**3GPP TSG-SA5 Meeting #155 *S5-243076***

Jeju, South Korea, 27 - 31 May 2024

**Source: AsiaInfo**

**Title:** **Add use case for edge application deployment location analytics**

**Document for: Approval, Information, Discussion**

**Agenda Item: 16.9.2**

# 1 Decision/action requested

***In this box give a very clear / short /concise statement of what is wanted.***

# 2 References

[1] 3GPP TR 28.866 v0.1.0 Study on Management Data Analytics (MDA) – Phase 3

# 3 Rationale

This provides the use case for edge allocation deployment location analytics.

# 4 Detailed proposal

It proposes to make the following changes to TR 28.866.

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| --- |
| **First Change** |

## 5.2 End-to-End performance analytics including Edge computing domain

### 5.2.x Use case X: Edge application deployment location analytics

#### 5.2.X.1 Description

With the rapid development of edge computing, an increasing number of applications require deployment at the network edge to meet the demands for low latency, high bandwidth, and localized data processing. However, selecting the optimal edge deployment location is a complex issue that involves considering multiple factors such as application requirements, network resource information and UE distribution . Currently, edge application deployment locations primarily rely on operator experience and manual configuration, lacking automated and intelligent decision support. This can lead to deployment location that fail to fully leverage the advantages of edge computing.

The use case aims to utilize MDA analytics capabilities to provide data-driven decision support for edge application deployment location selection. MDA can collect and analyse data related to application requirements(e.g. bandwidth), network resource information and UE distribution , and leverage technologies such as machine learning, optimization algorithms, and graph theory analysis to determine the deployment location that satisfies application requirements and user experience.

#### 5.2.X.2 Potential Requirements

REQ-EDGE-APP-LOCATION-01: MDA capability for edge application deployment location analysis should be able to recommend the deployment location that meets application requirements and user experience.