

Australian Standard™

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

Part 2: Extensions

This Australian Standard was prepared by Committee IT-029, Coded Representation of Picture, Audio and Multimedia/Hypermedia Information. It was approved on behalf of the Council of Standards Australia on 27 October 2004.
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**Information technology—JPEG 2000
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Part 2: Extensions

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PREFACE

This Standard was prepared by the Standards Australia Committee IT-029, Coded Representation of Picture, Audio and Multimedia/Hypermedia Information.

This Standard is identical with, and has been reproduced from, ISO/IEC 15444-2:2004, *Information technology—JPEG 2000 image coding system—Part 2: Extensions*.

The objective of this Standard is to provide designers of multimedia content with guidance on extended encoding processes for converting source image data to compressed image data and guidance on how to implement these processes in practice.

This Standard is Part 2 of AS ISO/IEC 15444, *Information technology—JPEG 2000 image coding system*, which when published will be available in parts as follows:

- Part 1: Core coding system
- Part 2: Extensions (this Standard)
- Part 4: Conformance testing
- Part 6: Compound image file format
- Part 12: ISO base media file format

Part 8, 18 and 19 are under development and have not been published by ISO/IEC.

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<i>Reference to International Standard</i>		<i>Australian Standard/New Zealand Standard</i>	
ISO/IEC		AS/NZS	
10918	Information technology—Digital compression and coding of continuous-tone still images	4473	Information technology—Digital compression and coding of continuous-tone still images
10918-1	Part 1: Requirements and guidelines	4473.1	Part 1: Requirements and guidelines
11174	Information technology—Coded representation of picture and audio information—Progressive bi-level image compression	4472	Information technology—Coded representation of picture and audio information—Progressive bi-level image compression
15444	Information technology—JPEG 2000 image coding system	15444	Information technology—JPEG 2000 image coding system
15444-1	Part 1: Core coding system	15444.1	Part 1: Core coding system

Only referenced documents that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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AUSTRALIAN STANDARD

Information technology—JPEG 2000 image coding system

Part 2: Extensions

1 Scope

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

This Recommendation | International Standard:

- specifies extended decoding processes for converting compressed image data to reconstructed image data;
- specifies an extended codestream syntax containing information for interpreting the compressed image data;
- specifies an extended file format;
- specifies a container to store image metadata;
- defines a standard set of image metadata;
- provides guidance on extended encoding processes for converting source image data to compressed image data;
- provides guidance on how to implement these processes in practice.

2 References

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

2.1 Identical Recommendations | International Standards

- ITU-T Recommendation T.81 (1992) | ISO/IEC 10918-1:1994, *Information technology – Digital compression and coding of continuous-tone still images: Requirements and guidelines.*
- ITU-T Recommendation T.82 (1993) | ISO/IEC 11544:1993, *Information technology – Coded representation of picture and audio information – Progressive bi-level image compression.*
- ITU-T Recommendation T.83 (1994) | ISO/IEC 10918-2:1995, *Information technology – Digital compression and coding of continuous-tone still images: Compliance testing.*
- ITU-T Recommendation T.84 (1996) | ISO/IEC 10918-3:1997, *Information technology – Digital compression and coding of continuous-tone still images: Extensions.*
- ITU-T Recommendation T.84 (1996)/Amd.1 (1999) | ISO/IEC 10918-3:1997/Amd.1:1999, *Information technology – Digital compression and coding of continuous-tone still images: Extensions – Amendment 1: Provisions to allow registration of new compression types and versions in the SPIFF header.*
- ITU-T Recommendation T.86 (1998) | ISO/IEC 10918-4:1999, *Information technology – Digital compression and coding of continuous-tone still images: Registration of JPEG Profiles, SPIFF Profiles, SPIFF Tags, SPIFF colour Spaces, APPn Markers, SPIFF Compression types and Registration Authorities (REGAUT).*
- ITU-T Recommendation T.87 (1998) | ISO/IEC 14495-1:2000, *Information technology – Lossless and near-lossless compression of continuous-tone still images – Baseline.*