



ISO/IEC JTC1/SC22
Languages
Secretariat: CANADA (SCC)

ISO/IEC JTC1/SC22

N528

AUGUST 1988

TITLE: Danish Comments on ISO/DP 9899-C

SOURCE: Secretariat ISO/JTC1/SC22

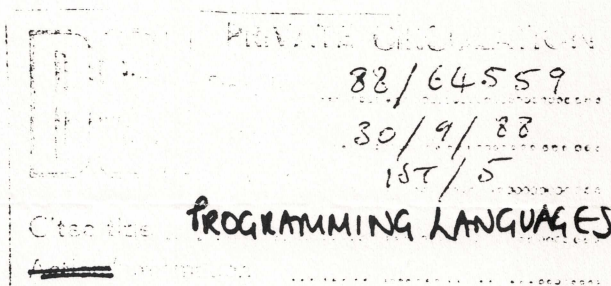
WORK ITEM: JTC1.22.20

STATUS: New

CROSS REFERENCE: N463, N413

DOCUMENT TYPE: Member Body Comments

ACTION: For information to SC22 Member Bodies.
For review by SC22/WG14-C.



Address reply to: ISO/IEC JTC1/SC22 Secretariat
J.L. Côté, 140 O'Connor St., 10th Floor
Ottawa, Ont., Canada K1A 0R5
Telephone: (613)957-2496 Telex: 053-3336



ISO/IEC JTC1/SC22
Languages
Secretariat: CANADA (SCC)

ISO/IEC JTC1/SC22

N528

AUGUST 1988

TITLE: Danish Comments on ISO/DP 8899-C

SOURCE: Secretariat ISO/JTC1/SC22

WORK ITEM: JTC1.22.20

STATUS: New

CROSS REFERENCE: N683, N413

DOCUMENT TYPE: Member Body Comments

ACTION: For information to SC22 Member Bodies.
For review by SC22/WG14-C.

Address reply to: ISO/IEC JTC1/SC22 Secretariat
J.L. Côté, 140 O'Connor St., 10th Floor
Ottawa, Ont., Canada K1A 0R3
Telephone: (613) 973-2466 Telex: 023-3336



Dansk Standardiseringsråd

DANISH STANDARDS ASSOCIATION

JTC1/SC22 Secretariat
 Att.: J.L. Côte
 140 O'Connor Street, 10th Floor
 Ottawa, Ontario
 CANADA K1A 0R5

Deres/Your ref.

Vor/Our ref.

Dato/Date

JTC1/SC22

1988-08-19

Danish comments on ISO/DP 9899, "C" programming language

Dear Mr Côte,

As the Danish experts informed the JTC1/SC20/WG14 meeting in London on 13th - 14th June 1988, the ANSI X3J11 draft of 13th May 1988 does not solve the "no" vote of the Danish Standards Association on DP 9899. The remaining problem concerns the representation in non-ASCII ISO 646 character sets.

We propose the enclosed solution to the problem, and we will change our vote to "yes" when this is incorporated in the ISO draft.

Yours sincerely

J. A. Hansen
 Jens Kolind

JK/al

An alternate to the trigraph "solution".

The application of trigraphs (as specified in the ANSI X3J11 C draft) to C programs is considered to lead to programs which are unmanageable to read and write. An alternate solution to the non-ASCII 7-bit (ISO 646-based) character sets problem is hereby proposed. The proposal is based on a combination of new operators and an include file with keyword definitions. The proposed changes are only syntactical in nature, and considered having no impact on existing programs.

Three new constructs are defined:

```
(:      for  {  
)      for  }  
!  
as an infix operator for array indices  
a!5 is equivalent to a[5]
```

An include file /usr/include/iso646.h is defined as follows:

```
#define and      &  
#define cand    && /* conditional and */  
#define or      |  
#define cor     || /* conditional or */  
#define xor     ^  
#define compl   ~  
#define andeq   &=  
#define oreq    |=  
#define xoreq   ^=
```

The proposed changes should be mandatory for a compiler to conform to ANSI/ISO C. The new constructs have been implemented as an undocumented feature in the C++ compiler by Bjarne Stroustrup, AT&T Bell Laboratories. The changes to the ANSI draft can be done as outlined in the ISO SC22/WG14 minutes from its Amsterdam meeting Nov 1987.