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Information technology — International string ordering and comparison — Method for comparing character strings and description of the common template tailorable ordering

AMENDMENT 3

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Technologies de l'information — Classement international et comparaison de chaînes de caractères — Méthode de comparaison de chaînes de caractères et description du modèle commun et adaptable d'ordre de classement

AMENDEMENT 3

Reference number
ISO/IEC 14651:2001/Amd.3:2006(E)

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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.

Amendment 3 to ISO/IEC 14651:2001 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 2, *Coded character sets*.

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Information technology — International string ordering and comparison — Method for comparing character strings and description of the common template tailorable ordering

AMENDMENT 3

Page 2, Clause 3

Replace the normative references with the following:

ISO/IEC 10646:2003, *Information technology — Universal Multiple-Octet Coded Character Set (UCS)*

ISO/IEC 10646:2003/Amd.1:2005 *Information technology — Universal Multiple-Octet Coded Character Set — Amendment 1: Glagolitic, Coptic, Georgian and other characters*

Page 17, subclause 6.5

Replace 6.5 with the following:

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6.5 Name of the Common Template Table and name declaration

ISO/IEC 14651:2001/Amd 3:2006
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Whenever the Common Template Table is referred externally as a base point in a given context, whether in a process, contract, or procurement requirement, it shall be referenced using the name ISO14651_2005_TABLE1. If another name is used due to practical constraints, a declaration of conformance shall indicate how the correspondence between this other name and the name ISO14651_2005_TABLE1 is taken care of.

The use of a defined name is necessary to manage the different stages of development of this table. This follows from the nature of the reference character repertoire, for which development will be ongoing for a number of years or even decades.

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Replace Annex A with the following:

Annex A
(normative)

Common Template Table

In order to minimize formatting problems and the risk of errors in reproduction, the common template table is provided separately in a machine-readable file as a normative component of this International Standard. The file name for this language version is different from the normative reference name specified in clause 6.5 of this International Standard due to the existence of file versions commented in other natural languages. The file for this language version can also be retrieved on the ITTF web site at the following URL:

http://www.iso.org/ittf/ISO14651_2005_TABLE1_en.txt

There is an official French version of the file which only differs in its comments (its technical content is identical), and its name is: http://www.iso.org/ittf/ISO14651_2005_TABLE1_fr.txt

NOTE 1 This amendment deprecates, but does not preclude specific reference to, the previous tables, which contained and still contains respectively ordering information From the full repertoire of ISO/IEC 10646-1:2000 and ISO/IEC 10646-2:2001. The previous tables can be found at the following URLs:

[ordering information on the repertoire of characters as defined in ISO/IEC 10646-1:1993 including Amendments 1-9]
http://www.iso.org/ittf/ISO14651_2000_TABLE1.htm

[ordering information on the combined repertoire of characters of ISO/IEC 10646-1:2000 and ISO/IEC 10646-2:2001]
http://www.iso.org/ittf/ISO14651_2002_TABLE1_en.txt

[ordering information on the repertoire of characters as defined in ISO/IEC 10646:2003]
http://www.iso.org/ittf/ISO14651_2003_TABLE1_en.txt

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The current Common Template Table reflects the repertoire of characters as defined in ISO/IEC 10646:2003 including its Amendment 1.

NOTE 2 The repertoire targeted by this Amendment 3 to ISO/IEC 14651:2001 is equivalent to the repertoire of *The Unicode Standard Version 4.1, published by The Unicode Consortium*.

When ordering data applicable to other amendments of ISO/IEC 10646:2003 becomes available, this International Standard and specifically its Common Template Table will be amended accordingly to cover the ordering of the additional characters and scripts. To meet cultural requirements of specific communities, delta declarations will have to be applied to the amended table as defined in this International Standard.

ISO_14651_2005_TABLE1 is the name that is used for referring to this table in this version of this International Standard.

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Include the following new section at the end of Annex B:

B.5. Example 5 – A tailoring for Khmer

The Khmer script is mainly used in Cambodia. The tailoring given below is not included in the CTT (see annex A) itself in order to keep the CTT simple, especially for rare letterforms. E.g. the Khmer ROBAT for which the tailoring below may not be desirable for efficiency reasons, since this letter occurs very rarely, but the tailoring for handling it correctly may affect the efficiency of collation also for texts that do not contain any ROBAT.

```
reorder-after <MAX>


% Khmer:

collating-symbol <S1794_S17C9> % KHMER LETTER BA, KHMER SIGN MUUSIKATOAN

collating-symbol <S1794_S17CA> % KHMER LETTER BA, KHMER SIGN TRIISAP

collating-symbol <S17BB_S17C6> % KHMER VOWEL SIGN U, KHMER SIGN NIKAHIT

collating-symbol <S17B6_S17C6> % KHMER VOWEL SIGN AA, KHMER SIGN NIKAHIT

collating-symbol <C1780>..<C179C>

   % Declaration of Khmer contractions

collating-element <U1794_17C9> from "<U1794><U17C9>" % KHMER LETTER BA, KHMER
SIGN MUUSIKATOAN

collating-element <U1794_17CA> from "<U1794><U17CA>" % KHMER LETTER BA, KHMER
SIGN TRIISAP

collating-element <SW_17CC_1780>..<SW_17CC_17A2> from "<U1780>..<U17A2><U17CC>"

% KHMER LETTER KA, KHMER SIGN ROBAT..KHMER LETTER QA, KHMER SIGN ROBAT

collating-element <SW_17CC_17A5>..<SW_17CC_17B3> from "<U17A5>..<U17B3><U17CC>"

% KHMER INDEPENDENT VOWEL QI, KHMER SIGN ROBAT..KHMER INDEPENDENT VOWEL QAU□,
KHMER SIGN ROBAT

collating-element <U17C6_17BB> from "<U17BB><U17C6>" % KHMER VOWEL SIGN U, KHMER
SIGN NIKAHIT (OM properly spelled)

collating-element <U17BB_17C6> from "<U17C6><U17BB>" % KHMER SIGN NIKAHIT, KHMER
VOWEL SIGN U (OM with the wrong sequence of the characters)

collating-element <U17C6_17B6> from "<U17B6><U17C6>" % KHMER VOWEL SIGN AA, KHMER
SIGN NIKAHIT (AM properly spelled)

collating-element <U17B6_17C6> from "<U17C6><U17B6>" % KHMER SIGN NIKAHIT, KHMER
VOWEL SIGN AA (AM with the wrong sequence of the characters)
```

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```
collating-element <U17D2_1780>..<U17D2_179C> from "<U17D2><U1780>..<U179C>"
% COENG, KHMER LETTER KA..COENG, KHMER LETTER QA
collating-element <U17D2_17A5>..<U17D2_17B3> from "<U17D2><U17A5>..<U17B3>"
% COENG, KHMER INDEPENDENT VOWEL QI..COENG, KHMER INDEPENDENT VOWEL QAU

reorder-after <S1794> % KHMER LETTER BA
<S1794_17C9> % KHMER LETTER BA, KHMER SIGN MUUSIKATOAN
<S1794_17CA> % KHMER LETTER BA, KHMER SIGN TRIISAP

reorder-after <S17C5> KHMER VOWEL SIGN AU
<S17BB_17C6> % KHMER VOWEL SIGN U, KHMER SIGN NIKAHIT

reorder-after <S17C6> KHMER SIGN NIKAHIT
<S17B6_17C6> % KHMER VOWEL SIGN AA, KHMER SIGN NIKAHIT

reorder-after <S17D2>
<C1780>..<C1794> % COENG, KHMER LETTER KA..COENG, KHMER LETTER BA
<C1795>..<C179A> % COENG, KHMER LETTER PHA..COENG, KHMER LETTER RO
<C17AB> % COENG, KHMER INDEPENDENT VOWEL RY
<C17AC> % COENG, KHMER INDEPENDENT VOWEL RYY
<C179B> % COENG, KHMER LETTER LO
<C17AD> % COENG, KHMER INDEPENDENT VOWEL LY
<C17AE> % COENG, KHMER INDEPENDENT VOWEL LYY
<C179C>..<C17A2> % COENG, KHMER LETTER VO..COENG, KHMER LETTER QA

reorder-after <SFFFF>
order_start forward;forward;forward;forward

<U1794_17C9> <S1794_17C9>;<BASE>;<MIN>;<U1794_17C9> % KHMER LETTER BA, KHMER SIGN
MUUSIKATOAN
```

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```
<U1794_17CA> <S1794_17CA>;<BASE>;<MIN>;<U1794_17CA> % KHMER LETTER BA, KHMER SIGN
TRIISAP

%% The ROBAT contractions should be used only in an "advanced" tailoring for

%% Khmer, since ROBAT is rather rarely used, and these contractions

%% may impact on the efficiency of the key computation even if ROBAT does not

%% occur, since these contractions begin with commonly used letters.

<SW_17CC_1780>..<SW_17CC_17A2>                    "<S179A><S17D2><S1780>..<S17A2>";
"<BASE><VRNT1><BASE><BASE>";"<MIN><MIN><MIN><MIN>";
<SW_17CC_1780>..<SW_17CC_17A2>

% KHMER LETTER KA, KHMER SIGN ROBAT..KHMER LETTER QA, KHMER SIGN ROBAT

<SW_17CC_17A5>..<SW_17CC_17A6>            "<S179A><S17D2><S17A2><S17B7>..<S17B8>";
"<BASE><VRNT1><BASE><BASE><VRNT1><BASE>";"<MIN><MIN><MIN><MIN><MIN><MIN>";
<SW_17CC_17A5>..<SW_17CC_17A6>  %  KHMER  INDEPENDENT  VOWEL  QI,  KHMER  SIGN
ROBAT..KHMER INDEPENDENT VOWEL QII, KHMER SIGN ROBAT

<SW_17CC_17A7>
"<S179A><S17D2><S17A2><S17BB>";"<BASE><VRNT1><BASE><BASE><VRNT1><BASE>";
"<MIN><MIN><MIN><MIN><MIN><MIN>";<SW_17CC_17A7>

% KHMER INDEPENDENT VOWEL QU, KHMER SIGN ROBAT

<SW_17CC_17A8>
"<S179A><S17D2><S17A2><S17BB>";"<BASE><VRNT1><BASE><BASE><VRNT2><BASE>";
"<MIN><MIN><MIN><MIN><MIN><MIN>";<SW_17CC_17A8>

% KHMER INDEPENDENT VOWEL QUK;  KHMER SIGN ROBAT

<SW_17CC_17A9>
"<S179A><S17D2><S17A2><S17BC>";"<BASE><VRNT1><BASE><BASE><VRNT1><BASE>";
"<MIN><MIN><MIN><MIN><MIN><MIN>";<SW_17CC_17A9>

% KHMER INDEPENDENT VOWEL QUU;  KHMER SIGN ROBAT

<SW_17CC_17AA>
"<S179A><S17D2><S17A2><S17BC>";"<BASE><VRNT1><BASE><BASE><VRNT2><BASE>";
"<MIN><MIN><MIN><MIN><MIN><MIN>";<SW_17CC_17AA>

% KHMER INDEPENDENT VOWEL QUUV;  KHMER SIGN ROBAT

<SW_17CC_17AF>..<SW_17CC_17B1>            "<S179A><S17D2><S17A2><S17C2>..<S17C4>";
"<BASE><VRNT1><BASE><BASE><VRNT1><BASE>";"<MIN><MIN><MIN><MIN><MIN><MIN>";
<SW_17CC_17AF>..<SW_17CC_17B1>  %  KHMER  INDEPENDENT  VOWEL  QE,  KHMER  SIGN
ROBAT..KHMER INDEPENDENT VOWEL QOO TYPE ONE, KHMER SIGN ROBAT

<SW_17CC_17B2>
"<S179A><S17D2><S17A2><S17C4>";"<BASE><VRNT1><BASE><BASE><VRNT2><BASE>";
"<MIN><MIN><MIN><MIN><MIN><MIN>";<SW_17CC_17B2>

% KHMER INDEPENDENT VOWEL QOO TYPE TWO;  KHMER SIGN ROBAT
```

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