3GPP TSG RAN WG2 Meeting #115-e draftR2-2109132

**Electronic meeting, 16th – 27th August 2021**

**Agenda item: 8.12.3.1**

**Source: vivo**

**Title: Summary of offline 105 - [REDCAP] eDRX cycles - third round**

**Document for: Discussion and decision**

# Introduction

This document is the summary of following offline discussion:

* [AT115-e][105][RedCap] eDRX cycles (Vivo)

Initial scope: Based on company contributions in 8.12.3.1, discuss the expected behaviour for different (RAN and CN) eDRX cycles lengths, assuming eDRX cycle in INACTIVE <= 10.24s

Initial intended outcome: Summary of the offline discussion with e.g.:

* + - List of proposals for agreement (if any)
    - List of proposals that require online discussions
    - List of proposals that should not be pursued (if any)

Initial deadline (for companies' feedback): Wednesday 2021-08-18 04:00 UTC

Initial deadline (for rapporteur's summary in [R2-2108881](file:///C:\Data\3GPP\RAN2\Inbox\R2-2108881.zip)): Wednesday 2021-08-18 08:00 UTC

Updated scope: discuss all remaining proposals from [R2-2108881](file:///C:\Data\3GPP\RAN2\Inbox\R2-2108881.zip)

Intended outcome: Summary of the offline discussion with e.g.:

* + - List of proposals for agreement (if any)
    - List of proposals that require online discussions
    - List of proposals that should not be pursued (if any)

Updated deadline (for companies' feedback): Monday 2021-08-23 10:00 UTC

Updated deadline (for rapporteur's summary in [R2-2108893](file:///C:\Data\3GPP\RAN2\Inbox\R2-2108893.zip)): Monday 2021-08-23 16:00 UTC

Proposals marked "for agreement" in [R2-2108893](file:///C:\Data\3GPP\RAN2\Inbox\R2-2108893.zip) not challenged until Tuesday 2021-08-24 0800 UTC will be declared as agreed via email by the session chair (for the rest the discussion will further continue online).

Final scope: discuss the remaining proposals from [R2-2109117](file:///C:\Data\3GPP\RAN2\Inbox\R2-2109117.zip)

Intended outcome: Summary of the offline discussion with e.g.:

* + - List of proposals for agreement (if any)
    - List of proposals that require online discussions

Final deadline (for companies' feedback): Thursday 2021-08-26 1000 UTC

Final deadline (for rapporteur's summary in R2-2109132): Thursday 2021-08-26 1500 UTC

Proposals marked "for agreement" in R2-2109132 not challenged until Friday 2021-08-27 0300 UTC will be declared as agreed via email by the session chair (for the rest the discussion might continue online during the CB session).

This is the third round of offline discussion on eDRX for RedCap. Per suggestion from Chair, the discussion will focus on the follow proposals in [18]:

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| ***Proposal 5. [To agree] [18/22]*** *When IDLE eDRX cycle is longer than 10.24s, CN PTW\_start calculation formula defined in LTE is re-used as the baseline, as below. FFS whether CN PTW\_start position could be configurable by network.*   |  | | --- | | *PTW\_start denotes the first radio frame of the PH that is part of the PTW and has SFN satisfying the following equation:*  *SFN = 256\* ieDRX, where*   * *ieDRX = floor(UE\_ID\_H /TeDRX,H) mod 4* |   ***Proposal 7.[To discuss] [11 vs 11]*** *For RRC\_INACTIVE UE, when IDLE eDRX cycle is no longer than 10.24s and INACTIVE eDRX cycle is not configured, RAN2 to discuss the following options on the paging monitoring mechanism*   * + *Option 1: T is determined by the shortest of RAN paging cycle, IDLE eDRX cycle, and default paging cycle.*   + *Option 2: T is determined by the shortest of RAN paging cycle and IDLE eDRX cycle.*   ***Proposal 8. [To discuss] [10 vs 12]*** *For RRC\_INACTIVE UE, when IDLE eDRX cycle is longer than 10.24s and INACTIVE eDRX cycle is not configured, RAN2 to discuss the following options on the paging monitoring mechanism for RRC\_INACTIVE UE outside CN PTW:*   * + *Option 1: T is determined by the shortest of RAN paging cycle, IDLE eDRX cycle, and default paging cycle.*   + *Option 2: T is determined by the shortest of RAN paging cycle and IDLE eDRX cycle.*   ***Proposal 12. [To agree] [19/22]*** *eDRX is optional for any gNB (either supporting RedCap or not), which means it is up to gNB implementation whether to support eDRX.* |

# Contact information

|  |  |
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# 3rd Round Discussion

## PTW\_start calculation

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| ***Proposal 5 from 2nd round. [To agree] [18/22]*** *When IDLE eDRX cycle is longer than 10.24s, CN PTW\_start calculation formula defined in LTE is re-used as the baseline, as below. FFS whether CN PTW\_start position could be configurable by network.*   |  | | --- | | *PTW\_start denotes the first radio frame of the PH that is part of the PTW and has SFN satisfying the following equation:*  *SFN = 256\* ieDRX, where*   * *ieDRX = floor(UE\_ID\_H /TeDRX,H) mod 4* | |

During the second-round of offline discussion, companies provided their views on whether they could agree the above proposal, and the summary based on companies is:

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| **Summary on the Discussion point 4 on PTW\_start determination.**  22 companies provided inputs to this discussion point: *When IDLE eDRX cycle is longer than 10.24s, CN PTW\_start calculation formula defined in LTE is re-used as the baseline. FFS whether CN PTW\_start position could be configurable by network.*   * 17companies (Xiaomi, Apple, Futurewei, vivo, Convida, ZTE, Samsung, Sharp, Huawei, CATT, NTTDOCOMO, Lenovo, LGE, Sequans, Ericsson, Nokia, CMCC) agree with this proposal.   + Xiaomi thinks for option 3, maybe we need ask SA2/CT1 and there may have impact on CT1 since the CN needs to know when UE is available for transmission.   + Convida thinks re-using LTE formula as a baseline and introducing a configurable offset between PTW\_start.   + ZTE supports using LTE formula as baseline but doesn’t agree it is configurable. ZTE thinks it is not clear what is configurable, and how to configurable.   [Rapporteur] Based on the discussing during 1st round, “configurable” means PTW\_start position is a configurable value, which is more flexible, e.g. 128 SFN or 256 SFN.   * + Samsung and CATT agree LTE formula as baseline, and RAN2 should discuss the FFS part.   + Ericsson thinks LTE PTW start formulation can be re-used as baseline and other options can be FFS. * Besides, Intel could also accept to reuse LTE as the baseline if majority want it. * 5 companies (Qualcomm, OPPO, MediaTek, Intel, DENSO) prefer Option 3, i.e. configurable by network.   + MediaTek commented that option 3 gives more flexibility and can allow fairer distribution in some cases.   + Intel prefers option 3 if PTW start is same for IDLE and INACTIVE, and suggests postpone this discussion since whether INACTIVE eDRX is longer than 10.24s is still FFS.   + DENSO prefers Option3, and thinks NW should be able to select between Option 1 and Option 2 flexibly by NW configuration.   **Rapporteur**: Based on the inputs from companies, it is observed that majority companies (18/22) could accept to reuse LTE formula as the baseline. Some companies think that the configurable PTW\_start position should be adopted or FFS. Rapporteur thinks we could follow the majority view to adopt LTE formula as the baseline first, and RAN2 could further discuss this FFS on configurable PTW\_start position. |

However, during the email discussion, some companies would like to reflect the FFS aspect in the formula. Thus, they propose to modified as:

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| PTW\_start denotes the first radio frame of the PH that is part of the PTW and has SFN satisfying the following equation:  SFN = N\* ieDRX, where   * ieDRX = floor(UE\_ID\_H /TeDRX,H) mod 4 * N = 256, FFS if N can take other values |

Considering the sensible technical option is to start the PTW at intervals that are at least spaced out equal to the PTW length. This ensures that paging load can be evenly distributed across the PH. Given that we already agreed to having a min PTW length of 1.28s, the ideal starting location to be used for PTW should also be spaced out 1.28s. In this way, the formula could be modified as:

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| PTW\_start denotes the first radio frame of the PH that is part of the PTW and has SFN satisfying the following equation:  SFN = 1024/N\* ieDRX, where   * ieDRX = floor(UE\_ID\_H /TeDRX,H) mod N * N = 4, FFS if N can take other values |

As mentioned during email discussion and 2nd round of offline discussion, ZTE thinks the FFS is not only on the "configurable" part, but also FFS on which value of N could be used (even if it is not configurable).

According to 2nd round discussion, Rapporteur thinks most companies accept to reuse LTE formula as the baseline. However, some companies want to re-use the LTE PTW\_start calculation formula directly with the same parameter, while some companies want to revise the “256 and 4” in LTE to “128 and 8” or make it as configurable in NR. Companies are invited to provided your views on the expression of agreement.

1. Companies are invited to provide their views on which option do you prefer on the conclusion of formula for PTW\_start calculation:

* **Option 1:**

When IDLE eDRX cycle is longer than 10.24s, CN PTW\_start calculation formula defined in LTE is re-used as the baseline, as below. FFS whether CN PTW\_start position could be configurable by network.

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| PTW\_start denotes the first radio frame of the PH that is part of the PTW and has SFN satisfying the following equation:  SFN = 256\* ieDRX, where   * ieDRX = floor(UE\_ID\_H /TeDRX,H) mod 4 |

* **Option 2:**

When IDLE eDRX cycle is longer than 10.24s, CN PTW\_start calculation formula defined in LTE is re-used as the baseline, as below. FFS whether CN PTW\_start position could be configurable by network.

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| PTW\_start denotes the first radio frame of the PH that is part of the PTW and has SFN satisfying the following equation:  SFN = 1024/N\* ieDRX, where   * ieDRX = floor(UE\_ID\_H /TeDRX,H) mod N * N = 4, FFS if N can take other values |

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| **Company’s name** | **Option(s)** | **Comments, if any** |
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## gNB capability on eDRX

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| ***Proposal 12 from 2nd round. [To agree] [19/22]*** *eDRX is optional for any gNB (either supporting RedCap or not), which means it is up to gNB implementation whether to support eDRX.* |

During the second round of offline discussion, 22 companies expressed their views on whether eDRX is an option feature at the gNB and UE sides. Regarding the aspect of gNB sides, companies showed their understanding on the eDRX feature at gNB side among the following options:

* + Option 1: eDRX is optional for any gNB (either supporting RedCap or not), which means it is up to gNB implementation whether to support eDRX
  + Option 2: eDRX is optional only for gNB supporting RedCap
  + Option 3: eDRX is mandatory for gNB supporting RedCap
  + Option 3.1: eDRX is mandatory for gNB supporting RedCap, while optional for gNB not supporting RedCap
  + Option 4: Others, please specify

The discussion summary is:

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| **Summary on the Discussion point 13 on gNB capability on eDRX.**  22 companies provided their preference on the supporting of eDRX feature at the gNB side:   * 19 companies (Qualcomm, OPPO, Xiaomi, MediaTek, Futurewei, vivo, Convida, Intel, ZTE, Samsung, Sharp, CATT, NTTDOCOMO, Lenovo, LGE, Ericsson, DENSO, Nokia, CMCC) support option1, i.e., eDRX is optional for any gNB (either supporting RedCap or not), which means it is up to gNB implementation whether to support eDRX   + MediaTek commented that Option 1 gives flexibility for different network deployments. * 2 companies (Apple, Sequans) support Option 3.1, i.e., eDRX is mandatory for gNB supporting RedCap, while optional for gNB not supporting RedCap   + Apple thinks all RedCap supporting gNB should mandatory support eDRX feature. Otherwise, the mobility between different RedCap supporting gNBs is hard to deal with.   + Sequans thinks it doesn’t make sense that UEs require eDRX cannot be supported by some gNBs. * 1 company (Huawei) supports option 2, i.e., eDRX is optional only for gNB supporting RedCap.   + Huawei doesn’t see a use case for eDRX for non-RedCap UEs. * 1 company (Sequans) support option 3, i.e., eDRX is mandatory for gNB supporting RedCap.   **Rapporteur**: Based on the inputs from companies, rapporteur suggests to follow the clear majority to agree eDRX is an optional for any gNB (either supporting RedCap or not). |

During email discussion after 2nd round, some companies still want to discuss this issue. Apple see potential complications that can be avoided if gNBs that support RedCap also support eDRX (i.e. Option 3.1). They want to get views on how the page would be handled between gNB that support eDRX and those that won’t, in cases where the UE is configured with eDRX (e.g. >10.24 sec in IDLE). It is not sure, assuming CN supports and has configured this IDLE eDRX, the CN would need to also handle gNBs that don’t support eDRX by sending the paging to these gNBs while buffering for gNBs that support, and RAN/CN has to assume that the UE could be in an eDRX supported or not-supported area?

Rapporteur’s understanding: as CN have no idea on SFN timing at gNB, CN cannot know when the gNBs will send the paging to UEs. In this way, either gNBs supporting eDRX or not, CN will send the paging to the gNBs by CN implementation.

Besides, after checking TS 36.304 and TS 36.331, Rapporteur thinks that UE stops using eDRX if the gNB doesn’t support eDRX. The issue raised by Apple is not a new issue since the eDRX is optional for gNB supporting eMTC. But we are open to have discussion on the raised issue.

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| *Except for NB-IoT, the UE may operate in extended DRX only if the UE is configured by upper layers and the cell indicates support for eDRX in System Information.*   |  | | --- | | ***eDRX-Allowed***  *The presence of this field indicates if idle mode extended DRX is allowed in the cell for the UE connected to EPC. The UE shall stop using extended DRX in idle mode if eDRX-Allowed is not present when connected to EPC.* | | ***eDRX-Allowed-5GC***  *The presence of this field indicates if idle mode extended DRX is allowed in the cell for the UE connected to 5GC. The UE shall stop using extended DRX in idle mode if eDRX-Allowed-5GC is not present when connected to 5GC.* | |

Rapporteur suggests companies to take the concern from Apple into account, and re-consider the issue and hope we could reach consensus.

1. Companies are invited to provide your understanding on the eDRX feature at gNB side among the following options:

* Option 1: eDRX is optional for any gNB (either supporting RedCap or not), which means it is up to gNB implementation whether to support eDRX
* Option 3.1: eDRX is mandatory for gNB supporting RedCap, while optional for gNB not supporting RedCap.

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| **Company’s name** | **Option(s)** | **Comments, if any** |
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## When INACTIVE eDRX is not configured

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| ***Proposal 7 from 2nd round. [To discuss] [11 vs 11]*** *For RRC\_INACTIVE UE, when IDLE eDRX cycle is no longer than 10.24s and INACTIVE eDRX cycle is not configured, RAN2 to discuss the following options on the paging monitoring mechanism*   * + *Option 1: T is determined by the shortest of RAN paging cycle, IDLE eDRX cycle, and default paging cycle.*   + *Option 2: T is determined by the shortest of RAN paging cycle and IDLE eDRX cycle.*   ***Proposal from 2nd round 8. [To discuss] [10 vs 12]*** *For RRC\_INACTIVE UE, when IDLE eDRX cycle is longer than 10.24s and INACTIVE eDRX cycle is not configured, RAN2 to discuss the following options on the paging monitoring mechanism for RRC\_INACTIVE UE outside CN PTW:*   * + *Option 1: T is determined by the shortest of RAN paging cycle, IDLE eDRX cycle, and default paging cycle.*   + *Option 2: T is determined by the shortest of RAN paging cycle and IDLE eDRX cycle.* |

During the 2nd round of offline discussion, companies provided their views on their preference of paging monitoring mechanism in the cases when IDLE eDRX cycle is no longer than 10.24s and INACTIVE eDRX cycle is not configured and when IDLE eDRX cycle is longer than 10.24s and INACTIVE eDRX cycle is not configured. The discussion summary is:

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| **Summary on the Discussion point 7 and Discussion point 8:**  22 companies provided inputs to these two discussion points and give their preferred option on the paging monitoring mechanism in case that when IDLE eDRX cycle is no longer than 10.24s and INACTIVE eDRX cycle is not configured (**Discussion point 7**), and on the paging monitoring mechanism outside CN PTW in case that when IDLE eDRX cycle is longer than 10.24s and INACTIVE eDRX cycle is not configured (**Discussion point 8**).   * 11 companies (Qualcomm, Futurewei, Intel, Huawei, NTTDOCOMO, Lenovo, LGE, Sequans, Ericsson, Nokia, CMCC) support Option 1 for Discussion point 7, and 9 same companies expect Lenovo support Option 1 for Discussion point 8.   + Qualcomm comments that we should follow the rule that if a RRC state is not configured with eDRX, the UE has to follow default paging cycle too to monitor SI change notifications. If RRC state is configured with eDRX, then UE does not need to follow default paging cycle.   + Intel comments that UE in RRC\_INACTIVE is not configured with eDRX should behave the same with legacy.   + Huawei thinks default paging cycle should be considered for NR principle. * 11 companies (OPPO, Xiaomi, MediaTek, Apple, vivo, Convida, ZTE, Samsung, Sharp, CATT, DENSO, ) support Option 2 for Discussion point 7, and 12 companies among these 11 companies same with Discussion point 7 and Lenovo support Option 2 for Discussion point 8.   + For DP 7: MediaTek and Convida think the expression in Option 2 is redundant,   [Rapporteur] We have discussed different expressions in the first-round of discussion. The expression here is acceptable by most companies. Rapporteur thinks we could further discuss the expression during normative phase to align with other cases. As Convida means the similar thing, rapporteur assume option 2 could be acceptable.   * + OPPO and Xiaomi think in these cases, default paging cycle should not be considered.   + MediaTek thinks option 2 is aligned with LTE.   + CATT wonders if option 1 is adopted in Discussion point 6), and INACTIVE eDRX cycle>10.24s is not supported, whether the definition of “INACTIVE eDRX” does exist.   [Rapporteur] if option 1 is adopted in Discussion point 6), and INACTIVE eDRX cycle>10.24s is not supported, then “INACTIVE eDRX” in the proposal/conclusion should be represented by “RAN paging cycle”. We could further discuss this if it happens. Here, the expression of “INACTIVE eDRX” is used by now.  **Rapporteur**: Based on the inputs from companies, it seems hard to make the decision on which option should be adopted due to split of views on this issue. Thus, rapporteur suggests to further discuss this issue online considering two options below. |

The views on this issue are very diverse, the companies support option 1 have the following reasons:

* Follow a rule that if a RRC state is not configured with eDRX, then UE has to consider default paging cycle in order to monitor SI change notifications. If a RRC state is configured with eDRX, then, UE does not need to consider default paging cycle. (Qualcomm)
* UE in RRC\_INACTIVE which is not configured with eDRX should behave the same as legacy (Intel).
* Default paging cycle should be considered for NR principle, wherein UE has to monitor SI change notification if not configured with eDRX. (Huawei, Sequans, Ericsson)

The companies support option 2 have the following reasons:

* When IDLE eDRX cycle is configured, default paging cycle is not used to determine T. (OPPO, Xiaomi)
* Align with the LTE mechanism. (MediaTek, vivo)
* SI change notification in eDRX was handled by a separate mechanism in LTE (i.e. eDRX acquisition period). (MediaTek, CATT, Samsung)

[Rapporteur] Rapporteur wants to clarify that: when eDRX cycle is longer than modification period, the eDRX acquisition period will be used, otherwise, modification period boundaries for BL UEs and UEs in CE are defined by SFN values for which (H-SFN \* 1024 + SFN) mod m=0. Considering the modification period has nothing to do with default paging cycle, even the eDRX cycle acquisition is introduced, UE has to monitor PO based on default paging cycle for SI change.

Rapporteur thinks the main divergence is whether the default paging cycle should be considered for INACTIVE UEs when IDLE eDRX is configured.

* On one hand (for option 2), when IDLE eDRX is configured for RRC\_IDLE UE, we don’t consider default paging cycle for SI change notification to determine T (i.e. agreement: *For RRC\_IDLE UE, when eDRX cycle is no longer than 10.24s, T is determined by IDLE eDRX cycle.*), the RRC\_IDLE UE may miss the SI change notification. Some companies think same rule should be applied to RRC\_INACTIVE UE when IDLE eDRX is configured, i.e. don’t consider default paging cycle or SI change notification to determine T, then, the RRC\_INACTIVE UE may also miss the SI change notification.
* On the other hand (for option 1), when IDLE eDRX is configured but INACTIVE eDRX is not configured, some companies think the similar logical should be: if a RRC state is not configured with eDRX, then UE has to consider default paging cycle in order to monitor SI change notifications; if a RRC state is configured with eDRX, then, UE does not need to consider default paging cycle. In this way, when INACTIVE eDRX is not configured, default paging cycle for SI change notification should be considered to determine T for RRC\_INACTIVE UE.

Honestly, Rapporteur think both sides are reasonable. Rapporteur suggests companies to re-consider this issue, and provide more technical reasons, if any.

1. For RRC\_INACTIVE UE, when IDLE eDRX cycle is no longer than 10.24s and INACTIVE eDRX cycle is not configured, companies are invited to provide their preference on the paging monitoring mechanism among the following options.
   * Option 1: T is determined by the shortest of RAN paging cycle, IDLE eDRX cycle, and default paging cycle.
   * Option 2: T is determined by the shortest of RAN paging cycle and IDLE eDRX cycle.

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| **Company’s name** | **Option(s)** | **Comments / arguments** |
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1. For RRC\_INACTIVE UE, when IDLE eDRX cycle is longer than 10.24s and INACTIVE eDRX cycle is not configured, **outside CN PTW**, companies are invited to provide their preference on the paging monitoring mechanism among the following options.
   * Option 1: T is determined by the shortest of RAN paging cycle and default paging cycle.
   * Option 2: T is determined by RAN paging cycle.

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| **Company’s name** | **Option(s)** | **Comments / arguments** |
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## LS to RAN4

During the first round of offine discussion, some companies mentioned the PTW length is urgent required by RAN4, which should be offline discussed. During the 2nd round of offline discussion, the PTW length, granularity, and PH/PTW determination have been agreed. Rapporteur thinks it is time to send an LS to RAN4 to inform then at least on PTW length, and to ask RAN4 to study the corresponding requirements inside PTW for eDRX.

1. Companies are invited to provide views on do you agree to send an LS to RAN4 on eDRX (e.g. PTW length, and ask RAN4 to study the corresponding requirements inside PTW)?

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| **Company** | **Yes / No** | **Comments, if any** |
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If companies agreed to send an LS to RAN4 on eDRX, we need to determine which information need to be included, e.g. PTW length, PTW/PH determination, ask RAN4 to study/specify the corresponding requirements inside PTW, when IDLE eDRX>10.24s, etc.

1. If companies agreed to send an LS to RAN4 on eDRX, companies are invited to provide your views on which information should be included:
2. PTW length and granularity
3. PTW/PH determination
4. Ask RAN4 to study/specify the corresponding requirements inside PTW, when IDLE eDRX>10.24s
5. Any others?

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| **Company** | **Item(s)** | **Comments, if any** |
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## Others

1. Any other relevant issues need to be discussed?

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| **Company** | **Issue description** |
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# Conclusion

<Section to be updated by Rapporteur>

Aiming to help with the meeting discussion/progress, the proposals are categorized starting with:

* [To agree] when there is large support and hence proposed for easy agreement.
* [To discuss] when there is substantial level of support and agreement may be possible.
* [FFS] when there is low support or companies propose new solutions or options to possibly consider further e.g. if there is sufficient support (understanding that these topic have not been discussed by all companies when providing their views in the different discussion points).

The proposals also start with a number: for the format [x], ‘x’ represents the number of supportive companies (i.e. these solutions are marked as FFS as the proposed solutions were not discussed by all companies) and, for the format [x/y], ‘x’ represents the number of supportive companies, and (y-x) the number of companies with different view.

The proposals captured are the following:

**Proposal 1.** **[To agree]** xxx

**Proposal 2.** **[To discuss]** xxx

**Proposal 3.** **[FFS]** xxx

The following order is suggested for the online discussion:

**Proposals for potential agreement**

<To be updated by Rapporteur>

**Proposals for potential discussion online**

<To be updated by Rapporteur>

**Proposals for potential discussion in future meetings**

<To be updated by Rapporteur>

# Reference

1. R2-2106905 Reply LS on introducing extended DRX for RedCap UEs (C1-213966; contact: Qualcomm) CT1 LS in Rel-17 NR\_redcap-Core To:RAN2 Cc:SA2, RAN3
2. R2-2107073 Discussion on eDRX for RedCap UEs OPPO discussion Rel-17 NR\_redcap-Core
3. R2-2107096 CN PTW and RAN PTW for RedCap eDRX Samsung discussion Rel-17
4. R2-2107210 eDRX for RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core
5. R2-2107217 eDRX configurations for RedCap UEs Qualcomm Incorporated discussion Rel-17 FS\_NR\_redcap
6. R2-2107412 Discussion on eDRX for RedCap UEs vivo, Guangdong Genius discussion Rel-17 FS\_NR\_redcap
7. R2-2107534 Discussion on e-DRX for Redcap Devices Xiaomi Communications discussion
8. R2-2107675 Leftover issues for eDRX Intel Corporation discussion Rel-17 NR\_redcap
9. R2-2107706 Discussion on eDRX for RRC\_IDLE and RRC\_INACTIVE LG Electronics UK discussion Rel-17
10. R2-2107751 eDRX for RedCap UEs ZTE Corporation, Sanechips discussion Rel-17 NR\_redcap-Core
11. R2-2107905 Consideration on eDRX for RedCap UE Lenovo, Motorola Mobility discussion Rel-17
12. R2-2108230 Remaining issues for eDRX MediaTek Inc. discussion Rel-17 NR\_redcap-Core R2-2105671
13. R2-2108280 Details of eDRX and PTW in RRC\_IDLE and RRC\_INACTIVE Ericsson discussion NR\_redcap-Core
14. R2-2108525 Discussion on eDRX for RRC\_Idle and RRC\_Inactive CMCC discussion Rel-17 NR\_redcap-Core
15. R2-2108699 Discussion on eDRX for NR RRC Inactive and Idle CATT discussion Rel-17 NR\_redcap-Core
16. R2-2108778 Open issues on eDRX for UE in RRC\_INACTIVE DENSO CORPORATION discussion Rel-17 NR\_redcap-Core
17. R2-2108881 Summary of offline 105- [REDCAP] eDRX cycles - first round vivo.
18. R2-2109117 Summary of offline 105- [REDCAP] eDRX cycles - second round vivo.