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# Smart Spaces and Next Generation Wired/Wireless Networking

11th International Conference, NEW2AN 2011, and  
4th Conference on Smart Spaces, ruSMART 2011  
St. Petersburg, Russia, August 22-25, 2011  
Proceedings

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# Preface

We welcome you to the joint proceedings of the 11<sup>th</sup> NEW2AN (Next Generation Teletraffic and Wired/Wireless Advanced Networking) and 4<sup>th</sup> ruSMART (Are You Smart) conferences held in St. Petersburg, Russia, during August 22–25, 2011.

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 implementation was entitled “Traffic Management and Routing in SDH Networks” and held by R&D LONIIS. In 2002 the event received its current name, NEW2AN. In 2008 NEW2AN received a new counterpart in smart spaces, ruSMART, hence boosting interaction between researchers, practitioners and engineers from different areas of ICT. NEW2AN/ruSMART are established conferences with a unique cross-disciplinary mix of telecommunications science in Russia. NEW2AN/ruSMART have always featured outstanding keynotes from universities and companies across Europe, USA and Russia. This year NEW2AN / ruSMART were co-located with the 11<sup>th</sup> International Conference on Intelligent Transportation Systems (ITS) Telecommunications, an international forum on recent advances in information and communication technologies for safe, efficient and green transport.

The 11<sup>th</sup> NEW2AN technical program addressed various aspects of next-generation network architectures. New and innovative developments for enhanced signaling protocols, QoS mechanisms, cross-layer optimization and traffic characterization were also addressed. In particular, issues of QoE in wireless and IP-based multiservice networks were dealt with, as well as financial aspects of future networks. It is also worth mentioning the emphasis placed on wireless networks, including, but not limited to, cellular networks, wireless local area networks, personal area networks, mobile ad hoc networks, and sensor networks.

The 4<sup>th</sup> Conference on Smart Spaces (ruSMART 2011) provided a forum for academic and industrial researchers to discuss new ideas and trends in the emerging area of smart spaces that create new opportunities for fully-customized applications and services for users. 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/ITST benefited from joint keynote speakers from European, Russian and USA universities, companies and authorities.

We wish to thank the Technical Program Committee members of both conferences and associated reviewers for their hard work and important contribution.

This year the conferences were organized in cooperation with the FRUCT Program, ITC (International Teletraffic Congress), IEEE, Tampere University of Technology, Popov Society, and supported by NOKIA. The support of these organizations is gratefully acknowledged.

Finally, we wish to thank the many people who contributed to the organization. In particular, Jakub Jakubiak (TUT, Finland) carried a substantial load of submission and review, website maintaining, did an excellent job on the compilation of camera-ready papers and interaction with Springer. Many thanks go to Natalia Avdeenko and Ekaterina Livshits (Monomax Meetings & Incentives) for their excellent local organization efforts and the conference's social program preparation.

We believe that the 11<sup>th</sup> NEW2AN and 4<sup>th</sup> ruSMART conferences provided an interesting and up-to-date scientific program. We hope that participants enjoyed the technical and social conference program, the Russian hospitality and the beautiful city of St. Petersburg.

June 2011

Sergey Balandin  
Yevgeni Koucheryavy  
Honglin Hu

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