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| *Title:* | **Sub-picture based CPB operation** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Proposal | | |
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# Abstract

This document proposes a sub-picture based coded picture buffer (CPB) behavior to achieve reduced codec delay in an interoperable manner. In the proposal, CPB removal may be carried out either at access unit level or sub-picture level. When at access unit level, each time an access unit is removed from the CPB. When at sub-picture level, each time a decoding unit containing one or more slices is removed from the CPB. Sub-picture level CPB removal timing information may be signalled in addition to access-unit-level CPB removal timing information. When CPB removal timing information at both access unit level and sub-picture level are present, the decoder may choose to operate the CPB at either access unit level or sub-picture level.

The proposed changes are included in the attachment of this document.

Revision 1 of this document includes a few typo corrections in the attachment of this document.

# Background

See documents JCTVC-I0333 and JCTVC-I0349.

# Proposal

The proposed changes are included in the attachment of this document.

The proposed changes also address the following aspects noted in the draft meeting report during the discussion of documents JCTVC-I0333 and JCTVC-I0349:

* decoding units that may be multiple VCL NAL units
* making this scheme be something that is defined to operate in addition to the existing scheme

# Patent rights declaration(s)

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