**3GPP TSG-RAN2 Meeting #114-e *R2-2106499***

**Online, 19 – 27 May 2021**

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| *CR-Form-v12.0* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **36.331** | **CR** | **4683** | **rev** | **1** | **Current version:** | **15.13.0** |  |
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| *For* [HELP](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>*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network | **x** | Core Network |  |

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| ***Title:***  | Minor changes collected by Rapporteur for Rel-15 |
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| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | R2 |
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| ***Work item code:*** | SPIA\_IDC\_LTE-Core, LTE\_5GCN\_connect-Core |  | ***Date:*** | 2021-05-20 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | 15 |
|  | *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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | The changes included in this CR aim to correct miscellaneous non-controversial errors (typos, etc) in the specification.1. In 5.3.10.9, a typo in the field name idc-HarwareSharingIndication
2. uac-BarringTime in SIB25 field descriptions has been defined as the **minimum** time before a new access attempt is to be performed after an access attempt was barred at access barring check for the same access category. However, ac-BarringTime is defined as “**Mean access barring time value in seconds**” though both fields use the same formula to calculate the “Tbarring” timer. Therefore, “minimum time” should be replaced by e.g. “average time in seconds” to better reflect the use of uac-BarringTime.
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| ***Summary of change:*** | This CR includes the following change:1. In 5.3.10.9, a typo in the field name idc-HarwareSharingIndication is fixed, i.e. the letter “d” is missing: idc-HardwareSharingIndication
2. For *uac-BarringTime* in SIB25 field descriptions, change “minimum time” to “average time in seconds”, and added refererence to the section of the formula using the field value.

**Impact Analysis:****Impacted functionality:**None i.e. these minor corrections do not involve any functional changes **Interoperability issue:**No interoperability issue (as no functional change). |
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| ***Consequences if not approved:*** | Miscellaneous non-controversial errors will remain in the specification. |
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| ***Clauses affected:*** | 5.3.10.9, 5.3.16.5, 6.3.1 |
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|  | **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:*** |  |

Start of the change

#### 5.3.10.9 Other configuration

The UE shall:

1> if the received *otherConfig* includes the *reportProximityConfig*:

2> if *proximityIndicationEUTRA* is set to *enabled*:

3> consider itself to be configured to provide proximity indications for E-UTRA frequencies in accordance with 5.3.14;

2> else:

3> consider itself not to be configured to provide proximity indications for E-UTRA frequencies;

2> if *proximityIndicationUTRA* is set to *enabled*:

3> consider itself to be configured to provide proximity indications for UTRA frequencies in accordance with 5.3.14;

2> else:

3> consider itself not to be configured to provide proximity indications for UTRA frequencies;

1> if the received *otherConfig* includes the *obtainLocation*:

2> attempt to have detailed location information available for any subsequent measurement report;

NOTE 1: The UE is requested to attempt to have valid detailed location information available whenever sending a measurement report for which it is configured to include available detailed location information. The UE may not succeed e.g. because the user manually disabled the GPS hardware, due to no/poor satellite coverage. Further details, e.g. regarding when to activate GNSS, are up to UE implementation.

1> if the received *otherConfig* includes the *bt-NameListConfig*:

2> if *bt-NameListConfig* is set to *setup*, attempt to have Bluetooth measurement results available for subsequent measurement report;

1> if the received *otherConfig* includes the *wlan-NameListConfig*:

2> if *wlan-NameListConfig* is set to *setup*, attempt to have WLAN measurement results available for subsequent measurement report;

NOTE 2: The UE is requested to attempt to have valid Bluetooth measurements and WLAN measurements whenever sending a measurement report for which it is configured to include these measurements. The UE may not succeed e.g. because the user manually disabled the WLAN or Bluetooth hardware. Further details, e.g. regarding when to activate WLAN or Bluetooth, are up to UE implementation.

1> if the received *otherConfig* includes the *idc-Config*:

2> if *idc-Indication* is included (i.e. set to *setup*):

3> consider itself to be configured to provide IDC indications in accordance with 5.6.9;

3> if *idc-Indication-UL-CA* is included (i.e. set to *setup*):

4> consider itself to be configured to indicate UL CA related information in IDC indications in accordance with 5.6.9;

3> if *idc-HardwareSharingIndication* is included (i.e. set to setup):

4> consider itself to be configured to indicate IDC hardware sharing problem indications in IDC indications in accordance with 5.6.9;

3> if *idc-Indication-MRDC* is included (i.e. set to *setup*):

4> consider itself to be configured to provide IDC indications for MR-DC in accordance with 5.6.9;

 2> else:

3> consider itself not to be configured to provide IDC indications;

2> if *autonomousDenialParameters* is included:

3> consider itself to be allowed to deny any transmission in a particular UL subframe if during the number of subframes indicated by *autonomousDenialValidity*, preceeding and including this particular subframe, it autonomously denied fewer UL subframes than indicated by *autonomousDenialSubframes*;

2> else:

3> consider itself not to be allowed to deny any UL transmission;

1> if the received *otherConfig* includes the *powerPrefIndicationConfig*:

2> if *powerPrefIndicationConfig* is set to *setup*:

3> consider itself to be configured to provide power preference indications in accordance with 5.6.10;

2> else:

3> consider itself not to be configured to provide power preference indications;

1> if the received *otherConfig* includes the sps-*AssistanceInfoReport*:

2> if *sps-AssistanceInfoReport* is set to TRUE:

3> consider itself to be configured to provide SPS assistance information in accordance with 5.6.10;

2> else

3> consider itself not to be configured to provide SPS assistance information;

1> if the received *otherConfig* includes the *bw-PreferenceIndicationTimer*:

2> consider itself to be configured to provide maximum PDSCH/PUSCH bandwidth preference indication in accordance with 5.6.10;

1> else:

2> consider itself not to be configured to provide maximum PDSCH/PUSCH bandwidth indication preference;

1> if the received *otherConfig* includes the *delayBudgetReportingConfig*:

2> if *delayBudgetReportingConfig* is set to *setup*:

3> consider itself to be configured to send delay budget reports in accordance with 5.6.10;

2> else:

3> consider itself not to be configured to send delay budget reports and stop timer T342, if running;

1> if the received *otherConfig* includes the *overheatingAssistanceConfig*:

2> if *overheatingAssistanceConfig* is set to *setup*:

3> consider itself to be configured to provide overheating assistance information in accordance with 5.6.10;

2> else:

3> consider itself not to be configured to provide overheating assistance information and stop timer T345, if running;

1> for BL UEs or UEs in CE, if the received *otherConfig* includes the *rlm-ReportConfig*:

2> if *rlm-ReportConfig* is set to *setup*:

3> consider itself to be configured to detect "early-out-of-sync" and "early-in-sync" RLM events as specified in 5.3.11;

3> if *rlmReportRep-MPDCCH* is set to *setup*:

4> consider itself to be configured to report *rlmReportRep-MPDCCH* in accordance with 5.6.10;

2> else:

3> consider itself not to be configured to detect "early-out-of-sync" and "early-in-sync" RLM events and stop timer T343, timer T344, timer T314 and timer T315 if running;

1> if the received *otherConfig* includes the *measConfigAppLayer*:

2> if *measConfigAppLayer* is set to setup:

3> forward *measConfigAppLayerContainer* to upper layers considering the *serviceType*;

3> consider itself to be configured to send application layer measurement report in accordance with 5.6.19;

2> else:

3> inform upper layers to clear the stored application layer measurement configuration;

3> discard received application layer measurement report information from upper layers;

3> consider itself not to be configured to send application layer measurement report.

1> if the received *otherConfig* includes the *ailc-BitConfig*:

2> if *ailc-BitConfig* is set to TRUE:

3> consider itself to be configured to provide assistance information bit for local cache as specified in TS 36.323 [8], clause 6.2.3;

2> else:

3> consider itself not to be configured to provide assistance information bit for local cache;

#### 5.3.16.5 Access barring check

The UE shall:

1> if one or more Access Identities are indicated according to TS 24.501 [95], and

1> if for at least one of these Access Identities the corresponding bit in the *uac-BarringForAccessIdentity* contained in "UAC barring parameter" is set to *zero*:

2> consider the access attempt as allowed;

1> else:

2> draw a random number '*rand*' uniformly distributed in the range: 0 ≤ *rand* < 1;

2> if '*rand*' is lower than the value indicated by *uac-BarringFactor* included in "UAC barring parameter":

3> consider the access attempt as allowed;

2> else:

3> consider the access attempt as barred;

1> if the access attempt is considered as barred:

2> draw a random number '*rand*' that is uniformly distributed in the range 0 ≤ *rand* < 1;

2> start timer T309 for the Access Category with the timer value calculated as follows, using the *uac-BarringTime* included in"UAC barring parameter":

"Tbarring" = (0.7+ 0.6 \* *rand*) \* *uac-BarringTime*;

### 6.3.1 System information blocks

– *SystemInformationBlockType25*

The IE *SystemInformationBlockType25* contains the UAC parameters.

***SystemInformationBlockType25* information element**

-- ASN1START

SystemInformationBlockType25-r15 ::= SEQUENCE {

 uac-BarringForCommon-r15 UAC-BarringPerCatList-r15 OPTIONAL, -- Need OP

 uac-BarringPerPLMN-List-r15 UAC-BarringPerPLMN-List-r15 OPTIONAL, -- Need OP

 uac-BarringInfoSetList-r15 UAC-BarringInfoSetList-r15,

 uac-AC1-SelectAssistInfo-r15 CHOICE {

 plmnCommon-r15 UAC-AC1-SelectAssistInfo-r15,

 individualPLMNList-r15 SEQUENCE (SIZE (2..maxPLMN-r11)) OF UAC-AC1-SelectAssistInfo-r15

 } OPTIONAL, -- Need OR

 lateNonCriticalExtension OCTET STRING OPTIONAL,

 ...

}

UAC-BarringPerPLMN-List-r15::= SEQUENCE (SIZE (1..maxPLMN-r11)) OF UAC-BarringPerPLMN-r15

UAC-BarringPerPLMN-r15 ::= SEQUENCE {

 plmn-IdentityIndex-r15 INTEGER (1..maxPLMN-r11),

 uac-AC-BarringListType-r15 CHOICE{

 uac-ImplicitAC-BarringList-r15 SEQUENCE (SIZE(maxAccessCat-1-r15)) OF UAC-BarringInfoSetIndex-r15,

 uac-ExplicitAC-BarringList-r15 UAC-BarringPerCatList-r15

 } OPTIONAL -- Need OR

}

UAC-BarringPerCatList-r15 ::= SEQUENCE (SIZE (1..maxAccessCat-1-r15)) OF UAC-BarringPerCat-r15

UAC-BarringPerCat-r15 ::= SEQUENCE {

 accessCategory-r15 INTEGER (1..maxAccessCat-1-r15),

 uac-barringInfoSetIndex-r15 UAC-BarringInfoSetIndex-r15

}

UAC-BarringInfoSetIndex-r15 ::= INTEGER (1..maxBarringInfoSet-r15)

UAC-BarringInfoSetList-r15 ::= SEQUENCE (SIZE (1..maxBarringInfoSet-r15)) OF UAC-BarringInfoSet-r15

UAC-BarringInfoSet-r15 ::= SEQUENCE {

 uac-BarringFactor-r15 ENUMERATED {

 p00, p05, p10, p15, p20, p25, p30, p40,

 p50, p60, p70, p75, p80, p85, p90, p95},

 uac-BarringTime-r15 ENUMERATED {s4, s8, s16, s32, s64, s128, s256, s512},

 uac-BarringForAccessIdentity-r15 BIT STRING (SIZE(7))

}

UAC-AC1-SelectAssistInfo-r15::= ENUMERATED {a, b, c}

-- ASN1STOP

| ***SystemInformationBlockType25* field descriptions** |
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| ***accessCategory***The Access Category according to TS 22.261 [96]. |
| ***uac-AC-BarringListType***Access control parameters for each access category valid only for a specific PLMN. UE behaviour upon absence of this field is specified in clause 5.3.16.2. |
| ***uac-AC1-SelectAssistInfo***Information used to determine whether Access Category 1 applies to the UE, as defined in TS 22.261 [96]. The field is forwarded to upper layers, if present. |
| ***uac-BarringFactor***Represents the probability that access attempt would be allowed during access barring check. |
| ***uac-BarringForAccessIdentity***Indicates whether access attempt is allowed for each Access Identity. The leftmost bit, bit 0 in the bit string corresponds to Access Identity 1, bit 1 in the bit string corresponds to Access Identity 2, bit 2 in the bit string corresponds to Access Identity 11, bit 3 in the bit string corresponds to Access Identity 12 and so on. Value 0 means that access attempt is allowed for the corresponding access identity. |
| ***uac-BarringForCommon***Common access control parameters for each access category. Common values are used for all PLMNs, unless overwritten by the PLMN specific configuration provided in *uac-BarringPerPLMN-List.* The parameters are specified by providing an index to the set of configurations (*uac-BarringInfoSetList*). UE behaviour upon absence of this field is specified in clause 5.3.16.2. |
| ***uac-barringInfoSetIndex***Index of the entry in field *uac-BarringInfoSetList*. Value 1 corresponds to the first entry in *uac-BarringInfoSetList,* value 2 corresponds to the second entry in this list and so on. An index value referring to an entry not included in *uac-BarringInfoSetList* indicates no barring. |
| ***uac-BarringInfoSetList***List of access control parameter sets. Each access category can be configured with access parameters corresponding to a particular set by *uac-barringInfoSetIndex*. Association of an access category with an index that has no corresponding entry in the *uac-BarringInfoSetList* is valid configuration and indicates no barring. |
| ***uac-BarringPerPLMN-List***Access control parameters for each access category valid only for a specific PLMN. |
| ***uac-BarringTime***The average time in seconds before a new access attempt is to be performed after an access attempt was barred at access barring check for the same access category, see 5.3.16.5. |

End of the change