**3GPP TSG-RAN WG2 #111-e R2-200xxx**

Online, August 17th - 28th, 2020

**Agenda Item: 6.1.3**

**Source: CMCC**

**Title: [AT111-e][022][NR16] Summary for Early Implementation**

**Document for: Discussion and decision**

# 1 Introduction

This document is for the following offline discussion, particularly for topics in 6.1.3:

* [AT111-e][022][NR16] Early Implementation (CMCC)

 Scope: Treat R2-2008102, R2-2008103, R2-2006716, R2-2007231

 Expected Outcome: Agreed CR 38331

 Deadline: CR Agreed by EOM, Deadline for comments 1 day earlier, or as set by rapporteur

This contribution is a summary of 6.1.3 TS 38.331 for early implementation. There are 5 contributions [1-5], including proposals of early implementation in NR and corresponding CRs. This summary is aimed to provide conclusion and agreed 38.331 CR. And please find and review the draft CR in the box (022).

# 2 Discussion

## 2.0 Contact list of delegates

To make it easier to find the correct contact delegate in each company for potential follow-up questions, the rapporteur encourages the delegates who provide input to provide their contact information in this table:

|  |  |
| --- | --- |
| Company | Delegate contact |
| CMCC | Li Chai (chaili@chinamobile.com) |
| Huawei, HiSilicon | Yang Zhao (zhaoyang@huawei.com) |
| Telecom Italia | Damiano Rapone (damiano.rapone@telecomitalia.it) |

|  |  |
| --- | --- |
| Nokia | amaanat.ali@nokia.com |
| Ericsson | Mattias Bergström (mattias.a.bergstrom@ericsson.com) |

|  |  |
| --- | --- |
| CATT | Erlin Zeng (erlin.zeng@catt.cn) |
| Futurewei | Hao Bi (hao.bi@futurewei.com) |
| OPPO | duzhongda@oppo.com |
| vivo | kimba@vivo.com |
| Qualcomm Incorporated | Masato Kitazoe (mkitazoe [at]qti.qualcomm.com) |

## 2.1 Potential Agreements

The following agreements are proposed based on the contributions [1-5]:

**Proposal 1: Considering to apply the existing rule to realize early release UE implementation of R16 enhanced features, adding the candidate features after the approval into the Annex G is regarded as a preferred way. The evaluation of whether a feature is to be early implementable is to be decided on a case-by-case basis, e.g. where there is a strong industry demand.**

**Question 1: Do you agree with Proposal 1?**

|  |  |  |
| --- | --- | --- |
| Company | YES/NO | Comment / alternative proposal |
| CMCC | YES |  |
| Huawei, HiSilicon | Yes |  |
| Telecom Italia | Yes | The CR coversheet should always contain the ‘magic sentence’ for a feature which has been decided to be early implementable (this is in line with P3 in R2-2006716) |
| Nokia | Yes |  |
| Ericsson | Yes |  |
| CATT | Yes |  |
| Futurewei | Yes |  |
| vivo | Yes |  |
| Qualcomm Incorporated | Yes |  |
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**Proposal 2: it is proposed to introduce the description of the UE requirements regarding how the ASN.1 definitions can be comprehended by the UE in the TS 38.331 as well, which is similar to that in Annex F of TS 36.331.**

**Question 2: Do you agree with Proposal 2 ?**

|  |  |  |
| --- | --- | --- |
| Company | YES/NO | Comment / alternative proposal |
| CMCC | YES |  |
| Huawei, HiSilicon | Yes |  |
| Telecom Italia  | Yes |  |
| Nokia | Yes |  |
| Ericsson | Yes |  |
| CATT | Yes |  |
| Futurewei | Yes |  |
| vivo | Yes |  |
| Qualcomm Incorporated | Yes |  |
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**Proposal 3: it is proposed the clarification on the inconsistent description on the UE requirements on transfer syntax (ASN.1) comprehension between broadcast signalling and dedicated signalling is required.**

**Question 3: Do you agree with Proposal 3?**

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| --- | --- | --- |
| Company | YES/NO | Comment / alternative proposal |
| CMCC | Yes |  |
| Huawei, HiSilicon | Yes |  |
| Telecom Italia | Yes |  |
| Nokia | Yes | Correct, UE requirements regarding the ASN.1 to be comprehended are needed to be clarified, covering both broadcast and decicated signalling. |
| Ericsson | Yes |  |
| CATT | Yes |  |
| Futurewei | Yes |  |
| vivo | Yes |  |
| Qualcomm Incorporated | Yes |  |
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## 2.1 Potential Agreements (de-prioritized)

In this section, companies are invited to propose your preferred features for the early release implementation in NR. However, since this item is predicted to be controversial and RAN plenary is possible to be involved for the last conclusion, we just do our best to achieve an agreement on allowed features for the early release implementation in NR. If it was too controversial, this part would not be reflected in the agreed CR.

**Question 4: what’s your preferred features?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Preferred features for the early release implementation in NR** | **Comment / alternative proposal from other participants** |
| CMCC | * Inter-band CA with unaligned frame boundary,
* UL TX switching,
* L3 CSI-RS measurement Result Reporting
 |  |
| Huawei, HiSilicon | We understand we should first capture what have already been agreed to allow early implementation, [R2-2007960](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_111-e%5CDocs%5CR2-2007960.zip) has proposed to capture this according to P1 and we suggest to agree this CR at this meeting.For new features which would potentially be early implemented, we need more time to think about it and we also think this is better to be contribution driven and thus we can understand better the motivation. |  |
| Telecom Italia | --- | It should be discussed on a case-by-case basis (as indicated in Q1, mainly considering strong market requirements from operators). We share the view of Huawei on the need to discuss based on contributions provided by interested companies. |
| Nokia |  | Agree with Telecom Italia that this is a small subset and case by case basis discussion. Of course, final decision rests with RAN plenary. |
| CATT | We tend to agree with Huawei comments. The previous discussions focus more on general principle that is along the line of LTE so no problem. Regarding exactly which feature we apply these more time is needed to check. |  |
| Futurewei |  | This email discussion can focus on the general principle of supporting early implementation of later release’s feature.The actual feature in question should be proposed in corresponding contribution and discussed case-by-case. |
| OPPO | We also think this email intends to discuss general principle rather detail features for early implementation. |  |
| vivo |  | Agree with Futurewei |
| Qualcomm Incorporated |  | We are concerned that more and more features are solicited for early implementation this lightly. We suggest careful considerations be given on this. |
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# **3 Conclusion**

TBD

# 4 References

1. R2-2001627 Impact of CG/SPS with periodicities non dividing HF length Sequans CommunicationsR2-2008102 Early Release Support of Features in NR CMCC, ZTE, Huawei, CATT, Ericsson discussion Rel-17 TEI16
2. R2-2008103 CR for Early Implementation in NR CMCC, ZTE, Huawei, CATT, Ericsson CR Rel-17 38.331 16.1.0 1961 2 B TEI16
3. [R2-2006716](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_111-e%5CDocs%5CR2-2006716.zip) Handling of early implementable features in NR Intel Corporation discussion Rel-16 TEI16
4. [R2-2007231](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_111-e%5CDocs%5CR2-2007231.zip) UE requirements on ASN.1 comprehension covering early implementation Samsung Telecommunications CR Rel-16 38.331 16.1.0 1807 - F TEI16
5. [R2-2007960](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_111-e%5CDocs%5CR2-2007960.zip) Introduction of CR containing early implementable feature Huawei, HiSilicon CR Rel-16 38.331 16.1.0 1949 - F TEI16