**3GPP SA4-MBS SWG AH *S4aI250111r01***

**Paris, FR, 03rd–05th September 2025**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
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|  | **26.942** | **CR** | **0003** | **rev** | **1** | **Current version:** | **19.0.0** |  |
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| *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:***  | [FS\_Energy\_Ph2\_MED] New KI on Energy-related configuration by the Application Service Provider  |
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| ***Source to WG:*** | Orange |
| ***Source to TSG:*** | S4 |
|  |  |
| ***Work item code:*** | FS\_Energy\_Ph2\_MED |  | ***Date:*** | 2025-08-04 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-20 |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | Addtion of a Key issue on Energy-related configuration by the Application Service Provider identified during phase 1. |
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| ***Summary of change:*** | Addition of a clause 6.4 adding a new Key issue on Energy-related configuration by the Application Service Provider. |
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| ***Consequences if not approved:*** | Objectives of the Study Item not fulfilled. |
| ***Q*** |  |
| ***Clauses affected:*** | 6.4 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications |  |
| ***affected:*** |  | **X** |  Test specifications |  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications |  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

1ST Change
(All new text)

## 6.4 Key Issue #4: Energy-related configuration by the Application Service Provider for media delivery services

### 6.4.1 Description

As the demand to provide a service considering energy usage and types of energy sources grows, it becomes increasingly important for Application Service Providers to have control over the energy consumption of the networks they utilize. The use cases summarised in clause 5.1 highlight the necessity for the 5G System to support flexible, policy-driven mechanisms that enable the management of energy use at various levels, including subscription policies, charging, and service performance adjustments. These capabilities allow Application Service Providers to define maximum energy credits, associate energy consumption with billing, and enforce energy consumption limits, ensuring that services operate within sustainable parameters. Additionally, the ability to modify services based on energy-related information, target specific User Equipment for energy savings, and adapt network operations in response to energy supply variations empowers providers to optimize energy efficiency without compromising user experience. Supporting degraded service levels and enabling third-party interventions further underline the importance of integrating energy-aware configurations, which ultimately contribute to reducing the environmental impact of mobile networks while maintaining service quality and regulatory compliance.

In this context, this Key Issue will consider the following questions:

1. What should be included in the definition of the Energy Information Exposure Specification to allow the Application Service Provider to use 5G system capabilities to optimize energy consumption of its service?
2. How the ASP can specify the possibility to degrade media delivery on its service and at which level?

### 6.4.2 Potential requirements

Clause 6.1 and 6.2 in TR 22.882 [56], and clause 6.1.2, 6.1.3 in TR 22.883 [85] contain the consolidated requirements extracted from use cases related to energy-related configuration by the Application Service Provider related with this Key Issue:

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| [22.882-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.[22.882-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.[22.882-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.[22.882-CPR 6.1-8] Subject to user consent and operator policy, 5G system shall be able to provide means to modify a communication service based on energy related information criteria based on subscription policies.[22.882-CPR 6.1-9] Subject to user consent, operator policy and regulatory requirements, the 5G system shall be able to provide means to operate part or the whole network according to energy consumption requirements, which may be based on subscription policies or requested by an authorized 3rd party.[22.882-CPR 6.2-2] 5G system shall support dynamic changes of energy states of network elements and network functions.[22.883-CPR 6.1.2-2] Subject to operator’s policy, regulatory requirements and user consent, the 5G network shall support subscription policies that include alternative (i.e. degraded) service performance (e.g. QoS parameters, maximum bitrate) of services with QoS criteria for energy saving reasons.[22.883-CPR 6.1.2-3] Subject to operator’s policy, the 5G network shall be able to support a means to target per UE energy saving actions, based on subscription policies.[22.883-CPR 6.1.2-4] Subject to operators’ policy, regulatory requirements, 5G network shall provide mechanisms to adjust communication service (e.g. user plane path, suitable Service Hosting Environment, defer background traffic delivery) considering the change of energy supply mix of the network as one of the factors.[22.883-CPR 6.1.3-1] Subject to operator’s policy and regulatory requirements, the 5G network shall be able to trigger charging events corresponding to an impacted UE when degrading performance of services with QoS criteria (e.g. to a lower bitrate) in order to achieve energy saving.[22.883-CPR 6.1.3-1] Subject to user consent, operator policy and regulatory requirements, the 5G network shall be able to assist an authorized 3rd party to identify a set of target UEs for whom to adjust the provided application service, considering criteria such as the current and future (e.g. predicted) energy-related characteristics of their serving network. |

End of changes