

ISO WG14 / MISRA C Liaison Report

Venue: Delft, The Netherlands

Meeting Date: Tue 23 April – Fri 26 April 2013

MISRA C:2012 Publication

The imminent publication of MISRA C:2012 was announced on 26 February 2013 at Embedded World, Nürnberg. The PDF version of the document was duly published, as announced, on 18 March 2013 and is available for purchase from http://www.misra.org.uk/shop/buy_now.php. The printed version can also be ordered from the same site but will not be available until week commencing 8 April.

The MISRA Bulletin Board

MISRA operates a bulletin board in order to encourage discussion relating to its publications and to distribute information to support those publications.

A new section has been created for discussions on the MISRA C:2012 guidelines under the MISRA C Forum at <http://www.misra.org.uk/forum/viewforum.php?f=164>. Guest users can browse the discussions but (free) registration is required in order to be able to post comments.

MISRA C:2012 addenda will be published via the bulletin board's MISRA C Resources section. The first such addendum, providing a mapping between MISRA C:2004 and MISRA C:2012 guidelines, is already available. Others are planned for the coming months.

Future Work

The MISRA C Working Group has two projects planned for the remainder of 2013.

MISRA C:2012 Exemplar Suite

Although most users of MISRA C will use software tools to assist in checking their code for compliance, MISRA does not provide validation services or validation suites. However, it did produce an exemplar suite for MISRA C:2004 which provided, for most rules, several examples of compliant code and several examples of non-compliant code.

The code examples in the MISRA C:2012 document have been substantially expanded when compared with those in MISRA C:2004. However, for reasons of brevity, these examples are rarely self-contained and therefore cannot be compiled or analyzed without some additional effort.

The first step towards producing an exemplar suite will be to extract the examples from MISRA C:2012 and add sufficient context around them to make them self-contained. We expect to complete this work during the current calendar year.

The next step will be to augment the examples as necessary to develop a more complete exemplar suite. If time permits, we will start on this work during the current calendar year.

MISRA C ADC

MISRA C ADC is a new project intended to support use of MISRA C:2004. It is being developed by the MISRA C Working Group with a significant contribution from the members of the Japan Automobile Manufacturers Association.

MISRA C is intended to be used within the framework of a disciplined software development process. The MISRA C:2004 guidelines (Section 4.3.2) permit controlled deviation from the rules when software safety and/or quality requirements cannot otherwise be satisfied. In order to justify a deviation, it is necessary to supply supporting information such as:

- An appropriate reason for the need to raise a deviation;
- A description of the extent to which a relaxation of the rule is being introduced;
- An argument to support the reasons for the deviation;
- Measures which must be observed to ensure safety and/or quality.

The first version of MISRA C ADC, released via the Bulletin Board on 6 March 2013, is a technical note that describes the common reasons for raising a deviation. A future revision of this document will describe the application of these reasons to specific MISRA C guidelines. It is anticipated that this future revision of the document will be completed during 2013.