3GPP TSG SA WG4 #122 *TDoc S4-230415*

Athens, Greece, 20th – 24th February 2023

**Title: LS on 5G-Advanced formats and codecs for messaging services**

**Response to: -**

**Release: Rel-18/19**

**Work Item: -**

**Source:** **3GPP SA4**

**To:** **GSMA NG, GSMA TSG**

**Cc: -**

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**Attachments: none**

# 1 Overall description

At the SA4#122 meeting, 3GPP SA4 held a discussion on potential new work related to 5G-Advanced formats and codecs for messaging services, based on a discussion document in Tdoc S4-230114 (insert link?). It was identified that several aspects may be relevant to GSMA related service profiles and SA4 seeks GSMA input on considerations and potential requirements for such tentative work.

There are many messaging applications that leverage the capabilities of 4G/5G IP connectivity to offer instant exchange between individuals or groups of users of text messages but also multimedia content such as images, audio, and video clips. GSMA RCS (Rich Communications Services) support is increasing. SMS and MMS are two different services, and SMS is used as fallback to GSMA RCS when data connectivity is lost.

3GPP SA4 is responsible for two messaging related specifications:

- 3GPP TS 26.140 *Multimedia Messaging Service (MMS); Media formats and codecs*

- 3GPP TS 26.141 *IP Multimedia System (IMS) Messaging and Presence; Media formats and codecs*

The discussion document in Tdoc S4-230114 is proposing upgrading these specifications to match the relevant media codecs and profiles capabilities defined in their 5G Media streaming specification:

* 3GPP TS 26.511 *5G Media Streaming (5GMS); Profiles, codecs and formats*

For example:

* Adding Super-Wideband and Fullband speech capabilities with EVS codec
* Addling support for Full-HD video
* Adding support for TTML subtitling

A number of formats and codecs recommendations and requirements could also be considered to be removed from future releases, assuming backwards compatibility could still be maintained. For example: DIMS, xHTML and 3GP File format.

The discussion document in Tdoc S4-230114 also suggested to decouple the messaging-type media formats and codecs capabilities specifications from the service specifications. This would imply creating a new specification or a new Annex to TS 26.511. This would consistently define media formats and codecs capabilities that could then be profiled and referenced by MMS, GSMA RCS, but also by any messaging application to be used over the 5G System.

Furthermore, 3GPP SA4 discussed the possibility to start a study item and/or work item on more advanced media formats that would cover XR applications such as the exchange of 3D assets for AR consumption. Such “3D Image Messaging” use case is documented in Annex A.2 of 3GPP TR 26.928 *Extended Reality (XR) in 5G*.

3GPP SA4 would welcome GSMA feedback on the potential update of 3GPP TS 26.140 and 3GPP TS 26.141, the creation of a generic messaging media formats and codecs specification, and the potential definition of XR formats for messaging applications.

# 2 Actions

**To GSMA NG, GSMA TSG**

**ACTION:** 3GPP SA4 kindly asks GSMA NG and GSMA TSG to provide feedback on potential study/work with regards to 5G-Advanced media formats and codecs for messaging services on each individual aspect listed below:

- adding or upgrading codecs and formats in 3GPP TS 26.140, 3GPP TS 26.141

- removing codecs and formats in 3GPP TS 26.140, 3GPP TS 26.141

- creating a creating a new specification or a new Annex to TS 26.511 to profile and reference by MMS, GSMA RCS but also any messaging application to be used over the 5G System

# 3 Dates of next TSG SA WG 4 meetings

SA4#123-e 17th–21st April 2023 Electronic

SA4#124 22nd–26th May 2023 Berlin, Germany