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**Graphic technology – Metadata for graphic arts workflow – XMP  
metadata for image and document proofing (ISO 19445:2016)**

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# INTERNATIONAL STANDARD

# ISO 19445

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## **Graphic technology — Metadata for graphic arts workflow — XMP metadata for image and document proofing**

*Technologie graphique — Métadonnées pour le flux de travail des  
arts graphiques — Métadonnées XMP pour la relecture de document  
et d'image*



Reference number  
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# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms, definitions and abbreviated terms</b> .....	<b>1</b>
3.1 Terms and definitions .....	1
3.2 Abbreviated terms .....	2
<b>4 Requirements</b> .....	<b>2</b>
4.1 General .....	2
4.2 Namespace .....	2
4.3 XMP packet structure .....	2
4.4 ImageApprovals property .....	2
4.5 ProofingApprovals property .....	3
4.6 ProofPrinter record .....	4
4.7 ProofingDevice record .....	5
<b>5 Soft-Proofing PDF specifications</b> .....	<b>6</b>
5.1 Encoding PDF/X output conditions .....	6
5.2 Using digital signatures .....	6
<b>Annex A (informative) XMP examples</b> .....	<b>7</b>
<b>Bibliography</b> .....	<b>9</b>

ISO 19445:2016(E)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents 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)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO 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](http://www.iso.org/patents)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 130, *Graphic technology*.

## Introduction

This International Standard describes a set of metadata that can be used to communicate the approval status for images or documents that are used for graphic arts print production workflow.

It is based on the soft-proofing ticket defined by the Ghent PDF Workgroup which uses XMP. This specification includes the specification of the Ghent PDF Workgroup soft-proofing ticket and extends it to include metadata required for the image preparation stage of the workflow.

The intent of this metadata is to track who has approved the image or document, how the proof was prepared, and what the viewing conditions were during the approval. To achieve this, the approver is identified along with the document output conditions, the software used for the approval and details of the device configuration.





# Graphic technology — Metadata for graphic arts workflow — XMP metadata for image and document proofing

## 1 Scope

This International Standard specifies the set of metadata to be used to communicate the approval status, proof preparation and viewing parameters for images and documents that are used in the graphic arts print production workflow.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15076-1, *Image technology colour management — Architecture, profile format and data structure — Part 1: Based on ICC.1:2010*

ISO 15930 (all parts), *Graphic technology — Prepress digital data exchange using PDF*

ISO 16684-1, *Graphic technology — Extensible metadata platform (XMP) specification — Part 1: Data model, serialization, and core properties*

ISO 32000-1, *Document management — Portable document format — Part 1: PDF 1.7*

## 3 Terms, definitions and abbreviated terms

For the purposes of this document, the following terms, definitions and abbreviated terms apply.

### 3.1 Terms and definitions

#### 3.1.1

##### **ICC CMYK characterization data registry**

central registry for CMYK print characterization data maintained by the ICC

#### 3.1.2

##### **ICC profile**

set of colorimetric transforms prepared in accordance with ICC.1 or ISO 15076-1

#### 3.1.3

##### **PDF/X**

file format for reliable exchange of print-ready data defined in ISO 15930

#### 3.1.4

##### **URI**

Uniform Resource Identifier as defined in IETF RFC 3986

#### 3.1.5

##### **XMP**

eXtensible Metadata Platform

standard format for the creation, processing, and interchange of metadata as defined by ISO 16684-1