**ISO/IEC JTC 1/SC 2**  
**Coded Character Sets**  
**Secretariat: Japan (JISC)**

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<tr>
<th>DOC. TYPE</th>
<th>National Body Contribution</th>
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<tbody>
<tr>
<td>TITLE</td>
<td>US response to Canadian contribution, SC 2 N 3725, to create a separate working group under SC 2 for ISO/IEC 14651 project</td>
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<td>National Body of USA</td>
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<td>PROJECT</td>
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It is the considered opinion of the US National Body that the working group best qualified to maintain and extend ISO/IEC 14651 is SC2/WG2. Here is a summary of our feedback:

1. Many of the experts on sorting and collation participate in the WG2 meetings and have the linguistic and technical skills to deal with both encoding of the repertoire and string ordering of encoded characters.
2. The reason for assigning ISO/IEC 14651 and ISO/IEC 10646 to the same Working Group is to track the two standards closely.
3. Contributions for repertoire additions and collation can be dealt with simultaneously in the same meeting. Synchronization becomes easier and there is no need to wait for an amendment publication of a repertoire addition before it is included in ISO/IEC 14651.
4. SC2 and its Secretariat would incur increased and unnecessary administrative costs.
5. The US is concerned that a separate Working Group might not attract the expertise necessary to keep ISO/IEC 14651 in synch with the Unicode Collation Algorithm, and so gradual divergence might occur, a singular disservice to users, to the computer industry, and to those developing other dependent standards.

Here is the background and additional detailed feedback on the Canadian proposal.


**RESOLUTION M44.13 (SC 2 scope and ISO/IEC 14651 transfer):**

*Unanimous*

With reference to documents ballot results in N2616 and N2658 on transferring of ISO/IEC 14651 from SC22 to SC2, WG 2 notes that the ballots to transfer the project to SC 2 have been approved by SC22 and SC2. In anticipation of the above transfer, WG 2 proposes that SC 2 adopt the following modified scope for SC2, which includes the phrase “including String Ordering” in it:

“Standardization of graphic character sets and their characteristics, including string ordering, associated control functions, their coded representation of characters for information interchange and code extension techniques. Excluded: audio and picture coding.”

SC2 is further requested to relay the above to JTC 1 at its next plenary in November 2003.

The US notes that SC2 fulfilled the request in WG2 Resolution M44.13 at the JTC1 Plenary Meeting in November 2003 and JTC1 approved the transfer of the project as well (ISO/IEC JTC 1 N7301, Resolution 24 – Transfer of Project).
RESOLUTION M44.14 (Future assignment of 14651 within SC 2):

Abstention: Canada

Yes: China, Ireland, Japan, Republic of Korea, and the USA

With reference to the anticipated transfer of ISO/IEC 14651 to SC 2 from SC 22, it is the considered opinion of WG 2 that due to the close relationship between the ISO/IEC 10646 and ISO/IEC 14651, the best home for 14651 in SC 2 is within WG 2, and requests SC 2 to assign the project to WG 2, with a corresponding expansion of the title of WG 2 to say "Multiple-octet codes and string ordering".

The US fully supports WG2 Resolution M44.14, because:

1. Resolution M44.14 makes it clear that the project should become part and parcel of the program of work of WG2 since there is a body of experts on collation there. It is more beneficial to have all the experts as part of the same working group to keep ISO/IEC 14651 fully synchronized with ISO/IEC 10646 and the Unicode Collation Algorithm (Unicode Technical Standard #10).

2. The purpose of assigning ISO/IEC 14651 and ISO/IEC 10646 to the same Working Group is to track the two standards closely. The repertoire of ISO/IEC 10646 changes rapidly and frequently, and it is inappropriate to have the sorting standard ISO/IEC 14651 be in a separate Working Group where it cannot be updated and revised at the same time as ISO/IEC 10646.

3. Contributions for repertoire additions and collation can be dealt with simultaneously. The time during which a proposal for additional repertoire is processed often represents a window of opportunity for involving local expertise on all aspects of the characters under consideration, particular collation. Waiting until an amendment to ISO/IEC 10646 is published before synchronizing the collation standard may involve a substantial delay, which increases the risk that local experts may no longer be involved in the process.

4. Assigning ISO/IEC 14651 to a working group separate from WG2 would dilute the expertise available for the development of the complementary standards (because of lack of funding for travel), weakening both of them. (In contrast, the Unicode Technical Committee is responsible for the character content of Unicode Standard and for the character ordering of the Unicode Collation Algorithm, and these are dealt with at the same meetings.)

5. SC2 and its Secretariat would incur increased administration costs due to: maintaining another roster of documents, distributing the same documents twice under different WG designations, coordinating with another convener, tracking another business plan, set of agendas, independent calendrical requirements, and so on.

6. It should be noted that the experts on collation who developed the Unicode Collation Algorithm have worked closely with the project editor of ISO/IEC 14651 and will continue to do so to ensure that future editions of ISO/IEC 14651 and the Unicode Collation Algorithm are always aligned and synchronized. The US is concerned that a separate Working Group might not attract the expertise necessary to keep ISO/IEC 14651 in sync with the Unicode Collation Algorithm, and so gradual divergence might occur, a singular disservice to users, to the computer industry, and to those developing other dependent standards.

Here are some specific additional objections to Canada's arguments in SC 2 N3725.

**Paragraph 2:** "Canada believes that this project is a component that is complementary to coding. This component, related to all character sets, is nevertheless code-independent, and it could be better served by a new WG."
Response: Ordering is complementary to coding, and because ordering deals with the universe of characters, regardless of how they are encoded, it is code-independent. However, the assertion that the project could be better served by a new WG does not follow from the preceding statements. WG2 is responsible for the premier coded character set in the world, ISO/IEC 10646. Just because WG2 has this responsibility does not mean that it could not also be responsible for the international standard for ordering characters. Indeed, assigning this responsibility to WG2 would be entirely appropriate because the national representatives who attend WG2 meetings are the world's experts on characters, languages, and scripts (including the ordering of characters).

Paragraph 3: “If the ordering standard has links with the Universal Character set because this one surveys all the characters of the world, it also has links with other coding schemes indeed.”

Response: Both the ordering standard, ISO/IEC 14651, and the Universal Character Set, ISO/IEC 10646, cover all the characters of the world. Because of that they have a common scope; the two standards should be assigned to a single Working Group, one experienced in dealing with the characters of the world, namely, WG2.

With respect to "other coding schemes," the SC2 coded character sets developed by WG3 are complete and are aligned with ISO/IEC 10646. Whether a non-ISO coding scheme can "link" with ISO/IEC 14651 depends on whether its characters correspond to those in the Universal Character Set.

Paragraph 4: “It should be made clear that ordering is a component that is serving all coding schemes.”

Response: See previous comment.

Paragraph 5: “Ensuring that this project is dealt with by another WG will make this universal concern more visible and contribute to show to all stakeholders that the ordering issues are decoupled from coding (in particular from a single character set).”

Response: What proof is offered for the assertion "Ensuring that this project is dealt with by another WG will make this universal concern more visible"? Because of the worldwide success of ISO/IEC 10646 and the Unicode Standard, WG2 is one of the most visible ISO/IEC Working Groups within the computer industry.

ISO/IEC 10646 (Unicode) has been a tremendous success. The computer industry has adopted it as the reference character encoding, and it is the defined character set for XML and thus all XML-dependent standards, for new IETF standards such as International Domain Names and for all recent updated programming languages standards developed in JTC1/SC22 and ECMA. There is no other mechanism for specifying characters; thus the standard for specifying the ordering of characters must be specified in terms of ISO/IEC 10646 character codes. ISO/IEC 14651 can be applied to any other encoding X simply by ordering the repertoire of X according to the mapping to ISO/IEC 10646. Inventing a different mechanism for specifying characters simply for ordering them would be absurd.