**SA WG2 Meeting #S2-160 S2-2313261**

**13 - 17 November, 2023, Chicago, USA revision of S2-2313048**

**Source: Nokia, Nokia Shanghai Bell**

**Title: New Key Issue on Support of IMS Avatar Communication**

**Document for: Approval**

**Agenda Item: 19.2**

**Work Item / Release: FS\_NG\_RTC\_Ph2**

*Abstract of the contribution: This contribution proposes a new KI for IMS based Avatar communication.*

# Introduction

The NG\_RTC\_Ph2 SID (SP-231196) includes the following objective:

WT-5: Study whether and how to enhance IMS architecture, procedures, interfaces for supporting avatar call (including multi-party communication) and communication with accessibility. This includes service/capability negotiation, enabling transition and transcoding between video and avatar media and avatar representation in the UE and in the IMS network, considering UE capability, network condition, and user preference.

The corresponding KI is missing in TR 23.700-77.

# 2 Proposal

It is proposed to add the following KI to TR 23.700-77.

\* \* \* \* Begin of changes\* \* \* \*

5.X Key Issue #X: Support of IMS Avatar Communication

5.X.1 Description

This key issue aims to study enhancements of IMS architecture, interfaces, and procedures to support IMS based Avatar communication. This includes studying following aspects:

- Define what Avatar communication between two or more users in the context of IMS means.

- study how to support IMS Avatar communications based on IMS Data Channel and not based on IMS Data Channel.

- Study the identifiers required for IMS Avatar communication and their usage, e.g., identifier for -Avatar representation in IMS; association of an Avatar representation with a user.- Study whether and how Avatar objects such as an Avatar representation are stored and accessed by the authenticated and authorized UE and/or IMS network nodes avoiding fraud and ensuring privacy.NOTE : Coordination with SA3 is required.

- Study whether and how to authorise the use of an Avatar representation in an IMS Avatar communication.

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- Study whether and how to enable service/capability negotiation between UE and IMS network. This includes service/capability negotiation to enable transition and transcoding of media in an Avatar communication.

- Study the use of slice other than the internet slice for IMS Avatar communication. The IMS APN is used in this case.

- Study how to enable transition and transcoding between a MMTel session using audio/video codec and IMS Avatar based communication which may use a special Avatar codec.

- Study how to enable UE based and network based rendering in case of IMS Avatar communication.

- support IMS Avatar Communication with accessibility including both DC-based and non-DC-based solution.

NOTE 1: Transition, transcoding and rendering and is based on UE/network capabilities and user preferences.

NOTE 2: Transition, transcoding, rendering and service/capability negotiation aspects require coordination with SA4.

NOTE 3: Security and privacy aspects, e.g., selecting and using an Avatar representation in an IMS session, require coordination with SA3.

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