WG 14 N3073, Updated SCC Comments for ISO/IEC CD 9899, C

MB/ NC ¹	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
					Document Number: JTC 1/SC 22/WG 14 N3073 Author: Hubert Tong About this document This document contains the comments submitted to the Standards Council of Canada by the Canadian mirror committee members. Due to various issues, the administrative personnel at SCC submitted an older comments document. Where comments are identical, the "MC/NC" column contains the identifier present in WG 14 document N3067. Otherwise, the "MC/NC" column has an identifier beginning with CA-N3073-nnn, which (if applicable) is followed by the identifier present for the corresponding comment in WG 14 document N3067 with a separating slash character. In this document, the "Observations of the		
CA- N30 73- 001/ CA1 -084		6.7.12	Paragraph 2	te	secretariat" column contains additional notes. Standard attribute syntax errors should be diagnosed as was the intent in C++ (see https://isocpp.org/files/papers/P2710R0.html#253 8 approved by WG 21 in 2022-11).	Modify paragraph 2: Any attribute token that is not supported by the implementation is ignored <ins> except that constraint violations of attributes specified in this document are diagnosed</ins> .	The proposed resolution has been updated (the original proposed resolution had no effect because of the "is ignored" wording; also, the individual attributes already had constraint sections).
CA2 -006		5.1.1.2	Paragraph 1	te	The removal of trigraphs makes it impossible for processing of C source code in code pages with variant code points for characters in the basic character set in a guaranteed deterministic way for all programs.	Add to the end of 5.1.1.2#1: Trigraph sequences are replaced by corresponding single-character internal representations. Add in a new section, 5.2.1.1 Trigraph sequences with	

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² **Type of comment: ge** = general **te** = technical **ed** = editorial

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						the following body: Before any other processing takes place, each occurrence of one of the following sequences of three characters (called <i>trigraph</i> sequences) ¹⁷⁾ is replaced with the corresponding single character.	
						??= # ??([??/\	
						??)]??'^??<{	
						??! ??> } ??- ~	
						No other trigraph sequences exist. Each ? that does not begin one of the trigraphs listed above is not changed.	
CA3 -064		6.5.2.2	Paragraph 2	te	The removal of function declarations without a prototype without a viable replacement (var-args can have different ABIs on some systems) makes it impossible to declare functions that take a variable number of arguments but are not C vararg functions.	Either return the specification for called functions without a prototype or provide an alternate means of declaring such a function.	
CA4 -114		6.7.6	Paragraph 1	te	The removal of "K&R" declarations made classes of interfaces impossible and breaks a lot of existing code.	Either return K&R declarations or allow forward declaration of parameters in some manner.	
CA5 -148		7.2	Paragraph 2	te	It is not clear what the effect of no NDEBUG defined should be for assert with no or multiple parameters passed in given the quasi-prototype listed in 7.2.1.1#1.	Add to paragraph 2: The assert macro shall be implemented as a macro with an ellipsis parameter, not as an actual function. If the macro definition is suppressed to access an actual function, the behavior is undefined. NOTE Nevertheless, when NDEBUG is not defined, the macro acts as a function taking one parameter as indicated by the given prototype. For	

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						both assert() and assert(1, 1), the number of arguments do not agree with the number of parameters. A diagnostic is required by 6.5.2.2.	
CA- N30 73- 002		B.6		ed	LDBL_IS_IEC_60559 is missing.	Add LDBL_IS_IEC_60559.	
CA- N30 73- 003		5.2.4.2.2	Paragraph 29	te	The example presents FLT_IS_IEC_60559 and DBL_IS_IEC_60559 macros having a value of 2. Said value does not have a defined meaning in paragraph 18 of the subclause.	Change the value to 1.	Duplicate of GB-016
CA- N30 73- 004		J.6.1	Paragraph 2	ed	STDC_WANT_IEC_60559_ only appears in this list (aside from the index). It does not have "particular semantics provided by this document" as the list claims.	Remove all mentions ofSTDC_WANT_IEC_60559_ from the document.	
CA- N30 73- 005		Index		ed	The footers from the pages of the Index identify the Bibliography as the section they belong to.	Change the subject footers to have Index in place of Bibliography.	
CA- N30 73- 006		5.2.4.2.2		te	The deployment impact of making a change to the floating-point model by clarifying that model parameters are to be chosen such that all normalized floating-point numbers are representable is unknown. Both AIX and Linux on Power use values of "p" for "double-double" that does not match the new definition in the CD.	For float, double, and long double: Add new *_MODEL_MANT_DIG and *_MODEL_EPSILON macros with the definitions of the *_MANT_DIG and *_EPSILON macros from the CD. For float, double, and long double: Modify the definitions of *_MANT_DIG and *_EPSILON by adding "in relation to implementation-defined model parameters not subject to the restriction that the floating type is able to represent all normalized floating-point numbers".	

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