INTERNATIONAL STANDARD

ISO/IEC 9541-2

First edition
1991-09-15

AMENDMENT 1
2000-12-15

Information technology — Font information interchange —

Part 2: **Interchange Format**

AMENDMENT 1: Support for font technology advances

Technologies de l'information — Échange d'informations sur les fontes —

Partie 2: Format d'échange

AMENDEMENT 1: Support pour les développements de la technologie des fontes

Reference number
ISO/IEC 9541-2:1991/Amd.1:2000(E)

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. 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 Amendment may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to International Standard ISO/IEC 9541-2:1991 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 34, *Document description and processing languages*.

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Introduction

This Amendment specifies an additional interchange format and slight modification to ISO/IEC 9541-2:1991. The specification is applied only when additional font properties defined by Amendment 2 and/or 3 to ISO/IEC 9541-1:1991 are employed. The properties are optional and make it possible to address advances in font technology in addition to those defined in ISO/IEC 9541-1:1991.

The additional interchange format is described by SGML (Standard Generalized Markup Language) conforming to ISO 8879:1986 and its Technical Corrigendum 2 (Annex K: Web SGML Adaptations).

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Information technology — Font information interchange —

Part 2:
Interchange Format

AMENDMENT 1: Support for font technology advances

Page 11, Clause 6.2

Element declaration of fontdes should be:

```
<!ELEMENT fontdes  (dataver? & stdver   & datasrce? & datacopy? &
                    dsnsrce  & dsncopy? & relunits? & typeface? &
                    fontfam  & posture  & postang?  & weight    &
                    propwdth & glycomp  & nomwrmde? & dsnsize   &
                    minsize  & maxsize  & caphght?  & lchght?   &
                    dsngroup & structur & mnfeatsz? & nomcsw?   &
                    nomlcsw? &
                    verticalunit-property &
                    fillratio-property    &
                    designareas-property  &
                    niprop*) >
```

Page 12, Clause 6.2

Element declaration of wrmode should be:

```
<!ELEMENT wrmode (wrmdnam , ( nescdir  & escclass  &
                 (avgescx  & avgescy  & avlcescx & avlcescy &
                  avcpescx & avcpescy & averageesc-property &
                  tabescx  & tabescy ) &
                  mxfntext & sectors? & escadjs? &
                  mineas?  & maxeas?  & scores? & varscrps? &
                  minlinsp? & minanasc? & maxanasc? & nomalign? &
                  algnmds? & copyfits? &
                  genkendot-property &
                  ILC-property &
                  (dsnwdadd? & dsnwdamp? & minwdadd? & minwdamp? &
                  maxwdadd? & maxwdamp? & dsnltadd? & dsnltamp? &
                  minltadd? & minltamp? & maxltadd? & maxltamp?) &
                  glyphs    & niprop* )) >
```

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Page 14, Clause 6.2

Add the following declarations:

```
<!-- SGML DTD for 9541-1 AM2 -->

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          to copy in any form is granted for use with comforming WebSGML
          systems and appilications as defined in ISO 8879:1986(WWW),
          provided this notice is included in all copies. -->

<!-- Public document type definition. Typical invocation:

<!DOCTYPE fontres PUBLIC "ISO 9541-2:1991 AM1:1999//DTD Font Resource//EN"> -->

<!-- DTD for 8.9.1 Vertical Units and Horizontal Units -->

<!ELEMENT  verticalunit-property   (verticalunit-name, verticalunit-value)  >
<!ELEMENT  verticalunit-name       (glbname)  >
<!-- glbname STRUCTURED NAME -->
<!ELEMENT  verticalunit-value      (card)  >
<!-- glbname CARDINAL -->
<!ELEMENT  horizontalunit-property (horizontalunit-name, horizontalunit-value)  >
<!ELEMENT  horizontalunit-name     (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  horizontalunit-value    (card)    >
<!-- card : CARDINAL -->

<!-- DTD for 8.9.2 Fill Ratio -->

<!ELEMENT  fillratio-property   (fillratio-name, fillratio-value-property-list)  >
<!ELEMENT  fillratio-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  fillratio-value-property-list   (blackness+) >
<!ELEMENT  blackness (reference-glyph, fillratio-value)  >
<!ELEMENT  reference-glyph   (msg) >
<!-- msg : MESSAGE -->
<!ELEMENT  fillratio-value     (ratl) >
<!-- ratl : RATIONAL -->

<!-- DTD for 8.9.3 Design Areas -->

<!ELEMENT  designareas-property   (designareas-name,
     designareas-value-property-list)  >
<!ELEMENT  designareas-name      (glbname) >
<!-- glbname STRUCTURED NAME -->
<!ELEMENT  designareas-value-property-list   (designarea-property|plist)+ >
<!ELEMENT  designarea-property   (designarea-name,
     designarea-value-property-list)  >
<!ELEMENT  designarea-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT designarea-value-property-list   (letter-face+) >
<!ELEMENT letter-face    (dsnarea-glyphset-name, dsnarea-height, dsnarea-width) >
<!ELEMENT  dsnarea-glyphset-name   (msg) >
<!-- msg : MESSAGE -->
<!ELEMENT  dsnarea-height     (ralr) >
<!-- ralr : REL RATIONAL -->
<!ELEMENT  dsnarea-width      (ralr) >
<!-- ralr : REL RATIONAL -->

<!-- DTD for 8.9.4 Average ESC -->
```


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```
<!ELEMENT  averageesc-property   (averageesc-name,
     averageesc-value-property-list)  >
<!ELEMENT  averageesc-name       (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  averageesc-value-property-list   (averagelen-property|plist)+ >
<!ELEMENT  averagelen-property   (averagelen-name,
     averagelen-value-property-list)  >
<!ELEMENT  averagelen-name       (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT averagelen-value-property-list   (average-length+) >
<!ELEMENT average-length   (averlen-glyphset-name, avrlen-height, avrlen-width) >
<!ELEMENT  averlen-glyphset-name   (msg) >
<!-- msg : MESSAGE -->
<!ELEMENT  averlen-height     (ralr) >
<!-- ralr : REL RATIONAL -->
<!ELEMENT  averlen-width      (ralr) >
<!-- ralr : REL RATIONAL -->

<!-- DTD for 8.9.5 Generalized Kendot -->

<!ELEMENT  genkendot-property   (genkendot-name, genkendot-value-property-list)  >
<!ELEMENT  genkendot-value-property-list  (genkendot-offsetx-property|
     genkendot-offsety-property|genkendot-thick-property|genkendot-shape-property)+ >
<!ELEMENT  genkendot-offsetx-property  (genkendot-offsetx-name,
     genkendot-offsetx-value) >
<!ELEMENT  genkendot-offsetx-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  genkendot-offsetx-value     (ralr)    >
<!-- ralr : REL RATIONAL -->
<!ELEMENT  genkendot-offsety-property  (genkendot-offsety-name,
     genkendot-offsety-value) >
<!ELEMENT  genkendot-offsety-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  genkendot-offsety-value     (ralr)    >
<!-- ralr : REL RATIONAL -->
<!ELEMENT  genkendot-thick-property  (genkendot-thick-name,
     genkendot-thick-value) >
<!ELEMENT  genkendot-thick-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  genkendot-thick-value       (ralr)    >
<!-- ralr : REL RATIONAL -->
<!ELEMENT  genkendot-shape-property  (genkendot-shape-name,
     genkendot-shape-value) >
<!ELEMENT  genkendot-shape-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  genkendot-shape-value     (glbname) >
<!-- glbname : STRUCTURED NAME -->

<!-- SGML DTD for 9541-1 AM3 -->

<!-- DTD for 8.10 Interlinear/intercharacter Object Properties -->

<!ELEMENT  ILC-property (ILC-name, ILC-value-property-list) >
<!ELEMENT  ILC-name     (glbname)  >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  ILC-value-property-list (ILC-type-property|ILC-font-size-property|
                                    ILC-typeface-property|ILC-rotation-property|
                                    ILC-writing-direction-offset-property|
                                    ILC-formatting-type-property|
                           ILC-line-progression-direction-offset-property)+ >
```

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```
<!ELEMENT  ILC-type-property  (ILC-type-name, ILC-type-value) >
<!ELEMENT  ILC-type-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  ILC-type-value     (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT  ILC-font-size-property (ILC-font-size-name, ILC-font-size-value-type,
                                   ILC-font-size-value) >
<!ELEMENT ILC-font-size-name   (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT ILC-font-size-value-type   EMPTY >
<!ATTLIST ILC-font-size-value-type type (ABS|RELATIVE) "ABS" >

<!ELEMENT ILC-font-size-value (relr) >
<!-- relr : REL RATIONAL -->

<!ELEMENT ILC-typeface-property  (ILC-typeface-name, ILC-typeface-value) >
<!ELEMENT ILC-typeface-name      (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT ILC-typeface-value     (glbname) >
<!-- glbname : STRUCTURED NAME -->

<!ELEMENT ILC-rotation-property (ILC-rotation-name, ILC-rotation-value) >
<!ELEMENT ILC-rotation-name (relr) >
<!-- relr : REL RATIONAL -->
<!ELEMENT ILC-rotation-value   EMPTY >
<!ATTLIST ILC-rotation-value value (0|90|180|270) "0"  >

<!ELEMENT ILC-writing-direction-offset-property
                                 (ILC-writing-direction-offset-name,
                                  ILC-writing-direction-offset-value,
                                  ILC-writing-direction-offset-value) >
<!ELEMENT ILC-writing-direction-offset-name (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT ILC-writing-direction-offset-value-type  EMPTY >
<!ATTLIST ILC-writing-direction-offset-value-type type (ABS|RELATIVE) "ABS" >

<!ELEMENT ILC-writing-direction-offset-value (relr) >
<!-- relr : REL RATIONAL -->

<!ELEMENT ILC-formatting-type-property
                     (ILC-formatting-type-name, ILC-formatting-type-value) >
<!ELEMENT ILC-formatting-type-name (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT ILC-formatting-type-value EMPTY >
<!ATTLIST ILC-formatting-type-value  value (HEAD|CENTER|TAIL|JUSTIFICATION)
     "HEAD" >

<!ELEMENT ILC-line-progression-direction-offset-property
                            (ILC-line-progression-direction-offset-name,
                             ILC-line-progression-direction-offset-value,
                             ILC-line-progression-direction-offset-value-type) >
<!ELEMENT ILC-line-progression-direction-offset-name (glbname) >
<!-- glbname : STRUCTURED NAME -->
<!ELEMENT ILC-line-progression-direction-offset-value-type EMPTY >
<!ATTLIST ILC-line-progression-direction-offset-value-type value (ABS|RELATIVE)
     "ABS" >

<!ELEMENT ILC-line-progression-direction-offset-value (relr) >
<!-- relr : REL RATIONAL -->
```


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