

16th IST Mobile and Wireless Communications Summit in Budapest

PROF. ISTVÁN FRIGYES
General Chair of the conference

The 16th "edition" of a series of annual conferences was held in Budapest, 1-5 July, 2007. (At the time of this writing, more precisely: will be held in that period.) IST Mobile Summits were initiated by the European Commission (EC). The person, who founded it 15 years ago, was Dr João da Silva, director of Converged Networks and Services of the European Commission. He has been the main promoter of this event since then. (Note: IST stands for Information Society's Technologies.)

During these years this conference grew to the greatest one in its field in Europe, both in terms of its size and scientific significance. Its main aim was and is to report on the progress of EU-sponsored projects in the field of mobile and wireless communications. However, it is by no means restricted either to these projects or to EU member countries or even to Europe. It is a usual scientific conference with invited and submitted papers, with at least 3-fold reviewing of submitted ones and with a broad professional audience.

It was a very great honor for us but also a great challenge when we, the Budapest University of Technology and Economics, Department of Broadband Communications and Electromagnetic Theory, were offered to organize the 2007 event here in Hungary. Of course, we accepted this offer, without any doubt. The conference was organized by us and co-organized by HTE. The organizers got big professional, financial and moral support by the EC in the framework of FP6 project SPECTRUM.

The number of participants was some 550, quite a large number; they came from 6 continents, 42 countries. Of course, most of them from Europe but there were somewhat more than 10% from Asia, about 15 people from North America, and a few also from Brazil (3), from Africa (2) and from Australia (1). It is also interesting to mention: Hungary was only second in the number/country of participants; the first in this list was Germany and the third the UK, preceding Italy as fourth.

The Summit was composed of basically two different types of publications: panel sessions and papers.

Panel sessions were held in plenary (except one special panel session). Topics of panel sessions covered discussions about the foreseeable future of four very important points in communications. These were:

- (i) next generation of mobile communications (called 4G, 4th Generation, in some countries and B3G, Beyond 3rd Generation, in others);
- (ii) the changing role and appearance of media in the Internet age;
- (iii) the future of Internet while communication is mainly mobile; and
- (iv) technical, security and legal problems related to Near Field Communication (NFC). Moderators and panelists came from the most important

European, Asian service and technology providers and also Americans.

Companies represented included – to list some of them only – Motorola, Intel, Huawei, NTT-DoCoMo, Samsung, Vodafone, NSN, Joost.

Among paper presentations, the keynote talk of Dr. Steve B. Weinstein is first to mention (on broadband wireless and optical-wireless communications); there were two invited special sessions: a North-American session and one of ITC in healthcare. The rest, i.e. the 300 contributed papers were organized in 30 oral sessions (60%) and 5 poster sessions (40%). Interestingly enough, the distribution (60%-40%) was the same between project-related and individual papers.

It is of some interest to look at the distribution of paper subjects. Of course, there is no one-to-one relationship between this distribution and the distribution of main problems in this segment of science – however these are not very far from each other. By far the most papers covered problems related to networks, about one third of all. It was even more typical that but-most papers dealt with applications, business models and services. In similar conferences the highest number of papers deals usually with problems of the physical layer; in this conference it was of the lowest interest – except one individual topic, i.e. that of MIMO and space-time techniques. Taking into account that more than half of the papers were related to IST projects, we can discover an interesting correlation/decorrelation between these projects and practical vs. theoretical studies.

The Summit has a follow-up life as well, in the form of a post-conference publication; as far as known by the author this was non-existing in previous-year Summits. It is foreseen that a significantly deepened and more detailed version of the best papers – 7-10% of all – will appear in the form of a book to be published by Springer. This is foreseen as the first issue of a new series called Lecture Notes in Electrical Engineering (LNEE). Appearance of the book is foreseen for early 2008.

As this paper is written four days before the Summit inauguration the author, not being an oracle, has no knowledge about its success or failure. Help us God!