**3GPP TSG-SA WG4 Meeting #128 S4-241009**

**Jeju, KR, 4**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **26.567** | **pCR** |  | **rev** | **01** | **Current version:** | **0.1.0** |  |
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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:***  | High level call flows for Split Rendering over IMS |
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| ***Source to WG:*** | Nokia  |
| ***Source to TSG:*** | S4 |
|  |  |
| ***Work item code:*** | SR\_IMS |  | ***Date:*** | 14-05-2024 |
|  |  |  |  |  |
| ***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 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)* |
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| ***Reason for change:*** | Clause 6.1 of the latest draft of TS 26.567 v 0.1.0 is left incomplete.  |
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| ***Summary of change:*** | This CR proposes new high level call flows for general procedures for split rendering session establishment over IMS and the corresponding text for clause 6.1  |
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| ***Consequences if not approved:*** | Clause 6.1 will remain incomplete.  |
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| ***Clauses affected:*** | 6. 1 (new).  |
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|  | **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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| 1st Change |

6 Procedures

6.1 General procedures for session establishment



Figure 6.1-1: high level call flows for split rendering over IMS.

The steps are as follows:

Step 1: The UE1 initiates a media session and establishes audio and video session connections with the UE2. Then the bootstrap and application data channels are established for the UE1 and UE2.

Step 2: UE sends a request to create a split rendering session leveraging the IMS network entities:

 When the UE1 discovers that its media capabilities cannot meet the related media rendering requirements, the UE1 decides to start split rendering call flow. Then the UE1 calculates which objects can be rendered by itself based on its status and decides which part of the objects to be rendered in the UE1 and the others to be rendered in the IMS network.

 The UE1 initiates the application data channels between the UE1 and the IMS AS, for the split rendering request and metadata transmission.

Step 3: The IMS AS interacts with the DCSF via DC1 for event notifications.

Step 4: The DCSF receives event reports from the IMS AS and decides whether data channel service is allowed to be provided during the IMS session. The DCSF manages bootstrap data channel and (if applicable) application data channel resources at the MF via the IMS AS;

Step 56- The IMS AS receives the data channel control instructions from the DCSF and accordingly interacts with the MF via DC2

Step 7: The IMS AS sends a Split Rendering Request to the MF through the established application data channel, the request includes the information of the objects to be rendered in IMS network.

Step 8: The MF sends a description of the split rendering output to the IMS AS.

Step 9: The IMS AS sends the media resource allocation request to the DCSF, to reserve XR media rendering resource for the UE1.

Step 10: When the resources are allocated successfully, the DCSF returns a successful response to the IMS AS.

Ste 11: The IMS AS returns a successful response to the UE1.

Step 12: successful SR session is established between SRC and SRS through the application data channel.

13. Subsequent procedures continue for the UE2.

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| End of change |