**/SA WG2 Meeting #162S2-2405146**

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**Title: Interim evaluation and conclusion for KI3**

**Document for: Approval**

**Agenda Item: 19.4**

**Work Item / Release: FS\_EnergySys / Rel-19**

*Abstract of the contribution: This contribution tries to provide the Interim evaluation and conclusion for KI3.*

# Introduction

This paper is trying to evaluate the solutions captured for KI#3(5GS enhancements for network energy saving and efficiency), provide the conclusions for the KI#3 based on the captured solutions.

# 2 Proposal

It is proposed to capture the following solution in TR 23.700-66.

Start of Changes

Next change

## 8.X Conclusion for Key Issue #3: 5GS enhancements for network energy saving and efficiency

Following interim conclusions for KI#3 are proposed for normative work:

Editor's note: The conclusions need to be further revised by considering additional solutions.

1. **For Enhancements on NF (re)selection based on energy related information**, following principles can be considered in normative work:

- NF profile is extended to support energy aware (re)selection.

- NF service consumer considers the new energy related information from the NF profiles discovered from NRF for the target NF selection.

Editor's note: Additional energy related information elements included in the NF profile is FFS.

1. **Enhancements on existing operations and procedures for energy saving and energy efficiency**, following principles can be considered in normative work:

- Access management and session management enhancement e.g., AM policy and SM policy generation by PCF taking the energy related information/Analytics into account.

NOTE: Policy control enhancement is relative to conclusion of KI#2.

- The UP path of PDU sessions e.g., DNAI, UPF (re-)selection maybe adjusted based on energy related information.

- Network slice admission control e.g., determination of accept/reject of requested S-NSSAIs or PDU session, and modification/release of PDU session may take energy related information into account.

 - If NSAC is supported, Maximum number of UEs and maximum number of PDU sessions for a network slice is subject to energy related information/Analytics.

Editor's note: Whether all the NSAC architecture options are applicable to this feature is FFS.

NOTE: The energy related decision of bullet 1 and bullet 2 is based on operator’s policy.

1. **For NWDAF-Based Energy Analytics for network energy saving and efficiency**, following principles can be considered in normative work:

- NWDAF is taken as the role of energy related analysis/prediction/statistics.

- New network data analytics event for energy saving and efficiency are needed, and the granularity for analytics includes at least NF level, slice level, UE level, PDU session level and QoS flow level.

- The network energy related analytics can be provided to PCF/AMF/SMF for network energy related control.

Editor's note: The input/output data for energy related analytics will be concluded during study phase.

End of Changes