TECHNICAL REPORT



First edition 2016-12-15

Information technology — Extensions of Office Open XML file formats —

Part 1: **Guidelines**

Technologies de l'information — Extensions de formats de fichiers Office Open XML —

Partie 1: Lignes directrices



Reference number ISO/IEC TR 30114-1:2016(E)



© ISO/IEC 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, 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 Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Page

Contents

Forew	vord		iv
Intro	duction	n	v
1	Scope	e	1
2	Norm	native references	1
3	Terms and definitions		
4	Addii	ng markup or other data to OOXML documents	
	4.1	General	
	4.2	Markup Compatibility and Extensibility (MCE): Ignorable elements and attributes (ISO/IEC 29500-3)	
	4.3	MCE: Alternate Content Blocks (ISO/IEC 29500-3)	2
	4.4	MCE: Application-defined extension elements (ISO/IEC 29500-3)	
	4.5	Embedding foreign Open Packaging Conventions (OPC) parts	
Bibliography			5

ISO/IEC TR 30114-1:2016(E)

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. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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).

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 <u>www.iso.org/patents</u>).

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

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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <u>www.iso.org/iso/foreword.html</u>.

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, SC 34, *Document description and processing languages*.

A list of all parts in the ISO/IEC 30114 series, published under the general title *Information technology* — *Extensions of Office Open XML file formats*, can be found on the ISO website.

Introduction

ISO/IEC 29500 was designed to allow the addition of markup and other data to Office Open XML (OOXML) documents, and to allow OOXML applications unaware of such markup and date to provide reasonable results. ISO/IEC TR 30114-1 provides guidance for such additions, and also specifies a collection of such additions.

Information technology — Extensions of Office Open XML file formats —

Part 1: **Guidelines**

1 Scope

This document gives guidelines for the use of extensibility mechanisms in ISO/IEC 29500 (Office Open XML). In particular, it makes clear which of these mechanisms supports lossless round tripping.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <u>http://www.electropedia.org/</u>
- ISO Online browsing platform: available at http://www.iso.org/obp

4 Adding markup or other data to OOXML documents

4.1 General

There are two main ways to add extra markup or other data to Office Open XML (OOXML) documents:

- Using the extension mechanisms described in ISO/IEC 29500-3, Markup Compatibility and Extensibility (MCE) offers three primary mechanisms for extending XML files, each with its own advantages and disadvantages.
- Embedding foreign Open Packaging Conventions (OPC) parts.

4.2 Markup Compatibility and Extensibility (MCE): Ignorable elements and attributes (ISO/IEC 29500-3)

The most commonly used extension mechanism, marking elements or attributes as ignorable, allows lightweight additions to be made to existing markup.

A good use of ignorable markup would be the addition of a custom metadata tag onto a paragraph in a WordprocessingML document. This could be accomplished by declaring a custom namespace, marking it as ignorable, and adding the attribute to the p element in that namespace. The relevant portions of the resulting document.xml part might resemble the following: