

SVENSK STANDARD

SS-ISO/IEC 29500-4:2011



Fastställt/Approved: 2011-12-12

Publicerad/Published: 2012-01-04

Utgåva/Edition: 2

Språk/Language: engelska/English

ICS: 35.020; 35.040; 35.060; 35.240.30

Information technology – Document description and processing languages – Office Open XML File Formats – Part 4: Transitional Migration Features (ISO/IEC 29500-4:2011, IDT)

This preview is downloaded from www.sis.se. Buy the entire standard via <https://www.sis.se/std-82525>

Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

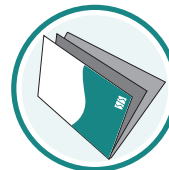
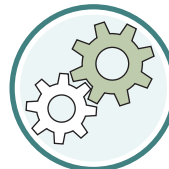
Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.



Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

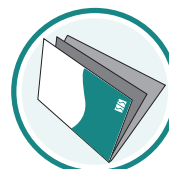
Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

If you want to know more about SIS, or how standards can streamline your organisation, please visit www.sis.se or contact us on phone +46 (0)8-555 523 00



Den internationella standarden ISO/IEC 29500-4:2011 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO/IEC 29500-4:2011.

Denna standard ersätter SS-ISO/IEC 29500-4:2009, utgåva 1.

The International Standard ISO/IEC 29500-4:2011 has the status of a Swedish Standard. This document contains the official version of ISO/IEC 29500-4:2011.

This standard supersedes the Swedish Standard SS-ISO/IEC 29500-4:2009, edition 1.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Uppllysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna uppllysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Dokumentbeskrivningsspråk, SIS/TK 545.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

Table of Contents

Foreword	xiii
Introduction	xiv
1. Scope	1
2. Conformance	2
2.1 Document Conformance.....	2
2.2 Application Conformance	2
3. Normative References	4
4. Terms and Definitions	8
5. Notational Conventions	10
6. Acronyms and Abbreviations	11
7. General Description	12
8. Additional Shared Parts	13
8.1 VML Drawing Part	13
9. WordprocessingML	15
9.1 Part Summary (Part 1, §11.3)	15
9.1.1 Alternative Format Import Part (Part 1, §11.3.1)	15
9.1.2 Comments Part (Part 1, §11.3.2)	15
9.1.3 Document Settings Part (Part 1, §11.3.3)	15
9.1.4 Endnotes Part (Part 1, §11.3.4).....	15
9.1.5 Fonts Table Part (Part 1, §11.3.5)	15
9.1.6 Footer Part (Part 1, §11.3.6)	15
9.1.7 Footnotes Part (Part 1, §11.3.7).....	16
9.1.8 Glossary Document Part (Part 1, §11.3.8)	16
9.1.9 Header Part (Part 1, §11.3.9)	16
9.1.10 Main Document Part (Part 1, §11.3.10).....	16
9.1.11 Numbering Definitions Part (Part 1, §11.3.11)	16
9.1.12 Style Definitions Part (Part 1, §11.3.12).....	16
9.1.13 Web Settings Part (Part 1, §11.3.13).....	16
9.2 Document Template (Part 1, §11.4)	17
9.3 Framesets (Part 1, §11.5).....	17
9.4 Master Documents and Subdocuments (Part 1, §11.6)	17
9.5 Mail Merge Data Source (Part 1, §11.7)	17
9.6 Mail Merger Header Data Source (Part 1, §11.8)	17
9.7 XSL Transformation (Part 1, §11.9).....	17
10. SpreadsheetML	18
10.1 Part Summary (Part 1, §12.3)	18
10.1.1 Calculation Chain Part (Part 1, §12.3.1).....	18
10.1.2 Chartsheet Part (Part 1, §12.3.2)	18
10.1.3 Comments Part (Part 1, §12.3.3)	18

SS-ISO/IEC 29500-4:2011 (E)

10.1.4	Connections Part (Part 1, §12.3.4).....	18
10.1.5	Custom Property Part (Part 1, §12.3.5).....	18
10.1.6	Custom XML Mappings Part (Part 1, §12.3.6).....	19
10.1.7	Dialogsheet Part (Part 1, §12.3.7).....	19
10.1.8	Drawings Part (Part 1, §12.3.8).....	19
10.1.9	External Workbook References Part (Part 1, §12.3.9).....	19
10.1.10	Metadata Part (Part 1, §12.3.10).....	19
10.1.11	Pivot Table Part (Part 1, §12.3.11).....	19
10.1.12	Pivot Table Cache Definition Part (Part 1, §12.3.12).....	19
10.1.13	Pivot Table Cache Records Part (Part 1, §12.3.13).....	20
10.1.14	Query Table Part (Part 1, §12.3.14).....	20
10.1.15	Shared Strings Table Part (Part 1, §12.3.15).....	20
10.1.16	Shared Workbook Revision Headers Part (Part 1, §12.3.16).....	20
10.1.17	Shared Workbook Revision Log Part (Part 1, §12.3.17).....	20
10.1.18	Shared Workbook User Data part (Part 1, §12.3.18).....	20
10.1.19	Single Cell Table Definitions Part (Part 1, §12.3.19).....	20
10.1.20	Styles Part (Part 1, §12.3.20).....	21
10.1.21	Table Definition Part (Part 1, §12.3.21).....	21
10.1.22	Volatile Dependencies Part (Part 1, §12.3.22).....	21
10.1.23	Workbook Part (Part 1, §12.3.23).....	21
10.1.24	Worksheet Part (Part 1, §12.3.24).....	21
10.2	External Workbooks (Part 1, §12.4).....	21
11.	PresentationML.....	22
11.1	Part Summary (Part 1, §13.3).....	22
11.1.1	Comment Authors Part (Part 1, §13.3.1).....	22
11.1.2	Comments Part (Part 1, §13.3.2).....	22
11.1.3	Handout Master Part (Part 1, §13.3.3).....	22
11.1.4	Notes Master Part (Part 1, §13.3.4).....	22
11.1.5	Notes Slide Part (Part 1, §13.3.5).....	22
11.1.6	Presentation Part (Part 1, §13.3.6).....	23
11.1.7	Presentation Properties Part (Part 1, §13.3.7).....	23
11.1.8	Slide Part (Part 1, §13.3.8).....	23
11.1.9	Slide Layout Part (Part 1, §13.3.9).....	23
11.1.10	Slide Master Part (Part 1, §13.3.10).....	23
11.1.11	Slide Synchronization Data Part (Part 1, §13.3.11).....	23
11.1.12	User Defined Tags Part (Part 1, §13.3.12).....	23
11.1.13	View Properties Part (Part 1, §13.3.13).....	24
11.2	HTML Publish Location (Part 1, §13.4).....	24
11.3	Slide Synchronization Server Location (Part 1, §13.5).....	24
12.	DrawingML.....	25
12.1	Part Summary (Part 1, §14.2).....	25
12.1.1	Chart Part (Part 1, §14.2.1).....	25
12.1.2	Chart Drawing Part (Part 1, §14.2.2).....	25
12.1.3	Diagram Colors Part (Part 1, §14.2.3).....	25
12.1.4	Diagram Data Part (Part 1, §14.2.4).....	25
12.1.5	Diagram Layout Definition Part (Part 1, §14.2.5).....	25
12.1.6	Diagram Style Part (Part 1, §14.2.6).....	26

12.1.7	Theme Part (Part 1, §14.2.7).....	26
12.1.8	Theme Override Part (Part 1, §14.2.8).....	26
12.1.9	Table Styles Part (Part 1, §14.2.9).....	26
13.	Shared MLs.....	27
13.1	Part Summary (Part 1, §15.2)	27
13.1.1	Additional Characteristics Part (Part 1, §15.2.1).....	27
13.1.2	Audio Part (Part 1, §15.2.2)	27
13.1.3	Bibliography Part (Part 1, §15.2.3).....	27
13.1.4	Content Part (Part 1, §15.2.4).....	27
13.1.5	Custom XML Data Storage Part (Part 1, §15.2.5).....	27
13.1.6	Custom XML Data Storage Properties Part (Part 1, §15.2.6).....	27
13.1.7	Embedded Control Persistence Part (Part 1, §15.2.9).....	28
13.1.8	Embedded Object Part (Part 1, §15.2.10).....	28
13.1.9	Embedded Package Part (Part 1, §15.2.11).....	28
13.1.10	Core File Properties Part (Part 1, §15.2.12.1).....	28
13.1.11	Custom File Properties Part (Part 1, §15.2.12.2).....	28
13.1.12	Extended File Properties Part (Part 1, §15.2.12.3).....	28
13.1.13	Font Part (Part 1, §15.2.13).....	28
13.1.14	Image Part (Part 1, §15.2.14).....	28
13.1.15	Printer Settings Part (Part 1, §15.2.15).....	28
13.1.16	Thumbnail Part (Part 1, §15.2.16).....	29
13.1.17	Video Part (Part 1, §15.2.17).....	29
13.2	Hyperlinks Part (Part 1, §15.3).....	29
14.	WordprocessingML Reference Material.....	30
14.1	Table of Contents.....	30
14.2	Paragraphs and Rich Formatting	33
14.2.1	Paragraphs	33
14.2.2	Run Content	34
14.3	Tables.....	37
14.3.1	left (Table Cell Leading Edge Border).....	37
14.3.2	left (Table Leading Edge Border).....	38
14.3.3	left (Table Cell Leading Margin Exception)	38
14.3.4	left (Table Cell Leading Margin Default)	38
14.3.5	right (Table Cell Trailing Edge Border)	38
14.3.6	right (Table Trailing Edge Border)	39
14.3.7	right (Table Cell Trailing Margin Default).....	39
14.3.8	right (Table Cell Trailing Margin Exception).....	39
14.3.9	Additional attribute for cnfStyle element (Part 1, §17.4.7).....	40
14.3.10	Additional attribute for cnfStyle element (Part 1, §17.4.8).....	41
14.3.11	Additional attribute for tblLook element (Part 1, §17.4.55).....	42
14.3.12	Additional attribute for tblLook element (Part 1, §17.4.56).....	43
14.4	Fonts	44
14.4.1	Elements	44
14.5	Numbering	45
14.5.1	pict (Picture Numbering Symbol Properties).....	45
14.6	Annotations	46
14.6.1	Revisions	46

SS-ISO/IEC 29500-4:2011 (E)

14.7	Settings	55
14.7.1	Legacy Password Hash Algorithm	55
14.7.2	Document Settings.....	63
14.7.3	Compatibility Settings	78
14.8	Miscellaneous Topics.....	162
14.8.1	Text Box Content.....	162
14.9	Fields and Hyperlinks	165
14.9.1	Syntax.....	165
14.9.2	Legacy language references.....	166
14.9.3	Use of DOS File Paths.....	173
14.9.4	Field definitions.....	173
14.9.5	fldData (Custom Field Data).....	182
14.9.6	fldData (Custom Field Data).....	183
14.9.7	hyperlink (Hyperlink) (Part 1, §17.16.22).....	184
14.10	Simple Types	184
14.10.1	Additional member types for the union in ST_DecimalNumberOrPercent (Part 1, §17.18.11) ...	184
14.10.2	Additional enumeration values for ST_Jc (Part 1, §17.18.44).....	184
14.10.3	Additional enumeration values for ST_JcTable (Part 1, §17.18.45).....	185
14.10.4	Additional enumeration values for ST_NumberFormat (Part 1, §17.18.59)	185
14.10.5	Additional enumeration values for ST_StyleSort (Part 1, §17.18.82)	186
14.10.6	Additional enumeration values for ST_TabJc (Part 1, §17.18.84).....	186
14.10.7	Additional enumeration values for ST_TextDirection (Part 1, §17.18.93).....	186
14.10.8	Additional member types for the union in ST_TextScale (Part 1, §17.18.95)	187
14.10.9	ST_Cnf (Conditional Formatting Bitmask).....	187
14.10.10	ST_UnqualifiedPercentage (Percentage Value Without Percent Sign).....	188
14.10.11	ST_TextScaleDecimal (Text Expansion/Compression Percentage).....	189
14.11	Changed attributes	189
14.11.1	Changed attribute for contentPart element (Part 1, §17.3.3.2)	189
14.11.2	Changed attribute for control element (Part 1, §17.3.3.3).....	190
14.11.3	Changed attribute for movie element (Part 1, §17.3.3.17)	190
14.11.4	Changed attribute for objectEmbed element (Part 1, §17.3.3.20).....	191
14.11.5	Changed attribute for objectLink element (Part 1, §17.3.3.21).....	192
14.11.6	Changed attribute for bottom element (Part 1, §17.6.2)	192
14.11.7	Changed attribute for left element (Part 1, §17.6.7).....	193
14.11.8	Changed attribute for printerSettings element (Part 1, §17.6.14)	194
14.11.9	Changed attribute for right element (Part 1, §17.6.15).....	195
14.11.10	Changed attribute for top element (Part 1, §17.6.21).....	195
14.11.11	Changed attribute for embedBold element (Part 1, §17.8.3.3).....	197
14.11.12	Changed attribute for embedBoldItalic element (Part 1, §17.8.3.4).....	197
14.11.13	Changed attribute for embedItalic element (Part 1, §17.8.3.5)	198
14.11.14	Changed attribute for embedRegular element (Part 1, §17.8.3.6).....	199
14.11.15	Changed attribute for footerReference element (Part 1, §17.10.2).....	199
14.11.16	Changed attribute for headerReference element (Part 1, §17.10.5)	200
14.11.17	Changed attribute for dataSource element (Part 1, §17.14.9).....	201
14.11.18	Changed attribute for headerSource element (Part 1, §17.14.16).....	201
14.11.19	Changed attribute for recipientData element (Part 1, §17.14.28)	202
14.11.20	Changed attribute for src element (Part 1, §17.14.30).....	203
14.11.21	Changed attribute for attachedTemplate element (Part 1, §17.15.1.6).....	203

14.11.22	Changed attribute for saveThroughXslt element (Part 1, §17.15.1.76)	204
14.11.23	Changed attribute for longDesc element (Part 1, §17.15.2.23)	204
14.11.24	Changed attribute for sourceFileName element (Part 1, §17.15.2.39)	205
14.11.25	Changed attribute for subDoc element (Part 1, §17.17.1.1)	206
14.11.26	Changed attribute for altChunk element (Part 1, §17.17.2.1)	206
15.	SpreadsheetML Reference Material	208
15.1	Table of Contents	208
15.2	Workbook	208
15.2.1	Additional attribute for fileSharing element (Part 1, §18.2.12)	208
15.2.2	Additional attribute for webPublishing element (Part 1, §18.2.24)	209
15.2.3	Additional attributes for workbookProtection element (Part 1, §18.2.29)	209
15.3	Worksheets	215
15.3.1	Worksheets	215
15.3.2	AutoFilter Settings	218
15.4	Styles	219
15.4.1	left (Leading Edge Border)	219
15.4.2	right (Trailing Edge Border)	220
15.5	Pivot Tables	220
15.5.1	Pivot Tables	220
15.6	External Data Connections	220
15.6.1	Additional attribute for textPr element (Part 1, §18.13.12)	220
15.7	Simple Types	221
15.7.1	Additional enumeration values for ST_PivotAreaType (Part 1, §18.18.58)	221
15.7.2	ST_UnsignedShortHex (Unsigned Short Hex)	221
15.8	Formulas	221
15.8.1	Attribute synonym for c element (Part 1, §18.6.1)	221
15.8.2	Additional representation for dates and times (Part 1, §18.17.4)	222
15.9	Changed attributes	222
15.9.1	Changed attribute for externalReference element (Part 1, §18.2.8)	222
15.9.2	Changed attribute for pivotCache element (Part 1, §18.2.17)	222
15.9.3	Changed attribute for sheet element (Part 1, §18.2.19)	222
15.9.4	Changed attribute for control element (Part 1, §18.3.1.19)	223
15.9.5	Changed attribute for controlPr element (Part 1, §18.3.1.20)	223
15.9.6	Changed attribute for customPr element (Part 1, §18.3.1.22)	223
15.9.7	Changed attribute for dataRef element (Part 1, §18.3.1.30)	224
15.9.8	Changed attribute for drawing element (Part 1, §18.3.1.36)	224
15.9.9	Changed attribute for drawingHF element (Part 1, §18.3.1.37)	224
15.9.10	Changed attribute for hyperlink element (Part 1, §18.3.1.47)	224
15.9.11	Changed attribute for objectPr element (Part 1, §18.3.1.56)	225
15.9.12	Changed attribute for oleObject element (Part 1, §18.3.1.59)	225
15.9.13	Changed attribute for pageSetup element (Part 1, §18.3.1.63)	225
15.9.14	Changed attribute for pageSetup element (Part 1, §18.3.1.64)	225
15.9.15	Changed attribute for picture element (Part 1, §18.3.1.67)	226
15.9.16	Changed attribute for pivotSelection element (Part 1, §18.3.1.69)	226
15.9.17	Changed attribute for tablePart element (Part 1, §18.3.1.94)	226
15.9.18	Changed attribute for pivotCacheDefinition element (Part 1, §18.10.1.67)	226
15.9.19	Changed attribute for rangeSet element (Part 1, §18.10.1.79)	226

SS-ISO/IEC 29500-4:2011 (E)

15.9.20	Changed attribute for worksheetSource element (Part 1, §18.10.1.95)	227
15.9.21	Changed attribute for header element (Part 1, §18.11.1.1)	227
15.9.22	Changed attribute for externalBook element (Part 1, §18.14.7)	227
15.9.23	Changed attribute for oleLink element (Part 1, §18.14.11)	227
16.	PresentationML Reference Material	229
16.1	Table of Contents	229
16.2	Presentation	230
16.2.1	Presentation Properties	230
16.3	Slides	239
16.3.1	Embedded Objects	239
16.4	Simple Types	239
16.4.1	ST_WebColorType (HTML Slide Navigation Control Colors)	239
16.4.2	ST_WebEncoding (Web Encoding)	240
16.4.3	ST_WebScreenSize (HTML/Web Screen Size Target)	240
16.5	Changed attributes	241
16.5.1	Changed attribute for bold element (Part 1, §19.2.1.1)	241
16.5.2	Changed attribute for boldItalic element (Part 1, §19.2.1.2)	241
16.5.3	Changed attribute for font element (Part 1, §19.2.1.13)	241
16.5.4	Changed attribute for handoutMasterId element (Part 1, §19.2.1.14)	244
16.5.5	Changed attribute for italic element (Part 1, §19.2.1.16)	244
16.5.6	Changed attribute for notesMasterId element (Part 1, §19.2.1.20)	244
16.5.7	Changed attribute for notesSz element (Part 1, §19.2.1.22)	244
16.5.8	Changed attribute for regular element (Part 1, §19.2.1.29)	245
16.5.9	Changed attribute for sld element (Part 1, §19.2.1.31)	245
16.5.10	Changed attribute for sldId element (Part 1, §19.2.1.33)	246
16.5.11	Changed attribute for sldMasterId element (Part 1, §19.2.1.36)	246
16.5.12	Changed attribute for SmartTags element (Part 1, §19.2.1.40)	246
16.5.13	Changed attribute for gridSpacing element (Part 1, §19.2.2.3)	246
16.5.14	Changed attribute for origin element (Part 1, §19.2.2.9)	247
16.5.15	Changed attribute for sld element (Part 1, §19.2.2.14)	247
16.5.16	Changed attribute for bgRef element (Part 1, §19.3.1.3)	248
16.5.17	Changed attribute for blipFill element (Part 1, §19.3.1.4)	248
16.5.18	Changed attribute for clrMap element (Part 1, §19.3.1.6)	248
16.5.19	Changed attribute for cNvPicPr element (Part 1, §19.3.1.11)	250
16.5.20	Changed attribute for cNvPr element (Part 1, §19.3.1.12)	250
16.5.21	Changed attribute for cNvSpPr element (Part 1, §19.3.1.13)	252
16.5.22	Changed attribute for contentPart element (Part 1, §19.3.1.14)	252
16.5.23	Changed attribute for custData element (Part 1, §19.3.1.17)	253
16.5.24	Changed attribute for grpSpPr element (Part 1, §19.3.1.23)	253
16.5.25	Changed attribute for sldLayoutId element (Part 1, §19.3.1.40)	253
16.5.26	Changed attribute for spPr element (Part 1, §19.3.1.44)	253
16.5.27	Changed attribute for tags element (Part 1, §19.3.1.47)	254
16.5.28	Changed attribute for xfrm element (Part 1, §19.3.1.53)	254
16.5.29	Changed attribute for control element (Part 1, §19.3.2.1)	255
16.5.30	Changed attribute for oleObj element (Part 1, §19.3.2.4)	255
16.5.31	Changed attribute for pos element (Part 1, §19.4.5)	255
16.5.32	Changed attribute for snd element (Part 1, §19.5.68)	256

16.5.33	Changed attribute for sndTgt element (Part 1, §19.5.70)	256
17.	DrawingML - Framework Reference Material	258
17.1	DrawingML - Main	258
17.1.1	Table of Contents	258
17.1.2	Simple Types	258
17.2	DrawingML - Legacy Compatibility	262
17.2.1	Table of Contents	262
17.2.2	Basics	263
17.3	Changed attributes	264
17.3.1	Changed attribute for hlinkHover element (Part 1, §20.1.2.2.23)	264
17.3.2	Changed attribute for snd element (Part 1, §20.1.2.2.32)	265
17.3.3	Changed attribute for audioFile element (Part 1, §20.1.3.2)	265
17.3.4	Changed attribute for quickTimeFile element (Part 1, §20.1.3.4)	265
17.3.5	Changed attribute for videoFile element (Part 1, §20.1.3.6)	265
17.3.6	Changed attribute for wavAudioFile element (Part 1, §20.1.3.7)	266
17.3.7	Changed attribute for blip element (Part 1, §20.1.8.13)	266
17.3.8	Changed attribute for blipFill element (Part 1, §20.2.2.1)	266
17.3.9	Changed attribute for cNvPicPr element (Part 1, §20.2.2.2)	267
17.3.10	Changed attribute for cNvPr element (Part 1, §20.2.2.3)	267
17.3.11	Changed attribute for spPr element (Part 1, §20.2.2.6)	269
17.3.12	Changed attribute for docPr element (Part 1, §20.4.2.5)	269
17.3.13	Changed attribute for extent element (Part 1, §20.4.2.7)	271
17.3.14	Changed attribute for lineTo element (Part 1, §20.4.2.9)	272
17.3.15	Changed attribute for simplePos element (Part 1, §20.4.2.13)	272
17.3.16	Changed attribute for start element (Part 1, §20.4.2.14)	273
17.3.17	Changed attribute for blipFill element (Part 1, §20.5.2.2)	274
17.3.18	Changed attribute for cNvPicPr element (Part 1, §20.5.2.7)	274
17.3.19	Changed attribute for cNvPr element (Part 1, §20.5.2.8)	275
17.3.20	Changed attribute for cNvSpPr element (Part 1, §20.5.2.9)	276
17.3.21	Changed attribute for contentPart element (Part 1, §20.5.2.12)	277
17.3.22	Changed attribute for ext element (Part 1, §20.5.2.14)	277
17.3.23	Changed attribute for grpSpPr element (Part 1, §20.5.2.18)	278
17.3.24	Changed attribute for pos element (Part 1, §20.5.2.26)	278
17.3.25	Changed attribute for spPr element (Part 1, §20.5.2.30)	279
17.3.26	Changed attribute for xfrm element (Part 1, §20.5.2.36)	279
18.	DrawingML - Components Reference Material	281
18.1	DrawingML - Charts	281
18.1.1	Table of Contents	281
18.1.2	Elements	282
18.1.3	Simple Types	283
18.2	Changed attributes	286
18.2.1	Changed attribute for hlinkClick element (Part 1, §21.1.2.3.5)	286
18.2.2	Changed attribute for hlinkMouseOver element (Part 1, §21.1.2.3.6)	287
18.2.3	Changed attribute for chart element (Part 1, §21.2.2.26)	287
18.2.4	Changed attribute for clrMapOvr element (Part 1, §21.2.2.30)	287
18.2.5	Changed attribute for externalData element (Part 1, §21.2.2.63)	289
18.2.6	Changed attribute for spPr element (Part 1, §21.2.2.197)	289

SS-ISO/IEC 29500-4:2011 (E)

18.2.7	Changed attribute for userShapes element (Part 1, §21.2.2.221).....	289
18.2.8	Changed attribute for blipFill element (Part 1, §21.3.2.2).....	290
18.2.9	Changed attribute for cNvPicPr element (Part 1, §21.3.2.6).....	290
18.2.10	Changed attribute for cNvPr element (Part 1, §21.3.2.7).....	290
18.2.11	Changed attribute for cNvSpPr element (Part 1, §21.3.2.8).....	292
18.2.12	Changed attribute for ext element (Part 1, §21.3.2.10).....	292
18.2.13	Changed attribute for grpSpPr element (Part 1, §21.3.2.14).....	293
18.2.14	Changed attribute for spPr element (Part 1, §21.3.2.23).....	293
18.2.15	Changed attribute for xfrm element (Part 1, §21.3.2.28).....	294
18.2.16	Changed attribute for relIds element (Part 1, §21.4.2.22).....	294
18.2.17	Changed attribute for shape element (Part 1, §21.4.2.27).....	295
18.2.18	Changed attribute for spPr element (Part 1, §21.4.3.7).....	296
18.2.19	Changed attribute for sp3d element (Part 1, §21.4.5.6).....	296
19.	VML Reference Material	299
19.1	VML.....	299
19.1.1	Table of Contents.....	300
19.1.2	Elements	301
19.1.3	Simple Types	689
19.2	VML - Office Drawing.....	697
19.2.1	Table of Contents.....	698
19.2.2	Elements	699
19.2.3	Simple Types	825
19.3	VML - WordprocessingML Drawing.....	837
19.3.1	Table of Contents.....	838
19.3.2	Elements	839
19.3.3	Simple Types	847
19.4	VML - SpreadsheetML Drawing	854
19.4.1	Table of Contents.....	855
19.4.2	Elements	857
19.4.3	Simple Types	891
19.5	VML - PresentationML Drawing.....	893
19.5.1	Table of Contents.....	893
19.5.2	Elements	894
20.	Shared MLs Reference Material.....	896
20.1	Shared Simple Types.....	896
20.1.1	Table of Contents.....	896
20.1.2	Simple Types	896
20.2	Extended Properties (Part 1, §22.2)	903
20.3	Custom Properties (Part 1, §22.3)	903
20.4	Changed attributes	904
20.4.1	Changed attribute for sources element (Part 1, §22.6.2.60).....	904
Annex A. (normative) Schemas – W3C XML Schema.....		905
A.1	WordprocessingML.....	905
A.2	SpreadsheetML.....	974
A.3	PresentationML	1059
A.4	DrawingML - Framework	1091

SS-ISO/IEC 29500-4:2011 (E)

A.4.1	DrawingML - Main.....	1091
A.4.2	DrawingML - Picture	1149
A.4.3	DrawingML - Legacy Compatibility	1150
A.4.4	DrawingML - Locked Canvas	1150
A.4.5	DrawingML - WordprocessingML Drawing	1150
A.4.6	DrawingML - SpreadsheetML Drawing	1154
A.5	DrawingML - Components	1158
A.5.1	DrawingML - Charts	1158
A.5.2	DrawingML - Chart Drawings	1186
A.5.3	DrawingML - Diagrams.....	1189
A.6	VML.....	1210
A.6.1	VML	1210
A.6.2	VML - Office Drawing	1221
A.6.3	VML - WordprocessingML Drawing	1231
A.6.4	VML - SpreadsheetML Drawing	1233
A.6.5	VML - PresentationML Drawing	1235
A.7	Shared MLs	1235
A.7.1	Math.....	1235
A.7.2	Extended Properties.....	1246
A.7.3	Custom Properties	1247
A.7.4	Variant Types	1248
A.7.5	Custom XML Data Properties.....	1252
A.7.6	Bibliography	1253
A.7.7	Additional Characteristics	1255
A.7.8	Office Document Relationships	1256
A.7.9	Shared Simple Types	1257
A.8	Custom XML Schema References	1260
Annex B. (informative) Schemas – RELAX NG	1261	
B.1	WordprocessingML.....	1261
B.1.1	Part Schemas.....	1305
B.2	SpreadsheetML.....	1312
B.2.1	Part Schemas.....	1400
B.3	PresentationML	1408
B.3.1	Part Schemas.....	1431
B.4	DrawingML - Framework	1435
B.4.1	DrawingML - Main.....	1435
B.4.2	DrawingML - Picture	1480
B.4.3	DrawingML - Locked Canvas	1480
B.4.4	DrawingML - Wordprocessing Drawing	1480
B.4.5	DrawingML - Spreadsheet Drawing	1483
B.5	DrawingML - Components	1485
B.5.1	DrawingML - Chart	1485
B.5.2	DrawingML - Chart Drawing.....	1504
B.5.3	DrawingML - Diagrams.....	1506
B.6	VML.....	1522
B.6.1	VML - Main.....	1522
B.6.2	VML - Office Drawing	1530

SS-ISO/IEC 29500-4:2011 (E)

B.6.3	VML - Wordprocessing Drawing	1537
B.6.4	VML - Spreadsheet Drawing	1539
B.6.5	VML - Presentation Drawing	1541
B.6.6	Part Schemas.....	1541
B.7	Shared MLs	1543
B.7.1	Math.....	1543
B.7.2	Extended Properties.....	1548
B.7.3	Custom Properties	1549
B.7.4	Variant Types	1550
B.7.5	Custom XML Data Properties.....	1554
B.7.6	Bibliography	1554
B.7.7	Additional Characteristics	1557
B.7.8	Office Document Relationships	1557
B.7.9	Shared Simple Types	1558
B.8	Custom XML Schema References	1560
B.9	Additional Resources	1560
B.9.1	Any	1560
B.9.2	XML	1560
Annex C. (informative) Namespace Prefix Mapping in Examples.....		1561
Annex D. (informative) Differences Between ISO/IEC 29500 and ECMA-376:2006		1563

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.

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

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

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.

ISO/IEC 29500-4 was prepared by ISO/IEC JTC 1, Information technology, Subcommittee SC 34, Document description and processing languages.

This second edition cancels and replaces the first edition (ISO/IEC 29500-4:2008), which has been technically revised by incorporation of the Amendment ISO/IEC 29500-4:2008/Amd.1:2010 and the Technical Corrigendum ISO/IEC 29500-4:2008/Cor.1:2010.

ISO/IEC 29500 consists of the following parts, under the general title *Information technology — Document description and processing languages — Office Open XML File Formats*:

- *Part 1: Fundamentals and Markup Language Reference*
- *Part 2: Open Packaging Conventions*
- *Part 3: Markup Compatibility and Extensibility*
- *Part 4: Transitional Migration Features*

Annex A forms a normative part of this Part of ISO/IEC 29500. Annexes B, C, and D are for information only.

This Part of ISO/IEC 29500 includes two annexes (Annex A and Annex B) that refer to data files provided in electronic form.

SS-ISO/IEC 29500-4:2011 (E)

Introduction

ISO/IEC 29500 specifies a family of XML schemas, collectively called *Office Open XML*, which define the XML vocabularies for word-processing, spreadsheet, and presentation documents, as well as the packaging of documents that conform to these schemas.

The goal is to enable the implementation of the Office Open XML formats by the widest set of tools and platforms, fostering interoperability across office productivity applications and line-of-business systems, as well as to support and strengthen document archival and preservation, all in a way that is fully compatible with the existing corpus of Microsoft Office documents.

The intent of this Part of ISO/IEC 29500 is to enable a transitional period during which existing binary documents being migrated to ISO/IEC 29500 can make use of legacy features to preserve their fidelity, while noting that new documents should not use them. Part 1, §2.4, “Document Conformance”, notes that WML Strict, SML Strict and PML Strict documents do not use any of the features defined in Part 4.

This Part of ISO/IEC 29500 is normative for the current edition of ISO/IEC 29500, but is not guaranteed to be included in future revisions of that Standard. The intent is to enable the group responsible for maintenance of ISO/IEC 29500 to choose, at a later date, to remove this set of features from a revised version of that Standard.

In general, this Part of ISO/IEC 29500 augments Part 1, and inherits the provisions of that Part. Exceptions to this are indicated explicitly.

The following organizations have participated in the creation of ISO/IEC 29500 and their contributions are gratefully acknowledged:

Apple, Barclays Capital, BP, The British Library, Essilor, Intel, Microsoft, NextPage, Novell, Statoil, Toshiba, and the United States Library of Congress.

Information technology — Document description and processing languages — Office Open XML File Formats

Part 4:

Transitional Migration Features

1. Scope

ISO/IEC 29500 defines a set of XML vocabularies for representing word-processing documents, spreadsheets and presentations. On the one hand, the goal of ISO/IEC 29500 is to represent faithfully the existing corpus of word-processing documents, spreadsheets and presentations that have been produced by Microsoft Office applications (from Microsoft Office 97 to Microsoft Office 2008, inclusive). It also specifies requirements for Office Open XML consumers and producers. On the other hand, the goal is to facilitate extensibility and interoperability by enabling implementations by multiple vendors and on multiple platforms.

This Part of ISO/IEC 29500 defines features for backward-compatibility and that are useful for high-quality migration of existing binary documents to ISO/IEC 29500. These features are used only by documents of conformance class WML Transitional (§2.1), SML Transitional (§2.1), or PML Transitional (§2.1). These features are sometimes needed for high-quality migration of existing binary documents to ISO/IEC 29500.

SS-ISO/IEC 29500-4:2011 (E)

2. Conformance

2.1 Document Conformance

Document conformance is purely syntactic.

- A conforming document shall conform to the transitional W3C XML Schema, and any additional syntax constraints.
- The document shall be of category Wordprocessing, Spreadsheet, or Presentation (see Part 1, §4).
- The document character set shall conform to the Unicode Standard and ISO/IEC 10646, with either the UTF-8 or UTF-16 encoding form, as required by the XML 1.0 standard.
- Any XML element or attribute not explicitly included in ISO/IEC 29500 shall use the extensibility mechanisms described by ISO/IEC 29500-1 and ISO/IEC 29500-3.

Each Part of this multi-part standard has its own conformance clause. The term *conformance class* is used to disambiguate conformance within different Parts of this multi-part standard. This Part of ISO/IEC 29500 defines the following document conformance classes:

- *WML Transitional*, if the document is a conforming document of category Wordprocessing that conforms to the transitional schema.
- *SML Transitional*, if the document is a conforming document of category Spreadsheet that conforms to the transitional schema.
- *PML Transitional*, if the document is a conforming document of category Presentation that conforms to the transitional schema.

[*Note*: Other document conformance classes could be defined in the future. *end note*]

[*Note*: A document cannot be of more than one of the above conformance classes. *end note*]

A document of a transitional conformance class shall not use relationship types <http://purl.oclc.org/ooxml/officeDocument/relationships/...> but shall use <http://schemas.openxmlformats.org/officeDocument/2006/relationships/...> instead.

2.2 Application Conformance

Application conformance incorporates both syntax and semantics.

- A conforming consumer shall not reject any conforming documents of at least one document conformance class.
- A conforming producer shall be able to produce conforming documents of at least one document conformance class.

SS-ISO/IEC 29500-4:2011 (E)

- A conforming application shall treat the information in Office Open XML documents in a manner consistent with the semantic definitions given in ISO/IEC 29500. An application's intended behavior need not require that application to process all of the information in an Office Open XML document. However, the information that it does process shall be processed in a manner that is consistent with the semantic definitions given in ISO/IEC 29500.

[*Note:* This note illustrates the third bullet above. Conforming applications might serve various functions. Examples include a viewer, an editor, and a back-end processor. Here is an illustration of how the third bullet applies to each of those examples:

- If a conforming viewer supports a given feature, then when it displays information using that feature, it respects the semantics of that feature as described in the Standard.
- If a conforming editor supports a given feature, then when it provides its user with an interface for manipulating information using that feature, it respects the semantics of that feature as described in the Standard.
- If a conforming back-end processor supports a given feature, then when that processor transforms or assembles information involving that feature, that processor respects the semantics of that feature as described in the Standard.

end note]

This Part of ISO/IEC 29500 defines the following application conformance classes:

- *WML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class WML Transitional.
- *SML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class SML Transitional.
- *PML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class PML Transitional.