**3GPP TSG-SA3 Meeting #115AdHoc-e *draft\_S3-241338-r1***

Electronic meeting, online, 15 - 19 April 2024

**Source: Huawei, HiSilicon**

**Title: Solution for operator configured indication**

**Document for: Approval**

**Agenda Item: 5.6**

# 1 Decision/action requested

***Approve to include the solution in TR 33.701 [1]***

# 2 References

[1] 3GPP TR 33.701: "Study on mitigations against bidding down attacks ".

# 3 Rationale

This contribution proposes a new solution for key issue #1. The solution focuses on the scenario where all GERAN and UTRAN RAN has been decommissioned in a given PLMN in which case it proposes to store an indication on the UE so that the UE no longer selects such access technology for the PLMN in question. The solution does not take a stand on the provisioning of such information and leaves it to out of band mechanisms or other solutions.

# 4 Detailed proposal

Approve the following changes for inclusion in TR 33.701 [1].

\*\*\* BEGINNING OF 1st CHANGES \*\*\*

## 5.y Solution #y: Solution for configured operator indication

### 5.y.1 Introduction

This solution addresses key issue #1: "Bidding down attacks from LTE/NR to decommissioned GERAN/UTRAN". The solution focuses on the scenario where all GERAN and UTRAN has been decommissioned in a given PLMN.

### 5.y.2 Details

If all GERAN and UTRAN has been decommissioned in a PLMN, the operator configures an indication on the UE. The indication is bound to the operator's PLMN ID and indicates to the UE that GERAN and UTRAN access technologies have been decommissioned. Based on this indication, the UE does no longer need to connect to this PLMN through GERAN or UTRAN.

How the indication is configured on the UE is left to out of band mechanisms or to other solutions for provisioning such information from the network. Observe, that any such mechanisms need to be secure so that the UE is not mislead into not selecting still available access technologies.

Editor’s Note: Clarification or examples of such available out of band mechanisms are FFS.

### 5.y.3 Evaluation

The solution addresses the requirement of key issue #1: "Bidding down attacks from LTE/NR to decommissioned GERAN/UTRAN".

The solution is limited to GERAN and UTRAN access technologies and is used only when all GERAN/UTRAN has been decommissioned.

The solution has only impact on the UE. Since the solution does not take stand on the provisioning mechanism, the impact on the network if any is for further study. In case the provisioning is left to out of band mechanisms, then network impact is limited. Furthermore, this would be beneficial even in roaming scenarios UE for serving PLMNs supporting similar out of band mechanisms.

Leaving the configuration to out of band mechanisms incurs an operational burden for the operator. Furthermore, for the roaming scenarios to work, the solution assumes an alignement of the so called out of band mechanisms. This, in practice, is very unlikely without relying on a standardized mechanism.

Editor’s Note: Further evaluation is FFS.

\*\*\*END OF CHANGES\*\*\*