**3GPP TSG-SA WG1 Meeting #108 S1-244657**

**Nov. 18 – 22, 2024, Orlando, USA** *(revision of S1-244258, 4599)*

**Source: vivo, EchoStar, Novamint, Qualcomm, CATT, China Mobile, Spreadtrum, UNISOC, ZTE Corporation, MediaTek Inc., Inmarsat, Viasat, Fraunhofer IIS, Verizon**

**pCR Title: Consolidation proposal on single use case IMS Voice Call using GEO satellite access**

**Draft Spec: 3GPP TR 22.887**

**Agenda item: 7.3**

**Document for: Approval**

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*Abstract: This document provides a consolidation proposal for the use of IMS voice calls using GEO satellite access with a small typo correction.*

**1. Introduction**

This document provides a consolidation proposal for the use of IMS voice calls using GEO satellite access.

**2. Reason for Change**

This IMS voice call using GEO satellite access objective in FS\_5GSAT\_Ph4 is single use case. The content is stable and is suggested to consolidate the requirements and KPI values directly to the TR conclusions.

**3. Conclusions**

This IMS voice call using GEO satellite access objective in FS\_5GSAT\_Ph4 is single use case. The content is stable and is suggested to consolidate the requirements and KPI values directly to the TR conclusions.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TR 22.887 v0.2.0.

\* \* \* First Change \* \* \* \*

5.1.6.2 Potential KPI Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Scenario | UE type | Transmission data rate | | Call setup time  NOTE 1 |
| UL | DL |
| IMS voice call using GEO | Handheld | [1-3] kbit/s | [1-3] kbit/s | [4-30] s  NOTE 2 |
| NOTE 1: call set up time refers to [4];  NOTE 2: the lower bound of 4s originated from the experience in terrestrial VoNR/VoLTE, while the upper bound of the 30s is derived based on the user’s patience suggestions (30s) in [12]; | | | | |

\* \* \* Second Change \* \* \* \*

7 Consolidated requirements

## 7.1 Consolidated functional requirements

### 7.1.x IMS voice call using GEO satellite access

Table 7.1.x-1 Consolidated Service Requirements for IMS voice call using GEO satellite access

| CPR # | Consolidated Potential Requirement | Original PR # | Comments |
| --- | --- | --- | --- |
| CPR 7.1.1-1 | The 5G system with GEO satellite access shall be able to support IMS voice communication as defined in TS 22.228 [3]. | PR 5.1.6-001 |  |
| CPR 7.1.1-2 | The 5G system with GEO satellite access and IMS system shall be able to provide mechanisms to optimize IMS voice (e.g., call setup, transmission overhead) and support a codec for the transfer of the voice considering the transmission data rate, latency and packet size. | PR 5.1.6-002  PR 5.1.6-003 |  |

## 7.2 Consolidated potential KPIs

Table 7.2-1 Consolidated Performance Requirements for IMS voice call using GEO satellite access

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Scenario | UE type | UE speed | Transmission data rate | | Call setup time  NOTE 1 |
| UL | DL |
| IMS voice call using GEO | Handheld | Stationary | [1-3] kbit/s | [1-3] kbit/s | ≤30 s  NOTE 2 |
| NOTE 1: call set up time refers to [4];  NOTE 2: 30s is the upper bound that is derived based on the user’s patience suggestions (30s) in [12]; | | | | | |

\* \* \* End of Change \* \* \* \*