INTRODUCTION OF DIGITAL BROADCASTING IN KOSOVO AND THE REGION – STRATEGIES

3-5 December 2009, Prishtina
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Introduction

Under the auspices of the Independent Media Commission, the International Conference on Strategies and Experiences on the process of switchover to digital broadcasting in Kosovo and the Region was held in Pristina on 3-5 December 2009. The aim of the Conference was the introduction of the process of digitalization of broadcasting, the discussion of technical and legal experiences and challenges from this process, and beginning the process of frequency coordination between Kosovo and neighboring countries. The Conference was attended by representatives of Kosovo institutions, Kosovo media representatives, representatives of relevant agencies of the countries of the Region, including Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia and Albania. Representatives of Serbia, although invited by the IMC were not present at the Conference.

The Conference was opened by the President of Assembly of Kosovo Mr. Jakup Krasniqi, who expressed his support to the Conference discussions and exchange of experiences in the process of digitalization of broadcasting and termed this process as important for the further democratization of society by providing and disseminating information as well as an important process in development media, business and economy in Kosovo. On behalf of the Independent Media Commission, Deputy Chairman of the IMC Board, Mr. Daut Demaku expressed the need for exchange of experiences and lessons from this process with the countries of the Region, and said that Kosovo, after the major challenges in regulating the media market in the postwar period, is now in the beginning of the digitalization process and that this is now the biggest challenge, especially if we consider the consequences of the Geneva 06 agreement to broadcasting in Kosovo. He said that although the frequencies are state assets, they do not recognize borders and thus can cause interferences to neighboring countries. Therefore Mr. Demaku stressed the importance of building cooperative relations with neighboring countries and expressed his gratitude to relevant agencies of these countries for a correct relationship with IMC.

The current state of broadcasting and media in Kosovo was presented initially in the Conference. Then, representatives of relevant agencies of the countries of the region presented their experiences from the digitalization process from technical and legal point of view. Role of the International Telecommunication Union and the consequences of the Geneva 2006 agreement on analogue and digital broadcasting in Kosovo were the focus of the second half of the Conference. During the Conference an alternative frequency plan from Geneva 06 was also presented, that would meet the needs of Kosovo and would simultaneously foster preventing digital broadcasting interference in neighboring countries. Alternative plan and opportunities of cooperating and coordinating broadcasting with regional countries was the closing discussion of the conference. During the Conference was expressed the readiness for cooperation and coordination among all countries participating in the Conference and the need for bilateral meetings between the relevant agencies of countries from the region was discussed. As a conclusion from the Conference came the need to create mechanisms for coordinating the process of digitalization, within Kosovo and between Kosovo and neighboring
countries. It was also expressed the need to consult the ITU about opportunities to resolve problems stemming from the Geneva 06 agreement. Neighboring countries expressed willingness to coordinate with Kosovo and to accommodate its needs. Representatives from Kosovo also expressed willingness not to interfere digital broadcasting of neighbors. Failure to resolve the problem of frequency allocation for Kosovo and failure to coordinate with neighboring countries was seen as an issue that would create problems in the process of digitalization the entire region.
Media and the process of digitalization of broadcasting in Kosovo

The Conference proceedings began with a presentation by Ms. Naile Selimaj – Krasniqi who presented the achievements in the media sector in postwar Kosovo. Regulation of broadcasting after the war in Kosovo started in 2000 through the temporary licensing and this system operated until July 2006 and was administered by the OSCE Mission in Kosovo. In 2006 was established the Independent Media Commission (IMC), while in 2009 the IMC begun with long-term licensing process. Operation of IMC is regulated by the Law on IMC and the Law on Public Radio Television of Kosovo, which are in process of amendment. IMC has the authority to pass secondary legislation and tends to base those on the best European practices.

Ms. Selimaj – Krasniqi stressed that there are 110 temporarily licensed broadcasters in Kosovo, which are in the process of long-term licensing. Out of these, there is a public broadcaster, which has a television channel and two radio stations, 2 private commercial television stations broadcasting at the national level and two radio stations with national coverage. Other broadcasters are local radio and televisions. Also, there are low-power broadcasters mainly serving the needs of minority populations and covering some small geographical locations. The broadcasters, 66 are in Albanian, 32 in Serbian, Bosnian, Turkish and Roma. As a legacy from the past, Kosovo is divided into 5 broadcasting regions.

In 2007, IMC has also issued the regulation to regulate broadcasting in the cable system, which has regulated this form broadcasting initiated several years earlier. Now in Kosovo there are 10 licensed cable operators. Through this network we also have television stations that don’t use frequencies but broadcast only through cable network.

Ms. Selimaj-Krasniqi concluded that within 10 years the media scene in Kosovo has been significantly developed and improved. Now the next challenge is to switch from analog to digital broadcasting, while media already started to working in this direction. Some media houses have created software packages which due to the lack of frequencies were broadcasted through cable network. Nevertheless, according to Ms. Selimaj – Krasniqi this is very positive because these broadcasters are creating their own platforms and are willing to easily switch to the future system of digital broadcasting. Regarding the process of digitalization we stand in the first phase and this is where a role is played by Kosovo institutions, media and relevant authorities from countries of the region. Ms. Selimaj-Krasniqi expressed the need to learn from experiences and obtain the assistance of other countries to facilitate as much as possible this process in the interest of public and media.
Digitalization in the Region

Strategy for switchover from analogue to digital broadcasting system: Legal and technical framework, lessons and experiences

Experience of Albania

Experience from Albania, on behalf of the National Council of Radio Television (NCRT) was presented by Mr. Pirro Braço. He began with a presentation of audio-visual landscape in Albania. The public broadcaster, Albanian Radio Television, covers over 80% of Albanian territory with national broadcasting through three regional networks and through satellite network. The public broadcaster offers two national and three regional radio networks. Private broadcasters hold three national television networks in analog broadcast, namely Klan, TV Arberia and Top-channel, which cover all Albania with analog national broadcasting and 80 regional and local broadcasting networks which cover one city up to four districts. There are also 2 commercial national radios, Top-Albania and Radio Plus 2, and 53 local radios. Mr. Braço also stressed that there are 64 cable networks with local coverage as well as 5 satellite networks: Alsat, Digitalb, Super Sport, Vision Plus and Tring.

Mr. Braço stressed that in Albania since several years there are digital terrestrial broadcasters, although it is a deregulated system. However, this system is now consolidated and NCRT considers it a national asset which must be regulated, but through maintaining the functioning of the system. Largest network is the Digitalbit which covers a large territory and uses four frequencies. He estimated the number of subscribers in the system to be more than 200 thousand. This network uses decoder system that cannot be used by other broadcasters. Nevertheless, it should be noted that frequencies used by Digitalb do not respect Geneva 06 frequency plan. In addition Digitalb offers mobile TV service. Except Digitalb, digital broadcasting platform is offered by Tring and Shijak TV, but these two are focused in the area of Tirana.

As for the licensing of digital broadcasters, the licensing is dictated by a resolution of the Parliament, which required licensing of digital operators during 2008. The challenge here, according to Mr. Braço, is that the license is supposed to be completed without a full legal framework and without having adopted a strategy for transition to digital broadcasting. NCRT has adopted the process of public competition where operators were invited to compete for licenses. This process has been accompanied by problems and after some delays in the deadline for competition, the process failed in early 2009 as by deadline no candidate applied. Reasons for this failure, according to parties involved in the process, consist in the lack of well-defined legal framework, lack of a strategy adopted for the transition to digital broadcasting as well as very high financial requirements (1 million € assets, of which 10% collateral, as well as high fees for annual license) for the operators as defined in the law, which was considered unaffordable by them.
According to Mr. Braço, a problem with current law in Albania is that there isn’t clearly defined cooperation between operators and content providers. Also, the law stipulates that broadcasting shall be in MPEG4 system as this allows greater efficiency in the use of frequency spectrum, but it faced the resistance of the current operators who currently use the MPEG2 system. Here, according to Mr. Braço there was no good communication between NCRT and operators to define a transition period which would justify transition to the new system.

As a result of absence of transition strategy, there is still speculation about the issue of subsidies of digital decoders by state, which causes delays in the process. Also, the NCRT force to impose licensing was politically limited since 2009 was the year of elections.

Regarding readiness of Albania to switch to digital broadcasting, according to Mr. Braço, a great job was become. However, as the digital broadcasting law has shortcomings, the Albanian Parliament established a working group to draft the new integrated law which would cover all issues regarding broadcasting in Albania. Meanwhile, Parliament has ratified the Geneva 06 Agreement, which establishes a strong basis for implementation of digital networks, and simultaneously NCRT has adopted a regulation on licensing of digital broadcasting and is preparing a new competition for licensing. Also the technical bases for building digital networks in Albania are fully established, and frequencies are set as well as frequency allotments. In this process NCRT was supported a lot by the OSCE mission in Albania as well as the French regulatory authority KSA.

NCRT has proposed creating a task force tasked with monitoring the process of digitalization in Albania during the entire process of defining and implementing the strategy of digitalization. This task force will have two levels, the decision-making body composed of government representatives that would approve the strategy and major decisions, and technical level, which will consist of specialists of relevant fields.

According to Mr. Braço, the main problem lies in the implementation of the strategy until ceasing of analog broadcasting. Under current law, public operator is granted the right to build two national digital networks, which in the opinion of NCRT is a too large and exceeds the needs of the public operator. The strategy envisions three national networks for private operators. The proposed strategy also provides for the regional operator. The main challenge according to NCRT is to establish the opportunity for transition into digital broadcasting available to all analog operators. For this purpose it was decided that planned national coverage is broken down to regional and local coverage. Thus, for each allotment were completed estimations of analog broadcasting and the number of required networks of MPEG2 and MPEG4 system was determined, in order to account for transmission capacity and required technology to be employed. Calculations cost were also completed for various systems and cost for decoders in various subsidy schemes. Regarding the implementation of the transition strategy the opinion of NCRT and external experts is that the best approach possible is digital islands used in Germany and Croatia. This means the transition will be done area-by-area, thus minimizing simulcast period and consequently minimizing maintenance costs for analogue and digital system in parallel. These two approaches can be followed, one to start from populated areas, such as Tirana, or to start in areas with minimal coverage,
so that damages from eventual failures is minimal. According to Mr. Braço in Albania there is already the experience of accepting digital broadcasting and the population is accustomed to new system.

In general there is a resistance against fast tempos of transition dictated by adopted laws and policies. This is resistance is greater among small local operators who tend to maximally use their analog networks and gain benefits from the investments made and delay the need for new investments. A proposal to solve this problem is that one of the planned networks for the public television is taken over and built by the state and made available to existing analogue operators so that they do not bear huge financial cost in building the digital network. Another proposed form is to provide these operators with long-term and favorable loans by the state. French example proposes that local operators do not need to compete in the tender, but that they automatically provided the right to jointly build their local network. However, this approach requires changing the law, which prevents granting frequencies without a tender and again loads financial burden to existing operators. Another proposal is possible that the state subsidizes building of these regional digital networks, but state budget capability is limited. The last alternative is to create a digital development fund with state participation, funds raised by the licensing process and funds from private sector.

**Experience of Bosnia and Herzegovina**

Mrs. Amela Odobasic Communications Regulatory Agency presented experiences from Bosnia and Herzegovina in the process of digitalization. She began with the presentation of the regulatory environment in Bosnia and Herzegovina. She stressed that the process of digitalization is governed by a body called DTT, which has the secretariat and working groups on regulatory issues, program content, technical groups and promotion, and the group for socio-economic issues.

DTT as a coordinating forum was established in 2006 and in the meantime its role has grown much. DTT together with the secretariat and working groups held a great number of meetings during which was drafted the first draft of the strategy, which was submitted to the parliamentary committee and in March 2009 the strategy was submitted to the Council of Ministers of Bosnia and Herzegovina, and was approved in June of that year.

Strategy is a thorough document presented in 70 pages and contains all issues that are important for practical side and the implementation of digitalization. The aim of the strategy is to complete transition by December 2011. The role of the regulator is fostering the proper implementation of the process. In Bosnia and Herzegovina, the Regulator worked on the drafting, adopting and implementing the strategy in order to meet the deadline of 1 December 2011. The Regulator was also involved in changing the licensing system, including licensing content, so that the system is better prepared for the transition.

According to Mrs. Odobasic, main working principle should be transparency. Through public discussion and involvement of all stakeholders, compliance is much easier achieved and everyone can see the benefits of this process. Regarding the monitoring of radio frequency, communication with neighboring countries is required, Mrs. Odobasic emphasized.
For 2010 is planned to start with the official process of transition to be followed by an information campaign and decide over subsidy of boxes and definition of minimum technical requirements for boxes. Year 2011 will be an interesting year and during this year the preparations will be finalized for eventual transition to digital broadcasting by the end of the year.

**Experience of Croatia**

Representative of the Croatian Electronic Media Council, Mr. Damir Hajduk, began his presentation with the introduction of regulatory bodies in Croatia as well as the legal basis of existing and future governing the process of transition to digital broadcasting. Central body managing the digitalization process in Croatia is titled Central State Administrative Office and this body except the responsibility for overseeing the implementation of the digitalization strategy, deals also with other issues such as penetration of broadband in Croatia. Since in Croatia there isn’t only one regulatory body, the tasks are divided and the Electronic Media Council primarily regulates the content while planning of frequency and operators are regulated by the Croatian Agency for Electronic Communications HAKOM.

Mr. Hajduk stressed that it is very important to have only one leader for the entire process that would coordinate all other stakeholders and shall assume the responsibility for success or failure of the process. The process of allotting frequencies and selecting multiplex operators is managed by HAKOM that was part of negotiations on allotments within Geneva 06 agreement. In this combination of agencies, the Ministry of Culture plays an important role in drafting laws, while the Electronic Media Agency deals with the content. Process of digitalization was described by Mr. Hajduk as a project that relied on good will, ambitions and digital division of the broadcaster, thus we may rely on public, commercial and local broadcasters. However, among the broadcasters, the most important role is played by the national broadcasters.

In general broadcasting in Croatia is covered by three laws that regulate the media sector. The most important of them is the Law on Media, which is in the process of amendment in the Croatian parliament and will also contain directives of the European Commission. The public broadcaster HRT is regulated by the Law on HRT, and even this law is in the process of amendment where among the main changes will be restriction of advertising space, which is currently a maximum of nine minutes per hour.

Strategy for digitalization was deemed successful by Mr. Hajduk even though the process is not over yet. The strategy specifies roles of all participants in the process. Croatia plans to fully switch to digital broadcasting during 2010 and since January 2009 transit was completed in some regions of Croatia. Strategy was published and its implementation is assisted by working groups which met regularly once a month, while these meetings are now weekly. Working groups consist of all stakeholders and work is now focused on the details which are very important. According to Mr. Hajduk, the strategy is not a static and sacred document thus it may change and adapt to developments in technology and media sector.
An important factor in implementing the strategy is delivery of decoders and consequently good partners are needed in the sales sector. In Croatia, the state has subsidized a portion of the cost for purchasing boxes through a voucher system. Initially the price was 20 Euro for boxing, but this has now dropped to 10 Euros as the price of equipment drops constantly and setting a fixed sum for a longer period of time is problematic.

Croatia has 8 planned multiplexes. Chronology of their activation will be as follows. Four national broadcasters in Croatia are broadcasting through Multiplex A and B. work is underway on launching Multiplex D which will carry regional broadcasters. Transmission system is now using MPEG2, but no final decision is taken yet about using this system or the MPEG4 system. This problem stems from the fact that the digitalization process in Croatia has started earlier and MPEG2 system was standardized at the time and is also cheaper. Croatia is divided into nine digital regions while politically Croatia has 21 counties and digitalization has caused some problems in broadcasting local news in the district level, as digital boundaries are not in line with boundaries of counties. During the year 2009 two multiplex operators were selected and they function through single frequency network and broadcast in MPEG2. This system enables the transmitting five channels in a multiplex and consequently there are 6 free spaces for the national broadcaster. One option for filling this capacity according to Mr. Hajduk is tendering of these broadcasting spaces. It is planned for multiplex A to cover 98% of the territory while multiplex B will cover 95%.

The cost of coverage increases rapidly after expanding the coverage to 70%, while after reaching the coverage of 90%, the cost increases according to coverage exponentially. In general, according to Mr. Hajduk, digitalization is conditioned by topology and geographical overlay of the territory which is planned to cover with signal. Croatia with over 1,000 islands, mountains and unsuitable geographic scope, represents a major challenge. While there were 360 broadcasters for analog broadcast, to achieve digital signal coverage 90.8% of the territory, in Croatia so far there are about 200 transmitters.

In essence, Mr. Hajduk stressed two main criteria to assess this process: the signal to be available to everyone and that each family has a set-top box. In Croatia there are already DTH operators, but we also have a degree of penetration of IPTV and cable television.

Regarding broadcasters, Croatia has four national channels, where according to Mr. Hajduk commercial broadcasters are very good such as CM Group and RTL. Electronic Media Council supports production of these broadcasters subsidizing mainly production of local news, which has shown to be a good practice in support of pluralism and diversity in the media. Such support is provided to local/regional broadcasters, which are considered an important element in the process of digitalization.

The key issue here is sustainability, so that after the transition to digital broadcasting, broadcasters may survive. As a result of recession, media revenues in Croatia, according to Mr. Hajduk, have dropped significantly and according to him it is probably not the ideal time for such large projects. Benefit to broadcasters is that digital broadcasting reduces the cost compared to analog broadcasting.

Regarding the information campaign for the process of transition, Mr. Hajduk said that although public accepted the argument of better quality picture, more must be done to explain what really is the digital
dividend, how it will affect the choice of offered channels and expansion of program offer, who will finance the process, who are the stakeholders of the process. Campaigns should target especially elderly people since they are the most difficult to convince. According to Mr. Hajduk, program content is the most effective stimulus.

Experience of Montenegro

Mrs. Jadranka Vojvodic from the Council of Broadcast Agency spoke on the media mosaic in Montenegro, influential developments in the process of transition to digital broadcasting, dilemmas in the process and experiences of this country.

In Montenegro, there are two public television channels with national coverage that use terrestrial analog frequency, while there is no digital terrestrial broadcasting system. Also there are four commercial channels with almost the full national coverage and 14 local or regional channels, including 3 channels established by municipal assemblies.

Regarding operators Mrs. Vojvodic stressed that the Broadcast Agency has licensed six cable operators, one IPTV operator, a DTT and a MMDS operator. Compared with other countries, coverage by various forms of broadcast varies significantly, where terrestrial analogue signal covers only 44% of the market, DTT system 21%, MMDS13%, IPTV 12% while cable covers only 10% of the market. The decline in use of the analog signal by Montenegrin households compared with a year ago according to Mrs. Vojvodic can be explained with demand for different platforms and better programming offer.

Mrs. Vojvodic stressed that Montenegro faces problems in achieving signal coverage due to geographical overlay. In existing analog system in Montenegrin territory there are 125 broadcast points which achieve only 93% coverage. Commercial broadcasters broadcast from 20 locations and don’t reach more than 65-70% coverage. According to Mrs. Vojvodic, this fact is important when considering necessary investments to shift to digital broadcasting and their sustainability.

Regarding legislation, media are regulated through four laws as following: the Law on Media, Law on Broadcasting, Law on Electronic Communications and the new Law on Public Broadcaster. According to Mrs. Vojvodic, approval of the law on media has been a very positive step in the process of digitalization. This law has established the Broadcast Agency responsible for licensing and frequency allocation. Amendment of existing laws and approval of new laws, according to Mrs. Vojvodic must be simultaneous, but such a thing is not done in Montenegro and consequently subsequent adoption of the law on electronic communications drastically changed the regulatory framework. In this way the media licensing function is separated from the frequency planning and coordination function and consequently the element of central coordination of media sector in Montenegro is lost. The Law for Transition to Digital broadcasting is being drafted, which has emerged as a recommendation from the transition strategy as it was considered that elements from the strategy should be legally mandatory. Separation of powers between different agencies has been criticized a lot in terms of the issue of political
independence of responsible institutions. Consequently, developing a broad debate about this issue is now underway in Montenegro.

In 2006 the Broadcast Agency began its work on a plan for transition to digital broadcasting aiming at achieving a functional transition strategy. Agency has attempted to reach a wide involvement of stakeholders including government, regulators, association of broadcasters, operators, clients, university, etc., but, according to Mrs. Vojvodic, response from these stakeholders was low. As a result, the Broadcast Agency with the support of the OSCE Mission in Montenegro prepared a draft document on the transition plan. This document was supplemented through public debates and was promoted through presentations, interviews and media coverage. The plan was foreseen as a basis for drafting the transition strategy to digital broadcasting. Strategy for digitalization was approved by the Council of the Broadcast Agency in April 2008.

The Montenegrin strategy consists of regulatory, program and economic part. Objectives arising from the strategy are as follows. The deadline for ceasing the analog signal according to the strategy should be 31<sup>st</sup> of December 2012 and this date still remains the target. An advice arising from the strategy is that all public services and existing broadcasters should be ensured the free-to-air distribution. This objective has to do more with preserving local content and sustainability of local broadcasters. Another objective was building a neutral technology towards environment that will support the transition to digital broadcasting and development of communication infrastructure. Also transition strategy and plan preserves and protects the promotion of culture, tradition and cultural diversity, and protects people with disabilities.

Agencies involved in this process include the Broadcast Agency, the Agency for Electronic Communications, whose council is appointed by the government, which is seen as problematic. From the part of government, the following are included: Ministry of Culture, Sports and Media, which handles media policies, and the Ministry of Transport, Maritime Affairs and Telecommunications, which deals with communication policies.

Regarding the frequency allocation plan within Geneva 06 agreement, Montenegro has 7 national-wide frequencies in UHF and one in VHF. All these national frequencies have 3 allotment areas each, one of which has the sub-allotment for Podgorica. According to the strategy, broadcast will be based on single frequency network, technically possible in terms of synchronization. Compression system will be MPEG4.

Regarding infrastructure, Broadcasting Center of Montenegro is the main basis of the broadcast system. In 2008 this center initiated a digital radio relay system based on internet platform. This system has 38 points interrelated with broadcast capacity of 155 to 622 megabit per second. This system for some time was seen as a good basis for access to digital broadcasting, but Broadcast Agency chose MPEG2 system thus this may present an obstacle now. According to Mrs. Vojvodic, infrastructure and support for infrastructure is a very important issue and without such support, operators’ interest to invest in this infrastructure would not be sufficient.
Funding for transition to digital broadcasting will come mainly from the state budget, but this process is supported by IPA 2009 funds of the European Commission. The European Commission has funded equipment and training for Montenegrin public broadcaster and staff of Montenegro Broadcasting Center, with the purpose of assisting the transition to digital broadcasting. Training of staff is in the form of study visits to EU countries. The equipment support part is related to purchase of digital broadcasters, whereby nine of them will be funded by Montenegrin government as co-funder while EU will finance equipment for additional 30 locations of digital broadcasting, all this to start the process of creating first multiplex. Nevertheless, according to Mrs. Vojvodic, delays in reforming legislation and unclear division of competencies between government and independent regulators may jeopardize the EU support.

With regards to the multiplexes, a dilemma that has not yet been resolved is whether the first multiplex should only dedicated to the public broadcaster or be open for commercial television. Currently RTCG public broadcaster cannot fill in the whole capacity of a multiplex and dedication of multiplex that broadcaster would be a waste. Another dilemma by Mrs. Vojvodic is the level of coverage that may be considered sufficient to cease the analog signal, which is 90% or any other percentage. This is especially problematic for Montenegro given the territory and terrain. Also, the period of parallel broadcasting, known as simulcast is another unexplained dilemma. Regarding responsibility and role of the media, Ms. Vojvodic said that the public broadcaster should have the primary role in this process and it should be supported not only in legal but also in the financial aspect in order to lead this process from the media point of view. Montenegro pays particular importance to broadcasting free of charge program and the aim is to support free broadcast so that most of the population have access to. Other forms of pay broadcasting are being developed and this remains a choice to citizens. In this aspect the role of the government is mainly in terms of subsidizing the receivers’ purchase cost, nevertheless it should be limited, targeted and neutral.

Experience of Macedonia

Experience from Macedonia presented Mr. Zoran Stefanovski by the Council for Radio-Diffusion of the Republic of Macedonia. As an agency, the Council is an independent regulatory body which exists since 1997. The Agency has been tasked to develop strategy for the development of radio-diffusion in Macedonia as well as digitalization of broadcasting. In Macedonia also exists the Agency for Electronic Communications and the public company called Macedonian Radio-Diffusion.

Strategy for radio-diffusive sector was approved in 2007 and the strategy includes the part for digitalization of broadcasting. Access to Macedonia has been a little more specific and according to Mr. Stefanovski even though it may sound strange, this approach worked well.

The first problem Macedonia has faced is financing of digitalization, which was impossible to be financed by the Macedonian government, at least in terms that were foreseen. For this reason Macedonia has organized an international tender inviting all telecom-operators from around the world to participate.
Condition of the tender was that the winner may assume the right for mostly 3 multiplexes. The purpose was to attract foreign competitors and to establish a sense of business. Macedonia according to Geneva 06 has allotments with capacity for 8 national multiplexes plus 1 multiplex for Skopje. The tender was announced by the Agency for Electronic Communications since it was about public communication network operator. This tender was won by Telecom Slovenia, which shortly thereafter began implementing the project and until now, within less than a year, 81% coverage is achieved with digital signal of the population of Macedonia.

Regarding the technical side of a multiplex capacity, although initially was thought that 8-10 channels will go for one multiplex, through a special software, it was managed to introduce 14 channels in one multiplex. Mr. Stefanovski offered the opportunity for sharing all technical information about solutions to achieve this capacity. He stressed that Macedonia currently broadcasts 43 digital TV channels and 6 national radio stations.

Mr. Stefanovski then spoke about the additional conditions charged to tender operators to protect the interests of citizens and program providers. According to him, in order to limit the possibility that the operator in future assumes the regulatory position, the operator was charged with conditions to broadcast free of charge all public service channels (3 television channels) and until ceasing the analog signal to broadcast another 5 national commercial channels at no extra charge. Operator has accepted these conditions and also added 2 other national satellite channels. The operator has signed contracts with each broadcaster to regulate copyrights. The operator can choose not to re-broadcast Macedonian satellite national channels, but the operator has no choice when it comes to national terrestrial channels. All channels are broadcasted free of charge in Macedonia so far, and should continue broadcasting in this form the digital operator so that the public shall not see any change. Citizens now can buy set-top box and may enter into contractual agreements with the operator and get free device. Regarding set-top boxes, Macedonia is supplied with 120.000 set-top boxes until now. All decoders (set-top box) should be inter-operational thus if the operator charges, the same boxes can used.

In Macedonia, in November 2009 started the broadcasting period of simulcast and broadcast is parallel in analog and digital system. Currently terrestrial broadcasting in digital platform is free of charge and the plan is to enter coded broadcasting in March 2010 coded. Prepay for the complete multiplex is approximately 8 Euros per month and if a contract is signed with the operator, the set-top boxing is provided free of charge by the operator. Even after March, citizens who do not want to pay for all programs in the multiplex will be able to watch free of charge three public TV channels and 5 national commercial channels, but in this case citizens should buy set-top box. Also, after regional digitalization, citizens may watch the existing regional and local programs free of charge.

A multiplex is automatically reserved for the public enterprise Macedonian Radio-Diffusion, which was not forced to compete in the tender and according to Mr. Stefanovski that is seen as national interest. Due to inabilities to build its network, Macedonian Radio-Diffusion rented the reserve equipment (back-up) of commercial operator. Macedonian Government has allocated funds to build its own multiplex for Macedonian Radio-Diffusion planning is to provide all Macedonian national channels through this multiplex. In this way the existing multiplex releases space for 15 TV channels that may be replaced with
foreign channels and thus the total offer for citizens through digital terrestrial broadcasting will be around 56 channels.

In addition to terrestrial digital broadcasting, a strong network of cable operators exists in Macedonia, with a market penetration of 60%. Likewise Macedonian Telecom offers a television package through IPTV platform (internet television). This platform also provides non-linear system such as access to video database of Macedonian Telecom through video-on-demand. According to Mr. Stefanovski, all operators in Macedonia are financially sustainable and Macedonia reached such a level of development in this sector that there are no problems around issues such as copyrights, although every now and then are problems with some smaller cable networks.

Mr. Stefanovski continued with discussion about the dilemmas Macedonia is facing now. According to him, all actors have been impressed with the speed of starting and almost completing the process. However, the current dilemma is about when the analog signal should be discontinued and what conditions should be met to do it. The issue is that analogue signal cannot be stopped so simply because of obligations to citizens. In the past, under the management of Macedonian Radio-Diffusion, analogue broadcasting covered about 98% of the population. This is a problematic issue since a digital signal has its own specifics and may easily reach 95%, but expanding the coverage for 3% is very difficult. According to Mr. Stefanovski 3% may cost 10 times more than initial 30%. In order to cover the last 3%, which includes the countries remote areas, it is required to build a system with many broadcast points and repeaters. Mr. Stefanovski said that the cost of the last 3% should be covered by the Macedonian Radio-Diffusion respectively the Government.

To adapt to rapid developments in technology and the need for transit through the digitalization process, according to Mr. Stefanovski, Macedonia has chosen a somewhat strange way by adjusting the law on electronic communications. Also, the approach was such that negotiations were conducted with each operator of public communications and a protocol was signed with them individually obliging them to meet certain basic conditions which are introduced in the protocol.

The development of digital broadcasting system according to Mr. Stefanovski nevertheless should be regulated by law, but the dilemma is whether the system should and can be build with its own capacity, or a foreign partner should be involved, as done in Macedonia. In this way, according to Mr. Stefanovski, Macedonia has improvised and risked a lot, but also achieved a lot in a short time.

Mr. Stefanovski ended his presentation by stressing that, although you can learn from experiences of the others, each country has its specifics and regulatory bodies must make the appropriate solution for situations they face with and there is no recipe for digitalization.

**Experience of Slovenia**

Slovenian experience was presented by Mrs. Tanja Kersevan Smokvina and Mr. Miha Kriselj Agency for Post and Electronic Communication, the body which has the role of content regulatory. According to Mr.
Kriselj, the existence of regulatory practice which deals exclusively with the content is rare in Europe, and similar agencies exist only in the UK and Bosnia.

Slovenia has started digital terrestrial broadcasting in 2006 via automatic separation of first Slovenian multiplex for public television under the law on the radio-television. After this, Slovenia announced an international tender for the second multiplex operator. Three companies applied in the tender coming from Luxembourg, Austria and Norway. The tender winner was the Norwegian company "Norkring", which is obliged to broadcast at least 8 TV channels which hold licenses in Slovenia as terrestrial digital broadcasting.

According to Mr. Kriselj, public multiplex A now covers about 85% of the population, but multiplex B under Norkring management has not started yet.

Regarding the legal framework and obligations multiplex should cover 95% of the population and achieve lower possible cost. Such a thing is opposed by commercial channels, which want to have an impact on level of coverage to be achieved since coverage of 95% of the territory is very expensive to be achieved and in most cases, according to Mr. Kriselj, commercial channels do not want this. Agency has the responsibility to monitor multiplex A, its function and price, so that he might be willing to share the excess capacity. For this reason the agency has taken the decision to divide the multiplex in two parts, one for public television channels and the rest for commercial TV channels. Multiplex B is licensed in December 2008 and the winner of the license has smaller obligations to cover the signal, which is about 85%. The price offered by Norkring was 360,000 Euro for national coverage channel that was also the lowest price offered.

Slovenian Law specifies that the operator cannot transmit channels that have no digital license issued by the agency. So actually in Slovenia there are two licenses issued, one for the channel, the other for the frequency granted to the operator. Therefore, the operator does not have free hands to choose the program in multiplex. According to Mr. Kriselj, since multiplex B is not operational, most relevant and essential channels must be transited and broadcast in multiplex A. After full activation of multiplex B, commercial channels should pass to this multiplex. According to Mr. Kriselj, the price set by the agency for broadcasting in the first multiplex had expired in April 2009 and the new price set by the operator was based on cost. This caused dissatisfaction of commercial operators who decided to leave the multiplex. At that time multiplex B was not in operation since there was no agreement between the operator and television channels licensed for digital broadcast and this situation created a major problem. Operator of the multiplex B at the time held the position that it will not start building the network until a sufficient number of contracts is signed with broadcasters. On the other hand, broadcasters didn’t agree with signing of contracts unless the network is built and tested. This led to a vicious circle, which was carrying the cost of double payment for both infrastructures, analog and digital.

Solution of the situation in Slovenia was provided by the government, which found a form to support the process through partial subsidies. To check simulcast costs, the government announced a competition for broadcaster to partly fund the costs of transition to digital broadcasting. To avoid controversy with the European Commission’s strict regulations for the prohibition of subsidies, the
competition was on funds that will finance only the analog network broadcasting during simulcast period. However, if support is under 200,000 Euros per applicant in 3-year period then this is in accordance with EU regulations. Applicants for these funds should meet conditions such as: be have an allocated frequency used, to be an analog broadcaster, to have digital license and technical possibilities to enter the multiplex and bind the contract with the operator. This approach was proven successful and, although there is no multiplex B, all broadcasters will currently broadcast only in multiplex A.

So far operator of multiple B has not yet begun construction of the network although it has shown signs that it will begin using frequency until deadline. If it doesn’t use the frequency until December 2009 the operator will lose the license for use of the frequency. Slovenian Law specifies that if licenses are not used within a year, the license is automatically waived without opportunity of return. The delay with second operator results to the inability to use multiplex B helping the process of transition (switch over) to digital broadcasting.

Another issue unplanned technical is coding of voice. Initially only the video coding was specified while voice coding is not specified. This is important since there are different set-top boxes, which may not support certain types of audio coding.

Public awareness campaign will begin in December 2009 and the transition period starts then.

Mrs. Kersevan-Smokvina continued presentation of Slovenian experience saying that initially they had ambitious plans, but at the end a lot of things have emerged as impossible due to lack of security and problems in implementation. She stressed that each channel that aims at broadcasting in digital system must be licensed through public tender. During the tendering process, regardless of added capacity offered by this system, there is not much interest by content providers that would be interesting and would help the transition process. For this process it is important that licensed channels have broad coverage throughout the population thus the transition should be done easier.

According to Mrs. Kersevan-Smokvina, in Slovenia for the moment less than a quarter of households are still dependent on terrestrial signal for television and this number is constantly falling, mainly due to increased market share covered by IPTV. IPTV in Slovenia is a success story and provides rich television packages. The issue according to Mr. Kersevan-Smokvina is how to build a Digital terrestrial platform which would be competitive in the broadcasting market. Currently this is impossible based on the legal framework in Slovenia. Since in Slovenia not many TV channels are competing to enter the digital platform, and consequently the capacity of broadcasting in this platform is no longer limited resource, we have to seek the opportunity of relaxation of regulations for licensing of broadcasters. We have to leave more space to operators to develop their business models, their content offers, and we should allow the possibility of binding agreements with content providers or other operators. A combination of free of charge channels with a group of free of charge channels can contribute to a successful future for this platform.

The year 2010 in Slovenia is very important year for implementing the digital platform. The aim is not to leave any citizen looking black pictures in their screen on the day of disconnection.
Plans and preparation of media in Kosovo for transition from analogue to digital broadcast

Mrs. Aferdita Saraçini-Kelmendi spoke on plans and preparations of the media in Kosovo for transition to digital broadcasting, on behalf of the Association of Independent Electronic Media of Kosovo (AMPEK), who began by outlining the challenges in the process of digitalization broadcast in Kosovo that are twofold. The first category of challenges has to do with the problems and costs of this process facing all countries, while the second category deals with problems related to the political position of Kosovo and the problems she is exposes often and purposely.

Given that Kosovo was left out of the planning process of broadcasting Geneva 06 by ITU and non attendance at the Regional Conference of radio-communications on planning terrestrial digital broadcasting, she faces with a situation where there is no alternative but to make solution within its limits, but without damaging the process and service delivery for its citizens. Mrs. Saraçini-Kelmendi mentioned that in the past Kosovo was participant with full powers, including veto power, in conferences and similar processes such as those in the years 1968 and 1978, when she was represented at ITU as a member of the former Yugoslav Federation. Kosovo still functions with the diffusive radio plan of that time. The right to representation was held by Kosovo under UN administration, but it was not allowed by ITU. Unfortunately, according to Mrs. Saraçini-Kelmendi, participants, including neighboring countries, in Geneva 06 as well as in regional conference didn’t have good understanding for Kosovo and for the fact that sooner or later radio-diffusive digitalization will be also implemented in Kosovo. As a result Kosovo was left outside these agreements and was deprived of the legal right to use its natural resources while management was arbitrarily left to Serbia.

In response to this, AMPEK together with all relevant stakeholders in Kosovo in 2006 published a joint written release stressing the need of recognizing the right of Kosovo for frequency band planning and design of her strategy for transition to digital radio-diffusion, which would take into account the specifics, specifications, needs and requirements of Kosovo and the Kosovar society. The release recommended the establishment of working groups on technical, legal, financial and content issues and that these groups to provide a guideline on how to do the transition in the most optimal way. However, work on drafting the Strategic Plan for digitalization in Kosovo has not yet begun.

Mrs. Saraçini-Kelmendi went on highlighting the position of AMPEK stating that no inadequate solution will be accepted with the justification of delays in the process or achievement of any international standard. It should be borne in mind that existing broadcasters, who today are identified with a frequency or network of frequencies, in this process will lose the frequency being merged into a platform of digital channels. Benefits from this process are also evident. Saving the frequency band and
opening opportunities to launch new channels are welcomed by the media. However, care should be paid to avoid abusing these priorities by narrow interest groups, without excluding the political clans.

The key issue in digital terrestrial broadcasting, from the viewpoint of media, is that if existing broadcasters don’t broadcast on these platforms, they will cease broadcast since they do not possess an own frequency. One such example is in Germany where a number of local channels in some Lands have ceased broadcast within a night, because digital platform operator began to bill these channels with a much higher rate for new digital services. This problem could not be resolved either by the regulatory structures of these Lands. As a result, local committees of Lands had to finance the construction of its terrestrial network especially for local media, but such a thing took at least three years thus damage caused to several media was irreparable.

To avoid such situations and to maintain independence of information, AMPEK is fully committed to help build adequate legal framework and to advocate for the progress of this process. In this regard, AMPEK also supports the work of IMC to start frequency planning for digital terrestrial broadcasting, which differs from the planning envisaged within the framework of Geneva 06 agreement. Here Mrs. Saraçini-Kelmendi stressed that this planning must reflect the real needs of Kosovo, not imposed solutions on access "to use what remained free."

Mrs. Saraçini-Kelmendi expressed her confidence that Kosovo’s neighbors are in principle willing to positively solve these problems and for appropriate coordination of the frequency plan based on same principles to those used by the neighbors during planning. Such a thing is allowed with Geneva 06 providing room for settling down cases of interference with mutual understanding. Not reaching an adequate solution would mean that Kosovo shall continue analog broadcasting after 2015, that could cause interference to the broadcasting in neighboring countries.

AMPEK considers that in order to succeed this process in Kosovo, all interested parties should gather and draft the concept. Then, according to Mrs. Saraçini-Kelmendi, team manager of the project should be appointed; technical, legal, financial and content working groups; request support from foreign experts, and create communication channels with ITU and other international telecommunication institutions. An action plan is also required that would precise concrete tasks and deadlines for implementation.
General overview of ITU and Geneva 06 agreement

Technical Analysis of radio-frequency plan approved in Geneva in 2006 was presented by Mr. Elton Poga, international expert and advisor to the IMC. Speaking on the Geneva 06 agreement he stressed that the agreement was signed under the framework of International Telecommunications Union (ITU) and regulates broadcasting in VHF 3 and UHF 4 and 5 bands for about 100 countries of Europe, Africa and Near East. This agreement replaces a part of the agreement Stockholm 61 on Europe and a part of the Geneva 89 agreement for African broadcasting areas. Final deadline for transition was set in 2015 and until then existing stations analog broadcasting shall be maintained, which results in temporary restrictions for new entries in the digital plan.

The objective of the agreement was meeting broadcasting digital requirements by all countries that have participated in this process and simultaneously to allow maximum flexibility for the use of frequency band in the future using technological achievements. Coordination process lasted two years and after an intensive work through regional conferences Geneva 06 agreement was reached. The principle of this process was the equal access to radio frequency band for all countries. Of ITU’s suggestion was that band 3 has a minimum of 3 frequencies for terrestrial audio services digital broadcast, a canal in DVBT and 7-8 channels (layers) of DVBT in bands 4 and 5. Fulfilling the requirements for frequency that is achieved in the agreement is 90% in band 3, 90% in band 4 and 98% in band 5. For European territory results are even better, with only 4 European countries that have not reached the requirements of 100%.

Unfortunately during this entire important process Kosovo was excluded and it is represented by the Republic of Serbia. In regional meetings during May 2004 to May 2006, Serb administration has been responsible for setting the technical parameters for the service area, and determining the frequency allotments for Kosovo. In this process the entire territory of Kosovo is designated as one service area and allotment. In both frequency bands of the coverage area dimensions are the same. Regarding selection of allotment, which is the basis for reaching agreement on the process of coordination, Serbia chose the Reference Network RN1, which is largest networks available for selection for one service area, whose diameter in Kosovo is 150 KM. For Kosovo two types of reception were chosen, portable outdoor and mobile. This has resulted in 7 channels in UHF band and one channel in VHF, as well as two frequency blocks in VHF band. If you compare allotments for Kosovo and neighboring countries, we can notice that Kopaonik in Serbia has 10 channels, Jastrebac in Serbia also has 10 channels, Besna Kobila and Popova Shapka in Macedonia also have 10 channels each. On the other hand Vërsh Crni has 10 channels and Stres has 11 channels. Allotments for border points of Kosovo with Albania are in Kukes with 10 channels and Dibra with ten channels. In comparison with these border broadcast points in neighboring countries, Kosovo for all its territory has only 8 channels. Serb administration during the planning process has set certain technical parameters are not related to the real needs and real situation in Kosovo. In setting allotment limits, which must be based on broadcast point, signal
coverage, synchronization and domestic and international coordination, Serbia has done a great harm to Kosovo and digitalization process here. The nature of the agreement should be based on the philosophy of coordination and to provide equal access to opportunities and broadcasting resources. Recommendation from ITU is that neighboring countries should choose allotments of approximately similar dimensions, particularly around the borderlines. Frequency planning and technical parameters selected for Kosovo by the Serbian administration planning only covering 52% of the territory. They have left Kosovo only with two broadcasting points, in Golesh and Cvilen, and broadcasting power is set at 40 DV. According to measurements made by Mr. Poga with the team of IMC, it appears that with the Serbian plan, Kosovo covers only 28% of the territory. Coverage of Kosovo territory as a whole is 16.1% and synchronization in a single frequency network is impossible.

The approved plan does not correspond to the situation in Kosovo nor the plan and its goals. A major problem is the lack of compatibility of the plan with the agreement and selected broadcast points that don’t match with reality. If you see the maps, almost half the territory of Kosovo was left out of this plan. Also broadcasting network and chosen parameters do not meet even minimum requirements.
Technical alternatives for digital frequency plan according to ITU standards

Alternative frequency plan drafted by a group of experts based on the needs of Kosovo and frequency allocation for neighboring countries was presented by a member of the team Mr. Emil Blakaj. He stressed that this plan is only tentative and needs to go through an additional technical assessment before it is completed. The aim is to achieve the transition to digital broadcasting in Kosovo, providing Kosovo with equal position and access to the frequency band for planning and implementation of digitalization.

In Kosovo there are total 20 broadcast points, including KTTN points, and these create a wide broadcasting network. Main broadcast points are used only by television stations with a license for national coverage. On the basis of map of allotment borders for Kosovo from Geneva 06, Kosovo has eight broadcasters outside the territory allotment. Broadcast network covers about 75% of the territory of Kosovo, while in terms of number of citizens it covers about 97% of the population. Considering the technical problems as a result of the plan approved in Geneva, alternative plan meets the needs of Kosovo and offers a technically acceptable plan, including specifications in allotment service areas. Frequency assignments enable coverage from a synchronized single frequency network. This plan offers a split that puts the harmony all mentioned parameters. The plan divides Kosovo in many allotments given the coverage of each point under the mountain in Kosovo in three main areas. First allotment is Anamorava area where existing broadcast points covers is about 80-85% of the area. Reference network proposed for this planning is RN2 while reception is foreseen to be RPC2. With these technical parameters and this area we can achieve a single frequency network, which is very important for digital planning. Another allotment in the alternative plan is allotment of Dukagjin, again using single frequency network, RN2 and reception RPC2. Again coverage with existing broadcast points is good, but improvements can be made through the holes coverage using additional broadcasters without causing any problems or interference. Third proposed allotment covers central Kosovo and Pristina. With the existing infrastructure of broadcasters, territorial coverage reaches 91%, but again this can be added through new broadcast points, which are single frequency network, and synchronization of broadcasting points. The selection of frequencies and their number for each allotment is based on service area of allotments arising from Geneva 06.

The main principle for selecting the alternative frequency plan was equal access to radio diffusive band with neighboring countries. During planning was used the software with content from Geneva 06 to find free channels which wouldn’t interfere will any allotment of neighboring countries in the region. Plan for the distribution of frequencies depends on the policy document within the strategy and requirements digitalization and real requirements for frequency and program offer. Also, there should be a combination between the providers of radio-diffusion, especially the distribution between national,
regional and local levels. The choice of channels should be coordinated with neighboring countries and these choices should be coordinated and tested by technical groups. If technical groups face problems, they can be coordinated with IMC experts and technical groups involved in the strategy process. Calculations for the presented alternative plan are made using suggestions stemming from the ITU.

Presentation of Mr. Blakaj was concluded by stressing the need for coordination between all countries. To complete this issue it is required to exchange experiences and technical data with other countries. Work done so far is good and creates some cells to new allotments and is a preparation for technical frequency plan on digital broadcasting.
Coordination and cooperation opportunities with neighboring countries for an alternative frequency plan

Discussion session about the possibilities of coordination of Kosovo with neighboring countries on the alternative frequency plan that would cover the needs of Kosovo and would provide equal access to the frequency band started by Mrs. Saraçini-Kelmendi from AMPEK saying that the alternative plan presented by two experts IMC is a good job and should be the basis for final planning which will meet the needs of Kosovo viewers. Mrs. Saraçini-Kelmendi then stressed the need that this plan is coordinated primarily within Kosovo among all interested parties and then start the process of coordination with neighboring countries. She stressed that the frequency plan should not be worked on the basis of frequencies which have remained free, but it must be based on the needs and specifications of Kosovo, since frequency band is a natural wealth of Kosovo.

Agim Sopi, a member of the Council of IMC, stressed that Kosovo as a state has the right to plan the use of its own resources. Under the alternative frequency plan, which is an initial plan, IMC has been careful not to cause interference with any neighboring country, including Serbia. Mr. Sopi cited the example of Kopaonik, where Serbia has secured 11 frequencies for a territory with no more than 10,000 residents that is more than the number of frequencies that they have set for Kosovo's allotment with 2 million residents. He stressed that the decision of ITU not to include Kosovo in planning the frequency violates all conventions on human rights, including the right to information, leaving more than 85% of Kosovo's population outside the frequency and its own natural resources. However, Kosovo has its own broadcast points, of which at least 2 are in altitude greater than 2,000 meters and broadcast from these points can reach Berlin, Athens or Cairo. He expressed confidence that there will be willingness and understanding and that Kosovo will not be forced into a conflicting position. Exclusion, according to Mr. Sopi, means the right to survive until inclusion requires responsibility and obligations. However, Kosovo is interested in good cooperation and coordination with its neighbors.

Mehdi Këpuska, by Radio Television of Kosovo, said Kosovo had 4 networks defined for analogue broadcasting and this broadcast was coordinated very well and this plan has been synchronized within the ITU and the neighbors of Kosovo. He stressed that the digital broadcast networks should be based on optimal parameters and not extreme parameters that would be more costly and problematic to achieve synchronization. Therefore, any plan must be coordinated within Kosovo and only then with neighboring countries.

According Fazli Shala from Telecommunications Regulatory Authority, alternative plan presented by Mr. Blakaj is a good basis, but it should be further modified. He stressed that the definitions in the plan of assignment as well as allotments are far from the needs of Kosovo and compared with definitions of neighboring countries. Mr. Shala proposed that 5 areas and another area for Prishtina are planned for
Kosovo, as is the practice in all other countries. One possibility then is that the border broadcast points of neighboring countries take some frequency coverage of the area of that allotment that falls in the territory of Kosovo. ITU should be contacted and new frequencies should be coordinated with them in this process.

Mr. Poga stressed that the alternative plan presented achieves 100% synchronization and that this plan is the most accommodating to allow an easier process of coordination with neighboring countries. He agreed with the idea of a special sub-allotment for Pristina, which would be in addition to 4 allotments envisaged for Kosovo. According to him, the choice of frequency is not random and has undergone a process of calculations using the software used by ITU for planning purposes.

Pirro Braço from the Albanian Regulatory Authority drew attention that planned frequencies are to be adopted and recorded in the international register of frequency and that such a thing includes coordination and agreement not only with neighboring countries but also with all countries in distance of 1,000 km from Kosovo.

In their discussions about readiness for coordination, representatives of relevant authorities from countries of the region expressed readiness for coordination with the Kosovo to enable an easy of transition to digital broadcast and overcoming the problems arising from the Geneva 06 agreement.

Miha Kriselj from Slovenia noted that the transition from one to three allotments according to the alternative plan will create many problems and hard negotiations with neighboring countries. Given that in neighboring allotments Kosovo has 10 frequencies occupied by Serbia, Macedonia and Albania, and if this is added 20 channels for Kosovo, the total number of channels comes to over 50 channels, while the UHF band has only 49 available. Mr. Kriselj asked how to get the additional channel required. He stressed that it is required to prepare a second plan for a situation if negotiations with neighbors fail. An alternative solutions proposed by Mr. Kriselj was to use the right from Geneva 06 and expand the area of coverage of existing allotments from current coverage to full coverage of the territory of Kosovo. This according to him can be a simpler solution, although technical problems may arise that will cost more to resolve.

Zoran Stefanovski of the Council for Radio Diffusion of the Republic of Macedonia agreed that problems stemming from the Geneva 06 should be solved with good neighborly relations. As for Macedonia, the agreement should have been made with the Agency for Electronic Communications, which is the regulator of infrastructure. Mr. Stefanovksi expressed goodwill from Macedonia to sit and discuss concrete solutions. He expressed the importance of conversations between IMC and ITU and its inclusion in this process. Also, the position statement by Serbia about these problems is important for this process, which should not be stopped.

Jadranka Vojvodic, Montenegro Broadcast Agency, agreed that this is a very important issue and that problems should be discussed in good faith and in accordance with the basic principle of ITU, which is equal access to frequency and objective that this valuable resource to be in optimal availability and the for the benefit of citizens. Mrs. Vojvodic stressed that the Ministry of Communications and Agency for Electronic Communications should be the interlocutors by Montenegro.
Pirro Braço, from the Albanian regulator, also expressed concern about the idea of adopting the new frequency since it could take a lot of time and not certainly would result successful. He also said it is better to have a plan B in order to achieve some immediate goals, but stressed that the presented alternative plan is an objective plan and a good basis for planning in the future.

Mrs. Saraçini-Kelmendi stressed the need for the IMC, together with relevant government institutions to start the dialogue with parties concerned in neighboring countries. According to her, the position of Kosovo since 2006 has changed and Kosovo is a country recognized by 63 countries hence the position to ITU has changed. Here Mrs. Saraçini-Kelmendi expressed her persuasion that diplomacy of neighboring countries has an important role in relationship with ITU that could propel towards a better cooperation with the ITU. Kosovo is ready to prevent obstruction or interference against anyone and is open for discussion and dialogue. However, if modalities are not found, Kosovo cannot invent frequencies thus an agreement should be reached on optimal use of natural resources. If problems with frequency band are not resolved, media in Kosovo will continue to broadcast in the same frequencies, and this may cause problems with neighboring countries. The deadline for agreement is the end of 2015.

Naile Selimaj-Krasniqi said that the process of digitalization can be considered as a mosaic. Analysis of the alternative frequency plan is an initial but very important part for the transformation of broadcasting. Work presented at the conference as well as further commitments of media, regulatory and neighboring countries will enable the necessary coordination for all.
Conclusions

International Conference ‘Presentation of Digital Broadcasting and Region In Kosovo – Strategies’, held in Pristina on 3-5 December 2009 focused on the presentation of the process of transition to digital broadcasting in the Balkan region and the start of discussions to overcome the problems arising from expulsion of Kosovo from Geneva 06 Agreement.

Discussion indicated two necessary processes, first is the internal coordination between the regulator and broadcasters, and the second very important process, perhaps a bit more difficult, is the coordination of Kosovo with neighboring countries and ITU in the future.

Participants agreed that failure to resolve problems arising from Geneva 06 will cause obstacles for the development of media sector and for the transition from analog to digital broadcasting in Kosovo, as well as problems for neighboring countries and the wider region. Under Geneva 06 Agreement, digitalization in Kosovo is impossible, both technically as well as in social aspect, respectively human rights aspect because in this way it would violate the right of citizens to be informed.

To overcome this situation and current circumstances in relation to ITU and in relation to neighbors, especially Serbia, we have to try to solve open issues in agreement with neighbors. Unfortunately Serbia although invited to this conference, has shown no willingness to attend.

An agreement with neighbors, who have good will, would provide an acceptable form to the allocation of frequencies that will fulfill the needs of Kosovo and will also respect the process in neighboring countries. This conference was the first step in this direction and all participants expressed their will to do what is possible to reach a fair and appropriate coordination for all. Participants stressed that it is in Serbia's interest to join the process in a near future and prevent harming any party.

Conclusions from the conference can be summarized as follows. Participants stressed the need for creation of two coordination mechanisms: an internal, which should be between stakeholders in Kosovo, and another regional coordinating mechanism, which could be initialed through Kosovo’s proposal and will include responsible authorities of the countries of the region, which may be affected by the consequences of improper coordination. Internal coordination mechanism should precede any regional mechanism. All parties around the table expressed goodwill to participate in such coordination process. Participants also stressed the need to consult and involve ITU in the process, which would be in the interest of Kosovo as well as ITU in order to regulate this area of broadcast.
Dear Council of IMC,

Dear Director of IMC,

Distinguished guests,

Representatives of regulatory in the region

Ladies and Gentlemen,

I feel privileged that Independent Media Commission invited me to open this conference with a very important topic for Kosovo and the region - digital broadcast.

Broadcast regulatory bodies from Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia and Albania let me welcome you in the Republic of Kosovo.

I wish you a pleasant stay to you and all the attendees in Kosovo and productive work in this conference.

Ladies and Gentlemen,

The road to prosperity is laid with good intention. We must ensure that we will offer more than just good intentions. By focusing on these intentions we will improve the standard and services to each citizen, but also will improve the position of Kosovo in terms of integration which is our goal for the future of the country.

Developments in technology, their adaption and use for individual and social interests, fast sending and receiving of quality and comprehensive information, is certainly a safe path towards an open, visionary and courageous society that supports the principles of development and it also carries unknown risks.

I wish that this activity, through debate, sharing of information about experiences serve finding the unknown and building bridges to regional collaboration.

As a citizen, with little knowledge about technology, but its daily user, as the head of the highest policy-making and decision-making institution in Kosovo, on behalf of the citizens of this country I ask the two-day forum, first: to provide us with expertise and better cooperation on how to approach issues of media digitalization from legal and public policy point of view and how to build a successful strategy, local and regional, in this field. Second: To inform and propose us technological infrastructure that will ensure business development, creation of new jobs, low cost investments and benefits to individuals and to investor.
We know that democracy is healthy and stable when its citizens are involved firmly and freely in exchange of information and ideas, when freely express their opinions and learn from others. Internet and traditional forms of media remain critical factor of communication between citizens of Kosovo and citizens in the region and the world.

Communication routes should belong to everyone and to reflect the diversity of Kosovo and the entire region. This policy would enable citizens to actively discuss issues of concern and that affect their lives.

Finally, I think this new approach will help and pressure the governments to enhance transparency, to lead development and time requirements for the benefit of citizens, to encourage and allow more participation and more involvement in decision-making.

On behalf of the Assembly of the Republic of Kosovo and in my name, once again I wish you good work.

Thank you for your attention!

Jakup Krasniqi,

Speaker of the Parliament
Annex 2 – Welcome speech of Daut Demaku, Deputy President of IMC Council

Dear Speaker of the Parliament of Kosovo, Mr. Krasniqi,

Dear colleagues from regulators of Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro and Slovenia,

Dear members of the Council,

Dear professionals of various divisions of the Independent Commission for Media,

Dear all of you, representatives of broadcasters in Kosovo,

Dear participants,

On behalf of the Council of the Independent Commission for Media I want you express welcoming and to express my deep gratitude for your time and availability to participate in our two day Conference on digitalization in Kosovo.

Along with the appreciation, I shall address a plea – to help, as much as possible, and let your experiences become a part of our experience.

Independent Media Commission is an agency of the Assembly of Kosovo, fully independent, tasked to regulate the sector the rights of media in Kosovo.

This agency has done a great job, especially after independence, because we inherited a complete disorder, a chaotic situation that we don’t like to recall, it was such a mess.

For regulating our media market, we were forced, to say, to start from the scratch, to fix all its segments, from the simplest one called registration, licensing, bringing the basic rules stemming from the law all the way up to complete licensing of all broadcasters with only one objective – to create a state of law, order, a situation that is indeed a media market, with rights, duties and obligations for each subject in the respective part of the market.

Re-licensing and bylaws that regulate media market shall be completed in December, i.e. during current month. But only then we begin the major work called ‘digitalization’, entering the digitalization, and we expect major duties then.

I’d like to let you know that this agency, under the law, creates policies, strategies, tasks and implements them - each of them is created and implemented independently. Within these strategies, set by us, the IMC Council has determined that the primary and leading role of the agency is in the preparation and launching of digitalization in Kosovo.
It is our need and interest to invite all relevant stakeholders in Kosovo, to get sooner and better involved in this process. Our goal is to create a plan, a strategy that would fit best our conditions and specifications in Kosovo.

Independent Media expects maximum support of media institutions, all operators and the public for the process to run smoother, to be more acceptable and useful by customer, for which we all work.

Independent Media has set the target for this year, to begin preparations for digitalization. But these preparations are based on an analysis of the plan set by the ITU for 2006 and the plan alternative. This topic will be covered later by experts, because Kosovo was affected a lot and it is not about a mistake or an accident, but it is a serious harm that we have to repair.

The organization of this conference is great step in meeting this obligation. Our colleagues in neighboring countries have moved ahead by establishing the legal and technical basis and defined strategies and timelines to switch to digital broadcasting.

Independent Media Council is very grateful for the concrete and collegial relations with counterpart agencies from the countries of the region, which are built and are continuing to get rich, especially in recent years and are very grateful that they are today here with us to share their good experiences with us.

Frequencies are state assets, but frequencies sometimes resemble to thoughts and recognize obstacles, barriers and borders and cross outside the state territories and interfere the others. We want to build relationships of cooperation with all the neighbors for the media market to function well without causing reciprocal damage to each other.

Therefore, from this conference we expect learning how the strategies implementation process is going, as set out in neighboring countries, what is working and what isn’t among them who have more experience than us, what can they advise us especially at this stage of preparations for transition from analog broadcast to digital broadcast.

And, at the end, on behalf of the Independent Media Commission once again I would like to thank you for participating and for your contribution. I believe that at the end of the Conference we will be more prepared and more willing to face the heavy challenges ahead, especially for concrete performance in designing and coordinating the frequency plan.

I wish a fruitful work in this conference and I wish you all plenty of successes.

Daut Demaku

Vice-President, Council of the Independent Media Commission
Annex 3 – Agenda of the Conference

*Introduction of Digital Broadcasting in Kosovo and the region*

**STRATEGIES**

3-5 December 2009, Grand Hotel, Pristina

**3 December 2009**

Transport from Airport to hotels will be organized

19:30 Reception and Dinner at the National Theater

**4 December 2009**

*First session, Moderator Bersant Disha*

09:00-09:30 Registration of participants

*Grand Hotel*

09:30-10:00 Welcoming remarks by Mr. Jakup Krasniqi, Speaker of Kosova Parliament

10:00 – 10:05 Opening Remarks by Mr. Daut Demaku, Vice-Chairman of IMC Council

10:05-10:20 Introduction of Media Landscape in Kosovo

Mrs. Naile Krasniqi – IMC CEO

10:20 – 11:00 “Switchover strategy: Technical and legal framework - lessons learned”

*Albania:*

Mr. Alban Karapici, National Council of Radio and Television

11:00-11:15 Coffee break

*Second session, Moderator Bersant Disha*

11:15 – 12:00 **Panel discussion: “Switchover strategy: Technical and legal framework - lessons learned”**

*Bosnia and Herzegovina:*

Mrs. Amela Odobasic, Communications Regulatory Agency
12:00 – 12:15  Discussion: Questions and Answer

12:15 – 12:45  Croatia:
Mr. Damir Hajduk, Council for Electronic Media

Montenegro:
Mrs. Jadranka Vojvodic, Broadcasting Agency Council

12:45 – 13:00  Discussion: Questions and Answers

13:00 - 14:30  Lunch

14:30-15:00  Panel discussion (continued): “Switchover strategy: Technical and legal framework - lessons learned”

Macedonia:
Mr. Zoran Stefanovski, Broadcasting Council

15:00 – 15:15  Discussion: Questions and Answers

15:15 – 15:30  Slovenia:
Mr. Miha Kriselj and Tanja Kersevan Smokvina, Post and Electronic Communication Agency

15:30 – 15:45  Discussion: Questions and Answers

15:45 –16:00  Coffee break

16:00 – 17:00  Joint panel: “What are the best practices possible?”
Speakers from Albania, Bosnia, Croatia, Macedonia, Montenegro and Slovenia

17:00 – 17:30  Summary of the first day of the conference

19:30  Dinner (Kosovo Museum)

5 December 2009

Second day

09:00- 9:10  Opening of the second day of the conference
Moderator Bersant Disha

9:10 – 10:00  Panel discussion: “Kosovo towards digitalization”
Media plans and preparations for switch over to digital terrestrial transmission

Mrs. Aferdita Saraçini, Kelmendi, Board Director, AMPEK

10:00 – 11:00 “Technical Alternatives for Kosovo’s digital frequency plan in accordance with ITU standards”

Mr. Emil Blakaj, Frequency Planning Expert

Mr. Elton Poga, Frequency Planning Expert

11:00 – 11:15 Coffee break

11:15 – 12:30 Open Discussion:

“Possibilities for the coordination of the alternative frequency plan”

12:30 – 13:00 Conclusions

13:00 – 14:30 Lunch (Grand Hotel)

19:30 Dinner on the honour of the colleagues from the Regulatory Authorities at “Sheshi 21”