**3GPP TSG-RAN WG4 Meeting #112 R4-2411613**

**Maastricht, Netherlands, 19th - 23rd August, 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.133** | **CR** | **4608** | **rev** |  | **Current version:** | **18.6.0** |  |
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| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <http://www.3gpp.org/Change-Requests>.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | CR on relaxation measurement requirements for RedCap inactive UE with INACTIVE eDRX >10.24s | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Xiaomi | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_redcap\_enh-Core | | | | |  | ***Date:*** | | | 2024-08-08 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | When UE in FR2 fulfilling the relaxation criterion, the scaling factor need to be revised due to the limitation of maximum PTW length. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Revise the relaxation scaling factor for UE in FR2 fulfilling the relaxation criterion | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The relaxed evaluation period cannot be within a single PTW. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.1B.2.9, 5.1B.2.10, 5.1B.2.11 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS 38.533 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

<Start of Change 1>

5.1B.2.9 Measurements of intra-frequency NR cells for UE configured with relaxed measurement criterion

The requirements in clause 4.2B.2.9 apply for UE configured with relaxed measurement criterion except when UE is configured with eDRX\_IDLE cycle greater than 10.24 s and UE has fulfilled stationary criterion or low mobility criterion or not-at-cell edge criterion.

If the UE is configured with eDRX\_IDLE cycle greater than 10.24 s in FR1 and FR2, and UE has fulfilled stationary criterion or low mobility criterion or not-at-cell edge criterion, and

* when UE is not configured with eDRX by [*ran-ExtendedPagingCycle-r18*] or *eDRX-AllowedInactive-r18* is not signalled in SIB1, then the requirements in Table Table 5.1B.2.9-1 and Table 5.1B.2.9-2 respectively apply provided that eDRX\_IDLE cycle is ≤ 10485.76 sec, or
* when UE is configured with eDRX by [*ran-ExtendedPagingCycle-r18*] and *eDRX-AllowedInactive-r18* is signalled in SIB1, the requirements defined in section 4.2B.2.9 shall apply with Tdetect, NR\_intra\_RedCap\_Relax, Tmeasure, NR\_intra \_RedCap\_Relax and Tevaluate, NR\_intra \_RedCap\_Relax defined in Table 5.1B.2.9-3 and Table 5.1B.2.9-4.

**Table 5.1B.2.9-1: Tdetect, Tmeasure and Tevaluate for inactive Redcap UE configured with eDRX\_IDLE cycle (Frequency range FR1)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **eDRX\_IDLE cycle length [s]** | **DRX or eDRX INACTIVE cycle length [s]** | **Tdetect,NR\_Intra\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tmeasure,NR\_Intra\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tevaluate,NR\_Intra\_RedCap\_Relax [s] (number of DRX or INACTIVE eDRX cycles)** |
|
| 20.48 ≤eDRX\_IDLE cycle length ≤ 10485.76 | 0.32 | 11.52 x M2 x K4 (36 x M2 x K4) | 1.28 x M2 x K4 (4 x M2 x K4) | 5.12 x M2 x K4 (16 x M2 x K4) |
| 0.64 | 17.92 x K4 (28 x K4) | 1.28 x K4 (2 x K4) | 5.12 x K4 (8 x K4) |
| 1.28 | 32 x K4 (25 x K4) | 1.28 x K4 (1 x K4) | 6.4 x K4 (5 x K4) |
| 2.56 | 58.88 x K4 (23 x K4) | 2.56 x K4 (1 x K4) | 7.68 x K4 (3 x K4) |
| 5.12 | 117.76 x K4 (23 x K4) | 5.12 x K4 (1 x K4) | 15.36 x K4 (3 x K4) |
| 10.24 | 235.52 x K4 (23) | 10.24 x K4 (1 x K4) | 30.72 x K4 (3 x K4) |
| Note 1: M2 = 1.5 if SMTC periodicity of measured intra-frequency cell > 20 ms; otherwise M2=1.  Note 2: K4 = 6 is the measurement relaxation factor applicable for UE fulfilling the *stationaryMobilityEvaluation* [2] criterion. K4 = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion. | | | | |

**Table 5.1B.2.9-2: Tdetect, Tmeas and Tevaluate for inactive Redcap UE configured with eDRX\_IDLE cycle, (Frequency range FR2)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **eDRX\_IDLE cycle length [s]** | **DRX or eDRX INACTIVE cycle length [s]** | **Scaling Factor (N1)** | **Tdetect,NR\_Intra\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tmeasure,NR\_Intra\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tevaluate,NR\_Intra\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** |
|
| 20.48 ≤eDRX\_IDLE cycle length ≤10485.76 | 0.32 | 8 | 11.52 x N1 x M2 x K4 (36 x N1 x M2 x K4) | 1.28 x N1 x M2 x K4 (4 x N1 x M2 x K4) | 5.12 x N1 x M2 x K4 (16 x N1 x M2 x K4) |
| 0.64 | 5 | 17.92x N1 x K4 (28 x N1 x K4) | 1.28 x N1 x K4 (2 x N1 x K4) | 5.12 x N1 x K4 (8 x N1 x K4) |
| 1.28 | 4 | 32 x N1 x K4 (25 x N1 x K4) | 1.28 x N1 x K4 (1 x N1 x K4) | 6.4 x N1 x K4 (5 x N1 x K4) |
| 2.56 | 3 | 58.88 x N1 x K4 (23 x N1 x K4) | 2.56 x N1 x K4 (1 x N1 x K4) | 7.68 x N1 x K4 (3 x N1 x K4) |
| 5.12 | 3 | 117.76 x N1 x K4 (23 x N1 x K4) | 5.12 x N1 x K4 (1 x N1 x K4) | 15.36 x N1 x K4 (3 x N1 x K4) |
| 10.24 | 3 | 235.52 x N1 x K4 (23 x N1 x K4) | 10.24 x N1 x K4 (1 x N1 x K4) | 30.72 x N1 x K4 (3 x N1 x K4) |
| Note 1: M2 = 1.5 if SMTC periodicity of measured intra-frequency cell > 20 ms; otherwise M2=1.  Note 2: K4 = 6 is the measurement relaxation factor applicable for UE fulfilling the *stationaryMobilityEvaluation* [2] criterion. K4 = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion. | | | | | |

Table 5.1B.2.9-3: Tdetect,NR\_Intra\_RedCap\_Relax, Tmeasure,NR\_Intra\_RedCap\_Relax and Tevaluate,NR\_Intra\_RedCap\_Relax for Redcap UE configured with eDRX\_IDLE cycle and eDRX\_INACTIVE cycle (Frequency range FR1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| eDRX\_IDLE cycle and  eDRX\_INACTIVE cycle length [s] | RAN DRX cycle length [s] | eDRX INACTIVE PTW length [s] (number of 1.28s periods) | Tdetect,NR\_Intra\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tmeasure,NR\_Intra\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tevaluate,NR\_Intra\_RedCap\_Relax [s] (number of RAN DRX cycles) |
| 20.48≤eDRX\_IDLE cycle length ≤163.84  20.48 ≤eDRX\_INACTIVE cycle length ≤ 163.84 | 0.32 | Note 6 | *eDRX\_cycle\_length*  (23 x Kx) | 0.32 x M2 x Kx (1 x 1.5 x Kx) | 0.64 x M2 x Kx (2 x 1.5 x Kx) |
| 0.64 | 0.64 x Kx (1 x Kx) | 1.28 x Kx (2 x Kx) |
| 1.28 | 1.28 x Kx (1 x Kx) | 2.56 x Kx (2 x Kx) |
| 2.56 | 2.56 x Kx (1 x Kx) | 5.12 x Kx (2 x Kx) |
| Note 1: RAN DRX cycle in this table is UE specific DRX value configured by RRC specified in [1].  Note 2: The number of RAN DRX cycles in this table is given for the DRX cycles within RAN configured PTWs.  Note 3: eDRX INACTIVE PTW in this table is RAN configured PTW [1].  Note 4: The number of DRX cycles in this table is given for the DRX cycles within RAN PTWs.  Note 5: The eDRX\_INACTIVE cycle lengths are as specified in Section 10.5.5.32 of TS 24.008 [34].  Note 6: The lower bound of PTW length is derived based on .  Note 7: Kx = 6 is the measurement relaxation factor applicable for UE fulfilling the *stationaryMobilityEvaluation* [2] criterion. Kx = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion.  Note 8: M2 = 1.5 if SMTC periodicity of measured intra-frequency cell > 20 ms; otherwise M2=1. | | | | | |

Table 5.1B.2.9-4: Tdetect,NR\_Intra\_RedCap\_Relax, Tmeasure,NR\_Intra\_RedCap\_Relax and Tevaluate,NR\_Intra\_RedCap\_Relax for Redcap UE configured with eDRX\_IDLE cycle and eDRX\_INACTIVE cycle (Frequency range FR2)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| eDRX\_IDLE cycle and  eDRX\_INACTIVE cycle length [s] | RAN DRX cycle length [s] | eDRX INACTIVE PTW length [s] (number of 1.28s periods) | Scaling Factor (N1) Note1 | Tdetect,NR\_Intra\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tmeasure,NR\_Intra\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tevaluate,NR\_Intra\_RedCap\_Relax [s] (number of RAN DRX cycles) |
| 20.48≤eDRX\_IDLE cycle length ≤163.84  20.48 ≤eDRX\_INACTIVE cycle length ≤163.84 | 0.32 | Note 4 | 8 | *eDRX\_cycle\_length*  (23 x N1 x Kx) | 0.32 x N1 x Kx (1 x N1 x Kx) | 0.64 x N1 x Kx (2 x N1 x Kx) |
| 0.64 | 5 | 0.64 x N1 x Kx (1 x N1 x Kx) | 1.28 x N1 x Kx (2 x N1 x Kx) |
| 1.28 | 4 | 1.28 x N1 x Kx (1 x N1 x Kx) | 2.56 x N1 x Kx (2 x N1 x Kx) |
| 2.56 | 3 | 20.48  (8) | 40.96  (16) |
| Note 1: Applies for RedCap UE of all power class.  Note 2: The number of DRX cycles in this table is given for the DRX cycles within RAN PTWs.  Note 3: The eDRX\_INACTIVE cycle lengths are as specified in Section 10.5.5.32 of TS 24.008 [34].  Note 4: The lower bound of PTW length is derived based on .  Note 5: When eDRX\_INACTIVE=20.48s and DRX=0.32s, UE is allowed to perform cell evaluation within PTW in every 2 eDRX \_INACTIVE cycles.  Note 6: RAN DRX cycle in this table is UE specific DRX value configured by RRC specified in [1].  Note 7: The number of RAN DRX cycles in this table is given for the DRX cycles within RAN configured PTWs.  Note 8: eDRX INACTIVE PTW in this table is RAN configured PTW [1].  Note 9: Kx = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion.For DRX cycle length is 0.32s, 0.64s, and 2.56s, Kx = 6 is the measurement relaxation factor applicable for UE fulfilling the stationaryMobilityEvaluation [2] criterion. For DRX cycle length is 1.28s, Kx = 4 is the measurement relaxation factor applicable for UE fulfilling the stationaryMobilityEvaluation [2] criterion. | | | | | | |

5.1B.2.10 Measurements of inter-frequency NR cells for UE configured with relaxed measurement criterion

The requirements in clause 4.2B.2.10 apply for UE configured with relaxed measurement criterion except when UE is configured with eDRX\_IDLE cycle greater than 10.24 s and UE has fulfilled stationary criterion or low mobility criterion or not-at-cell edge criterion.

If the UE is configured with eDRX\_IDLE cycle greater than 10.24 s in FR1 and FR2, and UE has fulfilled stationary criterion or low mobility criterion or not-at-cell edge criterion, and

* when UE is not configured with eDRX by [*ran-ExtendedPagingCycle-r18*] or *eDRX-AllowedInactive-r18* is not signalled in SIB1, then the requirements in Table Table 5.1B.2.10-1 and Table 5.1B.2.10-2 respectively apply provided that eDRX\_IDLE cycle is ≤ 10485.76 sec, or
* when UE is configured with eDRX by [*ran-ExtendedPagingCycle-r18*] and *eDRX-AllowedInactive-r18* is signalled in SIB1, the requirements defined in section 4.2B.2.10 shall apply with Tdetect, NR\_inter\_RedCap\_Relax, Tmeasure, NR\_inter \_RedCap\_Relax and Tevaluate, NR\_inter \_RedCap\_Relax defined in Table 5.1B.2.10-3 and Table 5.1B.2.10.

**Table 5.1B.2.10-1: Tdetect, Tmeasure and Tevaluate for inactive Redcap UE configured with eDRX\_IDLE cycle (Frequency range FR1)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **eDRX\_IDLE cycle length [s]** | **DRX or eDRX INACTIVE cycle length [s]** | **Tdetect,NR\_Inter\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tmeasure,NR\_Inter\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tevaluate,NR\_Inter\_RedCap\_Relax [s] (number of DRX or INACTIVE eDRX cycles)** |
|
| 20.48 ≤eDRX\_IDLE cycle length ≤ 10485.76 | 0.32 | 11.52 x M2 x K4 (36 x M2 x K4) | 1.28 x M2 x K4 (4 x M2 x K4) | 5.12 x M2 x K4 (16 x M2 x K4) |
| 0.64 | 17.92 x K4 (28 x K4) | 1.28 x K4 (2 x K4) | 5.12 x K4 (8 x K4) |
| 1.28 | 32 x K4 (25 x K4) | 1.28 x K4 (1 x K4) | 6.4 x K4 (5 x K4) |
| 2.56 | 58.88 x K4 (23 x K4) | 2.56 x K4 (1 x K4) | 7.68 x K4 (3 x K4) |
| 5.12 | 117.76 x K4 (23 x K4) | 5.12 x K4 (1 x K4) | 15.36 x K4 (3 x K4) |
| 10.24 | 235.52 x K4 (23) | 10.24 x K4 (1 x K4) | 30.72 x K4 (3 x K4) |
| Note 1: M2 = 1.5 if SMTC periodicity of measured intra-frequency cell > 20 ms; otherwise M2=1.  Note 2: K4 = 6 is the measurement relaxation factor applicable for UE fulfilling the *stationaryMobilityEvaluation* [2] criterion. K4 = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion. | | | | |

**Table 5.1B.2.10-2: Tdetect, Tmeas and Tevaluate for inactive Redcap UE configured with eDRX\_IDLE cycle, (Frequency range FR2)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **eDRX\_IDLE cycle length [s]** | **DRX or eDRX INACTIVE cycle length [s]** | **Scaling Factor (N1)** | **Tdetect,NR\_Inter\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tmeasure,NR\_Inter\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** | **Tevaluate,NR\_Inter\_RedCap\_Relax [s] (number of DRX or eDRX INACTIVE cycles)** |
|
| 20.48 ≤eDRX\_IDLE cycle length ≤10485.76 | 0.32 | 8 | 11.52 x N1 x M2 x K4 (36 x N1 x M2 x K4) | 1.28 x N1 x M2 x K4 (4 x N1 x M2 x K4) | 5.12 x N1 x M2 x K4 (16 x N1 x M2 x K4) |
| 0.64 | 5 | 17.92x N1 x K4 (28 x N1 x K4) | 1.28 x N1 x K4 (2 x N1 x K4) | 5.12 x N1 x K4 (8 x N1 x K4) |
| 1.28 | 4 | 32 x N1 x K4 (25 x N1 x K4) | 1.28 x N1 x K4 (1 x N1 x K4) | 6.4 x N1 x K4 (5 x N1 x K4) |
| 2.56 | 3 | 58.88 x N1 x K4 (23 x N1 x K4) | 2.56 x N1 x K4 (1 x N1 x K4) | 7.68 x N1 x K4 (3 x N1 x K4) |
| 5.12 | 3 | 117.76 x N1 x K4 (23 x N1 x K4) | 5.12 x N1 x K4 (1 x N1 x K4) | 15.36 x N1 x K4 (3 x N1 x K4) |
| 10.24 | 3 | 235.52 x N1 x K4 (23 x N1 x K4) | 10.24 x N1 x K4 (1 x N1 x K4) | 30.72 x N1 x K4 (3 x N1 x K4) |
| Note1: M2 = 1.5 if SMTC periodicity of measured intra-frequency cell > 20 ms; otherwise M2=1.  Note 2: K4 = 6 is the measurement relaxation factor applicable for UE fulfilling the *stationaryMobilityEvaluation* [2] criterion. K4 = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion. | | | | | |

Table 5.1B.2.10-3: Tdetect,NR\_Inter\_RedCap\_Relax, Tmeasure,NR\_Inter\_RedCap\_Relax and Tevaluate,NR\_Inter\_RedCap\_Relax for Redcap UE configured with eDRX\_IDLE cycle and eDRX\_INACTIVE cycle (Frequency range FR1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| eDRX\_IDLE cycle and  eDRX\_INACTIVE cycle length [s] | RAN DRX cycle length [s] | eDRX INACTIVE PTW length [s] (number of 1.28s periods) | Tdetect,NR\_Inter\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tmeasure,NR\_Inter\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tevaluate,NR\_Inter\_RedCap\_Relax [s] (number of RAN DRX cycles) |
| 20.48≤eDRX\_IDLE cycle length ≤163.84  20.48 ≤eDRX\_INACTIVE cycle length ≤ 163.84 | 0.32 | Note 6 | *eDRX\_cycle\_length*  (23 x Kx) | 0.32 x 1.5 x Kx (1 x 1.5 x Kx) | 0.64 x 1.5 x Kx (2 x 1.5) |
| 0.64 | 0.64 x Kx (1 x Kx) | 1.28 x Kx (2 x Kx) |
| 1.28 | 1.28 x Kx (1 x Kx) | 2.56 x Kx (2 x Kx) |
| 2.56 | 2.56 x Kx (1 x Kx) | 5.12 x Kx (2 x Kx) |
| Note 1: RAN DRX cycle in this table is UE specific DRX value configured by RRC specified in [1].  Note 2: The number of RAN DRX cycles in this table is given for the DRX cycles within RAN configured PTWs.  Note 3: eDRX INACTIVE PTW in this table is RAN configured PTW [1].  Note 4: The number of DRX cycles in this table is given for the DRX cycles within RAN PTWs.  Note 5: The eDRX\_INACTIVE cycle lengths are as specified in Section 10.5.5.32 of TS 24.008 [34].  Note 6: The lower bound of PTW length is derived based on .  Note 7: Kx = 6 is the measurement relaxation factor applicable for UE fulfilling the *stationaryMobilityEvaluation* [2] criterion. Kx = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion. | | | | | |

Table 5.1B.2.10-4: Tdetect,NR\_Inter\_RedCap\_Relax, Tmeasure,NR\_Inter\_RedCap\_Relax and Tevaluate,NR\_Inter\_RedCap\_Relax for Redcap UE configured with eDRX\_IDLE cycle and eDRX\_INACTIVE cycle (Frequency range FR2)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| eDRX\_IDLE cycle and  eDRX\_INACTIVE cycle length [s] | RAN DRX cycle length [s] | eDRX INACTIVE PTW length [s] (number of 1.28s periods) | Scaling Factor (N1) Note1 | Tdetect,NR\_Inter\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tmeasure,NR\_Inter\_RedCap\_Relax [s] (number of RAN DRX cycles) | Tevaluate,NR\_Inter\_RedCap\_Relax [s] (number of RAN DRX cycles) |
| 20.48≤eDRX\_IDLE cycle length ≤163.84  20.48 ≤eDRX\_INACTIVE cycle length ≤163.84 | 0.32 | Note 4 | 8 | *eDRX\_cycle\_length*  (23 x N1 x Kx) | 0.32 x N1 x Kx (1 x N1 x Kx) | 0.64 x N1 x Kx (2 x N1 x Kx) |
| 0.64 | 5 | 0.64 x N1 x Kx (1 x N1 x Kx) | 1.28 x N1 x Kx (2 x N1 x Kx) |
| 1.28 | 4 | 1.28 x N1 x Kx (1 x N1 x Kx) | 2.56 x N1 x Kx (2 x N1 x Kx) |
| 2.56 | 3 | 20.48  (8) | 40.96  (16) |
| Note 1: Applies for RedCap UE of all power class.  Note 2: The number of DRX cycles in this table is given for the DRX cycles within RAN PTWs.  Note 3: The eDRX\_INACTIVE cycle lengths are as specified in Section 10.5.5.32 of TS 24.008 [34].  Note 4: The lower bound of PTW length is derived based on .  Note 5: When eDRX\_INACTIVE=20.48s and DRX=0.32s, UE is allowed to perform cell evaluation within PTW in every 2 eDRX \_INACTIVE cycles.  Note 6: RAN DRX cycle in this table is UE specific DRX value configured by RRC specified in [1].  Note 7: The number of RAN DRX cycles in this table is given for the DRX cycles within RAN configured PTWs.  Note 8: eDRX INACTIVE PTW in this table is RAN configured PTW [1].  Note 9: Kx = 3 is the measurement relaxation factor applicable for UE fulfilling the *lowMobilityEvaluation* [2] criterion or fulfilling the *cellEdgeEvaluation* [2] criterion. For DRX cycle length is 0.32s, 0.64s, and 2.56s, Kx = 6 is the measurement relaxation factor applicable for UE fulfilling the stationaryMobilityEvaluation [2] criterion. For DRX cycle length is 1.28s, Kx = 4 is the measurement relaxation factor applicable for UE fulfilling the stationaryMobilityEvaluation [2] criterion. | | | | | | |

<End of Change 1>