# Living in a converged world
## Impossible without standards?
### ITU Kaleidoscope conference
### St. Petersburg, Russian Federation, 3-5 June 2014

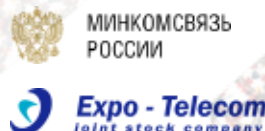| DAY 1 - TUESDAY 3 JUNE 2014 | |
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| 08:30 - 09:30 | **Welcome and Registration** |
| 09:30 - 11:15 | **Opening Plenary**<br><br>▪ **Welcome Host: Sergey Bachevsky** (Rector, SPbSUT, Russian Federation; Kaleidoscope 2014 General Chairman)<br>▪ **Opening Address: Malcolm Johnson** (Director, Telecommunication Standardization Bureau, ITU)<br>▪ **Inaugural Speeches:**<br>**Oleg Dukhovnitsky**, Head of the Federal Agency of Communications, Russian Federation<br>**Rashid Ismailov**, Head of Department of International Cooperation, Ministry of Communications and Mass Media, Russian Federation<br>**Ivan Gromov**, Chairman of the Committee on IT and Communications, Government of St. Petersburg, Russian Federation<br>**Vyacheslav Ivanyuk**, Director General of Russian Broadcasting and Warning Networks, Russian Federation<br>▪ **Scientific Welcome Speech:** Nobel Prize Winner Academician **Z. Alferov** |
| 11:15 - 11:45 | **Coffee break** |
| 11:45 - 12:30 | **Keynote speeches**<br>**Session Chair: Oleg Zolotokrylin** (SPbSUT, Russian Federation)<br><br>▪ Internet of Nanothings.<br>**I.F. Akyildiz** (Georgia Institute of Technology, USA)<br>▪ Experimental Biology and Molecular Communications.<br>**Y. Koucheryavy** (Tampere University of Technology, Finland) |
| 12:30 - 13:30 | **Special Session** |
| 13:30 - 14:30 | **Lunch** |
| 14:30 - 16:00 | **Session 1 – The future of convergence**<br>**Session Chair: Eva Ibarrola** (University of the Basque Country, Spain)<br><br>▪ **S1.1 Invited paper**: A Software Defined Approach to Unified IPv6 Transition.<br>Wenfeng Xia, Haiyong Xie (University of Science and Technology of China, China); Tina Tsou, Felix Lu, Wei Feng, **Kevin Hu** (Huawei Technologies, China); Diego Lopez (Telefonica, Spain); Qiong Sun (Beijing Research Institute, China Telecom)<br>▪ **S1.2** Global Convergence in Digital Identity and Attribute Management: Emerging Needs for Standardization.<br>Maurizio Talamo (University of Rome Tor Vergata and Nestor Laboratory, Italy); Maria Laura Barchiesi (Tor Vergata University of Rome, Italy); **Daniela Merella**, Christian Schunck (Fondazione Inuit Tor Vergata University of Rome, Italy)<br>▪ **S1.3** Distributed Demand-Side Management with Load Uncertainty.*<br>**Emmanuel Chifuel Manasseh**, Shuichi Ohno, Toru Yamamoto (Hiroshima University, Japan); Aloys Mvuma (University of Dodoma, Tanzania)<br>▪ **S1.4** Proposal of "Cyber Parallel Traffic World" Cloud Service.<br>**Yoshitoshi Murata** (Iwate Prefectural University, Japan); Shinya Saito (Iwate Prefectural University Graduate School, Japan) |
| | An * denotes papers nominated for best paper awards. |

| 16:00 - 16:30 | **Coffee Break** |
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| 16:30 - 17:30 | **Special session - Jules Verne's corner - Heart to heart communication**<br>**Moderator: Andrey Koucheryavy** (SPbSUT, Russian Federation)<br><br>**Panelists:**<br>▪ Telefax as forerunner of teleportation<br>   **Boris Goldstein** (SPb GUT, Russian Federation)<br>▪ From Jules Verne's Moon Landing Dream in 1865 to "Star Wars" now<br>   **Manfred Schneps** (Ventspils University College, Latvia)<br>▪ From Ubiquitous Sensor Network (USN) to Heart to Heart (He2He) Communications<br>   **Andrey Koucheryavy** (SPbSUT, Russian Federation) |
| 19:00 | **Welcome Reception** |

## DAY 2 - WEDNESDAY 4 JUNE 2014

| 09:30 - 10:00 | **Keynote speech**<br>**Session Chair: Alessia Magliarditi** (ITU-T, Switzerland)<br><br>Data vs Device-centric Cloud services for resource monitoring.<br>**Antonio Puliafito**, Maria Fazio (University of Messina, Italy) |
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| 10:00 - 11:00 | **Session 2 – Part I: 3G, 4G, 5G and beyond – the impact on spectrum**<br>**Session Chair: Christoph Dosch** (ITU-R Study Group 6 Chairman; IRT GmbH, Germany)<br><br>▪ **S2.1** Towards Converged 5G Mobile Networks - Challenges and Current Trends.*<br>   **Anna Zakrzewska**, Sarah Ruepp, Michael S. Berger (Technical University of Denmark, Denmark)<br>▪ **S2.2** Comparison of WiBro and TD-LTE through the Social Network Analysis.<br>   **Dong-hyu Kim**, Heejin Lee, Jooyoung Kwak (Yonsei University, Korea)<br>▪ **S2.3** Modelling and performance analysis of pre-emption based radio admission control scheme for video conferencing over LTE.<br>   Vladimir Y. Borodakiy (JSC Concern Sistemprom, Russia); Irina A. Gudkova, **Ekaterina V. Markova**, Konstantin Samouylov (Peoples' Friendship University of Russia, Russia) |
| 11:00 - 11:30 | **Coffee Break** |
| 11:30 - 13:00 | **Session 2 – Part II: 3G, 4G, 5G and beyond – the impact on spectrum**<br>**Session Chair: Ved P. Kafle** (NICT, Japan)<br><br>▪ **S2.4** IMT Standardisation and Spectrum Identification: Regulatory and Technology Implications.<br>   **Mohamed El-Moghazi**, Jason Whalley, James Irvine (University of Strathclyde, United Kingdom)<br>▪ **S2.5** Spectrum occupation and perspectives millimeter band utilization for 5G networks.<br>   Grigory Bochechka (Icominvest, Russia); **Valery Tikhvinskiy** (Moscow Technical University of Communication and Informatisation (MTUCI), Russia)<br>▪ **S2.6** A Non-cooperative TV White Space Broadband Market Model for Rural Entrepreneurs.<br>   **Sindiso Mpenyu Nleya** (Computer Science Department, South Africa); Bigomokero Antoine Bagula (University of Western Cape, South Africa); Marco Zennaro, Ermanno Pietrosemoli (International Centre for Theoretical Physics (ICTP), Italy) |
| 13:00 - 14:00 | **Lunch** |
| 14:00 - 14:30 | **Fast-forward Poster Session**<br>**Session Chair: Martin Adolph** (ITU-T, Switzerland) |
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| **14:30 - 16:00** | **Poster Session with coffee break**<br>**Session Chair: Martin Adolph** (ITU-T, Switzerland)<br><br>▪ **P.1** How to support a standard on a multi-level playing field of standardization: propositions, strategies and contributions.<br>**Ellen Filipovic'** (TU Berlin, Germany)<br><br>▪ **P.2** Content Distribution in Information Centric Network: Economic Incentive Analysis in Game Theoretic Approach.<br>**Mohammad Arifuzzaman**, Keping Yu, Takuro Sato (Waseda University, Japan)<br><br>▪ **P.3** Innovative RF Localization for Wireless Video Capsule Endoscopy.<br>**Igor Vitas**, Damir Zrno (Faculty of Electrical Engineering, University of Zagreb, Croatia); Dina Simunic (University of Zagreb, Croatia); Ramjee Prasad (Aalborg University, Denmark)<br><br>▪ **P.4** Economical efficiency assessment model of spectrum conversion for new mobile wireless technologies.<br>**Victor Koval** (GEYSER-TELECOM, Ltd, Russia); Valery Tikhvinskiy (Moscow Technical University of Communication and Informatisation, Russia)<br><br>▪ **P.5** A Mutual Key Agreement Protocol To Mitigate Replaying Attack In eXpressive Internet Architecture (XIA).<br>Beny Nugraha (Mercu Buana University, Indonesia); **Rahamatullah Khondoker**, Ronald Marx, Kpatcha Bayarou (Fraunhofer SIT, Germany)<br><br>▪ **P.6** A cloud platform for QoE evaluation: QoXcloud.<br>**Eduardo Saiz**, Eva Ibarrola, Leire Cristobo, Ianire Taboada (University of the Basque Country, Spain)<br><br>▪ **P.7** Performance evaluation of a dual diversity reception base on OFDM RoFSO systems over correlated log-normal fading channel.<br>**Fan Bai**, Yuwei Su, Takuro Sato (Waseda University, Japan)<br><br>▪ **P.8** Assessment of New Information and Communication Technologies using activity-based costing and tensor analysis of networks.<br>Nikolay Suschenko, Anatoly Nazarenko, **Viliam Sarian**, Alexander Lutokhin (Federal State Unitary Enterprise Radio Research And Development Institute, Russia)<br><br>▪ **P.9** Sustainable Security Advantage in a Changing Environment: The Cybersecurity Capability Maturity Model (CM2).<br>**Corlane Barclay** (University of Technology Jamaica, Jamaica) |
| **16:00 - 17:30** | **Session 3 – Multimedia applications for all?!**<br>**Session Chair: Dhananjay Kumar** (Anna University, India)<br><br>▪ **S3.1 Invited Paper:** Conversion of Broadcasting and Broadband Internet - A benefit for people with disabilities (and for us all).<br>**Christoph Dosch** (ITU-R Study Group 6 Chairman; IRT GmbH, Germany)<br><br>▪ **S3.2** SQUALES: A QT-based Application for Full-Reference Objective Stereoscopic Video Quality Measurement.*<br>José Vinícius de Miranda Cardoso; Marcelo Sampaio de Alencar (Federal University of Campina Grande, Brazil); Carlos Danilo Regis (IFPB, Brazil)<br><br>▪ **S3.3** Design and Specifications of a Repository for Real-Time Open Data.<br>Sudesh Lutchman, **Patrick Hosein** (University of the West Indies, Trinidad and Tobago)<br><br>▪ **S3.4** A Cross-Country Comparison on User Acceptance of Multimedia Cloud Services - Germany and Japan<br>**Yasuhiro Tanaka** (Senshu University, Japan); Akihisa Kodate (Tsuda College, Japan) |
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# DAY 3 - THURSDAY 5 JUNE 2014

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| 9:30 - 11:00 | **Session 4 – E-Health and standards**<br>**Session Chair: Martin Adolph** (ITU-T, Switzerland)<br><br>▪ **S4.1** Combining ICT-Standards Essential-Patents and Medical-managerial Guidelines towards sustainable Assisted-living and home-care.*<br>**Vasileios P. Spyropoulos** (Technological Education Institute of Athens, Greece)<br><br>▪ **S4.2** E-HEALTH Standardization Challenges in Emerging Economies: The case of Mexico.<br>Arturo Serrano-Santoyo, **Veronica Rojas Mendizabal** (CICESE Research Center, Mexico)<br><br>▪ **S4.3** Reverse Standardization from Public E-health Service.<br>**Masahiro Kuroda**, Yasuyuki Koga, Yasunobu Akaoka (NICT, Japan); Yasunobu Nohara, Naoki Nakashima, Ashir Ahmed (Kyushu University, Japan); Partha Pratim Ghosh, Rafiqul Maruf (Grameen Communications, Bangladesh)<br><br>▪ **S4.4** Global standards, the key enablers for deploying next generation emergency communications networks.<br>**Fidel Liberal**, Jose Oscar Fajardo (University of the Basque Country, Spain); Naiara Goia (ITELAZPI S.A., Spain); Ioanna Mesogiti (COSMOTE Mobile Telecommunications S.A., Greece) |
| 11:00 - 11:30 | **Coffee Break** |
| 11:30 - 12:30 | **Session 5 – Sensor networks**<br>**Session Chair: Mitsuji Matsumoto** (Waseda University, Japan)<br><br>▪ **S5.1** Dynamic Mobile Sensor Network Platform for ID-based Communication.*<br>**Ved P. Kafle**, Yusuke Fukushima, Hiroaki Harai (NICT, Japan)<br><br>▪ **S5.2** An Experimental Test-Bed for the Evaluation of the Hidden Terminal Problems on the IEEE 802.15.5 Standard.<br>David Rodenas-Herraiz, **Antonio-Javier Garcia-Sanchez**, Felipe Garcia-Sanchez, Joan Garcia-Haro (Technical University of Cartagena, Spain)<br><br>▪ **S5.3** On Software Standards for Smart Cities: API or DPI.<br>**Dmitry Namiot** (Moscow State University, Russia); Manfred Sneps-Sneppe (Ventspils University College, Latvia) |
| 12:30 - 13:30 | **Lunch** |
| 13:30 - 15:00 | **Session 6 – Standardization, Education, Innovation**<br>**Session Chair: Elena Bogdanova** (Director of the Institute of International Business and Law NRU ITMO, Russian Federation)<br><br>▪ **S6.1 Invited Paper:** Standardization: A primer.<br>**Ken Krechmer** (University of Colorado, USA)<br><br>▪ **S6.2** Standards as enablers for innovation in education - the breakdown of European pre-standardisation.<br>**Tore Hoel** (Oslo and Akershus University College of Applied Sciences, Norway)<br><br>▪ **S6.3** Syllabuses Crawling and Knowledge Extraction of Courses for Global Standardization Education.<br>**Hiroshi Nakanishi**, Yoshiaki Kanaya (Osaka University, Japan); Tetsuo Oka (Tresbind Corporation, Japan)<br><br>▪ **S6.4** Standards: Inhospitable Terrain for Innovation?*<br>Justin Pierce, **Megi Medzmariashvili** (Lund University, Sweden) |
| 15:00 - 15:30 | **Coffee Break** |
| 15:30 - 16:00 | **Wrap-Up Session**<br>**Session Chairman: Christoph Dosch** (ITU-R Study Group 6 Chairman; IRT GmbH, Germany)<br>Summary of the sixth Kaleidoscope conference (panel with Session Chairs) |
| 16:00 - 16:30 | **Best Paper Awards and Young Author Recognition Ceremony**<br>**Sergey Bachevsky** (Rector, SPbSUT; Russian Federation; Kaleidoscope 2014 General Chairman)<br>**Alessia Magliarditi** (ITU Kaleidoscope Coordinator) |
| 16:30 - 17:00 | **Closing**<br><br>**Sergey Bachevsky** (Rector, SPbSUT; Russian Federation; Kaleidoscope 2014 General Chairman)<br>**Alessia Magliarditi** (ITU Kaleidoscope Coordinator) |
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