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## Graphic technology — Extensible metadata platform (XMP) specification —

### Part 1: Data model, serialization and core properties

*Technologie graphique — Spécification de la plate-forme de  
métadonnées extensibles (XMP) —*

*Partie 1: Modèle de données, mise en série et paramètres principaux*



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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

ISO 16684-1 was prepared by Adobe (as *XMP Specification Part 1, Data Model Serialization, and Core Properties*, July 2010) and was adopted, under a special "fast-track procedure", by Technical Committee ISO/TC 130, *Graphic technology*, in parallel with its approval by the ISO member bodies.

ISO 16684 consists of the following parts, under the general title *Graphic technology — Extensible metadata platform (XMP) specification*:

— *Part 1: Data model, serialization and core properties*

Future parts will address formal validation of XMP and XML syntax for describing XMP UI elements.

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## Introduction

This International Standard specifies a standard for the definition, creation, and processing of metadata that can be applied to a broad range of resource types. The Extensible Metadata Platform (XMP) was introduced by Adobe Systems Incorporated in 2001 and has since established itself as a critical technology for improving business efficiency in many industries. The Adobe Systems XMP Specification Part 1 version of July 2010 is the basis for this International Standard. Establishing this International Standard ensures the stability and longevity of its definitions and encourages broader integration and interoperability of XMP with existing standards.

*Metadata* is data that describes the characteristics or *properties* of a resource. It can be distinguished from the main content of a resource. For example, for a word processing document, the *content* includes the actual text data and formatting information, while the *metadata* might include properties such as author, modification date, or copyright status.

Some information could be treated as either content or metadata, depending on context. In general, metadata is useful without regard for a resource's content. For example, a list of all fonts used in a document could be useful metadata, while information about the specific font used for a specific paragraph on a page would be logically treated as content.

Metadata allows users and applications to work more effectively with resources. Applications can make use of metadata, even if they cannot understand the native format of the resource's content. Metadata can greatly increase the utility of resources in collaborative production workflows. For example, an image file might contain metadata such as its working title, description, and intellectual property rights. Accessing the metadata makes it easier to perform such tasks as searching for images, locating image captions, or determining the copyright clearance to use an image.

File systems have typically provided metadata such as file modification dates and sizes. Other metadata can be provided by other applications, or by users. Metadata might or might not be stored as part of the resource with which it is associated.

This International Standard provides a thorough understanding of the XMP data model. It is useful for anyone who wishes to use XMP metadata, including both developers and end-users of applications that handle metadata for resources of any kind.

The serialization information is vital for developers of applications that will generate, process, or manage files containing XMP metadata. The serialization information will also interest application developers wishing to understand file content. This International Standard also provides additional guidelines for programmers who will implement XMP metadata processors.

The International Organization for Standardization (ISO) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning the creation, processing, modification, and storage of XMP metadata.

ISO takes no position concerning the evidence, validity and scope of this patent right. The holder of this patent right has assured ISO that he is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ISO. Information may be obtained from:

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