**ö3GPP TSG-RAN2#AH-1801 *Tdoc R2-18xxxxx***

**Vancouver, Canada, 22-26 Jan 2018**

**Agenda Item: x.y**

**Source: Ericsson**

**Title: Review issue list for TS 38.331 EN-DC ASN.1 freeze**

**Version: 0.0**

**Document for: Discussion and decision**

# Introduction

This document provides an overview of list of issues resulting from the review of the PDU specification and related procedure text and field descriptions.

For some issues the proposed solution is indicated as well as the company & Tdoc introducing this in the standard. For some of the issues this document includes further considerations. The following companies volunteered for the review.

“ID” identifies the company, and consists of “X” (<letter>), as “E” for Ericsson.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Companies** | **Contact persons** | **Email** | **Last iss** |
| E | Ericsson | Håkan Palm  Riikka Susitaival  Henning Wiemann | [hakan.l.palm@ericsson.com](mailto:hakan.l.palm@ericsson.com)  riikka.susitaival@ericsson.com  [henning.wiemann@ericsson.com](mailto:henning.wiemann@ericsson.com) |  |
| S | Samsung | Himke van der Velde | himke.vandervelde@samsung.com |  |
| N | Nokia | Tero Henttonen  Amaanat Ali | tero.henttonen@nokia.com  amaanat.ali@nokia.com |  |
| Z | ZTE | Eswar  LiuJing  HuangHe  Sergio | eswar.vutukuri@zte.com.cn  liu.jing30@zte.com.cn  huang.he4@zte.com.cn  Sergio.Parolari@zte.com.cn |  |
| H | Huawei | Nathan Tenny  David Lecompte  Brian Martin | [nathan.tenny@huawei.com](mailto:nathan.tenny@huawei.com)  [david.lecompte@huawei.com](mailto:david.lecompte@huawei.com)  brian.alexander.martin@huawei.com |  |
| I | Intel | Guo, Yi  Jeong, Kyeongin  Palat, Sudeep | [yi.guo@intel.com](mailto:yi.guo@intel.com)  [kyeongin.jeong@intel.com](mailto:kyeongin.jeong@intel.com)  K sudeep.k.palat@intel.com |  |
| V | Vivo | Kimba Dit AdamouChen, Li Wu, Yumin | boubacar [kimba@vivo.com](mailto:kimba@vivo.com)  [chenli5g@vivo.com](mailto:chenli5g@vivo.com)  [wuyumin@vivo.com](mailto:wuyumin@vivo.com) |  |
| D | DOCOMO | Hideaki Takahashi  Wuri Hapsari  Toru Uchino  Kenji Kai | [hideaki.takahashi.vx@nttdocomo.com](mailto:hideaki.takahashi.vx@nttdocomo.com)  wuri@nttdocomo.com  [tooru.uchino.fv@nttdocomo.com](mailto:tooru.uchino.fv@nttdocomo.com)  kenji.kai.gx@nttdocomo.com |  |
| C | CATT | Chandrika Worrall  Jing Liang | chandrika@catt.cn  liangjing@catt.cn |  |
| O | OPPO | Lei Yixue | leiyixue@oppo.com |  |
| Q | QUALCOMM | Keiichi Kubota  Umesh Phuyal  Masato Kitazoe | keiichik@qti.qualcomm.com  uphuyal@qti.qualcomm.com  mkitazoe@qti.qualcomm.com |  |
| L | LGE | Bokyung  Jaewook  Oanyong | bokyung.byun@lge.com  jaewook.lee@lge.com  aidoy.lee@lge.com |  |
| M | Mediatek | Alex Hsu YuanYuan Zhang Li-Chuan Tseng Johan Johansson | [alex.hsu@mediatek.com](mailto:alex.hsu@mediatek.com)  [YuanY.Zhang@mediatek.com](mailto:YuanY.Zhang@mediatek.com)  [Li-Chuan.Tseng@mediatek.com](mailto:Li-Chuan.Tseng@mediatek.com)  [Chun-Fan.Tsai@mediatek.com](mailto:Chun-Fan.Tsai@mediatek.com)  [johan.johansson@mediatek.com](mailto:johan.johansson@mediatek.com) |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

# Instructions for RIL and CR storage

RIL and Editorial CR is stored in <ftp://ftp.3gpp.org/Email_Discussions/RAN2/>.

Companies are requested to provide their review comments and change proposals directly in the stored documents (see Classification below). Companies are encouraged to continuously introduce their comments/changes in the RILs/CR, e.g. when one area have been reviewed (and not provide all comments together on the last day).

When storing the documents after providing updates, companies should **add their Company ID** (**one letter**, see section 1) to the file name.

Companies are encouraged to try to resolve collisions. Also the Rapporteur will take an active role in this (and storage/merging problems can be discussed via email). In future reviews, we can potentially use more sophisticated tools.

# Instructions for RIL

**Issue Number (I-No)**

All issues should be numbered in a format Xyyy where

* X is the unique ID (<letter>) assigned to each company, see the table in clause 1.
* yyy is a running number starting from 001, i.e. 001, 002, …. 999.
* Ex: “E103”.

To avoid duplicated I-No numbers, companies may use the table very last in this document.

**Description**

Describe the issue in a few words.

**Classification (Class):**

|  |  |
| --- | --- |
| Class 1 | Straigthforward clarification/correction will not be included in RIL but company will directly include in “Minor corrections CR”. This can include small things like addition of need codes (as long as relatively straightforward) |
| Class 2 | Small issue i.e. solution requires some discussion but possible to concluded as part of ASN.1 review. Within column Details in the RIL, the company raising the issue is invited to suggest a proposed way forward, that other companies review and if not agreeable may suggest alternatives for. |
| Class 3 | More significant issue, i.e. requiring more extensive analysis by a contribution. Class 3 issues are within the scope of the ASN.1 review (i.e. does not concern more functional aspects). Companies are requested to volunteer for drafting a contribution (CR).  A contribution may address multiple issues, but these should be clearly marked. |
| Class 4 | Issue of type 4 are like type 3, with the exception that the issue is not only adressing ASN.1 aspects but also more functional aspects. Companies are still invited to draft a contribution, but this would be treated in the agenda item covering the concerned related functionality. |

Companies are requested to provide contribution details, to have an overview of the status (in particular regarding which issues are not covered).

**Details (proposed solution/ discussion)**

Mainly relevant for issues of class 2, the cell is intended to discuss/ agree the proposed way forward. The company raising the issue is invited to suggest a proposed way forward, that other companies review and if not agreeable may suggest alternatives for.

Companies are encouraged to descripe solutions in the same manner as they correct issues in CRs, i.e. propose changes that are shown in the same manner using change marks.

It is therefore suggested to use “**simulated change marks**” for the issue reporting, i.e.

* Added parts are marked with underlined red coloured text, e.g. new text .
* Deleted parts are marked with strikethough red coloured text, e.g. ~~delated text.~~
* If there is a need to high-light something by marking text with a colour, e.g. to high-light small changes, it is recommended that yellow colour is used, e.g. spelling error.
* Reason for these “simulated change marks” is to alow for more easy moving/copy/paste without loosing the changes.

Companies are encouraged to comment issues introduced by other companies, both on agreeing or objecting. These comments shall be **tagged with the company name** for easy search. E.g. “Ericsson: We agree”.

**Status/Ref (to be filled in by the Rapporteur)**

Status of the issue, in particular:

Class 2: indicate FFS if no (confirmed) way forward yet

Class 3: indicate company planning to bring a contribution

Class 4: same as 3, but also indicate agenda item

(coding/coloring TBD)

# Conclusion & recommendation

This paper includes a of list of issues resulting from the review of [1]. RAN2 is requested to endorse the status including the solutions proposed.

# References

[1] TS 38.331 RRC specification

# Review issue list (Annex)

#### Foreword

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I001 | Measurement related fields should be grouped in separate section instead of radio resouce configuration | 2 |  |  |
| I002 | As agreed in RAN2#99bis,  *7) Agreed to re-use the conditions approach with its table and apply this for network constraints, to distinguish Message Constraints (e.g Cond MC-N) and Configuration Constraints (e.g. Cond CC-N). In TS36.331, this is typically documented in field descriptions.*  But it is missing in the spec when deploy the condition. | 2 | check all conditions to reflect this agreement. |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 1 Scope

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 2 References

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 3 Definitions, symbols and abbreviations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 3.1 Definitions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 3.2 Abbreviations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4 General

#### 4.1 Introduction

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4.2 Architecture

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4.2.1 UE states and state transitions including inter RAT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4.2.2 Signalling radio bearers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I003 | Need to add SRB1/1S, SRB2/2S and SRB3 | 2 | Can use 36.331 as start point. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4.3 Services

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4.3.1 Services provided to upper layers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4.3.2 Services expected from lower layers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 4.4 Functions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I004 | - Other functions including e.g. transfer of dedicated NAS information and non-3GPP dedicated information, transfer of UE radio access capability information [FFS support for RAN sharing (multiple PLMN identities)];  What does “non-3GPP dedicated information” refer to? | 2 | Suggest to remove “non-3GPP dedicated information,” for now |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5 Procedures

#### 5.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.1.1 Introduction

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.1.2 General requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.2 System information

Only MIB acquisition applicable for EN-DC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3 Connection control

#### 5.3.1 Introduction

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.2 Paging

Targeted for completion in June 2018.

#### 5.3.3 RRC connection establihshment

Targeted for completion in June 2018.

#### 5.3.4 Initial security activation

Targeted for completion in June 2018.

#### 5.3.5 RRC reconfiguration

#### 5.3.5.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I005 | Editor’s Note: FFS\_Standalone: Check terminology (“RAN may …” or “Network may …”). Update figures accordingly.  Some figure, RAN is used, some figures network is used. Should be aligned. RAN seems more suitable. | 2 | Use RAN for also figures |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.2 Initiation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.3 Reception of an RRCReconfiguration by the UE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I006 | 1> if the UE is operating in EN-DC mode (MCG is EUTRA):  Here MCG is EUTRA should be MCG is EUTRAN. Otherwise how to distinguish NG-EN DC? | 2 | 1> if the UE is operating in EN-DC mode (MCG is EUTRAN): |  |
| I007 | It is confused which SRB1 is using.  2> if *RRCReconfiguration* was received via SRB1:  3> construct *RRCReconfigurationComplete* message and submit it via the EUTRA MCG as specified in TS 36.331 [10].  2> submit the *RRCReconfigurationComplete* message via SRB1 to lower layers for transmission using the new configuration;  It would be good to clarify, the first SRB1 is EUTRA MCG SRB | 2 | Suggest to  2> if *RRCReconfiguration* was received via EUTRA MCG SRB1:  3> construct *RRCReconfigurationComplete* message and submit it via the EUTRA MCG SRB1 as specified in TS 36.331 [10].  Or we can  2> if *RRCReconfiguration* was received via LTE RRC ~~SRB1~~:  3> construct *RRCReconfigurationComplete* message and submit it via the ~~EUTRA MCG~~ LTE RRC as specified in TS 36.331 [10]. |  |
| I008 | There are serveral parts mentioning sync reconfiguration as:  3> if *reconfigurationWithSync* was included in *spCellConfig* of an SCG:  4> initiate the random access procedure on the SpCell, as specified in TS 38.321 [3];  in 5.3.5.5.1, there is description about the handling of *reconfigurationWithSync.* Can we put them together? | 2 | Suggest  1 in section 5.3.5.3, to remove  ~~3> if~~ *~~reconfigurationWithSync~~* ~~was included in~~ *~~spCellConfig~~* ~~of an SCG:~~  ~~4> initiate the random access procedure on the SpCell, as specified in TS 38.321 [3];~~  Add in 5.3.5.5.1  The UE performs the following actions based on a received *CellGroupConfig* IE:  1> if the received CellGroupConfig contains the *spCellConfig* with *reconfigurationWithSync*:  2> initiate the random access procedure on the SpCell, as specified in TS 38.321 [3];  2> perform Reconfiguration with sync according to 5.3.5.5.2;  2> resume all suspended radio bearers and resume SCG transmission for all radio bearers, if suspended;  In section 5.3.5.3, to remove  ~~1> if MAC of an NR cell group successfully completes a random access procedure triggered above;~~  ~~2> stop timer T304 for that cell group;~~  ~~2> apply the parts of the CQI reporting configuration, the scheduling request configuration and the sounding RS configuration that do not require the UE to know the SFN of the respective target SpCell, if any;~~  ~~2> apply the parts of the measurement and the radio resource configuration that require the UE to know the SFN of the respective target SPCell (e.g. measurement gaps, periodic CQI reporting, scheduling request configuration, sounding RS configuration), if any, upon acquiring the SFN of that target SpCell;~~  ~~2> the procedure ends;~~  Add it at the end of 5.3.5.5.2  1> perform the measurement related actions as specified in 5.5.6.1;  1> if MAC of an NR cell group successfully completes a random access procedure triggered above;  2> stop timer T304 for that cell group;  2> apply the parts of the CQI reporting configuration, the scheduling request configuration and the sounding RS configuration that do not require the UE to know the SFN of the respective target SpCell, if any;  2> apply the parts of the measurement and the radio resource configuration that require the UE to know the SFN of the respective target SPCell (e.g. measurement gaps, periodic CQI reporting, scheduling request configuration, sounding RS configuration), if any, upon acquiring the SFN of that target SpCell;  2> the procedure ends; |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.4 Secondary cell group release

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5 Cell Group configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I009 | 1> for each element in *RLC-BeaererToAddModList*:  2> configure the RLC bearer as specified in 5.3.5.5.4;  Should align with other description | 2 | 1> if the *CellGroupConfig* contains the *RLC-BeaererToAddModList,*  for each element in *RLC-BeaererToAddModList*:  2> configure the RLC bearer as specified in 5.3.5.5.4; |  |
| I010 | Two parts related to sPcell configuration, can be combined  1> if the received CellGroupConfig contains the *spCellConfig* with *reconfigurationWithSync*:  2> perform Reconfiguration with sync according to 5.3.5.5.2;  2> resume all suspended radio bearers and resume SCG transmission for all radio bearers, if suspended;  1> if the *CellGroupConfig* contains the spCellConfig:  2> configure the SpCell as specified in 5.3.5.5.7; | 2 | Suggest:  ~~1> if the received CellGroupConfig contains the~~ *~~spCellConfig~~* ~~with~~ *~~reconfigurationWithSync~~*~~:~~  ~~2> perform Reconfiguration with sync according to 5.3.5.5.2;~~  ~~2> resume all suspended radio bearers and resume SCG transmission for all radio bearers, if suspended;~~  1> if the *CellGroupConfig* contains the spCellConfig:  2> configure the SpCell as specified in 5.3.5.5.7;  2> if the received *spCellConfig* contains *reconfigurationWithSync:*  3> perform Reconfiguration with sync according to 5.3.5.5.2;  3> resume all suspended radio bearers and resume SCG transmission for all radio bearers, if suspended; |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.2 Reconfiguration with synch

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.3 Logical Channel release

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.4 Logical Channel addition/modification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I011 | 2> if the logical channel ID corresponds to an SRB (i.e. ID less than or equal to 3) and if *mac-LogicalChannelConfig* is not included:  3> configure this MAC entity with a logical channel in accordance to the default configuration defined in 9.2 for the corresponding SRB;  2> else:  3> configure this MAC entity with a logical channel in accordance to the received *mac-LogicalChannelConfig*;  2> configure this MAC entity with a logical channel in accordance to the received *mac-LogicalChannelConfig;*  Looks like for SRB, *mac-LogicalChannelConfig* may be configured twice. | 2 | suggest  1> else ~~(a logical channel with the given ID was not configured before)~~ if the logical channel ID corresponds to an SRB (i.e. ID less than or equal to 3):  2> if ~~the logical channel ID corresponds to an SRB (i.e. ID less than or equal to 3) and~~ *rlc-Config* is not included:  3> establish an RLC entity in accordance with the default configuration defined in 9.2 for the corresponding SRB;  2> else:  3> establish an RLC entity in accordance with the received *rlc-Config;*  2> if ~~the logical channel ID corresponds to an SRB (i.e. ID less than or equal to 3) and if~~ *mac-LogicalChannelConfig* is not included:  3> configure this MAC entity with a logical channel in accordance to the default configuration defined in 9.2 for the corresponding SRB;  2>  else:  3> configure this MAC entity with a logical channel in accordance to the received mac-LogicalChannelConfig;  1> else:  2>  configure this MAC entity with a logical channel in accordance to the received *mac-LogicalChannelConfig;*  2>  associate this logical channel with the PDCP entity identified by *servedRadioBearer;* |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.5 MAC entity configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.6 RLF Timers & Constants configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.7 SpCell Configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.8 SCell Release

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.5.9 SCell Addition/Modification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.6 Radio Bearer configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.6.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.6.2 SRB release

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.6.3 SRB addition/ modification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I012 | 1> for each *srb-Identity* value included in the *srb-ToAddModList* that is not part of the current UE configuration or configured with *pdcp-Config* (SRB establishment or reconfiguration from E-UTRA PDCP to NR PDCP):  Not quite sure for SRB configured with E-UTRA PDCP, whether not configured with pdcp-Config can cover? Since pdcp-Config is optional, and the UE may use default value. | 2 | Suggest  1> for each *srb-Identity* value included in the *srb-ToAddModList* that is not part of the current UE configuration ,or configured with E-UTRA PDCP entity *~~pdcp-Config~~* (SRB establishment or reconfiguration from E-UTRA PDCP to NR PDCP): |  |
| I013 | 2> establish a PDCP entity and configure it with the security algorithms according to *securityConfig* and apply the keys (KUPenc) associated with the KeNB/S-KgNB as indicated in *keyToUse*, if applicable;  It is unclear whether securityConfig is must be present for MCG SRB1/2 using NR PDCP. If not, then we do not need to mention KeNB. | 2 |  |  |
| I014 | The UE shall for the SRB with SRB Identity corresponding to *srb-ToRelease*:  1> release the PDCP entity.  PDCp configuration contains  moreThanOneRLC which should also be removed, but it is not PDCP entity. | 2 | The UE shall for the SRB with SRB Identity corresponding to *srb-ToRelease*:  1> release the PDCP ~~entity~~ configured by PDCP-Config. |  |
|  |  |  |  |  |

#### 5.3.5.6.4 DRB release

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.6.5 DRB addition/ modification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I015 | Editor’s Note: Full configuration is not applicable for EN-DC. For EN-DC, NR *RRCReconfiguration* message does not include the *fullConfig* IE.  2> if the *RRCReconfiguration* message includes the *fullConfig* IE:  3> associate the established DRB with corresponding included *eps-BearerIdentity*;  2> else if no DRB was configured with the same *eps-BearerIdentity* prior to receiving this reconfiguration:  Editor’s Note: FFS\_CHECK:  Full configuration is not applicable for EN-DC, then why do we need to link it to EPS id? | 2 | There are serveral parts are not relevant to EN-DC and cannot be stable before June. These parts should be removed |  |
| I016 | the ciphering configuration shall be applied to all subsequent messages received and sent by the UE;  This is for DRB, why do we need “all subsequent messages”? | 2 | Suggest  2> if *reestablishPDCP* is set  3> configure the PDCP entities of this *RadioBearerConfig* to apply the ciphering algorithm and KUPenc key associated with the KeNB/S-KgNB as indicated in *keyToUse*, i.e. the ciphering configuration shall be applied to all subsequent PDCP PDUs~~messages~~ received and sent by the UE; |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.7 Full configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I017 | This part is unrelated to EN-DC, and not stable. Should be removed. | 2 | Remove the content. |  |
|  |  |  |  |  |

#### 5.3.5.8 Security key update

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I018 | Editor’s Note: FFS reference to 33.401 correct?  I assume, should be 33.501 since the NR algorithms are specified in 33.501;’ | 2 | should be 33.501 since the NR algorithms are specified in 33.501;’ |  |
| I019 | *1> for all radio bearers configured with S-KgNB:*  *2> configure lower layers to apply the KRRCint key, i.e. the integrity protection shall be applied to all subsequent messages received and sent by the UE, including the message used to indicate the successful completion of the procedure;*  *2> configure lower layers to apply the ciphering algorithm, the KRRCenc key and the KUPenc key, i.e. the ciphering shall be applied to all subsequent messages received and sent by the UE, including the message used to indicate the successful completion of the procedure.*  The above should be removed since the configuration of the lower layers should be done in the DRB/SRB-ToAddMod in the radioBearerConfig. Otherwise there will be a duplication of the same action as in 5.3.5.6.5 (DRB) and 5.3.5.6.3 (SRB):  2> if reestablishPDCP is set  3> configure the PDCP entities of this RadioBearerConfig to apply the ciphering algorithm and KUPenc key associated with the KeNB/S-KgNB as indicated in keyToUse, i.e. the ciphering configuration shall be applied to all subsequent messages received and sent by the UE; | 2 | Remove  *~~1> for all radio bearers configured with S-KgNB:~~*  *~~2> configure lower layers to apply the KRRCint key, i.e. the integrity protection shall be applied to all subsequent messages received and sent by the UE, including the message used to indicate the successful completion of the procedure;~~*  *~~2> configure lower layers to apply the ciphering algorithm, the KRRCenc key and the KUPenc key, i.e. the ciphering shall be applied to all subsequent messages received and sent by the UE, including the message used to indicate the successful completion of the procedure.~~* |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.9 Reconfiguration failure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.9.1 Integrity check failure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.9.2 Inability to comply with RRCReconfiguration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I020 | >             initiate the connection re-establishment procedure as specified in TS 36.331 [10, 5.3.7], upon which the connection reconfiguration procedure ends;  It should not be NR RRC initiating the LTE re-establishment. | 2 | Suggest:  >             inform the LTE RRC to initiate the connection re-establishment procedure as specified in TS 36.331 [10, 5.3.7], upon which the connection reconfiguration procedure ends; |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.5.9.3 T304 expiry (Reconfiguration with synch Failure)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.6 Counter check

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.7 RRC connection re-establishment

Targeted for completion in June 2018.

#### 5.3.8 RRC connection release

Targeted for completion in June 2018.

#### 5.3.9 RRC connection release requested by upper layers

Targeted for completion in June 2018.

#### 5.3.10 Radio resource configuration

Targeted for completion in June 2018.

#### 5.3.11 Radio link failure related actions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### i5.3.11.1 Detection of physical layer problems in RRC\_CONNECTED

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.11.2 Recovery of physical layer problems

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.11.3 Detection of radio link failure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.3.12 UE actions upon leaving RRC\_CONNECTED

Targeted for completion in June 2018.

#### 5.3.13 UE actions upon PUCCH/SRS release request

Targeted for completion in June 2018.

#### 5.4 Inter-RAT mobility

Targeted for completion in June 2018.

#### 5.5 Measurements

#### 5.5.1 Introduction

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I021 | - *For inter-RAT E-UTRA measurements a measurement object is a single EUTRA carrier frequency. Associated with this E-UTRA carrier frequency, the network can configure a list of cell specific offsets, a list of 'blacklisted' cells and a list of 'whitelisted' cells. Blacklisted cells are not applicable in event evaluation or measurement reporting. Whitelisted cells are the only ones applicable in event evaluation or measurement reporting.*  As agreed for LTE,  whiteCellList is not supported for NR measurements reporting in LTE(Bx events). No use case is identified.  Do we need to support whiltecellList for LTE measurement in NR?  Also whether cell specific offset is useful. | 2 | Not so sure whether it is useful to have it for B1/2. If we follow the same logic, it should not be used for them in NR. |  |
| I022 | The network may configure the UE to report the following measurement information based on SS/PBCH block(s):  - Measurement results per SS/PBCH block.  - Measurement results per cell based on SS/PBCH block(s).  - SS/PBCH block(s) indexes.  The network may configure the UE to report the following measurement information based on CSI-RS resources:  - Measurement results per CSI-RS resource.  - Measurement results per cell based on CSI-RS resource(s).  - CSI-RS resource measurement identifiers.  Since reporting of SSB alone is not allow. Suggest to combine with SS/PBCH blocks index:  e.g.  - SS/PBCH block(s) indexes with optional measurement result per SS/PBCH block | 2 | - SS/PBCH block(s) indexes with optional Measurement results per SS/PBCH block.  - Measurement results per cell based on SS/PBCH block(s).  ~~- SS/PBCH block(s) indexes.~~  - CSI-RS resource measurement identifiers with optional Measurement results per CSI-RS resource.  - Measurement results per cell based on CSI-RS resource(s).  ~~- CSI-RS resource measurement identifiers.~~ |  |
| I023 | - RS type: The RS that the UE uses for cell measurement results (SS/PBCH block or CSI-RS).  This should be for both beam and cell, and Should clarify only SS/PBCH block or CSI-RS can be configured in a single reporting configuration. | 2 | RS type: The RS that the UE uses for beam and cell measurement results (SS/PBCH block or CSI-RS). Only SS/PBCH block or CSI-RS can be configured in a single reporting configuration. |  |
| I024 | **5. Measurement gaps:** Periods that the UE may use to perform measurements, i.e. no (UL, DL) transmissions are scheduled.  The description on single per UE gap and independent gap should be added | 3 | We plan to provide the whole picture on how to capture gap related issues in one contribution, including ASN.1, procedure, etc. |  |
| I025 | *An RRC\_CONNECTED UE maintains a single measurement object list, a single reporting configuration list, and a single measurement identities list.*  What’s the meaning of this sentence? Looks like pure UE implementation. We may add restriction that for the same RS type, the network only configures a gignle measurement object for a given frequency. | 2 | *An RRC\_CONNECTED UE maintains a single measurement object list, a single reporting configuration list, and a single measurement identities list for a given frequency for the same RS-type.* |  |
| I026 | Clarification on E-UTRAN measurement objects. | 2 | The measurement procedures distinguish the following types of cells:  1. The serving cell(s) - these are the PCell and one or more SCells, if configured for a UE supporting CA.E-UTRAN PCell/SCell(s) are serving cell(s) if the UE is configured with EN-DC.  2. Listed cells - these are cells listed within the measurement object(s).  3. Detected cells - these are cells that are not listed within the measurement object(s) but are detected by the UE on the carrier frequency(ies) indicated by the measurement object(s).  For NR measurement object(s), the UE measures and reports on the serving cell(s), listed cells and/or detected cells.  ~~Editor’s Note: FFS Whether the definitions of serving cells, listed cells and detected cells in 38.331 are also applicable for E-UTRAN measurement object(s).~~ |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2 Measurement configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.2 Measurement identity removal

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I027 | Do we consider measurement id autonomous removal for A1/2/6? | 2 | Autonomous removal should be added |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.3 Measurement identity addition/ modification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.4 Measurement object removal

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.5 Measurement object addition/ modification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I028 | BlackCellsToAddMod ::= SEQUENCE {  cellIndex INTEGER (1..maxNrofCellMeas),  physCellIdRange PhysCellIdRange  }  A PhysCellIdRange is used for blackcell lists. It would be good to either maintain the note as LTE, or | 2 | Suggest  Either add note as  NOTE 1: For each *cellIndex* included in the *blackCellsToRemoveList* that concerns overlapping ranges of cells, a cell is removed from the black list of cells only if all cell indexes containing it are removed.  Or change ASN.1 as  BlackCellsToAddMod ::= SEQUENCE {  cellIndex INTEGER (1..maxNrofCellMeas),  physCellIdRange PhysCellId~~Range~~  } |  |
| I029 | Same comments for whiteCell lists; | 2 |  |  |
| I030 | Editor’s Note: FFS Whether the UE should delete a measurement reporting entry based on one RS type (e.g. SS/PBCH block), stop timers and reset variables (e.g. *timeToTrigger*) when parameters associated to another RS type are modified in *measObject*.  What is the logical argument to do so? Don’t see the need of mixing them. | 2 | The FFS can be removed. |  |
|  |  |  |  |  |

#### 5.5.2.6 Reporting configuration removal

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.7 Reporting configuration addition/ modification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.8 Quantity configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.9 Measurement gap configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I031 | Editor’s Note: FFS How measurement gaps are configured.  Editor’s Note: FFS how to capture the e.g. following agreement: For the independent gap case where UE is able to apply a different gap pattern for LTE/FR1 and FR2: a NR RRC configures a measurement gap configuration for FR2. | 3 | In R2-1712650, we provided ASN.1 for both 36.331 and 38.331 on gap for FR1/2, it could be used as baseline. We are happy to provide contribution on measurement gap for both LTE and NR if it is not easy to be solved in review procedure.  The UE shall:  1>    if *measGapConfig* is set to *setup*:  2>    if a measurement gap configuration is already setup, release the measurement gap configuration;  2>    if the UE is operating in EN-DC:  3>    setup the measurement gap configuration indicated by the *measGapConfig* in accordance with the received *gapOffset*, i.e., the first subframe of each gap occurs at an SFN and subframe meeting the following condition (SFN and subframe of SCG cells on FR2 as defined in TS 38.133 [x]):  SFN mod *T* = FLOOR(*gapOffset*/10);  subframe = *gapOffset* mod 10;  with *T* = MGRP/10 as defined in TS 38.133 [x];  2>    else:  3>    setup the measurement gap configuration indicated by the *measGapConfig* in accordance with the received *gapOffset*, i.e., the first subframe of each gap occurs at an SFN and subframe meeting the following condition (SFN and subframe of MCG cells on both FR1 and FR2 as defined in TS 38.133 [x]):  SFN mod *T* = FLOOR(*gapOffset*/10);  subframe = *gapOffset* mod 10;  with *T* = MGRP/10 as defined in TS 38.133 [x];  NOTE:    The UE applies a single gap, which timing is relative to the MCG cells, even when configured with DC.  1>    else:  2>    release the measurement gap configuration; – *MeasGapConfig* The IE *MeasGapConfig* specifies the measurement gap configuration and controls setup/ release of measurement gaps.  *MeasGapConfig* information element  -- ASN1START  MeasGapConfig ::= CHOICE {  release NULL,  setup SEQUENCE {  gapOffset CHOICE {  gp0 INTEGER (0..19),  gp1 INTEGER (0..39),  gp2 INTEGER (0..79),  gp3 INTEGER (0..159),  ...  },  -- w = [1+x]ms, y = [2.25]ms, z = [5+x] in MGL as defined based on RF switching time in RAN4  mgl ::= ENUMERATE{3,4,6,w,y,z, spare1, spare2}  }  }  -- ASN1STOP |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.2.10 Reference signal measurement timing configuration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.3 Performing measurements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.3.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I032 | Based on discussion and agreement “ *Different filter coefficients can be configured for different measurement quantities, for different RS types, and for cell and beam measurements*”. Looks like there is no motivation for combined triggered. We prefer not to, otherwise, it is unclear the relationship between each configuration. The network can configure multiple of them individually. So it is an optimization.SO the FFS can be removed. | 2 | Suggest to remove FFS  ~~Editor’s Note: FFS Whether multiple quantities and be configured as trigger quantities, e.g. RSRP and RSRQ; RSRP and SINR; RSRQ and SINR; RSRP, RSRQ and SINR.~~ |  |
| I033 | 3> if a measurement gap configuration is setup, or  3> if the UE does not require measurement gaps to perform the concerned measurements:  This should include the aspect where in EN-DC, LTE configured gap for FR1 and FR2. | 3 | We plan to provide the whole picture on how to capture gap related issues in one contribution, including ASN.1, procedure, etc. |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.3.2 Layer 3 filtering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.3.3 Derivation of measurement results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I034 | 2> if *nroSS-BlocksToAverage* in the associated *measObject* is not configured; or  2> if *absThreshSS-BlocksConsolidation* in the associated *measObject* is not configured; or  2> if the highest beam measurement quantity value is below *absThreshSS-BlocksConsolidation*:  3> derive each cell measurement quantity based on SS/PBCH block as the highest beam measurement quantity value, where each beam measurement quantity is described in TS 38.215 [9];  It would be good to align file name between LTE and NR, and the description style. Looks like the description in LTE RRC is more clear, i.e. only if all these 3 conditions are met, the UE will do beam average. | 2 | Use LTE style, i.e.  2> if *nroSS-BlocksToAverage* in the associated *measObject* is ~~not~~ configured; ~~or~~ and  2> if *absThreshSS-BlocksConsolidation* in the associated *measObject* is ~~not~~ configured; ~~or~~ and  2> if more than one of these NR-SS beams the ~~highest~~ beam measurement quantity value is ~~below~~ above *absThreshSS-BlocksConsolidation*:  3> derive each cell measurement quantity based on SS/PBCH block as the linear average of the power values of the highest beam measurement quantity values above *absThreshSS-BlocksConsolidation* where the total number of averaged beams shall not exceed *nroSS-BlocksToAverage*; |  |
| I035 | The UE shall:  1> for each cell measurement quantity to be derived based on SS/PBCH block;  …  1> for each cell measurement quantity to be derived based on CSI-RS;  …  One more level should be added for agreement where there can ony be one rsType configured in each reportConfig:  If reportConfig is set to ss …… (copy the SS/PBCH measurement here) 1> else …… (copy the CSI-RS measurement here) | 2 | One more level should be added for agreement where there can ony be one rsType configured in each reportConfig:  If reportConfig is set to ss …… (copy the SS/PBCH measurement here) 1> else …… (copy the CSI-RS measurement here) |  |
| I036 | The UE shall:  1> for each layer 3 beam filtered measurement quantity to be derived based on SS/PBCH block;  2> derive each configured beam measurement quantity based on SS/PBCH block as described in TS 38.215[9], and apply layer 3 beam filtering as described in 5.5.3.2;  1> for each layer 3 beam filtered measurement quantity to be derived based on CSI-RS;  One more level should be added for agreement where there can ony be one rsType configured in each reportConfig:  If reportConfig is set to ss …… (copy the SS/PBCH measurement here) 1> else …… (copy the CSI-RS measurement here) | 2 | One more level should be added for agreement where there can ony be one rsType configured in each reportConfig:  If reportConfig is set to ss …… (copy the SS/PBCH measurement here) 1> else …… (copy the CSI-RS measurement here) |  |

#### 5.5.4 Measurement report triggering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.4.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.4.2 Event A1 (Serving becomes better than threshold)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.4.3 Event A2 (Serving becomes worse than threshold)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.4.4 Event A3 (Neighbour becomes offset better than PCell/ PSCell)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.4.5 Event A4 (Neighbour becomes better than threshold)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.4.6 Event A5 (PCell/ PSCell becomes worse than threshold1 and neighbour becomes better than threshold2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.4.7 Event A6 (Neighbour becomes offset better than SCell)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I037 | Editor’s Note: FFS Whether multiple trigger quantities is supported in Rel-15.  We prefer not to support and it is optimization. | 3 | We prefer not to support and it is optimization. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.5 Measurement reporting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.5.5.1 Reporting of beam measurement information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I038 | 2> if the measurement information to be included is based on SS/PBCH block:  3> include within *resultsSSB-Indexes* the index associated to the best beam for that SS/PBCH block quantity and the remaining beams whose quantity is above *absThreshSS-BlocksConsolidation* defined in the *VarMeasConfig* for the corresponding *measObject*;  3> if *onlyReportBeamIds* is not configured, include the SS/PBCH based measurement results associated to each beam index;  2> else if the beam measurement information to be included is based on CSI-RS:  Suggest to reword to “if *rsType* set to *ss*:” and  Suggest to reword to “else if *rsType* set to *csi-rs*:” | 2 | Suggest to reword to “if *rsType* set to *ss*:” and  Suggest to reword to “else if *rsType* set to *csi-rs*:” |  |
| I039 | Editor’s Note: FFS which quantity to use for ordering beam measurement results.  Suggest to use RSRP | 2 | Suggest to use RSRP |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.6 UE capabilities

#### 5.6.1 UE capability transfer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I077 | 1> if includes *requestedFreqBandList*:  *requestedFreqBandList is missing in ASN.1 part. Is the intention for the whole section targeting June? This part should be used for EN-DC.*  *Intel V03,*  *We understand it targets to Dec, so should be completed. It is also related to LTE RIL I038/040.* | 3 | Complete the subsection 5.6.1.4 and 5.6.1.5  Intel v03 to add, for example:    requestedFreqBandList     FreqBandList              OPTIONAL,  FreqBandList ::=  SEQUENCE (SIZE (1..maxSimultaneousBands)) OF FreqBandInformation  FreqBandInformation ::= CHOICE {      bandEUTRA             FreqBandIndicatorEUTRA,      bandNR                FreqBandIndicatorNR  } |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.7 Other

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.7.1 DL information transfer

Targeted for completion in June 2018.

#### 5.7.2 UL information transfer

Targeted for completion in June 2018.

#### 5.7.3 SCG failure information

#### 5.7.3.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.7.3.2 Initiation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I040 | 2>           initiate transmission of the SCGFailureInformation message as specified in TS 36.331 [10, 5.6.13.3];  It should not be NR RRC initiating the LTE re-establishment. | 2 | Suggest:  >             inform the LTE RRC to initiate transmission of the SCGFailureInformation message as specified in TS 36.331 [10, 5.6.13.3]; |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.7.3.3 Failure type determination

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 5.7.3.4 Setting the contents of FailureReportSCGtoOtherRAT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 6 Protocol data units, formats and parameters (ASN.1)

#### 6.1 General

#### 6.1.1 Introduction

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 6.1.2 Need codes for optional downlink fields

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 6.2 RRC messages

#### 6.2.1 General message structure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – NR-RRC-Definitions

#### – BCCH-BCH-Message

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – DL-DCCH-Message

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – UL-DCCH-Message

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 6.2.2 Message definitions

#### – MIB

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasurementReport

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I041 | Direction: UE to NG-RAN  Should be UE to network | 2 | Direction: UE to ~~NG-RAN~~ network |  |
| I042 | Do not we leave NCE for measurementReport? | 2 | -- TAG-MEASUREMENTREPORT-START  MeasurementReport ::= SEQUENCE {  criticalExtensions CHOICE {  measurementReport MeasurementReport-IEs,  criticalExtensionsFuture SEQUENCE {}  }  }  MeasurementReport-IEs ::= SEQUENCE {  measResults MeasResults,  nonCriticalExtension SEQUENCE{} OPTIONAL  -- FFS  }  -- TAG-MEASUREMENTREPORT-STOP  -- ASN1STOP |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – RRCReconfiguration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  | Typo | 1 | RRCReconfiguration-IEs ::= SEQUENCE {  -- Configuration of Radio Bearers (DRBs, SRBs) including SDAP/PDCP.  -- ~~In~~ In EN-DC this field may only be present if the RRCReconfiguration  -- is transmitted over SRB3.  radioBearerConfig RadioBearerConfig OPTIONAL, -- Need M |  |
| I043 | Why is it that RadioBearerConfig is transmitted only on SRB3 and not as embedded NR message in LTE RRC message? | 2 | ~~-- In In EN-DC this field may only be present if the RRCReconfiguration~~  ~~-- is transmitted over SRB3.~~  radioBearerConfig RadioBearerConfig OPTIONAL, -- Need M |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – RRCReconfigurationComplete

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I044 | Direction: UE to E-UTRAN  Should be UE to network | 2 | Direction: UE to ~~E-UTRAN~~ network |  |
| I045 | RRCReconfigurationComplete-IEs ::= SEQUENCE {  -- FFS  }  Add NCE for the message | 2 | nonCriticalExtension SEQUENCE{} OPTIONAL  -- FFS  } |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SIB1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I046 | Editor’s Note: Discuss whether to keep SIB1 for the December version. FFS  SIB1 is unrelated to the completion of EN-DC, should be removed. | 2 | Remove the part related to SIB1 for now. |  |
| I047 | Add NCE for SIB1 | 2 | SIB1 ::= SEQUENCE {  -- FFS / TODO: Add other parameters.  -- Time domain positions of the transmitted SS-blocks in an SS-Burst-Set (see 38.213, section 4.1)  ssb-PositionsInBurst SEQUENCE {  -- Indicates the presence of the up to 8 SSBs in one group  inOneGroup BIT STRING (SIZE (8)),  -- For above 6 GHz: indicates which groups of SSBs is present  groupPresence BIT STRING (SIZE (8)) OPTIONAL -- Cond above6GHzOnly  },  …………………..  nonCriticalExtension SEQUENCE{} OPTIONAL  -- FFS  } |  |

#### 6.3 RRC information elements

#### – SetupRelease Information Element

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I048 | It would be good to keep consistant across the spec, so far, some parts explist release/setup are used, for instance  PHR-Config ::= CHOICE {  release NULL,  setup SEQUENCE { | 2 | Keep consistance across the spec on release/setup structure |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 6.3.1 System information blocks

#### 6.3.2 Radio resource control information elements

#### – *Alpha*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – DRB-Identity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – BandwidthPart-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I049 | Do we need to configure both *firstActiveDownlinkBwp*-Id and *defaultDownlinkBwp-Id* if bandwidthPartInactivityTimer is not configured? Seems not. | 2 | if inactivitytimer expires (i.e. it is configured) but there is no defaultBWP configured, the UE switches to the initial BWP (only applicable to the NR SA and for PCell). If you agree, then how about the below comment?  If defaultBWP is not configured for SCells, the firstActiveBWP is considered as the default BWP (as this BWP is conditioned only on SCells, and can in a way be viewed as initial BWP for SCells). |  |
| I050 | The below statement can be ambiguous:  The *BandwidthPart-Config* IE is used to configure a bandwidth part as defined in 38.211, section 4.2.2. Bandwidth parts are configured per serving cell for uplink (if the serving cell is configured with an uplink) and for downlink.  Change to:  The *BandwidthPart-Config* IE is used to configure a bandwidth part as defined in 38.211, section 4.2.2. Bandwidth parts are configured per serving cell for downlink and for uplink (if the serving cell is configured with an uplink). | 2 | The below statement can be ambiguous:  The *BandwidthPart-Config* IE is used to configure a bandwidth part as defined in 38.211, section 4.2.2. Bandwidth parts are configured per serving cell for uplink (if the serving cell is configured with an uplink) and for downlink.  Change to:  The *BandwidthPart-Config* IE is used to configure a bandwidth part as defined in 38.211, section 4.2.2. Bandwidth parts are configured per serving cell for downlink and for uplink (if the serving cell is configured with an uplink) ~~and for downlink~~. |  |
| I051 | locationAndBandwidth cannot be optional  locationAndBandwidth INTEGER (1..65536) OPTIONAL, | 2 | locationAndBandwidth INTEGER (1..65536) ~~OPTIONAL~~, |  |
| I052 | If the UL BWP has DC location, then how is the locationAndBandwidth interpreted? | 2 | For the UL BWP how do DC location and locationAndBandwidth differ in providing the UL BWP location in PRB? |  |

#### – CellGroupConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I053 | It is unclear what the meaning is for *servedRadioBearer.* | 2 | Add file description to clarify the relationship betwee s*ervedRadioBearer* and SRB/DRB.  Value 1 is applicable for SRB1 only.  Value 2 is applicable for SRB2 only.  Value 3 is applicable for SRB3 only.  Value 4-32 are applicable for DRB only. Value 4 is corresponding to *drb-Identity* 4, Value 5 is corresponding to *drb-Identity* 5, and so on. |  |
| I054 | cellGroupid is mandatory present, but start from 1. However in procedure part, MCG is 0. How to set it for MCG configuration? | 2 | CellGroupId ::= INTEGER (~~1~~0.. maxSCellGroups) |  |
| I055 | secondaryCellGroupToAddModList SEQUENCE (SIZE (1..maxSCellGroups)) OF CellGroupConfig OPTIONAL, -- Need M  secondaryCellGroupToReleaseList SEQUENCE (SIZE (1..maxSCellGroups)) OF CellGroupId OPTIONAL, -- Need M  Do we want to support more than 1 SCellGroup for now? At least it would be good to clarify in Rel-15 only one SCell group. | 2 | Add field description on “cellGroupId” as  ***cellGroupId***  In this version of specification, the *cellGroupId* can only be set as 0 and 1. |  |
| I056 | No non-critical extensions for PhysicalCellGroupConfig | 2 | Add the below  PhysicalCellGroupConfig ::= SEQUENCE {  ……  nonCriticalExtension SEQUENCE{} OPTIONAL  -- FFS  }  Or atleast an extension marker ‘;;;’  PhysicalCellGroupConfig ::= SEQUENCE {  …  }  Same applied to spCellConfig as well. No extension markers for this IE. |  |
|  |  |  |  |  |

#### – CellIndexList

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – ControlResourceIndex

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – CrossCarrierSchedulingConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – CSI-MeasConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I057 | Only aperodic CSI can be used which is mandatory in reportTrigger?  reportTrigger SEQUENCE {  aperiodic | 2 | Shall periodic to be supported |  |
| I058 | move “rach-ConfigCommon” in this field under rach-ConfigCommon | 2 | move “rach-ConfigCommon” in this field under rach-ConfigCommon |  |
| I059 | Same comment on rach-ConfigDedicated move “rach-ConfigDedicated” in this field under rach-ConfigDedicated | 2 | move “rach-ConfigDedicated” in this field under rach-ConfigDedicated |  |
|  |  |  |  |  |

#### – FailureReportSCGtoOtherRAT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I060 | In LTE, the SCG failure message contains a NR container for NR RRC mesurement result.  ***measResultSCG***  The field contains **available results of measurements on NR frequencies, set in accordance with** **TS** 38.331 **[X2].**  However, in **38.331, NR will provide “**FailureReportSCG-ToOtherRAT**” to LTE containing failure type, serving cell results, Neighbor cell results,**  **It is unclear what should be contained in LTE container, the “**FailureReportSCG-ToOtherRAT**” or only measurement results?** | 2 | Joint issue with NR spec, to be simple, the LTE should just contain what NR provides, i.e. **“**FailureReportSCG-ToOtherRAT**”. It will be good to clarify this.**  **Suggest**  ***measResultSCG***  The field contains **~~available results of measurements on NR frequencies~~** *FailureReportSCG-ToOtherRAT***, set in accordance with** **TS** 38.331 **[X2].** |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – FrequencyInfoDL

#### – FrequencyInfoUL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I061 | Can sub carrier space related parameters to be contained in this field?  For instance  subcarrierSpacingCommon and subcarrierSpacingSSB, etc. as ssb-subcarrier-offset? It would be good to group them together. | 2 | Group them together if possible. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – LogicalChannelConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MAC-CellGroupConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I062 | Do we support mTAG? Looks not. Since RACh parameters are not included in SCell configuration.  tag-Config TAG-Configuration | 2 | Remove it for now. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I063 | Genearl question, likely in Rel-16, measurement on other RAT will be introduced, how to extend it in Rel-16, so far seems the only way is in RRCReconfiguration. Do we want to add sub level NCE? | 2 | Confirm in reconfiguration level is ok. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasIdToAddModList

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasObjectEUTRA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasObjectId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasObjectNR

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I064 | So far, the ASN.1 structure provides the full flexible for  RS-ConfigSSB-NR-r15 ::= SEQUENCE {  measTimingConfig-r15 MTC-SSB-NR-r15 OPTIONAL, -- Need OR  offsetCenterFreq-r15 FreqOffsetNR-r15 OPTIONAL, -- Need OR  subcarrierSpacingSSB-r15 ENUMERATED {kHz15, kHz30, kHz120, kHz240} OPTIONAL, -- Need OR  ...  It can be removed simultaneously, can be removed separaetly. Do we need such flexible?  In NR RRC, offset and subcarrierspace are linked together. Which one is correct?  At least, we need to align with each other. | 2 | Align with LTE |  |
| I065 | PhysicalCellId, used here should be *PhysCellId>* | 2 | Change PhysicalCellId to *PhysCellId* |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasObjectToAddModList

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – MeasResults

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I066 | MeasResultListEUTRA is missing. | 2 | Need to add or remove it for now |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – PDCCH-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – PDCP-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – PDSCH-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – PhysCellId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I067 | There is PhysicalCellId, what is relationship between PhysicalCellId and PhysCellId> | 2 | Only keep PhysCellId |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – PUCCH-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I068 | Extension marker missing | 2 | PUCCH-ConfigCommon ::= SEQUENCE {  …  } |  |
| I069 | PUCCH-ConfigCommon is used not only for pre-RRCConnectionSetup | 2 | PUCCH-ConfigCommon ::= SEQUENCE {  -- ~~PUCCH resource configuration for HARQ-ACK before RRC connection setup~~  -- Corresponds to L1 parameter 'PUCCH-resource-common' (see 38.213, section 9.2)  -- FFS\_Value: RAN1 to provide more details on the value range  pucch-ResourceCommon BIT STRING (SIZE (4)) |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – PUSCH-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – Q-OffsetRange

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – QuantityConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – RACH-ConfigCommon

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – RACH-ConfigDedicated

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – RadioBearerConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I070 | KeyChange The field is mandatory present in case of with key change, otherwise the field is not present  Does key change cover the initial configuration case? Or PDCP version change from LTE to NR?  Intel v02: The comments is for SecurityConfig IE. The KeyChange condition is not only used for SecurityConfig IE but also for re-establishPDCP IE.  For the re-establishPDCP IE, the original condition is ok. For the SecurityConfig IE, the new condition is needed. | 2 | For PDCP version chagne from LTE to NR, security capability, if it is optional present, then do we need to mention the algorith handling in 5.3.5.6.3?  For initial configuration, the security must be present.  Suggest  The field is mandatory present in case of with key change or upon setup of a radio bearer, otherwise the field is not present |  |
| I071 | srb-ToReleaseList INTEGER (3) OPTIONAL, -- Need M  So SRBs can only be removed one by one? | 2 | Change it to lists instead of INTEGER  srb-ToReleaseList ~~INTEGER (3)~~  SRB-ToReleaseList  SRB-ToReleaseList ::= SEQUENCE (SIZE (1..3)) OF SRB-Identity |  |
|  |  |  |  |  |

#### – ReportConfigId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – ReportConfigNR

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I072 | reportCGI, it would be good to clarify, reportCGI is not configured in this version of specification. | 2 | reportCGI, it would be good to clarify, reportCGI is not configured in this version of specification. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – ReportConfigToAddModList

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – RLC-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – RLF-TimersAndConstants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SCellIndex

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SchedulingRequest-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SchedulingRequestResource-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SDAP-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SecurityAlgorithmConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I073 | *The IE SecurityAlgorithmConfig is used to configure AS integrity protection algorithm (SRBs)*  Is it the intention to add intergrity protection for DRB in June? | 2 | Ask for common understanding; |  |
| I074 | ***cipheringAlgorithm***  *Indicates the ciphering algorithm to be used for SRBs and DRBs, as specified in TS 33.501 [11]. The algorithms nea0-nea3 are identical to the LTE algorithms eea0-3. For EN-DC, the algorithms configured for bearers using KeNB shall be the same as for all bearers using KeNB.*  Looks like for KgNB, the algorithm can be different for different DRB, is it the intention? | 2 | **cipheringAlgorithm**  Indicates the ciphering algorithm to be used for SRBs and DRBs, as specified in TS 33.501 [11]. The algorithms nea0-nea3 are identical to the LTE algorithms eea0-3. For EN-DC, the algorithms configured for bearers using KeNB shall be the same as for all bearers using KeNB and the algorithms configured for bearers using KgNB shall be the same as for all bearers using KgNB. |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – ServCellIndex

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – ServingCellConfigCommon

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I075 | ServingCellConfigDedicated BandwidthPart-Config  and  ServingCellConfigCommon containes  DownlinkBandwidthPart ::= SEQUENCE {  genericParameters BandwidthPart,  pdcch-ConfigCommon PDCCH-ConfigCommon OPTIONAL  }  Do we need to specify that dedicated configuration will replace the one in common? | 2 | To clarify dedicated configuration will replace the one in common if configured. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – ServingCellConfigDedicated

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SRB-Identity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SPS-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SRS-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SubcarrierSpacing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – *TDD-UL-DL-Config*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I076 | nrofUplinkSymbols INTEGER (0..maxSymbolIndex) OPTIONAL  } OPTIONAL -- Need M  The only field in TDD-UL-DL-Config is slotSpecificConfigurations, why should it be optional? | 2 | Remove sencond optional  nrofUplinkSymbols INTEGER (0..maxSymbolIndex) OPTIONAL  } ~~OPTIONAL -- Need M~~ |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 6.3.3 UE capability information elements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
| I078 | NR PDCP capability: dataRateDRB-IP  The agreement was:  *UE capability signalling will also support values above 64 kbit/s up to the maximum supported bit rate of the UE.*  This agreement meant we assign a code point already for “max supported bit rate” in:                  dataRateDRB-IP                                ENUMERATED {kbps64, spare6, spare5, spare4, spare3, spare2, spare1, spare0}                 OPTIONAL,  Then Why is this optional?  What does the “absent” mean here? “fuall data rate”? or “not supported” (e.g. for EN-DC)? | 2 | Suggest:  Clarify optional means “not supported” if the intention is to say for EN-DC the UE may not support it, and added code point indicate “max supported bit rate of the UE” |  |
| I079 | NR PDCP capablity: Voice. What’s the meaning of it? We assume in NR it means the UE pass the test. But should not it be out of PDCP capability? | 2 | To have common understanding. |  |
| I080 | BandCombinationList is still missing, which is important for the completion of EN-DC | 4 | We would like to provide details on it.  Intel 03: the reason was that we didn’t decide DL and UL decoupling option. Once it is decided via email discussion, the information will be captured accordingly. |  |
| I081 | UE-NR-Capability ::= SEQUENCE {  pdcp-Parameters PDCP-Parameters,  rlc-Parameters RLC-Parameters, -- FFS OPTIONAL  mac-Parameters MAC-Parameters, -- FFS OPTIONAL  phyLayerParameters PhyLayerParameters,  rf-Parameters RF-Parameters,  nonCriticalExtension SEQUENCE {} OPTIONAL  }  PhyLayerParameters ::= SEQUENCE {  supportedBasebandProcessingCombination SupportedBasebandProcessingCombination  Only one set of NR BPC capaiblity in NR SA capability. However in our view, likely the NR BPC for MR-DC is different from NR BPC for SA NR. How can the network know this? | 3 | Prefer to distinguish NR BPC for SA NR and NR BPC for MR-DC, we will provide details later if companies are fine with this approach. |  |
| I082 | rename some IEs with too long name  supportedBandCombination -> supportedBC, BandCombinationList -> BC-List, supportedBasebandProcessingCombination-MRDC -> supportedBPC-MRDC, supportedBasebandProcessingCombination -> supportedBPC, BasebandProcessingCombination-MRDC -> BPC-MRDC, BasebandProcessingCombination -> BPC, LinkedBasebandProcessingCombination -> Linked-BPC, BasebandProcessingCombinationIndex -> BPC-Index, BasebandProcessingCombinationLinkedIndex -> BPC-LinkedIndex | 2 | rename some IEs with too long name  supportedBandCombination -> supportedBC, BandCombinationList -> BC-List, supportedBasebandProcessingCombination-MRDC -> supportedBPC-MRDC, supportedBasebandProcessingCombination -> supportedBPC, BasebandProcessingCombination-MRDC -> BPC-MRDC, BasebandProcessingCombination -> BPC, LinkedBasebandProcessingCombination -> Linked-BPC, BasebandProcessingCombinationIndex -> BPC-Index, BasebandProcessingCombinationLinkedIndex -> BPC-LinkedIndex |  |
| I083 | The following information needs to be removed from UE-NR-Capability           SupportedBandCombination ::= SEQUENCE (SIZE (1..maxBandComb)) OF BandCombination | 1 | The following information needs to be removed from UE-NR-Capability           SupportedBandCombination ::= SEQUENCE (SIZE (1..maxBandComb)) OF BandCombination |  |
| I084 | The following information needs to be separate in DL and UL      modulationOrder                  ModulationOrder,  ->           modulationOrderDL                        ModulationOrder                  modulationOrderUL                       ModulationOrder | 2 | The following information needs to be separate in DL and UL      modulationOrder                  ModulationOrder,  ->           modulationOrderDL                        ModulationOrder                  modulationOrderUL                       ModulationOrder |  |
| I085 | The following information needs to be separate in DL and UL      subCarrierSpacing            SubCarrierSpacing,   ->           subCarrierSpacingDL                       SubCarrierSpacing                  subCarrierSpacingUL                      SubCarrierSpacing | 2/3 | The following information needs to be separate in DL and UL      subCarrierSpacing            SubCarrierSpacing,   ->           subCarrierSpacingDL                       SubCarrierSpacing                  subCarrierSpacingUL                      SubCarrierSpacing |  |
| I086 | To remove the following “— FFS OPTIONAL”      rlc-Parameters               RLC-Parameters,                      -- FFS OPTIONAL      mac-Parameters               MAC-Parameters,                     -- FFS OPTIONAL | 2 | To remove the following “— FFS OPTIONAL”      rlc-Parameters               RLC-Parameters,                      -- FFS OPTIONAL      mac-Parameters               MAC-Parameters,                     -- FFS OPTIONAL |  |
| I087 | The following information to be implemented in the proper place                  singleTx will be included per band combination                  scalingFactor will be included per band per band combination | 3 | singleTx will be included per band combination                  scalingFactor will be included per band per band combination  We would like to provide more details on it. |  |
| I088 | Following FFSs need to be solved                  FFS How to decouple DL and UL -> wait for email discussion (by Qualcomm)                  FFS How to address NC CA in relation to carrier separation -> wait for email discussion (by Qualcomm)                  FFS on other parameters on rf-parameters-MRDC, rf-parameters, phyLayerParameters-MRDC, phyLayerParameters -> In general for any L1 parameters, wait for RAN1/4 inputs,                  FFS if supportedBasebandProcessingCombination-MRDC is included here or BandCombinationList -> wait for email discussion (by Qualcomm) | 4 | we would like to provide details once we get more inputs from RAN1/4 and email discussion |  |
| I089 | to complete L2/3 capability parameters (i.e. the need of capability signaling, the need of FDD/TDD split, etc) | 4 | To consider how to progress on them |  |
| I090 | Following FFSs needs to be resolved.                  intraBandSimultaneousTxRx will be added with FFS (per UE or per band combination)                  multipleTimingAdvance will be added with FFS (per UE or per band combination)  FFS Whether intraBandAsyncFDD is included per UE or per band combination                  FFS on the need of supportedBWPerCC                  FFS if modulationOrder and subCarrierSpacing are included per Band or per CC | 4 | To consider how to progress on them |  |
| I091 | To set value ranges for the following IEs. -> according to the number of configuration value ranges      numberOfSR-Configurations    ENUMERATED {n2, n3, n4,…} OPTIONAL, -- FFS value range      numberOfConfiguredGrantConfigurations   ENUMERATED {n2, n3, n4,…} OPTIONAL -- FFS value range | 2 | Ask company opinion about the value, and then FFS can be removed |  |
|  |  |  |  |  |

#### 6.3.4 Other information elements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 6.4 RRC multiplicity and type constraint values

#### – Multiplicity and type constraint definitions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 7 Variables and constants

#### 7.1 Timers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 7.1.1 Timers (Informative)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 7.1.2 Timer handling

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 7.2 Counters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 7.3 Constants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 7.4 UE variables

#### – VarMeasConfig

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – VarMeasReportList

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 8 Protocol data unit abstract syntax

#### 8.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 8.2 Structure of encoded RRC messages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 8.3 Basic production

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 8.4 Extension

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 8.5 Padding

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9 Specified and default radio configurations

#### 9.1 Specified configurations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2 Default radio configurations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.1 SRB configurations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.1.1 SRB1/SRB1S

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.1.2 SRB2/SRB2S

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.1.3 SRB3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.2 SRB configurations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.2.1 SRB1/SRB1S

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.2.2 SRB2/SRB2S

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 9.2.2.3 SRB3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 10 Generic error handling

#### 10.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 10.2 ASN.1 violation or encoding error

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 10.3 Field set to a not comprehended value

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 10.4 Mandatory field missing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 10.5 Not comprehended field

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 11 Radio information related interactions between network nodes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 11.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 11.2 Inter-node RRC messages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 11.2.1 General

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 11.2.2 Message definitions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – HandoverCommand

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – HandoverPreparationInformation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SCG-Config

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – SCG-ConfigInfo

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 11.3 Inter-node RRC information element definitions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### – CandidateCellInfoList

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 11.4 Inter-node RRC multiplicity and type constraint values

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### 12 Processing delay requirements for RRC procedures

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I-No | Description | Class | Details (proposed solution/ discussion) | Status/ ref |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

#### Annex A (informative): Guidelines, mainly on use of ASN.1

#### A.3.8 Guidelines on use of parameterised SetupRelease type

#### – ParentIE-WithEM

#### – ChildIE1-WithoutEM

#### – ChildIE2-WithoutEM

#### A.6 Guidelines regarding use of need codes

#### Annex <X> (informative): Change history 180

# Sections not part of the review (for information)

-

# List of last I-No (Issue Number)

Companies indicate their last used I-No, to avoid duplication.

|  |  |
| --- | --- |
| **Company** | **Last used I-No** |
| Intel | I091 |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |