



# Workshop on Environmental Impact Assessment and Energy Efficiency



## Biographies

7 – 8 October 2013, Athens (GR)

<http://www.etsi.org/EEWORKSHOP>



**Beniamino GORINI, Alcatel-Lucent, ETSI TC EE Chairman,  
Member of the Programme Committee (PC)**

Beniamino Gorini has achieved the Degree in Electronic Engineer in 1985 at the University "Politecnico" of Milano, Italy. Since 1987 he has been working in telecommunication industries starting in Telettra, an Italian provider of telecom equipment, that became later part of the Alcatel group and now Alcatel-Lucent group that is a worldwide supplier of telecom products.

He started his working experience in Research & Development department as design engineer of power supply units and later moved to Quality Department where he went through positions of EMC compliance manager, Environmental compliance manager, Product quality compliance manager and standardization coordinator. He is now in charge of the Qualification laboratories for EMC, safety and environmental topics in Alcatel-Lucent Italy and has also the responsibility for the Standardization and Environmental matters in the Optics Business Division. He is involved in the standardization bodies since 1989, with main focus on EMC, safety, environmental, Electromagnetic field radiation and reliability. He had various roles in International Standardization bodies and is currently chairman of the ETSI TC "Environmental Engineering", chairman of IEC/CISPR SC-H "Emission limits", Co-chairman of the CEN/CENELEC/ETSI joint WG on Mandate M/462 "Energy efficiency in ITC", Vice-chairman of ETSI ERM-EMC WG, convener of IEC/CISPR SC-A/WG2 "EMC test methods".



**Marco AJMONE MARSAN, Politecnico di Torino**

Marco Ajmone Marsan is Professor of Telecommunications at the Politecnico di Torino in Italy, and Chief Researcher at the Institute IMDEA Networks in Spain. He was the Vice-Rector for Research, Innovation and Technology Transfer at the Politecnico di Torino from 2005 to 2009. From 2002 to 2007 he was the Director of the Institute for Electronics, Information and Telecommunications Engineering of the National Research Council. He was the chair of the Italian Group of Telecommunications Professors, and the Italian Delegate in the ERC Committee of the 7th Framework Programme of the EU. His main present research interest is in energy-efficient networking, and in the applications of ICT for energy efficiency.



**Anders ANDRAE, Huawei,  
Member of the Programme Committee (PC)**

Dr. Anders S.G. Andrae received the M.Sc. degree in chemical engineering from the Royal Institute of Technology, Stockholm, Sweden, in 1997, and the Ph.D. degree in electronics production from Chalmers University of Technology, Gothenburg, Sweden, in 2005. He worked for Ericsson with LCA between 1997 and 2001. Between 2006 and 2008 he carried out post-doctoral studies at the

National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan. His specialty is the application of sustainability assessment methodologies to ICT solutions from cradle-to-grave. Between 2009 and 2011 Dr. Andrae was the Editor of European Telecommunications Standards Institute's (ETSI) first LCA standard for ICT and continues since 2012 on its update. He has previously published three books, three theses, 20 conference papers, and 15 peer-reviewed journal papers. Since 2008 Dr. Andrae has been with Huawei Technologies in Sweden as Senior Expert of Energy Efficiency/Emission Reduction/Ecodesign/Sustainability/LCA.



**Shen ANPING, Academy of telecommunication Research of Ministry of Industry and Information Technology**

Shen is an engineer working for Academy of Telecommunication Research of Ministry of Industry and Information Technology of the People's Republic of China.



**Pernilla BERGMARK, Ericsson,  
Member of the Programme Committee (PC)**

Pernilla Bergmark is a Master of Science in Electrical Engineering from the Royal Institute of technology and graduated 1991. She started in telecom sector and joined Ericsson in 1994 and worked for several years with system management in various positions, focusing on radio performance and hardware architecture. Over the years she has specialized more and more on energy efficiency and sustainability, particularly focusing on life cycle assessments, and since 2011

she holds a master researcher position in sustainability assessment at Ericsson Research. Pernilla Bergmark has been an active member of many of the recent standardization initiatives related to life cycle assessments and organizational inventory, including ETSI EE, ITU-T and GHGP ICT supplement. In ITU-T she is currently an editor of the environmental assessment methodology for cities and an associate rapporteur of ITU-T SG5 Q18.



**Claudio BIANCO, Telecom Italia Lab,  
Member of the Programme Committee (PC)**

Claudio Bianco received a Dr. Ing. degree in Electrical Engineering from Politecnico di Torino (Italy) in 1995. He joined Telecom Italia Lab (formerly CSELT), that is the Telecom Italia Group's Company for study, research, experimentation and qualification in the field of telecommunications and information technology. The fields of his research and engineering activities are addressed toward energy efficiency, power and air-conditioning system, energy storage, equipment power consumption and deployment of new ultra-broadband access networks. He is involved in ETSI

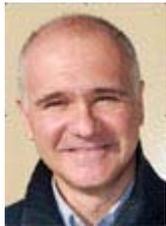
Environmental Engineering standardization group (chairing the working Group EE1).



**Mauro BOLDI, Telecom Italia,  
Member of the Programme Committee (PC)**

Mauro Boldi graduated at Politecnico di Torino, Italy, in 1998. He joined Csel, Research Center of Telecom Italia, in the same year, where he has been involved in radio access network activities since the beginning, with activities on antenna and propagation, radio over fiber solutions, collaborative networks.

Currently System Engineer in Telecom Italia Lab with expertise on radio access network and related technologies. Leader of a Task in European Celtic Project "Winner+" dedicated to Coordinated Antenna Systems. Active participation in European Project FP7 Earth, dedicated to wireless network Energy Efficiency. Telecom Italia delegate in ETSI EEPs Work Item on Energy Efficiency in radio Base Stations. In the same ETSI group, Rapporteur of the Work Item dedicated to access network energy efficiency. Theoretical background on Propagation issues and simulations and author of several patents on radio access network innovative solutions. Author of several publications, among which the chapter dedicated to CoMP in the Wiley book on "IMT advanced and beyond".



**Raffaele BOLLA, University of Genoa,  
Member of the Programme Committee (PC)**

He is responsible of the International relationships for the Polytechnic School of Genoa University. He has been and is Principal Investigator/responsible of many important research projects and contracts in the telecommunication field. He is participating to standardization activities of many different bodies especially for what concerns the general theme of ICT energy efficiency and environmental sustainability. In ETSI he is acting as rapporteur in the Work Item related to the Green Abstraction Layer standardization. He has co-authored over 200 scientific publications in international journals, books and conference proceedings. His current research interests are mainly:

i) mechanisms and techniques for energy consumption reduction in IP networks, ii) modelling and design of advance mechanisms for network programmability (Software define Networks) and virtualization, iii) advance platform for Future Internet nodes (Distribute and Flexible Software Router), iv) networking architectures, protocols and techniques for the smart energy grid support.

Raffaele Bolla has been Associate Professor at University of Genoa (DITEM Department) where he is leading the Telecommunication Networks and Telematics Laboratory (TNT LAB, [www.tnt-lab.unige.it](http://www.tnt-lab.unige.it)).



**Dave BOSSMIN, Ericsson Canada**

Dave Bossmine is an electrical engineer focused on energy efficiency standardization for mobile networks. He currently works for Ericsson and conducts his research activities at their location in Ottawa, Canada. In addition to being a contributing member of the ATIS STEP-TEE standards committee, he is also the chair of the ATIS Wireless Working Group (WWG), a subcommittee dedicated to advancing energy efficiency standards for wireless network equipment in North America.



**Daniel DIANAT, Ericsson,  
Member of the Programme Committee (PC)**

Daniel ([daniel.dianat@ericsson.com](mailto:daniel.dianat@ericsson.com)) has been working with Ericsson since 1999 with radio related tasks. Daniel started his career within energy efficiency from 2006 and has been designer of BTS Power Saving feature and co-designer of Time Slot Power Saving feature and PSU power saving feature in GSM. Daniel joined the standardization group within Ericsson at 2009 and since then he has been working with EE standardization within ETSI and also ITU-T SG5. Daniel Dianat is working now as team leader for energy efficiency standardization group at DURA System & Technology within Ericsson.



**Keith DICKERSON, Climate Associates Ltd**

Keith Dickerson has played an active role in the ICT industry for over 30 years. He is currently a Director of Climate Associates Ltd which provides advice to major companies on Energy Efficiency and Climate Change Mitigation issues, especially where international standards are an important consideration. Until the end of 2009, Keith was Head of Standards of BT, providing direction to all BT's international standards activities and working closely with senior management to identify the standards required to support BT programmes such as the 21st Century Network.

Keith has been a member of the ETSI Board for over 10 years. He leads the ETSI Green Agenda and the Cross-Sector Strategy work, identifying opportunities for ETSI to benefit from its diverse membership mix. He is also a rapporteur for work items on energy efficiency and mitigation in the ETSI CLOUD and SES Technical Committees and has made numerous contributions to standards.

Keith is also a Vice Chair of ITU-T Study Group 5 "Environment & Climate Change" and until the end of 2012, chaired their working party on ICT & Climate Change. This is developing global standards covering topics such as carbon reduction, energy efficiency and e-waste, and receives a wide range of inputs from ETSI.



**Vassilis FOTEINOS, University of Piraeus**

Vassilis Foteinos graduated from the Department of Informatics & Telecommunications of the National & Kapodistrian University of Athens in 2008 and received his MSc diploma from the Department of Digital Systems of the University of Piraeus in 2011. Currently he is working as a research engineer at the University of Piraeus, Telecommunication Networks and integrated Services (TNS) laboratory, where he is also pursuing a PhD in autonomic management of Future Networks.



**PAOLO GEMMA, HUAWEI ,  
Member of the Programme Committee (PC)**

Paolo Gemma - senior Specialist for Europe and representative of Huawei on issues related to energy saving and environmental sustainability of companies worldwide - has done its input in Huawei in April 2008.

Before he was in Nokia Siemens Networks, has been responsible for laboratories Italian for EMC (electromagnetic compatibility) and electrical safety areas. Previously he held for 18 years a role like within the Siemens Communications Division.

Paolo Gemma, has an active role in international standardization activities. Since 1993 has engaged in ETSI (European Telecommunication Standard Institute) and participates in the development of telecommunications EMC standards.

Paolo Gemma has followed the work of the EE (Environmental Engineering) of ETSI Technical Committee since 1998. In 2002, has been appointed Secretary of the Committee ETSI TC EE and 2009 holds the position of Chairman of the EEPs EE (eco Environmental product standard) working group. In 1997 he did entering ITU-T in the study group 5 with the role of Rapporteur until now It is, actually he is acting as chairman of WP3/5 ICT and Climate Change ". Paolo Gemma is a graduate in electrical engineering from the University of Genoa in 1987.



**Vasiliki GIANNIKOPOULOU, GRNET**

Vasiliki Giannikopoulou received the Diploma degree in Electrical Engineering from the Technological Educational Institute of Patras in 2001 and is currently attending the School of Electrical and Computer Engineering of the National Technical University of Athens. She is certified as an Auditor/Lead Auditor in ISO 9000:2000 series Standards. Within GRNET, she is responsible for Quality Control while she works as a project manager as well. She has actively participated in many European and Greek funded research projects, focusing on e-learning technologies, energy efficient techniques in the ICT sector and support activities for SMEs and educational communities. She has co-authored several papers in international conference proceedings.



**Gianluca GRIFFA, Telecom Italia**

Gianluca Griffa, PMP® joined Telecom Italia in 2001. He currently works in the R&D Department, where he's managing the project "Innovative solutions for powering and Energy Efficiency in the Access Network".

He's Chairman of the ETNO CORE Energy Task Force, which is a group formed by the main European TLC Operators and involved in benchmarking activities and best practice analysis.

He's also actively involved in different Standardization Bodies and Fora (ITU-T, ETSI, ETNO, GeSI) as far as the energy efficiency topics are concerned. In particular he's Rapporteur of Q17 ("Energy Efficiency for the ICT sector") in ITU-T SG5 WP3 and Associate Rapporteur of Q13 ("Environmental impact reduction including e-waste").

He's then involved in the Next Generation Access Network project, where he is engaged in several topics, among which: scouting of equipment, benchmarking of TLC Operators, analysis of power consumption trends and analysis of different architecture solutions (FTTx/xDSL, FTTH P2P/P2MP) for the access network.

Finally, since 2006 he manages the Eco-Efficiency Indicator (expressed in terms of bit/joule) that is officially reported in the Telecom Italia Sustainability Report.



**Renato GROSSO, Ericsson**

Renato joined Ericsson in 2006 and he is currently System Manager Research & Innovation at PDU Optical & Metro in Genova, Italy. He is also Technical Coordinator for the Ericsson Standardization activities related to Energy Efficiency Wireline, and member of the ETSI Energy Efficiency WG. He is driving innovation projects in the area of thermal management technologies, energy efficiency such as the ECONET project, etc. Renato began his career at Marconi about 30 years ago, covering increasing senior positions, until the HW Engineering Senior Manager appointment in 2001.

His experience covers HW design, infrastructures and system level architectures, ranging from PDH, SDH and Optical Transport, to POTS, ISDN, xDSL, etc.

Renato hold a dozen of patents in the fields of xDSL, WDM\_PON, Energy Efficiency and ICT infrastructures.



**Jáchym JUDL, Finnish Environment Institute**

Mr Jáchym Judl has worked as a researcher at the Centre for Sustainable Consumption and Production of the Finnish Environment Institute since 2010. His field of research is life cycle assessment (LCA) and its application on a case study level. Recently, he has also focused on the methodology development of sustainability LCA. Currently he is involved in several national and international research projects with a focus on ICT, energy, SMEs and servicing economy. He holds his master's degree from the Institute of Chemical Technology in Prague, Czech Republic.



**Dimitrios KARVOUNAS, UPRC**

Mr. Dimitrios Karvounas received his diploma from the School of Applied Mathematics and Physical Sciences of the National Technical University of Athens in 2007. He obtained an MSc in Digital Communications and Networks from the Department of Digital Systems of the University of Piraeus, Greece in 2009. Since February 2010 he is pursuing a PhD in Cognitive and Autonomous Management Techniques of the Future Internet and is a Research Engineer at the University of Piraeus Research Center (UPRC).



### **Dag LUNDÉN, Royal Institute of Technology (KTH)**

Dag Lundén is a Master of Science in Land Surveying from the Royal Institute of Technology (KTH) and graduated 1995. He started to work in the telecom sector already in 1984 when he joined Teliasoneras pre assessor Televerket Radio. Since then he has been assigned to various tasks such as high capacity radiolink management, Geographic Information systems (GIS) and digital reference data management, Real estate management including legal issues, environmental and Life Cycle Assessments by many others. He is involved in research at The Centre for Sustainable Communication at KTH and has published or co-authored several conference and scientific papers

over the years.



### **Jens MALMODIN, Ericsson**

Mr Jens Malmodin joined Ericsson in 1995 to work with environmental issues and life cycle assessments at the radio base station basic technology research unit. Life cycle assessments and energy efficiency has always been an important part of his work and he has been active in standardization of LCA. Early on, he also got the responsibility to build up Ericsson's environmental data reporting system for which he is still responsible for. Between 2003 and 2006 he changed career partly to specifically work with system design and energy efficiency for WCDMA radio base stations.

From 2007, he is a member of the Sustainability Research Team at Ericsson Research and he has published a number of papers and articles about LCA of ICT products, systems and services, including studies on the ICT sector level and how ICT can help society reduce its impact on the environment. Jens holds an MSc in material engineering from the Royal Institute of Technology (KTH), Stockholm, Sweden.



### **Åsa MOBERG, KTH Royal Institute of technology, Stockholm**

Åsa Moberg is assistant professor and head of the Division of Environmental Strategies Research at KTH, Royal Institute of Technology in Stockholm. Her field of work is environmental assessment, primarily life cycle assessment, and she is starting to address also social impacts. Her research regards both methodological development and case studies. Primarily performing research within CESC - Centre for Sustainable Communications, where she is also part of the management group, cases are currently mainly related to information and communication technology.



### **Vassilis NIKOLOPOULOS, Intelen**

Vassilis Nikolopoulos, PhD is the co-founder and Chief Innovation Officer of Intelen and responsible for the Innovation development / transition and the creation of new advanced Services for the future markets. He graduated in 2000 as Valedictorian of 3 Engineering departments (Civil, Electrical, Mechanical) from the Polytechnic School of Dundee University (Scotland), with a 1st class 4year Scottish honours in Electrical Engineering. He also obtained a 1st class MSc and Diploma (DIC) in Control from Imperial College, certificates in Management and Marketing from LSE and after

preparing the French classe preparatoire and succeeding in entrance exams he entered the military Ecole Polytechnique of Paris (X99), from where he obtained the "Majeures d'Ingenieur Diplome de l' Ecole polytechnique" in applied mathematics and informatics, with mention "Honorable". He has a PhD at the Multimedia Technology Laboratory of NTUA in the domain of Optimal Knowledge Engineering, Energy ICT and hypercubic KDD Fusion. He has worked as an R&D Manager and Innovation officer / PM in big EU (FP6, eContent, eTEN, IEE) and National projects (GSRT).



### **Magnus OLSSON, Ericsson Research Stockholm**

Magnus Olsson has been with Ericsson AB, Stockholm, Sweden, since 2000, where he currently holds a Senior Researcher position in Radio Access Technologies. Over the years he has worked on several technologies and areas such as advanced antenna systems, interference rejection techniques, and currently energy efficiency of radio access networks (RAN). He has authored and co-authored over 25 international journal and conference papers, and has held leading positions in both internal as well as various European research projects. For example, 2008-2009 he was managing Ericsson's research activities on multi-antenna technologies targeting LTE-Advanced, and 2011-2012 he was the

Technical Manager of the EARTH project on RAN energy efficiency. Currently he is involved in the METIS and 5GREEN projects focusing on energy efficiency of future radio access.



### **Hans-Otto SCHECK, Nokia Siemens Networks**

Hans-Otto Scheck received his Diploma Engineer (Dipl.-Ing.) degree in communications theory in 1982 from the University of Stuttgart, Germany. He has over 30 years of professional experience with a broad spectrum of Telecom applications in the fields of satellite navigation, bi-static radar, microwave circuit design, mobile phone and base station radio architectures. He joined Nokia's Research Center as a research manager for radio system implementations in 1994 and works since 2001 at Nokia's Networks unit (now Nokia Siemens Networks). In his current function as standardization specialist he analyses the environmental impact of telecom systems to support NSN's sustainability strategy and represents NSN in international standardization bodies like ETSI and ITU-T.

He holds several patents in the field of telecommunications and published or co-authored over 30 papers in international conferences and journals.



#### **Panagiotis STATHOPOULOS, National Hellenic Research Foundation**

Dr. Panagiotis Stathopoulos received his diploma in Electrical and Computer Engineering and his PhD at 1999 and 2004 respectively, from the National Technical University of Athens (NTUA). From 1999 until 2006 he has been with the Computer Networks Laboratory of NTUA participating and technically coordinating several national and EU funded research projects.

From 2006, he is the Head of the Systems and Networks Unit of EKT, leading the team designing and operating a highly sophisticated IT infrastructure. His interests include virtualisation, Datacenter and Green IT monitoring tools, IT operations management and Research e-infrastructures. He is a member of the core team that develops the Greek National Information System for Research and Technology ([www.epset.gr](http://www.epset.gr)), which provides large scale e-infrastructure and SaaS services for e-content.

He is a member of euroCRIS, the organisation developing the CERIF Current Research Information System European standards, and he is involved in the PKP European Network. Dr. P.Stathopoulos has over 40 publications in peer reviewed journals and conferences.



#### **Revveka Trigka , University of Piraeus**

Revveka Trigka studied at University of Ioannina in Greece where she received the four-year Diploma in Computer Science in 2009. In 2013 she received the MSc degree in Digital Communication and Networks from University of Piraeus. The same year she got accepted in a PhD position at the University of Piraeus, Greece. She is currently working as an IT Manager at the Allergology Department of Medical School at the National and Kapodistrian University of Athens. In 2010 she successfully completed a 3-month internship in Overmedia (company in Athens) as Junior Web Developer. In 2012 during a 6-month internship she worked in Barcelonapoint.com (company in Spain) as Web Developer. During the past, she has been working as Software Developer in AssistNet.gr in Naflio, Greece. After her specific studies and professional experience she has obtained knowledge in both theoretical and technical level. Her purpose is to contribute to the research in the field of Telecommunications through the completion of her PhD.



#### **Christos VERIKOUKIS, Telecommunications Technological Centre of Catalonia**

Christos Verikoukis got his degree in Physics and his M.Sc. in Telecommunications Engineering in the Aristotle University of Thessaloniki (AUTH) in 1994 and 1997, respectively. He got his PhD from the Signal Theory and Communications Department of the Technical University of Catalonia (UPC), Barcelona, in 2000, in the area of Broadband Indoor Wireless Communications. From March 2003 to February 2004 he was research associate of the Southeastern Europe Telecommunications & Informatics Research Institute (INA), Thessaloniki, Greece where he participated in National and European projects. He joined CTTC on February 2004 and he is a senior research associate in the Intelligent Energy Area since 2010. Dr Verikoukis has participated or is currently participating in several European (ACTS, IST FP5 & FP6, Marie-Curie FP6, PEOPLE FP7, ICT FP7, eTEN and INTERREG) and National (in Spain and in Greece) funded projects.



#### **Klaus VERSCHUERE, Cisco**

After finalizing his engineering studies in Belgium, Klaus Verschuere started his career to work for U.S.Robotics in France on compliance aspects of modems.

In 1999 he joined Cisco, taking care of certification and telecom regulations in Europe and in the Middle East region. After September 2001 he got involved into ETSI standardization for Lawful Interception and Data Retention.

For the past 6 years, he is leading Cisco in the European energy efficiency standards bodies of ETSI, CENELEC, ITU and in Code of Conduct meetings for Broadband and Set Top Boxes,...

Klaus Verschuere represents Cisco in various policy organizations like Digital Europe, where he plays an important role as issue manager and as spokes person for the industry towards the European Commission on Network Standby issues.



#### **Anastasios ZAFEIROPOULOS, Greek Research & Technology Network (GRNET), Member of the Programme Committee (PC)**

Anastasios Zafeiropoulos received his Diploma-Ing. and his Ph.D. degree from the School of Electrical and Computer Engineering of the National Technical University of Athens. He also holds a M.Sc. degree on Public Policy and Management from the Athens University of Economics and Business. Currently, he works as a senior project manager in GRNET focusing mainly on Green IT projects.

He has strong expertise on applying energy efficiency solutions in GRNET's networking and computing infrastructure while he is participating in multiple international activities related with environmental impact assessment as well as standardization issues. He has been actively involved in the project management, administration and financial control activities of multiple high-end integrated IT projects. He has co-authored more than 35 publications in international journals and conferences with main research interests in the area of green ICT techniques, autonomic networks, IPv6 protocol, wireless sensor networks, and network monitoring and management techniques.



**Ahmed ZEDDAMI, France Telecom Orange, Chairman ITU-T SG5,  
Member of the Programme Committee (PC)**

Ahmed ZEDDAMI received Doctor of Research degree in electronics and the Ph.D. degree in electromagnetic both from the University of Lille, France in 1980 and 1988, respectively. From 1979 to 1982, he was an assistant Professor of electronics at Lille I University. Since 1982, he has been employed at Research and Development Division of France Telecom in Lannion where he was until 2009 head of a Research and Development Unit dealing with Electromagnetic Compatibility (EMC). He conducted research on Lightning Protection and EMC for broadband systems of communications.

He is involved in several Technical Committees of international standardisation bodies dealing with Electromagnetic Compatibility (ITU-T, IEC, and CENELEC).

Dr Zeddami is the author and co-author of about 100 scientific papers, published in reviewed journals and international conferences. He participated to the production of books related to EMC, including a reference book published in 2007. Since 2008 he is Senior Standardisation Manager within France Telecom Orange and he currently Chairman of Study Group 5 of ITU-T 'Environment and Climatic Change'. He is also involved in Commission E 'Electromagnetic Noise and Interference' of International Union of Radio Science (URSI).

Dr. Zeddami is member of many scientific committees of national and international conferences where he held chairing positions and in particular, he was the General Co-chair of IEEE ISPLC 2011.