**3GPP TSG-SA5 Meeting #154 *S5-241648***

**Changsha, China, 15 - 19 April 2024** **(revision of xx-yyxxxx)**

**Source: China Mobile**

**Title: New SID on Charging aspects of next generation real time communication services phase 2**

**Document for: Approval**

**Agenda Item: 7.2**

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: New SID on Charging aspects of next generation real time communication services phase 2

Acronym: FS\_NG\_RTC\_Ph2\_CH

Unique identifier:

Potential target Release: Rel-19

# 1 Impacts

{For Normative work, identify the anticipated impacts. For a Study, identify the scope of the study}

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

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
| X | Study |
|  | Normative – Stage 1 |
|  | Normative – Stage 2 |
|  | Normative – Stage 3 |
|  | Normative – Other\* |

**\* Other = e.g. testing**

## 2.2 Parent Work Item

For a brand-new topic, use “N/A” in the table below. Otherwise indicate the parent Work Item.

|  |  |  |  |
| --- | --- | --- | --- |
| Parent Work / Study Items | | | |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
|  |  |  |  |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work /Study Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 920036 | Evolution of IMS Multimedia Telephony Service | Work Item of Stage 1 requirements for IMS MMTel enhancement |
| 940066 | Study on system architecture for next generation real time communication services | Study Item of Stage 2 architecture and procedures in Rel-18 |
| 970014 | System architecture for Next Generation Real time Communication services | Work Item of Stage 2 architecture and procedures in Rel-18 |
| 1000008 | Charging Aspects of IMS Data Channel | SA5 Rel-18 WID for IMS data channel charging |
| 950005 | Study on Localized Mobile Metaverse Services | Study Item of Stage 1 requirements for Metaverse Service |
| 990049 | PS Data Off for IMS Data Channel Service | Work Item of Stage 1 requirements for PS Data Off for IMS Data Channel Service |
| 1000028 | Stage 1 of Localized Mobile Metaverse Services | Work Item of Stage 1 requirement for Metaverse Service |
| 1010030 | Study on system architecture for next generation real time communication services phase 2 | Study Item of Stage 2 architecture and procedures in Rel-19 |

# 3 Justification

In Rel-18, SA5 initiate the investigation on charging principles and solutions to support duration-based charging and volume-based charging for IMS data channel, based on the output of Rel-18 SA2 NG\_RTC Study Item and Work Item, i.e. TR 23.700-87 and TS 23.228.

In Rel-19, SA2 initiated SID FS\_NG\_RTC\_ph2, which includes 8 Key Issues with multiple functionalities enhancement documented in TR 23.700-77. This study item proposes to investigate which of the enhancements have potential charging aspect impact, and study on the solutions to support charging aspects of next generation real time communication services phase 2.

Based on the current progress of SA1 and SA2, the following aspects may be considered by the charging of next generation real time communication services phase 2:

- There are multiple new services and functionalities (e.g. IMS network capability exposure, Standalone IMS data channel, Avatar communication) introduced for IMS in Rel-19.

- IMS DC could be a PS Data Off Exempted services, and flexibility could be provided for individual DC app.

- The scenario that the UE downloads the IMS data channel applications introduces potential charging impact.

SA5 should identify the charging scenarios and study the potential charging requirements and solutions of above aspects in Rel-19.

NOTE: This study will be based on the conclusion of SA2 SID FS\_NG\_RTC\_Ph2. Whether some of the objectives and requirements are needed depends on SA2 conclusion.

# 4 Objective

The objective of the study item is to identify and study the charging aspects of next generation real time communication services phase 2:

- **WT-1: Identify charging scenarios and potential charging requirements to support the following aspects:**

- WT-1.1: IMS network capabilities exposure.

- WT-1.2: Standalone data channel.

-WT-1.3: Avatar communication.

- WT-1.4: Services over IMS Data Channel as a part of 3GPP PS Data Off Exempt Services.

-WT-1.5: IMS data channel applications download.

- **WT-2: Investigate the potential solutions to support the above charging scenarios and charging requirements.**

- **WT-3: Identify the recommendations for the normative work further.**

## TU estimates and dependencies

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Work Task ID** | **TU Estimate**  **(Study)** | **TU Estimate**  **(Normative)** | **RAN Dependency**  **(Yes/No/Maybe)** | **SA Dependency**  **(Yes/No/Maybe)** | **Non-3GPP Dependency** |
| WT-1 | 2 | 1 | No | Yes | No |
| WT-2 | 2 | 2 | No | Yes | No |
| WT-3 | 1 | 0 | No | Yes | No |

**Total TU estimates for the study phase: 5**

**Total TU estimates for the normative phase: 3**

**Total TU estimates: 8**

# 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 |
| Internal TR | 28.XXX | Study on charging aspects of next generation real time communication services phase 2 | TSG#106 (Dec. 2024) | TSG#107 (Mar. 2025) | Chen, Ai, China Mobile, chenai@chinamobile.com |
|  |  |  |  |  |  |

# 6 Work item Rapporteur(s)

Chen, Ai, China Mobile, chenai@chinamobile.com

# 7 Work item leadership

SA5

# 8 Aspects that involve other WGs

None

# 9 Supporting Individual Members

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| --- |
| Supporting IM name |
| China Mobile |
| HiSilicon |
| Huawei |
|  |
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