**3GPP TSG-SA5 Meeting #140-e *S5-216064rev1***

**e-meeting, 15 - 24 November 2021**

**Source: Huawei**

**Title: Update solution of Key Issue 6**

**Document for: Approval**

**Agenda Item: 6.5.1**

# 1 Decision/action requested

***The group is asked to discuss and approval the proposal.***

# 2 References

[1] 3GPP TR 28.813: Study on new aspects of Energy Efficiency (EE) for 5G v1.2.0

[2] S5-215556 Rel-17 CR 28.310 Update clause 6.2 for energy saving

# 3 Rationale

It is proposed to update the solution of Key Issue 6 in TR 28.813 [1] to align with the latest SA5 EE working progress – see content of S5-215556 agreed in SA5#139e.

# 4 Detailed proposal

This document proposes the following changes in TR 28.813 [1].

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| **1st Change** |

### 4.6.2 Potential solutions

#### 4.6.2.1 Potential solution #1: Energy saving in 5G NR based on service related information

##### 4.6.2.1.1 Introduction

The ES cell activation/deactivation decision is typically based on the load information of the related cells and the energy saving policies (like the allowed ES time period, ES candidate cell relations) without considering information such as service type of cell traffic, or tenant information, etc.

In this potential solution, ES cell activation/deactivation decision takes service related information as one kind of energy saving policies.

##### 4.6.2.1.2 Description

This potential solution is based on the following information:

The service related information may include service characteristic information or tenant information of service.

The service characteristic information may include service type information, service name information, and service priority information:

- The service type information indicates the type of service that is being provided via traffic carried by cells under observation, it can be decided by operator's policy, for example, one kind of service type may be eMBB, URLLC, mIoT, or V2X etc, or another kind of service type may be voice, video, industrial control, web browsing, or autonomous driving;

- The service name may be human-readable name according to operator's policy;

- The service priority information may be, for example, high priority, medium priority, or low priority.

The tenant information of service may include tenant type information, tenant name information, tenant priority information:

- The tenant type may be, for example, Business to Consumer (B2C) tenant, Business to Business (B2B) tenant, Business to Household (B2H) tenant, Business to Business to Everything (B2B2X) tenant;

- The tenant name may be human-readable name according to operator's policy;

- The tenant priority information may be, for example, high priority, medium priority, or low priority.

The service related information can be obtained from UEs, 5GC NFs (such as UPFs or SMFs) or operators' information provisioned in 3GPP management system.

Based on the load information of the related cells and the service related information of the area under consideration, 3GPP management system decides ES actions for the corresponding cells. 3GPP management system may use different weight values for the factors that can influence the ES actions - load information of the related cells and the service related information of the analysis area.

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| **End of change** |