



ISO/IEC JTC 1/SC 29 "Coding of audio, picture, multimedia and hypermedia information"

Secretariat: JISC

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## Liaison statement from SC 29/WG 5 to 3GPP on feasibility study [SC 29/WG 5 N 252]

Document type	Related content	Document date	Expected action
Project / Other		2023-10-30	

### Description

In accordance with Recommendation 7.2.1 at the 13th WG 5 Meeting, 2023-10-13/20, Hannover, Germany, the SC 29 Secretariat sends this liaison statement to 3GPP. [Requested action: For SC 29's information]

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION  
ORGANISATION INTERNATIONALE DE NORMALISATION  
ISO/IEC JTC 1/SC 29/WG 5  
MPEG JOINT VIDEO EXPERTS TEAM WITH ITU-T SG 16

ISO/IEC JTC 1 / SC 29 / WG 5 N 252  
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The Joint Video Experts Team (JVET) of ITU-T WP3/16 and ISO/IEC JTC 1/SC 29 (as WG 5 in SC 29) thanks 3GPP for the liaison document TDoc S4-231587 (29n21621).

JVET has been developing a technical report on film grain synthesis technologies. The document has been submitted for ballot for potential final approval as ISO/IEC DTR 23002-9 “Film grain synthesis technologies for video applications” and will also be produced as an ITU-T supplement (provisionally called H.Sup-FGST). Such technology can provide subjective quality benefits for certain video applications and, thus, could effectively achieve improved video compression. The purpose of this document is to provide a publicly referenceable overview of the end-to-end processing steps for film grain and sensor noise removal, estimation, parameterization, synthesis, and blending for consumer distribution applications.

JVET has also received a report on subjective film grain performance that may be of interest to 3GPP as found in [JVET-AD0382](#), containing an assessment of subjective quality with and without film grain synthesis. This assessment evaluates the benefits of film grain synthesis as a tool for improving the visual quality of a compressed video sequence. The results of this assessment indicate a significant visual benefit by applying film grain synthesis.

Finally, a recent input contribution, [JVET-AF0262](#) “New Film Grain Material based on a Ground Truth approach”, has provided film grain content material that was generated using a “ground truth” method (discussed further in prior contributions [JVET-AD0369](#) and [JVET-AE0250](#)). The material consists of either newly captured content or scenes taken from the OpenMovie project “Tears of Steel”. A total of 26 film grain characteristics variants was created for each selected scene.

JVET looks forward to continued discussion and developments on film grain activities in both groups and would appreciate being kept informed of such further developments in your organization.