ISO/IEC JTC 1/SC 22/WG 9 N456 Convener's Proposal for the Revision of the ASIS Standard, ISO/IEC 15291

This report is intended to close out the actions requested of the convener by Resolution 48-8.

Resolution 48-8 reads as follows:

In order to begin work on a revision of the ASIS standard appropriate to Ada 2005, WG9 assigns the scope of ASIS to the Ada RG. The WG9 convener is requested to provide a proposal by the November 2005 meeting of WG9, including scope of work, plan of work, schedule and personnel. WG9 encourages SIGAda to formulate proposals for extending the ASIS specification to include the new language elements of Ada 2005.

Background

[Some historical information is paraphrased from a note by Currie Colket.]

The original ASIS specification for the Ada 1983/87 language was developed outside of WG9 under the auspices of the SIGAda ASIS WG. Tom Shields, of UNISYS, was the Chair of the ASISWG at the time. ASIS for Ada 1983/87 was completed and recommended for use by the AJPO in December 1993. About this time, Currie Colket took over as Chair of the ASISWG for the development of ASIS for Ada 95. One of the issues was to decide if ASIS should become an ISO standard or be a de facto standard recommended by the AJPO. Because SIGAda was chartered under ACM and ACM has no standardization mechanism, it was decided to seek ISO standardization. Accordingly a New Work Item Proposal was submitted at the WG9 meeting of 28 April 1995. At this time, the ASIS Rapporteur Group was created and Colket was named as its chair. On 8 December 1998, JTC 1 approved ASIS as an ISO/IEC Standard leading to its publication as ISO/IEC 15291:1999.

The WG9 ASIS RG was created as a mechanism for transposing the standard from the SIGAda ASISWG to WG9. As is usual, the standard carries the unencumbered copyright of ISO. However, it is fair to say that the SIGAda ASISWG was primarily responsible for the technical content of the current standard. By the time the WG9 ASIS RG was created, the SIGAda ASISWG had 5 years of organizational growth with a dedicated set of officers. Steve Blake (AONIX) was the Vice Chair, Clyde Roby (IDA) was the Recorder, Dan Cooper (Boeing) was the Vice Recorder, Bill Thomas (MITRE) was the Chair for Publicity/Meetings, and Gary Barnes (Rational) was the Archivist. Active members in the group included Joyce Tokar, Alfred Strohmeier, Sergey Rybin, Robert Dewar, and Jean-Pierre Rosen. A total of 297 persons have been listed on the SIGAda ASISWG mailing list and approximately 140 of them are regarded as still active in some way.

The membership of the WG9 ASIS RG was not carefully enumerated until 2002, but the omission was of little importance because the three persons ultimately named as members of the WG9 ASIS RG were also members of the SIGAda ASISWG and served to maintain an informal liaison between the two groups. Currie Colket was listed as Chair of the WG9 ASIS RG and Clyde Roby and Steve Blake were listed as co-editors of ISO/IEC 15291. (Last year,

Steve Blake was replaced by Greg Gicca.) All were endorsed to serve as WG9 officers via the Category C liaison relationship between SIGAda and WG9.

Current Situation

As far back as Meeting #41, 5 October 2001, there has been an expressed desire that the WG9 ASIS RG should develop a New Work Item Proposal for the revision of ISO/IEC 15291 and should take other actions to revitalize its efforts. The desire has led to a series of action items and resolutions of an increasingly directive nature:

- Action Item 42-3: (Convener and Chair of ASIS RG): Confer to develop a charter or other terms of reference defining the scope of work of the ASIS RG. (Completed by resolution 43-3.)
- Action Item 42-4: (Convener and ASIS RG Chair): Review ISO procedures for handling defects and develop an appropriate mechanism. Ensure that there are terms of reference for the ASIS RG. (Closed administratively at meeting #45.)
- Action Item 46-1: (Rapporteur of ASIS RG): Draft a new work item proposal for the revision of the ASIS standard, ISO/IEC 15291. (Still open, administratively reassigned to Rapporteur of ARG prior to meeting #49.)
- Action Item 47-3 (ASIS Rapporteur) At next meeting of WG9, report on vitality of ASIS RG and recommend any changes in duties to facilitate the update of ASIS to Ada 2005. (Closed administratively by convener prior to meeting #49.)

This series of resolutions culminates in the current resolution:

• Resolution 48-8: In order to begin work on a revision of the ASIS standard appropriate to Ada 2005, WG9 assigns the scope of ASIS to the Ada RG. The WG9 convener is requested to provide a proposal by the November 2005 meeting of WG9, including scope of work, plan of work, schedule and personnel. WG9 encourages SIGAda to formulate proposals for extending the ASIS specification to include the new language elements of Ada 2005.

Actions taken by Convener

The convener proceeded by conferring with those persons recently responsible for the ASIS standard and those who may soon become responsible. These persons included Pascal Leroy (ARG Rapporteur), Currie Colket (former ASIS RG Rapporteur), John McCormick (Chair of ACM SIGAda), Bill Thomas (nominated liaison to ASIS WG), Clyde Roby (co-editor of ISO/IEC 15291), and Greg Gicca (co-editor of ISO/IEC 15291). The purpose of the communication was to formulate a basis for amiable and effective cooperation between ACM SIGAda and WG9 on the revision of ISO/IEC 15291.

Convener's Recommendations

- 1. (The first recommendation merely restates, for purpose of completeness, a decision already made by WG9.) The scope of ASIS should be reassigned to the Ada RG.
- 2. (The second recommendation restates and expands upon Action Item 46-1, now reassigned to the ARG.) The ARG should draft a New Work Item Proposal for the revision of ISO/IEC 15291. A draft NP should be available for consideration by WG9 at its Meeting #50 in June 2006.
- 3. The scope of the revision should be to add or modify interfaces of the current ASIS specification in order to permit representation of the new language features that have been added to ISO/IEC 8652 since 1995. There should be no intent to perform an overall

- revision of the standard although localized changes might be considered. There should be no intent to rewrite the existing ASIS specifications to exploit the new language features introduced to ISO/IEC 8652.
- 4. The work should be performed on the so-called "normal" schedule for an ISO/IEC standard, roughly three years.
- 5. Drafting of the revised standard should occur within the Ada RG. For this purpose, Greg Gicca (one of the co-editors of ISO/IEC 15291) is requested to attend meetings of the Ada RG.
- 6. The Ada RG should take advantage of any capability of the SIGAda ASISWG to provide broad technical review and comment on the evolving draft. For this purpose, Bill Thomas of SIGAda is requested to attend meetings of the Ada RG to effect liaison with SIGAda ASISWG. Mr. Thomas is requested to represent any technical contributions from SIGAda ASISWG to the revision project and is requested to mobilize the resources of SIGAda ASISWG to accomplish any requests for broad review and comment made by the WG9 ARG.
- 7. Any proposal for revision of ISO/IEC 15291, whether from SIGAda ASISWG or other sources, should be in the form of an "Ada Issue" for ease of processing in the ARG's existing databases.
- 8. The ARG should carefully budget the time and resources devoted to ASIS in consideration of the current high priority effort to complete the "Ada 2005" amendment.