Report on the TELSIKS 2009 Conference

From October 7 to October 9, 2009 the Faculty of Electronic Engineering in Niš, Serbia hosted the ninth time the biennial International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services - TELSIKS 2009. Like the previous Conference, TELSIKS 2007, this year's event was organized jointly by the Faculty of Electronic Engineering Niš and National Society for Microwave Technique and Technologies. TELSIKS 2009 was organized under the technical co-sponsorship of the IEEE MTT-Society, IEEE AP-Society and IEEE Region 8, and in co-operation with IEEE Section of Serbia and Montenegro, IEEE MTT-S Chapter and IEEE Communications Chapter of Serbia and Montenegro as well as with National Society for Telecommunications and Society for ETRAN. The conference was also supported by Serbian Academy of Science and Art, Academy of Engineering Science of Serbia and Montenegro, Ministry of Science and Technological Development, and Ministry of Telecommunications and Information Society.

The official start of the Conference was the Opening ceremony held on Wednesday October 7. After a welcome speech of Prof. Bratislav Milovanović, the chairman of the Conference, the participants and numerous guests were addressed by academician Prof. Aleksandar Marinčić, Prof. Vladimir Katić, Chair of IEEE Section of Serbia and Montenegro, Prof. Dragan Antić, the dean of the Faculty of Electronic Engineering, Niš, as well as Mr. Andrew Muller, a representative of the IET Communications, UK. Within the opening session a plenary talk was given by Prof. Kamisetty Rao, University of Texas at Arlington, USA. It was followed by a suitable musical performance given by three Serbian famous artists.



Prof. A. Marinčić is opening the Conference Chairmen: Profs. K. Rao, B. Milovanović, S. Tomažić, G. Stoyanov, O. Fratu

The main part of the Conference program included presentations of the scientific papers, some of which were invited papers, written by the renowned scientists from all over the world. The papers covered a wide range of topics: RF and microwave technique, Electromagnetic compatibility, Antennas and propagation, Satellite Communications, Mobile communications, Classical cable and optical communications, Multimedia communications, Digital signal processing, Broadband wireless access, Telecommunication networks, Modulation and coding, Internet technologies, New telecommunication technologies and services, etc.

The revision of the submitted papers was done by an international board of the Conference reviewers and the final selection was done by the Conference Program Committee. Total number of the papers selected for presentation was 124, 19 of which were invited papers. Authors of the papers are scientists from the following countries: Bosnia and Herzegovina, Bulgaria, Canada, Czech Republic, Croatia, Germany, Greece, Italy, Libya, Macedonia, the Netherlands, Romania, Slovenia, Serbia, Ukraine, Spain, United Kingdom and USA. There were 11 regular sessions and 5 poster sessions.



A meeting with some of the invited authors: Profs. R. Petrović, O. Fratu, P. Russer, C. Mitrovski, G. Stoyanov, V. Markovic (from left to right)



Prof. B. Milovanović with the plenary speaker Prof. K. Rao



Poster session (M. S. Elshebani talking about his paper)

All papers scheduled for presentation were published prior to the Conference. The two-volume proceedings, accompanied by a CD-ROM publication, were distributed to all registered participants. It is important to note that the Conference Proceedings, as an official IEEE publication, will be distributed by the IEEE Conference Publications Program (IEEE CPP). All of the Conference papers will be indexed in the IET INSPEC database.

As the previous TELSIKS conferences, this year's conference was not just a conference with presentations of scientific papers and exchange of experience, but also an event included many activities and meetings covering different important issues related to the filed of telecommunications.

First of the Conference additional activities was the Workshop "*Trends in Multimedia Communications*". The lecturers were Prof. Kamisetty R. Rao, University of Texas at Arlington, USA, and Prof. Zoran Bojković, University of Belgrade, Serbia. The Workshop reflects the latest work in multimedia communications, providing both underlying theory and today's best design techniques, by systematically addressing aspects of recent trends and standardization activities, as well as covering the layered structure of multimedia communication systems: applications, middleware and networking.

There were two round tables organized during the Conference. Since some actual Serbian topics were considered, both round tables were held in Serbian.

The first round table *"Strategy of Scientific and Technological Development in Republic of Serbia 2009-2014*" gained attention of scientists, university professors, representatives of the institutes as well as representatives of interested companies. The main goal of this round table was to consider the proposed draft version of the strategy of scientific and technological development in Serbia from 2009 to 2014. Special attention was paid to consideration of the role and importance of ICT, as one of the seven defined national priorities in the domain of science and technologies, as well as to discussing of other ICT related issues considered in the draft version of the Strategy. Also, there were discussions related to the improvement of the system of financing of the scientific research work, continuous development of the researchers, collaboration of the institutes and universities, mobility of researchers, collaboration with professional companies as well as international collaboration, role of the Ministry and of the National Council for Scientific and Technological Development, etc.

The second round table *"Accreditation in Higher Education – Results and Forthcoming Activities*" was related to the accreditation in higher education as an actual and very important issue in the academic community in Serbia. Besides the representatives of the Serbian Faculties, there were also members of the Commission for Accreditation and Quality Assessment as well as representatives of the National Council for Higher Education. The

main goal of the round table was to summarize the results of the accreditation process in the previous period and to define further activities as well as to consider the role of the Commission, the National Council and all other subjects involved in the process of the accreditation.

Since the TELSIKS Conference is dedicated to the introduction of new telecommunications technologies and services, activities that involve experimental broadcasting of digital television programs in Niš were carried out during the Conference. In cooperation with the national telecommunication company "Telekom Srbija", as well as three television companies, one of which has national coverage, a transmitter was set-up and broadcasting of a set of digital television programs was provided. Within the DVB multiplex, one of the emitted TV programs was the TELSIKS 2009 promoting program. The reception of the programs was demonstrated at the Faculty of Electronic Engineering during the Conference. The equipment for the reception and displaying of DTV signal was provided by local ICT Companies. In addition, a special presentation dedicated to the DVB was organized with the main goal to promote a plan of the transition from analogue broadcasting to new digital platforms, as well as possibilities of emitters and manufacturers of the equipment for digital signal transmission and reception. This presentation included presentation of the above mentioned experimental broadcasting of digital television program as well as the HDTV broadcasting by the Serbian media public service RTS.

In addition to the activities related to the presentation of scientific and professional results and activities, there were several commercial presentations. Some of the leading ICT companies: Ericsson, IRITEL, Rohde & Schwarz, Ibis Instruments and Tagor Electronics presented their latest solutions and products. The presentations arose great interest judging from the number of attendees.

Further, there was an exhibition of the literature published by Akademska Misao, one of the most important Serbian publishers in the field of engineering, an exhibition of Microwave Review, a journal published by National Society for Microwave Technique and Technologies and IEEE MTT-S Chapter of Serbia and Montenegro, as well as one day exhibition of the IET journals.

As a special attraction, the presentation of the project "Computer simulation and 3-D modeling of the original patents of Nikola Tesla" was held. It was organized by the Faculty of Electronic Engineering of Niš and Nikola Tesla Museum in Belgrade.



Sightseeing – The fortress of Niš

Among the other activities, there were a meeting of the Executive Committee of IEEE Section of Serbia and Montenegro and a meeting of IEEE Women in Engineering Chapter of Serbia and Montenegro. Further, a meeting of Serbian Society of Cable operators' representatives was held as well.

The conference program was rich in the social events as well. There was a reception for invited authors organized by a Mayor of the City of Niš held in the City hall in the fist conference evening, followed by a nice musical performance for all conference participants in organization of the Student Cultural Centre of Niš. On the second day, all interested participants had opportunity to visit the most important archaeological and historical places from Roman and Turkish time, as well as some parts of the city. The conference gala dinner was organized at the end of the second Conference day. Serbian national cuisine, an orchestra performing Serbian and international music, and, most importantly, cheerful guests made the evening memorable.

This conference continued success of the series of previous TELSIKS Conferences, providing good atmosphere for academic discussions, exchange of experience and further networking of the Conference participants.



Some of the members of the Conference Organizing Committee

I would like to thank to all of the authors, members of the TPC and organizing committee, reviewers, sponsors, exhibitors and all the others who participated in organization and in the Conference itself.

Prof. *Bratislav Milovanović* TELSIKS 2009 Chair and Chair of Serbia and Montenegro IEEE MTT-S Chapter

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