**3GPP TSG-CT WG1 Meeting #125-eC1-204755**

**Electronic meeting, 20-28 August 2020**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **24.628** | **CR** | **0078** | **rev** | **-** | **Current version:** | **16.2.0** |  |
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| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:***  | Indication of video annoucement during established communication |
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| ***Source to WG:*** | Huawei, HiSilicon, China Telecom |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | TEI17 |  | ***Date:*** | 2020-08-20 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)Rel-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)* |
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| ***Reason for change:*** | According to clause 4.7.2.9.1 in TS 24.628, the AS may provide video announcement parallel with the audio conversation to a UE. But there is no indication to indicate this video stream is for announcement.If the UE has the capablity of both audio conversation and video conversation, and if the AS provide video announcement with audio converstaion, it’s possible that the UE can receive two types of video stream, one is video annoncement stream, the other is video conersation stream. If there is a indication to distinguish these two type of video stream, UE can take different actions while receiving these two type of video stream. E.g. one UE may request the user to choose whether to accept the video conversation stream, and may also not request the user to choose whether to accept the video announcement stream. |
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| ***Summary of change:*** | AS actions:* During the established communication, if the AS provides video announcement parallel with audio stream, the AS shall include "a=content:g.3gpp.announce\_i" or "a=content:g.3gpp.announce\_ni" in the SDP offer as the indication of the video announcement stream.

UE actions:* During the established communication,
	1. if a video stream is provided with the media level attribute "a=content: g.3gpp.announce\_i", the UE shall play this video stream with confirmation with the user.
	2. if a video stream is provided with the media level attribute "a=content: g.3gpp.announce\_ni", the UE shall play this video stream without confirmation with the user.
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| ***Consequences if not approved:*** | User experience of video annoucement cannot have difference with video conversation. |
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| ***Clauses affected:*** | 2, 4.7.2.1, 4.7.2.10, 4.7.2.9.1, Annex X (new), Annex Y (new) |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 24.229: "IP Multimedia Call Control Protocol based on SIP and SDP"..

[2] Void.

[3] Void.

[4] IETF RFC 3261: "SIP: Session Initiation Protocol".

[5] IETF RFC 3262: "Reliability of Provisional Responses in the Session Initiation Protocol (SIP)".

[6] IETF RFC 3960: "Early Media and Ringing Tone Generation in the Session Initiation Protocol (SIP)".

[7] ETSI TS 181 005: "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); Service and Capability Requirements".

[8] Void.

[9] 3GPP TS 29.163: "Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks".

[10] Void.

[11] ITU-T Recommendation I.112: "Vocabulary of terms for ISDNs".

[12] IETF RFC 5009: "Private Header (P-Header) Extension to the Session Initiation Protocol (SIP) for Authorization of Early Media".

[13] IETF RFC 3515: "The Session Initiation Protocol (SIP) Refer Method".

[14] IETF RFC 3725: "Best Current Practices for Third Party Call Control (3pcc) in the Session Initiation Protocol (SIP)".

[15] 3GPP TS 24.607: "Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[16] Void.

[17] ETSI TS 183 028 V2.4.0: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Common Basic Communication procedures; Protocol specification".

[18] IETF RFC 6228 (May 2011): "Response Code for Indication of Terminated Dialog".

[19] IETF RFC 3840: "Indicating User Agent Capabilities in the Session Initiation Protocol (SIP)"

[20] IETF RFC 4596: "Guidelines for usage of the Session Initiation Protocol (SIP) Caller Preferences Extension

[21] IETF RFC 6665 (July 2012): "SIP-Specific Event Notification".

[22] IETF RFC 7647 (September 2015): "Clarifications for the Use of REFER with RFC6665".

[23] 3GPP TS 22.173: "Multimedia Telephony Service and supplementary services".

[24] 3GPP TS 22.001: "Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".

[xx] IETF RFC 4796: "The Session Description Protocol (SDP) Content Attribute".

#### 4.7.2.1 Actions at the originating UE

Procedures according to 3GPP TS 24.229 [1] shall apply.

Certain services require the usage of the Alert-Info header field, Call-Info header field and Error-Info header field according to procedures specified by IETF RFC 3261 [4].

If the UE detects that in-band information is received from the network as early media, the in-band information received from the network shall override locally generated communication progress information.

NOTE 1: In-band information received from the network overrides any locally generated communication progress information also when the most recently received P-Early-Media header fields of all early dialogs contain "inactive" or "recvonly".

NOTE 2: When multiple early dialogs exist with authorization as "sendrecv" or "sendonly", the mechanism used by the UE to associate the received early media with the correct early dialog is unspecified in this version of this specification.

The UE shall not generate the locally generated communication progress information if an early dialog exists where the last received P-Early-Media header field as described in IETF RFC 5009 [12] contains "sendrecv" or "sendonly".

If an early dialog exists where a SIP 18x response to the SIP INVITE request other than 183 (Session Progress) response was received, no early dialog exists where the last received P-Early-Media header field as described in IETF RFC 5009 [12] contained "sendrecv" or "sendonly" and in-band information is not received from the network, then the UE is expected to render the locally generated communication progress information.

NOTE 3: According to 3GPP TS 22.173 [23] the UE for an MMTel session generates the communication progress information specified in clause F.2 of 3GPP TS 22.001 [24], with parameters applicable for the home network of the UE.

If the UE supports the P-Early-Media header field as defined in IETF RFC 5009 [12], and at least one P-Early-Media header field has been received on at least one early dialog, then the UE shall send any available user generated media, e.g. speech or DTMF, on media stream(s) associated with the early dialog for which the most recent P-Early-Media header field, as described in IETF RFC 5009 [12], contained a "sendrecv" header field value. If there is more than one such early dialog, the UE shall use the early dialog where the P-Early-Media header field was most recently received.

If the UE receives a re-INVITE request containing no SDP offer, the UE shall send a 200 (OK) response containing an SDP offer according to 3GPP TS 24.229 [1] indicating the directionality used by UE as

- "sendonly" if the re-INVITE request is received on a dialog where the associated communication session has been put on hold by the user or has been put on hold by both users at both ends; and

- "sendrecv" otherwise.

During the established communication,

- if a video stream is provided with the media level attribute "a=content: g.3gpp.announce\_i" as specified in Annex X, the UE shall play this video stream with confirmation with the user; and

- if a video stream is provided with the media level attribute "a=content: g.3gpp.announce\_ni" as specified in Annex Y, the UE shall play this video stream without confirmation with the user.

#### 4.7.2.10 Action at the terminating UE

Certain services require the usage of the Alert-Info header field and Call-Info header field according to procedures specified by IETF RFC 3261 [4].

If the UE receives a re-INVITE request containing no SDP offer, the UE shall send a 200 (OK) response containing an SDP offer according to 3GPP TS 24.229 [1] indicating the directionality used by UE as

- "sendonly" if the re-INVITE request is received on a dialog where the associated communication session has been put on hold by the user; and

- "sendrecv" otherwise.

During the established communication,

- if a video stream is provided with the media level attribute "a=content: g.3gpp.announce\_i" as specified in Annex X, the UE shall play this video stream with confirmation with the user; and

- if a video stream is provided with the media level attribute "a=content: g.3gpp.announce\_ni" as specified in Annex Y, the UE shall play this video stream without confirmation with the user.

##### 4.7.2.9.1 Providing announcements during an established communication session

The AS may use the Call-Info header field according to procedures specified by IETF RFC 3261 [4] to provide an announcement during an established communication session.

The AS may send an in-band message or media using an existing media-stream to provide an announcement during an established communication session. The AS may re-negotiate the media to a media type suitable for the announcement.

The AS may add a new media stream in addition to the existing media stream by SDP re-negotiation to provide an announcement using different media than in the existing media stream (e.g., providing video stream with audio stream) during an established communication session. In the re-negotiation, the AS shall include an SDP a=content media-level attribute as specified in RFC 4796 [xx], with a "g.3gpp. announce\_i" or "g.3gpp. announce\_ni" value as specified in Annex X and Annex Y in the SDP offer.

Annex X (normative):
SDP a=content attribute "g.3gpp.announce\_i" value

## X.1 Introduction

IANA registration table: "content SDP Parameters" table of "Session Description Protocol (SDP) Parameters" registry

IANA registry: A new value "g.3gpp.announce\_i" for the SDP a=content media-level attribute defined in RFC 4796 [xx].

Reference: 3GPP TS 24.628, <http://www.3gpp.org/ftp/Specs/archive/24_series/24.628/>

## X.2 Usage

This value "g.3gpp.announce\_i" is used only for informative purposes, to indicate an SDP media description is for the announcement service and the announcement stream shall be played with user conformation. The "a=content" media-level attribute with a "g.3gpp.announce\_i" value can be inserted into the SDP offer by the AS for providing a video announcement during an established communication.

Annex Y (normative):
SDP a=content attribute "g.3gpp.announce\_ni" value

## Y.1 Introduction

IANA registration table: "content SDP Parameters" table of "Session Description Protocol (SDP) Parameters" registry

IANA registry: A new value "g.3gpp.announce\_ni" for the SDP a=content media-level attribute defined in RFC 4796 [xx].

Reference: 3GPP TS 24.628, <http://www.3gpp.org/ftp/Specs/archive/24_series/24.628/>

## Y.2 Usage

This value "g.3gpp.announce\_ni" is used only for informative purposes, to indicate an SDP media description is for the announcement service and the announcement stream shall be played without user conformation. The "a=content" media-level attribute with a "g.3gpp.announce\_ni" value can be inserted into the SDP offer by the AS for providing a video announcement during an established communication.