3GPP TSG-RAN WG2 Meeting #123 R2-2xxxxxx

Toulouse, France, August 21-25, 2023

Agenda: 8.8

Source: Session Chair (Intel)

Title: Report from IDC breakout session

Document for: Approval

**Organizational:**

* [AT123][650][IDC] Organizational Yi – IDC (Intel)

 Scope:

* Share plans for the meetings and list/status of ongoing email discussions for the sessions.
* Share meeting notes and agreements for review and endorsement.

* [AT123][651][IDC] Corrections on TS 38.331 Agreed in principle CR (Xiaomi)

 Scope: To discuss the changes from R2-2307544, P2 from R2-2307651, R2-2307919, R2-2308583, R2-2308676

 Intended outcome: Report in R2-2309041 and Agreeable CR in R2-2309042 (Agreed in principle)

 Deadline: Thursday 2023-08-24 2000 UTC

* [AT123][652][IDC] Corrections on TS 38.300 Agreed in principle CR (Huawei)

 Scope: To discuss the changes from R2-2307909, remove the change on change from Agreed in principle CR R2-2306923;

 Intended outcome: Agreeable CR in R2-2309043 (Agreed in principle)

 Deadline: Thursday 2023-08-24 2000 UTC

## 7.10 IDC enhancements for NR and MR-DC

(NR\_IDC\_enh-Core; leading WG: RAN2; REL-18; WID: RP-221281)

Time budget: 0 TU

Tdoc Limitation: 1 tdocs

Corrections. For smaller corrections please contact CR editor / Rapporteur directly.

R2-2307651 IDC Enhancements Qualcomm Incorporated discussion Rel-18

Proposal 1: “uwb” is added as a field value in victimSystemType.

Discussion:

* ZTE supports the proposal. Samsung supports as well. Nokia also supports
* “uwb” is added as a field value in victimSystemType
* To be captured in RRC CR in [AT123][651]

Proposal 2: The condition to report an MR-DC frequency combination causing IMD is relaxed by allowing the UE to report when one or more of the frequency ranges causing IMD is configured.

* P2 to be treated in [AT123][651]

R2-2308225 Discussion on IDC problem over sidelink Samsung, Ericsson discussion Rel-18 NR\_IDC\_enh-Core

Proposal 1: In Rel-18 IDC, the UE can report the impacted link information (i.e., sidelink, both) to the gNB if the UE operates at both Uu link and sidelink.

Proposal 2: RAN2 is kindly asked to discuss whether to introduce the impacted link information for previous releases.

Discussion:

* Samsung based on RAN4 spectrum, some bands will be impacted. Samsung wonder whether previous release should be updated as well.
* ZTE supports proposal. But think Rel-18 is enough.
* Huawei think the scenario is not real common. They think we can consider this in future release instead of R18.
* Xiaomi think it could happen for some scenarios. But it is difficult to indicate since the issue is dynamic.
* QC think it can be indicated based on existing IE.
* Samsung agree it could be done based on existing IE.
* Nokia think it is quite late to introduce it.
* Apple wonder how can network address the issue even if the UE can indicate the problem, for instance mode 2, network has no idea what resources the UE is using.
* We will not address sidelink issue in Rel-18.

R2-2307767 UE interface for IDC Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_IDC\_enh-Core

Proposal 1: It is suggested an LS is sent to CT1 with the request to consider adding an interface description for exchange of IDC parameters between UE sub-systems.

Proposal 2: It is suggested that RAN2 and CT1 aligns on the parameters exchanged between UE sub-systems and UE-NW message exchange.

Discussion:

* Xiaomi checked CT1, it is only used when IoT test is needed. But they think it is not essential since no IoT impact for IDC.
* Vivo wonder whether CT1 understand IDC.
* ZTE think it can be left to UE implementation, and it is strange to specify this in CT1 on frequency range,etc.
* QC also think it is UE implementation. And nothing new in Rel-18.
* Huawei/ Ericsson have same view as QC, ZTE.
* Nokia think the issue also exists in LTE.
* Noted
* [AT123][651][IDC] Corrections on TS 38.331 Agreed in principle CR (Xiaomi)

 Scope: To discuss the changes from R2-2307544, P2 from R2-2307651, R2-2307919, R2-2308583, R2-2308676

 Intended outcome: Report in R2-2309041 and Agreeable CR in R2-2309042 (Agreed in principle)

 Deadline: Thursday 2023-08-24 2000 UTC

R2-2309041 Summary of [AT123][651][IDC] Corrections on TS 38.331 Agreed in principle CR (Xiaomi) Xiaomi discussion Rel-18 NR\_IDC\_enh-Core

**Agreements:**

1: The changes proposed in R2-2307544 are not agreed.

2: The relaxed UE report for the IMD issue as proposed in R2-2307651 is not agreed.

3: As proposed in R2-2307919, idc-AssistanceConfig-r18 is changed to idc-AssistanceConfig-v18xy.

4: No need to clarify when the gNB configures both the Rel-16 FDM and the Rel-18 FDM, the UE ignores the Rel-16 FDM, as proposed in R2-2307919.

5: As proposed in R2-2308583, the ASN.1 structure of idc-AssistanceConfig-r18 is changed to align with idc-AssistanceConfig-r16.

6: Do not remove the interferenceDirection in AffectedCarrierFreqRangeComb-r18 as proposed in R2-2308583. The previous RAN2 agreement that “a unified solution is adopted for harmonic interference and IMD interference that interferenceDirection and victimSystemType could be reported with the affected frequency” is not revised.

7: The missing references to candidateServingFreqRangeListNR and candidateServingFreqListNR is added for TDM assistance information, as proposed in R2-2308583 and R2-2307919.

8: To add the following clarification in the field description of affectedBandwidth:

 If candidateBandwidth-r18 is not configured, the UE is allowed to report the frequency range for any bandwidth as indicated by affectedBandwidth, within the frequency band limitation.

R2-2309042 38.331 running CR for introduction of IDC Xiaomi CR Rel-18 38.331 17.4.0 4164 2 B NR\_IDC\_enh-Core

* Revised in R2-2309044

R2-2309044 Introduction of In-Device Co-existence (IDC) enhancements for NR Xiaomi CR Rel-18 38.331 17.4.0 4164 3 B NR\_IDC\_enh-Core

* Agreed in principle
* [AT123][652][IDC] Corrections on TS 38.300 Agreed in principle CR (Huawei)

 Scope: To discuss the changes from R2-2307909, remove the change on change from Agreed in principle CR R2-2306923;

 Intended outcome: Agreeable CR in R2-2309043 (Agreed in principle)

 Deadline: Thursday 2023-08-24 2000 UTC

R2-2309043 Introduction of In-Device Co-existence (IDC) enhancements for NR Huawei, HiSilicon CR Rel-18 38.300 17.4.0 0680 3 B NR\_IDC\_enh-Core

* Agreed in principle

R2-2307544 Further Considertion on the IDC reporting ZTE Corporation, Sanechips discussion Rel-18 NR\_IDC\_enh-Core

* To be treated in [AT123][651]

R2-2307909 draft \_Correction to 38.300 running CR on IDC Ericsson draftCR Rel-18 38.300 17.5.0 B NR\_IDC\_enh-Core

* To be treated in [AT123][652]

R2-2307919 Corrections on IDC assistant information Sharp discussion

* To be treated in [AT123][651]

R2-2308583 Corrections for 38.331 Running CR for IDC Enhancements Huawei, HiSilicon discussion Rel-18 NR\_IDC\_enh-Core

* To be treated in [AT123][651]

R2-2308676 TS 38.331 Clarification on the candidateBandwidth field vivo CR Rel-18 38.331 17.5.0 4272 - F NR\_IDC\_enh-Core

* To be treated in [AT123][651]