**3GPP TSG-SA WG6 Meeting #68 S6-253644**

**Göteborg, Sweden, 25th – 29th August 2025 revision of S6-253270**

**Source: Ericsson, CATT**

**Title: New Key Issue on Enhance Existing Application Enablement Layer Services to Support Energy Saving**

**Spec: 3GPP** **23.700-44 v0.0.0**

**Agenda item: 9.9**

**Document for: Approval**

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**1. Introduction**

This pCR proposes new Key Issue for FS\_EnergySys\_Ph2\_APP.

**2. Reason for Change**

The New SID for study on Application Enablement to support Energy Saving Phase 2 (SP-250871) was approved in the SA#108 meeting. According to the approved SID, the objective of the study is to identify and specify enhancements at application enablement layer to enable support for energy saving, which include

1. Study functional enhancements and possible architectural enhancements to application enablers/services to support energy saving, including:
   1. potential enhancements to NSCE services for usage/configuration of dedicated network slice to verticals.
   2. potential enhancements to the application enablement layer (e.g. SEALDD, AIMLE, LM, ADAE) to support energy saving for the network resources used by applications.
2. Identify potential solutions, including the information flows and application enablement APIs satisfying the architectural requirements and enhancements identified in bullet#1.

NOTE: The study of application enablement for energy saving will consider the underlying 3GPP system’s existing capabilities such as leveraging the energy consumption information provided by the Core Network (e.g. EIF defined in TS 23.501), network slicing management and energy measurement information exposed by Management system (e.g. introduced in TS 28.552 and TS 28.554).

Therefore, a new Key Issue is proposed for the study of the objective 1-b) on enhance existing application enablement layer services to support energy saving for the network resources used by applications.

**3. Conclusions**

This paper proposes a new Key Issue is proposed for the study of the objective 1-b) on enhance existing application enablement layer services to support energy saving for the network resources used by applications.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TR 23.700-44 v0.0.0.

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

## 5.X Key Issue #X: Enhance Application Enablement Layer Architecture and Services to Support Energy Saving

### 5.X.1 Description

The new SID "study on Application Enablement to support Energy Saving Phase 2" lists the objective of the study that include:

* Potential enhancements to the application enablement layer (e.g. SEALDD, AIMLE, LM, ADAE) to support energy saving for the network resources used by the applications.

SA6 has developed energy consuming solutions that impact operator domain (e.g. SEAL enablers). These services require to be energy efficient and provide energy saving capabilities in order to satisfy the request from consumer, as well as support SA6 solutions in the exposure ecosystem landscape. Potential enhancements to the exisiting application enablement layer architecture or introduction of a new application enabler may be required to support energy saving of the resources used by the applications.

In addition to the services identified in the other KIs, there may be other existing SEAL enablers and services (e.g. SEALDD, LM, ADAE) that can be enhanced to support energy saving for the network resources used by various applications.

### 5.X.2 Open Issues

To enhance application enablement layer architecture and services to support energy saving, the key issue will study:

- Whether enhancements to the existing application enablement layer architecture is needed or whether there is a need for a new application enabler to support energy saving of the resources used by applications.

- if there is no need for any new application enabler, then identify which existing application enablement layer services (beside the services identified in the other KIs) need be enhanced to support energy saving, and how to enhance their function.

NOTE: The study will consider the underlying 3GPP system’s existing capabilities such as leveraging the capabilities provided by core network and management system.

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