

## **ISO/IEC JTC 1/SC 22/WG 9 N 472**

### **Proposal to Revise ISO/IEC 15291, Information technology - Programming languages – Ada Semantic Interface Specification (ASIS)**

Submitted to SC 22 by James W. Moore, Convener, ISO/IEC JTC 1/SC 22/WG 9  
24 June 2006

As directed by WG 9 Resolution 50-7, this proposal is submitted to SC 22 for consideration at its 2007 plenary meeting. WG 9 requests that SC 22 take action at the meeting to add this item to its programme of work, instead of conducting a letter ballot. The relevant items of the JTC 1 Directives are quoted below:

**15.1.1** If it is decided that an IS is to be revised, the SC Secretariat shall inform the ITTF and add an appropriate project to the programme of work (see 6.2.1.5).

**6.2.1.5** The procedure of distributing the NP form for voting is not required in the case of revision of a published IS. Such revisions should, however, be recorded in JTC 1's programme of work as items at Stage 2 (see 12.1) and should have target dates and priorities assigned as for other work items.

**ISO/IEC JTC 1/SC 22/WG 9 N 464r2,**

**3rd Preliminary draft New Work Item Proposal for the Revision of ISO/IEC 15291, ASIS**

Replaced first draft on 24 June 2006, as directed by WG9 Action Item 50-2

## G3 New Work Item Proposal

February 2004

### PROPOSAL FOR A NEW WORK ITEM

Date of presentation of proposal: 2006-05-04	Proposer: JTC 1/SC 22
Secretariat: ANSI	ISO/IEC JTC 1 N XXXX ISO/IEC JTC 1/SC XX N XXX

**A proposal for a new work item** shall be submitted to the secretariat of the ISO/IEC joint technical committee concerned with a copy to the ISO Central Secretariat.

**Presentation of the proposal** - to be completed by the proposer.

<b>Title</b> Information technology - Programming languages – Ada Semantic Interface Specification (ASIS)
<b>Scope</b> This revision of international standard ISO/IEC 15291:1999 would provide support for the language features added to Ada by ISO/IEC 8652:1995/Amd 1. The target audience would be vendors of language processors as well as purchasers of the processors.
<b>Purpose and justification</b> <p>The Ada community has a strong de facto tradition of being able to use the Ada Semantic Interface Specification (ASIS) for analyzing or transforming Ada source code. Both third-party vendors and final users depend critically on ASIS to develop tools that have an intimate knowledge of the static semantics of Ada while being independent from the proprietary technologies of language processors. Since its standardization in 1999, the availability of ASIS technology has been essential to the marketability of Ada language processors.</p> <p>With the addition of significant new language features in Amendment 1 to ISO/IEC 8652:1995, the Ada community has expressed the need to standardize new interfaces and modify existing interfaces to process these features. This is vital in keeping the tools ecosystem healthy when users start using the amended language.</p> <p>It is proposed to incorporate these new interfaces as part of a revision to the ASIS standard. A revision seems more appropriate than an amendment, because it is expected that most sections of the existing standard will be affected in one way or another, making an amendment awkward to read and understand for users.</p>

**Programme of work**

If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed?

- a single International Standard
- more than one International Standard (expected number: ..... )
- a multi-part International Standard consisting of ..... parts
- an amendment or amendments to the following International Standard(s)  
.....
- a technical report , type .....

And which standard development track is recommended for the approved new work item?

- a. Default Timeframe
- b. Accelerated Timeframe
- c. Extended Timeframe

**Relevant documents to be considered**

ISO/IEC 8652:1995/Amd 1

**Co-operation and liaison**

No formal liaison is anticipated. Informal liaison will be maintained with the various parties in the current de facto process

**Preparatory work offered with target date(s)**

An initial working draft will be made available at the plenary meeting of ISO/IEC JTC1/SC22 in the fall of 2008.

**Signature:**

Sally Seitz, ISO/IEC JTC1/SC22 Secretariat

Will the service of a maintenance agency or registration authority be required?

.....NO

- If yes, have you identified a potential candidate? .....

- If yes, indicate name .....

Are there any known requirements for coding? .....NO

-If yes, please specify on a separate page

Does the proposed standard concern known patented items? .....NO

- If yes, please provide full information in an annex

Comments and recommendations of the JTC 1 or **SC 22 Secretariat** - attach a separate page as an annex, if necessary.

**Comments with respect to the proposal in general, and recommendations thereon:**

It is proposed to assign this new item to JTC 1/SC 22/WG 9.

**Voting on the proposal** - Each P-member of the ISO/IEC joint technical committee has an obligation to vote within the time limits laid down (normally three months after the date of circulation).

<b>Date of circulation:</b> YYYY-MM-DD	<b>Closing date for voting:</b> YYYY-MM-DD	<b>Signature of Secretary:</b>
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<b>NEW WORK ITEM PROPOSAL - PROJECT ACCEPTANCE CRITERIA</b>		
<b>Criterion</b>	<b>Validity</b>	<b>Explanation</b>
<b>A. Business Requirement</b>		
A.1 Market Requirement	Essential <input checked="" type="checkbox"/> Desirable ___ Supportive ___	See above justification.
A.2 Regulatory Context	Essential ___ Desirable ___ Supportive <input checked="" type="checkbox"/> Not Relevant ___	The fact that tools are based on ASIS may be supportive of acquisitions performed in a regulatory context.
<b>B. Related Work</b>		
B.1 Completion/Maintenance of current standards	Yes <input checked="" type="checkbox"/> No___	The work is related to the continued maintenance of the language specification, ISO/IEC 8652.
B.2 Commitment to other organisation	Yes ___ No <input checked="" type="checkbox"/>	But informal liaison will be maintained with the participants in the current de facto process.
B.3 Other Source of standards	Yes ___ No <input checked="" type="checkbox"/>	
<b>C. Technical Status</b>		
C.1 Mature Technology	Yes <input checked="" type="checkbox"/> No___	The existing ASIS technology has been in use for nearly 10 years, and tool support for ISO/IEC 8652:1995 Amd 1 is starting to be available.
C.2 Prospective Technology	Yes <input type="checkbox"/> N/A_ No___	

C.3 Models/Tools	Yes <input type="checkbox"/> N/A <input type="checkbox"/> No <input type="checkbox"/>	
<b>D. Conformity Assessment and Interoperability</b>		
D.1 Conformity Assessment	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
D.2 Interoperability	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	The work supports portability of tools among various platforms.
<b>E. Adaptability to Culture, Language, Human Functioning and Context of Use</b>		
<b>E.1 Cultural and Linguistic Adaptability</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>E.2 Adaptability to Human Functioning and Context of Use</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>F. Other Justification</b>		It is expected that, at least, the following national bodies will actively support this effort: Belgium, Canada, France, Germany, Italy, Japan, United Kingdom, and United States.