Program Outline

| | | Day I: Tuesday Oct | tober 22, 2013 | |
|------------------------------------|--|--------------------|-----------------------|--|
| 08:30-09:00 | Registration | | | |
| 09:00-10:30 | Opening Session - 300 | | | |
| 10:30-11:00 | | Morning C | offee Break | |
| 11:00-12:30 | | Quantum Co | mputing - 300 | |
| 12.30-13:30 | Lunch | | | |
| 13:30-15:00 | WG A Session I - 225 WG B Session I - 215 WG C Session I - 300 WG D Session I - 400 | | | |
| 15:00-15:30 | Afternoon Coffee Break | | | |
| 15:30-17:00 | WG A Session II - 225 WG B Session II – 215 WG D Session II - 400 | | | WG D Session II - 400 |
| 17:00-17:30 | | | WG C Session II - 300 | Editors meeting for ITU WP5D workshop contribution - 400 |
| 17:30-19:30 | Reception | | | |
| Day II: Wednesday October 23, 2013 | | | | |
| 08:30-09:00 | Registration | | | |
| 09:00-10:30 | Commercialization & Standardization Session I - 300 | | | |
| 10:30-11:00 | Morning Coffee Break | | | |
| 11:00-12:30 | Commercialization & Standardization Session II - 300 | | | |
| 12.30-13:30 | Lunch | | | |
| 13:30-15:00 | WG A/B Joint Session III - 400 Afternoon Coffee Break WG C/D Joint Session III - 300 | | | |
| 15:00-15:30 | W.C. A./D. L | | | 14/0 D G |
| 15:30-17:00 | WG A/B Joint S | | WG C Session IV - 300 | WG D Session IV - 225 |
| 18:30 Banquet | | | | |
| Day III: Thursday October 24, 2013 | | | | |
| 09:00-10:30 | Cyber Security Panel Session - 300 | | | |
| 10:30-11:00 | Morning Coffee Break | | | |
| 11:00-12:30 | Optical Wireless- 300 | | | |
| 12.30-13:30 | Lunch | | | |
| 13:30-15:30 | Final Session - 300 | | | |

Final Program

| | | Day | I: Tuesday October 22, 2013 | | |
|---------------|--|-------------|--|-------------|--|
| | 8:00-9:00 Registration | | | | |
| | 0-10:30 Opening Session (Chair: Dr. Nigel Jefferies) - 300 | | | | WG C Session II - 300 |
| 09:00-09:15 | Opening of WWRF 31, Welcoming Message from ICICS Director | 14:30-15:00 | Invited Talk: "Network Efficiency Improvements for Future | 15:30-16:00 | Design Considerations for Radio Protocol Improvement |
| | Prof. Victor Leung and Prof. Panos Nasiopoulo, | | Wireless Networks" | | beyond LTE-Advanced: Service Access Integration and |
| 00 45 00 00 | The University of British Columbia, Canada | | Clara Qian Li, Intel Corp., USA | | Optimization |
| 09:15-09:30 | WWRF Status and Activities | 14.00 14.20 | WG D Session I - 400 | | Ki-Dong Lee and Sang G. Kim, |
| 09:30-09:35 | Prof. Nigel Jefferies, WWRF Chair Award to new Fellow Robert Simmonds | 14:00-14:20 | Ultra Dense Network: Key Solution for Future Capacity Explosion | | LG Electronics Mobile Research |
| 09.30-09.33 | Prof. Nigel Jefferies, WWRF Chair | | Liu Jiamin, Kang Shaoli, Wang Yingmin, Qin Fei, Kou Huiru | 16:00-16:30 | Performance Analysis of a Joint Carrier Frequency |
| 09:35-10:00 | Fellow's Presentation: A Brief History of Clearnet | | State Key Laboratory of Wireless Mobile Communication, | | Offset Estimation Algorithm for Co-channel OFDM |
| | Dr. Robert Simmonds, Lenbrook Corp. | | CATT, Beijing, China | | Signals Using MUSIC Algorithm with Modified Rank |
| 10:00-10:30 | 5G Wireless | 14:20-14:40 | Cooperative Distributed MIMO Broadcasting — A | | Selection |
| | Dr. Wen Tong, Huawei Technologies | | Promising Solution to the "Mobile Data Tsunami" in | 16:30-17:00 | Seema Sud, The Aerospace Corporation, USA Spectral Efficiency of Neighbourhood Femtocell |
| | 10:30-11:00 Morning Coffee Break | | 2020 | 10.30-17.00 | Networks |
| | 2:30 Quantum Computing Session (Chair: Dr. Shalini) - 300 | | Ming Liu, Jean-François Hélard, | | Anwer Al-Dulaimi, Alagan Anpalagan, |
| 11:00-11:45 | Invited Talk: "Quantum Information Processing" | | Matthieu Crussière, Maryline Hélard | | Ryerson University, Canada; |
| | Presenter: Prof. Raymond Laflamme | | Institut National des Sciences Appliquées de Rennes (INSA), | | John Cosmas, Brunel University, UK |
| | Executive Director in Institute for Quantum Computing at Univesity of Waterloo | 14:40-15:00 | Rennes, France Software-Based Design of Multiple Antenna Systems for | 17:00-17:30 | Experimental Results on Indoor Positioning based on |
| 11:45-12:30 | Quantum Computing and Quantum Communications at LANL | 14.40-15.00 | Large Wireless Capacities | | Visible Light Communications |
| 11.43 12.30 | Presenter: Prof. Rolando D. Somma | | Maryam Dehghani Estarki and Rodney G. Vaughan | | Siu Wai Ho, Telecommunications Research, |
| | Theoretical Physicist and Staff at Los Alamos National Laboratory | | Sierra Wireless Mobile Communications Laboratory, | | UniSA, Australia |
| | 12:30-13:30 Lunch | | School of Engineering Science Simon Fraser University, | 15:30-16:00 | WG D Session II - 400 |
| | 13:30-14:00 Plenary Session | | Burnaby, Canada | 15:30-16:00 | Invited Talk: "Angular Momentum Radio – Principles and Techniques" |
| 13:30 - 13:50 | Introduction of WWRF Working Groups and Election of WG | | 15:00-15:30 Afternoon Coffee Break | | Bo Thidé, Swedish Institute of Space Physics, |
| | Chairs and Vice-chairs | | 15:30-17:30 Parallel Session II of WGs | | Uppsala, Sweden, |
| 13:50 - 14:00 | Invitation to WWRF-32 | 45 20 46 00 | WG A Session II - 225 | | and University of Padua, Padua, Italy |
| | Presenter: Prof. Mischa Dohler | 15:30-16:00 | Using mobile phones for environmental protection in Africa: The Equatorial Africa Deposition Network case | | Fabrizio Tamburini, Twist Off S.R.L., Padua, Italy, |
| | King's College, University of London, UK 14:00-15:00 Parallel Session I of WGs | | study | | and University of Padua, Padua, Italy |
| | WG A Session I - 225 | | Alejandro Islas Lopez, McMaster University, Canada | 16:00-16:20 | Wireless Wide Area Network for Internet of Things |
| 14:00-14:30 | Smart Home Wireless Sensor Nodes: Addressing the | 16:00-16:30 | Proactive Security Issues in WLANs – a Nigerian case | | Chandra Bontu, Shalini Periyalwar, |
| | Challenges using Smart Objects and Artificial Intelligence | | study | | Mark Pecen, Jim Womack, |
| | Per Lynggaard, | | Isa Abdullahi/ Knud Erik Skouby, | 16:20-16:40 | Blackberry Corp. Mobility Management for LTE based Small Cell |
| | Aalborg University, Denmark | | Aalborg University, Denmark | 10.20-10.40 | Networks |
| | WG B Session I - 215 | 16:30-17:00 | WP-draft: Developing countries requirements | | Saba Al-Rubaye and Anwer Al-Dulaimi, |
| 14:00-14:30 | Evaluating Customer Energy Invoice Calculation as a Service | 45 20 46 00 | WG B Session II - 215 | | Ryerson University, Toronto, Canada |
| | Jari Porras, | 15:30-16:00 | Network based Aggregation Server for Federated WiFi Access | 16:40-17:00 | Autonomous Opportunistic Spectrum Access |
| 14:30-15:00 | Lappeenranta University of Technology, Finland Smart Grid invoice privacy in the Cloud | | Access Andreas U. Schmidt | | Strategie: Benefits of Adaptive Strategies |
| 14.50-15.00 | Jari Porras, | 16:00-16:30 | (U)SIM Usage in OTT | | Zaheer Khan, Marcos Katz, |
| | Lappeenranta University of Technology, Finland | 10.00 10.50 | Marcus Wong | | Centre for Wireless Communications (CWC), |
| | WG C Session I – 300 | 16:30-17:00 | "let's imagine you are an app" | | University of Oulu, Finland; |
| 14:00-14:30 | Invited Talk: "Small Cell Enhancement with Multi-Stream | | Mario Hoffmann | Lui- A. F | Zhu Han, University Of Houston, USA; |
| | Aggregation" (White paper identification) | | | Luiz A. L | DaSilva, Virginia Tech, USA and Trinity College Dublin, Ireland 17:30-19:30 Reception |
| | Dr. Yongxing Zhou, Huawei, China | | | | 17.30-13.30 Neception |
| | | | | | |

| Day | II: Wednes | day Octobei | r 23, 2013 |
|-----|------------|-------------|------------|
|-----|------------|-------------|------------|

| Day II. Weditesday October 25, 2015 | | | | | |
|-------------------------------------|--|-------------|--|--|--|
| | 8:00-9:00 Registration | | 15:00-15:30 Afternoon Coffee Break | | |
| | 9:00-10:30 Commercialization & Standardization Session I – 300 | | 15:30-17:30 Parallel Session IV of WGs | | |
| | Workshop on Wireless Standardization and Commercialization Session I | | WG A/B Joint Session IV - 400 | | |
| 9:00-9:05 | Welcome and Introduction | 15:30-15:50 | Status of the book | Knud Erik Skouby | |
| | Prof. Dave Michelson | 15:50-16:10 | White Paper on User Interfaces | Jari Porras | |
| | University of British Columbia | 16:10-16:45 | Discussion on White paper drafts | | |
| 9:05-9:30 | Changing the Innovation Cycle | | WP-draft: User Requirements/Social Networks | Knud Erik Skouby | |
| 3.03 3.30 | Prof. Mischa Dohler | | WP-draft: User 2020 | Jari Porras | |
| | King's College, University of London | | WP-draft: Service level agreement | Jari Porras | |
| 9:30-10:00 | The Mobile Operator's Challenge on Business-Relevant Technology Advances | 16:45-17:00 | Wrap up of WGA and WGB | Knud Erik Skouby, Jari Porras | |
| 3.30 10.00 | Dr-Ing Hendrik Berndt | 10.45 17.00 | WG C Session IV - 300 | Kilda Elik Skouby, sail i oli as | |
| | DoCoMo Communications Laboratories Europe | 15:30-15:55 | CTP-A: A New Routing protocol Based on Collection Tree | Protocol | |
| | Bocolino Communications Euboratories Europe | 13.30 13.33 | CTI A. A New Routing protocol based on concetion free | Fariborz Entezami, Christos Politis, | |
| 10:00 - 10:30 | Move Together To Stay Together | | | Kingston University, UK | |
| 10.00 - 10.50 | Dr. Ki-Dong Lee | 15:55-16:20 | Secure Dynamic & Autonomous Authentication Framewo | | |
| | LG Electronics Mobile Research U.S.A. | 15.55-10.20 | | | |
| | | | Nuwan weerasing | he, Arvind Ramrekha, Christos Politis, | |
| | 10:30-11:00 Morning Coffee Break | 46 20 46 45 | | Kingston University, UK | |
| | 11:00-12:30 Commercialization & Standardization Session II – 300 | 16:20-16:45 | Reliability of Routing Protocols in Smart Utility Networks | • | |
| | Workshop on Wireless Standardization and Commercialization Session II | | Gopalakrishnan Iy | er, Prathima Agrawal, Ruben Salazar, | |
| 11:00-11:30 | Support of Innovative SMEs as Part of European Collaborative Research Framework Programs | | | Auburn University, USA | |
| | Dr. Werner Mohr | 16:45-17:00 | Meeting Wrap-Up, discussion on White Papers, conclusion | | |
| | Nokia Solutions and Networks (Munich, Germany) | | | ALL | |
| 11:30-12:00 | Wireless Commercial Resources in Canada | | WG D Session IV - 225 | | |
| | Brad Lowe | 15:30-15:50 | Security Analysis on NFC Applications | | |
| | Wavefront Wireless Commercialization Centre | | , , , | ı Zhao, Puxin Yao, Tianbo Lu, Bing Xu | |
| 11:30-12:00 | Panel Session | | School of Software Engineering, Beijing Univers | ity of Posts and Telecommunications, | |
| | 12:30-13:30 Lunch | | | Beijing, China | |
| | 13:30-15:00 Parallel Session III of WGs | 15:50-16:10 | On Secure Inter- and Intra-Vehicle Communications | | |
| | WG A/B Joint Session III - 400 | | | hmud Hasan and Hussein T. Mouftah | |
| | WG A/B Joint Session on Cyber Security Organizer : Mario D. Hoffmann | | | al Engineering and Computer Science, | |
| 13:30-14:00 | "Identity in your Wallet" - User-centric security with a business value Jörg | | Unive | rsity of Ottawa, Ottawa, ON, Canada | |
| 14:00-14:30 | A Regulator's Perspective: Leading the way with Privacy by Design Michelle | 16:10-16:30 | Spectrum Technology Evolution for future cellular system | ns | |
| | WG C/D Joint Session III - 300 | | | Dr. Yongxing Zhou | |
| 13:30-13:55 | Introduction to 5G preparation activities in Korea | | | 3GPP LTE RAN standard in Huawei | |
| | Lee HyeonWoo, DanKook University, Korea | 16:30-17:00 | Discussion on the 2 WGD White Papers in progress and n | ew white papers, conclusions, | |
| 13:55-14:20 | World Beyond 2020: How 5G Will Play a Major Role in Supporting Socio-Technical Evolution | | meeting wrap-up | | |
| | Agnieszka Szufarska, Patrick Marsch, Preben Mogensen, Ossi Pollanen, | | | ALL | |
| | Nokia Solutions and Networks | | 18:30 Banquet | | |
| 14:20-14:45 | Moving Towards Green Communications: The Emergence of Neighbourhood Femtocell | | · | | |
| | Networks | | | | |
| | Anwer Al-Dulaimi, Alagan Anpalagan, Ryerson University, Canada | | | | |
| 14:45-15:00 | Joint Session Wrap-Up (White Papers discussion etc.) ALL | | | | |
| | | | | | |
| | Day III. Thursday | October 24 | 2013 | | |
| Day III: Thursday October 24, 2013 | | | | | |

| Moderator : Mario D. Hoffmann | Presenter: Dr. Aleksandar Jovicic | | |
|--|--|--|--|
| Panelist: Michelle Chibba, Prof. Atta Badii, Dr. Nigel Jefferies, Jörg Heuer | Qualcomm Research New Jersey, | | |
| 10:30-11:00 Morning Coffee Break | Lead Engineer of Qualcomm's R&D program on Visible Light Communication | | |
| 11:00-12:30 Optical Wireless Session (Chair: Dr. Lutz Lampe, Dr. Roger Green) - 300 | 12:30-13:30 Lunch | | |
| 11:00-11:30 EU COST Action IC1101: "OPTICWISE" : Shaping the future of Optical Wireless | 13:30-15:30 Final Session (Chair: Dr. Nigel Jefferies) - 300 | | |
| communications | 13:30-14:00 Dynamic Spectrum Access in the TV White Spaces & Beyond | | |
| Presenter: Prof. Roger Green | Dr. Ranveer Chandra, Microsoft Research | | |
| Professor of Electronic Communication Systems, School of Engineering, | 14:00-14:30 Devices and Networks for Future Embedded Mobile Internet | | |
| University of Warwick, United Kingdom, | Dr. Geng Wu, Intel Corp. | | |
| and European Project Action COST IC1101 Financial Rapporteur, and co-chair of the Special | 14:30-15:00 General Assembly | | |
| Interest Groups (SIGs) on Visible Light Communications (VLC) and Underwater Systems | Dr. Nigel Jefferies, WWRF Chair | | |
| 11:30-12:00 Indoor to Outer space: theory and experiments in optical wireless communications | 15:00-15:30 WG reports and Close of meeting | | |

Presenter: Prof. Steve Hranilovic

Associate Professor in the Department of Electrical and Computer Engineering, McMaster University (Hamilton, Ontario, Canada) 12:00-12:30

Visible Light Communication: An Industrial Perspective

Dr. Nigel Jefferies, WWRF Chair

9:00-10:30 Cyber Security Panel Session - 300