**3GPP SA4-e (AH) Video SWG post 127 S4aV240003**

**Online, March 2024**

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| *CR-Form-v12.0* |
| **Pseudo CHANGE REQUEST** |
|  |
|  | **26.956** | **CR** | **<CR#>** | **rev** | **-** | **Current version:** | **0.0.1** |  |
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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:***  | [FS\_ Beyond2D] Draft Scenario Template |
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| ***Source to WG:*** | China Mobile Com. Corporation |
| ***Source to TSG:*** | SA4 |
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| ***Work item code:*** | FS\_ Beyond2D |  | ***Date:*** | 2024-03-26 |
|  |  |  |  |  |
| ***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-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 asks for typical scenarios |
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| ***Summary of change:*** | Introduces Scenario Template |
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| ***Consequences if not approved:*** | Inconsistent scenario definitions |
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| ***Clauses affected:*** | Annex A |
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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 pCR is based on TR26.956v0.0.1  |
|  |  |
| ***This CR's revision history:*** |  |

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| **1st Change** |

Annex A
Scenario Template

## A.1 Introduction

This annex provides a proposed template to introduce a Scenario for Beyond 2D Video. This template has been used to collect the scenarios in this report. The text in blue corresponds to guidelines on the information to be provided with a scenario proposal.

## A.2 Template

The following aspects are considered for a scenario:

1. **Scenario name**
2. **Motivation for the scenario**

*What is the market relevance of the proposed scenario within the next few years? Are there any commercially available or pre-released products or prototypes?*

1. **Description of the scenario**

*This provides a description of beyond 2D video end-to-end workflows, which includes identifying and defining beyond 2D formats being used in the context and representation technologies to delivery these formats. The following aspects may be considered for each workflow:*

1. *Capturing and processing*
2. *Encoding*
3. *Packaging and delivery*
4. *Decoding*
5. *\*Post-processing*
6. *Rendering*
7. *General constraints on latency, bandwidth, reliability and complexity*
8. **Supporting companies and 3GPP members**
9. *This documents the 3GPP members that support this scenario in terms of providing the information, test material, test requirements and the characterization for the tests. For each of the identified necessities, a tick box is created in the template.*
10. *Preferably several 3GPP members are included in the support, and in addition a video service provider may be included (not necessarily a 3GPP member).*
11. *Cross-verification is preferably done by the supporters of the scenario*
12. **Source format properties**

*This defines a clear range of the considered and relevant source formats, including the signal properties, but also the characteristics of the content. As an example, the texture and depth format properties of the source may be used which include:*

1. *Spatial resolutions*
2. *Chroma Format*
3. *Chroma Subsampling*
4. *Aspect ratios*
5. *Frame rates*
6. *Colour space formats*
7. *Transfer Characteristics*
8. *Bit depth*
9. *Viewpoints*
10. *Other signal properties*
11. **Encoding and decoding constraints and settings**

*Typical encoding constraints and settings such as*

1. *Relevant Codec and Codec Profile/Levels according to 3GPP TS (e.g., TS26.119), ~~TR26.928, TR26.998 and TR26.966~~.*
2. *Random access frequency*
3. *Error resiliency requirements*
4. *Bitrates and quality requirements*
5. *Bitrate parameters (CBR, VBR, CAE, HRD parameters)*
6. *ABR encoding requirements (switching frequency, etc.)*
7. *Latency requirements and specific encoding settings*
8. *Encoding context: real-time encoding, on device encoding, cloud-based encoding, offline encoding, etc.*
9. *Required decoding capabilities*
10. *Synchronization requirements*
11. **Performance Metrics and Requirements**
12. *A clear definition on how the performance needs to be evaluated including metrics, etc addressing the main KPIs of the scenario.*
13. *Objective measures such as PSNR, VMAF, etc, may be used.*
14. *Justification on whether objective metrics are sufficient and representative of the subjective performance.*
15. **Interoperability Considerations for the application**
16. *Streaming with DASH/HLS/CMAF/QUIC*
17. *RTP based delivery*
18. **Test Sequences**

*A set of selected test sequences that are provided by the proponents in order to do the evaluation. They should cover a set of source format properties*

1. **Detailed test conditions**

*Provides a proposal for detailed test conditions, for example based on a reference software together with the sequences and configuration parameters.*

1. **External Performance data**

*References to external performance data that can be added, for example other SDOs, public documents and so on.*

1. **Additional Information**

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| **2nd Change** |