**3GPP TSG-CT WG1 Meeting #137-eC1-225031**

**E-Meeting, 18th – 26th August 2022**

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| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **24.501** | **CR** | **4627** | **rev** | **-** | **Current version:** | **17.7.1** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:***  | Addition of the length value of the Negotiated eDRX parameters IE |
|  |  |
| ***Source to WG:*** | LG Electronics Inc., Ericsson, Huawei, HiSilicon, China Mobile |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | ARCH\_NR\_REDCAP |  | ***Date:*** | 2022-08-11 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | Rel-17 |
|  | *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 canbe 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | According to C1-224525 (LS on the maximum PTW length of IDLE eDRX), RAN2 agreed to support the maximum PTW length 40.96s. <RAN2 agreements>1. The maximum PTW length is 40.96s when IDLE eDRX cycle is longer than 10.24s.
2. The minimum PTW length is 1.28s and the step length/granularity of PTW length is 1.28 when IDLE eDRX cycle is longer than 10.24s.

 To support this, TS 24.008 introduced extended PTW length values in the extened DRX parameters IE, and as the result, the length of Negotiated extended DRX parameters can be 4. So, this change should be reflected in the specification accordingly.  |
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| ***Summary of change:*** | The length of the Negotiated eDRX parameters IE can be 4. |
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| ***Consequences if not approved:*** | The UE cannot successfully decode the Negotiated eDRX parameters IE that includes extended PTW length values. |
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| ***Clauses affected:*** | 8.2.6.1, 8.2.7.1 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ... |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* First Change \* \* \* \*

### 8.2.6 Registration request

#### 8.2.6.1 Message definition

The REGISTRATION REQUEST message is sent by the UE to the AMF. See table 8.2.6.1.1.

Message type: REGISTRATION REQUEST

Significance: dual

Direction: UE to network

Table 8.2.6.1.1: REGISTRATION REQUEST message content

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| IEI | Information Element | Type/Reference | Presence | Format | Length |
|  | Extended protocol discriminator | Extended Protocol discriminator9.2 | M | V | 1 |
|  | Security header type | Security header type9.3 | M | V | 1/2 |
|  | Spare half octet | Spare half octet9.5 | M | V | 1/2 |
|  | Registration request message identity | Message type9.7 | M | V | 1 |
|  | 5GS registration type | 5GS registration type9.11.3.7 | M | V | 1/2 |
|  | ngKSI | NAS key set identifier9.11.3.32 | M | V | 1/2 |
|  | 5GS mobile identity | 5GS mobile identity9.11.3.4 | M | LV-E | 6-n |
| C- | Non-current native NAS key set identifier | NAS key set identifier9.11.3.32 | O | TV | 1 |
| 10 | 5GMM capability | 5GMM capability9.11.3.1 | O | TLV | 3-15 |
| 2E | UE security capability | UE security capability9.11.3.54 | O | TLV | 4-10 |
| 2F | Requested NSSAI | NSSAI9.11.3.37 | O | TLV | 4-74 |
| 52 | Last visited registered TAI | 5GS tracking area identity9.11.3.8 | O | TV | 7 |
| 17 | S1 UE network capability | S1 UE network capability9.11.3.48 | O | TLV | 4-15 |
| 40 | Uplink data status | Uplink data status9.11.3.57 | O | TLV | 4-34 |
| 50 | PDU session status | PDU session status9.11.3.44 | O | TLV | 4-34 |
| B- | MICO indication | MICO indication9.11.3.31 | O | TV | 1 |
| 2B | UE status | UE status9.11.3.56 | O | TLV | 3 |
| 77 | Additional GUTI | 5GS mobile identity9.11.3.4 | O | TLV-E | 14 |
| 25 | Allowed PDU session status | Allowed PDU session status9.11.3.13 | O | TLV | 4-34 |
| 18 | UE's usage setting | UE's usage setting9.11.3.55 | O | TLV | 3 |
| 51 | Requested DRX parameters | 5GS DRX parameters9.11.3.2A | O | TLV | 3 |
| 70 | EPS NAS message container | EPS NAS message container9.11.3.24 | O | TLV-E | 4-n |
| 74 | LADN indication | LADN indication9.11.3.29 | O | TLV-E | 3-811 |
| 8- | Payload container type | Payload container type9.11.3.40 | O | TV | 1 |
| 7B | Payload container | Payload container9.11.3.39 | O | TLV-E | 4-65538 |
| 9- | Network slicing indication | Network slicing indication9.11.3.36 | O | TV | 1 |
| 53 | 5GS update type | 5GS update type9.11.3.9A | O | TLV | 3 |
| 41 | Mobile station classmark 2 | Mobile station classmark 29.11.3.31C | O | TLV | 5 |
| 42 | Supported codecs | Supported codec list9.11.3.51A | O | TLV | 5-n |
| 71 | NAS message container | NAS message container9.11.3.33 | O | TLV-E | 4-n |
| 60 | EPS bearer context status | EPS bearer context status9.11.3.23A | O | TLV | 4 |
| 6E | Requested extended DRX parameters | Extended DRX parameters9.11.3.26A | O | TLV | 3-4 |
| 6A | T3324 value | GPRS timer 39.11.2.5 | O | TLV | 3 |
| 67 | UE radio capability ID | UE radio capability ID9.11.3.68 | O | TLV | 3-n |
| 35 | Requested mapped NSSAI | Mapped NSSAI9.11.3.31B | O | TLV | 3-42 |
| 48 | Additional information requested | Additional information requested9.11.3.12A | O | TLV | 3 |
| 1A | Requested WUS assistance information | WUS assistance information9.11.3.71 | O | TLV | 3-n |
| A- | N5GC indication | N5GC indication9.11.3.72 | O | TV | 1 |
| 30 | Requested NB-N1 mode DRX parameters | NB-N1 mode DRX parameters9.11.3.73 | O | TLV | 3 |
| 29 | UE request type | UE request type9.11.3.76 | O | TLV | 3 |
| 28 | Paging restriction | Paging restriction9.11.3.77 | O | TLV | 3-35 |
| 72 | Service-level-AA container | Service-level-AA container9.11.2.10 | O | TLV-E | 6-n |
| 32 | NID | NID9.11.3.79 | O | TLV | 8 |
| 16 | MS determined PLMN with disaster condition | PLMN identity9.11.3.85 | O | TLV | 5 |
| 2A | Requested PEIPS assistance information | PEIPS assistance information9.11.3.80 | O | TLV | 3-n |

\* \* \* Next Change \* \* \* \*

### 8.2.7 Registration accept

#### 8.2.7.1 Message definition

The REGISTRATION ACCEPT message is sent by the AMF to the UE. See table 8.2.7.1.1.

Message type: REGISTRATION ACCEPT

Significance: dual

Direction: network to UE

Table 8.2.7.1.1: REGISTRATION ACCEPT message content

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| IEI | Information Element | Type/Reference | Presence | Format | Length |
|  | Extended protocol discriminator | Extended protocol discriminator9.2 | M | V | 1 |
|  | Security header type | Security header type9.3 | M | V | 1/2 |
|  | Spare half octet | Spare half octet9.5 | M | V | 1/2 |
|  | Registration accept message identity | Message type9.7 | M | V | 1 |
|  | 5GS registration result | 5GS registration result9.11.3.6 | M | LV | 2 |
| 77 | 5G-GUTI | 5GS mobile identity9.11.3.4 | O | TLV-E | 14 |
| 4A | Equivalent PLMNs | PLMN list9.11.3.45 | O | TLV | 5-47 |
| 54 | TAI list | 5GS tracking area identity list9.11.3.9 | O | TLV | 9-114 |
| 15 | Allowed NSSAI | NSSAI9.11.3.37 | O | TLV | 4-74 |
| 11 | Rejected NSSAI | Rejected NSSAI9.11.3.46 | O | TLV | 4-42 |
| 31 | Configured NSSAI | NSSAI9.11.3.37 | O | TLV | 4-146 |
| 21 | 5GS network feature support | 5GS network feature support9.11.3.5 | O | TLV | 3-5 |
| 50 | PDU session status | PDU session status9.11.3.44 | O | TLV | 4-34 |
| 26 | PDU session reactivation result | PDU session reactivation result9.11.3.42 | O | TLV | 4-34 |
| 72 | PDU session reactivation result error cause | PDU session reactivation result error cause9.11.3.43 | O | TLV-E | 5-515 |
| 79 | LADN information | LADN information9.11.3.30 | O | TLV-E | 12-1715 |
| B- | MICO indication | MICO indication9.11.3.31 | O | TV | 1 |
| 9- | Network slicing indication | Network slicing indication9.11.3.36 | O | TV | 1 |
| 27 | Service area list | Service area list9.11.3.49 | O | TLV | 6-114 |
| 5E | T3512 value | GPRS timer 39.11.2.5 | O | TLV | 3 |
| 5D | Non-3GPP de-registration timer value | GPRS timer 29.11.2.4 | O | TLV | 3 |
| 16 | T3502 value | GPRS timer 29.11.2.4 | O | TLV | 3 |
| 34 | Emergency number list | Emergency number list9.11.3.23 | O | TLV | 5-50 |
| 7A | Extended emergency number list | Extended emergency number list9.11.3.26 | O | TLV-E | 7-65538 |
| 73 | SOR transparent container | SOR transparent container9.11.3.51 | O | TLV-E | 20-n |
| 78 | EAP message | EAP message9.11.2.2 | O | TLV-E | 7-1503 |
| A- | NSSAI inclusion mode | NSSAI inclusion mode9.11.3.37A | O | TV | 1 |
| 76 | Operator-defined access category definitions | Operator-defined access category definitions9.11.3.38 | O | TLV-E | 3-8323 |
| 51 | Negotiated DRX parameters | 5GS DRX parameters9.11.3.2A | O | TLV | 3 |
| D- | Non-3GPP NW policies | Non-3GPP NW provided policies9.11.3.36A | O | TV | 1 |
| 60 | EPS bearer context status | EPS bearer context status9.11.3.23A | O | TLV | 4 |
| 6E | Negotiated extended DRX parameters | Extended DRX parameters9.11.3.26A | O | TLV | 3-4 |
| 6C | T3447 value | GPRS timer 39.11.2.5 | O | TLV | 3 |
| 6B | T3448 value | GPRS timer 29.11.2.4 | O | TLV | 3 |
| 6A | T3324 value | GPRS timer 39.11.2.5 | O | TLV | 3 |
| 67 | UE radio capability ID | UE radio capability ID9.11.3.68 | O | TLV | 3-n |
| E- | UE radio capability ID deletion indication | UE radio capability ID deletion indication9.11.3.69 | O | TV | 1 |
| 39 | Pending NSSAI | NSSAI9.11.3.37 | O | TLV | 4-146 |
| 74 | Ciphering key data | Ciphering key data9.11.3.18C | O | TLV-E | 34-n |
| 75 | CAG information list | CAG information list9.11.3.18A | O | TLV-E | 3-n |
| 1B | Truncated 5G-S-TMSI configuration | Truncated 5G-S-TMSI configuration9.11.3.70 | O | TLV | 3 |
| 1C | Negotiated WUS assistance information | WUS assistance information9.11.3.71 | O | TLV | 3-n |
| 29 | Negotiated NB-N1 mode DRX parameters | NB-N1 mode DRX parameters9.11.3.73 | O | TLV | 3 |
| 68 | Extended rejected NSSAI | Extended rejected NSSAI9.11.3.75 | O | TLV | 5-90 |
| 7B | Service-level-AA container | Service-level-AA container9.11.2.10 | O | TLV-E | 6-n |
| 33 | Negotiated PEIPS assistance information | PEIPS assistance information9.11.3.80 | O | TLV | 3-n |
| 34 | 5GS additional request result | 5GS additional request result9.11.3.81 | O | TLV | 3 |
| 70 | NSSRG information | NSSRG information9.11.3.82 | O | TLV-E | 7-65538 |
| 14 | Disaster roaming wait range | Registration wait range9.11.3.84 | O | TLV | 4 |
| 2C | Disaster return wait range | Registration wait range9.11.3.84 | O | TLV | 4 |
| 13 | List of PLMNs to be used in disaster condition | List of PLMNs to be used in disaster condition9.11.3.83 | O | TLV | 2-n |
| 1D | Forbidden TAI(s) for the list of "5GS forbidden tracking areas for roaming" | 5GS tracking area identity list9.11.3.9 | O | TLV | 9-114 |
| 1E | Forbidden TAI(s) for the list of "5GS forbidden tracking areas for regional provision of service" | 5GS tracking area identity list9.11.3.9 | O | TLV | 9-114 |
| 71 | Extended CAG information list | Extended CAG information list9.11.3.86 | O | TLV-E | 3-n |
| TBD | NSAG information | NSAG information9.11.3.87 | O | TLV-E | 10-n |

\* \* \* End of Changes \* \* \* \*