



University of Malta

Workshop: Demystifying IEEE 802 Standards

The IEEE standards Association (IEEE-SA) is a major contributor to IEEE, the world's largest technical professional society. The IEEE-SA promotes the engineering process by creating, developing, integrating, sharing, and applying knowledge about electro- and information technologies and sciences.

For over a century, the cornerstone of the IEEE-SA is its established standards development program - a program that offers balance, openness, due process, and consensus. Each year, the IEEE-SA conducts over 200 standards ballots, a process by which proposed standards are voted upon for technical reliability and soundness. In addition to producing the prominent IEEE 802® Standards for Local and Metropolitan Area Network Wireless, IEEE-SA also develops the standards for: Intelligent highway systems and vehicular technology Distributed generation renewable energy Voting Equipment Electronic Data Interchange Rechargeable Batteries for PCs Motor Vehicle Event Data Recorder Public Key Infrastructure Certificate Issuing and Management Components Architecture for Encrypted Shared Media Organic Field Effect Technology

The IEEE Standards Education Committee is a joint committee of the IEEE Standards Association and the IEEE Educational Activities Board. The IEEE Standards Education website <http://www.ieee.org/web/education/standards/index.html> serves as the focal point for the delivery of all relevant information on education about standards.

This workshop will provide a detailed overview of IEEE 802 Standards and cover each of the Working Groups developing standards in both the wired and wireless areas with an emphasis on wireless.

The IEEE 802 Working Groups are:

- IEEE 802.1 Higher Layer LAN Protocols Working Group
- IEEE 802.3 Ethernet Working Group
- IEEE 802.11 Wireless LAN Working Group
- IEEE 802.15 Wireless Personal Area Network (WPAN) Working Group
- IEEE 802.16 Broadband Wireless Access Working Group
- IEEE 802.17 Resilient Packet Ring Working Group
- IEEE 802.18 Radio Regulatory TAG
- IEEE 802.19 Coexistence TAG
- IEEE 802.20 Mobile Broadband Wireless Access (MBWA) Working Group
- IEEE 802.21 Media Independent Handover Services Working Group
- IEEE 802.22 Wireless Regional Area Networks

Included will be an overview and scope of each technical working group and how they relate or differ from each other. The workshop will also address the subject of technical standards in general, including an overview of IEEE and IEEE Standards Association as well as a short overview of the ITU which IEEE 802 standards have a close relationship with. This will be followed by an overview of the IEEE-SA Standards Process as well as Standards Education in Technology Programs.

The workshop will be divided into three parts:

Segment 1 (10:30 - 12:10) – IEEE 802 overview, Bridging, Wireline and Wireless (part 1)

- Welcome
- IEEE 802 Overview
- IEEE 802.1 Higher Layer LAN Protocols Working Group
- IEEE 802.3 Ethernet >Working Group
- IEEE 802.17 Resilient Packet Ring Working Group
- IEEE 802.11 Wireless LAN Working Group
- IEEE 802.15 Wireless Personal Area Network (WPAN) Working Group

Segment 2 (14:00 - 15:40) – IEEE 802 Wireless (part 2)

- IEEE 802.16 Broadband Wireless Access Working Group
- IEEE 802.18 Radio Regulatory TAG
- IEEE 802.19 Coexistence TAG
- IEEE 802.20 Mobile Broadband
- Wireless Access (MBWA) Working Group
- IEEE 802.21 Media Independent Handover Services Working Group
- IEEE 802.22 Wireless Regional Area Networks

Segment 3 (16:20 - 18:20) - IEEE-SA Overview, process, ITU

- Overview of IEEE and IEEE Standards Association Overview of ITU-T Standards Education in Technology Programs The IEEE-SA Standards Process IEEE-SA Patent policy.

The Workshop will be conducted by Dr. Adrian Stephens, Dr Bilel Jamoussi and David Law.

This event is being sponsored by:



Following are the registration fees:

IEEE Members	€100
Employees of Sponsors and ISACA Members	€125
Non-IEEE Members / General Public	€150

Registration includes two coffee breaks and lunch.

Cheques / Payments are to be made payable to:

MELECON 2010

Cheques / Payments are to be sent to:

*Dr. Ivan Grech
MELECON 2010 (IEEE Conference)
Department of Micro and Nano-Electronics
Faculty of ICT
University of Malta
Msida, MSD2080.*

Biographies



Dr. Adrian Stephens

Adrian Stephens is a Principal Engineer in Intel's Wireless Standards and Technology group (part of the Mobile Wireless Group). His focus is on developing next generation IEEE 802.11 standards. He is an 802.11 vice chair and is the 802.11REVmb technical editor. He coordinated Intel's MAC proposal for IEEE 802.11n and chaired both the TGnSync and Joint Proposal MAC teams.

He has been chair of various IEEE 802.11 TGn committees. Adrian has over 20 years of product development and research experience working for industry and government. He was previously at Mobilian Corporation, where he was a Senior Director of Business Development, specialising in Wireless LAN development and 802.11 standards work as well as editor of the BT SIG's coexistence specification.

Before that, he was at Symbionics Ltd (which became Cadence Design Services, then Tality, now defunct) where he was head of software technology for Wireless and Multimedia design services. There he was responsible for developing the highly successful 802.11 MAC software licensed product. He was product architect for Bluetooth (tm) and Hiperlan/1 developments, and technical editor of the HomeRF (tm) SWAP-CA standard for two years – taking it to successful release. Adrian received a B.A. (1st Hons) in natural sciences (1974) and a Ph.D. in experimental physics (1981) both from Cambridge University, UK. He is a member of the IEEE.



Dr Bilel Jamoussi

Dr. Bilel Jamoussi is Chief of the Study Groups Department at the ITU Telecommunication Standardization Bureau in Geneva where he is responsible for the organization and management of the ITU-T Study Groups, Global Standardization Initiatives, Joint Coordination Activities, Focus Groups, and the secretariat comprising Counsellors and Assistants. For the past 15 years he has been with Nortel where he has held several leadership roles including Strategic Standards, Advanced Technology, Software Development for routing/switching platforms, and Data Network Engineering of major international customer networks.

As Director of the Strategic Standards organization within the office of the Chief Technical Officer (CTO), Bilel provided strategic technology direction and leadership for Nortel's involvement in more than 90 standards development organizations, forums and consortia. He led Nortel's Green ICT standards game plan and has been a member of the Scientific Committee of the Green Telco World Congress 2009. An experienced standards professional, Bilel was an elected member of the IEEE Stan-

dards Association (IEEE-SA) Board of Governors and the IEEE-SA Corporate Advisory Group (CAG).

He served on the IEEE Standards Education Committee, the IEEE-SA Nominations and Appointments Committee, the IEEE-SA BOG International ad hoc, and the Technical Liaison from IEEE-SA to ITU-T and ITU-D. Bilel contributes to the innovation and advancement of technology in the ICT Field. He has 22 granted and filed US patents in diverse areas: packet, optical, wireless, and quality of service.



David Law

David Law is a Consultant Engineer at 3Com where has worked on the specification and development of Ethernet products since 1989. Throughout that time he has been a member of the IEEE 802.3 Ethernet Working Group where he has held a number of leadership positions.

He served as the Vice-Chair of IEEE 802.3 from 1996 to 2008 and in 2008 was elected to Chair of IEEE 802.3. In 2000 he received the IEEE-SA Standards Medallion for 'leadership and technical contributions to Ethernet networking standards' and 2009 he received the IEEE Standards Association Standards Board Distinguished Service award 'For long term – service to improve the operation and integrity of IEEE-SA governance'. In 2004 he was appointed to the IEEE-SA Standards Board review committee (RevCom) and in 2005 was also appointed to the IEEE-SA Standards Board and the IEEE -SA Standards Board patent committee (PatCom).

In 2007 he served as Chair of PatCom and since 2008 has served as the Chair of RevCom. David has a BEng (hons) in Electrical and Electronic Engineering from Strathclyde University, Glasgow, Scotland.