



**Global Standards Collaboration (GSC)
Machine-to-Machine Standardization Task
Force (MSTF) Meeting
May 18, 2011, Dallas, TX, USA**

List of Contributors

Gaylord Texan Hotel & Convention Center
1501 Gaylord Trail, Grapevine, Texas 76051
U.S.A.

Hosted by:





Eric N. Barnhart, P.E.

*Division Chief and Principal Research Engineer, Communications and Networked Systems Division
Georgia Tech Research Institute (GTRI)*

Eric Barnhart is Chief of the Communications and Networked Systems Division of the Georgia Tech Research Institute in Atlanta (www.gtri.gatech.edu). Mr. Barnhart has responsibility for the Research Institute's sponsored research programs and strategic technology investments in telecommunications, networking, security and related disciplines in commercial and government markets. He holds the M.S. degree in Electrical Engineering from Georgia Tech and the B.E.E. degree from Auburn University. He is a Principal Research Engineer, an elected GTRI Fellow and has served as a member of the Georgia Tech Executive Board. He is also affiliated with the Georgia Tech Information Security Center.

Mr. Barnhart has been a consultant to government and industry and has served as a reviewer for National Science Foundation programs in Small Business Innovative Research. He has been an expert witness in criminal proceedings, trade-secret and patent litigation, and has assisted corporate clients in arbitration matters related to telecommunications products and services and in technical due diligence supporting corporate transactions in the private equity market. Mr. Barnhart has also assisted non-government organizations (NGOs) such as the Caribbean Association of National Telecommunication Organizations (CANTO) with technology issues. He has practiced in support of corporate clients in Federal Communications Commission rule-making proceedings and has been a member of United States delegations to Working Parties of the International Telecommunication Union in Geneva, including Working Party 4-9S, focused on harmonization of spectrum applications for terrestrial and satellite systems. He is a registered Professional Engineer in Georgia and is a member of the Institute of Electrical and Electronics Engineers.



Cheryl Blum

*Vice President, Technology and Business Development, TIA
Chair of the 3GPP2 Steering Committee*

Prior to joining TIA (www.tiaonline.org) in September 2009, Cheryl was a Senior Manager with Alcatel-Lucent and had been with the company for over 30 years. She has extensive experience with various aspects of telecom systems, including software development, systems engineering, network architecture and standards development.

Cheryl has been active in TIA Standards Development for over 15 years. Her focus has been in wireless core network development, including its evolution to IP-based networks. She has also been involved with standards development for Public Safety and Homeland Security standards for Lawfully Authorized Electronic Surveillance (CALEA), E911, Wireless Priority Services, and Commercial Mobile Alert Service (CMAS). Cheryl was the Chair of TIA Engineering Committee TR-45, Mobile and Personal Communications Systems Standards, and held that position for more than eight years. She is also TIA's Head of Delegation to the 3rd Generation Partnership Project 2 (3GPP2) and has held the position of 3GPP2 Steering Committee Chair since 2009.

She has represented TIA on various committees and fora such as the NSTAC effort to address Public Safety Capabilities in Next Generation Networks, and the FCC Commercial Mobile Service Alert Advisory Committee (CMSAAC). Cheryl has also been a member of the TIA Delegation to the Global Standards Collaboration meetings for the last 7 years and was the Chair for the Global Radio Standards Collaboration (GRSC) hosted by TIA in June 2006. Cheryl was appointed in 2010 as a member of the U.S. National Committee (USNC) Council to the International Electrotechnical Commission (IEC).

Cheryl received her Master of Science Degree (Computer Science) from Northwestern University in Evanston, Illinois.



Asok Chatterjee, Ph.D.

*Vice President of Industry Relations, Ericsson
Governing Body of Global ICT Standardisation Forum for India (GISFI)*

Dr. Asok Chatterjee is currently Vice President of Industry Relations at Ericsson (www.ericsson.com). He has worked for nearly 30 years in various branches of the telecommunications industry. He has extensive standardization experience acquired in international Standards Developing Organizations and other groups and forums. He is co-Chairman of WP1, SG13, ITU-T for the 2009-2012 Study Period; member of the US Delegation to ITU-R SG5 WP5D [working on IMT-Adv standardization]; one of the founders of 3GPP (3rd Generation Partnership Project) and presently a Vice Chairman of 3GPP Project Coordination Group; member of the Executive Committee of the Board of Directors of ATIS; and member of the ATIS Delegation to Global Standards Collaboration meetings. He was a member of the US Delegation to WTSA 2008 in Johannesburg and WTDC 2010 in Hyderabad

Dr. Chatterjee holds a Master's degree in Radio Physics and Electronics from University of Calcutta, India, and Ph.D. in Electrical Engineering from the University of Ottawa, Canada.



Catherine Hammond

*Orange Labs Standardization Director
Wavenis Open Standard Alliance*

Representing Wavenis (www.wavenis-osa.org), Catherine Hammond was appointed Standardization Director within the R&D Division of France Telecom – Orange (www.orange.com) in 2008. She is responsible for Orange labs activities in standardization for fixed and mobile, access, core and services. Previously, she was head of wholesale product management for France Telecom in France, responsible for broadband wholesale offers, unbundling or interconnection. Catherine Hammond also held a number of leading positions in operations and IT within France Telecom, after starting her career in Intelligent Network R&D.

She is a graduate of the Ecole Polytechnique and Telecom Paris, France.



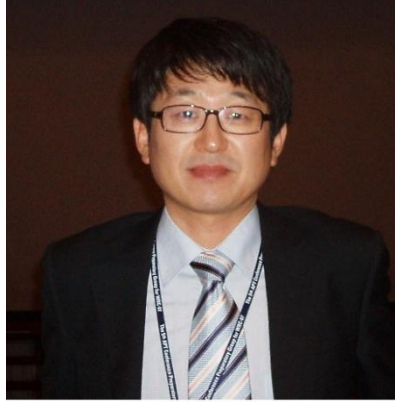
Gary Jones

*Director of Standards Policy, T-Mobile USA
Treasurer and Board Officer of the Open Mobile Alliance (OMA)*

Gary Jones is the Director of Standards Policy for T-Mobile USA (www.t-mobile.com). He directs and coordinates the efforts of the T-Mobile Standards Group in the worldwide standards fora, such as 3GPP, OMA and the ITU. Gary started in the wireless industry in 1986, with Millicom International. He moved to Omnipoint Corporation in 1993 as Manager of Standards, when Omnipoint won a Pioneer's Preference PCS license for New York. He continued to head the standards group when Omnipoint merged with VoiceStream, which was then purchased by Deutsche Telekom. VoiceStream then became known nationwide as T-Mobile USA.

Gary has been chairman of various standards groups including T1P1.1 (International Wireless/Mobile Standards Coordination Working Group), T1P1.3 (GSM/3G System and Network Working Group), and T1P1.6 (Composite CDMA/TDMA). He is currently Vice-Chairman of the 3rd Generation Partnership Project Service and System Aspects Technical Specification Group (3GPP TSG-SA), chairman of GSM North America Standards Working Group, Treasurer and board officer of the Open Mobile Alliance (www.openmobilealliance.org) as well as a member of the US Delegations to ITU-R Working Party 5D dealing with 4th generation wireless technology development and spectrum identification.

In addition to standards and spectrum, Gary was responsible for the development of Wireless Priority Service and Secure Communications capabilities for the government. He was the T-Mobile representative on the FCC's Commercial Mobile Service Alert Advisory Committee (CMAAC) where he chaired the User Needs Group and is now the engineering primary on Wireless Emergency Alert Service and Messaging to Emergency Services for T-Mobile.



Daejung KIM

*Director of Radio and Broadcasting Department, Standardization Division
Telecommunication Technology Association (TTA, Korea)*

Mr. Daejung KIM is the director of Radio & Broadcasting department of Standardization Division, Telecommunications Technology Association (TTA). He coordinates TTA's standardization efforts in the field of mobile & wireless communication and Broadcasting in domestic and worldwide standardization organizations such as ITU-R SGs, WRC, 3GPPs, IEEE 802, OMA, ATSC, WorldDMB Forum.

He has been leading several projects in Mobile-WiMAX, Mobile Broadcasting and IMT-Advanced in Korea. He was the recipient of "2008 Korea Prime Minister Award" for excellent contributions in WiBro standardization and of "2003 Minister of Information and Communication Award" for remarkable contribution in T-DMB standardization.

Before joining to TTA (www.tta.or.kr/english) in May 2001, he was an inspector and researcher of Korea Radio-communication Agency under Ministry of Information and Communication for over 8 years. He received his master's degree in Information Communication Engineering from Kyunghee University.



Hyoung-jun KIM, Ph.D.

*Principal Researcher, ETRI
Convener of JCA-IoT in ITU-T*

Mr. Kim was educated at Kwang-Woon University, Seoul, in Computer Engineering B.A., 1986 and M.E., 1988, respectively. And he got his Ph.D. degree in the field of Computer Science at Chung-Nam National University, 2007. He joined ETRI (www.etri.re.kr) in 1988, and he is currently in charge of Team Head of Future Infrastructure Standards Research Team as a Principal Researcher of ETRI. He has 23 years research experience in various divisions of ETRI including Telecommunication Systems Division, Information & Telecommunications Technology Division, and so on. At present, he is also in charge of Rapporteurs of Q7/SG13 (Impact of IPv6 to an NGN) and Q25/16(USN Applications and Services) in ITU-T as well as Convener of JCA-IoT (www.itu.int/en/ITU-T/jca/iot/Pages/default.aspx).. Also he has a role of Chairman of IPv6 Project Group (PG 210) and M2M Project Group (PG 708) of Telecommunication Technology Association (TTA) in Korea (www.tta.or.kr/English/). Since the year 2002, he has been participating in many of National IPv6 related projects and RFID/USN projects as project leader, where he is tightly involved in the development of IPv6 based mobility architecture, mobile RFID system architecture, and USN applications and services, and so on.



Joachim Koss

Director Standardization, Technology, Cinterion Wireless Modules GmbH

ETSI Board Member

Vice-chair ETSI TC M2M

Joachim Koss is looking back to more than 25 years of experience from different Siemens telecommunications business units, where he held various management positions in HW/SW Engineering, International Project and Process Management, Conformity Testing and Approval, IPR Management and Standardization. Today he is responsible for Standardization Management at Cinterion (www.cinterion.com) Wireless Modules GmbH, a leading supplier of GSM based machine-to-machine communication devices and solutions for customers worldwide. In November 2008 Joachim Koss was elected into the Board of ETSI (European Telecommunications Standards Institute) (www.etsi.org) and in May 2009 as a Vice-Chairman of the ETSI Technical Committee Machine-to-Machine communications. This TC M2M is the ETSI main centre of expertise in the area of M2M and its main objective is to develop and maintain an "end to end" M2M global vision, targeting total machines IP connexion, from connectivity to services.



Duo Liu

Deputy Secretary General, China Communication Standardization Association (CCSA)

Ms. Duo Liu has a unique role in standard development. Her focus is on the oversight of the Chinese standard development from an administrative perspective. She is the Director of the Communication Standard Research Institute of the China Academy of Telecommunication Research (CATR) of the Ministry of Industry and Information Technology (MIIT), China. Ms. Liu also serves as Deputy Secretary General of the China Communication Standardization Association (CCSA, www.ccsa.org.cn/english/), and Chair of the Ubiquitous Network Technical Committee (TC10), which is the major forum for M2M standard development within CCSA. Her other positions related to Chinese and international standard development include Secretary General of China Next Generation Internet Expert Committee, Secretary General of the Interactive Media Alliance of China, and Vice Chair of SG13 of ITU-T.

Ms. Liu received her Master's degree from Chinese Academy of Sciences and Bachelor's degree from Tsinghua University.



Jim MacFie

*National Standards Officer, Microsoft Canada
Chairman of the ICT Standards Advisory Council of Canada (ISACC)*

As National Standards Officer for Microsoft Canada (www.microsoft.com), Jim represents the company's standards interests and embodies Microsoft's commitment to the Canadian National Standards System. To that purpose, Jim participates directly in a mix of standards development and standards governance activities, and coordinates Microsoft Canada's other participation in domestic and international standards organizations, especially JTC 1 and ITU.

Jim is Chairman of the ICT Standards Advisory Council of Canada (ISACC) (www.isacc.ca) and ISACC's Rapporteur for Intellectual Property Rights policy; Head of Delegation for ISACC to the Global Standards Collaboration (GSC) forum and Chairman of GSC's Admin Working Group; active in JTC 1 Standardization and the Standards Council of Canada's system of Canadian Advisory Committees, including Vice-chair of the Canadian Advisory Committee for JTC 1, Vice-chair of the National Committee on Identity Management, and member of several other JTC 1 Canadian Advisory Committees; member of the Steering Committee of the Canadian National Organization for the International Telecommunication Union; and a participant in the ITU-T's Telecommunication Standardization Advisory Group and Study Group 5 (Environment and Climate Change).

Prior to joining Microsoft Jim was with Nortel, responsible for the company's Canadian standards strategy, which included a similar level of participation in the Canadian standards community as described above (except more ITU-T and not as much JTC 1). Prior to Nortel Jim was employed by the telephone operating companies that eventually became Telus, engaged in telecom network planning.

Jim holds an M.Sc. in E.E. from Oxford University 1973 and a B.Sc. in E.E, from the University of Alberta 1972.



Peter Nurse

Principal, Sigma Delta Communications, Inc.

Chair of TIA TR-50.1 Smart Device Communications Requirements & Architecture Subcommittee

Peter Nurse is principal at Sigma Delta Communications, Inc. (www.sigmadelta.com), an independent consulting company working with multiple clients in the wireless telecommunications industry. He holds a B.Sc. in Electrical and Electronic Engineering, and M.Sc. in Mathematical Logic and Computing.

Peter is currently Chair of Telecommunications Industry Association (www.tiaonline.org) Subcommittee TR-50.1, which is responsible for Requirements and Architecture for Smart Device Communications. He has served as Chair of Committee TIA TR-45, and Subcommittee TIA TR-45.3, which was responsible for establishing standards for US Digital Cellular. He was the recipient of the Cellular Telecommunications Industry Association “Industry Service Award” for outstanding contributions in furthering the development of the Cellular Industry. He has also served as Executive Director of the OFDM Forum; as a Member of Program Committee, Alberta Telecommunications Research Centre; Chairman of Industrial Affiliates Board, Institute for Computer Research, University of Waterloo; on the Canadian delegation to ITU-R TG8/1, and as spokesperson for Radio Technology on the US delegation to ITU-R WP 8F and WP 5D.



Eric Perrier de la Bâthie

Électricité de France

OCARI (Optimization of Communication for Ad hoc Reliable Industrial Network) Standardization

Eric Perrier de La Bâthie holds an advanced degree in Telecom & Electronics engineering from Ecole Supérieure d'Électricité (France). Since 1995, he has been leading various telecom projects in the PLC, AMR, home networking and Wireless Sensor Networks areas. He has contributed to the design and the standardization of PLC technology for AMR applications (PLAN-IEC 61334) from 1995 to 1998. He has also set up the OSGI alliance and has managed the deployment of Home networking projects (OSGI gateways) in Grange-Sweden with Ericsson. From 1999 to 2002, he has led EDF (www.edf.com) standardization activities for high-speed PLC (CISPR, ETSI, CENELEC and CEPT). Inside the OCARI (www.ocari.org) project; he has the responsibility of making OCARI a proven standard for nuclear power plant applications.



Ramjee Prasad, Ph.D.

*Founding Chairman of the Global ICT Standardisation Forum for India (GISFI)
Director of the Center for TeleInfrastruktur (CTIF) at Aalborg University, Denmark*

Professor Ramjee Prasad is the Founding Chairman of the Global ICT Standardisation Forum for India (GISFI: www.gisfi.org) established in 2009 and a distinguished educator and researcher with a long path of experience through achievements until to date in the academic research of the wireless and mobile communication area that have paved the road from first generation telecommunication systems towards the current next generation. Ramjee Prasad has an outstanding technical leadership, managerial and business skills that have led to the globalization of mobile and wireless research and education and their elevation to a new level through an effort towards commercialisation of research results. He is a worldwide established scientist which is visible from his many international academic, industrial and governmental awards and distinctions, huge number of books (~more than 30), journal and conferences publications (more than 700), a sizeable amount of graduated PhD students (more than 60) and even larger amount of graduated M.Sc. students. Ramjee Prasad is currently the Director of the Center for TeleInfrastruktur (CTIF-established in 2004) at Aalborg University, Denmark and Professor, Wireless Information Multimedia Communication Chair.

Ramjee Prasad is the Founding Chairman of the HERMES Partnership (www.hermes-europe.net)- a network of leading independent European research centers established in 1996, of which he is now the Honorary Chair. Ramjee Prasad is the founding editor-in-chief of the Springer International Journal on Wireless Personal Communications.

Ramjee Prasad is a member of the Steering, Advisory, and Technical Program committees of many renowned annual international conferences {e.g., Wireless Personal Multimedia Communications Symposium (WPMC); Wireless VITAE, etc}. Ramjee Prasad is a Fellow of the Institute of Electrical and Electronic Engineers (IEEE),USA, the Institution of Electronics and Telecommunications Engineers (IETE), India; the Institution of Engineering and Technology (IET), UK; and a member of the Netherlands Electronics and Radio Society (NERG), and the Danish Engineering Society (IDA). Further, he has been distinguished with many prestigious awards, the latest of which (2010) is the Knight in the Order of Dannebrog (Ridder af Dannebrog) given by the Danish Queen.



Grant Seiffert

President, TIA

As president of TIA (www.tiaonline.org), Grant Seiffert oversees the policy, standards, tradeshow and marketing efforts for the leading advocate in Washington, D.C., for the information and communications technology (ICT) industry. TIA's member companies represent the entire supply chain of the ICT industry; these companies manufacture products, provide services and offer applications that transmit content by video, voice and data, thereby merging communications and entertainment options. As leaders in the industry, the companies and organizations participating in TIA develop and deliver communications innovations for consumers, government users and businesses alike, while improving productivity and access to information around the world.

Seiffert joined TIA in 1996 as director of government relations. His main priority was the representation of the equipment industry's interests, particularly regarding competitive issues during implementation of the Telecommunications Act of 1996 by the Federal Communications Commission (FCC). He was promoted to vice president in 1998, directing domestic and global policy to help the association's supplier members gain marketing opportunities around the world. In that role, he oversaw policy, including interaction with the U.S. Congress, the FCC and the Administration, as well as with international regulatory bodies and government leaders and fulfilling the senior management role for association membership and TIA tradeshows. He succeeded Matt Flanigan as president of TIA in January 2007. Prior to joining TIA, Seiffert served five years with Senator John McCain (R-Ariz.).

He serves on the ITU World Telecom Board and the Connected Nation Board.

He holds a Bachelor of Science degree in political science from Radford University. He and his wife, daughter and two sons reside in Mt. Vernon, Virginia.



Jeffrey O. Smith, Ph.D.

Chief Technology Officer, Numerex

Convener of the GSC Machine-to-Machine Standardization Task Force

Chair of TIA Smart Device Communications Engineering Committee

As a scientist for Motorola, The Robotics Institute, and the Superconducting Super Collider (SSC), Dr. Smith has worked on wireless sensor and control systems developed for the FBI, CIA, DOD, DOE, NASA, and USPS - from autonomous unmanned aerial vehicles to particle accelerators. In 1993, he co-founded and served as President and CEO of OnRamp Technologies, a pioneer Internet Service Provider, subsequently acquired by Verio, which is now a wholly-owned subsidiary of NTT communications. In 2002, Dr. Smith founded SensorLogic, a leading Telemetry Service Provider (TSP). He also co-founded Via; Vericenter; Vaultnet; Memorial.com; Advanced Home Automation; and Ublip, which was acquired in late 2008 by Numerex, a company at the vanguard of the machine-to-machine communications industry. Dr. Smith is currently Chief Technical Officer of Numerex (nasdaq: nmr, www.numerex.com). He has served or serves on the boards of several prominent high tech companies. In February 2010, he was elected Chairman of TIA (www.tiaonline.org) TR-50 Smart Device Communications Engineering Committee and in September 2010, he was appointed convener of the GSC M2M Standardization Task Force (MSTF).

Dr. Smith has a B.S. in Engineering Science from Trinity University, and an M.S. and Ph.D. in Computer Engineering from the University of Texas at Arlington. He is a distinguished Alumnus at The University of Texas - Arlington, and serves on the Board of Trustees of the University as well as the Advisory Board of the College of Engineering. He is on the Alumni Board of Trinity University, San Antonio, Texas. He is a member of IEEE, ACM, Tau Beta Pi, Upsilon Pi Epsilon, The Entrepreneurs Organization, and The Young President's Organization (YPO).



David Su, Ph.D.

Senior Adviser, Advanced Network Technologies, National Institute of Standards and Technology (NIST)

Dr. Su is leading the group to conduct research in the area of communications protocol modeling, testing, performance measurement, and standardization (www.antd.nist.gov). He is also part of the NIST team for Smart Grid, and is chairing several priority action plans (PAP) for smart grid networking – PAP on IP networks, PAP on wireless network, and PAP on power line communications (PLC). The main focus of these action plans is to define networking requirements of smart grid applications, to identify new standards needed, and to ensure interoperability of standards for smart grid. For the PLC PAP he is leading the effort to promote coexistence of various PLC protocols.

Before joining NIST, Dr. Su was with GE Information Services in charge of developing software for its worldwide data network. He received his Ph.D. in computer science from the Ohio State University in 1974.



Fumihiko Tomita, Ph.D.

*Director General, Inter-Industry Innovation Center (I3C)
Telecommunication Technology Committee (TTC), Japan*

Fumihiko “Tom” Tomita is responsible for the leadership in future inter-industry ICT innovation projects in the Telecommunication Technology Committee (TTC, www.ttc.or.jp/e/), and also in the research strategy in the National Institute of Information and Communications Technology (NICT), Japan. He received the B.S. degree in physics and the M.S. and Ph.D. degree in geophysics from the Tohoku University of Japan. After the Assistant Professor at the Faculty of Science of Tohoku University, he joined the Radio Research Laboratory (RRL), the direct ancestor of NICT. He launched the “Space Weather Program” in Japan in 1988, and, has been supervising many kinds of research strategy and program in NICT. He has been a Director of the Kashima Space Research Center, an Executive Director of the Basic Research Department, an Executive Director of the Planning Department of the NICT, and a Secretary General of the ICT Standardization and Intellectual Property Promotion Center (iSIPc) since 2008, and a Director General of the Inter-Industry Innovation Center, TTC since 2011.

He has been interested in the next-generation smarter communication world based on ICT. Especially, an on-going revolution around new energy vehicles and smart grid has a potential to be an entrance to the new social infrastructure for the world sustainable human happiness.



Mitch Tseng, Ph.D.

Tseng InfoServ, LLC

Vice-Chair of TIA TR-50.1 Smart Device Communications Requirements & Architecture Subcommittee

Mitch Tseng is the Vice-Chair of the TIA (www.tiaonline.org) TR-50.1 Smart Device Communications Subcommittee on Requirements and Architecture. He has more than 20 years of telecommunications industry experience and a broad international standardization expertise acquired in 3GPP and 3GPP2, including IPR Management; and wireless access specifications of LTE, CDMA, and GSM/UMTS . He has directly been involved in CDMA standardization activities since 1998 through TIA, and later on, through 3GPP2, representing Nortel Networks, Nokia, and now Huawei Technologies (www.huawei.com). He also accumulated valuable international marketing experience while based in Beijing in 2004-2007, promoting Smartphone Platforms to operators. Later on, he worked on CDMA-LTE interworking in both 3GPP and 3GPP2. His current interests are in M2M system architecture, M2M applications and the platforms for Cloud Computing.

Mitch is a former member of the board of directors of the Chinese Institute of Engineers, USA, Dallas-Fort Worth, Texas, Area Chapter, and holds a Ph.D. in Electrical Engineering from the University of Texas at Dallas.



Harish Viswanathan, Ph.D.

*Director, CTO Advisory Group, Alcatel-Lucent
Alliance for Telecommunications Industry Solutions (ATIS, USA)*

Harish Viswanathan received the B. Tech. degree from the Department of Electrical Engineering, Indian Institute of Technology, Chennai, India and the M.S. and Ph.D. degrees from the School of Electrical Engineering, Cornell University, Ithaca, NY. Since joining Bell Labs in October 1997, he has worked on multiple antenna technology for cellular wireless networks, network optimization, mesh networking, and base station router mobility management. He is currently Director in the CTO Advisory Group in the Corporate CTO organization of Alcatel-Lucent (www.alcatel-lucent.com). His current responsibilities include identifying strategic directions that Alcatel-Lucent should pursue in M2M & sensor networks area and architecting end-to-end solutions.



Arthur Webster

Institute for Telecommunication Science (NTIA/ITS)

Chairman of the International Telecommunication Union, Telecommunications Standardization Sector's (ITU-T) Study Group (SG) 9. ITU-T SG9

Mr. Webster is the Chairman of the International Telecommunication Union, Telecommunications Standardization Sector's (ITU-T) Study Group (SG) 9 (www.itu.int/net/ITU-T/info/sg09.aspx). ITU-T SG9 is responsible for international standardization activities related to "Television and sound transmission and integrated broadband cable networks." Mr. Webster serves in this position for the current study period (2009-2012). He has for many years participated in many technical standards groups--most of which are devoted to the standardization of video and multimedia quality assessment methods. Mr. Webster began participating regularly in ITU-T in 1994 and was a Rapporteur (in SG9 or SG12) from 1995 to 2009. Mr. Webster is also a Co-chair of the Video Quality Experts Group (VQEG), a position he has held since its founding in 1997.

Mr. Webster contributes technically to video and multimedia quality assessment as well as to the development and standardization of priority, reliability, and security aspects of emergency telecommunications services over next generation networks. He is co-author of several approved and draft ITU-T Recommendations and Technical Reports in the areas of priority telecommunications, quality assessment, and security. Mr. Webster has participated in ATIS PRQC, (Performance, Reliability, and Security Committee), and its predecessor committees (T1Q1, T1A1) since 1990. He served as Chair of the ATIS PRQC Security Task Force for several years. He has periodically participated in other Standards groups such as the SCTE, IETF, IEEE, ITU-R Study Group 6, TIA, and ATIS IIF. Mr. Webster has chaired sessions and given presentations at several ITU and ETSI workshops.

Arthur holds a BA in English and a MS in Electrical Engineering. For the last 21 years he has worked for the National Telecommunications and Information Administration's Institute for Telecommunication Sciences (NTIA/ITS) which is a part of the United States Department of Commerce. From 2005 to 2008 he was the Standards Development Team Leader for the NTIA/ITS.P Division. He manages 2 technical projects at NTIA/ITS, both of which have strong standards outputs. Mr. Webster is a member of IEEE and ACM and holds two U.S. patents for innovations in objective assessment of video quality.