3GPP TSG SA WG4#121 ***Tdoc S4-221617***

Toulouse, France, 14th – 18th November 2022 Revision of S4-221425

**Source: Huawei, Qualcomm Incorporated, Ericsson LM, Intel**

**Title: WID on Enhanced Multiparty RTT**

**Document for: Approval**

**Agenda Item: 10.11**

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: Enhanced Multiparty RTT

Acronym: eMP\_RTT

Unique identifier: 980007

Potential target Release: Rel-18

# 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Affects: | UICC apps | ME | AN | CN | Others (specify) |
| Yes |  | X |  | X |  |
| No | 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 | Feature |
|  | Building Block |
|  | *Work Task* |
|  | Study Item |

## 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 |
|  |  |  |

**Dependency on non-3GPP (draft) specification:**

# 3 Justification

At the SA4#120, the contribution [S4-220978](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220978.zip) proposing to initiate a new WI on Multiparty RTT was agreed. This new WID proposal is to implement that agreement.

On 2019-10-17, 3GPP SA4 received LS [S4-191216](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_106_Busan/Docs/S4-191216.zip) sent from ETSI TC HF to ask 3GPP to make changes for accommodating Multiparty RTT. 3GPP SA4 answered in [S4-191253](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_106_Busan/Docs/S4-191253.zip) that requirements were welcome.

On 2022-02-07, 3GPP SA4 received LS [S4-220102](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_117-e/Docs/S4-220102.zip) sent from ETSI TC HF containing the reply to that answer. Furthermore, ETSI TC HF has invited SA4 to initiate and coordinate actions regarding related specifications under the responsibility of other 3GPP groups than SA4:

*“Knowing that 3GPP SA4 manages the TS 126 114 [6] specification covering conversational multimedia services already specifying use of RTT, ETSI HF hereby kindly asks SA4 to amend this and possible other related specifications to explicitly support multiparty calling with RTT.”*

Then, 3GPP SA4 requested actions to 3GPP, GSMA and ATIS in [S4-220321](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_117-e/Docs/S4-220321.zip). Answers from those groups can be summarized as: there are no new requirements from 3GPP SA1 and GSMA; and there are two approaches for Multiparty RTT solution: over RTP and over data channel, the latter is being studied under FS\_NG\_RTC by 3GPP SA2.

# 4 Objective

This WI will specify suitable solutions for multiparty RTT media in IMS, for both RTP and IMS data channel transport, focusing on the transport format and procedures in IETF RFC 9071, but also taking other aspects and specifications into account if found necessary in the course of the work.

Since existing requirements and use cases for RTT are typically either high-level or not related specifically to multiparty communication, there’s some risk that detailed needs are not yet identified, and the work will therefore include:

* Collect and document detailed use cases for multiparty usage of RTT
* Develop harmonized solutions for both RTP and IMS data channel transport that address the detailed use case needs
* Amend existing IMS control/signalling flows to support the solutions, if found necessary
* Document pros and cons of each solution, and provide implementation guidelines to equipment vendors, as an informational Annex
* Inform/coordinate with at least SA2, CT1, CT4, and with other relevant 3GPP groups as found necessary, to enable alignment and possible updates of specifications under the responsibility of those groups.

# 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 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |
| --- |
| Impacted existing TS/TR {One line per specification. Create/delete lines as needed} |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| TS 26.114 | Adding Enhanced Multiparty RTT feature | SA#102 |  |
|  |  |  |  |

# 6 Work item Rapporteur(s)

Huan-yu Su, su.huanyu@huawei.com

# 7 Work item leadership

SA4

# 8 Aspects that involve other WGs

None

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Huawei |
| Qualcomm Incorporated |
| Ericsson LM |
| Intel |
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