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**Information technology — Advanced  
image coding and evaluation —**

**Part 1:  
Guidelines for image coding system  
evaluation**

*Technologies de l'information — Codage d'image avancé et  
évaluation —*

*Partie 1: Lignes directrices pour l'évaluation des systèmes de  
codage d'image*





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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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A list of all parts in the ISO/IEC 29170 series can be found on the ISO website.

## Introduction

This document provides a framework and best practices to evaluate image compression algorithms. This document provides a selection of evaluation tools that allow testing multiple features, including objective metric image quality, subjective metric image quality and codec algorithmic complexity. Which features of codecs should be tested and pass-fail criteria is beyond the scope of this document.



# Information technology — Advanced image coding and evaluation —

## Part 1: Guidelines for image coding system evaluation

### 1 Scope

This document recommends best practices for coding system evaluation of images and image sequences. This document defines a common vocabulary of terms for coding system evaluation and divides evaluation methods into three broad categories:

- a) subjective assessment;
- b) objective assessment;
- c) computational assessment.

In addition to these broad assessment categories, this document discusses special care that is given for coding unusual imagery, e.g. high dynamic range or high colour depth.

A fourth assessment category, hardware complexity, is often important for real-time or computationally complex applications; however, it is outside the scope of this document.

### 2 Normative references

There are no normative references in this document.