**3GPP TSG SA4#124 S4-230916**

**Berlin, Germany, 22-26 May 2023**

**Source: Dolby Laboratories Inc., Fraunhofer IIS, Ericsson LM, Nokia Corporation**

**Title: New WID on 5G-Advanced media profiles for messaging services**

**Document for: Agreement**

**Agenda Item: 6.2**

3GPP™ Work Item Description

Information on Work Items can be found at <http://www.3gpp.org/Work-Items>   
See also the [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39 and the TSG Working Methods in [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm)

# Title: 5G-Advanced media profiles for messaging services

## Acronym: PROMISE

## Unique identifier: -

Potential target Release: Rel-18

## 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Affects:** | UICC apps | ME | AN | CN | Others (specify) |
| **Yes** |  | X |  | X |  |
| **No** | X |  | X |  | X |
| **Don't know** |  |  |  |  |  |

## 2 Classification of the Work Item and linked work items

### 2.1 Primary classification

This work item is a …

|  |  |
| --- | --- |
| X | Feature |
|  | Building Block |
|  | *Work Task* |
|  | Study Item |

### 2.2 Parent Work Item

|  |  |  |  |
| --- | --- | --- | --- |
| Parent Work / Study Items | | | |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| EMM | S4 | 530048 | Enhancements to Multimedia: PSS, MMS, and MBMS Enhancements and Performance Improvements |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| FS\_5GXR | Study on eXtended Reality (XR) in 5G | Use cases and requirements for XR and 3D scene exchange |
| FS\_5GSTAR | Study on 5G Glass-type AR/MR Devices | Use cases and requirements for AR and 3D scene exchange |

## 3 Justification

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. At the same time, GSMA RCS (Rich Communications Services) support is increasing, while SMS/MMS is still a very popular service with universal support, interoperability and roaming. SMS/MMS is used as fallback to GSMA RCS. Because of this, it is considered important to maintain and upgrade the relevant SA4 specifications in support for messaging applications and services for 5G-Advanced.

SA4#122 approved a liaison statement to GSMA in [S4-230432](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_122_Athens/Docs/S4-230432.zip) LS on 5G-Advanced formats and codecs for messaging services. GSMA response was received in [S4-230795](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_124_Berlin/Docs/S4-230795.zip) *LS Response from GMSA UPG to SA4 on 5G-Advanced media formats and codecs for messaging services*. In their response, *GSMA confirms that 3GPP SA4 should be specifying SMS/MMS/RCS/Messaging formats and codecs that GSMA can then reference/profile: e.g. add at least AMR-WB and EVS for RCS messaging and consider more advanced formats including XR. GSMA confirms that a new generic 3GPP specification for messaging apps in general and RCS in particular seems beneficial from both a system and interoperability perspective*.

In addition, new media types are evolving in particular in context of XR applications. Sharing 3D scenes and AR content has been identified as an important use cases in TR26.928 and TR 26.998. Extending messaging services to support sharing of simple 3D scenes and AR objects is important.

## 4 Objectives

The purpose of this Work Item is to specify SMS/MMS/RCS/Messaging formats and codecs that GSMA and other organizations or application vendors can then reference and/or profile to improve messaging service quality and interoperability. In particular the following objectives are addressed

1. Adding or upgrading codecs and formats in 3GPP TS 26.140, 3GPP TS 26.141.
   1. Specify the EVS codec and introduce support for Super-Wideband and Full band for speech message.
   2. When the IVAS codec is completed & approved in 3GPP, it should be added to speech messaging.
   3. Specify support for xHE-AAC codec for audio messaging in addition to aacPlus and ARM-WB+, in alignment with 5GMS TS 26.511.
   4. Add basic formats to support exchange of XR and 3D scenes, based on Khronos glTF and MPEG-I Scene Description.
   5. Upgrade video profiles to in alignment with 5GMS TS 26.511.
2. Removing codecs and formats in 3GPP TS 26.140, 3GPP TS 26.141;
   1. Consider each profile and formats in light of deployed services and remove unused ones.
3. Create a new Messaging Media profiles specification for potential reference by MMS, GSMA RCS and third-party messaging application potentially used over the 5G System.

## 5 Expected Output and Time scale

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **New specifications** *{One line per specification. Create/delete lines as needed}* | | | | | |
| Type | TS/TR number | Title | For info  at TSG# | For approval at TSG# | Rapporteur |
| *TS* | *26.xyz  (26.143?)* | *Messaging Media profiles* | *SA#102 (Dec 23)* | *SA#103 (Mar 24)* | *Frédéric Gabin (Dolby Laboratories Inc.) –* [*frederic.gabin@dolby.com*](mailto:frederic.gabin@dolby.com) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| *26.140* | Updates to codecs and formats | *SA#103 (Mar 24)* |  |
| *26.141* | Updates to codecs and formats | *SA#103 (Mar 24)* |  |

## 6 Work item Rapporteur(s)

Frédéric Gabin (Dolby Laboratories Inc.) – [frederic.gabin@dolby.com](mailto:frederic.gabin@dolby.com)

## 7 Work item leadership

SA4

## 8 Aspects that involve other WGs

None

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Dolby Laboratories Inc. |
| Fraunhofer IIS |
| Ericsson LM |
| Nokia Corporation |
| Qualcomm Incorporated |
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