

Business Plan and Convener's Report
ISO/IEC JTC 1/SC 22/WG 23 (Programming Language Vulnerabilities)

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SUBMITTED BY:
Convener, ISO/IEC JTC 1/SC 22/WG 23: Vulnerabilities
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1. MANAGEMENT SUMMARY

1.1. JTC 1/SC 22/WG 23

Guidance to Avoiding Vulnerabilities in Programming Languages through Language Selection and Use

1.2. PROJECT REPORT

1.2.1. COMPLETED PROJECTS

ISO/IEC TR 24772:2010, *Guidance to Avoiding Vulnerabilities in Programming Languages through Language Selection*. This is a Technical Report type III.

1.2.2. PROJECTS UNDERWAY

JTC 1 NP 24772, *Guidance to Avoiding Vulnerabilities in Programming Languages through Language Selection*. This is a revision. Currently in PDTR ballot, see SC 22 N4736.

JTC 1 NP 17960, *Code Signing for Source Code*. This project is to produce an International Standard, and currently is in the development stage.

1.2.3. CANCELLED PROJECTS

None over this time period.

1.2.4. COOPERATION and COMPETITION

Where appropriate, WG 23 has established active liaisons with other SC22 working groups and other standards organizations. A Category C liaison with MISRA-L has been established, but MISRA-L is currently not active.

There is no apparent direct competition with any other current SC22 working group.

2. PERIOD REVIEW

2.1. MARKET REQUIREMENTS

WG 23 feels that it is responding to the needs of the programming language community by inclusion. WG 23 will accept input and liaison by any and all appropriate organizations.

2.2. ACHIEVEMENTS

WG 23 has spent the sixth year refining TR 24772, adding Language specific annexes¹, new vulnerabilities, and resolving ballot comments from a PDTR ballot, see SC 22 N4704.

WG 23 has also started development on IS 17960.

2.3. RESOURCES

WG 23 plans to meet three to four times per year. Eight national bodies are currently participating by attending meetings or by being involved in the technical discussions that take place over the email reflector. The national bodies are: Canada, France, Germany, Italy, Japan, Netherlands, UK, and the USA.

Over the last several years WG 23 has made Web conferencing capabilities available for those that are finding it difficult to travel. WG 23 would like to thank MITRE and ISO for the Web conferencing support.

Liaison with five SC22 Language groups, four groups outside of SC22 has been established, and a Category C liaison has been established with MISRA-L.

Current WG 23 liaisons are:

Group	Name/Type	Person assigned
SC 22/WG4	Cobol	Barry Tauber
SC 22/WG5	Fortran	Dan Nagle
SC 22/WG9	Ada	Erhard Ploedereder
SC 22/ WG14	C	Tom Plum
SC 22/ WG 21	C++	Group (Tom Plum)
SC 7/WG 19	Open Distributed Processing and Modeling Languages	Cesar Gonzalez-Perez
ECMA TC39/TG2	C#	Tom Plum
JSR-282/JSR-302	Real-Time/Safety-Critical Java	Ben Brosgol
Linux Foundation	Linux	Nick Stoughton
MDC	MUMPS	Ed de Moel
MISRA-L	Category C	Clive Pygott

¹ Current language specific annexes are: Ada, C, PHP, Python, Ruby, and SPARK

3. FOCUS NEXT WORK PERIOD

WG 23 will focus on:

- TR 24772, *Guidance to Avoiding Vulnerabilities in Programming Languages through Language Selection.*
 - Work with Language working groups to develop more Language independent Annexes.
- IS 17960, *Code Signing for Source Code.*
 - Work on development of this document.

3.1. DELIVERABLES

None.

3.2. STRATEGIES

WG 23 believes that routine handling will suffice to complete the progress desired.

3.3. RISKS

No problems are anticipated.

3.4. OPPORTUNITIES

None.

3.5. WORK PROGRAM PRIORITIES

- WG 23 will concentrate the second revision of TR 24772.
- WG 23 will continue to work on the development of IS 17960.

4. OTHER ITEMS

4.1. POSSIBLE ACTION REQUESTS AT FORTHCOMING PLENARY

WG 23 would like a resolution that cancels the Category-C liaison with MISRA-L. MISRA-L is currently not active; therefore WG 23 sees no value in keeping this liaison. If MISRA-L does become active sometime in the future WG 23 will revisit this liaison.

4.2. PROJECT EDITOR

The following individuals have been appointed project editors and backup project editors:

- JTC 1 NP 24772, *Guidance to Avoiding Vulnerabilities in Programming Languages through Language Selection.*
John Benito (Project Editor)
- JTC 1 NP 17960, *Code Signing for Source Code.*
Larry Wagoner (Project Editor)

4.3. ELECTRONIC DOCUMENT DISTRIBUTION

WG 23 has conducted some of its detailed technical discussion using email reflector maintained by MITRE Corp.

WG 23 also has an ftp and Web site provided at <http://grouper.ieee.org/groups/plv/> and maintained by James Moore.

WG 23 is providing all the appropriate committee documents on the [Committee Web site](#), eliminating the need for paper mailings.

4.4. RECENT MEETINGS

#1	26-27 Jun 2006	District of Columbia, US	ANSI/INCITS and Blue Pilot
#2	14-15 Sep 2006	London, UK	BSI
#3	11-13 Dec 2006	District of Columbia, US	ANSI/INCITS and Blue Pilot
#4	30-2 Apr/May 2007	Padova, IT	NNI
#5	18-20 July 2007	Ottawa, Ontario, CA	SCC
#6	14-15 Oct 2007	Kona, HI, US	ANSI/INCITS and Plum Hall
#7	10-10 Dec 2007	Pittsburg, PA, US	ANSI/INCITS and CERT
#8	09-11 Apr 2008	Amsterdam, NL	NEN, ACE
#9	29-01 Sep/Oct 2008	Stuttgart, DE	Universität Stuttgart
#10	13-15 April 2009	San Diego, CA, US	ANSI/INCITS and MITRE Corp
#11	13-15 July 2009	Ottawa, Ontario, CA	SCC
#12	01-03 Nov 2009	Santa Cruz, CA, US	ANSI/INCITS and Blue Pilot
#13	26-28 Apr 2010	Padova, IT	UNI
#14	28-30 Jul 2010	Kona, HI, US	ANSI/INCITS and Plum Hall
#15	15-17 Sep 2010	Ottawa, Ontario, CA	SCC
#16	14-16 Dec 2010	San Diego, CA, US	ANSI/INCITS and MITRE Corp
#17	23-25 Mar 2011	Madrid, ES	AENOR and Telefónica I+D
#18	18-20 Jun 2011	Edinburgh, UK	The Ada Connection
#19	05-07 Oct 2011	Teleconference	ISO
#20	14-16 Dec 2011	Washington, DC, US	INCITS and Jim Moore
#21	28-30 Mar 2012	Ottawa, Ontario, CA	SCC
#22	20-22 Jun 2012	Stuttgart, DE	Universität Stuttgart

4.5. FUTURE MEETINGS

#23	12-14 Sep 2012	Geneva, CH	IEC
#24	12-14 Dec 2012	Teleconference	ISO
#25	13-15 Mar 2013	New York, NY, USA	ANSI
#26	08-10 Jun 2013	Berlin, DE	The Ada Connection
#27	Sep 2013	Tokyo, Japan	ITSCJ
#28	Dec 2013	Teleconference	<i>Tentative</i>