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Sergey Andreev   Sergey Balandin
Yevgeni Koucheryavy (Eds.)

Internet of Things, Smart Spaces, and Next Generation Networking

12th International Conference, NEW2AN 2012,
and 5th Conference, ruSMART 2012,
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Sergey Andreev
Yevgeni Koucheryavy
Tampere University of Technology (TUT)
Department of Communications Engineering
Korkeakoulunkatu 1, 33720 Tampere, Finland
E-mail: sergey.andreev@tut.fi; yk@cs.tut.fi

Sergey Balandin
FRUCT Oy
Kissankellontie 20B, 00930, Helsinki, Finland
E-mail: sergey.balandin@fruct.org

Preface

We welcome you to the joint proceedings of the 12th NEW2AN (Next-Generation Teletraffic and Wired/Wireless Advanced Networking) and 5th Conference on Internet of Things and Smart Spaces ruSMART (Are You Smart) held in St. Petersburg, Russia, during August 27–29, 2012.

Originally, the NEW2AN conference was launched by ITC (International Teletraffic Congress) in St. Petersburg in June 1993 as an ITC-Sponsored Regional International Teletraffic Seminar. The first edition was entitled "Traffic Management and Routing in SDH Networks" and held by R&D LONIIS. In 2002, the event received its current name, the NEW2AN. In 2008, NEW2AN acquired a new counterpart in Smart Spaces, ruSMART, hence boosting interaction between researchers, practitioners, and engineers across different areas of ICT. Presently, NEW2AN and ruSMART are well-established conferences with a unique cross-disciplinary mixture of telecommunications-related research and science. NEW2AN/ruSMART is accompanied by outstanding keynotes from universities and companies from Europe, USA, and Russia.

The 12th NEW2AN technical program addressed the various aspects of next-generation data networks. This year, special attention was given to radio access networks and the related problems. The authors presented novel and innovative improvements for advanced signaling protocols, enhanced QoS mechanisms, cross-layer optimization solutions, and traffic characterization models. In particular, the issues of QoE in wireless and IP-based multiservice networks were studied, as well as some economical aspects of future networks. In addition, there was a traditional emphasis on wireless technologies, including, but not limited to, cellular, mesh, ad hoc, and sensor networks.

The 5th Conference on Internet of Things and Smart Spaces, ruSMART 2012, provided a forum for academic and industrial researchers to discuss new ideas and trends in the emerging areas of Internet of things and smart spaces that create new opportunities for fully customized applications and services. The conference brought together leading experts from top affiliations around the world. This year, there was active participation by industrial world-leader companies and particularly strong interest from attendees representing Russian R&D centers, which have a good reputation for high-quality research and business in innovative service creation and applications development.

This year, the Technical Program of NEW2AN/ruSMART benefited from joint keynote speakers from European and Russian universities and companies.

We would like to thank the Technical Program Committee members of both conferences, as well as the associated reviewers, for their hard work and important contribution to the conference.

The conferences were organized in cooperation with Open Innovations Association FRUCT, ITC (International Teletraffic Congress), IEEE, Tampere University

of Technology, St. Petersburg State University of Telecommunications, and Popov Society. The support of these organizations is gratefully acknowledged.

We also wish to thank all those who contributed to the organization of the conferences. In particular, we are grateful to Jakub Jakubiak for his substantial work on supporting the conference website and his excellent job on the compilation of camera-ready papers and interaction with Springer.

We believe that the 12th NEW2AN and 5th ruSMART conferences delivered an interesting, high-quality, and up-to-date scientific program. We also hope that participants enjoyed the technical and social conference programs, the Russian hospitality, and the beautiful city of St. Petersburg.

August 2012

Sergey Balandin
Sergey Andreev
Yevgeni Koucheryavy

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