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## **Information technology — Document Description and Processing Languages — DSSSL library for complex compositions**

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## Foreword

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- type 1, when the necessary support within the technical committee cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development requiring wider exposure;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

This specification is a translation of a JIS/Technical Report "DSSSL library for complex compositions" (TR X 0010:2000) published by Japanese Standards Association (JSA) in September 01, 2000.

## Introduction

This Technical Report is based on the activities taken by Application Standards Committee of JBMA (Japan Business Machine Makers' Association) and Electronic Publishing Committee of INSTAC/JSA for application technology of DSSSL (ISO/IEC 10179, Document Style Semantics and Specification Language).

The DSSSL library specified in this Technical Report encourages interchanging SGML (Standard Generalized Markup Language) or XML (Extensible Markup Language) documents with such a complicated style specification by DSSSL as multilingual composition including Japanese and English texts within a page, clause or paragraph.



# Information technology— Document Description and Processing Languages — DSSSL library for complex compositions

## 1 Scope

This Technical Report provides a DSSSL library that can specify styles for the documents described by SGML (Standard Generalized Markup Language, ISO 8879) or XML (Extensible Markup Language, W3C REC-xml-980210). The library makes it feasible to describe DSSSL specification for those documents, without any particular knowledge of DSSSL or particular composition rules.

## 2 References

The following standards contain provisions that, through reference in this text, constitute provisions of this Technical Report. At the time of publication, the editions indicated are valid. All standards are subject to revision, and parties to agreements based on this Technical Report are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 10179:1996, *Information technology — Processing languages — Document Style Semantics and Specification Language (DSSSL)*.

ISO 8879:1986, *Information technology — Text and office systems — Standard Generalized Markup Language (SGML)*.

ISO 8879:1986/Cor.2:1999, *Information technology — Text and office systems — Standard Generalized Markup Language (SGML) TECHNICAL CORRIGENDUM 2*.

ISO/IEC 9541-1:1991, *Information technology — Font information interchange — Part 1: Architecture*.

## 3 Definitions

For the purposes of this Technical Report, the following definitions apply.

### 3.1

#### **bottom edge**

The bottom side of a page.

### 3.2

#### **cell**

a basic unit in a table composition.

### 3.3

#### **character size**

The size of virtual body of a character.

**3.4**

**clock numerals**

A Roman numerical character designed for a clock face.

**3.5**

**column**

A separated composition area within a page.

**3.6**

**column space**

An interval between adjacent columns.

**3.7**

**DSSSL library**

A set of DSSSL specifications (see ISO/IEC 10179).



**3.8**

**edge**

One of the three sides of a page that are not bound. The three sides are top edge, bottom edge and front edge.

**3.9**

**emphasizing mark**

A symbol located at the side (right side in vertical composition or top side in horizontal composition) of a character to be emphasized.



**3.10**

**facing page**

A two-page (left page and right page) spread of a book.

**3.11**

**group-ruby**

A ruby scheme in which ruby characters are aligned at the side of a grouped object characters.

**3.12**

**gutter**

A binding portion of a book.



**3.13**

**head line**

Description of a book-title, chapter-title or section-title allocated on a margin areas of a page.



**3.14**

**image area**

An effective page area on which main texts are composed.

**3.15**

**indentation**

Line head shifting along the character progression direction in a line.

**3.16**

**interline space (or line space)**

An interval between adjacent lines.

**3.17**

**line leading**

Displacement between the corresponding points of adjacent lines.



**3.18**

**mono-ruby**

A ruby scheme in which ruby characters are aligned with respect to each object character.

**3.19****number of characters on a line**

The number of characters which are included and aligned in a line.

**3.20****ordering character**

A head character of each ordered object (list, clause, etc.), indicating the order of the object.

**3.21****page number**

The number indicating a page sequence.

**3.22****pre/post-marking of ordering character(s)**

Character(s) just before/after ordering character(s).

**3.23****ruby**

A (sequence of) small character(s) located at the side of object character(s), indicating the pronunciation, meaning, etc. of the object character(s).

**3.24****single page**

A separated page. It is employed specifically discriminating a page from a facing page.

**3.25****solid matter (or solid)**

A composition without space between adjacent characters or lines.

**3.26****space**

An interval between virtual bodies of adjacent characters or lines.

**3.27****strike-through (or strike-out)**

A line overwritten on characters indicating their deletion.

**3.28****superscript/subscript (or superior/inferior)**

Small characters allocated at the side (right-top or right-bottom respectively) of an object character.

**3.29****table caption**

A title (and other related description) of a table. It is sometimes referred to as table title or table heading.

**3.30****top edge**

The top side of a page.

**3.31****two-character ruby**

A ruby consisting of the character(s) whose virtual body size (measured in the character progression direction) is a half of the virtual body size of corresponding object character.

**3.32****writing direction**

The direction of a character string composing a line. Multilingual texts are composed with a vertical or horizontal direction. Those compositions are called vertical compositions or horizontal compositions respectively.



**3.33**

**writing mode**

A character progression direction on a line. [The direction to escapement point from position point on a glyph coordinate system (see ISO/IEC 9541-1).] Multilingual texts employ the writing modes of LEFT-TO-RIGHT, TOP-TO-BOTTOM or RIGHT-TO-LEFT.