actions as specified in clause 5.2.2.3.3x;

3> else:

4> perform the actions as specified in clause 5.2.2.5.

**[Proposed Change]**:

2> else if *SIB1* acquisition is required for the UE and *ssb-SubcarrierOffset* indicates that *SIB1* is not scheduled in the cell: [RIL]: V500, NES

3> if the UE has a stored valid version of *od-sib1-Config* for this cell as specified in clause 5.2.2.4.2x:

4> if the SIB1 acquisition is upon receiving an indication that the system information has changed or upon receiving a PWS notification:

5> acquire the *SIB1* (see clause 5.2.2.2.2)*,* which is scheduled as specified in TS 38.213 [13];

4> else:

5> if the UE is in RRC\_IDLE or in RRC\_INACTIVE; or

5> if the UE is in RRC\_CONNECTED while T311 is running:

6> perform the actions as specified in clause 5.2.2.3.3x;

3> else:

4> perform the actions as specified in clause 5.2.2.5.

**[Comments]**:

# V501

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| V501 | NES | 1 | update field description for *od-ssb-absoluteFrequency* |  | vivo (Jianhui) |  | V015 | ToDo |

**[Description]**:

For the following FD:

|  |
| --- |
| OD-SSB field descriptions |
| ***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 TS 38.213. |

RAN1 once agreed that

**Agreement for RAN1 #120bis**

For a cell supporting on-demand SSB SCell operation,

* Frequency of the on-demand SSB (i.e., *od-ssb-absoluteFrequency*) can be absent for Case #2
  + If absent, the center frequency of on-demand SSB is the same as that of always-on SSB.

and now in TS 38.213, V19.0.0, the agreement is captured in related text as:

|  |
| --- |
| <irrelevant text omitted>  the frequency location of the second SS/PBCH blocks is indicated by *od-absoluteFrequencySSB*, if provided; otherwise, by *absoluteFrequencySSB* |

We understand that the correct comprehension for *od-ssb-absoluteFrequency* is that it can be the same or different from *absoluteFrequencySSB*. It is only when *od-ssb-absoluteFrequency* is the same as *absoluteFrequencySSB* that it can be absent.

However: 1) even if *od-ssb-absoluteFrequency* is the same as *absoluteFrequencySSB*, it can still be configured; 2) if *absoluteFrequencySSB* is not configured (SSB-less SCell), then *od-ssb-absoluteFrequency* must be present for OD-SSB configuration, and it has nothing to compare whether it is different from *absoluteFrequencySSB* or not.

Therefore, we think the current FD for *od-ssb-absoluteFrequency* needs to be modified as follows. Note that there are lots of field description in current RRC spec to use ‘If the field is absent, xxxxxxxx’ already.

**[Proposed Change]**:

|  |
| --- |
| OD-SSB field descriptions |
| ***od-ssb-absoluteFrequency***  Indicates the frequency of the OD-SSB. If the field is absent, the UE applies *absoluteFrequencySSB* indicated in *FrequencyInfoDL* for this serving cell, if configured. Additional restrictions as described in subclause 4.4. of TS 38.213. |

**[Comments]**:

Instructions:

1. Copy the template RIL comments fields above (including the Heading Xnnn)
2. Paste the RIL comments fields at its position while **respecting the order of the RILs in the Review file (i.e. keep the order of the spec).**
3. Fill in the fields, see R19 ASN.1 Guideline.
4. Companies may comment whether they agree or disagree.
5. Can copy spec text and use Word “Track changes”, etc.
6. Do not delete text added by other companies.