

# Template for comments and secretariat observations

Date:2020-09-28	Document: SC 22 WG21 N4865 Responses to Comments for DIS 14882	Project: 14882
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MB/ NC <sup>1</sup>	Line number	Clause/ Subclause	Paragraph/ Figure/Table	Type of comment <sup>2</sup>	Comments	Proposed change	Observations of the secretariat
** <b>-001</b>		2		Ed	Please use the boilerplate text provided:	The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.	Agree. However, we note that the 'Proposed change' is already in the DIS, so we are not sure what this comment is about.
** <b>-002</b>		2		Ed	ISO/IEC, Directives, Part 2, 15.5.2: <i>"Only documents referred to in the text shall be listed in Clause 2."</i> ISO/IEC, Directives, Part 2, 15.5.3: <i>"Only references cited in the text in such a way that some or all of their content constitutes requirements of the document shall be listed in the Normative references clause."</i>	The normative references list is not just a list of important documents. It lists the references that are part of the requirements of the document. Please remove the concerned reference(s) to the Bibliography or cite them explicitly as a requirement (shall) in the text, as indicated in the DIS edited text.	Accepted
JP5- <b>003</b>	9	3.30		ed	It may be difficult to understand what the section reference (7.7) means in the following description.  Evaluation of a constant expression never exhibits behavior explicitly specified as undefined in <a href="#">Clause 4</a>  through <a href="#">Clause 15</a> of this document ( <a href="#">7.7</a> ).	Make the following changes.  Evaluation of a constant expression ( <a href="#">7.7</a> ) never exhibits behavior explicitly specified as undefined in <a href="#">Clause 4</a>  through <a href="#">Clause 15</a> of this document ( <del><a href="#">7.7</a></del> ).	Accepted
JP6- <b>004</b>	1	17.11.2.2	Paragraph 5	te	If v is unordered value, the following expression returns v, but it should return partial_ordering::unordered.  Returns: v < 0 ? partial_ordering::greater : v > 0 ? partial_ordering::less : v.	Change expression as follows:  Returns v.is_ordered ? (v < 0 ? partial_ordering::greater : v > 0 ? partial_ordering::less : v) : partial_ordering::unordered	Rejected There is no consensus to make this change. If v is unordered, then returning v and returning partial_ordering::unordered are identical, so the suggested change is equivalent to the existing text.
JP7-		20.7.4	Paragraph 2	ed	Since the variant_size is a struct type, "class" in the	Change "class" to "struct" as follows:	Accepted

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005					following definition should be changed to "struct".  template<class T> class variant_size<const T>;	template<class T> struct variant_size<const T>;	
JP8- 006		20.7.4	Paragraph 3	ed	Since the variant_alternative is a struct type, "class" in the following definition should be changed to "struct".  template<size_t I, class T> class variant_alternative<I, const T>;	Change "class" to "struct" as follows:  template<size_t I, class T> struct variant_alternative<I, const T>;	Accepted
JP9- 007	2	20.11.3.9	Paragraph 4	ed	In the following sentence, "well formed" should be "well-formed".  The expression dynamic_cast<typename shared_ptr<T>::element_type*>(r.get()) is well formed.	Change the words to "well-formed".	Accepted
JP10- 008	6	20.12.1		te	In the following definition, Tp should have byte value.  template<class Tp> class polymorphic_allocator;	Change the example as follows:  template<class Tp = byte> class polymorphic_allocator;	Accepted
JP11- 009		20.12.3.2	Paragraph 11	ed	In the following definition, first argument of the new_object function should have "..." after class.  template<class T, class CtorArgs...> [[nodiscard]] T* new_object(CtorArgs&&... ctor_args);	Change the example as follows:  template<class T, class... CtorArgs> [[nodiscard]] T* new_object(CtorArgs&&... ctor_args)	Accepted
JP12- 010	5	31.8.1	Paragraph 25	ed	In the following example, the first parameter of memcpy should be pointer value:  memcpy(expected, this, sizeof(*this));	Change the example as follows  memcpy(&expected, this, sizeof(*this));	Accepted
JP1-		Bookmarks		ed	Regarding the PDF file of the specification, when	Rebuild the bookmarks.	Accepted.

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011					the item of bookmarks is clicked, the displayed page is different from clicked item.		ISO/CS replaced the cover sheet which misaligned the bookmarks. We request that ISO/CS check the bookmarks if any edits are made by them and if any exist then resubmit the document to us so the bookmarks can be realigned prior to publication.
**012		Foreword		Ed	Please use the Foreword provided:	<p>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.</p> <p>The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="http://www.iso.org/directives">www.iso.org/directives</a>).</p> <p>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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="http://www.iso.org/patents">www.iso.org/patents</a>) or</p>	Accepted

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						<p>the IEC list of patent declarations received (see <a href="http://patents.iec.ch">http://patents.iec.ch</a>).</p> <p>Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.</p> <p>For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <a href="http://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.</p> <p>This document was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 22, Programming languages, their environments and system software interfaces.</p> <p>This sixth edition cancels and replaces the fifth edition (ISO/IEC 14882:2017), which has been technically revised.</p> <p>The main changes compared to the previous edition are as follows:</p> <p>— xxx xxxxxxxx xxx xxxx</p> <p>Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="http://www.iso.org/members.html">www.iso.org/members.html</a>.</p>	
JP4- 013		General		ed	<p>In some cases, function references in a sentence has no parentheses attached and others has attached parentheses.</p> <p>For example, <code>std::terminate</code> has no parentheses attached in 14.6.1. But, <code>std::uncaught_exceptions</code> has attached parentheses in 14.6.2.</p>	Remove the parentheses.	Accepted
JP3- 014		General		ed	Regarding the PDF file of the specification, when the link of annex X is clicked, the displayed position is different from the former document.	Reset the link.	Accepted

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					(When the link of annex X is clicked: C++17 standard jump to the chapter title of annex X. This document jump to the beginning of text of annex X.) This behaviour may cause the confusion.		
JP2- 015		General		ed	Regarding the PDF file of the specification, when the link of the clause X is clicked, X.1 is displayed.	Reset the link.	Accepted
**016		General		Ed	An edited file of the DIS has been prepared by ISO/CS. Please note that the DIS edited file contains 39 comments on specific elements of the document, which need to be fixed so the document complies with the Directives, Part 2.	Please take all the comments in to consideration to avoid rejection at the next stage.	Accepted If any additional items are found please let us know. We will add them to the ongoing work for the next version we plan to publish in 2023.
**017		General		Ed	<u>ISO/IEC Directives, Part 2, 2016, Clause 7:</u> <i>"shall" is used to express a <b>requirement</b></i> <i>"should" is used to express a <b>recommendation</b></i> <i>"may" is used to express a <b>permission</b></i> <i>"can" is used to express a <b>possibility</b></i> (for information "must" may only be used to express an external constraint) <b>Also, "could", "might", are not recognised ISO verbal forms.</b>	Please check all provisions to ensure that verbal forms are used correctly. Please remove occurrences of "could" and "might" and replace them with "can" to express possibility even if it sounds different from "regular" English. Verbal forms can also affect certain parts of the document. For example, requirements are not allowed in the Introduction, Scope, definitions, Notes, or examples; recommendations and permissions are not allowed in Notes, etc.	Accepted We have ensured the "shall", "should", and "may" do not appear inside notes and examples, and fixed occurrences that we discovered that did not conform to the defined meaning of these words. We discovered and fixed instances of "can" that were used to express a requirement or permission. We acknowledge that "could" and "might" are not recognized ISO verbal forms and have ensured that we are not using these words to express a requirement,

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							recommendation, or permission, but instead use them for their plain English meaning.
** <b>-018</b>		General		Ed	Hanging paragraphs are not allowed in ISO publications (i.e. all paragraphs must belong to the smallest sublevel). Also, a sublevel is only allowed if there are at least 2 items at the same sublevel (i.e. no x.1 if there is no x.2).	Please refer to the few occurrences indicated in the DIS text and correct as necessary throughout the document.	Accepted
** <b>-019</b>		General		Ed		Considering the end user is charged by the page count, are the 200 pages of cross-references and indexes necessary? Should they be moved to an electronic attachment instead?	We considered this proposed change and found that the indices and linkage provided by them are considered very important by our user community when using the document. Thus we have chosen not to enact this proposed change.

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