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**ISO/IEC JTC 1/SC 29/AG 5**

**MPEG VISUAL QUALITY ASSESSMENT**

**ISO/IEC JTC 1/SC 29/AG 5 N188**

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| **Title** | **Announcement of subjective evaluations in the joint call for proposals on video compression with capability beyond VVC** |
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# Abstract

The Joint Video Experts Team (JVET) of ITU-T SG21 WP3/21 and ISO/IEC JTC 1/SC 29 is preparing a Call for Proposals (CfP) on “video coding technology with capabilities beyond VVC” (the Versatile Video Coding standard, Rec. ITU-T H.266 | ISO/IEC 23090-3). This announcement provides information on the subjective testing activities planned for CfP submissions, summarizes the CfP conditions, and describes the expected requirements of participating laboratories. Laboratories interested in contributing to these tests are invited to register for participation.

# Introduction

The Joint Video Experts Team (JVET) of ITU-T SG21 WP3/21 and ISO/IEC JTC 1/SC 29 is preparing a Call for Proposals (CfP) on video coding technology with capabilities that significantly exceed those of the Versatile Video Coding (VVC) standard (Rec. ITU-T H.266 | ISO/IEC 23090-3) and its extensions. A draft version of the CfP is available in document JVET-AO2026 [1]. JVET plans to release the final version of the Call for Proposals in July 2026.

Multiple international laboratories are sought to conduct subjective testing of the CfP submissions. The previous JVET Call for Proposals for the VVC standard (2018) resulted in 46 category-specific submissions (22 SDR, 12 HDR, 12 for 360° video). A similar or greater number of submissions is anticipated for this current Call.

Evaluation of the submissions will include the acquisition of mean opinion scores (MOS) for video sequences decoded from the submitted bitstreams. Laboratories will perform these subjective tests using the Degradation Category Rating (DCR) method recommended in ITU-T P.910 (also known as the Double Stimulus Impairment Scale (DSIS) method in ITU-R BT.500) [2][3]. The tests will use an 11-level impairment rating scale ranging from “0” (severely annoying) to “10” (imperceptible).

JVET will evaluate the subjective assessment results at its January 2027 meeting.

# CfP timeline

The draft timeline of the Call for Proposals [1] is as follows:

2026-05-15: Final Draft Call for Proposals

2026-05-31: VTM (VVC Test Model) anchors, runtime-constrained VTM encodings, additional VTM encodings with RPR (Reference Picture Resampling) enabled, and VTM encoder configuration information available

2026-07-17: Call for Proposals

2026-08-01: Formal registration period opens

2026-09-01: Formal registration period ends

2026-09-07: Formal offer to conduct the tests is sent by the test coordinator

2026-10-26: Coded test material is available at the test site

2026-10-26: Confirmation of purchase order shall be received

2026-11-02: Subjective assessment starts

2026-11-02: Set of additional sequences provided to the proponents

2026-12-21: Submission of bitstreams and associated materials for the set of additional sequences

2027-01-06: Registration of documents describing the proposals

2027-01-06: Submission of documents

2027-01-??: Cross-checking of bitstreams and binary decoders

2027-01-13: Subjective test results available within standardization body

# Test conditions and categories under consideration for the CfP

Multiple test cases are defined: one test case for improved compression at large and three test cases for improved compression with runtime-constrained encoding. For each case, categories are defined to denote a specific content type and encoding configuration. Submitters to the CfP are encouraged (but not required) to submit results for both conditions. When submitting a result for a test condition, complete results for all categories are required.

The following seven test categories are defined:

* **SDR RA UHD/4K**: Representing the use case of distribution of standard dynamic range UHD/4K video content e.g. in a streaming scenario, using a random-access configuration.
* **SDR RA HD**: Representing the use case of distribution of standard dynamic range HD video content e.g. in a streaming scenario, using a random-access configuration.
* **SDR LB HD**: Representing the use case of conversational and other low-delay applications at HD resolution, correspondingly using a low-delay configuration.
* **HDR-PQ RA UHD**: Representing the use case of distribution of high dynamic range UHD/4K/8K video content using the PQ transfer function e.g. in a streaming scenario, using a random-access configuration. In order to reduce the encoding workload for assessment of this category and allow investigation on 4K displays, cropped regions of 3840×2160 resolution are used for 4K and 8K content.
* **HDR-HLG RA UHD**: Representing the use case of distribution of high dynamic range UHD/4K/8K video content using the HLG transfer function e.g. in a streaming scenario, using a random-access configuration. In order to reduce the encoding workload for assessment of this category and allow investigation on 4K displays, cropped regions of 3840×2160 resolution are used for 4K and 8K content.
* **Gaming LB HD**: Representing the use case of online gaming with a low-delay configuration.
* **UGC RA**: Representing the use case of user generated content at 1080×1920 or 1920x1080 resolution using a random-access configuration.

Four or more test sequences are defined for each of these categories implying a total of about 30 test sequences under consideration.

For each test sequence, four rate points are defined for evaluation in the subjective tests. These rate points have been selected to provide a wide usage of the impairment scale. Additional rate points for objective evaluation only may be included in the final CfP.

# Laboratory requirements

Laboratories are required to express their interest in participation in this test activity through the European Union tenders portal (link in Section 6 below). The conditions described in this portal apply.

The testing activity will include a synchronization step among participating laboratories (including a smaller-scale dry-run test). Communication, data transfer, reporting and data processing across the laboratories will also be tested and confirmed before the start of the actual testing phase. A tentative timeline for the activities of the participating laboratories is provided in the following section.

To avoid conflicts of interest, participating laboratories must be independent of parties submitting to the CfP. Signing a Non-Disclosure Agreement covering both the data and generated scores is required for all participating laboratories.

Participating laboratories must follow the requirements for testing facilities defined in ITU-T P.910 and ITU-R BT.500 [2][3]. For testing, using state-of-the-art consumer-grade HDR-capable OLED displays instead of professional SDR or HDR monitors is acceptable. Stable playout of HD and UHD test sequences in raw YUV 4:2:0 format with a bit depth of 10 bits and frame rates of 24, 25, 30, 50, and 60 Hz using the appropriate colour spaces and transfer functions is required.

Data distribution among the test coordinator and the test laboratories using a NextCloud server is preferred, though distribution via mobile SSDs may be considered.

Laboratories interested in contributing to the subjective testing activity in the context of the JVET CfP on video compression with capability beyond VVC are requested to provide reference information on previous achievements (e.g., successful participation as test laboratory in similar CfPs or verification test activities or contribution to internationally recognized data bases, documented by corresponding highly ranked publications). Laboratories are expected to actively participate in the coordination and synchronization activities carried out before the actual test phase (such as data distribution tests and dry runs). In the actual testing phase, laboratories will be requested to deliver raw scores of (tentatively) 25 or more valid test subjects for each processed video sequence (PVS). They are further expected to actively contribute to the generation of the aggregated results and to the test report submitted as an input contribution to JVET. The JVET test coordinator will appoint the laboratories joining the test effort and will allocate the testing tasks.

# Tentative timeline of test preparation activities

* Spring 2026: Collection of interested laboratories
* Jun-Aug 2026: Synchronization experiments with participating laboratories, testing of data distribution
* Sept 2026 (early): Formal request for offer by laboratories
* Oct 2026 (early): Allocation of laboratories
* Oct 2026 (mid): Allocation of testing tasks
* Oct 2026 (end): Distribution of test material to laboratories
* Nov 2026: Subjective tests conducted
* Dec 2026: Processing of raw results
* Jan 2027 (early): Finalization and release of test report

# Participation as a test laboratory

Interested laboratories are invited to express their interest **until 2026-03-31** via the European Union tenders portal at <https://ted.europa.eu/en/notice/-/detail/121282-2026>, or to send an email with the expression of interest to [beschaffung@zhv.rwth-aachen.de](mailto:beschaffung@zhv.rwth-aachen.de) with the text “ID 10041176: 153/164” as part of the subject line.

# Further information

Representatives of laboratories interested in joining as a test site for the CfP are invited to reach out to the following contact if additional information is needed:

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# References

1. J.-R. Ohm, M. Wien, F. Bossen, “Draft Joint Call for Proposals on video compression with capability beyond VVC,” Doc. JVET-AO2026, Joint Video Experts Team (JVET), 41st Meeting, online, Jan. 2026.
2. International Telecommunication Union – Telecommunication Standardization Sector, *Subjective video quality assessment methods for multimedia applications*, Recommendation ITU-T P.910 (available at <https://www.itu.int/rec/t-rec-p.910>).
3. International Telecommunication Union – Radiocommunication Sector, *Methodology for the subjective assessment of the quality of television pictures*, Recommendation ITU-R BT.500-15 (available at <https://www.itu.int/rec/R-REC-BT.500>).