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

**Part 16:
Encapsulation of JPEG 2000 images
into ISO/IEC 23008-12**



This document is a preview generated by EBS



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier; Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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 or www.iec.ch/members_experts/refdocs)

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see patents.iec.ch).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by ITU-T (as Rec. ITU-T T.815) 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 second edition cancels and replaces the first edition (ISO/IEC 15444-16:2019) which has been technically revised.

The main changes compared to the previous edition are as follows:

- the encapsulation of Rec. ITU-T T.802 | ISO/IEC 15444-3 image sequences is deprecated, and replaced by the encapsulation of Rec. ITU-T T.800 | ISO/IEC 15444-1 image sequences;
- adds support for quality and resolution layers;
- the syntax and semantics of the JPEG 2000 header item property are clarified; and
- reader conformance requirements are removed.

A list of all parts in the ISO/IEC 15444 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

CONTENTS

	<i>Page</i>
1 Scope	1
2 Normative references.....	1
2.1 Identical Recommendations International Standards.....	1
2.2 Paired Recommendations International Standards equivalent in technical content.....	1
2.3 Additional references.....	1
3 Definitions.....	1
3.1 Terms defined elsewhere	1
3.2 Terms defined in this Recommendation International Standard	1
4 Abbreviations	2
5 Conventions	2
6 Encapsulation of Rec. ITU-T T.800 ISO/IEC 15444-1 images and image collections.....	2
6.1 General.....	2
6.2 JPEG 2000 coded image item	2
6.3 JPEG 2000 header item property.....	2
6.4 JPEG 2000 layers box.....	3
6.5 File conformance	4
6.6 Media type.....	4
6.7 Media type registration	4
7 Encapsulation of Rec. ITU-T T.800 ISO/IEC 15444-1 sequences	5
7.1 General.....	5
7.2 JPEG 2000 image sequence	5
7.3 JPEG 2000 visual sample entry.....	6
7.4 JPEG 2000 prefix	6
7.5 JPEG 2000 header info	6
7.6 File conformance	6
7.7 Media type.....	7
7.8 Media type registration	7
8 Encapsulation of Rec. ITU-T T.802 ISO/IEC 15444-3 image sequences (informative).....	8
Bibliography	9

**INTERNATIONAL STANDARD ISO/IEC 15444-16
RECOMMENDATION ITU-T T.815****Information technology – JPEG 2000 image coding system –
Encapsulation of JPEG 2000 images into ISO/IEC 23008-12****1 Scope**

This Recommendation | International Standard specifies the encapsulation of image formats specified in the JPEG 2000 family of Recommendations | International Standards in the framework defined in ISO/IEC 23008-12.

2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. At the time of publication, the editions indicated in dated references 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

- Recommendation ITU-T T.800 (latest) | ISO/IEC 15444-1: (latest), *Information technology – JPEG 2000 image coding system – Core coding system*.

2.2 Paired Recommendations | International Standards equivalent in technical content

None.

2.3 Additional references

- ISO/IEC 23008-12:2017, *Information technology – High efficiency coding and media delivery in heterogeneous environments – Part12: Image file format*.

3 Definitions**3.1 Terms defined elsewhere**

This Recommendation | International Standard uses the following terms defined elsewhere:

For the purposes of this Recommendation | International Standard, the definitions given in ISO/IEC 23008-12 apply. ITU, ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ITU terminology database: <https://www.itu.int/go/terms>
- ISO Online browsing platform: <https://www.iso.org/obp>
- IEC Electropedia: <http://www.electropedia.org/>

3.2 Terms defined in this Recommendation | International Standard

This Recommendation | International Standard defines the following terms:

None.