

The digital revolution is a decisive factoring our daily life. It is not anymore possible to live without the techniques of information and communication. The electronic system is the ideal way to develop work. Everybody wants the electronic government, commerce, education, health, work at a distance and others. We hope to be able to manage and organize to the best the sectors linked to the techniques of information and communication in our country. These techniques are part of the needed evolution to build the society of knowledge and accomplish the development wished especially in the information sector that puts us in front of world dead lines.

The communication and information revolution allowed numerous possibilities and various media services to the public (IPTV, DVB, ATSC) as well as the use of various technical means either by cable or DSL, or without cables, or through various instruments (TV, mobile, computer) and on the various communication networks (Internet, telephone, through satellites) which turned the world into a universal village where the space and time dimension vanished and knowledge became available for everybody.

The technique treating the information and the ways to save them has met the communication technique transmitting them to the various instruments. All services are now available on each of these networks and through different techniques. Today we can receive the TV channels and the radio stations on the various communication networks functioning digitally, and we can receive our email and contact Internet through the broadcasting networks. Finally, we can obtain all these services on the same system and the same network.

With the evolution of the digital technology, the radio services became interactive; the spectator is no more a receiver. He became an effective partner in the media industry through his direct interaction with the content.

We must face the huge challenges to be even with the technological evolution and match the world in its transformations that we cannot simply ignore. We have no other choice but to adopt them, thus contributing in developing the society as a whole. By developing the knowledge potentials which are the key of the economical development through better investment opportunities, new jobs will be available for the young.

In this respect, the «الهيئة المنظمة للاتصالات» has recently organized in coordination with the Ministry of Information, and the Ministry of Communications, a workshop to present its vision about how to accompany the dead lines and discuss it with the concerned authorities.

The issues to submit and discuss are numerous and ramified. The main are:

- To accompany the technological evolution made by the digital revolution. To ameliorate the services quality and develop them to suit the requirements of the epoch and the society needs.
- To up-date and modernize the laws and legislations to match the new requirements of this sector.
- To meet the universal dead lines through planning and preparation in order to accomplish the transfer to the digital TV diffusion.
- To determine the norms for licensing radio and TV services not mentioned in the current laws and legislations.

The big challenge is how to prepare the transfer to the digital diffusion in implementation of the Geneva Agreement 2006 fixing the final date on 17/6/2015. This needs setting a suitable plan determining the rules and stages of the transfer as well as the role of all concerned parties, the coordination, the renovation of the laws in accordance with the new requirements and criteria, and the instruction of the regulations guaranteeing the needs and rights of the society for a soft transfer with the least repercussions on the society, the state and the sector.

During the world conference for the radio communication held in 2007, the use of frequencies above UHF was reviewed. The conference approved the possibility of using the Digital Dividend in the limits of the UHF frequency for additional services and/or other in the region (1) fixed by the International Federation of Communication since the majority of the countries are turning to the digital diffusion. In the future, the level of frequencies 790-862 MHz may be reserved to the use of the international mobile communication (IMT) after carrying an additional study by the Federation.

The transfer to the digital diffusion is a challenge of a capital importance that needs solutions on the media, architectural, economical and social levels. It will provide a huge benefit for the society due to the available frequencies useful to increase the TV programs, the media services and other communication services. This will contribute in the society development and help the economy through bringing new investments and new services.

The states of Europe, Africa and some states of Asia agreed on a new plan to organize the frequencies in a compatible way with the digital revolution in order to draw the benefits of the transfer. This agreement was named Geneva Agreement 2006.



It concerns the frequencies of the 3rd range(174-230 MHz), as well as the frequencies of the 4th and 5th ranges (470-862 MHz) for the digital earth TV and audio diffusion DVB-T and T-DAB. It fixed the dead line on 17/6/2015 and gave all states the freedom to use the frequencies for the digital services. It also liberated the states already using the digital diffusion from the protection of the analogue services of the neighbor states. This date is universally considered as compulsory to pass to the digital diffusion, at least within the national borders.

In this Agreement, two separate plans were set for the analogue diffusion and the digital diffusion between the states in this part of the world. This Agreement is compulsory for the states and has been registered at the UN. The result of the states demands taken into consideration for the various kinds of diffusion is briefly: 3 frequencies of earth audio diffusion and 1 frequency of earth digital TV diffusion beside 7-8 frequencies of digital TV diffusion on the 4th and 5th ranges were granted to the states.

In Europe and parts of Asia, the Geneva Agreement replaced in some parts the Stockholm Agreement 61 which regulated the use of the analogue diffusion frequencies. But the Stockholm Agreement remains valid for the frequencies of the first and second ranges. We hope that the Geneva Agreement provides the flexibility of the Stockholm Agreement which originally dealt with 5300 demands from the various countries, but allowed the registration of 80000 analogue appliances.

The year 2020 is the date fixed for ending the analogue diffusion on the third range(Band III- VHF) and to complete the transfer to the digital diffusion in certain African and Arab countries.

The world developments show that the services of analogue TV are progressively ending.

- Europe: six countries have completely ended the analogue diffusion before the end of 2007. The majority of the countries uses simultaneously the analogue diffusion and the digital one, or adopts the digital diffusion progressively one region after the other. The total ending is expected before 2012.
- United States: the complete transfer to the digital diffusion was expected in February 2009. The last developments tell that it will not be effective before June 2009.

On the world level, the situation is mixed but many countries announced that the analogue diffusion will end between 2010 and 2015.

This huge work requires the total cooperation and coordination of all being the responsibility of everyone, especially between the Government, the Ministry of Communication, the Ministry of Information, the Ministry of Economy, the Communications Regulating Board in addition to the Parliament and Association of the Consumer's Protection. Time is becoming tight since the plan and first stages of execution should have been ready some

years ago in order to achieve the transfer operation before 2015.

The role of the government is necessary in this operation to provide:

- \* The citizens protection and their right to receive the diffusion (especially the low income category and the inhabitants of the far regions)
- \* The permanence of the earth TV diffusion service and allow a period of simultaneous diffusion of the two types during the transfer operation.
- \* To use the frequencies range properly.
- \* After ending the analogue diffusion, it is possible to use once again the unused range of frequencies in order to increase the diffusion capacity and/or for other services (mobile services/large band)
- \* Preserving a competitive market between the diffusion firms.

The repercussions on the societies that do not adopt it will be major, especially because the factories will not produce this type of systems for lack of markets. It will not be possible to protect these services against interferences since the Geneva Agreement will cancel all rights of protection of the analogue services starting 2015 and obliges to stop the analogue services at the borders that might interfere with the services of the other countries. This means ending the TV services in large regions close to the borders, as a matter of fact, many kilometers inside the borders.

The benefits on the contrary are numerous. The most important is to keep a distinguished place on the media world map. They help Lebanon to recover its leading role in the region.

On the economical level, the development of the institutions services of this sector will increase the investment opportunities to satisfy the need to increase the production and consequently to create new companies and new opportunities of work in the various fields.

Besides, it will save frequencies that can be used in other services thus providing a new income to the treasury and the activation of the economy given their high value. The income made by the American government by selling frequencies in the range of 700 Mhz reached 20 billion dollars.

In brief, the transfer to the digital diffusion will provide:

- \* A better quality of TV service
- \* A better coverage for all regions of Lebanon even with the same number of diffusion posts with less kick-off energy.
- \* A higher competence in using the range of frequencies and a larger distribution of channels in the same range of frequencies.
- \* Less protection and therefore less disturbances and interference
- \* A greater internal reception of the TV signals.
- \* The installation of one sole infrastructure of diffusion instead of independent parallel networks, thus reducing the cost for all the diffusion companies, and reducing the negative effect on the environment.