**3GPP TSG-CT WG1 Meeting #124eC1-203079**

**E-meeting, 2-10 June 2020**

**Source: Perspecta Labs**

**Title: New WID on Stage 3 of Multimedia Priority Service (MPS) Phase 2**

**Document for: Endorsement**

**Agenda Item: 17.1.1**

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: Stage 3 of Multimedia Priority Service (MPS) Phase 2

## Acronym: MPS2

## Unique identifier: *{A number to be provided by MCC at the plenary}*

 Potential target Release: Rel-17

Note that this field above indicates the proposed Release at the time of submission of the WID to TSG approval. It can later be changed without a need to revise the WID. The updated target Release is indicated in the Work Plan.

## 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

|  |  |
| --- | --- |
|  | Feature |
| x | 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) |
| MPS2\_St2 | SA2 | 870002 | Stage 2 of Multimedia Priority Service (MPS) Phase 2 |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work Items (if any) |
| Unique ID | Title | Nature of relationship |
| 780005 | Study on MPS2 | Stage 1 Feasibility Study |
| 840032 | Stage 1 of MPS2 | Stage 1 Work Item |

**Dependency on non-3GPP (draft) specification**: None.

## 3 Justification

The scope of MPS until Release 16 mainly focused on voice communications. MPS Users are now relying more heavily on sophisticated services involving data and video communications. Several use cases to account for current and anticipated MPS User needs for priority voice, data, and video communication capabilities have been studied and new stage 1 requirements were identified in the Feasibility Study on MPS Phase 2 in 3GPP TR 22.854, which was approved at SA#85. SA#86 further approved normative updates to 3GPP TS 22.153 and 3GPP TR 22.953 to support MPS needs for priority voice, data, and video communications based on 3GPP TR 22.854 in Release 17.

Stage 2 work on enhanced services in MPS Phase 2 will lead to additional stage 3 impacts to core network specifications. For example, priority voice / video conferencing, conferencing initiated by host on the server, priority sessions (voice/video calls, voice/priority teleconferencing) from a public UE (i.e., a UE not subscribed to MPS), priority data sessions using the default bearer, including those to an enterprise network, priority sessions initiated from enterprise network, etc. Updates to the normative stage 3 specifications are needed to support stage 3 solutions for the use cases identified in the updated stage 1 requirements in 3GPP TS 22.153 for Release 17 as applicable for EPS as well as for 5GS.

## 4 Objective

The work item will address impacts to EPC and 5GC specifications for supporting:

- enhancements to upgrade an established teleconferencing call/session to MPS status (updates to CT1 IMS procedures); and

- enhancements to upgrade an established call/session to MPS status (updates to CT1 IMS procedures).

NOTE 1: These are referred to in 3GPP TS 22.153 as upgrades to MMTel video, MMTel video teleconferencing, and MMTel voice teleconferencing.

The above is not dependent on stage 2 work and can be started directly in CT WGs.

Once normative stage 2 requirements are available, support the requirements defined in 3GPP TS 23.203, 3GPP TS 23.401, 3GPP TS 23.501 and 3GPP TS 23.503, the following will be addressed:

- MPS for DTS communications invoked from a subscribed UE, from a public UE, or from an enterprise network.

The work item will include normative impacts pertaining to the following work tasks:

- MPS for DTS - EPC: Support the requirements as defined in 3GPP TS 22.153 for MPS for DTS use cases:

- DTS applicability to different types of UEs, including UEs without MPS subscription;

- DTS applicability only to default EPS bearer; and

- Impacts to Policy Control (updates to CT3 Gx and Rx interfaces).

- MPS for DTS - 5GC: Support the requirements as defined in 3GPP TS 22.153 for MPS for DTS use cases:

- DTS applicability to different types of UEs, including UEs without MPS subscription;

- DTS applicability only to default 5G QoS flow; and

- Impacts to Policy Control (updates to CT3 N5 and N7 interfaces).

NOTE 2: Although MPS may use some common priority mechanisms used by MCData and MCVideo, MPS has some unique service requirements that are different from MCData and MCVideo. Specifically, MPS is supported using operator’s commercial services (voice, video, and data) with priority using commercially available UEs. The work item will identify normative changes that are required for MPS Phase 2.

## 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# | Remarks |
|  |  |  |  |  |  |

|  |
| --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| TS 24.229 | P-CSCF procedure updates for MPS voice and video. | TSG#90(Dec. 2020) | Under CT1 responsibility |
| TS 29.212 | PCRF procedure updates for DTS. | TSG#91(Mar. 2021) | Under CT3 responsibility |
| TS 29.213 |  PCC procedures and QoS mapping tables update. | TSG#91(Mar. 2021) | Under CT3 responsibility |
| TS 29.214 | Procedure updates for DTS. New AVP, new AVP fields. | TSG#91(Mar. 2021) | Under CT3 responsibility |
| TS 29.512 | PCF procedure updates for DTS. | TSG#91(Mar. 2021) | Under CT3 responsibility |
| TS 29.513 |  PCC procedures and QoS mapping tables update. | TSG#91(Mar. 2021) | Under CT3 responsibility |
| TS 29.514 | Procedure updates for DTS. New message attributes. | TSG#91(Mar. 2021) | Under CT3 responsibility |
| TS 29.328 | Add access key value to table. | TSG#91(Mar. 2021) | Under CT4 responsibility |

## 6 Work item Rapporteur(s)

Peter Monnes Perspecta Labs pmonnes@perspectalabs.com

## 7 Work item leadership

CT3

## 8 Aspects that involve other WGs

## 9 Supporting Individual Members

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| --- |
| Supporting IM name |
| Perspecta Labs |
| CISA ECD |
| AT&T |
| T-Mobile USA |
| Verizon |
| Nokia |
| Nokia Shanghai Bell |
| Ericsson |