

Global Communications Newsletter

February 2010

International Conference on Regulatory Activities in the Telecommunications Sector 28-29 September 2009, Budva, Montenegro

By Boris Jevric, Deputy Executive Director EKIP, Montenegro

Each year, in the last week of September, the International Conference on Regulatory Activities in the Telecommunications Sector is held in the town of Budva, the center of Montenegrin tourism on the Adriatic Sea. The conference was hosted by EKIP, the Agency for Electronic Communications and Postal Services of Montenegro, the national regulatory authority for electronic communications and postal affairs.

The idea to organize this conference was born in 2004, when the national regulatory authority of Montenegro realized the importance of organizing an event of a highly professional level, and it was put into practice in coordination with national regulatory authorities for telecommunications from neighbouring countries.

Up to last year, the Agency for Electronic Communications and Postal Services has organized seven international conferences. The conferences to date have been well attended, and received with full contribution and engagement of the representatives of national regulatory agencies from the telecommunications sector, ministries, telecommunications operators, as well as delegates from the International Telecommunication Union (ITU), the European Union and European Commission, experts from competent institutions from the EU Member States (Cullen International, INA SETA Academy from Salonika, Rohde&Schwarz, etc.), and scientific and educational institutions and universities from the countries of the region.

The first conference, held in 2004, was used to get a full picture of the overall situation in the telecommunications market in the South East Europe (SEE) region, and the main conclusion was that this form of exchange of experience among the key factors in the telecommunications market in the region was useful for all its participants, and it should be continued in the forthcoming period.

In 2009 the conference was held on 28 and 29 September in Budva within the Festival of Information Technology Achievements (INFOFEST), which took place for the 16th time, being attended by 70 registered participants from seven countries in the region: Slovenia, Romania, Croatia, Bosnia and Herzegovina, Serbia, FRY of Macedonia, and the host country, Montenegro.

Having identified global trends of the present moment and their effects on the electronic communications sector, this year's conference was entitled "The Achieved Level of Regulation and Analysis of the Electronic Communications Market" and organized in the form of two panel discussions, within which 15 presentations were given, dealing with the hot



Opening ceremony of the conference in Budva, September 2009. From left to right: Milan Nikolic, Telenor doo; Daniel Szász, Chairman of the Board of Directors of Crnogorski Telekom; Prof. Vujica Lazovic, Deputy Prime Minister for Economic Policy and Financial System in the Government of Montenegro; Dr. Saleta Durovic, Council President of the EKIP; Zoran Sekulic, CEO of the EKIP; Christopher Laska, CEO of the Promonte.

topics in the region: the electronic communications market in the economic downturn, with a special overview of the major activities in the period between the two conferences; regulatory problems, infrastructure sharing; the rights and protection of electronic communications service users; safe information society and child protection on the Internet; the impact of the global economic crisis on industry development; the switchover from analog to digital broadcasting, with a call for a regional approach to the use of "digital dividend" freed spectrum.

On the second day of the conference, as in previous years, the host and organizer of the conference, the Agency for Electronic Communications and Postal Services, organized an excursion for participants. This year it was a boat trip around the Bay of Boka Kotorska, one of the most beautiful places in the world with one of the narrowest fjords in Europe. Along its coast, conference participants saw ancient towns, medieval and baroque palaces, and treasures of culture and art. The massifs of Orjen and Lovćen mountains rise high up above the bay. The center of the bay is the town of Kotor, which is listed as a UNESCO world heritage site. During the tour, the participants visited a man-made islet Gospa od Skrpjela, where a church of the same name was built as early as 1630.

This year's conference is also planned for the last week of September in Budva.

2010: An Expected Appointment for DVB-H in Spain and Europe

By Ana Vazquez Alejos, Manuel Garcia Sanchez, and Iñigo Cuiñas, University of Vigo, Spain

Conceived as an evolution of the DVB-T network, DVB-H offers a great opportunity for the development of the information society since it represents the convergence of two services with almost universal penetration in the marketplace: television and mobile communication.

Mobile TV is doubtless one of the hottest topics in the market for mobile wireless services, and many platforms try to implement it as an attempt to satisfy multimedia subscribers' demands. Mobile TV regards real-time permanent TV contents, not short video downloads. This expression usually simplifies three big topics: mobile TV broadcast, mobile TV streaming, and video on demand. DVB-H is concerned with only the first.

Three years ago the Gartner hype-cycle positioned DVB-H mobile TV at the peak of emerging technologies, and one year later it was placed in a period of disillusionment. Many factors decelerated the potential growth of DVB-H networks: division of the standards; the appearance of new competitor technologies (DVB-SH, MBMS, WiMAX); spectrum unavailability; the business model (peer-view, subscription, pay-per-view); and, of course, immaturity of the infrastructure.

Created by Nokia in 2004, since DVB-H was adopted in 2007 as the de facto standard for mobile TV in the European Union, it has experienced hard luck. According to data provided by [1], we can check that the number of trials and pilots in Europe is still larger than the number of launched networks, as shown in Figure 1.

The Italian case is an example of a short-time success. Italy was first in the world to initiate an operational DVB-H digital mobile TV service, with three different operators and nationwide coverage at present. Launched in July 2006 in the cities of Milan and Rome, the experienced growth made it available in over 2500 Italian towns in 2009. The infrastructure and business model were rapidly decided. We can highlight as a key aspect of this success that an important effort has been made in order to obtain a good coverage of over 75 percent of the Italian population. The indoor capabilities were also carefully planned, reaching a probability of 90 percent, which represents 45–55 percent penetration. The facilities provided by the regulation cannot be forgotten either.

Another remarkable case, also in Europe, is a recently launched DVB-H service in Finland (October 2009), the second in this country that covers 2 million people. Finland became the first country in Europe to offer a commercial DVB-H license for mobile TV services. Two main national TV broadcasters agreed to start programming on the network, and initially the service is free.

In countries such as England, France, Germany, and Spain the problems derived from disagreements between the different involved agents — broadcasters, operators, and content providers — about the business model, the agents' role, and the property copyright on the broadcast contents have delayed the launch of commercial DVB-H services. The unavailability of frequencies has also contributed to keeping stalled the eagerly expected services. With the imminent analog switch-off this should become of less importance, but not so the first issues.

In Spain, since 2005 successful trials and pilots have

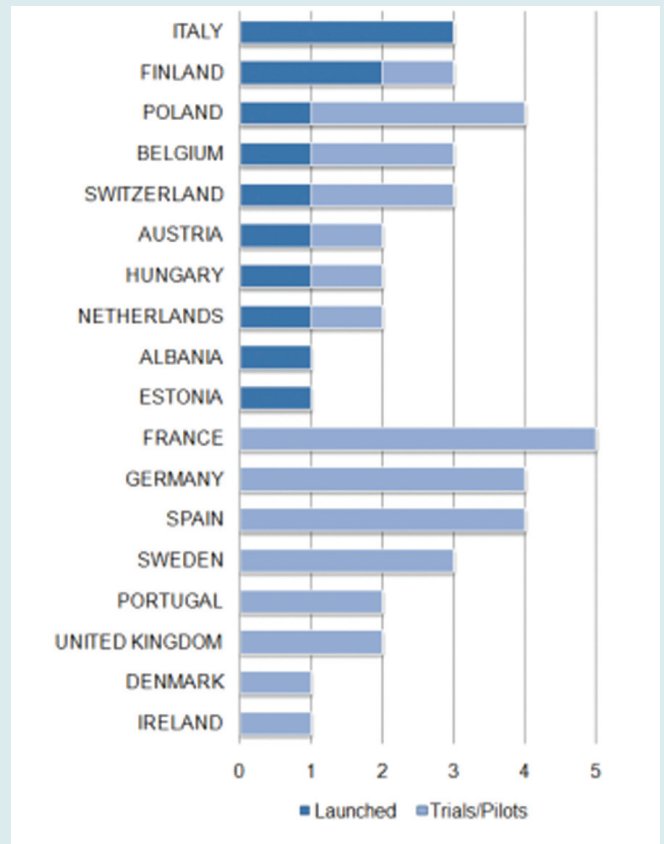


FIGURE 1. European DVB-H networks.

been carried out, and one of them was presented during the 2006 GSM World Congress celebrated in Barcelona. Four important precommercial pilots have been deployed within 2005 and 2009 in Barcelona, Madrid, Zaragoza, Gijon, Sevilla, and Valencia showing the advanced status of the technology on the part of the involved participants. The outcomes provided not only important contributions to the standard development, but also conclusions about the acceptance level by the participating users. A further achieved goal was to establish the subscription amount the subscribers would accept for mobile TV services.

One more important DVB-H trial was developed in February 2009 by the company SIDSA, joining efforts with Albertis Telecom (Spain) and DML (Italy), during the Mobile World Congress celebrated in Barcelona. This consortium showcased a fully featured pilot to provide live DVB-H interactive mobile TV services, using as a handset a mobile phone developed in partnership with Telefunken.

The technology is fully checked, and Spain also has companies designing instrumentation, infrastructure elements, decoders, and chips for DVB-H and the incoming DVB-HS standard. Nevertheless, in 2008 the Spanish Ministry of Industry announced that the commercialization of mobile TV in Spain should be delayed until 2010, and since then it has not been regulated.

The regulation law to develop in 2010 has to define the business model and the agent roles. The first option is

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Recent Activities of the Vietnam Chapter

By Tran Xuan Nam, Chapter Chair, Vietnam

The IEEE ComSoc Vietnam Chapter was formed on 30 October 2008, marking the appearance of the first IEEE technical society in Vietnam. The appearance of the Chapter was supported by Dr. Nim Cheung (ComSoc President), Dr. Byeong Gi Lee (ComSoc Vice President), Dr. Roberto Saracco (Director of Sisters Societies), and the Radio-Electronic Association of Vietnam (REV), the Sister Society of ComSoc in Vietnam.

The inauguration ceremony was held together with the first technical meeting of the Chapter at the College of Technology (Coltech), Vietnam National University Hanoi (VNU) on 30 October 2009 (Fig. 1). Among the 30 people who attended the ceremony, there were Chapter members and representatives from the IEEE Vietnam Section, REV, and the Faculty of Electronics and Telecommunications of Coltech. The ceremony opened with a welcome speech by Prof. Tran Quang Vinh, Vice-Rector of Coltech, followed by a brief introduction to the IEEE ComSoc Vietnam Chapter given by Dr. Tran Xuan Nam, the Chapter's founding Chair. Prof. Ta Cao Minh, Vietnam Section chair, continued with a welcome remark and an introduction to the IEEE Vietnam Section. The ceremony also received a congratulatory speech by Prof. Phan Anh, Vice President and General Secretary of REV, addressing the long relationship between Comsoc and REV dating back to the first agreement between the two entities in 1999. The last part of the event was the very first technical meeting of the Chapter with an invited talk entitled "Telecommunications Ecosystems" presented by Dr. Roberto Saracco, ComSoc Director of Sister Societies.

The second technical meeting of the Chapter was held together with the Workshop on the Next Generation of Communications at Hanoi University of Technology



FIGURE 1. Inauguration ceremony of the IEEE ComSoc Vietnam Chapter.



FIGURE 2. Plenary session at ATC 2009.

(HUT) on 14 July 2009. The one-day workshop was run with 12 technical presentations covering currently attractive topics such as WiMAX, multiple-antenna techniques, and IMS-based and ad hoc networks. Two invited talks were delivered by Dr. Dao Ngoc Chien and Dr. Nguyen

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Activities of the IEEE ComSoc Xi'an Chapter

By Jiandong Li, Xi'an Chapter Chair, China

IEEE ComSoc Xi'an Chapter Inauguration

On 18 June, 2008, a new IEEE ComSoc Chapter, the Xi'an Chapter, was approved by IEEE Region 10 Director Janina Mazierska. Prof. Jiandong Li, Xidian University, was elected as the Chapter Chair and Prof. Guizhong Liu, Xi'an Jiaotong University, and Prof. Kehu Yang, Xidian University, were elected as Vice Chair for Membership Development and Treasurer, respectively. The Chapter Inauguration was held on 15 December, 2008. There were two talks at the inauguration, "Efficient High-Performance MIMO Detection Using Semidefinite Relaxation" by Wing-Kin Ma, an assistant professor at The Chinese University of Hong Kong, and "Cooperative Resource Management of Intensive Wireless Networks" by Zhisheng Niu, a professor at Tsinghua University. Prof. Yao HAO (vice president of Xidian University), Prof. Zhisheng Niu (Region 10 Director of IEEE ComSoc), Prof. and Jianguo Huang (IEEE Xi'an Section Chair) gave their congratulations. Chapter Chair Jiandong Li gave a presentation on the history of IEEE Communications Society and the future plans of the Chapter. More than 60 people includ-



Inauguration of the IEEE ComSoc Xi'an Chapter.

ing some of the members of the Chapter attended the inauguration.

Workshop on Wireless Communications

The first Workshop on Wireless Communications sponsored by the IEEE ComSoc Xi'an Chapter was held at Xidian University, Xi'an, China, 24–25 August, 2009, at ChinaCom 2009. Nine professors — ChongYung Chi, Jenming Wu, Yeong-Luh Ueng, and Hsi-Pin Ma (National

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VIETNAM CHAPTER/*continued from page 3*

Huu Thanh of the Faculty of Electronics and Telecommunications, HUT.

The Chapter also jointly organized with REV the 2009 International Conference on Advanced Technologies for Communications (ATC 2009) during the period from 12 to 14 October 2009 at Vietnam Maritime University, Hai Phong (Fig. 2). The conference was technically sponsored by ComSoc and financially sponsored by REV and Vietnam Maritime University. The Chapter held various key roles on the organizing committee. The Steering Committee Co-Chair was Prof. Nguyen Van Ngo, the Conference Co-Chair was Prof. Phan Anh, and the Technical Program Committee Co-Chair was Dr. Tran Xuan Nam. The chapter also provided support for paper reviews and session chairs, helping to ensure the quality of the conference technical program. The conference received 121 submissions, of which 67 papers were accepted for oral presentation, accounting for an acceptance rate of 55 percent. The technical program was carried out with four keynote speeches and 17 technical parallel sessions. Beside the conference was the Workshop on Communications and Navigations for the Development of Vietnam's Marine Economy, which aims to find solutions for applications of communications and navigation techniques to support search and rescue activities at sea.

Following ATC 2009 was the Chapter scientific meeting held on 15 October 2009 at the University of Engineering and Technology. Twenty-six people attended the meeting.

There were eight presentations at the event, including three invited talks by Prof. Huynh Huu Tue from Bac Ha International University on the topic of alpha-stable impulsive noise, Prof. Yoshio Karasawa from the University of Electro-Communications, Japan, on how to create a propagation environment for MIMO performance evaluation of user terminals, and Prof. Merouane Debbah from Supélec, France, on intelligent MIMO networks.

The Chapter is preparing to co-organize with REV and Ho Chi Minh City University of Technology ATC 2010 in Ho Chi Minh City.

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Tsinghua University, Taiwan), Yimin Zhang (Villanova University, United States), Pinyi Ren (Xi'an Jiaotong University), Baoming Bai, Hongyan Li, and Kehu Yang (Xidian University) — were invited to give talks and have discussions on their latest research results related to a few hot topics in wireless communications, including MIMO detection, multichannel antennas, cognitive radio, MAC protocols in ad hoc wireless networks, and LDPC coding. More than 40 people participated in the workshop.

IEEE ComSoc DLT

Under the IEEE ComSoc Distinguished Lecture Tours program, Prof. Jacob (Jacques) Gavan visited the IEEE ComSoc Xi'an Chapter on 17 September, 2009 and gave a lecture entitled "Concepts, Applications and Design of High Altitude Platform Radio Relay." After the lecture, there were very active discussions focused on high-altitude platform communication principles and possible problems of the system, which were highly appreciated by the participants.

APPOINTMENT FOR DVB-H/*continued from page 2*

in base to free-on-the air contents that would be economically supported by publicity, according to the public feature of the broadcasting services that include DVB-H. But this choice does not seem to satisfy some agents' economical expectative, creating a situation hard to unlock.

The lack of regulation and also of information for potential users is creating a negative impact on the still not launched service. The survey "Global Telecoms Insights" performed by TNS in 2009 demonstrated that the penetration of 3G mobile TV among Spanish cellular mobile subscribers is only 6 percent, the same as two years ago. And only 3 percent expressed interest in subscribing to this service. Some efforts and investment should be made to awaken interest in the new technologies that could come from demonstrating the enhanced capacity and speed features of the infrastructure.

Despite the halted situation, 2009 placed DVB-H technology in a mature position as a going forward service. The technology has been thoroughly tried, the infrastructure adopted a collaborative model, and the remaining questions should be solved in the shortest possible time. The year 2010 is outlined as crucial for the definitive and successful launch of the DVB-H services in Spain so that this can become a reality.

References

[1] <http://www.dvb-h.org>

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