**3GPP TSG SA WG1 Meeting #104 *S1-23xxxx***

**Chicago, USA, 13-17 November**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **22.261** | **CR** |  | **rev** | **-** | **Current version:** | **19.4.0** |  |
|  |
| *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 | **X** | Core Network | **X** |

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| ***Title:***  | Update the 6.15a.4 section |
|  |  |
| ***Source to WG:*** | ZTE |
| ***Source to TSG:*** | SA1 |
|  |  |
| ***Work item code:*** | Sensing |  | ***Date:*** | 2023-11-03 |
|  |  |  |  |  |
| ***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 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)* |
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| ***Reason for change:*** | In last SA1#103 meeting, the new CPRs for energy information exposure have been agreed. But they are not completed included in related TS22.261 section 6.15a.5.2. In the PR5.7.6-1 “Subject to Operator policy and consent by the customer, the 5G system shall be able to collect and expose to the authorized third party, through same update rate e.g. hourly or daily, the energy consumption information for the network functions serving the customer, together with the network performance statistic information for the services provided by that network functions.”, it requires not only collect, but also expose the related information which also need to be included in the 6.15a.5.2. |
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| ***Summary of change:*** | It is suggested to include the new added CPRs into the section 6.15a.5.2. |
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| ***Consequences if not approved:*** | The requirements are not completed. |
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| ***Clauses affected:*** | 6.15a.5.2,  |
|  |  |
|  | **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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

#### 6.15a.5.2 Requirements

Subject to operator’s policy and agreement with 3rd party, the 5G system shall be able to expose information on energy consumption for serving this 3rd party.

NOTE 8: Energy consumption information can include ratio of renewable energy and carbon emission information when available. The reporting period could be set, e.g., on monthly or yearly basis and can vary based on location.

NOTE 9: The energy consumption information can be related to the network resources of network slice, NPNs, etc.

Subject to operator’s policy, the 5G system shall support a means to expose energy consumption to authorized third parties for services, including energy consumption information related to the condition of energy credit limit (e.g. when the energy consumption is reaching the energy credit limit).

Subject to operator policy, the 5G system shall provide means for the trusted 3rd party, to configure which network performance statistic information (e.g. the data rate, packet delay and packet loss) for the communication service provided to the 3rd party, needs to be exposed along with the information on energy consumption for serving this 3rd party.

Subject to Operator policy and consent by the customer, the 5G system shall be able to expose to the authorized third party, through same update rate e.g. hourly or daily, the energy consumption information for the network functions serving the customer, together with the network performance statistic information (e.g. the data rate, packet delay and packet loss) for the services provided by that network functions.

Based on operator policy and agreement with 3rd party, the 5G system shall be able to expose energy consumption information and prediction on energy consumption of the 5G network per application service to the 3rd party.

Subject to operator’s policy and agreement with 3rd party, the 5G system shall support a mechanism for the 3rd party to provide current or predicted energy consumption information over a specific period of time.

NOTE 10: Energy consumption information can include ratio of renewable energy used for providing application services on periodic basis.

\* \* \* End of Change \* \* \* \*