**TSG SA Meeting #SP-105 DRAFT\_SP-241355**

**10 – 13 September 2024, Melbourne, Australia**

**Title: [DRAFT] Reply LS on Newly published data channel GSMA PRD TS.66**

**Response to: LS on Newly published data channel GSMA PRD TS.66 (TSG56\_059)**

**Source: TSG SA**

**To: GSMA TSG**

**CC: 3GPP SA WG2, 3GPP SA WG3, 3GPP SA WG4, 3GPP SA WG6, 3GPP TSG RAN5, 3GPP SA WG1, 3GPP CT, 3GPP CT WG1, 3GPP CT WG3, 3GPP CT WG4**

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**Send any reply LS to: 3GPP Liaisons Coordinator,** [**3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**Attachments: None**

# 1 Overall description

The IMS data channel was introduced in 3GPP Release-16 TS 26.114 and provides the ability to establish a real-time communication path between two endpoints to exchange any form of data and enables new types of IMS interactive services.

Related with this, 3GPP has received an LS from GSMA. GSMA Networks Group (NG) and GSMA Terminal Steering Group (TSG) have worked on the data channel related aspects and during the years 2021-2023 GSMA Networks Group (NG) has published two documents: GSMA PRD NG.134 – IMS Data Channel and GSMA NG.129 – IMS Data Channel White Paper.

This LS asks a number of questions to this feature, and below is a consolidated reply from 3GPP TSG SA to the questions targeted for the SA WGs.

**Question to SA2, SA3:**

GSMA would like to ask feedback on whether work is planned or ongoing to develop security controls for IMS Data Channel (and more generally for new type of communication services).

**Reply:**

SA3 would like to mention that the first phase on the security of IMS Data Channels has been studied in Rel-18 and was specified in TS 33.328 and SA3 currently performs a Rel-19 study on Next Generation Real-Time Communication security Phase 2, the results of which are recorded in TR 33.790. The Rel-19 study includes Key Issue #3: "Security and privacy aspects of IMS DC capability exposure" which includes the security aspects of Key issue #1, and Key Issue #2 of the corresponding study performed by SA2 in TR 23.700-77. The Rel-19 SA3 study has not concluded yet. Moreover the Rel-19 study includes Key Issue #2: "Key issue #2: Security of IMS based Avatar Communication" which is a new type of service in which SA2 concluded that IMS data channels will be used.

**Question to SA3:**

TSG kindly asks SA3 to provide feedback on any security aspects of data channel they believe should be developed and, if such aspects are to be covered by or in cooperation with GSMA to consider taking part in the GSMA activity.

**Reply:**

As described above there is an SA3 Rel-19 study in progress which includes IMS Data Channel security aspects.

3GPP SA3 has not studied security aspects on IMS data channel API specified in GSMA TS.66 so far.

SA3 will update GSMA after the Rel-19 SA3 study has been concluded if there are any identified data channel security aspects.

**Question to SA4:**

GSMA would like to know, if, with reference to point 4 in the body of the LS, SA4 believes that there is the need to develop JavaScript APIs to control media stream?

The content of point 4 is as below:

*Video pipeline and GSMA IR.94 extensions (new PRD) document would be the extension of GSMA IR.94 and would provide JavaScript API allowing to manipulate programmatically video media type. This work might be of interest to 3GPP SA4.*

**Reply:**

SA4 has been working on the IMS-based AR Real Time Communication (see 3GPP TS 26.264), and Avatar based on IMS network (see 3GPP TR 26.813). These services require data channel application to capture, process and transport the video media, and the service logic should be controlled by the data channel application. Therefore, SA4 think that the JavaScript API for video pipeline is valuable.

**Question to SA6:**

GSMA kindly asks SA6 to review the attached GSMA TS.66 and provide comments on the relationship between the APIs specified by GSMA and the APIs already existing or planned to be specified by 3GPP.

**Reply:**

SA6 has reviewed the attached GSMA TS.66 and believes that there is no relationship between APIs specified by GSMA and the APIs already existing or planned to be specified by 3GPP SA6, since the terminal side APIs specified by GSMA are out of scope of SA6. The W3C WebRTC1.0 based IMS data channel Application Programming Interface (API) for DCMTSI client in terminal can be considered as the reference point between service enabler client in terminal and application client in terminal in SA6, and it is generally considered as implementation specific and out of scopes.

Currently, SA6 is working on the service enablement of MMTel service. The MMTel service is an MTSI service as specified in 3GPP TS 26.114 with or without Data channel support. The related study is documented in 3GPP TR 23.700-92 and the follow up normative work is documented in 3GPP TS 23.392. Both the documents above have not published by 3GPP yet. The main content of this work includes:

i) the application layer architecture and procedures to support the MMTel service, e.g. controlling the downloading of data channel applications on UE by providing data channel application profile to UE.

ii) the service enabler layer capability exposure procedures and related APIs for enablement aspects of MMTel service.

SA6 believes that the i) listed above, which happens in the downloading procedure of data channel applications, needs further collaboration with GSMA TSG and GSMA NG to consider the usage of the procedures specified by SA6.

SA6 believes that the APIs already existing or planned to be specified by SA6, as ii) listed above, is not overlapped with the APIs specified by GSMA TS.66. But the APIs planned to be developed by SA6 may interact with the External Server/content which documented in Annex C and Annex D of GSMA PRD NG.134. SA6 would like to ask GSMA NG whether GSMA NG has plan to develop the APIs used by External Server/content? If yes, what APIs are planned by GSMA? If no, SA6 would like to ask GSMA NG provide any feedback on the gaps in the APIs needed to be used by External Server/content, if identified.

**Question to SA4 and SA6:**

GSMA would like to ask if there are plans to develop a reference implementation to test IMS Data Channel services.

**Reply:**

There are no plans to develop JavaScript code in SA4.

SA6 has no plan to develop a reference implementation to test IMS Data Channel services since it is out of scope of SA6.

# 2 Actions

**To GSMA TSG**

**ACTION:** 3GPP TSG SA kindly requests GSMA TSG to consider the above feedback.

# 3 Dates of next TSG SA meetings

**SA#106: 10 - 13 December, 2024 Madrid, Spain**

**SA#107: 12 - 14 March, 2025 Republic of Korea**

**SA#108: 10- 13 June, 2025 Prague, Czech Republic**