SESSION 1	
Hendrik Berndt	
Nigel Jeffery	Nigel Jefferies is a senior standards manager with Huawei Technologies and Chairman of the Wireless World Research Forum, a global partnership between industry and academia to develop a research agenda for mobile communications. Previously he was Head of Academic Relationships within Vodafone Group Research & Development and a Principal Mathematician at Racal Research Ltd. In the past he led the European-funded IST project SHAMAN, which studied the security of future mobile systems, and ran the Secure Applications Steering Group for Mobile VCE. Other collaborative research projects on various aspects of security for mobile communications include 3GS3 in the UK-funded LINK programme, and ASPeCT and USECA in the European ACTS programme. His research interests include cryptography, security of systems and applications of mathematics to telecommunications. He received a PhD in functional analysis from Goldsmith's College, London, and an MA in mathematics from the Queen's College, Oxford, and is a visiting professor at Kingston University. He is a Fellow of the Institute of Mathematics and its Applications and a Chartered Mathematician.
Ramjee Prasad	Dr. Ramjee Prasad, Fellow IEEE, IET, IETE, and WWRF, is a Professor of Future Technologies for Business Ecosystem Innovation (FT4BI) in the Department of Business Development and Technology, Aarhus University, Herning, Denmark. He is the Founder President of the CTIF Global Capsule (CGC). He is also the Founder Chairman of the Global ICT Standardisation Forum for India, established in 2009. GISFI has the purpose of increasing of the collaboration between European, Indian, Japanese, North-American and other worldwide standardization activities in the area of Information and Communication Technology (ICT) and related application areas. He has been honored by the University of Rome "Tor Vergata", Italy as a Distinguished Professor of the Department of Clinical Sciences and Translational Medicine on March 15, 2016. He is Honorary Professor of University of Cape Town, South Africa, and University of KwaZulu-Natal, South Africa. He has received Ridderkorset af Dannebrogordenen (Knight of the Dannebrog) in 2010 from the Danish Queen for the internationalization of top-class telecommunication research and education. He has received several international awards such as: IEEE Communications Society Wireless Communications Technical Committee Recognition Award in 2003 for making contribution in the field of "Personal, Wireless and Mobile Systems and Networks", Telenor's Research Award in 2005 for impressive merits, both academic and organizational within the field of wireless and personal communication, 2014 IEEE AESS Outstanding Organizational Leadership Award for: "Organizational Leadership in developing and globalizing the CTIF (Center for TeleInFrastruktur) Research Network", and so on. He has been Project Coordinator of several EC projects namely, MAGNET, MAGNET Beyond, eWALL and so on. He has published more than 50 books, 1000 plus journal and conference publications, more than 15 patents, over 130 PhD Graduates and larger number of Masters (over 250). Several of his students are today worldwide telecommunication leaders themselves.

Anders Frederiksen 	Anders Frederiksen is professor in business economics and econometrics at Aarhus University (AU), Denmark. He has served as Head of Department at Department of Business Development and Technology (AU) since 2015, and is the Director of Center for Corporate Performance (domiciled at Copenhagen Business School). Anders Frederiksen obtained his PhD in economics from AU. During his PhD studies, he was Leschly Fellow at the Industrial Relations Section at Princeton University. Subsequently he earned a Marie Currie Fellowship at Stanford University and became W. Glen Campbell & Rita Ricardo Campbell National Fellow at the Hoover Institution at Stanford University. Anders Frederiksen's main research area is personnel economics and more broadly labor economics. The purpose of this research is to understand the internal workings of companies including incentive structures, career development and performance management. His work has been published in top economics journals such as the Economic Journal; Journal of Econometrics; Journal of Law, Economics and Organization; Journal of Economic Behavior and Organization; and Labour Economics. For academic excellence he has received the Tuborg and Tietgen prices. Anders Frederiksen has been generously funded by the Danish Research Council, The European Commission, The Foundation for Danish Industries and private companies to conduct research within personnel economics and to run Center for Corporate Performance.
Colin Langtry 	Colin Langtry worked as the Chief of the Radiocommunication Study Groups Department in the International Telecommunication Union up until January 2018. The ITU-R Study Groups develop global standards for radiocommunication systems and conduct studies to support the international framework for management of the radio frequency spectrum. Mr. Langtry's previous experience involved working as the Counsellor for ITU-R Study Groups 5 and 8 supporting their studies on amateur, fixed, mobile and radiodetermination services. This activity included his role as Counsellor in the development of the ITU's International Mobile Telecommunications (IMT) systems standards for mobile broadband wireless access. Prior to that he was responsible for the Text Editing and Publications Division of the ITU Radiocommunication Bureau and, before joining the ITU, managing spectrum planning activities in the Australian spectrum management agency.
Bernard Barani 	After 11 years as Communication engineer in industry and with the European Space Agency, Bernard Barani joined the European Commission in 1994 as program officer for research and policy issues in wireless communication. He is currently Deputy head of unit in the CONNECT Directorate General of the European Commission where he leads the definition and implementation of the 5G Public Private Partnership launched in 2013 by the EC to support 5G European R&D. His field of activities covers strategic R&D planning, standardisation, international cooperation, demonstration and pilot programmes. He is also involved in the implementation of the 5G Action Plan published by the Commission in 2016 to support 5G deployment in Europe. He is also vice chairman of the Steering committee of the EUCNC conference, the main showcasing event for telecom research sponsored by the EU programmes. He has an engineering degree from the "Ecole National Supérieure des Télécommunications de Bretagne".

SESSION 2	
Gregory O'Brien	Dr. Gregory O'Brien has over 45 years of experience in higher education and has served in various leadership roles at universities across the United States. Presently, he is the University President of International Technological University, San Jose, California, USA. Prior to joining ITU, he served as the Distinguished President Emeritus of the 19 campus Argosy University System, Chancellor of the University of New Orleans, Provost and Vice President of Academic Affairs at the University of South Florida, Provost of the University of Michigan - Flint, and Dean of the School of Social Welfare at the University of Wisconsin – Milwaukee. He received a PhD and Master's degree in Social Psychology from Boston University and was awarded honorary degrees from Lehigh University and Western State University College of Law. Dr. O'Brien also received the US Navy's Meritorious Service Award for his time in the armed services.
Marcus Brunner	Dr. Marcus Brunner is head of standardization, eco-system development, and chief researcher in the strategy and innovation department of Swisscom, the Swiss incumbent telecom operator. He received his Ph.D. from the Swiss Federal Institute of Technology (ETH Zurich) in 1999. He is active in research, development, and standardization since 20 years with experience in programmability of networks and services, cloud technology for IT and network service providers (NfV), and automation of network and IT including autonomic communication. He is involved in various international organizations on software-defined networking and the future telecommunication technologies like Network Function Virtualization, Cloud-native Telco-Platforms and 5G networking.
Shuzo Kato	He received his Ph. D degree in electrical and communications engineering from Tohoku University, Sendai Japan in 1977. From 1977 to 1995, he worked at NTT (Nippon Telegraph and Telephone) Research Laboratories in Japan, specializing personal and satellite communications systems R&D. He and his team have developed 39 kinds of ASICs so far without re-spins including the world first TDMA chip set in 1986, the world fastest Viterbi decoder chips in 1987 and 1993, lowest power consumption ADPCM codec (0.5 mW) in 1994, best receiver sensitivity (6 dB improvement) and the world first 2 V operating CMOS SOC PHS baseband chip and many others. He founded Pacific Communications Research Corp. in 1995 and served as President of Uniden Corporation in 1997. From January 1998 to July 2001, he served as Executive Vice President, Mitsubishi Wireless Communications Inc (MWCI) in USA. From 2002 to 2005, he served as Executive Vice President of Teradyne Japan responsible for P/L, Engineering, Production and Global Marketing as well as President and CEO of Omni Wireless Inc., in California, USA. From 2006 to 2010, he served as Program Director / Coordinator, Ubiquitous Mobile Communications at NICT (National Institute of Information and Communications Technology) working on wireless communications systems R&D focusing on millimeter wave communications systems. He served as Vice-chair of IEEE802.15.3c Task Group working on millimeter wave systems standardization and Chair of COMPA (Consortium of Millimeter Wave Systems Practical Applications) promoting millimeter wave systems globally and contributed to establish IEEE802.15.3c Standard on multi-Gigabit/s millimeter wave systems in IEEE.

	He currently is Professor Emeritus / Visiting Professor, Micro System Integration Center (µSIC）, Tohoku University, Japan and has been carrying out R&D on millimeter wave communications systems and Factory IoT systems.
	He has published over 300 technical papers, held over 120 patents (including a patent which became DOD (Department of Defense, USA) standard in 1998 and currently used in the most of smart phones to generate constant envelope signals), co-founded International Symposium on Personal Indoor and Mobile Radio Communications. He is a Life Fellow of the IEEE and Fellow of IEICE Japan and served as an Editor of IEEE Transaction on Communications, Chairman of Satellite and Space Communications Committee, COMSOC IEEE, a Board Member of IEICE Japan.
Werner Mohr	Werner Mohr was graduated from the University of Hannover, Germany, with the Master Degree in electrical engineering in 1981 and with the Ph.D. degree in 1987. Dr. Werner Mohr joined Siemens AG, Mobile Network Division in Munich, Germany in 1991. He was involved in several EU funded projects and ETSI standardization groups on UMTS and systems beyond 3G. Werner Mohr coordinated several EU and Eureka Celtic funded projects on 3G (FRAMES project), LTE and IMT-Advanced radio interface (WINNER I, II and WINNER+ projects), which developed the basic concepts for future radio standards. Since April 2007 he is with Nokia Solutions and Networks (now Nokia) in Munich Germany, where he is Head of Research Alliances. In addition, he was chairperson of the NetWorld2020 European Technology Platform until December 2016. Werner Mohr was Chair of the Board of the 5G Infrastructure Association in 5G PPP of the EU Commission from its launch until December 2016. He was chair of the "Wireless World Research Forum – WWRF" from its launch in August 2001 up to December 2003. He was member of the board of ITG in VDE from 2006 to 2014. He is co-author of a book on "Third Generation Mobile Communication Systems" a book on "Radio Technologies and Concepts for IMT-Advanced" and a book "Mobile and Wireless Communications for IMT-Advanced and Beyond". In December 2016 Werner Mohr received the IEEE Communications Society Award for Public Service in the Field of Telecommunications.
Session 3	
Steffen Ring	
Thomas Weilacher	Thomas Weilacher has been working in the field of telecommunications since he finalised the study on electronic engineering. Since 1992 he has been working with the German regulatory authority (now "Federal Network Agency", BNetzA). Until 1995 he had been working in the area of licensing and monitoring in a regional office. From 1996 until now he has been

	involved in international frequency management issues, by working in the BNetzA headquarters in Mainz. His tasks include the participation in meetings of ECC groups, Radio Spectrum Committee and ITU-R working parties as a member of the German delegation. He was also acting as Vice Chairman of ECC Working Group FM from 2008 to the beginning of 2014 and has become chairman of WG FM in March 2014.
Session 4	
Miquel Payaró	
Juha-Pekka Soininen	
Gabriel Anzaldi	
Panagiotis Demestichas	**Prof. Panagiotis Demestichas** received the Diploma and the Ph.D. degrees in Electrical Engineering from the National Technical University of Athens (NTUA). He is full Professor (since April 2012) and has been the Chairman (September 2011 – September 2015) of the Department of Digital Systems of the University of Piraeus. Currently, he focuses on technology development for the SMEs WINGS ICT Solutions and Incelligent. In the period from October 2015 to September 2016 he was on Sabbatical, collaborating with the University of Surrey and in particular its 5G Innovation Center. He has over 25 years of experience in R&D in the fields of wireless/mobile broadband networks, fixed-mobile broadband convergence, Internet technologies, network planning and management, smart cities and environment management. Recent interests include 5G aspects, and especially, the exploitation of spectrum beyond 6 GHz, overall spectrum management, 5G architectures, knowledge-based and predictive management, virtualization technologies based on SDN and NFV. He has several publications in these areas in international journals and refereed conferences. At the European level, he has been actively involved in, and coordinated (project manager, deputy project manager, technical manager), a number of international research and development programs. He also organized the European Conference on Networks and Communications (EUCNC 2016), which took place in Athens, Greece in June 2016. He has also been involved in several bilateral collaborations with international and national industrial entities and public-sector organizations. In terms of standardization, he has contributed to various standardization bodies such as ETSI and IEEE. He was also chairing Working Groups of WWRF related to next-generation networking and advanced management technologies. He is a senior member of the IEEE, member of ACM and the Technical Chamber of Greece.
Cristina Bueti	
Session 5	

Peter Lindgren	Peter Lindgren holds a full Professorship in Multi business model and Technology innovation at Aarhus University, Denmark – Business development and technology innovation and is Vice President of CTIF Global Capsule (CGC). He is Director of CTIF Global Capsule/MBIT Research Center at Aarhus University – Business Development and Technology. He has researched and worked with network based high speed innovation since 2000. He has been head of Studies for Master in Engineering – Business Development and Technology at Aarhus University from 2014 - 2016. He has been researcher at Politechnico di Milano in Italy (2002/03), Stanford University, USA (2010/11), University Tor Vergata, Italy (2016/2017) and has in the time period 2007 – 2011. He has been the founder and Center Manager of International Center for Innovation www.ici.aau.dk at Aalborg University, founder of the MBIT research group and lab - http://btech.au.dk/forskning/mbit/ - and is cofounder of CTIF Global Capsule – www.ctifglobalcapsule.com. He has worked as researcher in many different multi business model and technology innovations projects and knowledge networks among others E100 - http://www.entovation.com/kleadmap/, Stanford University project Peace Innovation Lab http://captology.stanford.edu/projects/peace-innovation.html, The Nordic Women in business project - www.womeninbusiness.dk/, The Center for TeleInFrastruktur (CTIF), FP7 project about "multi business model innovation in the clouds" - www.Neffics.eu, EU Kask project – www.Biogas2020.se. He is author to several articles and books about business model innovation in networks and Emerging Business Models. He has an entrepreneurial and interdisciplinary approach to research. His research interests are multi business model and technology innovation in interdisciplinary networks, multi business model typologies, sensing, persuasive and virtual business models.
Walter Weigel	Dr. Walter Weigel graduated from the Technical University in Munich, Germany, with the Master Degree in electrical engineering in 1984 and with the Ph. D. degree in pattern recognition in 1990. From 1984 to 1991 he was assistant professor at the Institute of Data Processing at the Technical University in Munich.Dr. Weigel is since 1st April 2015 VP and CSO of the European Research Institute of Huawei, based in Leuven, Belgium. He was from September 2006 to July 2011 the Director General of the European Telecommunication Standards Institute ETSI. Between February 1991 and February 2015 he held several positions within Siemens AG, including VP of External Cooperations and Head of Standardization in Corporate Technology, VP of the Research & Concepts-department of the Mobile Networks business unit as well as Head of the business segment Video Processing for the semiconductor business unit (today Infineon).He is a member of the Innovationsdialog of the German Government, of the BDVA (Big Data Value Association) Board of Directors, of the Senate of Acatech (German academy of technical sciences), of the Board of 5GAA (5G Automotive Association), of the IEEE-SA Board of Governors as well as former member of the Key Enabling Technologies working group of DG Grow. He is also a lecturer at the Technische Universitaet Muenchen,

Anand Prasad 	Anand R. Prasad, Dr. & ir. (MScEngg) from Delft University of Technology, The Netherlands, is Chief Advanced Technologist, Executive Specialist, at NEC Corporation, Japan, where he leads the mobile communications security activity. Anand is the chairman of 3GPP SA3, founder chairman of the GISFI Security & Privacy group and member of the governing body / council member of GISFI and TSDSI. He has 20+ years of experience in networking, wireless and mobile communications product design, development and business development in companies around the globe. Anand has published 6 books and authored 50+ peer reviewed papers in international journals and conferences. Two of the books he co-authored on security are "Security in Next Generation Mobile Networks SAE/LTE and WiMAX", published by River Publishers, and "Security for Mobile Networks and Platforms", published by Artech House. He is a series editor for standardization book series and editor-in-chief of the "Journal of ICT Standardization" published by River Publishers. He is recipient of the 2014 ITU-AJ "Encouragement Award: ICT Accomplishment Field" and the 2012 (ISC)² "Asia Pacific Information Security Leadership Achievements (ISLA) Award as a Senior Information Security Professional". Anand is a certified information systems security professional (CISSP).
May Huang 	Dr. May Huang is professor and chair of the electrical and computer engineering department and meanwhile servers as director of global relations division at International Technological University (ITU). She's a guest professor at School of Software and Microelectronics, Peking University (PKU), Institute of Microelectronics, Tsinghua University, and Beijing University of Post and Telecommunication, China. She established research activities at ITU including a joint research team with members from ITU and PKU. Dr. Huang brings over 20 years of Silicon Valley IC design and software design experience to her work. She was a principal designer and project manager at Virtual Silicon Technology, Hitachi Semiconductor America, VLSI Technology, Inc., etc. She participated as a member of working group and balloter on VITAL, Verilog and Analog Extensions of VHDL toward IEEE standard. Dr. Huang obtained her bachelor's degree from South China University of Technology in electrical engineering. She earned her master's degree from Santa Clara University and doctorate from ITU. Her research interests are IC design and artificial intelligence.
Kiritkumar Lathia 	As ex-Vice President of Siemens "Product Strategy, Standards & Regulations", I have more than thirty years of management experience within telecommunications industry and as a result have developed and managed excellent collaborative relationships with national, regional and international organizations, government departments and regulatory authorities. This has also lead to thorough understanding of the issues related to WTO-TBT and IPR issues and their impact on global standardization and trade. For world class products, the need for collaborative research between universities and industries is paramount. This provides the basis for achieving full potential of innovations. However, innovation per se is not sufficient since global standards and regulations are fundamental part of the necessary tool-kit. I was one of the ETSI leaders in establishing the 3rd Generation Partnership Project (3GPP) with China, Japan, Korea and USA and the creation of Mobile Competence Centre (MCC) at ETSI. This is now the leading

	standards body for mobile communications worldwide, including 5G. Since formally retiring in 2009, I have been assisting collaborative platforms (GISFI and CGC) between worldwide Universities and SMEs with specific focus in 5G technologies which are more than just "telecom" as 5G will be a major disruptive technology impacting all industries.
Tommy Svensson	Tommy Svensson [S'98, M'03, SM'10] is Full Professor in Communication Systems at Chalmers University of Technology in Gothenburg, Sweden, where he is leading the Wireless Systems research on air interface and wireless backhaul networking technologies for future wireless systems. He received a Ph.D. in Information theory from Chalmers in 2003, and he has worked at Ericsson AB with core networks, radio access networks, and microwave transmission products. He was involved in the European WINNER and ARTIST4G projects that made important contributions to the 3GPP LTE standards, the EU FP7 METIS and the EU H2020 5GPPP mmMAGIC 5G projects, and currently in the EU H2020 5GPPP 5GCar project, as well as in the ChaseOn antenna systems excellence center at Chalmers targeting mm-wave solutions for 5G access, backhaul and V2X scenarios. His research interests include design and analysis of physical layer algorithms, multiple access, resource allocation, cooperative systems, moving networks, and satellite networks. He has co-authored 4 books, 70 journal papers, 118 conference papers and 51 public EU projects deliverables. He is Chairman of the IEEE Sweden joint Vehicular Technology/ Communications/ Information Theory Societies chapter and editor of IEEE Transactions on Wireless Communications, and has been editor of IEEE Wireless Communications Letters, Guest Editor of several top journals, organized several tutorials and workshops at top IEEE conferences, and served as coordinator of the Communication Engineering Master's Program at Chalmers, www.chalmers.se/en/staff/Pages/tommy-svensson.aspx.
Special Session 1	
Angela Alexiou	Angeliki Alexiou received the Diploma in Electrical and Computer Engineering from the National Technical University of Athens in 1994 and the PhD in Electrical Engineering from Imperial College of Science, Technology and Medicine, University of London in 2000. Since November 2014 she is an associate professor at the Department of Digital Systems, University of Piraeus, Greece, where she conducts research and teaches courses in the area of Broadband Communications. Prior to this appointment she was with Bell Laboratories, Wireless Research, Lucent Technologies, now Alcatel-Lucent, in Swindon, UK, first as a member of technical staff (January 1999-February 2006) and later as a Technical Manager (March 2006-April 2009). Her current research interests include multiple antenna systems and multihop communications, advanced signal processing and efficient radio resource management for future generation wireless systems. Dr Alexiou is a co-recipient of Bell Labs President's Gold Award in 2002 for contributions to Bell Labs Layered Space-Time (BLAST) project and the Central Bell Labs Teamwork Award in 2004 for role model teamwork and technical achievements in the IST FITNESS project. Dr Alexiou is the Chair of the Working Group on New Air Interfaces, Relay-based systems and Smart antennas of the Wireless World Research Forum. She is a member of the IEEE, the IET and the Technical Chamber of Greece.

Yansha Deng 	Yansha Deng is currently a Lecturer (Assistant Professor) in department of Informatics, Kings College London, U. K. She received the Ph.D. degree in electrical engineering from the Queen Mary University of London, U.K. in 2015. From 2015 to 2017, she was a Post-Doctoral Research Fellow with Kings College London, U.K.. Her research interests include signal processing and channel modeling of molecular communication, chemical circuits and genetic circuit design for molecular communication. She was a recipient of the Best Paper Awards from ICC 2016 and Globecom 2017 in the area of molecular communication. She is currently an Editor of IEEE Transactions on Communications and IEEE Communication Letters.
Special Session 2
Sudhir Dixit 	Dr. Sudhir Dixit is a Senior Fellow and Evangelist of Basic Internet at the Basic Internet Foundation and heads its US operations. He is also a Board Member & Working Group Chair at the Wireless World Research Forum (WWRF). From 2015 to 2017 he was the CEO and Co-Founder of a start-up, Skydoot, Inc, in the cloud-based and collaboration space. From December 2013 to April 2015, he was a Distinguished Chief Technologist and CTO of the Communications and Media Services for the Americas Region of Hewlett-Packard Enterprise Services in Palo Alto, CA, and prior to this he was the Director of Hewlett-Packard Labs India from September 2009. From June 2009 to August 2009, he was a Director at HP Labs in Palo Alto. Before joining HP, he held various leadership positions at BlackBerry, Nokia, NSN and Verizon Communications. Sudhir Dixit has 21 patents granted by the US PTO and has published over 200 papers and edited, co-edited, or authored eight books by Wiley, Springer and Artech House. He has been a technical editor of IEEE Communications Magazine, and is presently on the editorial boards of IEEE Spectrum Magazine, Cambridge University Press Wireless Series and Springer's Wireless Personal Communications Journal. From 2010 to 2012, he was an Adjunct Professor of Computer Science at the University of California, Davis, and, since 2010, he has been a Docent of Broadband Mobile Communications for Emerging Economies at the University of Oulu, Finland. A Life Fellow of the IEEE, Fellow of IET and IETE, Dixit holds a Ph.D. from the University of Strathclyde, Glasgow, U.K. and an M.B.A. from the Florida Institute of Technology, Melbourne, Florida.
Klaus David	
Roberto Riggio	
Marja Matinmikko-Blue 	**Marja Matinmikko-Blue** is Senior Research Fellow and Project Manager at Centre for Wireless Communications (CWC), University of Oulu. She manages uO5G project on new micro operator concept for boosting local service delivery in 5G. She is also research coordinator of 6G-Enabled Wireless Smart Society & Ecosystem (6Genesis) Flagship. She holds a Dr.Sc. (Tech.) degree in Telecommunications Engineering from University of Oulu on cognitive radio techniques, and is finalizing her Ph.D. degree in Industrial Engineering and Management on stakeholder analysis for spectrum sharing. She conducts inter-disciplinary research on 5G and beyond networks from

	business, technical, and regulatory perspective in close collaboration with industry, academia, and regulators. She has published over 100 scientific papers and prepared 100 contributions to spectrum regulatory forums in Europe (CEPT) and globally (ITU).