

<p><b>EUROPEAN WORKSHOP ON INDUSTRIAL COMPUTER SYSTEMS</b> <b>TECHNICAL COMMITTEE 7</b> Reliability, Safety, Security</p>		<p>WP: 7900 – 2.1 Date: 2008-09-01 Status: Released Classification: Public</p>
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## EWICS TC 7

### Briefing paper

#### 1. Introduction

*The scope of EWICS TC 7 is to promote the economical and efficient realisation of programmable industrial systems through education, information exchange, and the elaboration of standards and guidelines.*

The organisation EWICS TC7, founded in 1974, is active in the field of programmable electronic systems safety, reliability, and security. It has members from many European and some non-European countries, covering various fields of interests and affiliations.

The aim of EWICS is to assess the state of the art methods and tools for critical system development and maintenance in industrial environments, to develop standards and guidelines for the development and assessment of safe and secure systems, and to disseminate information and knowledge in this field. There is also a strong current of technical exchange between members.

#### 2. Method of Work

EWICS TC7 meets three to four times a year for about three days. The Technical Committee is composed of Subgroups which are set up to deal with particular topics, and which establish the scope of their work, with schedules, milestones and evaluation of the resources necessary to complete the task. The current subgroups deal with:

- Maintenance of Diverse Systems (MDS).
- Medical Devices (MeD).
- Security of Safety-Critical Computer Systems (Sec).
- Education and Training in Dependable Systems Engineering (E&T).
- Object-oriented Software in Safety Systems (OOSS).

Normally during the year, one or more subgroups hold one-day workshops prior to the EWICS TC7 meeting. Non-members are welcome to attend these workshops, which are advertised on the website together with information from previous workshops.

#### 3. Membership

EWICS TC7 membership represents a broad coverage of industry, manufacturers, and users, as well as universities and research centres. Industry (manufacturers, consultants), users and research (universities, research centres, licensing and standardisation authorities, government) are about equally represented. This distribution is well balanced; no single group can impose its views, and a consensus has to be found between sometimes opposing interests.

EWICS TC7 is supported by the companies and organisations of its members. EWICS TC7 is an open organisation. The only condition for membership is one of participation. Active, passive and liaison membership status is available. Visitors are welcome to attend meetings prior to becoming members.

## 4. Publications

EWICS TC7 has produced several Position Papers. The first ones have been published in three books by Elsevier Science Publishers (vol. 2 and 3 now available from Springer by Printing on Demand):

- "Dependability of Critical Computer Systems - 1 and 2", edited by F. Redmill, ISBN 1 85166-203-0 and ISBN 1 85166-381-9.
- "Dependability of Critical Computer Systems – 3, Techniques Directory", edited by P. Bishop, ISBN 1 85166-544-7.

Some of the more recent papers (Guidelines for the Use of PLCs in Safety Related Applications; Achieving Safety in Distributed Systems; Project Management of the Development of Critical Computer Systems) are also available from ISA ([www.isa.org](http://www.isa.org)). In addition, Guidelines on Formal Methods and on PLC as well as Security Briefing Papers are available on the EWICS website.

EWICS TC7 has undertaken the Roadmap Project for the European Joint Research Council, which studied the standardisation and regulatory environment for the application of worldwide standards relevant to the use of programmable electronic systems in safety related and security applications. In 2003, a Roadmap study on the applicability of ISO/IEC 17799 and the German Baseline Protection Manual to the needs of safety critical systems was completed. The results from the Roadmap studies are also on the EWICS website.

The work of EWICS TC 7 has influenced the development of several national and international standards, e.g. IEC 880, DIN V VDE 0801 and IEC 61508.

## 5. Information Dissemination

EWICS TC7 organises workshops and conferences which are now well known. Its annual conference, SAFECOMP, was first held in Stuttgart (Germany, 1979), then held successively in West Lafayette (USA, 1982), Cambridge (UK, 1983), Como (Italy, 1985), Sarlat (France, 1986), Manchester (UK, 1987), Fulda (Germany, 1988), Vienna (Austria, 1989), Gatwick (UK, 1990), Trondheim (Norway, 1991), Zürich (Switzerland, 1992), Poznan (Poland, 1993), Anaheim (USA, 1994), Belgirate (Italy, 1995), Vienna (Austria, 1996), York (UK, 1997), Heidelberg (Germany, 1998), Toulouse (France, 1999), Rotterdam (The Netherlands, 2000), Budapest (Hungary, 2001), Catania (Italy, 2002), Edinburgh (UK, 2003), Potsdam (Germany, 2004), Fredrikstad (Norway, 2005), Gdansk (Poland, 2006), Nuremberg (Germany, 2007), and Newcastle (UK, 2008). SAFECOMP 2009 will be held in Hamburg (Germany, 14<sup>th</sup> – 17<sup>th</sup> September). Further information can be found on [www.safecomp.org](http://www.safecomp.org).

EWICS TC7 has established links with a number of International, European and national Standardisation Committees, according to the goals of the Commission of the European Communities. In addition informal liaison is maintained through the participation of TC7 members or the distribution of documents. EWICS TC7 has also established liaisons with the European Safety & Reliability Association (ESRA), the European Network of Reliability and Safety of Software-Intensive Systems (ENCRESS) and various National Computer Societies. EWICS has an official liaison with ISA, ISO and IEC SC 65C/WG10 and WG 13.

## 6. Contact

For further information on EWICS TC7, please see the website <http://www.ewics.org/>. To obtain more information (e.g. how to become a member), please contact one of the present Chairpersons:

- **Udo Voges**, Forschungszentrum Karlsruhe, Postfach 3640, 76021 Karlsruhe, GERMANY  
tel: ++49 7247 82 5725, fax: ++49 7247 82 5786, e-mail: [voges@iai.fzk.de](mailto:voges@iai.fzk.de)

- **Peter Daniel**, SELEX Communications Ltd, Liverpool Digital, Baird House, Edge Lane, Fairfield, Liverpool L7 9NJ, UK, tel: ++44 151 282 5200, fax: ++44 151 259 6796,  
e-mail: [pete.daniel@selex-comms.com](mailto:pete.daniel@selex-comms.com)

- **Francesca Saglietti**, Dept. of Software Engineering, University of Erlangen-Nuremberg, Martensstrasse 3, 91058 Erlangen, GERMANY, tel: ++49 9131 8527870, fax: ++49 9131 8528746,  
e-mail: [saglietti@informatik.uni-erlangen.de](mailto:saglietti@informatik.uni-erlangen.de)