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Standard

ISO/IEC 15444-1

**Information technology — JPEG
2000 image coding system —**

**Part 1:
Core coding system**

*Technologies de l'information — Système de codage d'images
JPEG 2000 —*

Partie 1: Système de codage de noyau

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This document was prepared by ITU-T (as ITU-T T.800) and drafted in accordance with its editorial rules, in collaboration with Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

This fifth edition cancels and replaces the fourth edition (ISO/IEC 15444-1:2019), which has been technically revised.

The main changes are as follows:

- addition of Annex N, which lists a registration request for media type image/j2c
- specify that the Mastering Display Metadata Box of Annex M is optional and has no defaults, reflecting industry practice
- remove obsolete and erroneous reference to IETF RFC 2279
- clarify semantics of CEpocⁱ
- update reference to ISO/CIE 11664-1, Rec. ITU-R BT.601 and Rec. ITU-R BT.709
- remove unused JPEG Utilities Registration Authority (JURA) term
- specify the value of Rsiz when extended capabilities are present but no profile is signalled.

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INTERNATIONAL STANDARD ISO/IEC 15444-1
RECOMMENDATION ITU-T T.800

Information technology – JPEG 2000 image coding system: Core coding system

Summary

This Recommendation | International Standard defines a set of lossless (bit-preserving) and lossy compression methods for coding bi-level, continuous-tone grey-scale, palletized colour, or continuous-tone colour digital still images.

This Recommendation | International Standard:

- specifies decoding processes for converting compressed image data to reconstructed image data;
- specifies a codestream syntax containing information for interpreting the compressed image data;
- specifies a file format;
- provides guidance on encoding processes for converting source image data to compressed image data;
- provides guidance on how to implement these processes in practice.

This edition includes the following changes relative to the previous edition:

- addition of Annex N, which lists a registration request for media type image/jpeg
- specify that the Mastering Display Metadata Box of Annex M is optional and has no defaults, reflecting industry practice
- remove obsolete and erroneous reference to IETF RFC 2279
- clarify semantics of CEPocⁱ
- update reference to ISO/CIE 11664-1, Rec. ITU-R BT.601 and Rec. ITU-R BT.709
- remove unused JPEG Utilities Registration Authority (JURA) term
- specify the value of Rsiz when extended capabilities are present but no profile is signalled

NOTE – As this specification was first published as common text only after ISO/IEC JTC1 had approved the first edition in 2000, edition numbers in the ITU and ISO/IEC versions are offset by one. This is the fourth edition of ITU-T T.800 and the fifth edition of ISO/IEC 15444-1.

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

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