**3GPP TSG|WG-S4 Meeting #115-e S4-211050**

**18th – 27th Aug 2021**

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| *CR-Form-v12.0* | | | | | | | | |
| **Pseudo CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.804** | **CR** | **<CR#>** | **rev** | **-** | **Current version:** | **0.2.1** |  |
|  | | | | | | | | |
| *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\_5GMS-EXT] Content Preparation: Conclusion and recommendations | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Tencent | | | | | | | | | |
| ***Source to TSG:*** | SA4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | FS\_5GMS-EXT | | | | |  | ***Date:*** | | | 2021-08-12 |
|  |  | | | |  | |  | | |  |
| ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
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| ***Reason for change:*** | | The study item description identifies the key topic “Content Preparation”. | | | | | | | | |
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| ***Summary of change:*** | | Conclusion and recommendations | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Key topic not addressed | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |
| ***56*** | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

#### 5.2.6 Conclusion and recommendations

This study explored three deployment scenarios for content preparation:

1. Content preparation before downlink distribution,

2. Content preparation after uplink streaming, and

3. Content preparation between uplink streaming and downlink distribution.

The call flows for all deployment scenarios are defined, along with a gap analysis of TS 26.512 [?] in addressing those scenarios.

As this study shows, the use of Content Preparation Templates is not explained adequately in TS 26.501 [?], especially in the case of uplink media streaming. Furthermore, TS 26.512 [?] needs several extensions to make the use of Content Preparation Templates interoperable in the 5G Media Streaming architecture.

The following extensions are recommended for TS 26.501 and TS 26.512:

- TS 26.501:

- Inclusion of content preparation deployment scenarios and associated call flows.

- TS 26.512:

- Develop a Content Preparation Template format that addresses requirements for generic media processing in the 5GMS System, or at least satisfying mainstream use cases such as adaptive media streaming.

- Add signaling between uplink and downlink streaming, when content preparation is used to manipulate uplinked streaming sessions for redistribution within the same 5GMS System.

- Specify URL translation as part of the content preparation feature when the content is being pulled by the 5GMSd AS from an upstream source for the purpose of downlink streaming distribution.