**3GPP SA4 #131 S4-250109**

**Geneva, Switzerland, February 17-21, 2025 Revision of S4aR250050**

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| *CR-Form-v12.0* | | | | | | | | |
| **PSEUDO CHANGE REQUEST** | | | | | | | | |
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|  | **26.854** | **CR** | pseudo | **rev** | **-** | **Current version:** | **0.2.0** |  |
|  | | | | | | | | |
| *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 | **x** | Core Network | **x** |

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| ***Title:*** | **[FS\_HapticsMedia]** On supporting haptics media formats in deployed devices in split rendering | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | FS\_HapticsMedia | | | | |  | ***Date:*** | | | 02/17/2025 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 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-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)*  *Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | A large portion of the actuators in the deployed UEs (e.g., smartphones) use proprietary haptic media formats.  For split rendering, it is beneficial to support proprietary haptics media format without changing the the deployed UEs. The proposed revision is added to the clause 8.1.3 in response to the comment on a prior paper S4aR250050. | | | | | | | | |
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| ***Summary of change:*** | | Introduce a potential solution to support UEs that only support proprietary haptic media formats. | | | | | | | | |
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| ***Consequences if not approved:*** | | The TR misses the discussion of how to support an important deployment scenario. | | | | | | | | |
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| ***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:*** | |  | | | | | | | | |

\* \* \* \* 1st change \* \* \* \*

8.1.3.2 Network functions and UE entities

The haptics media related network functions in the XR end to end split rendering architecture are similar to the one described in section 8.1.2. The haptics media engines in the Media AS and in the UE need to make sure that the format of the haptics media sent by the Media AS is understandable to the UE. Negotiating the split of haptic media capabilities is for further studies. Use of Non-3GPP codecs are out of scope of this document.

The haptics media entities on the XR baseline Client consist of:

- the haptic media codec, handling and decompressing a compressed haptics media bitstream is illustrated in the MAF function of the SRC along with AV codecs.

- the haptic renderer, handling the rendering of haptics effects using the targeted actuators is illustrated in the light presentation engine function of the SRC.

\* \* \* \* end of 1st change \* \* \* \*