**3GPP TSG-SA1 Meeting #104 *S1-23xxxx***

**Chicago, United States, 13th Nov 2023 - 17th Nov 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **22.882** | **CR** | **00** | **rev** | **-** | **Current version:** | **19.1.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **X** | Core Network | **X** |

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| ***Title:*** | Consolidation requirements update with leftover PRs | | | | | | | | | |
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| ***Source to WG:*** | China Mobile | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | FS\_EnergyServ | | | | |  | ***Date:*** | | | 2023-10-25 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
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| ***Reason for change:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1) 6.1 adding CPR 6.1-X addressing 5.15.6-1  2) 6.1 adding CPR 6.1-Y addressing 5.9.6-1, 5.13.6-1, 5.13.6-2 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  |  | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  |  | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  |  | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | 6.1.2.1 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

FIRST CHANGE

# 6 Consolidated potential requirements

## 6.1 Energy consumption as service criteria

This subclause contains the requirements related to energy consumption as service criteria and supporting energy credit limit for specific service.

Table 6.1-1 – Consolidated requirements on energy consumption as service criteria

| CPR # | Consolidated Potential Requirement | Original PR # | Comment |
| --- | --- | --- | --- |
| CPR 6.1-1 | Subject to operator’s policy, the 5G system shall support subscription policies that define a maximum energy credit limit for services for services without QoS criteria.  NOTE 1: The definition of subscription is in TS 21.905. | P.R 5.5.6-1 | Definition of subscription is in TS 21905  **maximum energy credit limit:** a policy establishing an upper bound on the quantity of energy used by the 5G system to provide services provided to a specific subscriber.(clause 3.1) |
| CPR 6.1-2 | Subject to operator’s policy, the 5G system shall support a means to associate energy consumption with charging information based on subscription policies for services without QoS criteria. | P.R 5.5.6-2 | Charging aspect |
| CPR 6.1-3 | Subject to operator’s policy, the 5G system shall support a mechanism to perform energy credit limit control for services without QoS criteria.  NOTE 2: The result of the credit control is not specified by this requirement.  NOTE 3: Credit control [18] compares against a credit control limit. It is assumed charging events are assigned a corresponding energy consumption and this is compared against a policy of energy credit limit. It is assumed there can be a new policy to limit energy consumption allowed. | P.R 5.5.6-4 |  |
| CPR 6.1-4 | Subject to operator’s policy, the 5G system shall support a means to define and enforce subscription policies that define a maximum energy consumption for services without QoS criteria.  NOTE 4: The granularity of the subscription policies can either apply to the subscriber (all services), or to particular services. | PR 5.1.6-1,  PR 5.1.6-2 |  |
| CPR 6.1-6 | The 5G system shall provide a mechanism to include the ratio of renewable energy as part of charging information.  NOTE 5: Calculation of ratio of renewable energy as described in the preceding requirement is done by means of averaging or applying a statistical model. The requirements do not imply that some form of 'real time' monitoring is required. | PR.5.12.6-1  PR.5.12.6-2 |  |
| CPR 6.1-7 | Subject to operator policy and agreement with 3rd party, the 5G system shall provide a mechanism to support the selection of an application server based on energy consumption information associated with a set of application servers.  NOTE 6: Energy consumption information can include ratio of renewable energy and carbon emission information when available. Calculation of ratio of renewable energy as described in the preceding requirement is done by means of averaging or applying a statistical model. The requirements do not imply that some form of 'real time' monitoring is required. | PR.5.14.6-2 |  |
| CPR 6.1-X | Subject to user consent and operator policy, 5G system shall be able to provide means to adapt a communication service based on energy related information.  NOTE X: Energy consumption information can include ratio of renewable energy and carbon emission information when available. Calculation of ratio of renewable energy as described in the preceding requirement is done by means of averaging or applying a statistical model. The requirements do not imply that some form of 'real time' monitoring is required. | PR.5.15.6-1 |  |
| CPR 6.1-Y | Subject to user consent and operator policy, the 5G system shall be able to provide means to operate network for serving this 3rd party based on subscription policies containing energy related information. | PR.5.9.6-1  PR.5.13.6.1  PR.5.13.6.2 |  |