**3GPP TSG-CT WG1 Meeting #130-eC1-213556**

**Electronic meeting, 20-28 May 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.173** | **CR** | **0147** | **rev** | **1** | **Current version:** | **17.0.0** |  |
|  | | | | | | | | |
| *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 |  |

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| ***Title:*** | IMS data channel media feature tag in Accept-Contact header | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17 | | | | |  | ***Date:*** | | | 2021-05-21 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 can be 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | As specified in RFC 5688: *When included in the Accept-Contact or Reject-Contact header field, it indicates a desire on the part of a User Agent Client (UAC) to be connected to a User Agent Server (UAS) that can support or cannot support, respectively, streaming using that application subtype.*  In the subclause 5.4.3.3 of TS 24.229:  *5.4.3 General treatment for all dialogs and standalone transactions excluding requests terminated by the S-CSCF*  *5.4.3.3 Requests terminated at the served user*  *When the S-CSCF receives, destined for a registered served user, an initial request for a dialog or a request for a standalone transaction, and the request is received either from a functional entity within the same trust domain or contains a valid original dialog identifier or the dialog identifier (From, To and Call-ID header fields) relates to an existing request processed by the S-CSCF, then prior to forwarding the request, the S-CSCF shall:*  *9) if necessary perform the caller preferences to callee capabilities matching according to RFC 3841 [56B] to the target set;*  *NOTE 15: This might eliminate entries and reorder the target set.*  *NOTE 16: The S-CSCF performs caller preferences to callee capabilities matching also to select among multiple targets set to a single instance-id, when the UE has registered multiple registration flows.*  Also, as specified in subclause 6.2.10.1 of TS 26.114:  *To indicate support for the procedures in this clause, a DCMTSI client shall when including media feature tags as specified in TS 24.229 [7] include a +sip.app-subtype media feature tag, as specified by RFC 5688 [177], with a value of "webrtc-datachannel" (the application media format used by [172]), regardless of data channel media being part of the SDP or not.*  So, if the 'sip.app-subtype' media feature tag is included in the Accept-Contact header field, the terminating S-CSCF may use such information to determine the target set. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | It is proposed to specify the originating UE may include an Accept-Contact header field containing the 'sip.app-subtype' media feature tag in a request for a new dialog or standalone transaction. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The 'sip.app-subtype' media feature tag with a value of "webrtc-datachannel" in an Accept-Contact could help the terminating S-CSCF to select a terminaing UE that is best match for the "webrtc-datachannel" media. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2; 5.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\* \* \* First Change \* \* \* \*

# 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 TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 22.173: "IP Multimedia Core Network Subsystem (IMS) Multimedia Telephony Service and supplementary services; Stage 1".

[3] 3GPP TS 24.604: "Communication Diversion (CDIV); Protocol specification using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification ".

[4] 3GPP TS 24.605: "Conference (CONF) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[5] 3GPP TS 24.606: "Message Waiting Indication (MWI) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[6] 3GPP TS 24.607: "Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[7] 3GPP TS 24.608: "Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[8] 3GPP TS 24.610: "Communication HOLD (HOLD) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[9] 3GPP TS 24.611: "Anonymous Communication Rejection (ACR) and Communication Barring (CB) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[10] 3GPP TS 24.629: "Explicit Communication Transfer (ECT) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[11] 3GPP TS 24.623: "Extensible Markup Language (XML) Configuration Access Protocol (XCAP) over the Ut interface for Manipulating Simulation Services".

[12] 3GPP TS 26.114: "IP Multimedia Subsystem (IMS); Multimedia telephony; Media handling and interaction".

[13] 3GPP TS 24.229: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".

[14] 3GPP TS 24.247: "Messaging using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".

[15] Void

[16] IETF RFC 3841 (August 2004): "Caller Preferences for the Session Initiation Protocol (SIP)".

[17] 3GPP TS 24.647: "Advice Of Charge (AOC) using IP Multimedia (IM)Core Network (CN) subsystem; Protocol Specification".

[18] 3GPP TS 24.654: "Closed User Group (CUG) using IP Multimedia (IM) Core Network (CN) subsystem, Protocol Specification".

[19] 3GPP TS 24.239: "IP Multimedia Subsystem (IMS) Flexible alerting supplementary service".

[20] 3GPP TS 24.238: "Session Initiation Protocol (SIP) based user configuration; stage 3".

[21] 3GPP2 C.S0055-A: "Packet Switched Video Telephony Services".

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

[23] 3GPP TS 24.615: "Communication Waiting (CW) using IP Multimedia (IM) Core Network (CN) subsystem, Protocol Specification".

[24] 3GPP TS 24.642: "Completion of Communications to Busy Subscriber (CCBS) Completion of Communications by No Reply (CCNR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[25] 3GPP TS 24.182: "IP Multimedia Subsystem (IMS) Customized Alerting Tones (CAT); Protocol specification".

[26] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification".

[27] 3GPP TS 24.183: "IP Multimedia Subsystem (IMS) Customized Ringing Signal (CRS); Protocol specification".

[28] IETF RFC 3362 (August 2002): "Real-time Facsimile (T.38) - image/t38 MIME Sub-type Registration".

[29] 3GPP TS 24.259: "Personal Network Management (PNM); Stage 3".

[30] 3GPP TS 24.390: "Unstructured Supplementary Service Data (USSD) using IP Multimedia (IM) Core Network (CN) subsystem IMS; Stage 3".

[31] IETF RFC 6809 (November 2012): "Mechanism to Indicate Support of Features and Capabilities in the Session Initiation Protocol (SIP)".

[32] 3GPP TS 24.167: "3GPP IMS Management Object (MO); Stage 3".

[33] 3GPP TS 23.221: "Architectural requirements".

[34] Void.

[35] 3GPP TS 24.628: "Common Basic Communication procedures using IP Multimedia (IM) Core Network (CN) subsystem; Protocol Specification".

[36] 3GPP TS 24.275: "Management Object (MO) for basic communication part of IMS multimedia telephony (MMTEL) communication service".

[37] 3GPP TS 22.011: "Service accessibility".

[38] 3GPP TS 31.102: "Characteristics of the Universal Subscriber Identity Module (USIM) application".

[39] 3GPP TS 24.196: "Technical Specification Group Core Network and Terminals; Enhanced Calling Name".

[40] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3".

[41] 3GPP TS 23.122: "Non-Access-Stratum functions related to Mobile Station (MS) in idle mode".

[42] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS); Stage 3".

[43] 3GPP TS 24.174: "Support of Multi-Device and Multi-Identity in IMS; Stage 3".

[XX] RFC 5688 (January 2010): "A Session Initiation Protocol (SIP) Media Feature Tag for MIME Application Subtype".

\* \* \* Next Change \* \* \* \*

## 5.2 Session control procedures

The IMS multimedia telephony communication service can support different types of media, including media types listed in 3GPP TS 22.173 [2]. The session control procedures for the different media types shall be in accordance with 3GPP TS 24.229 [13] and 3GPP TS 24.247 [14], with the following additions:

a) Multimedia telephony is an IMS communication service and the P-Preferred-Service and P-Asserted-Service headers shall be treated as described in 3GPP TS 24.229 [13]. The coding of the ICSI value in the P-Preferred-Service and P-Asserted-Service headers shall be according to subclause 5.1.

b) The multimedia telephony participant shall include the "+g.3gpp. icsi-ref" header field parameter equal to the ICSI value defined in subclause 5.1 in the Contact header field in initial requests and responses as described in 3GPP TS 24.229 [13].

c) The multimedia telephony participant shall include an Accept-Contact header field containing the "+g.3gpp.icsi-ref" header field parameter containing the ICSI value defined in subclause 5.1 in initial requests. If the multimedia telephony participant supports the IMS data channel usage as specified in 3GPP TS 26.114 [12], then the multimedia telephony participant may include an Accept-Contact header field containing the "sip.app-subtype" media feature tag defined in RFC 5688 [XX] with a value of "webrtc-datachannel" in a request for a new dialog or standalone transaction. If the user requests capabilities other than multimedia telephony and IMS data channel, the Accept-Contact header field may contain other feature parameters and feature parameter values, and other Accept-Contact header fields may be added to express user preferences as per IETF RFC 3841 [16].

NOTE 1: How the user indicates other feature parameters and the feature parameter values is outside of the scope of this document.

d) The multimedia telephony application server shall include the "+g.3gpp.icsi-ref" header field parameter equal to the ICSI value defined in subclause 5.1 in a Feature-Caps header field in requests sent to the terminating user and in 1xx or 2xx responses to requests from the originating user as described in 3GPP TS 24.229 [13] and IETF RFC 6809 [31].

e) The multimedia telephony participant may use the presence of a "+g.3gpp.icsi-ref" header field parameter equal to the ICSI value defined in subclause 5.1 in a Feature-Caps header field in requests and responses as described in IETF RFC 6809 [31] to determine that a multimedia telephony application server is participating in the session and multimedia telephony is the IMS communication service supported for use in the dialog.

NOTE 2: ICSI values with subclass identifiers are considered equal to the value defined in subclause 5.1 when determining that the multimedia telephony application server is participating in the session.

f) The multimedia telephony application server may insert a Response-Source header field in accordance with the procedures in subclause 5.7.1.0 of 3GPP TS 24.229 [13], where the "role" header field parameter is set to "tas" when initiating a failure response to any received request.

\* \* \* End of Changes \* \* \* \*