**3GPP TSG-WG SA4 130 meeting *-241943***

**Orlando, US, 18 – 22, November, 2024**

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| *CR-Form-v12.2* |
| **Pseudo CHANGE REQUEST** |
|  |
|  | **26.830** | **CR** |  | **rev** |  | **Current version:** | **0.1.0** |  |
|  |
| *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 | **X** |

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|  |
| ***Title:***  | [FS\_iRTCW\_Ph2] KI#1 Description |
|  |  |
| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | S4 |
|  |  |
| ***Work item code:*** | FS\_iRTCW\_Ph2 |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** | Rel-19 |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** |  |
|  |  |
| ***Summary of change:*** | Adds descriptive text for Key issue #1 |
|  |  |
| ***Consequences if not approved:*** |  |
|  |  |
| ***Clauses affected:*** |  |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  |  |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  |  |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  |  |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

FIRST CHANGE

# 5 Key Issues

## 5.1 General

Editor's note: This clause will list the key issues of this study.

## 5.2 Key Issue#1: Media Profiles and Codecs for RTC

### 5.2.1 General

In the Rel-18 work, there was a discussion of the media capabilities, profiles, and codecs for RTC endpoints, but no specific codecs nor media capabilities have been derived. Therefore, this key issue addresses the specification of codecs and media capabilities for RTC endpoints.

### 5.2.2 Minimum requirements for RTC

While TS 26.113 mainly specifies the protocols and APIs for RTC (Real-Time media Communication), it also addresses the minimum requirements of media profiles for minimum service interoperability as follows;

*a terminal implementing the protocols and APIs defined in the present document should implement:*

*- The UE codec requirements for speech as specified in TS 26.114, if speech/audio is supported.*

*- The UE codec requirements for video as specified in TS 26.114, if video is supported.*

TS 26.114 provides the following list of codecs to be supported in MTSI clients in terminals;

- Speech codecs

- AMR speech codec (mandatory for offering speech communication)

- AMR-WB codec (mandatory for offering wideband speech communication)

- EVS codec (mandatory for offering super-wideband or fullband speech communication)

- IVAS codec (mandatory for offering immersive audio communication)

- Video codecs

- H.264 (AVC) Constrained Baseline Profile (CBP) Level 1.2 (mandatory for offering video communication)

- H.265 (HEVC) Main Profile, Main Tier, Level 3.1 (mandatory for offering video communication)

- H.264 (AVC) Constrained High Profile (CHP) Level 4.0 (recommended for offering video communication)

- H.265 (HEVC) Main Profile, Main Tier, Level 4.0 (recommended for offering video communication)

All the codecs above were identified for MTSI (Multimedia Telephony Service for IMS) services, they are assumed to have the capabilities of real-time encoding/decoding. Therefore, all of them may be considered as the candidate media codecs and profiles for RTC services as well.

### 5.2.3 Other candidate media codecs and profiles

#### 5.2.3.1 Case of 5G Media Streaming

5G Media Streaming (5GMS), another branch from the Generalized Media Delivery architecture, also specifies the following media capability and codec list;

- Speech codecs (as addressed in TS 26.117)

- AMR speech codec

- AMR-WB codec

- EVS codec

- Audio codecs (as addressed in TS 26.117)

- eAAC+ codec

- AMR-WB+ codec

- xHE-AAC stereo codec

- IVAS codec (Note that it implies support of EVS capabilities bases on IVAS features)

- AAC-ELDv2 codec

- Video codecs (as addressed in TS 26.511)

- H.264 (AVC) Progressive High Profile Level 3.1

- H.264 (AVC) Progressive High Profile Level 4.0

- H.264 (AVC) Progressive High Profile Level 5.1

- H.265 (HEVC) Main Profile, Main Tier, Level 3.1

- H.265 (HEVC) Main10 Profile, Main Tier, Level 4.1

- H.265 (HEVC) Main10 Profile, Main Tier, Level 5.1

- H.265 (HEVC) Main10 Profile, Main Tier, Level 6.1

As all codecs above were identified to support the streaming services, thus it is obvious that some of codecs are not suitable to support real-time media communication. Therefore, they need to be carefully evaluated in terms of real-time encoding/decoding feasibility.

#### 5.2.3.2 Case of Web browser type clients

The codecs for WebRTC endpoints described in IETF RFC 7874 are used by web browser type applications. Therefore, all of codecs described in IETF RFC 7874 may be considered as the candidate media codecs and profiles for RTC services as well.

End of changes