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Information technology — Processing languages — Document Style Semantics and Specification Language (DSSSL)

AMENDMENT 2: Extensions to multilingual and complicated document styles

Technologies de l'information — Langages de traitement — Sémantique de présentation de documents et langage de spécifications (DSSSL)

AMENDEMENT 2: Extensions aux modèles multilingues et compliqués de document

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Foreword

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Amendment 2 to ISO/IEC 10179:1996 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 34, *Document description and processing languages*.

Information technology — Processing languages — Document Style Semantics and Specification Language (DSSSL)

AMENDMENT 2:
Extensions to multilingual and complicated document styles

*Replace "*ISO 639:1988 *Code for the representation of names of languages." of* ***3 Normative References*** *with:*

ISO 639-1:2002, *Codes for the representation of names of languages — Part 1: Alpha-2 code.*

ISO 639-2:1998, *Codes for the representation of names of languages — Part 2: Alpha-3 code.*

Add the following list items after the list item of "— `may-violate-keep-after?` *" of* ***12.6.2 Display-group Flow Object Class****:*

— `ext-line-number`: is a style object specifying characteristic to be assigned to `ext-line-number` to determine the style of a line number.

— `ext-line-number-start`: is a number that start point of sequence of line numbers to be output. The default value is specified using declare-characteristic. This characteristic is inherited.

— `ext-line-number-position`: is either #f or a string that specifies the position within the display area at which to output the line number. The default value is specified using declare characteristic. The `string` property specifies the position of the number by counting from either side of the display area from the initial position of the writing-mode. Thus, when the writing-mode is 'left-to-right with a layout of 'simple-page-sequence', specifying the value as "2" will display line-number on the right-hand side of the main text area. When layout is 3 columns, using 'column-set-sequence', to display the line number on both sides of 2nd column, specify "3 4" as the value of characteristic. This characteristic is inherited.

— `ext-line-number-interval`: is a positive integer that specifies the interval between successive line numbers. The default value is specified using declare-characteristic. This characteristic is inherited.

— `ext-line-number-sep`: is a length specifying the separation between line-number and display area. The default value is specified using declare-characteristic. This characteristic is inherited.

— `ext-line-number-side`: is one of the symbols `start`, `end`, or `both`. Specifies the position of display area in which the line-number is displayed. This characteristic is overlaps with `ext-line-number-position`: when both characteristics are specified, `ext-line-number-position` has a priority. The default value is specified using declare-characteristics. This characteristic is inherited.

— `candidate-point-y`: is a length specifying the candidate point of y-coordinate in a display-group region. The default value is 0pt. This characteristic is not inherited.

— `keep-with-next-table-row-count`: is a number that specifies the number of table rows that are to be kept together within the area produced by flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

— `enable-last-linebreak?`: is a boolean specifying whether line-break is to be inserted or not at the end of generated area. The default value is #f. This characteristic is not inherited.

— `basic-spacing?`: is a boolean specifying whether the basic line positioning rule is to be applied or not. The default value is #f.

— `line-adjustment?`: is a boolean specifying whether the basic kerning rule of start and end of line is to be applied or not. The default value is false.

— `numeric-unit-division?`: is a boolean specifying whether division methods toward numeric and unit are to be applied or not. The default value is false.

— `treat-single-line-as-last-line?`: is a boolean specifying whether a single line is treated as last line or not. This characteristic is mainly used when display FOC specifies quadding as justify and the stylesheet writer does not expect single lines to be justified. The default value is #f.

— `open-paren-space-length`: is a length specifying the distance between line head and an open parenthesis. The default value is 0pt.

— `first-line-open-paren-space-length`: is a length specifying the distance between the start position of the first line of paragraph and an open parenthesis.

— `continuous-number-base-position?`: is a boolean indicating whether basic positioning methods based on continuous number is to be applied or not. The default value is false.

— `space-addition?`: is a boolean specifying whether inter-letter space adjustment methods are to be applied or not. When the value is #t and a line has space for justification, space can be inserted between each letter. The default value is false.

— `last-line-characters`: is a number that specifies the minimum number of characters that can be placed in the last line of the text area. The default value is #f.

— `font-height`: is a length specifying height of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `font-width`: is a length specifying width of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `font-family-name`: is either #f, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is isoserif

— `character-rotation`: is one of the symbols `0`, `90`, `180`, or `270`. Specifies that floating direction on specified inline characters. `0` means floating direction is same as the value of writing-mode. 90 means specified characters' floating direction is orthogonal to writing-mode. The default value is `0`.

— `base-line-shift`: is a length specifying the distance from the base line. When the value is negative, base line is shifted up (or right). Base line is shifted down (or left) in response to a positive value. The default value is 0.

Add the following list items after the list item of "— `writing-mode`" of ***12.6.3 Simple-page-sequence Flow Object Class****:*

— `page-number-format`: is either #f or a string that specifies the format of a page number. The default value is "1". This characteristic is not inherited.

— `page-number-restart`: is a boolean specifying whether the page number is to be re-calculated or not. The default value is #f. This characteristic is not inherited.

— `initial-page-number`: is a number that specifies the initial value of the page number. The default value is #f. This characteristic is not inherited.

Add the following list items after the list item of "— `binding-edge`" of ***12.6.4 Page-sequence Flow Object Class****:*

— `page-number-format`: is either #f or a string that specifies the format of a page number. The default value is "1". This characteristic is not inherited.

— `page-number-restart?`: is a boolean specifying whether the page number is to be re-calculated or not. The default value is #f. This characteristic is not inherited.

— `initial-page-number`: is a number that specifies the initial value of the page number. The default value is #f. This characteristic is not inherited.

Add the following list items after the list item of "— `keep-with-next?`" of ***12.6.5 Column-set-sequence Flow Object Class****:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

Add the following list items after the list item of "— `keep-with-next?`" of ***12.6.6 Paragraph Flow Object Class****:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

— `basic-spacing?:` is a boolean specifying whether the basic line positioning rule is to be applied or not. The default value is #f.

— `line-adjustment?:` is a boolean specifying whether the basic kerning rule of start and end of line is to be applied or not. The default value is false.

— `numeric-unit-division?:` is a boolean specifying whether division methods toward numeric and unit are to be applied or not. The default value is false.

— `treat-single-line-as-last-line?:` is a boolean specifying whether a single line is treated as last line or not. This characteristic is mainly used when display FOC specifies quadding as justify and the stylesheet writer does not expect single lines to be justified. The default value is #f.

— `open-paren-space-length:` is a length specifying the distance between line head and an open parenthesis. The default value is 0pt.

— `first-line-open-paren-space-length:` is a length specifying the distance between the start position of the first line of paragraph and an open parenthesis.

— `continuous-number-base-position?:` is a boolean indicating whether basic positioning methods based on continuous number is to be applied or not. The default value is false.

— `space-addition?:` is a boolean specifying whether inter-letter space adjustment methods are to be applied or not. When the value is #t and a line has space for justification, space can be inserted between each letter. The default value is false.

— `last-line-characters:` is a number that specifies the minimum number of characters that can be placed in the last line of the text area. The default value is #f.

— `font-height:` is a length specifying height of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `font-width:` is a length specifying width of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `font-family-name`: is either #f, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is isoserif.

— `character-rotation:` is one of the symbols `0`, `90`, `180`, or `270` specifying that a floating direction on specified inline characters. `0` means a floating direction is same as the value of writing-mode. 90 means specified characters' floating direction is orthogonal to writing-mode. The default value is `0`.

— `base-line-shift:` is a length specifying the distance from the base line. When the value is negative, base line is shifted up (or right). Base line is shifted down (or left) on positive value. The default value is 0.

— `drop-character-number:` is a number that specifies the number of characters can be displayed as dropcap characters. The default value is 0. This characteristic is not inherited.

— `dropcap-height:` is a length specifying height of a dropcap region. The default value is 0pt. This characteristic is not inherited.

— `dropcap-width:` is a length specifying width of a dropcap region. The default value is 0pt. This characteristic is not inherited.

— `string-bullet-list:` is a list of strings that specifies the ordered bullet expression. Specified list will be rendered as the bullet of the ordered list. Each list item will be embraced by doublequote and separated by space. A doublequote can be written inside a string only by escaping it with a backslash(\) as in “The world \”recursion\” has many meanings.”. Sample of this expression is as follows: string-bullet-list: ‘(list(“one” “two” “\”three\”” “four”)). The default value is “”. This characteristic is not inherited.

*Replace the list item of "— `font-family-name`" of **12.6.6 Paragraph Flow Object Class** with:*

— `font-family-name`: is either #f, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is isoserif.

*Add the following list item after the list item of "— `break-after-priority`" of **12.6.8 Line-field Flow Object Class**:*

— `inhibit-justify-space`: is one of the symbols `before`, `after`, `both`, or `#f` specifying the inhibition of space by quadding: 'justify before/after the FOC line-field. The default value is `#f`. This characteristic is not inherited.

*Add the following list item after the list item of "— `line-sep`" of **12.6.9 Sideline Flow Object Class**:*

— `sideline-shift`: is a length specifying the shifted length by means of a relative coordinate. The default value is 0 pt. This characteristic is inherited.

*Add the following list items after the list item of "— `inhibit-line-breaks?`" of **12.6.11 Character Flow Object Class**:*

— `character-rotation`: is one of the symbols `0`, `90`, `180`, or `270` specifying that a floating direction on specified inline characters. `0` means a floating direction is same as the value of writing-mode. 90 means specified characters' floating direction is orthogonal to writing-mode. The default value is `0`.

— `base-line-shift`: is a length specifying the distance from the base line. When the value is negative, base line is shifted up (or right). Base line is shifted down (or left) on positive value. The default value is 0.

— `font-height`: is a length specifying height of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `font-width`: is a length specifying width of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `font-family-name`: is either #f, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is isoserif

*Add the following list items after the list item of "— `keep-with-next?`" of **12.6.14 Rule Flow Object Class**:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

*Add the following list items after the list item of "— `keep-with-next?`" of **12.6.15 External-graphic Flow Object Class**:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

— `inhibit-expansion?`: is a boolean specifying whether an image is allowed to expand or not when `max or 'max-uniform is specified on the characteristics `scale`. The default value is #f. This characteristic is not inherited.

— `inhibit-reduction?`: is a boolean specifying whether an image is allowed to reduce or not when `max or 'max-uniform is specified on the characteristics `scale`. The default value is #f. This characteristic is not inherited.

*Add the following list items after the list item of "— `keep-with-next?`" of **12.6.16 Included-container-area Flow Object Class**:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

*Add the following list items after the list item of "— `font-size`" of **12.6.17 Score Flow Object Class**:*

— `font-height`: is a length specifying height of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `font-width`: is a length specifying width of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.

— `character-rotation`: is one of the symbols `0`, `90`, `180`, or `270` specifying that a floating direction on specified inline characters. `0` means a floating direction is same as the value of writing-mode. 90 means specified characters' floating direction is orthogonal to writing-mode. The default value is `0`.

— `base-line-shift`: is a length specifying the distance from the base line. When the value is negative, base line is shifted up (or right). Base line is shifted down (or left) on positive value. The default value is 0.

*Replace the list item of "— `font-family-name`" of **12.6.17 Score Flow Object Class** with:*

— `font-family-name`: is either #f, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is isoserif.

*Add the following list items after the list item of "— `box-size-after`" of **12.6.18 Box Flow Object Class**:*

— `box-size-start`: is a length that specifies the distance from the placement path to the start-edge of the box. This shall apply only if the flow object is inline. The initial value is 0pt.

— `box-size-end`: is a length that specifies the distance from the placement path to the end-edge of the box. This shall apply only if the flow object is inline. The initial value is 0pt.

*Add the following list items after the list item of "— `keep-with-next?`" of **12.6.18 Box Flow Object Class**:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

*Add the following list items after the list item of "— `keep-with-next?`" of **12.6.19 Side-by-side Flow Object Class**:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

*Add the following list item after the list item of "— `break-after-priority`" of **12.6.21 Glyph-annotation Flow Object Class**:*

— `ruby-process?`: is a boolean specifying whether ruby character spacing is to be applied or not. When a value is true and the length of ruby characters are longer than base characters, all letters cannot have space in between even though ruby characters are on non-ruby characters. If #f, inter-letter space adjustment methods are to be applied. The default value is #f.

*Add the following list items after the list item of "— `keep-with-next?`" of **12.6.23 Aligned-column Flow Object Class**:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.

*Add the following list item after the list item of "— `break-after-priority`" of **12.6.24 Multi-line-inline-note Flow Object Class**:*

— `inline-note-kerning?`: is a boolean specifying whether kerning methods toward inline-note are to be applied or not. The default value is #f. This characteristic is not inherited.

*Add the following list item after last paragraph of **12.6.26.3 Subscript Flow Object Class**:*

— `subscript-depth`: is a length specifying the depth of subscript. The default value is a half as many as the value of font-size. This characteristic is not inherited.

*Add the following list item after last paragraph of **12.6.26.4 Superscript Flow Object Class**:*

— `superscript-height`: is a length specifying the height of superscript. The default value is a half as many as the value of font-size. This characteristic is not inherited.

*Add the following list items after the list item of "— `keep-with-next?`" of **12.6.27.1 Table Flow Object Class**:*

— `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #t. The default value is 0. This characteristic is not inherited.

— `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.

— `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.