



**International Symposium  
Information Security in Safety Related Systems  
January 2002, Boppard**

# **EWICS TC7**

**Peter Daniel**

**EWICS TC7 Vice-Chair**

**EWICS TC7 Security Subgroup Chair**

# **Aims and Method of Work**

## **EUROPEAN WORKSHOP ON INDUSTRIAL COMPUTER SYSTEMS**

***"To promote the economical and efficient realisation of programmable industrial systems through education, information exchange, and the elaboration of standards and guidelines."***

# Membership and Liaison

- **Set up in 1974**
- **Meets four times a year**
- **Supported by member companies, "free"**
- **Cross sector e.g. chemical, nuclear, transport, security**
- **Vendors, Users, Regulators, Researchers, Assessors**
- **Liaison**
  - **Standardisation groups (ISO/IEC, CENELEC)**
  - **ENCRESS, OLOS, ECMA**
  - **Instrument Society of America (ISA)**

# **Current and Recent Subgroups**

- Project Management**
- Safety Aspects of Distributed Systems**
- The Industrial Applications of Formal Methods**
- Programmable Logic Controllers**
- Maintenance of Diverse Systems**
- Security of Safety Related Systems**
- Safety of Medical devices**
- Safety Aspects in Railways**
- Risk Analysis**
- Curriculum**
- IEC 61508/61511**

# **Publications**

- Numerous position papers and three books published by Elsevier Science Publishers:**
- "Dependability of Critical Computer Systems - 1 and 2" edited by F.Redmill, ISBN 1 85166-203-0 and ISBN 1 85166-389-1,**
- "Dependability of Critical Computer Systems - 3, Techniques Directory" edited by P.Bishop, ISBN 1 85166-544-7**
- Guidelines & Briefing Papers on ISA and EWICS web sites**

# **SAFECOMP**

- International event for over 20 years**
- The 21st International Conference on Computer Safety, Reliability and Security in Catania, Italy Sept. 10th to 13th, 2002**
- Safecomp 2003 Edinburgh, UK**
- Proceeding published by Springer, now in LNCS series**
- Further Information:<http://www.safecomp.org>**

# Future Activities

- **Participation welcome**
- **Emphasis on addressing needs of standards users**
- **Experience, safety analysis, use of PCs, human and organisational issues, safety & security**
- **Emphasis on more rapid delivery of information**
- **Meetings:**
  - **23rd to 25th January**                      **Boppard**
  - **17th to 19th April**                              **Edinburgh**
  - **9th to 10th September**                      **Catania**
- **5th PES in Safety Related Systems Symposium**
  - **7th - 8th May**                                      **Köln**
- **Safecomp 2002 (10th-13th September, Catania)**

# Further Information

- **At this Symposium**
- **Via the EWICS web site [www.ewics.org](http://www.ewics.org)**
- **EWICS TC7 Briefing Paper**
- **Via the Safecomp web site [www.safecomp.org](http://www.safecomp.org)**



# **EWICS TC7 Systems Security Subgroup**

- **Subgroup set-up August 1988**
- **Security of Safety Critical Computer Systems**
- **Interfaces with other EWICS TC7 Subgroups**
- **Liaison**
- **Workshops & Seminars**
- **Case Studies**
- **Briefing Papers**

# Problem Statement

- **Levels of European Awareness**
- **Emerging Legislation & Standards**
  - Data Protection Act
  - Evaluation (e.g. CC, ITSEC)
  - Management (e.g. ISO 17799)
- **National Infrastructure Protection Programmes**
- **Industrial Computer Systems**
  - Security Awareness
  - Range of Systems (PC to Process Control)
- **Security is not a bolt on item**
- **Safety & Security need to be Mutually Supportive**

# What is Needed

- **Guidance on:**
  - Application of emerging security standards
  - Interpretation of Security Legislation
  - Security Aspects of the Total System Lifecycle
  - Generic Overview of Security Requirements vs Standards
- **Biased to Safety Critical Systems**
- **Guidance for suppliers,users,regulators & purchasers**

# Progress To Date

- **Membership**

- Over 30 members from 10 countries
- Industry, Government, Research

- **Briefing Papers**

- Information Collection : countries, standards, companies, security agencies
- Information Dissemination & Comments
- Guidance for designers, developers, regulators, users, suppliers

- **Liaison (e.g. ITAEGV, ECMA, CEN/CENELEC)**

- **Workshops & Conferences (e.g. Safecomp)**

- **Roadmap Project**

- Standardisation and regulation for safety related computer systems

# Current Activities

- **Roadmap Follow-on**

- Study of the application of ISO/IEC 17799 and the German IT Baseline Protection Manual to the Needs of Safety Critical Systems

- **Briefing Papers in preparation**

- Information Security Management
- Information Warfare
- Digital Signatures
- Security Activities in the Safety Lifecycle
- Remote Access

- **Case Studies**

- Power Subsystems

# Further Information

- **Security Subgroup Briefing Paper**
- **EWICS TC7 Web Site ([www.ewics.org](http://www.ewics.org))**
- **Peter Daniel (Chair)**  
**[pete.daniel@marconi.com](mailto:pete.daniel@marconi.com)**
- **Stefan Wittmann (Vice-Chair)**  
**[stefan.wittmann@bsi.bund.de](mailto:stefan.wittmann@bsi.bund.de)**

**Subgroup Meeting : Tomorrow 9:00 - 12:00**

# Security of Safety Critical Systems Workshops

- **August 1993**                      **Lucerne, Switzerland**
- **November 1997**                **München, Germany**
- **June 1999**                        **Cracow, Poland**
- **January 2002**                    **Boppard, Germany**

# Information Security in Safety Related Systems

- 10:00 INFORMATION SECURITY MANAGEMENT SESSION
  - ISO/IEC 17799 (BS 7799)
  - BSI Baseline Security Manual : How to measure IT-Security
- 11:30 The E-COFC Approach of ECMA to IT-Security
- 12:15 Lunch
- 13:15 INFORMATION WARFARE SESSION
  - Information Operation, a Threat to ICT-based Safety Systems
  - Critical Infrastructures - A Decade's new Challenge
- 14:45 Refreshments
- 15:00 CASE STUDY SESSION
  - Health Information System Security
  - The CORAS Framework
- 16:30 GENERAL DISCUSSION SESSION
- 17:15 End of Symposium