3GPP TSG SA WG3 Meeting #98bis-e *draft-*S3-200723-r2

e-meeting, April 14 - 17 2020

**Agenda item:** 2.5

**Source:** Huawei, Hisilicon

**Title:** Discussion on protection of UE radio capability for CP optimized UEs

**Document for:** Discussion and endorsement

# Introduction

For CIoT devices that only support control-plane optimization, it is necessary to develop a security solution to protect the UE radio capabilities transfer. The ongoing study on CIoT has several related solutions. As SA3 is approaching the planned end-date for this study, this contribution gives a way forward on the solutions.

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# Discussion

For both EPS and 5G CIoT CP optimized UE, the AS security is not expected to be supported. Without AS security, there are some potential threats for the UE radio capability transfer. The system shall support to mitigate the effects of handling unprotected UE radio capability for UEs without AS security.

**Observation 1: It's needed for both EPS and 5G to protect the UE radio capabilities transfer.**

**Proposal 1: The mechanism, which is applicable and common for both EPS and 5G CIoT UEs, is highly recommended.**

# Conclusion and Proposal

This paper mainly discusses the issue of protection of radio capabilities, and we have the following proposal:

**Proposal 1: The mechanism, which is applicable and common for both EPS and 5G CIoT UEs, is highly recommended.**