**3GPP TSG-WG SA2 Meeting #164 *S2-240xxxx***

**Aug. 19 – 23, 2024, Maastricht, NL (revision of S2-2407658)**

**Source: Intel**

**Title: KI#3: Conclusion update**

**Document for: Approval**

**Agenda Item: 19.9.1**

**Work Item / Release: FS\_eEDGE\_5GC\_Ph3 / Rel-19**

*Abstract: This paper proposes conclusion update for KI#3.*

# 1. Discussion

This contribution proposes conclusion update for KI#3 on how to route EC traffic between local DN and central DN.

Currently there are two solutions (i.e. Sol#17 for CAT-A and Sol#21 for CAT-B) for further consideration per the interim conclusion for KI#3.

For Sol#17, Security concern was raised by several companies.

* 1. **Security Aspect**

Security concern was raised for Sol#17 on the EAS sending traffic using the UE IP address as Source IP address after handling the traffic with EAS IP address as the Destination IP address and UE IP address as the Source IP address. After being processed at EAS, the EAS replaces the Destination IP address/Port Number of the uplink traffic with the central AS’ and send back to L-PSA UPF. Since the EAS is under the control of AF and SP under SLA, there should be no security issue.

While for the traffic with central AS IP address as the Destination IP address and UE IP address as the Source IP address, if the traffic is not encrypted, after firstly being processed by EAS, it can be forwarded to L-PSA UPF with the IP header unchanged. If the traffic is encrypted, the EAS is unable to process the traffic, it will be simply sent back to the L-PSA UPF with the IP header unchanged. This kind of traffic can be routed through the data path of the UE’s PDU Session without security concern.

* 1. **Charging Aspect**

From UE perspective, it has no idea whether it’s communicating with local EAS or central AS. For the uplink traffic with EAS IP address as the Destination IP address, the UE would also expect it to be charged by the operator, it doesn’t matter whether the traffic goes through L-PSA UPF or C-PSA. For roaming scenario, the Charging system in HPLMN should be able to consolidate the Charging Data record by coordinating with the Charging system in VPLMN to ensure there is no over-charging issue.

# 2. Text Proposal

It is proposed to capture the following changes in TR 23.700-49.

\* \* \* \* First change \* \* \* \*

## 8.3 Conclusion for KI#3

**Conclusion:**

- It’s concluded not to pursue normative work for this key issue.

\* \* \* \* End of changes \* \* \* \*