



ANALYSIS OF EXISTING LEGAL FRAMEWORK FOR THE DIGITAL SWITCHOVER

Project: South-East European Digital Television

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1 INTRODUCTION

The purpose of this study is to produce a comparative legal analysis of legal frameworks for the transition from analogue to digital television broadcasting in the countries of South Eastern Europe from the area of the transnational Digi.TV SEE project, implemented within the framework of Territorial Cooperation Programme South East Europe. Analysis of legal frameworks encompasses the following 10 countries: Slovenia, Austria, Hungary, Italy, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, the former Yugoslav Republic of Macedonia (hereinafter: Macedonia) and Albania. Existing legal framework regulating the area of digitalisation in respective countries is not harmonized or aligned. In addition, the problem of proportional development of digitalisation in the project area is very evident, resulting in big differences among participating countries. The goal of the analysis is to provide a solid background for elaboration of regional guidelines for the development of the national legal frameworks in SEE countries, which should contribute to the successful implementation and harmonization of activities in the field of digital broadcasting and to reducing the digital divide.

2 OVERVIEW OF EU POLICIES AND REGULATIONS

2.1 General

Most of European Union's legislation and policies that concern digital broadcasting are part of the **regulatory framework for electronic communications**, which covers all forms of fixed and wireless electronic communications, data transmission and broadcasting. The EU has established this regulatory framework in order to raise standards of regulation and competition across Member States' communications markets. The **radio spectrum policy** supports and complements the regulatory framework. The regulation of the content of services delivered over electronic communications networks, such as broadcasting content, however, is dealt with under separate rules, taking into account the rules on **audiovisual media services**, aiming at creation of a single European market for audiovisual services, while recognising the Member States' specific cultural aspects. The issues of data transmission and of its content are usually regulated separately, but convergence of networks, services, devices and business is blurring boundaries also between different fields of regulation. A broader picture is needed especially when it comes to securing media pluralism, cultural diversity and consumer protection.

Concerning the **switchover from analogue to digital broadcasting**, there are no specific EU rules binding on Member States. However, the EU has been active in formulating basic policy directions for introduction of digital television, pointing out the advantages of switch-over to digital broadcasting systems, giving information about Member States' switchover process and acceleration of transition process, establishing priorities in the switchover process etc.

2.2 Regulatory framework for electronic communications

The electronic communications regulatory framework was put in place in 2002 with the aim of developing a better functioning internal market for telecommunications networks and services and making the electronic communications sector more competitive. The framework initially consisted of a package of five Directives:

- Directive (2002/21/EC) on a common regulatory framework ("Framework Directive")
- Directive (2002/19/EC) on access and interconnection ("Access Directive")
- Directive (2002/20/EC) on the authorisation of electronic communications networks and services ("Authorisation Directive")
- Directive (2002/22/EC) on universal service and users' rights relating to electronic communications networks and services ("Universal Service Directive")
- Directive (2002/58/EC) on privacy and electronic communications ("Directive on privacy and electronic communications")

Decision No. 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) is usually also considered a part of the regulatory framework.

To take account of rapidly evolving markets and services, the regulatory framework was amended in 2009, by two directives:

- Directive 2009/140/EC ("Better Regulation Directive")
- Directive 2009/136/EC ("Citizens' Rights Directive")

The amended rules were to be transposed into national legislation in the 27 Member States by 25 May 2011.

The framework directive contains general provisions on the **national regulatory authorities** (NRAs). Member States must guarantee NRAs' independence by ensuring that they are legally distinct from and independent of all organisations providing electronic communications networks, equipment or services. The NRAs, responsible for the ex-ante regulation of markets, must not accept instructions from any other body. Effective national mechanisms must allow any user or provider of electronic communications networks or services the right of appeal against NRA's decisions. Member States must ensure that national regulatory authorities exercise their powers impartially and transparently. They must also ensure that the NRAs make arrangements for consultation of the interested parties if they intend to take measures which could have a significant impact on the market. NRAs must promote competition in the provision of electronic communications networks and services, contribute to development of the internal market, and promote European public interests concerning universal services, dispute resolution and the protection of personal data and privacy in electronic communications. Additionally, as part of the 2009 Telecoms Package, the Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 established the Body of European Regulators for Electronic Communications (BEREC), the European Telecoms Body that will help ensure fair competition and more

consistency of regulation on the telecoms markets. BEREC is made up of a Board composed of the heads of the 27 national telecoms regulators and is assisted by an Office.

The Framework Directive and the Authorisation Directive set out the regime for the **use of radio frequencies** for electronic communications networks and services, including for broadcast purposes. As a rule, the allocation and assignment of radio frequencies must be based on objective, transparent, non-discriminatory and proportionate criteria.

The Authorisation Directive, in particular, aims to create a single European market for electronic communications by harmonising the rules for **authorising the provision of services and networks**. Services and networks used for the transmission of radio and television broadcast content, such as satellite broadcasting networks, terrestrial broadcasting networks or cable television networks, are subject to a **general authorisation regime** which aims to facilitate market access and strengthen competition. The Authorisation Directive did away with the system under which Member States issued individual licences to network and service providers as a means of regulating the communications sector. Member States can no longer demand that a service provider obtain explicit administrative authorisation before starting business. Authorities may ask to be notified of a company's intention to start business, in order to keep a register, but the service provider does not have to wait for a reply to this notification, nor should they be asked to provide more information than necessary for the identification of the company. The Directive stipulates that all relevant information on rights, conditions, procedures, charges, fees and decisions is to be published in a way that makes it easily accessible for all interested parties. Any changes should also involve prior consultation with interested parties. The Directive limits the type of conditions which may be included in general authorisations, in order to ensure service providers are treated in a non-discriminatory, objective, transparent and proportionate fashion by national regulatory authorities. It also ensures consumers' rights to universal service are protected and that competition within the communications market is strengthened through interconnectivity, while setting out the types of charges that can be levied on service providers.

The **Access Directive** stresses that in an open and competitive market there should be no restrictions that prevent companies from negotiating access and interconnection agreements, including cross-border agreements. In principle, all requests for access made in good faith should be met on a commercial basis. When there are significant differences in negotiating power, the regulatory authorities may act to ensure that companies controlling access to end-users provide such access to content providers through interconnection to their networks. The Access Directive mentions digital radio and television broadcasting specifically. These provisions are aimed at service providers that have control over a facility that is essential for providing a service. In digital broadcasting this will be the platform operators who control the transmission facilities.

The Framework Directive also encourages the **interoperability** of digital interactive television services and enhanced digital television equipment, in order to ensure the free flow of information, media pluralism and cultural diversity.

2.3 Radio spectrum policy

Radio frequencies are an essential input for radio-based electronic communications services. In the context of digital television, multiplex operators will have to obtain the right to use specific broadcasting frequencies. Both the Framework Directive and Authorisation Directive establish common general rules for the management of radio spectrum, to ensure compatibility between national regulations and between the main national and EU level policy objectives. Under the framework, the EU aims to **harmonise spectrum access conditions** in the single market whenever this is necessary to ensure efficient use of radio spectrum or to enable interoperability of underlying equipment. The national regulatory authorities manage the radio frequencies for electronic communication services. Such radio frequencies must be allocated and assigned on the basis of objective, transparent, non-discriminatory and proportionate criteria. Beyond that, any undertaking intending to transfer rights to use radio frequencies must notify the national regulatory authority responsible for spectrum assignment. NRAs must ensure that competition is not distorted as a result of any such transaction.

Under the Authorisation Directive, Member States may, however, provide **restrictions**, where this is necessary to:

- avoid harmful interference;
- protect public health against electromagnetic fields;
- ensure technical quality of service;
- ensure maximisation of radio frequency sharing;
- safeguard efficient use of spectrum;
- ensure the fulfilment of a general interest objective (such as the safety of life or the promotion of social cohesion, in particular).

The necessity to avoid harmful interference may justify exceptions to the general rule whereby the provision of services and networks, as well as the use of spectrum, should be subject to general authorisations only. Due to the current technological limitation that still exist in terms of interference management; the use of spectrum is in practice subject to **individual rights** to avoid harmful interference in a majority of cases. Similarly, the need to ensure efficient use of radio spectrum may justify the limitation of the number of rights of use in certain situations.

Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (**Radio Spectrum Decision**) aims to establish a policy and legal framework in the Community in order to ensure the coordination of policy approaches and, where appropriate, harmonised conditions with regard to the availability and efficient use of the radio spectrum necessary for the establishment and functioning of the internal market in Community policy areas such as electronic communications, transport and research and development (R & D). The Decision establishes procedures in order to:

- (a) facilitate policy making with regard to the strategic planning and harmonisation of the use of radio spectrum in the Community taking into consideration inter alia economic, safety, health, public interest, freedom of expression, cultural, scientific, social and technical as-

pects of Community policies as well as the various interests of radio spectrum user communities with the aim of optimising the use of radio spectrum and of avoiding harmful interference;

- (b) ensure the effective implementation of radio spectrum policy in the Community, and in particular establish a general methodology to ensure harmonised conditions for the availability and efficient use of radio spectrum;
- (c) ensure the coordinated and timely provision of information concerning the allocation, availability and use of radio spectrum in the Community;
- (d) ensure the effective coordination of Community interests in international negotiations where radio spectrum use affects Community policies.

In defining, developing and implementing Community radio spectrum policy, the European Commission is assisted by the “**Radio Spectrum Committee**”, which is made up of representatives of the Member States and is chaired by a representative of the Commission.

On the basis of the updated provisions of the Framework Directive, the European Commission, assisted by the Radio Spectrum Policy Group,¹ may now submit legislative proposals to the European Parliament and Council for establishing a multi-annual **Radio Spectrum Policy Programmes**. The purpose of such programmes is to set out the policy orientations and objectives for the strategic planning and harmonisation of the use of radio spectrum in the European Union. The Commission adopted on 20 September 2010 its proposal to the European Parliament and Council for a first Radio Spectrum Policy Programme, which outlines at a strategic level how the use of spectrum can contribute to the most important political objectives of the European Union from 2011 to 2015.

A major benefit of the switchover will be the **freeing up of radio spectrum** thanks to the switching off of less efficient analogue services. For that purpose, the Commission is urging Member States in its Communications, to be flexible in drawing up new radio spectrum usage plans in order to make sure bandwidth is available for new communications services in a way that provides the most value to society and to the economy. All potential applications for the use of frequencies should be considered, and any allocation and assignment procedures must ensure fair access for all potential users.

2.4 Audiovisual media policy

The EU policy on television simultaneously pursues the objective of creating a single market in broadcasting while also fostering cultural pluralism and protecting existing national broadcasting markets and institutions. Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (**Audiovisual Media Services Directive – AVMSD**) set out minimum standards that are expected to be

¹ Established by Commission Decision 2002/622/EC of 26 July 2002 establishing a Radio Spectrum Policy Group.

meet by audiovisual media services (AVMS) under the editorial responsibility of providers established in the EU Member States. As a general principle, Member States may not restrict which broadcasts people can receive or what programmes foreign providers can retransmit in their country – if the broadcasts comply with the AVMSD in the country where they originate (**freedom of reception**).

The AVMSD recognises the variety of modern delivery routes for the content that was traditionally viewed only on televisions; therefore the Directive covers all services with audiovisual content that meet the criteria for an AVMS, irrespective of the technology used to deliver the content, including online services. **Platform neutrality** ensures a level playing field for all AVMS providers. Taking into account the degree of choice and user control over services, however, the AVMSD makes a distinction between linear (television broadcasts) and non-linear (on-demand) services.

The distinction between linear and on-demand services is the basis for a graduated regulatory approach: In a **two-tier system** of rules the Directive acknowledges a set of core societal values applicable to all audiovisual media services, but provides lighter regulation to on-demand services where the users have a more active, "lean-forward" approach and decide on the content and the time of viewing.

All audiovisual media services have to respect the **basic tier** of obligations in the following areas:

- identification of media service providers,
- prohibition of incitement to hatred,
- accessibility for people with disabilities,
- qualitative requirements for commercial audiovisual communications,
- sponsoring, and
- product placement.

Stricter rules in the areas of advertising and protection of minors are foreseen for television broadcasts due to their impact on society.

As an exception to the general principle of freedom of reception, Member States may **restrict the reception of unsuitable content** – e.g. neo-Nazi propaganda – that may not be banned in its country of origin but violates local laws. Any restrictions must first be approved by the Commission and are only allowed under exceptional circumstances:

- For **TV broadcasts** (Article 3(2)-(3)) – provided that there are manifest and serious violations against human dignity (incitement to hatred) or children (e.g. pornography, gratuitous violence).
- For **on-demand content** (Article 3(4)-(6)) – restrictions are also justified where there is a grave risk to other aspects of public policy, health or security, or consumers.

Restrictions must be proportionate and applied only in the country of reception. The country where the content originates has to be given advance notice.

Member States are free to apply **more detailed or stricter rules** in the fields coordinated by the AVMSD to media service providers under their jurisdiction, provided that those rules are consistent with the general principles of European Union law. As an example, in order to promote a policy in favour of specific language, Member States are able to lay down more detailed or stricter rules on the basis of language criteria, as long as these rules are in conformity with European Union law and in particular are not applicable to the retransmission of broadcasts originating in other Member States. With a view to ensure that the interests of television viewers are fully and properly protected, Member States are also free to maintain or set more detailed or stricter rules with respect to television advertising and in certain circumstances to lay down different conditions for television broadcasters under their jurisdiction.

2.5 Digital switchover

Digital switchover has been put high on the agenda of European regulators in recent years. Digital broadcasting represents one of the major platforms of approach to information society according to action plan “**eEurope2005: an information society for all**” (COM/2002/0263 final). The action plan encouraged Member States to speed up the transition to digital television by creating transparency as far as the conditions for the envisaged switchover are concerned. Member States should publish by end 2003 their intentions regarding a possible switchover. These could include a road map, and an assessment of market conditions, and possibly a date for the closure of analogue terrestrial television broadcasting which would enable the recovery and re-farming of frequencies. National switchover plans should also be an opportunity to demonstrate a platform-neutral approach to digital television, taking into account competing delivery mechanisms (primarily satellite, cable and terrestrial). The European Council of Telecommunications (ECT) of 20 November 2003 endorsed the proposed deadline for publishing digital switchover plans.

The policy framework for the information society and media “**i2010 – A European Information Society for growth and employment**” (COM/2005/0229 final), adopted by the European Commission in 2005, established that digital convergence calls for a consistent system of rules for information society and media. In this area, the internal market is governed by a wide set of rules covering e.g. audiovisual media, digital television, on-line trading, intellectual property rights and support measures for the creation and circulation of European content. The Commission undertook to examine the rules affecting the digital economy to make their interplay more coherent and oriented to economic and technological realities. It declared the intention to propose a revision of the ‘Television without Frontiers’ directive to modernise the rules on audiovisual media services. Spectrum access across the EU should be facilitated through market mechanisms, which would be assisted by the planned switching off of analogue terrestrial television by 2012. The Commission undertook to define a strategy for efficient spectrum management.

The current information society policy initiative “A Digital Agenda for Europe” (COM/2010/0245), initiated in 2010, does not specifically deal with issues of the digital switchover. Related to digital broadcasting is the Commission’s intention to coordinate, on the basis of the European Radio

Spectrum Policy Programme, the technical and regulatory conditions applying to spectrum use and, where necessary, harmonise spectrum bands to create economies of scale in equipment markets. The Commission also undertook to ensure the implementation of the provisions of the Audiovisual Media Services Directive concerning cultural diversity, where appropriate through co- and self-regulation and request information from Member States on their application.

In line with the above strategy documents, the Commission issued several communications, providing specific guidance for the regulatory aspects and strategic orientation in the digital switchover. In September 2003, the Commission published the **Communication on the transition from analogue to digital broadcasting (from digital ‘switchover’ to analogue ‘switch-off’)** (COM(2003) 541 final), which set the benefits of switching over to digital broadcasting and initiated the debate on EU policy orientations on the amount and future uses of spectrum potentially released at switch-off of analogue terrestrial television transmission. The overall strategic objective is to encourage such switchover policies that would accelerate the initiation of digital broadcasting, protecting at the same time the interests of the citizens and the principles of fair competition. The communication also stated the importance of free market initiative in the digital switchover, and of technology neutral regulation. The communication underlines that the consumers and the users must be at the heart of each digital switchover strategy and that the strategy should serve the widest possible spectrum of users including those with limited financial resources and those with special needs. Regarding more sophisticated functionalities such as *Application Programme Interfaces* (‘API’), interoperable and open solutions for interactive TV services must be encouraged in accordance with the ‘Framework Directive. The Commission did not prescribe deadlines for digital switchover, since progress varied widely across the Union; its aim, however, was to elicit voluntary switchovers through a series of incentives.

In July 2004, the **Communication** on interoperability of digital interactive television services (COM(2004) 541 final) stated the Commission's position on the interoperability of digital interactive television services. It is based on the assessment of the Commission Working Paper on the interoperability of digital interactive television services (SEC(2004) 346) and on the outcome of a public consultation on the matter.

In May 2005, European Commission announced its **Communication on accelerating the transition from analogue to digital broadcasting** (COM (2005) 204 final), in which the Commission examined the transition from analogue to digital broadcasting. It finds that even partially continuing analogue services in some Member States (or the neighbouring countries) would act as a barrier to the introduction of these new services and would affect competition with the rest of the world. The phase in which the two broadcasting systems co-exist, based largely on terrestrial platforms, must therefore give way to a phase in which the conversion to digital is accelerated. In the light of Member States’ switchover intentions published within the framework of the eEurope Action Plan, as well as a 2004 Opinion of the Radio Spectrum Policy Group, the Commission proposed that the beginning of 2012 be agreed for switch-off in all Member States. The national switchover plans should therefore all be completed by 2012. The Commission is encouraging national competition authorities to take action to ensure that the dominant firms on the market

respect the provisions of the Framework Directive. The Commission considers that coordination between national broadcasters must be given new impetus. Such coordination essentially requires agreement on the sequence for the different phases of the switchover to digital. While respecting the principle of technological neutrality, a State may take proportionate steps to promote certain technologies specific to digital broadcasting as a means for increasing spectrum efficiency. Encouraging consumers to switch to digital is also a necessary condition.

Towards achieving unified approach for usage of spectrum that will be free after digital switchover, the Commission published Communication COM(2007) 700 final “**Reaping the full benefits of the digital dividend in Europe: A common approach to the use of the spectrum released by the digital switchover**”, which describes the nature and opportunities of the ‘digital dividend’, and demonstrates the added value which can be derived from a common approach at the EU level. This would enable economies of scale by establishing the prospect of an internal market. The document proposes a common way forward to ensure an efficient and flexible use of the digital dividend spectrum by a wide range of potential applications. The communication invites the Member States to make sure that political interventions are transparent, justified, adequate, implemented in due time and indiscriminately.

3 ANALYSIS OF THE EXISTING NATIONAL LEGAL FRAMEWORKS

3.1 Albania

3.1.1 General

The general regulation of radio and television broadcasting is contained in Law No. 8410, dated 30 September 1998, "*On the Public and Private Radio and Television in the Republic of Albania*", as amended (hereinafter: Radio and Television Law). However, this legislation is not adapted to the introduction of digital technology. In order to fill this legal gap, Law No. 9742, dated 28 May 2007, "*On Digital Broadcasting in the Republic of Albania*" (hereinafter: Digital Broadcasting Law) was approved, with the aim of providing a regulatory framework for the introduction of digital broadcasting in the Republic of Albania. Within the framework provided by this law, operators for programmes and operators of networks (multiplexes) are allowed to broadcast programmes and set up digital networks. Nevertheless, the *Albanian Strategy on Digital Switchover* states that this law is not adequate to guarantee a successful digital switchover in Albania, since it does not make a sufficient distinction between the network operators and the programme operators; it does not define the status of commercial distributor and service distributor; it does not take into consideration that the price offered for the multiplex licence may lead to limiting their issuing to economically more powerful operators; it does not consider the status of the existing operator as well as other disputable issues. For these reasons, a complete overhaul of the radio and television legislation is planned.

3.1.2 The regulatory authority

As mandated by the Radio and Television Law, the National Council on Radio and Television (NCRT) was established in December 1999, whose mission is to regulate and oversee the radio-television activity in the territory of the Republic of Albania. With the establishment and function of this structure, a continuous progress has been noticed in the process of regulating and overseeing the activity in this field, in the process of drafting legal and sub-legal acts, licensing, frequency management and new technology, drafting of the frequency map, as well as the progress with developing a *Development Strategy and a Frequency Plan for Radio-Television Broadcasting*. The Council is playing an increasingly visible role in the field of electronic media and the economy of the country.

3.1.3 The role of stakeholders

The National Council on Radio and Television carried out a wide public consultation and collaboration process in order to reach a wide consensus among the interested players in the process of approving a strategy for a harmonized transition to digital broadcasting. In the framework of the consultation, the NCRT in cooperation with international partners such as the OSCE, undertook a range of measures including online counselling, hosting of several national and regional meetings and conferences aiming at getting the operators familiar with the challenges of this process, as well as getting their input. This consultation process has enabled the identification of the best ways of collaboration with the radio and television operators as the key players in this process for building the local, regional and national platforms. The contributions offered by the interested players are a part of the digital switchover strategy prepared by NCRT. The strategy document points out that public consultation is a process that should not end with the approval of this document, but should be continued throughout the digital switchover transitory stage, as an efficient tool for attracting the inputs of all players and stakeholders in this process.

Based on the practice of other countries, the NCRT deemed necessary to establish an inter-institutional and technical Task Force, which would lead this change of the Albanian audio-visual landscape. This technical Task Force is to be run by the NCRT as the regulatory body in this field, and to be consisted of technical experts, economists, representatives of consumer organizations, etc., assisted also by a Secretariat as co-ordinating structure. The Task Force is to lay out all the steps and procedures needed for a complete digital switchover. The inter-institutional Task Force would be the decision making body, which would examine and assess all the proposals prepared by the Technical Group. The Task Force would have to function throughout the period of transition, and it could consist of representatives of the Assembly of Albania, the Council of Ministers, Minister of Economy, Ministry of Finances, Ministry of Public Works, the Competition Authority, as well as representatives of the NCRT and the Electronic Media Community (national and local media, and the public television).

3.1.4 Allocation and use of broadcasting spectrum resources

The Digital Broadcasting Law provides, in Article 3, that the NCRT issues licences for the establishment and use of digital terrestrial broadcasting networks. Digital terrestrial networks may only use the frequencies envisaged for digital use. The NCRT declares available frequencies for the establishment of digital terrestrial broadcasting networks and the respective coverage areas in accordance with the availability and progress of freeing the spectrum from analogue broadcasting. A licence for digital network to broadcast radio and television serves as a permit for the installation, maintenance and operation of technical equipment for a radio and/or television digital broadcasting network. Three types of licences exist:

- national licence (to cover at least 80% of the country's populated territory with a signal);
- regional licence (to cover up to four geographically contiguous regions); and
- local licence (to cover one region).

The NCRT determines the frequencies, the intensity, the location and the area for which a licence for establishing a digital network is issued, in accordance with the Frequency Plan adopted

by the Regional Radiocommunication Conference (GE06), Geneva 2006. The typology and characteristics of digital terrestrial networks that cover the territory of the Republic of Albania with a radio or television signal is determined by the NCRT in accordance with the territorial characteristics and the administrative division of the country, in co-ordination with the neighbouring countries and in line with the technical features. In cases when, for the purpose of implementing the Frequency Plan in co-ordination with the neighbouring countries, a frequency issued to an operator licensed for analogue broadcasting is required for setting up a digital network, the NCRT issues the analogue operator another frequency to cover the same area. The expenses for changing the frequency are covered by the NCRT.

3.1.5 Selection of multiplex operators

Terrestrial digital television broadcasting in Albania started even before it was specifically regulated in legislation. Since July 2004, a private operator has been offering a package of digital programmes supported on terrestrial digital networks (4 fixed networks and 1 mobile) and one satellite network. Therefore, the licensing of three national private digital terrestrial networks, scheduled to be carried out within 2008, was aimed primarily at legalizing the existing digital terrestrial broadcasts, which had been established and were working without being subject to any laws or regulatory authority. Additionally, the Albanian Radio and Television was given the right to operate two national digital networks.

Licensing procedures for the selection of multiplex operators are laid down in Article 4 of the Digital Broadcasting Law, which provides that applicants for a network licence, whether or not they hold a licence for analogue terrestrial or satellite broadcasting, who want to set up a digital network, must take part in the competition process opened by the NCRT. The following criteria have priority when assessing the applications received:

- a) The quality of technical solutions, including the scale of flexibility that given solutions offer to users in relation to the selection of services. In this context, attention must be paid, *inter alia*, to the selection of non-exclusive standards, where technically possible, for Application Programming Interface (API) and the access control systems;
- b) Network investment and development plans, including selling and availability of decoders, the pace of development and the cost for the general public;
- c) Services that the applicant wishes to offer. Special attention should be paid to various and different television offers for various groups of viewers. This applies to various types of programme content and to the relation between free and pay television channels.

Additional criteria for issuing licences to the digital broadcasting network operators are stipulated in Annex 1 to the Digital Broadcasting Law. Applicants need to meet certain financial conditions: For the digital radio/television broadcasting at a national level, licences are granted only to those subjects that have declared and signed capital amounting to at least ALL 1000 million. In a local licensing zone, the licence is given only to those subjects that have a certified capital amounting to at least ALL 100 million for television broadcasting, and in a regional licensing zone at least ALL 400 million. The applicants must also provide information on the 7 members of their Steering

Board, who should be renowned persons in the fields of journalism, management, law, finances and technology, out of which not more than three (two for regional and local licences) may be employed by the applicant.

Article 13 of the Digital Broadcasting Law provides that a legal person may not hold more than one licence for a terrestrial digital network. A natural person, who has an economic interest or holds a decision-making position in a legal person that holds a licence for terrestrial digital broadcasting, may not have economic interests or hold a decision-making position in another legal person that holds another digital terrestrial licence. Additional criteria concerning the ownership in legal persons that have a licence as a network operator or programme operator are set by Radio and Television Law.

The Digital Broadcasting Law specifically states that the public broadcaster, i.e. Albanian Radio and Television (ART), has the right to set up two national digital terrestrial networks by using the frequencies of the Digital Plan determined by the NCRT. ART analogue broadcasting will continue during the entire transition phase. During the transition period, a regional or national analogue operator may be issued another licence as a network or programme operator.

3.1.6 Selection of content / services providers

The Digital Switchover Strategy states that cultural diversity and media pluralism should lead the implementation of the digital switchover. For this purpose, the legislation should support the idea of existing operators building digital networks, while the NCRT should be a factor in determining the programme bouquet that could and should be broadcast in a digital network.

Licences for broadcasting of radio and television programmes are regulated in Article 5 of the Digital Broadcasting Law. A licence for broadcasting radio and television programmes gives a legal person that is a programme operator the right to broadcast a programme or a package of radio and/or television programmes. The programmes are to be licensed one by one by the NCRT at the moment a licence is issued to the digital network or at a later moment. A licence for radio and television programme broadcasting specifies, apart from the criteria for creating the programmes, the rights and responsibilities of the licensed subject. The NCRT is to issue licences for programme broadcasting to applicants who ask to broadcast their programmes through a terrestrial or satellite network platform, according to an agreement with operators of the respective networks. The licence is issued on the condition that programmes meet the programme standards specified by the Radio and Television Law.

A network operator has the right to be issued a licence for the broadcasting of one radio or television programme and vice-versa. Existing radio and television programmes of the licensed terrestrial or satellite analogue operators automatically obtain the right to a programme licence for the period remaining of a licence as analogue operators.

3.1.7 Regulation of relations between broadcasters and multiplex operators

Rights and responsibilities of network operators are laid down in Article 6 of the Digital Broadcasting Law. The NCRT is to ensure that all services provided to programme operators by the network operators are based on fair, reasonable and non-discriminating conditions. Regarding conditional access systems, application programming interfaces or electronic programme guides, the NCRT must apply the principles defined in the European Union Access Directive.

The separation between broadcasters and multiplex operators is not strict, since a network operator may be issued a licence for the broadcasting of one radio or television programme and vice-versa.

Network operators and providers of digital terrestrial broadcasting services are to ensure that their programmes respect the rules of ethics, of encrypting and of coding when they are destined for viewers of specific age groups. The ART must broadcast all its programmes on the digital terrestrial and satellite network free of charge, while holders of network licences and digital terrestrial platform licensees are obliged to ensure that at least 50 per cent of their digital broadcasting services are provided to their users free of charge.

3.1.8 Public interest provisions

Annex 1 to the Digital Broadcasting Law requires that in the news and emissions they broadcast, the licensees for national and local radio/television broadcasting should present the facts and events in a fair and unbiased manner, to promote free thinking, without serving the interests of any party, political organization, economic grouping or religious community or association. Broadcasters of national or local radio and television programmes are obliged to broadcast without remuneration short notices of specific interest for the public of their broadcasting areas related to health, natural disasters, and public order.

The digital switchover strategy discusses the possibility of applying subvention schemes in order to encourage the swift transition to digital broadcasting. The subsidies provided by the state could consist of the following:

- a) investments in broadcasting networks which cover small areas, or which do not present high commercial interests for investors;
- b) financial compensations for the public ART for using the digital technology ensuring thus a national coverage of this public service;
- c) subsidies to viewers for buying digital decoders, making sure they are of a neutral technology, and especially if they encourage open standards for interaction;
- d) financial compensations for operators who need to close their analogue TVs before their licence expires, and must provide a capacity for digital TV.

3.2 Austria

3.2.1 General

The Austrian broadcasting legislation underwent substantial changes in the year 2001, when private terrestrial television was allowed for the first time and the ground rules for digital switch-over were laid down in Private Television Act (PrTV-G). The Austrian Communications Authority (KommAustria) was also created at that time. In 2010, the PrTV-G was renamed Audiovisual Media Services Act (AMD-G) and amended to implement the EU's Audiovisual Media Services Directive and to expand the authority's substantive control over audiovisual media services on the Internet. Additional considerations regarding the digitisation of television and radio broadcasting were also taken into account.

3.2.2 The Communications Authority

The Austrian Communications Authority (KommAustria) is the regulatory authority for electronic audio media and electronic audiovisual media. Since its establishment under the KommAustria Act in 2001, KommAustria has been responsible for issuing licences to private television and radio stations, managing broadcasting frequencies, handling the legal supervision of private broadcasters, as well as preparing and launching digital broadcasting in Austria. In 2004 and in 2010, it was given additional responsibilities for the supervision in the field of media services and broadcasting, and for the administration of the federal government's press and journalism subsidies.

KommAustria is provided with operational and administrative support by the Media Division of the Regulatory Authority for Broadcasting and Telecommunications (RTR). In 2010, KommAustria was transformed into an independent panel authority, which is not subject to instructions from any other authority. Appeals against KommAustria decisions can be submitted to the Federal Communications Senate (BKS). Further appeals against BKS decisions may be submitted to the Austrian Administrative Court and the Austrian Constitutional Court.

3.2.3 The role of stakeholders

Various stakeholders in the digital switchover have been given the possibility to participate in the "**Digital Platform Austria**" work group that was set up by the Federal Chancellery in accordance with § 21 of AMD-G. The task of the work group is to support the regulatory authority (KommAustria) in drawing up scenarios for the introduction, expansion and further development of digital broadcasting (radio and television), as well as future multi-media services, with the participation of broadcasters, service providers, network operators, industry, the business community, scientists, the federal provinces and consumers. These stakeholders or organizations representing such groups may communicate their interest in taking part in "Digital Platform Austria" to the reg-

ulatory authority at any time, and may participate in the work group upon invitation by KommAustria.

KommAustria is required to draw up, by way of regulation, a **digitization concept** for the introduction, expansion and further development of digital broadcasting (television and radio) and other media services in Austria, with the support of "Digital Platform Austria" and in cooperation with the Federal Chancellor. Each digitization concept generally covers a period of two years and must specify a time schedule and technical framework plan for the planning and issuing of an invitation to tender for multiplex platforms and coverage areas, taking into consideration the available transmission capacities and European developments. KommAustria must submit a draft of the digitization concept to the members of "Digital Platform Austria", and take into account their opinions expressed.

With the assistance of "Digital Platform Austria" and in cooperation with the Federal Chancellor, KommAustria must prepare a **report** on the status and development of digital broadcasting in regular intervals, but at least every two years. In the report, "Digital Platform Austria" may express its recommendations on the further procedure to be followed when introducing, expanding and further developing digital broadcasting. Such recommendations must take special regard to the technology-neutral introduction, expansion and further development of digital broadcasting on all transmission platforms.

3.2.4 Allocation and use of broadcasting spectrum resources

KommAustria is responsible for the administration of broadcasting frequencies, i.e. the spectrum designated for broadcasting in the frequency usage plan and frequency allocation plan. Whereas in analogue television, available frequencies were each allocated to an individual broadcaster, the same approach has not been applied for digital terrestrial television broadcasting (DVB-T), since multiple channels and additional services are now bundled by a single multiplex operator and transmitted using a shared frequency. According to AMD-G, a licence is required in order to operate a multiplex platform and licences are to be allocated by the regulatory authority on the basis of a public tender (with the exception of pilot tests). In line with the specifications of the Digitization Concept 2011, the regulatory authority has published in July 2011 invitations to tender for two more multiplex platforms (in the DVB-T2 standard) and allocates them (along with the relevant frequencies) to the most suitable applicant. In this context, a number of requirements are imposed on the multiplex operator, mainly with regard to the selection of channels. A multiplex licence is granted for a period of ten years.

In the first tender procedure, which was carried out in 2005, the nationwide licence for DVB-T (MUX A and MUX B) was issued. Regional and local multiplex licences are grouped under the heading of MUX C. The nationwide licence for mobile terrestrial broadcasting based on the DVB-H standard (MUX D) was issued in 2008. The license for MUX D was terminated in December 2010.

3.2.5 Selection of multiplex operators

Multiplex operators are selected based on an invitation to tender and an assessment according to specific criteria ("beauty contest"). In accordance with the digitization concept and provided that transmission capacities are available, KommAustria must issue an invitation to tender regarding the planning, the setting up and the operation of terrestrial multiplex platforms.

Each applicant for multiplex licence must first establish that it meets the technical, financial and organizational requirements for the continuous broadcasting of digital channels and additional services. If there are several applicants who meet the statutory requirements for a multiplex licence, § 24 AMD-G provides that the regulatory authority must give priority to that applicant who will better provide the following:

1. a quickly reached high level of coverage with digital signals for the population;
2. an excellent technical quality of the digital signals;
3. integrating the expert knowledge of broadcasters when building up and operating the digital platform;
4. a plan that is user-friendly for consumers;
5. a plan to promote the dissemination of terminal equipment for receiving digital signals;
6. an offer of digital channels providing a diversity of opinions, with channels including Austria-specific content being disseminated preferentially.

Prior to an invitation to tender, KommAustria must determine in detail the above selection principles in view of the digitization concept, regarding the technical, economic and user-oriented requirements that a multiplex operator shall meet, giving due consideration to European standards. The selection criteria must be published at the same time, at the latest, as the invitation to tender. Before the regulation on selection criteria is issued, "Digital Platform Austria" must be given the opportunity to comment.

The procedure ends with the allocation of a multiplex-licence to the best suited applicant.

3.2.6 Selection of content/services providers

According to § 3 AMD-G, any person who provides terrestrial and mobile terrestrial television or satellite television and is established in Austria requires a licence. A media service provider is deemed to be established in Austria if its head office is in Austria and the editorial decisions on the audiovisual media service are made in Austria. Applications for being granted a licence for providing terrestrial television services (including mobile terrestrial television) or satellite television services must be filed with the regulatory authority.

Since the grant of a channel licence for digital terrestrial television does not entail the allocation of a broadcasting frequency (as was the case with analogue broadcasting), the applicant must present agreements regarding the use of transmission capacities of a multiplex operator in the event that a licence is granted, or information about the area covered and about the planned

dissemination in cable or other electronic communications networks. Broadcasters to be included in a specific multiplex are therefore no longer selected by the regulatory authority. This task is now handled by the multiplex operator according to the procedure and criteria prescribed by KommAustria. In cases where multiplex operator violates these criteria, the authority may intervene upon request or *ex officio*.

The program licence, issued by KommAustria for the period of ten years, approves the mode of transmission used for dissemination (MUX A, B, C or satellite), the coverage area and the daily length of transmission time, as well as the program character, the length of time of window channels, and the program description. A person or partnership may hold several licences for terrestrial television, as long as the coverage areas defined in the licences do not overlap.

3.2.7 Regulation of relations between broadcasters and multiplex operators

AMD-G requires that applicants for a multiplex licence must present, *inter alia*, information about the digital channels and additional services that are to be disseminated, including submission of specific agreements entered into in that respect with broadcasters and, where appropriate, channel aggregators. When granting the first multiplex licence, the regulatory authority had to ensure the following by imposing the relevant conditions:

- that the analogue television channels broadcast by the Austrian Broadcasting Corporation or by other broadcasters who were issued licences for nationwide analogue terrestrial television are integrated into the package of digital channels in the respective coverage area upon request and against a reasonable remuneration and that a sufficient data volume is available for their dissemination, to the extent such channels are not yet disseminated in a digital terrestrial manner in the respective coverage area (with the exception of dissemination via a multiplex platform for mobile terrestrial broadcasting)
- that the digital channels and additional services are broadcast under fair, equal and non-discriminatory conditions;
- that the multiplex operators invoice the costs incurred for the technical dissemination of the digital channels and the additional services to the providers, always on a *pro-rata* basis
- that, in the event that digital channels and additional services are integrated into a global package under one electronic programme guide (navigator), consumers are able to find all digital channels and additional services under fair, equal and non-discriminatory conditions, and that the navigator is designed in such a way that identical, pro-rata data rates are available to all digital channels and additional services represented on the multiplex platform
- that all digital channels and additional services are offered on an equal basis, regarding their optical appearance, the possibility to locate them and their clear presentation, and that immediate access to the individual channels and additional services is facilitated.

The listed criteria except the first are also valuable for further licensing procedures.

In the event of a transfer to third parties of more than 50 per cent of the shares held by the multiplex operator at the time when the licence was granted, the television broadcaster must report this transfer to the regulatory authority in advance. KommAustria must assess whether the requirements of AMD-G are still complied with under the changed circumstances, and may revoke the licence if the multiplex operator transferred the shares contrary to this finding.

Operators of a multiplex platform for *mobile terrestrial broadcasting* are restricted to operating a communications service, and must be separated from providing content. Multiplex operators are prohibited from providing broadcasting, acting as a channel aggregator, transferring the designing of the content of the electronic programme guide of such platform to a media undertaking, or influencing the allocation of channels of the basic package or subsequently refusing to transport the signal of a broadcaster for reasons other than technical reasons. The mobile multiplex operator does not have any rights of approval with regard to the allocation of channels.

§§ 27 and 28 AMD-G further stipulate that multiplex operators must disseminate digital channels and additional services, and provide access to associated facilities or to conditional access systems, under fair, equal and non-discriminatory conditions. The costs incurred must be invoiced to the providers on a *pro rata* basis. The regulatory authority may further specify multiplex operators' obligations in this regard.

3.2.8 Public interest provisions

AMD-G provides that KommAustria must give priority to that applicant for multiplex licence, who will better ensure an offer of digital channels providing a diversity of opinions, with channels including Austria-specific content being disseminated preferentially. The regulatory authority must secure this public policy goal additionally, by laying down the relevant conditions in the multiplex licence itself.

Furthermore, KommAustria must ensure, by imposing appropriate conditions when granting a multiplex licence, that the two analogue television channels of the Austrian national public service broadcaster ORF remain available nationally. Therefore, they must be integrated by the multiplex operator in the package of digital channels in the respective coverage area upon request and against a reasonable remuneration if they are not yet disseminated in a digital terrestrial manner in the respective coverage area.

One of the criteria for the selection of a multiplex operator is also the applicant's plan for the dissemination of terminal equipment for receiving digital signals. The regulation on the selection criteria (*MUX-Auswahlgrundsätzeverordnung 2011*) further specifies the following elements of such a plan:

- a concept under which the necessary devices can be selected and purchased by the users of a plurality of competing manufacturers and models;
- the disclosure requirements of the devices by potential manufacturers and distributors;

- a concept for the award or certification appropriate terminal equipment in cooperation with the concerned broadcasters, service providers, manufacturers and dealers;
- a strategy for the dissemination of appropriate devices in socially disadvantaged groups.

RTR administers the Austrian Digitization Fund, the resources of which are earmarked for promoting digital transmission technologies and digital applications based on European standards in connection with broadcasting programmes. Based on by the European Commission under state aid regulations approved grant guidelines the fund supports projects that upgrade and reinforce all broadcasting transmission platforms as a special part of communications infrastructure, especially in light of the central role of broadcasting in modern democratic societies. Grants from the Austrian Digitization Fund are awarded according to technology-neutral criteria with due attention to all transmission means and platforms for digital broadcasting.

3.3 Bosnia and Herzegovina

3.3.1 General

The introduction of digital television in Bosnia and Herzegovina (hereinafter referred to as: BiH) is an obligation of BiH arising out of the international agreements in force in this field.

On 20 June 2007, the Council of Ministers of BiH acknowledged BiH's participation at the Regional conference on radio-communication for digital terrestrial broadcasting service planning in region 1 and 3 parts, within the frequency bands 174-230MHz and 470-862MHz (Regional Radiocommunication Conference (RRC-06)), that took place in Geneva from 15 May 2006 to 16 June 2006, and was organized by the International Telecommunications Union (ITU) at the initiative of the European countries. The Council of Ministers examined the Final Acts of the Geneva RRC-06, and a month later, the BiH Presidency took a Decision on ratifying these documents.² It was not, however, until 16 January 2009 that a ratified instrument of the final acts of the conference was deposited by the BiH Presidency with the ITU Secretary General.

The GE-06 agreement determined the 17 June 2015 as the end of the transition period. After this date, all administrations may use freely all frequencies that have been allocated to them in the GE-06 plan for digital broadcasters. After this date, analogue broadcasting will no longer be protected. The European Commission has, however, issued a recommendation to the EU Member States that they must fully switch-off analogue broadcasting and switch-over to digital broadcasting no later than the year 2012. Although at first, the dynamics of switchover from analogue to digital technology were to be completed by the year 2014,³ the authorities of BiH have eventually set the deadline for the digitalisation to December 2011.

² The acts were published in the Official Gazette of BH - International Contracts, No. 9/08.

³ According to the *Broadcasting Sector Policy*.

As early as 8 May 2006, the *Digital Terrestrial Television Forum of BiH* (the *DTT Forum*) was established by the Council of Ministers of BiH. The Forum consists of the DTT Council (whose members were representatives of the Ministry of Communications and Traffic of BiH representatives of the Communications Regulatory Agency (CRA), and the working group coordinators) and the Secretariat of the DTT Forum (secretary and secretary assistant), which has played a coordinating role and offered technical and administrative support to the DTT Council and to the five working groups operating within the Forum.⁴

The DTT Forum initiated its work in June 2007. The first meetings of the Council of the DTT Forum were held on 20 September 2007 when, inter alia, the working group coordinators were appointed, and first working meetings with the international experts for DTT were held. Among other activities, a round table on *Digital Broadcasting in Bosnia and Herzegovina* was organized, attracting a large number of stakeholders. On the basis of such discussions, the Forum was to suggest a final date for the switching off the analogue television in BiH, and to set a transition period for the switch-over to digital broadcasting. It has also been its task to educate the public, to contribute to the harmonization of regulations that would follow the process of introducing digital television in BiH, to define and advise on technical aspects of introducing digital television, as well as to analyze social and economic aspects of introducing digital television in BiH.⁵

The work of the DTT Forum resulted with the issuing of the 74 pages long document titled *Strategy on the digital switch-over within the frequency bands of 174-230MHz and 470-862MHz in Bosnia and Herzegovina*. Prepared by the DTT Forum and adopted by the Council of Ministers on its 91st session held on 17 June 2009, the strategy envisaged the full account of all legal and regulatory, technical, social and public campaign activities. By analyzing the experiences of other countries as well as the situation in BiH, the Forum reached the following key conclusions regarding the replacement of analogue by the digital broadcasting:

- analogue broadcasting in BiH will be fully switched-off on 1 December 2011 at the latest;
- the DVB-T standard with MPEG-4 (H.264/AVC) compression system will be used;
- the transition period for the switch-over to digital terrestrial broadcasting should be as short as possible;
- the introduction process for the digital terrestrial broadcasting should be conducted in interdependent and interrelated phases;
- a public campaign should be conducted with the aim to inform and educate the BiH public about the introduction process of digital terrestrial broadcasting, to present advantages of digital television and the steps expected from citizens in preparing their households to receive the digital TV signal in accordance with the given deadlines;
- provide subsidies for the purchase of the DVB-T receivers, which will significantly speed up the process of transition to DTT; the penetration of receivers in the market will be observed, enabling TV stations to make sooner decisions on introducing digitalisation to their programmes and access the multiplex.

⁴ WG1 – Regulatory, WG2 – Programme content, WG3 – Technical, WG4 – Promotion, WG5 – Social and economic aspects.

⁵ The DTT Forum's tasks are defined in the *Broadcasting Sector Policy*.

The existing legal framework consisting, inter alia, of the *Law on Communications of BiH*,⁶ the *Law on the Public Radio-Television System of BiH*,⁷ the *Telecommunications Sector Policy*,⁸ and the *Broadcasting Sector Policy*,⁹ supposedly fully enabled the launch of the transition period activities.

In April 2010, the CRA issued a *Decision on the terms and conditions for the utilization of Multiplex A (MUX A) by public broadcasting services for terrestrial digital television broadcasting during the transition period*.¹⁰ Further details on its substance are presented *infra*.

On its 128th session held on 14 July 2010, the Council of Ministers of BiH adopted a *Decision on the adoption of the Project of Digitization of the Microwave Links of Radio, Television Public Services of Bosnia and Herzegovina*. The project is to be performed in phases, and is aimed at building a new, modern system for digital transmission of radio and TV programmes, and at increasing network capacity for a bilateral and multilateral exchange of programmes among the three public broadcasting services in BiH. The Public Broadcasting System of BiH is in charge of the project which is to be implemented in two years.

By request of the DTT Forum formulated on its regular session in March 2010 in order to speed up the digitalisation process, the Ministry of Transport and Communications nominated the Expert Commission of the DTT Forum in February 2011. The Commission's task is to develop an action plan which is to entail in detail all the activities and phases in the process, including the time-frames and responsible institutions and organizations, as well as to monitor the digital switchover in line with the BiH's DTT Strategy. The Commission's activities have commenced only on 13 September 2011 after a series of interventions of the DTT Forum that urgent steps are to be taken (and therefore the Expert Commission is to be formed) for a prompt implementation of the digitalisation process. The 22 members of the Commission are representatives of the Parliamentary Assembly of BiH, the CRA, and the public as well as commercial broadcasting services. In the context of speeding up the switch-over in BiH, the Council of the CRA decided on its last session held on 28 September 2011 that part of its income of the previous year is to be distributed among citizens for purchasing the set-top-boxes.

On 7 February 2011, the Ministry of Transport and Communications issued a *Call for tenders for the supply of transmission and broadcasting equipment to be used in the process of digitalisation for PBS for the connection of IT centres in Sarajevo, Banja Luka and Mostar* (two transmitters for each city). This was an international tender open for 42 days (30 days for appeal, 60 days for equipment delivery). It was expected that the entire process would be completed by the end of June 2011. However, an appeal was lodged by one of the four tenderers claiming that it had placed the best offer, but was not selected by the Ministry as a supplier of the equipment, and

⁶ Official Gazette of BH, No. 31/03.

⁷ Official Gazette of BH, No. 78/05.

⁸ *Decision on the Telecommunications Sector Policy of Bosnia and Herzegovina for the Period from 2008 – 2012*, Official Gazette of BH, No. 8/09.

⁹ *Decision on the Adoption of the Broadcasting Sector Policy of Bosnia and Herzegovina*, Official Gazette of BH, No. 18/07 of 13 March 2007.

¹⁰ Official Gazette of BH, No. 38/10 of 10 May 2010.

that the tender had been construed so as to suit the tenderee that has been selected despite the fact that its offer was only the second best. It is expected that a new tender will be issued in the forthcoming period.

The deadline for switching off the analogue signal in BiH initially set for 1 December 2011 has been extended to an undefined date, plausibly in 2012. BiH will thus not accomplish the project as rapidly as anticipated by its authorities. The Council of Ministers of BiH has therefore prolonged the mandate of the DTT Forum enabling it to draft a complete and detailed action plan on the finalization of the digitalisation process. These activities are currently underway.

On September 15, 2011, the Council of Ministers of BiH adopted the Decision related to inclusion of Project of digitalisation in the Programme of multiannual capital investments for the period from 2011 – 2014, in the amount of ca. EUR 18.5 mil.

The resources for realization of this project will be ensured from three sources:

- Budget of institutions of BiH in the amount of ca. EUR 6 mil. (annually from 2012 to 2014 the instalments in the amount of ca. EUR 2 mil)
- From accumulated surplus of revenue of Communications Regulatory Agency BiH in the total amount of ca. 8 mil EUR (from which in 2010, it has already been allocated 200 000 EUR, and from 2010 transferred to 2011 the amount of ca. EUR 3.5 mil, as well as ca. EUR 1.5 mil from 2012 to 2014 per annum)
- From resources paid for allocation of licenses for Universal telecommunications systems in the total amount of ca. EUR 4.5 mil (ca. EUR 1.9 mil in 2012 and ca. EUR 1.2 mil in 2013 and 2014 per annum).

3.3.2 The regulatory authority

The regulatory authority responsible for digital broadcasting in BiH is the *Communications Regulatory Agency (CRA)* that was established on 2 March 2001 combining the competences of the former Independent Media Commission and the Telecommunications Regulatory Agency which previously operated separately. The mandate of the CRA is defined by the *Law on Communications of Bosnia and Herzegovina* which was originally imposed by the Decision of the High Representative in October 2002, while the Parliamentary Assembly of BiH adopted it in September 2003.¹¹ Further provisions on its tasks are set in the *Broadcasting Sector Policy*.

The CRA is an autonomous non-profit making institution with the status of a legal person under the laws of BiH. The expressly states that neither the Council of Ministers of BiH, nor individual ministers or any other person shall in any way interfere in the decision-making of the CRA in individual cases. The CRA performs its tasks as a state agency in accordance with the general principles of legality, objectivity, transparency, and non-discrimination. The *Law on Communications of Bosnia and Herzegovina* sets out the following competences of the CRA:

¹¹ Official Gazette of BH, No. 31/03.

- the development and promotion of rules in the sectors of telecommunications and broadcasting,
- the regulation of broadcasting and public telecommunications networks and services, including licensing, tariffing, interconnection, and defining the basic conditions for the provision of common and international communications facilities,
- the licensing of operators in the broadcasting and telecommunications sectors,
- the planning, co-ordinating, allocating and assigning the use of the radio frequency spectrum,
- the implementation of technical and other standards related to quality, and the establishment and maintenance of licence fees.

In addition, the *Broadcasting Sector Policy* lists the following tasks of the CRA:

- to protect the plurality and diversity of the media (concentration limit), and, above all, to provide a constant and balanced development of the radio sector in the country;
- by granting concessions for digital broadcasting to radio and television stations, to take into account the interests of citizens as its primary task;
- to define and propose ways of using CT;
- to provide a diverse range of services through the policy of issuing licences for digital broadcasting;
- the determining of real plurality in the area of broadcasting is a critical task that should, whenever appropriate, be achieved through the implementation of new public vacancy announcements;
- public networks for electronic communication that are established for the purposes of distribution of digital television signals must meet the requirement regarding distribution of wide screen television services;
- to establish a system of exercising the right to perform activities of broadcasting radio and / or television programmes through content licences, which will not consider the technological aspects of broadcasting and will give each licensee the right to perform activities of broadcasting radio and / or television programmes through the resources which right to use they have acquired independently, or those resources that they access on the basis of contracts with their legitimate customers; this does not exclude the right to impose a minimum of technical or expertise capacity, or the scope of own production, content, or quality of the programmes offered and similar obligations, which can be applied to all broadcasters, or a specific group;
- to eliminate any form of monopoly and to use regulations in promoting competition in the use of electronic communications networks and providing of electronic communications services;
- to develop a general document to define the issue of conditional access systems and prescribe the requirements for interoperability of digital television equipment used by consumers, and to exercise control over the implementation of regulations on the conditional access system;
- to adopt rules that also relate to the content that will be available to all citizens, as well as to users of application programming interface (API) and electronic programme guides;

- to regulate the manner of packaging programme content and ensure the right of all citizens of BiH to be able to receive as much programming content as possible;
- in addition to the public broadcasting services and other broadcasters (radio and television stations), there is a need to also define other providers through specific regulation;
- using the Frequency Allocation Plan, on the basis of competitions, to conduct the allocation of frequencies for all new services and offers;
- taking into account that a minor portion of programme content and services in digital broadcasting is offered to all viewers, and that a greater portion will be available to each individual taking into account their choice, desire, or ability to pay, in the future period, the regulation of digital television shall be based on two fundamentals:
 - o that a certain portion of programme content (programming content of public interest) is available to all viewers, on equal terms and for the same price,
 - o that there is no monopoly over the conditional access system which could result in limited consumer (user) choice;
- The regulation of digital broadcasting must provide:
 - o a balance between the public and private media with the provision of broadcasting of public interest where a particular priority should be given to the public service broadcasters when awarding concessions,
 - o consistent respect of competitive legislation, or the prohibition of concentration and monopoly,
 - o clearly defined requirements of "the mandatory inclusion and broadcasting" of certain programming.

The bodies of the CRA are the Council of the CRA and the Director General whose duties are enumerated in Articles 39 and 40 of the *Law on Communications of Bosnia and Herzegovina*. The CRA is managed by its Director General who is responsible for regulatory functions, administrative operations, and staffing issues, as well as for the establishment of internal procedural rules. The Director General is appointed by the Council of the CRA, and approved by the Council of Ministers of BiH. The term of his or her mandate is four years, and can be re-appointed once. The Director General may not be an official in a legislative or executive function at any level of the government, or a member of political party bodies. The Director General reports to the Council of the CRA.

The Council of the CRA consists of seven members nominated by the Council of Ministers, and appointed by the Parliamentary Assembly of BiH. The Council manages the CRA in strategic issues of law implementation, adopts codes of practice and rules for the areas of operations in the authority of the CRA. Additionally, it serves as an appellate body for decisions of the Director General. The decisions of the Council are made by consensus. In the event that a consensus cannot be achieved, it reaches a simple majority decision, provided that at least four members are present and vote.

The basic organizational units of the CRA are the Cabinet of Director General, sections, and divisions. There are five sections established within the CRA's area of operation: the section of telecommunications, the section of broadcasting, the section of legal, financial, and general affairs,

the section of frequency spectrum management, and the section of radio monitoring, IT support, and control of compliance with licence terms and conditions. Other departments are the Public affairs department, the Regional office Banja Luka, and the Regional office Mostar.

Other institutions in BiH may have special responsibility when it comes to regulation. A special role is assigned to the Council of Ministers of BiH. According to the *Law on Communications of Bosnia and Herzegovina*, the Council is responsible for the development and adoption of policies in line with existing legislation, as well as for determining the representation of BiH in international forums concerned with communications. Together with the CRA it shall take all reasonable measures that are aimed at achieving the following objectives:

- the promotion of fair competition so that the users derive maximum benefit in terms of choice, price and quality;
- that there is no distortion or restriction of competition in the communications sector according to the Council of Ministers' sector policies;
- that efficient investment in infrastructure is encouraged and innovation promoted; etc.

3.3.3 The role of stakeholders

The challenges placed before regulators of the market of electronic communications and audiovisual media services are focused on the establishment of a balance among the stakeholders: the users on one hand, and the market on the other, protecting the interests of users in a competitive market and supporting the entry of new participants. Throughout the process of framing and implementing the project of transition to digital broadcasting in BiH, the leading stakeholders have had the opportunity to express their position on focal issues of the digitalisation: telecom operators, the Corporation of the Public Broadcasting Service of BiH (PBS), the Association of Electronic Media in BiH, the representatives of IT, the media industry, the Chamber of Commerce, the Institute of Economics, the faculties of economics and electrical engineering, nongovernmental organizations, and the professional community as well as the citizens of BiH. They have been invited to the roundtable meetings, conferences, workshops and other activities organized by the DTT Forum and the CRA. With the aim of informing, educating and involving the interested parties within the communications sector in BiH in the switch-over process to digital terrestrial broadcasting, the DTT Forum and the CRA have also issued newsletters and initiated the webpage on the DTT process in BiH (www.dtt.ba).

In its Strategy, the DTT Forum has also analysed the socio-economic aspects of the DTT introduction in BiH, and presented its the advantages for certain interest groups, e.g. audiovisual media, content producers, network/multiplex operators, users/viewers, equipment producers, and state/public administration.

3.3.4 Allocation and use of broadcasting spectrum resources

On 20 April 2010, the CRA issued a Decision on the terms and conditions for the utilization of Multiplex A (MUX A) by public broadcasting services for terrestrial digital television broadcasting during the transition period.¹² The decision establishes the terms and conditions for usage of Multiplexes A for digital terrestrial television broadcasting of the three public RTV services: Radiotelevizija Bosne i Hercegovine (BiHRT), Radiotelevizija Federacije Bosne i Hercegovine (RTV FBiH) and Radiotelevizija Republike Srpske (RTRS). The decision provides public broadcasting services with the right and obligation to broadcast their own television programmes via digital terrestrial signal covering the whole territory of BiH, through common structure and within usage of synchronized networks in digital allotments, and according to the technical and programme terms laid down in the annexes to the decision. Further, the frequency spectrum as well as infrastructure and capacity have to be used effectively. Until the full establishment and functioning of the Corporation of PBS, the requests to the CRA (for the new own programmes and/or contents to be broadcast in the MUX A) will be addressed by the System Board (i.e. the board of the system of the PBSs) on behalf of the three PBSs. On the basis of such requests, the CRA will issue individual decisions to the PBSs.

On its regular session, held on 22 February 2011, the CRA Council has concluded that apart from certain activities in the process of digitalisation launched by the Public Radio and Television Service, the absence of the Corporation is still largely hindering the process of digitalisation on BiH. In order to stimulate the process, the Council concluded that the CRA is to initiate a procedure on awarding Multiplex B and C intended for commercial purposes.

On its next regular session, held on 11 April 2011, the Council of the CRA analyzed the information on the process of introducing digital television in BiH, and concluded that the CRA had continued performing the activities related to the process of introducing the DTT in BiH in accordance with the conclusion of the previous session of the CRA Council, and has thus initiated the activities on designing tender documentation for MUX B and C operators as well as continuing with the preparations for implementing the process of awarding licences for the right of the existing TV stations to enter the Multiplex.

As presented supra, in February 2011, the Council of Ministers commenced a tender procedure for the supply of transmission and broadcasting equipment to be used in the process of digitalisation for PBS for the connection of IT centres in Sarajevo, Banja Luka and Mostar. This was an international tender open for 42 days (30 days for appeal, 60 days for equipment delivery). It was expected that the entire process would be completed by the end of June 2011. However, an appeal was lodged by one of the four tenderers claiming that it had placed the best offer, but was not selected by the Ministry as a supplier of the equipment, and that the tender had been construed so as to suit the tenderer that has been selected despite the fact that its offer was only the second best. It is expected that a new tender will be issued in the forthcoming period.

¹² Official Gazette of BH, No. 38/10 of 10 May 2010.

3.3.5 Selection of multiplex operators

As stated above, Multiplex A is intended for use by the three public broadcasting services (PBSs). Accordingly, no procedure for selecting multiplex operators is provided. The national Strategy on the Digital Switchover in BiH sees public broadcasting services as leading stakeholders in the process of transition to digital broadcasting due to their traditionally central position in BiH broadcasting market but also their important role in providing universally available services which can help bridge the digital divide. The abovementioned delays in the process of transition of public broadcasting services in BiH to digital broadcasting have hence resulted in the postponement of the entire digitalization process.

As a consequence, the tender for the Multiplex B and C has not been issued thus far, but the criteria and the procedure for selecting the multiplex operators are currently being prepared.

3.3.6 Selection of content/services providers

Multiplex A is intended for use and broadcasting by the three public broadcasting services (PBSs). Accordingly, no procedure for selecting the providers is provided, either. However, the requests for the new own programmes and/or contents to be broadcast in the MUX A are to be addressed to the CRA. On the basis of such requests, the CRA will issue individual decisions to the PBSs. As has already been emphasized, the public broadcasting services have the right and obligation to broadcast their own television programmes via digital terrestrial signal covering the whole territory of BiH, through common structure and within usage of synchronized networks in digital allotments, and according to the technical and programme terms laid down in the annexes to the decision. The frequency spectrum as well as infrastructure and capacity have to be used effectively.

As until the present date, the tenders for the Multiplex B and C has not been issued, the criteria and the procedure for selecting the content/service providers are being prepared.

The CRA is authorised to award licences for broadcasting regardless of the transmission platform. The licence for broadcasting via terrestrial networks may be awarded on the basis of a public competition, whereas licences for broadcasting via cable, satellite or IPTV are granted on a non-exclusive basis upon request. In the process of harmonising its rules and regulations with the Audiovisual Media Services Directive, the CRA has devised the Rule for the Provision of Audiovisual Media Services which, inter alia, defines terms and conditions for awarding the licence for television broadcasting via terrestrial transmission to be applied after the DSO. In the transition period, the CRA shall ensure that all existing broadcasters have guaranteed access to multiplexes with at least the same coverage as in the analogue broadcasting.

3.3.7 Regulation of relations between broadcasters and multiplex operators

Already in 2008, the stakeholders participating at the conference on *Strategy on the switch-over to digital broadcasting in Bosnia and Herzegovina* have made a conclusion that it is necessary to carefully regulate relations in digital broadcasting between network operators, multiplex operators and service providers of audio-visual content having in mind protection of competition and consumers' protection. This particular issue is at present being dealt with as part of preparation of detailed action plan.

3.3.8 Public interest provisions

The protection of public interest is guaranteed under the Law on Communications which sets out the regulatory principles of broadcasting including the: *protection of freedom of expression and diversity of opinion while respecting generally accepted standards of decency, non-discrimination, fairness, accuracy, and impartiality.*

As stated above, the *Broadcasting Sector Policy* lists the following tasks of the CRA:

- to protect the plurality and diversity of the media (concentration limit), and, above all, to provide a constant and balanced development of the radio sector in the country;
- by granting concessions for digital broadcasting to radio and television stations, to take into account the interests of citizens as its primary task.

The CRA has harmonised all its rules and codes with the Audiovisual Media Services Directive. The *Code on audiovisual and radio media services* and *Code on Commercial Communication* (in application as of 1 January 2012) lay down the basic principles on the programme contents of all audiovisual and radio media services in BiH regardless of the distribution platform. Apart from the general programme standards (regarding, e.g., impartiality and fairness, hate speech, violence, protection of consumers), the codes entail special provisions for the protection of minors, as well as special provisions on specific programme topics (e.g. on privacy, religion, court trials, alternative medicine etc.).

3.4 Croatia

3.4.1 General

In May 2002, *OiV (Odašiljači i Veze, d.o.o., i.e. Transmitters and Communications Ltd)* began with experimental DVB-T broadcasting from two transmitters in MPEG-2 compression system located in the area of the city Zagreb. During 2007, a project „Digital Istria” started and enabled Istria to be the first county in the Republic of Croatia (hereinafter referred to as: HR) covered with

digital terrestrial television broadcast from additional 15 locations. In March 2007, experimental HDTV transmission started in Zagreb and expanded during 2008 to Split, Rijeka and Osijek.

On 31 July 2008, the Government of HR adopted the *Analogue to Digital Television Broadcasting Switchover Strategy in the Republic of Croatia*. It was planned that by the beginning of 2011 only digital broadcasting television signals would be available in the area of the whole country. The Government of HR determined the complete transition from analogue to digital broadcasting of television programmes in HR as the key strategic objective in the period up to 31 December 2010 to accord with the European Commission's recommendation dated 2005, defining the beginning of the year 2012 as the end term for analogue programme switch-off in the Member States of the EU.

The main criteria for the implementation of the Strategy have been the following:

- conducting the digital switch-over in a way that will not have a negative impact of any kind on the viewers, as the end users of the services, nor to the television producers;
- determining basic tasks and responsibilities for all key participants in the transition process from analogue to digital broadcasting of television programmes, and forming guidelines for their adaptation for the digital switch-over;
- planning systematically broadcasting networks for the need of digital terrestrial broadcasting and providing other electronic communicational services, thereby respecting principles of responsible management and satisfying public interest on the grounds of available technical possibilities;
- completing transition from analogue to digital terrestrial broadcasting will be done gradually, with the application of a regional model;
- using the MPEG-2 compression system for the first three multiplexes for SDTV programmes;
- creating conditions for preserving free, universal and public broadcasting service for television programmes, as well as programmes from other television producers on national, regional and local level, creating conditions for an access of independent producers to the digital terrestrial television network content, and encouraging pluralism development at open service market;
- familiarizing the public with the introduction and the advantages of the digital television, and facilitating preparation for digital television introduction;
- establishing successful and sustainable system for planning funds and monitoring expenses in a period of transition from analogue to digital broadcasting of television programmes;
- establishing supervision system, monitoring and management for the Strategy implementation;
- joint measures and activities set are monitored and coordinated by the Central State Office for e-Croatia, which manages their implementation.

Along with the implementation of the Strategy, the Government of HR has also insisted on the implementation of the previously commenced activities within the Implementation Plan of the e-Croatia programme for the year 2008, Broadband Development Strategy in the Republic of Croa-

tia by the year 2008, and Action Plan for the Broadband Development Strategy in the Republic of Croatia by the year 2008. Realization of these activities will, in addition to expected improvements of digital electronic communications services, also enable the introduction of new services of the information society.

In September 2008, OiV set up the call centre of the Government to assist the viewers during transition period in thereby assure the switch-over to be as smooth as possible.

In April 2009, after winning a public tender issued by HAKOM (Croatian Post and Electronic Communications Agency), OiV became network operator of two national DVB-T multiplexes, the MUX A and MUX B with standard definition and MPEG-2. Since May 2009, the digital terrestrial television has been introduced across the whole country. In July 2010, after winning another public tender by HAKOM, OiV became also the network operator of the third DVB-T multiplex, i.e. the MUX D, a combined national/regional and local multiplex with standard definition and MPEG-2.

The digital switch-over in Croatia was completed on 5 October 2010 at 12:35 local time. Since that moment national TV programmes are broadcast only via DVB-T network. In February 2011, the HDTV experimental broadcasting in Zagreb, Rijeka, Split and Osijek had ended.

The following acts form the basic legal framework for the switch-over from analogue to digital television programme broadcasting:

- *Electronic Communications Act*¹³ regulates the field of electronic communications, in particular the use of electronic communications networks and the provision of electronic communications services, the provision of universal services and the protection of rights of users of services. It also provides for the rules on construction, installation, maintenance and use of electronic communications infrastructure and associated facilities, as well as competition conditions and rights and obligations of participants in the market of electronic communications networks and services. Further, it stipulates the addressing, numbering and management of the radio frequency spectrum, digital broadcasting, data protection and security in electronic communications and the performance of inspection and expert supervision and control in electronic communications. It also regulates the establishment of a national regulatory authority in electronic communications and its organisation, scope and competence, including the decision-making procedure and dispute resolution concerning electronic communications.
- *Electronic Media Act*¹⁴ regulates rights, obligations and responsibilities of natural and legal entities involved in the production and publishing of programme contents and services via electronic media, and interests of HR in the field of electronic media.
- *Croatian Radio-Television Act*,¹⁵ regulates the organization and operation of the Croatian Radio Television (hereinafter referred to as: HRT) as a legal entity with the status of a public institution, established by the state, whereas founding rights are to be exercised by the Government of HR.

¹³ Official Gazette 73/08.

¹⁴ Official Gazette 153/09, 84/11.

¹⁵ Official Gazette 137/10.

- *Audiovisual Works Act*¹⁶ regulates the provision, organisation and funding of audiovisual works as an integral part of contemporary culture, encouragement of the Croatian audiovisual production and distribution, promotion of cinematography and complementary activities, and particularly the protection and studying of audiovisual heritage and presentation of the Croatian audiovisual works in Croatia and abroad.
- *Copyright and Related Rights Act*¹⁷ regulates the rights of authors as well as the acquisition and protection of copyright and other related rights.
- Act on Acceptance of the European Convention on Transfrontier Television and the Protocol Amending the European Convention on Transfrontier Television.¹⁸
- Act on Acceptance of the European Agreement Concerning Programme Exchanges by Means of Television Films.¹⁹
- Act on Acceptance of the European Agreement on the Protection of Television Broadcasts.²⁰
- Act on Acceptance of the European Agreement for the Prevention of Broadcasts Transmitted from Stations outside National Territories²¹
- Act on Acceptance of the European Convention on the Legal Protection of Services based on, or consisting of, Conditional Access²²
- Act on Acceptance of the European Convention for the Protection of the Audiovisual Heritage.²³
- Act on Acceptance of the Memorandum of Understanding between the European Community and the Republic of Croatia on the Participation of the Republic of Croatia in the Community Programme MEDIA 2007 (2007 – 2013).²⁴

Detailed provisions on the procedure for selecting network operators as well as new commercial broadcasters to fill the available multiplexes with appropriate programme content are laid down in the secondary legislation, e.g. in the *Ordinance on Radio Frequency Spectrum Allocation*,²⁵ *Ordinance on the Transition from Analogue to Digital Broadcasting of Radio and Television Programmes and Access to Multiplex Positions in Digital Terrestrial Broadcasting*,²⁶ *Ordinance on the conditions for the assignment and use of radio frequency spectrum*,²⁷ etc.

3.4.2 The regulatory authority

Croatian Post and Electronic Communications Agency (HAKOM) is a legal entity with public authority within the scope and competences laid down in the Electronic Communications Act (in

¹⁶ Official Gazette 76/07.

¹⁷ Official Gazette 167/03 & 79/07.

¹⁸ Official Gazette – International Treaties 11/01.

¹⁹ Official Gazette – International Treaties 10/04.

²⁰ Official Gazette – International Treaties 10/04.

²¹ Official Gazette – International Treaties 10/04.

²² Official Gazette – International Treaties 4/07.

²³ Official Gazette – International Treaties 5/07.

²⁴ Official Gazette – International Treaties 3/08.

²⁵ Official Gazette 136/08, 17/10, 118/10, 119/10 & 87/11.

²⁶ Official Gazette 148/08.

²⁷ Official Gazette 136/08, 70/10 & 39/11.

particular in Articles 5 to 17) that entered into force on 1 July 2008, as well as in the relevant secondary legislation and in the Statute of HAKOM.²⁸

HAKOM is an independent, autonomous and non-profit legal entity with public authority. The founder of HAKOM is the state; founding rights are exercised by the Croatian Parliament and the Government of HR.

HAKOM is governed by the Council consisting of seven members, including the Chairman and Deputy Chairman. The members of the Council are appointed for a period of five years, and dismissed by the Croatian Parliament upon proposal of the Government of HR. The Council of HAKOM adopts decisions by the majority of votes. HAKOM has an administrative service performing expert, administrative and technical tasks of HAKOM. The administrative service is organised in accordance with the Statute and other HAKOM's internal rules, and is managed by the Executive Director who is appointed by and is accountable to the Council for his work.

In the field of electronic media, the Electronic Media Agency (EMA) figures as an autonomous legal entity with public authority operating within the scope and competences laid down in Articles 66-79 of the Electronic Media Act, as well as in the Statute of the EMA.

The EMA is managed by the Electronic Media Council which carries out the duties of a regulatory body in the area of electronic media. The Council has seven members (including its president who is also the head-manager of the EMA) who are appointed for a five-year term by the Croatian Parliament upon the proposal of the Government of HR.

3.4.3 The role of stakeholders

Various stakeholders had taken part in the process of analogue to digital television broadcasting switch-over in HR. According to the Strategy, the key stakeholders in the analogue to digital television switchover process were the Government of HR and administrative bodies competent for the implementation of the Strategy, independent regulatory authorities, the public service broadcaster as well as private broadcasters, network operators, equipment manufacturers and retailers, consumer protection groups, and antenna and cable distribution system installers and maintenance personnel.

The Strategy defines basic tasks and responsibilities of the stakeholders, some of these tasks are also defined in the Electronic Communications Act (e.g. in Article 4 for the competent state administration bodies, and in Article 5 for HAKOM).

The Government of HR and administrative bodies competent for the implementation of the Strategy were/are to ensure that the digital television switchover process took place by 31 December 2010. According to the Strategy, they are to provide universal access to public television chan-

²⁸ Official Gazette 116/08.

nels via a choice of digital platforms; ensure that primary and secondary legislation is in place; ensure that the radio frequency spectrum vacated by analogue television, i.e. the digital dividend, was re-used in the most beneficial way possible for the benefit of the population as a whole through the generation of new services providing economic and employment opportunities; establish a method for the core partners to work together in an efficient and effective way to establish digital switchover within the defined term; ensure that new and enhanced free-to-air (FTA) services via digital television is available to the same or preferably larger proportion of households that received analogue television signal; ensure the interests of the population are protected through the establishment of a *Digital Switchover Help* system which is available to all users through a consumer education programme; ensure that no group of the population is socially disadvantaged for any reason in the digital switchover process; ensure necessary subsidy for the purchase of digital receivers, technologically neutral, for all natural persons paying RTV fee; and ensure necessary funds for the promotion campaign. Similar tasks of the competent state administration bodies are defined in Article 4 of the Electronic Communications Act.

Independent regulatory authorities were/are to ensure that radio frequency spectrum management issues regarding digital switchover are solved in a timely way and that the spectrum assets assigned to Croatia are adequately protected and preserved. They are to ensure that public service and private broadcasters and networks/multiplex operators comply with the terms of the concession agreement, and that amendments to the concession agreements, if necessary, are made on time. They must also ensure that the Croatian electronic communications sector continues to function in an open and effective competitive way, that no operator of services or technology is disadvantaged in any way as a result of transition, and that new services such as the electronic programme guide (EPG), conditional access for subscription services, and other enhanced services conform to the international standards for digital television and that their use is enshrined within the relevant licenses. The task of the regulatory authorities is also to advise the Government of HR and competent administrative bodies of any shortcomings or/and necessary amendments within existing regulatory legislation in order to avoid any obstacles in the digital television implementation.

According to Article 5 of the *Electronic Communications Act*, HAKOM has the following obligations: it is obliged to take all the appropriate measures which are aimed at achieving the regulatory principles and objectives laid down in the Act, while at the same time respecting the principle of proportionality; it must promote competition in the provision of electronic communications networks and services and electronic communications infrastructure and associated facilities, in particular by ensuring that users, including disabled users, derive maximum benefit in terms of choice, price and quality of service; by preventing the distortion or restriction of competition in the electronic communications sector; by encouraging efficient investment into infrastructure and promoting innovation; by encouraging efficient use and ensuring the effective management of the radio frequency spectrum and addressing and numbering space; it must promote interests of users, in particular by ensuring that all users have access to universal services pursuant to the provisions of the Act, and by ensuring a high level of protection of end users – consumers in their relations with operators, in particular by making available simple and inexpensive dispute resolution procedures pursuant to the provisions of the Act; it must ensure a high level of protection of

personal data and privacy; promote the provision of clear information, in particular concerning the transparency of prices and conditions of use of publicly available electronic communications services; address the needs of specific social groups, in particular disabled users; and ensure that the integrity and security of public communications networks are maintained. Further, HAKOM must contribute to the development of the internal market of the European Union, and take the utmost account of recommendations and guidelines adopted by the Commission for the purpose of harmonised application of the relevant *acquis communautaire* in the electronic communications sector in Member States of the EU, or at least notify the Commission that it will not do so, and specify the reasons for such a decision. The role of Agency for Electronic Media as defined in the Strategy is to provide legal framework for the process of switchover by amending its ordinances regarding regulation of media service providers taking active role in the process, particularly in the area of licensing new broadcasters by conducting tender procedure for content to be distributed in the foreseen multiplexes. Beside its primary role in regulating content providers, the Agency also develops basic principles according to which EPG will be produced, promoted and maintained.

The public service broadcaster was/is to ensure that the public service remit is fulfilled in the context of the change-over to the digital platform, as required by the HRT Act, and that the public service broadcasts remain accessible to all members of society; to provide additional content to further educate, inform and entertain the viewers through new programmes, as well as through the programmes that were available on the analogue platform; to provide innovative programming that capitalises on the higher quality of digital television, particularly in the area of HDTV for programmes containing high production values, such as sports fixtures, science, entertainment and other programmes; to provide specialized theme programmes that could not be broadcasted in analogue technology due to lack of available channels; to provide new services for special needs of the members of society and for the elderly, as well as additional services such as audio description channels, signing and closed caption services for the visually and aurally impaired; to provide multilingual broadcasting for ethnic groupings in Croatian society; to take an active role in the dissemination of public information relating to the education of the consumers for the digital transition especially in the production of relevant high value public service announcements; and to provide first order interactivity together with programme manufacturers and supported by advertisers.

Private broadcasters are to be active in the promotion of consumer education for the digital switchover, provide innovative programming that capitalises on the higher quality of digital television particularly in the area of HDTV for programmes containing high production values such as sports fixtures, science, entertainment and other programmes, and provide additional programmes to further educate, inform and entertain the viewers over and above the channels that were available on the analogue platform.

Network operators are responsible for the initial financing and the engineering rollout of the digital television network on a national, regional and local level. They must provide sufficient distribution channels to supply all the possible DVB-T transmitters with programme services from the public and private broadcasters. Further, they are to control the multiplexes, electronic programme

guides (EPG) and conditional access systems in a neutral, transparent and non-discriminatory manner that guarantees the same treatment to all content providers. Their task is also to interact with other stakeholders in the process of digital switchover and advise on technical details relating to use of standards MPEG-2, H.264/AVC (MPEG-4), HDTV, DVB-H and other developing technologies. They must facilitate the broadcasters in providing and implementation of new technologies, and provide short-term distribution channels to accommodate simulcast transmissions, if required, in any region undergoing digital transition.

Equipment manufacturers and retailers are to ensure that suitable digital receiver equipment is available for all technical configurations used within the multiplexes, advise the viewers on matters regarding the availability of digital receivers and necessary equipment, their technical details, purchase and maintenance costs, distribution and future technology developments, as well as to ensure necessary staff training to provide the viewers with timely, accurate, and complete information on digital receivers and associated equipment. They are responsible for timely, complete and accurate placement of consumer advisory alerts on all analogue television sets being sold, stating that after the digital switchover, the device will no longer be suitable for over-the-air broadcasts without purchasing an external digital receiver (STB).

Consumer protection groups are to advise all participants in the switchover process on the interests of the consumers as end-users, to inform and advise the public on analogue to digital switchover relating to consumer protection, as well as to ensure that the elderly, the disabled and the socially deprived are timely, adequately and completely informed about the switchover.

Finally, antenna and cable distribution system installers and maintenance personnel are to install, service and maintain common antenna systems and cable distribution systems and associated equipment on the basis of previously obtained proper certificate in order to provide consumers with timely, accurate and complete information on all possible technical upgrades of their common antenna systems and cable distribution systems. They must ensure that new common antenna systems are carried out at a reasonable cost for end-users. Their task is also to liaise with network operators and broadcasters regarding digital signal coverage of areas in HR as well as multiplex channels and programmes offers.

3.4.4 Allocation and use of broadcasting spectrum resources

The broadcasting spectrum is managed by HAKOM whereby the Agency acts in view of achieving the goal of efficient management of the radio frequency spectrum based on the principles of objectivity, transparency, proportionality and non-discrimination. Thus, HAKOM's Council proposes a plan of frequency allocation (Radio Frequency Allocation Table) which is adopted by the minister in charge of electronic communications. As the use of radio frequency spectrum is generally regulated through a system of general authorisation, it is necessary for the Electronic Communication Act to allow the use radio frequency bands to of any legal entity or natural person. In this view, the Agency grants individual licenses for use of the radio frequency spectrum on the basis of submitted applications for granting the license for use of the radio frequency band

in relation to which such a manner of granting licenses has been established in the Radio Frequency Allocation Table. In cases where the interest for frequencies exceeds their availability and whereby such limited availability has been identified in the Radio Frequency Allocation Table, the individual licence will be granted via a public tender procedure. Article 90 of the Electronic Communications Act also envisages the granting of individual licenses via a public auction procedure.

All the types of licences are transferable to another person with a prior consent from the Agency and, as specified by the Ordinance on conditions of use of radio Frequency spectrum the validity period of the license for the use of radio frequency spectrum cannot be longer than twenty years.

3.4.5 Selection of network and multiplex operators

During the transitional period, until licences were issued in accordance with the provisions of the *Electronic Communications Act*, network operators were regarded legal entities that had licences for experimental digital terrestrial television broadcasting effective as of the date of entering into force of the Strategy, but only for the electronic communications networks and services to which the licence referred (SDTV, HDTV, DVB-H, etc.).

Currently, DVB-T in Croatia is operated by *OiV (Odašiljači i Veze, d.o.o., i.e. Transmitters and Communications Ltd)*. OiV is a Croatian broadcast and WiMAX network operator established as an independent company with a limited liability after having been separated from the public HRT in 2002.

The communications regulator HAKOM (*Croatian Post and Electronic Communications Agency*) has awarded OiV a 10-year licence to operate two DVB-T multiplexes, the Mux A and Mux B. The licence conditions require OiV to roll-out the DTT networks to 95% of the population. Croatia is using MPEG-2 compression system.

Croatian MUX D is also operated by the OiV.

The selection of multiplex operators is carried out via a separately regulated procedure, it is matter of notification to HAKOM, but during the procedure of granting licenses for the use of radiofrequency spectrum applicant (license holder) had obligation to ensure multiplex service on its own or by another company. This view is confirmed by the wording of articles 4 and 5 of the Ordinance on the Transition from Analogue to Digital Broadcasting of Radio and Television Programmes and Access to Multiplex Positions in Digital Terrestrial Broadcasting (Official Gazette 148/08), whereby The services of broadcasting radio and television programmes in the digital technology are to be provided by the network operator. Multiplex operator may broadcast only the radio and television programmes by the electronic media broadcaster that has been granted the right of access to multiplex positions, in accordance with provisions regulating electronic media service, i.e. the Electronic Media Act.

3.4.6 Selection of content/services providers

The Strategy provided that all nationwide analogue broadcasters, including the public service broadcaster, shall have their programmes in the first multiplex at the moment of digital switch-over.

Currently, MUX A carries 4 channels: 2 public national channels (HRT 1 and HRT 2) and 2 commercial national channels (RTL, NOVA).

MUX B carries 2 commercial channels: RTL 2 and Doma TV. 2 public national channels (HRT 3 and HRT 4) are expected to join later.

National/regional MUX D in the Croatian D4 allotment carries 5 channels: JABUKA TV, NeT, Sportska televizija, KN and CMC, while local MUX D in the Croatian d44-d46 digital region carries 3 channels: Z1, TV4R and TV PLUS. The national/regional MUX D in the Croatian D5 allotment carries 7 channels: KANAL RI, TV ISTRA, RITV, TV NOVA, Sportska televizija, KN and CMC. The national/regional MUX D in the Croatian D6 and D7 allotment carries 4 channels TV VOX, Sportska televizija, KN and CMC, in the Croatian D8 allotment carries 5 channels TV JADRAN, TV DALMACIJA, Sportska televizija, KN and CMC, in the Croatian D9 allotment carries 4 channels DU TV, Sportska televizija, KN and CMC. Local MUX D in the Croatian d71 digital region carries 1 channel: GRADSKA TV, d72 carries TV SIBENIK. Furthermore, national/regional MUX D, apart from the Sportska televizija, KN and CMC broadcasted in all allotments in Croatia, in D1 allotment carries additional 3 channels STV, OSJECKA TV and VINKOVACKA TV, in D2 allotment additionally carries SBTV and in D3 allotment carries additional 2 channels SRCE TV and VARAZDINSKA TV.

The selection of digital television content providers is governed by the Electronic Media Act. As provided by Article 73 et seq., the Council of the Agency for Electronic Media issues public tenders for the awarding of concessions to carry out the activities of television and radio media service. Such public tender is issued for a free transmission capacity of an individual radio or television programme within the multiplex. The criteria for awarding concessions for providing radio and television media services are:

- the quantity of own production, European audiovisual works and works of independent producers,
- the time of service providing,
- the quality and diversity of audiovisual and/or radio programmes,
- special technical, financial (amount of resources and financial guarantees) and personnel conditions.

The right to perform the activities of providing television and radio media service broadcasting is obtained on the basis of a decision on the selection of the most advantageous tenderer and the contracted concession contract. While the said decision is issued by the Electronic Media Council, the selected content provider concludes the concession contract with both, Agency for Electronic Media and HAKOM.

3.4.7 Must-carry obligation

Article 97 of the *Electronic Communications Act* stipulates that on the basis of a decision adopted by the authority competent for electronic media (i.e. the Electronic Media Agency) on must-carry obligations concerning one or more radio and/or television programmes in HR at the national, regional or other levels, HAKOM shall adopt a decision designating operators of public communications networks which are obliged to carry such programmes.

Such must-carry obligations may be imposed, in compliance with the principles of proportionality and transparency, only on those operators of public communications networks which are used by a significant number of end-users as their main means of receiving radio and television programmes, and only if there is a public interest thereof. The fee for the carrying of programmes in accordance with such obligations shall be determined in accordance with the principles of proportionality, transparency and non-discrimination. According to the Act, HAKOM shall regularly verify the implementation of the must-carry obligations, and every operator of the public communications network, that has been imposed the must-carry obligations, shall be entitled to request HAKOM to re-examine these obligations after the expiry of the period of four years following the adoption of the decision on must-carry obligations.

3.4.8 Regulation of relations between broadcasters and multiplex operators

As provided for by the Ordinance on the Transition from Analogue to Digital Broadcasting of Radio and Television Programmes and Access to Multiplex Positions in Digital Terrestrial Broadcasting, multiplex operator must enable radio broadcasters and television broadcasters as well as operators of other services access to capacities within the multiplex in accordance with the principles of objectivity, transparency, proportionality and non-discrimination.

Obtaining right of access to transmission capacities within the multiplex shall be determined in the agreement concluded between the multiplex operator and broadcasters, or operators of other services. .

Multiplex operator and network operator may be the same entity.

3.4.9 Public interest provisions

Article 25 of the Electronic Media Act stipulates that audio-visual or radio programmes should:

- broadcast truthful information, respect human dignity and human rights and fundamental freedoms and contribute to the respect of other people's opinions and beliefs,
- contribute to the free forming of opinions, versatile and objective informing of listeners and viewers, as well as to their education and entertainment,

- promote Croatian cultural heritage and encourage listeners and viewers to participate in the cultural life,
- promote international understanding and the public's sense of justice, defend democratic freedoms, serve to the environment protection, fight for the equality of women and men,
- promote understanding for members of national minorities

In addition, Article 26 of the said Act provides for protection of minors and children via absolute or TPM (time, place, and manner) prohibitions. It is therefore prohibited:

- to publish footage which offends human dignity,
- to publish footage which especially contains immoral and pornographic content,
- in any manner to encourage, promote and glorify violence and crime and encourage citizens, especially children and youth, to use tobacco products, alcohol or drugs.

Audiovisual or radio programmes which might seriously impair the physical, mental or moral development of minors, in particular programmes that involve pornography or gratuitous violence are also prohibited.

Broadcasting of audiovisual or radio programmes which are likely to impair the physical, mental or moral development of minors shall be prohibited, except where it is ensured by the television or radio broadcaster, by selecting the time of the broadcast or by any technical measure, that minors in the area of transmission will not normally hear or see such broadcasts. When such programmes are broadcast in unscrambled form, the broadcaster shall ensure that they are preceded by an acoustic warning or are identified by the presence of visual symbols throughout their duration.

3.5 Hungary

3.5.1 General

In the “analogue era”, the regulation of the terrestrial TV broadcasting in Hungary was provided in two legislative acts: *Act I of 1996 on radio and TV broadcasting* regulated the licensing procedures and the preconditions of broadcasting as content supply. The National Radio and Television Body as media authority was authorised to issue the entitlement to use terrestrial broadcasting frequencies in a procedure under this act. *Act C of 2003 on electronic communications* laid down the preconditions of the operation of broadcasting transmission. The former act, although technology neutral, could not facilitate the efficient introduction of digital broadcasting, since it did not separate between tendering of programme provision opportunities and the right of frequency use.

The issue of digitization was regulated in *Act LXXIV of 2007 on the rules of broadcasting and digital switchover* (hereinafter: Digital Switchover Act), as amended by *Act CLIV of 2007 on the amendment of Act LXXIV of 2007 on the rules of broadcasting and digital switchover* and *Act I of*

1996 on Radio and television broadcasting. The Digital Switchover Act was further amended by Act CLXXXV of 2010 on media services and mass media (hereinafter: Media Act), which, *inter alia*, changed some terminology, laid down new rules on the protection of diversity in media service distribution and introduced specific tender procedures for local and regional digital broadcasting. It also amended the analogue switch-off date for television broadcasting, which is now set by the end of 2012, but not later than by the end of 2014. The Digital Switchover Act was further amended in 2011. Amendments have been made in connection with the rules of the digital switchover process. The conditions of switching of the analogue broadcasting services are not defined in the Act and the switch off conditions will be defined by the president of NCAH in decrees. The switchover can take place on if 94% of the population is reached by the digital broadcasting service in national scale. According to the Act, another condition is that set-boxes must be available in retail trade.

The latest amendments have also significantly broadened the regulative authority of the president of NCAH. The amendment includes the precision of several definitions. It completes the definitions with the definition of terrestrial broadcasting, defines more precise the category of manufacturer or releasing (the wording uses the corresponding EU terminology). The Act now also provides that the financial sources of the digital switchover process – at least that one that is coming from MTVA – might be used for the central (state) communication in connection with the digital switchover process.

3.5.2 The regulatory authority

The regulatory authority responsible for digital broadcasting in Hungary is the *National Media and Infocommunications Authority* (NMHH), which is an autonomous administrative body governed by the Constitution and pertaining legislation in force. It was established in 2010 by merging the responsibilities of the previously existing National Communications Authority and the National Radio and Television Commission.

NMHH's task is to ensure the undisturbed operation, in compliance with the relevant legislation, of the media and the markets for electronic communications, postal and information technology services. It places a strong emphasis on the protection of the interests of customers and users. Furthermore, it is also entrusted with establishing and maintaining the fair conditions of an effective competitive environment, as well as with supervising the compliant behaviour of service providers. The Authority has an active role in the work of international organisations in the fields of media regulation, electronic communications, postal and IT services. The authority's tasks in the field of media are carried out by the Media Council, which forms a part of NMHH.

3.5.3 The role of stakeholders

Various stakeholders were involved in the designing of the Digital Switchover Strategy (Annex to Government Resolution No. 1014/2007). In the first phase of drawing up the transition strategy,

the state organs concerned (Ministry of Informatics and Communications, Ministry of National Cultural Heritage competent in audiovisual issues, National Radio and Television Board, National Communications Authority, etc.), programme providers, network operators as well as customer representatives, made comments on the Proposal on the strategic objectives and the primary governmental tasks. Their comments have been taken into account. A consultative committee was formed, the task of which is the development of the strategic rolling schedule with the involvement of the stakeholders and with due regard to the market situation, and the elaboration of topical proposals for the Government.

3.5.4 Allocation and use of broadcasting spectrum resources

The Digital Switchover Act provides in Article 8 that the right to operate a digital broadcasting network or broadcasting transmission station can be obtained on the basis of a tender procedure specified in this Act. The licence awarded includes the following:

- the construction of the digital free-to-air broadcasting network or free-to-air broadcasting station,
- the right to use the radio frequencies allocated to the network or free-to-air broadcasting station,
- the right to provide, via the network, broadcasting service, ancillary digital service and other electronic communication service directly to the subscribers or users (free of charge or against a subscription fee), or to other media service providers and ancillary digital service providers.

Free-to-air broadcasting is defined in Article 5 as broadcasting whereby analogue or digital radio or television programmes are transmitted to the subscriber or user via transmission network using terrestrial radio frequencies – with the exception of frequencies primarily allocated to satellite services – and generally allowing one-way data transmission. Free-to-air broadcasting also includes broadcasting via a digital free-to-air broadcasting network or free-to-air broadcasting station. The operator of the digital free-to-air broadcasting network or the free-to-air broadcasting station must report the commencement of the broadcasting service, ancillary digital service, or other electronic communication service in compliance with the relevant rules set forth in the Electronic Communications Act.

Article 43 of the Digital Switchover Act provides that the Authority will publish a call for applications for the operating licence of the four digital television free-to-air-media service providers available during the transition period (one of which will become available after terminating the analogue free-to-air broadcasting of the programme of a public service media service provider), then, following the digital switchover, for an additional free-to-air digital television broadcasting network. The network with the second largest coverage area to be won by the application must be suitable to provide mobile digital free-to-air broadcasting services meeting European standards. The term of the licence to be granted is 12 years from the date of signing the official contract on the licence.

3.5.5 Selection of multiplex operators

The Digital Switchover Act does not employ the term “multiplex operator” but uses instead the term “*operator of a digital free-to-air broadcasting network or a free-to-air broadcasting station*”, defined as the service provider determining the conditions of broadcasting service, ancillary digital services, multiplex service or other electronic communication services by way of digital free-to-air broadcasting to be applicable to users or other service providers, and concludes a contract to this effect with the subscriber or service provider.

Article 39 of the Digital Switchover Act lays down the following evaluation criteria that must be included in the documentation of the call for applications for the right to operate a digital broadcasting network:

- the applicants’ commitment to make a freely accessible, terrestrially broadcasted new media service provider with general content available,
- undertakings related to the broadcasting fees of the public service programmes of public service media service providers,
- undertaking to implement interactive ancillary digital services,
- commitments to build up a digital free-to-air radio or television broadcasting network or a free-to-air broadcasting station under conditions more favourable than those stipulated in the law,
- commitments to the planned access by the general public, of a broadcasting service rendered via a digital free-to-air broadcasting network or a free-to-air broadcasting station under conditions more favourable than those stipulated in the law,
- the suitability of digital set-top-boxes for using the interactive services broadcasted via the digital free-to-air broadcasting network,
- commitments regarding the information to be supplied to users and subscribers, and any discounted or subsidized distribution of digital set-top-boxes under conditions more favourable than those stipulated in the law,
- commitment regarding participation in the early switch-off of the national analogue terrestrial television broadcasting affected, under conditions more favourable than those stipulated in the law.

The documentation of the call for applications may not contain any other conditions regarding programme contents and evaluation criteria beyond those specified above and Articles 9-11 of the Media Act (concerning the protection of children and minors).

3.5.6 Selection of content/services providers

As follows from the Digital Switchover Strategy, the Hungarian regulators sought a compromise solution between the models of “strong” and “weak” multiplex operator. Therefore, it was recommended in the strategy that the first multiplex would host all the public service channels as determined by media policy (weak model), the channel positions remaining on MUX1 as well as MUX2 and MUX3 could be used freely – taking account of any other tendering conditions that

may apply – by the winning bidder (strong model). The winning service providers have the opportunity to fill up the available channel capacities, alongside the channels specified by the media authorities, with channels of their own choice – based on examples of cable and satellite providers. This way the service providers themselves enter into contracts with both programme providers and broadcasters.

The provision of programmes via a digital free-to-air broadcasting network, or a free-to-air broadcasting station subject to Hungarian jurisdiction may commence after registration in accordance with the Media Act. No further registration is required in the case of programmes broadcasted under an effective contract for programme provision, or the concurrent broadcasting of programmes provided exclusively by way of a programme distribution network via a digital free-to-air broadcasting network. The operator of a digital free-to-air broadcasting network or a digital free-to-air broadcasting station is subject to the transmission or contracting obligation stipulated in the law or in the course of the application procedure. According to the latest amendments to the Digital Broadcasting Act, if the broadcaster wishes to broadcast media service that is not regulated by the Mttv, it must certify with a certification that the media service provider has the necessary authorisation to make the media service provision.

3.5.7 Must-carry obligation

Article 39 of the Digital Switchover Act provides that the call for applications must contain the following obligations for the operator of a digital free-to-air broadcasting network:

- the obligation to transmit the audiovisual and radio media services of the public media service providers,
- the obligation to conclude contracts with at least two television programme providers broadcasting news or programmes of public interest and the national public service radio programme providers
- the obligation to contract – relating to media service distribution - of a maximum of four general national media service providers, which can be applied to media service providers currently providing the media services via terrestrial broadcasting transmission, if they issue the relevant declaration of commitment and undertake to make their programme flow available on the non-mobile digital television broadcasting network. If the service providers do not issue the declaration, the operator of the winning digital broadcasting network may freely conclude agreements on the available transmission capacities with other general national media service providers.

Article 44 of the Digital Switchover Act further provides that the operator of the digital television or radio broadcasting network or broadcasting transmission station must make the media services of the public media service provider available to users free of charge. The operator of the digital television broadcasting network is obliged to transmit the media services of the public media service providers on the network which has the largest public access and on the mobile digital television broadcasting transmission network.

Further must-carry obligations and obligations to offer media services in order to protect the diversity in media service distribution are laid down in Chapter VI of the Media Act, which repealed and replaced such provisions previously contained in Chapter IV of the Digital Switchover Act.

3.5.8 Regulation of relations between broadcasters and multiplex operators

Article 8 of the Digital Switchover Act sets out some rules on the use of digital data transmission capacities for providing services. The operator of the digital free-to-air broadcasting network or the free-to-air broadcasting station is entitled to use only the part of the available data transmission capacity not contracted for broadcasting for the purpose of ancillary digital service, and/or electronic communication service – in this order –, or to allow the use of the remaining free capacity for the same purposes for other parties. Up to 15% of the available data transmission capacity in the network may be used up for the purpose of such services.

Article 30 regulates the right to access conditional access systems. Regardless of the transmission method of digital broadcasting, the operator of any conditional access system for digital television and radio services must offer technical services to all media service providers and ancillary digital service providers that comply with competition law rules and the principles of fairness, reasonability and equal treatment, and allow reception of the services of media service providers or a digital media service providers with the help of the digital set-top-boxes made available to subscribers or users by the operator of the conditional access service. Articles 31 and 34 of the Act grant media service providers and conditional access providers similar access rights in relation to digital interactive television services and electronic programme guides.

3.5.9 Public interest provisions

Article 39 of the Digital Switchover Act mandates the obligation of digital broadcasting network operators of giving air raid and disaster warning and related information to the general public.

Article 44 provides that in order to guarantee the digital reception of public service programmes, digital set-top-boxes may be subsidised during the three-month period preceding the termination of the public service analogue free-to-air broadcasting in a competition-neutral manner. The subsidy should only be granted upon request and in justified cases and to a justified extent, exclusively to households in social need, already having a capacity to receive analogue terrestrial free-to-air broadcasting as stipulated in a separate piece of legislation. Article 45 specifies as one of the purposes for which the sources allocated for digital switchover may be used, the support to those who do not have a device suitable for receiving digital broadcasting, based on social need as specified in a separate piece of legislation.

3.6 Italy

3.6.1 General

The Italian process of television broadcasting digitalisation has been carried out in two separate steps, whereby the first step could be identified as the "Switch-over", while the second step is to be perceived as the gradual "Switch-off" of Italian Regions. The second phase of "switch-off" is to be concluded within 2012, whereby all Italian TV channels will have become digital. The first digital Region was Sardinia in 2008, followed by Valle d'Aosta, Western Piedmont (the provinces of Turin and Cuneo). Trentino Alto Adige, Lazio and Campania went digital in 2009. In 2010 the switch-off was completed in all the North of Italy (with the Regions of Eastern Piedmont, Lombardy, Emilia Romagna, Veneto and Friuli Venezia Giulia), reaching about 70% of the Italian population. Liguria, Tuscany and Marche are to be digitalized by the end of 2011, with Abruzzo and Molise, Puglia, Basilicata, and Sicily in the first half of 2012.

The main reasoning behind such gradualist approach is to achieve the effect of a "wake up bell" for citizens to equip themselves and to set up a trial phase for broadcasters and institutions to fine tune their processes.

In the transition period between the "switch-over" and "switch-off" phase, the transmission channels may change, and no new analogue transmission licensing is allowed.

The following legislation was/is crucial for the process of digital switchover and switch-off:

Legislative Decree 31.07.2005, n. 177 "Testo unico dei servizi di media audiovisivi e radiofonici" (G.U. 150/2005)

Law 6.06.2008 n. 101 - art. 8 novies

- General authorization regime confirmed
- Definition of a switch off schedule
- AGCOM to define frequency assignment criteria and procedures, ensuring proportionality, transparency and non-discrimination (can change Del. Italian Regulatory Framework 603/07/CONS with provisional schedule for experimental planning)

MSE Decree 10.09.2008 (on G.U. n.238/2008)

- Final switch-off calendar (detailed timing for all national areas defined)

MSE Decree 13.11.2008 (on G.U. n.273/2008)

- New national frequency repartition plan (PNRF) approved
- TV broadcasting service bands: VHF-III, UHF-IV, UHF-V Channels: 8 in VHF-III, 48 in UHF-IV and UHF-V (Total: 56 channels)

AGCOM Decision n. 181/09/CONS (7 April 2009)

- States criteria for the complete digitization of the Italian TV terrestrial networks:
 - 21 DVB-T national networks + 4 DVB-H national networks
 - 80% coverage (DVB-T)
 - Conversion rule for existing analogue programs:
 - Enough capacity to transmit the same program both in SDTV and in HDTV
 - At least 1 multiplex per operator
 - 8 multiplexes to fulfil this need
 - 5 DVB-T national networks (+1 DVB-H) available as digital dividend for new entrants

AGCOM Decision 497/10/CONS:

- Beauty contest to be held to allocate six digital terrestrial multiplexes (5 DVB-T and 1 DVB-H or DVB-T2)
- Frequencies are granted for a renewable period of 20 years
- Price regulation: operators who are assigned 5 muxs after the beauty contest, must handover 40% of the transmission capacity of the fifth multiplex to independent content providers. The price of the mux capacity must be cost-oriented

AGCOM Decision no 353/11/CONS (on G.U. n 155/2011)

- Network operator: general authorization is required for this activity (no need for acknowledgement from Ministry) Duration: 20 years (renewable)
- The frequencies are defined in the national frequency plan (decision no 300/10/CONS) for the broadcasting of digital terrestrial television. Need of a separate assignation to utilize frequencies and the title released by Ministry
- Content Provider: Need for an Authorization (Authorization is released by Ministry within 60 days) Duration: 12 years (renewable)
- Service provider (no need for acknowledgement from Ministry)

3.6.2 The regulatory authority

The Communications Regulatory Authority (AGCOM) is an independent authority, established by Law n. 249 of 31 July 1997. Independence and autonomy are the elements which typify its activity and its decisions. Like the other authorities set up in the Italian system, Agcom is accountable to Parliament which has established its powers, defined its statutes and elected its members. The two main tasks assigned to it by Law n. 249 are to ensure equitable conditions for fair market competition and to protect fundamental rights of all citizens.

As regards its activities in the field of operators, its main tasks are:

- implementation of liberalization in the telecommunication market through regulation and supervision activities, and through dispute resolution;
- rationalization of resources in audiovisuals; application of antitrust rules in the field of communications, inquiries on dominant positions;
- organization of the Registry of Communication Operators.

As regards its activities in the field of consumers, its main tasks are:

- strict control on quality and distribution of services and products, including advertising;
- resolution of disputes between operators and consumers;
- regulation of universal service and creation of specific rules aimed at safeguarding socially vulnerable categories;
- fostering and safeguarding political, social and economic pluralism in broadcasting;
- defence of copyright of audiovisual and software products, by means of a recently established

In the field of broadcasting, the AGCOM role is mainly in carrying out the tasks entrusted to it by law, ensuring respect for fundamental human rights in the communications sector, including radio or audiovisual media services.

As regards the issuance of licences and/or authorisations for the operation of multiplexes on one hand and broadcasting (providing content) on the other, the Authority does not have the final saying as it is the Ministry of Economic Development that grants the authorisations for the said services (*cf. Arts. 15-21 Testo Unico*). However, The Authority remains supreme in the process of frequency allocation and assignment and for releasing authorisations for satellite and web-TV operators (in the last case general authorisations).

3.6.3 The role of stakeholders

The Italian switchover plan identified the following stakeholders as key players in the process of digitalisation:

- a) **providers of contents**, is the company holder of the right of installation, operation and provision of an electronic communications network and installations for the transmission, multiplexing, distribution and/or broadcast as well as of frequency resources enabling transmission of broadcasting blocks to users;
- b) **providers of services** is the company providing, by means of the network operator, conditional access services to public through the distribution to users of numeric keys to enable program viewing, service billing, and, where necessary, the provision of equipment, or providing services of the information society or providing an electronic program guide (EPG);
- c) **network operators** is the company holder of the right of installation, operation and provision of an electronic communications network and installations for the transmission, multiplexing, distribution and/or broadcast as well as of frequency resources enabling transmission of broadcasting blocks to users;

Only network operators may be granted the right to use frequencies, while contents and service providers may be granted a regular authorisation as operators of communication services.

Italy considers the involvement of all players interested in developing digital terrestrial technology to be of vital importance, and in particular pursues the following objectives:

- promotion of industrial sectorial studies to take note of studies already carried out by commissions and committees already established for the purpose of examining the problems of introducing digital terrestrial television;
- encouragement of the demand for digital terrestrial television services among users;
- arrangement of the timing of the transition with industry and the consumers;
- implementation of all incentive actions to complete the transition within the three years stipulated

Various cooperative initiatives between institutions and manufacturers composed of terrestrial, satellite and cable broadcasters, manufacturers and service developers have been launched in Italy to achieve this goal. At the same time, information campaigns on digital terrestrial television have been initiated through analogue television networks, so that citizens can gauge the advantages of the new broadcasting technology through simple, constant and updated information.

Operators and representatives of manufacturers, who are also extensively involved in European coordination initiatives, were part of ad hoc working groups and participate, under the coordination of the Ministry of Communication, in the international activity connected to CEPT and the preparatory stage of national positions.

3.6.4 Allocation and use of broadcasting spectrum resources

With regard to management of the spectrum prior to the switch-off, Italy has to deal with overcrowding on the radio-electric spectrum intended for TV broadcasting, because of the high number of existing analogue broadcasters, so it views the "more economical" use of the spectrum in connection with digital technology with keen interest. This situation makes the switchover stage in Italy particularly sensitive, owing to the difficulty of finding adequate resources to allocate for an effective co-existence of the two systems. For this reason, it was decided to shorten the switchover stage as much as possible in Italy, and to accelerate the generalised introduction of digital technology. During the switchover stage, Italian legislation authorises the trading of frequencies between broadcasters of the analogue service, on condition that the buyer of the frequencies uses them for digital terrestrial transmissions.

3.6.5 Selection of multiplex operators

Italian legislation does not use the term multiplex operator - instead, a more general term "television network operator" or *operatore di rete per la radiodiffusione televisiva* (see cf. **Delibera n. 353/11/CONS**) is used synonymously.

Italian regulatory frameworks distinguish between a general authorisation for operation of a network (or multiplex, see above), which can be applied for by any natural or legal person of EU or

EEA provenience, and the assignment of radio frequencies itself. As for the assignment of frequencies, the Article 17 of Resolution 353/11/CONS provides that the act of allocation of radio frequencies to each network operator is different from the general authorisation and its content depends on the actual availability of portions of the electromagnetic spectrum. In addition, the allocation and assignment of the frequencies (carried out by the AGCOM) has to, among others, be based on the principles efficient use of spectrum and the same non-interference.

The conditions for issuing general authorisations to operate a network for digital television broadcasting on terrestrial frequencies at national or local level that have to be met at the time of application, must exist at the time of issuing the general authorisation and all its duration.

In addition, it should be noted that Article. 5 of the *Testo Unico* prohibits public entities in nature (i.e. public administration, public companies and companies with majority holding, plus companies and financial institutions) to carry out activities of a network operator, or a provider of media service on request.

3.6.6 Selection of content/services providers

The selection of content providers is governed by Arts.16 and 17 of the *Testo Unico* and Arts 3-14 of the Resolution 353/11/CONS on terrestrial broadcasting in digital technique.

The Ministry of Economic Development – Department of Communications is the institution entrusted with the task of issuing the necessary permits to persons who intend to pursue any of the activities encompassed in the general definition of "**servizio di media audiovisivo**" as set forth in Art. 2 of the TU. As for the audiovisual media service providers, both linear and nonlinear, the authorization is granted on the basis of two specific regulations drawn up by the AGCOM.

The authorization is issued for a period of twelve years and is renewable in accordance with the rules in force at the time of renewal and can be transferred (sold) to third parties only with the prior approval of the Ministry of Communications issued in consultation with the Authority.

3.6.7 Selection of service providers

The selection of service providers is governed by Art. 15- of the Resolution 353/11/CONS on terrestrial broadcasting in digital technique.

General authorization (no need for acknowledgement from Ministry)

The conditions for issuing general authorisations to operate a service provider that have to be met at the time of application, must exist at the time of issuing the general authorisation and during all its duration. Conditional access service providers have to comply with technical standards

for conditional access systems provided in current laws; and adopt a charter of services to be submitted to the Authority's approval.

3.6.8 Public interest provisions

The Article 35-bis of the TU provides for a special responsibility of broadcasters as regards coverage of sports events. Broadcasters, including analogue ones, and radio stations, when covering sports events, especially football, are bound to contribute to the broadening of values of fair play, sportsmanship and respect among the young in view of preventing the phenomena of violence or disruption of public order.

Article 34 of the TU prohibits broadcasting of scenes of gratuitous violence or of gruesome or pornographic nature, which may seriously impair the physical, mental or moral development of minors.

3.7 The former Yugoslav Republic of Macedonia

3.7.1 General

The broadcast regulatory framework has undergone significant change in recent years following the adoption of new laws on electronic communications and broadcasting. The two laws relevant for television broadcasting are:

- The *Law on Broadcasting Activity* of 2005, as amended, which regulates the conditions for and manner of pursuing broadcasting activity and matters of public interest in the field of broadcasting.
- *The Law on Electronic Communications* of 2005, as amended, which governs, *inter alia*, the use and control over the radio frequency spectrum.

The legislation is not specifically adapted to the requirements of digital terrestrial broadcasting. There is, however, there is on-going initiative for development of new Law on Broadcasting. The Strategy for the Development of Broadcasting for the Period 2007-2012, adopted by the Broadcasting Council in 2007, points out that the current model for regulation of the broadcasting is designed, first and foremost, for analogue technological environment and could be inefficient and completely inapplicable in the digital time. Therefore, changes of the regulation are necessary. The liberalisation of the legal provisions is a prerequisite for carrying out the planned digitisation process, i.e. relicensing of the digital terrestrial television. In addition, attention should be paid to the possible negative effects of the vertical integration in a digital environment, due to the necessary control of the access to digital platforms and the cable networks, in order to prevent the creation of so-called "bottle necks" in the systems with conditional access. The legal obligations should elaborate precise measures that will assist the regulatory authorities in imposing the vertically integrated subjects in digital broadcasting to provide fair and unbiased access to third par-

ties, as well as must-carry rules for the dominant operators. The new technologies and the digitalisation are imposing the need for liberalisation of the market, i.e. opening the opportunities for entry of new subjects that are willing to broadcast linear or non-linear programme services via other transmission platforms (cable, satellite, internet, etc.). The existing licensing model via competition is designed, above all, for the analogue terrestrial broadcasting in conditions of a limited frequency spectrum, which will be used, in the future, for the digital terrestrial broadcasting. However, with the purpose of facilitating the market liberalisation regarding the opportunities for entry of new subjects that are willing to broadcast programme services and will not use a section of the frequency spectrum, it is necessary to foresee, in the legislation, a new and more liberal method for licensing, which will not imply a long and complicated competition, but it will enable granting of licences on-demand, and the conditions for carrying out the activity will be different from the ones that have to be met by the terrestrial providers of audiovisual services.

In November 2007, the Broadcasting Council adopted its Strategy for the Development of Broadcasting for the period 2007-2012, which includes its plans for digitalisation. However, the government rejected this strategic plan in early 2008, claiming that it clashed with its policies on communications. Despite the lack of agreement with the regulatory authorities and without the necessary legal framework defined, the government decided nonetheless that it would invite candidates to tender for the DTT multiplexes in 2008. Services will include the simulcast of all existing broadcast services on the analogue terrestrial platform and must be available to at least 80% of the population. The DTT platform is expected to provide services across four multiplexes at the time of launch with one multiplex reserved for the broadcast network operator MRD for the transmission of services from the public service broadcaster MRT.

3.7.2 The regulatory authority

Broadcasting Council of the Republic of Macedonia (Совет за радиодифузија на Република Македонија, hereinafter: Broadcasting Council) is an independent regulatory, non-profit body exercising public competences and authority in the broadcasting sector. In the course of implementation of its responsibilities, which are determined within the Broadcasting Law, the Council assures freedom and pluralism of expression, existence of diverse, independent and autonomous media, economic and technological development of broadcasting activity, and protection of the interests of citizens in broadcasting. Among the Council's duties and responsibilities are the following:

- It implements the Strategy for Development of Broadcasting Activities in Republic of Macedonia;
- it brings decisions for allocation, revoking and renewal of broadcasting licences;
- it coordinates its activities with the Agency for Electronic Communications in the development of the Plan for allocation and use of radiofrequencies in the part of broadcasting;
- it monitors the broadcasters and their adherence to the provisions from the Broadcasting Law, the broadcasting licences and to the acts of the Broadcasting Council, which refer to the programme content;

- it brings decisions and conclusions, adopts regulations, instructions, recommendations and other acts, determines positions and gives proposals for implementation of the Broadcasting Law.

The *Agency for Electronic Communications* (Агенцијата за електронски комуникации, hereinafter: AEK) was established with the Law on Electronic Communications in 2005 as an independent regulatory body in the electronic communications markets. The Agency has directions to achieve the goals of a competitive market in which the conditions would be created for end users to use electronic communications services with best quality and prices. The AEK has the competence, *inter alia*, to:

- Prepare and administer the Plan for allocation of radio frequencies and the Plan for assignment of the radio frequencies.
- Monitor the use of the radio frequency spectrum in accordance with the;
- Issue radio frequencies authorizations;

- Conduct coordination of radio frequencies with the regulatory bodies of the neighbouring and other countries;
- Prepare and administer public tenders for the assignment and use of radio frequencies;

3.7.3 The role of stakeholders

Pursuant to Article 22 of the Broadcasting Law, the Broadcasting Council is obliged to draft a Strategy for Development of Broadcasting Activity in cooperation with competent institutions from the field of broadcasting, electronic communications and information society, and the views and positions of non-governmental organisations and other entities from the area of broadcasting should be taken into consideration.

The Strategy points out that in Europe, the digitisation process of the terrestrial television has been carried out with the strong support of the DIGITAG Authority, which has its national branches. The need for such a branch to exist in the Republic of Macedonia is in the interest of all subjects interested for DTT, i.e. it combines and protects the interests of the equipment manufacturers, the operators and the users of DTT. For this purpose, it would be necessary to establish a separate National Coordination Authority for Digitisation by the Broadcasting Council and the AEK, including all relevant subjects (MB, MRT, APEMM – Association of private electronic media of Macedonia, MASIT - Macedonian ICT Chamber of Commerce, independent experts, Organization for protection of consumers, all relevant Ministries), which would function as an auxiliary authority in the digitisation process. The work of this authority should raise the general level of knowledge of the users regarding the application and the benefits of the DTT-services. The National Coordination Authority should, on the basis of a wide consensus and according to the recommendations mentioned in this Strategy, draft a plan and a timeframe for introduction of the digital and switching off the existing analogue terrestrial television.

3.7.4 Allocation and use of broadcasting spectrum resources

Electronic Communications Law provides in Article 58 that natural persons or legal entities may only use radio frequencies on the basis of an authorization to use such frequencies issued by AEK. The authorisations are issued in accordance with the Plan for Allocation and Utilization of Radio Frequencies, or by way of a public tender, which is used in case of restricted resources and if the efficient use of the allocated radio frequencies can only be ensured through restriction of the number of authorizations. AEK may issue frequency authorizations for broadcasting upon a prior decision for issuing a licence for performing broadcasting activities authorization adopted by the Broadcasting Council. Radio frequency authorizations are issued for a fixed interval not greater than ten years. The validity of a radio frequency authorization may, at the suggestion of the holder thereof, be extended if at the end of its term all the conditions prescribed for the use of such radio frequencies are met. Without a prior decision of consent from the Agency requested in writing, transfer or assignment of the right to use radio frequencies to another natural person or legal entity are prohibited.

The Broadcasting Development Strategy envisages that the allocation of radio frequencies for multiplexes will be carried out, by rule, by launching a public competition. The competition documentation has to comprise the important characteristics of the multiplex for which the radiofrequency is launched, such as: the frequency, the area of coverage, the capacity of the channel, the technical standards that have to be preserved, the volume of the reserved capacity, etc.

The public enterprise Macedonian Broadcasting should obtain an approval for the use of a radio frequency for one multiplex without a public competition. That multiplex is intended, above all, for transmission of the programmes of the public broadcaster MRT. Accordingly, Article 75 of the Electronic Communications Law provides that the Public Enterprise Macedonian Broadcasting may use radio frequencies for the construction and operation of an electronic communications network for digital terrestrial broadcast by two national multiplex digital systems, in accordance with law. Part of the free capacity of this multiplex will only be determined for DVB SSU. The remaining free capacity of the multiplex is at free disposal of the public enterprise MB, taking into consideration the prohibition of discrimination and allowing all interested national broadcasters, under equal conditions as the MTV, to use the multiplex.

3.7.5 Selection of multiplex operators

The Broadcasting Development Strategy provides that in order to become a multiplex operator, a legal entity has to obtain, via a public competition, an approval for using a radiofrequency for multiplex for digital broadcasting, mobile television or innovative services. To use the awarded resource, the multiplex operator will pay the state certain annual fee, depending on the type of the received multiplex. It is necessary to introduce limitations with reference to the maximum number of multiplexes (three at the most) that one multiplex operator may have at his disposal. The multiplex operator will conclude an adequate contract with the providers whose contents are

included in the multiplex, and, if necessary, with the owner/administrator of the infrastructure used to distribute the signals of the multiplex.

The Strategy envisages that one multiplex, without an open competition, will be allocated free of charge to the public enterprise MB and it will be intended, above all, for transmission of the public television services (MTV), with a priority for the other free-to-air channels to be offered under equal conditions to the national commercial TV-services. Other multiplexes will be allocated via an international tender procedure. If there are technical possibilities, during this period, it is planned to launch an open competition for one regional multiplex for the territory of Skopje. In the second stage it is foreseen to realize two multiplexes intended for transmission of new commercial television services or one multiplex for the aforementioned objective and one multiplex for innovative services, depending on the assessment of the market interest after the completion of the first stage. This same stage could cover the realization of one multiplex for transmission of regional television services (including in Skopje, unless it is completed during the first stage).

3.7.6 Selection of content/services providers

The Broadcasting Development Strategy provides that the existing licences of the broadcasters for analogue transmitting will be directly converted into licences for digital transmitting (for content providers). New competitions should be launched for the other interested subjects that want to broadcast new programme services national and regional level. The multiplex operator will conclude an adequate contract with the providers whose contents are included in the multiplex.

The programme broadcasting licences in general are regulated in the Broadcasting Law, which defines the term “broadcaster” as a legal entity or a natural person with editorial responsibility for the composition of schedules for radio, i.e. television programme services intended for reception by the public, transmitted by the said legal or natural person, or transmitted on its behalf by third parties, completely and unchanged. In accordance with Article 12 of the said law, a broadcaster may start the pursuit of broadcasting activity after it was issued a licence to pursue broadcasting activity. The public broadcasting enterprise, however, acquires a licence to pursue broadcasting activity *ex lege*.

The Broadcasting Law provides that the licence to pursue broadcasting activity may be issued for the transmission of a given radio or television programme service, regardless of the technical means of transmission, under conditions and in a manner and procedure defined by this Law. It is prohibited to pursue broadcasting activity without a licence. The Broadcasting Council must announce a public competition for allocation of licences. The procedure for issuance of the licence must be transparent and carried out in a manner that ensures fair, equal, and non-discriminatory treatment for all participants in the procedure.

3.7.7 Regulation of relations between broadcasters and multiplex operators

The Broadcasting Development Strategy provides that a multiplex operator, who at the same time wants to be a content provider, will have to take part on a launched competition for content provider, then the aforementioned operator will have to establish a new legal entity which will deal only with content providing. The multiplex operator will have to offer, to all content providers, equal and fair conditions for access to the multiplex that is under its administration. The supervision of the administration of the multiplex will be carried out by the Council of the multiplex, where all service providers, proportionally with the percentage of the capacity they are using, are represented.

3.7.8 Public interest provisions

The Broadcasting Law provides that programme contents aimed at the violent overthrow of the constitutional order of the Republic of Macedonia, programmes that encourage or invite to military aggression or incite national, racial or religious hatred and intolerance are prohibited from the programmes of broadcasters and in programmes retransmitted via public commercial networks. The programmes of the broadcasters may not contain pornography, excessive violence, or other programmes that may cause serious damage to the physical, mental and moral development of children and youth. Programme services with pornographic contents may be retransmitted over the public communication networks only in encrypted form. Programme contents that could seriously impair the physical, mental and moral development of children and minors, and are not foreseen by Article 70 of this Law may be broadcast only in the watershed between 24:00 and 05:00 hours. Such programmes must be labelled before the start of their broadcasting, with an acoustic or visual warning, noting that they are not recommended for viewing by certain segments of the audience.

3.8 Montenegro

3.8.1 General

The Strategy on the switchover from analogue to digital broadcasting systems in Montenegro was adopted on April 10th, 2008. The Strategy defined as one of its objectives that analogue switch-off date should be not later than 31 December 2012 (target date) as well as guidelines for setting up an adequate activities timeframe and economic, technical and legal framework.

This document suggested that the first network with national coverage should be free-to-air network where multiplex signal will be broadcast to the final users without additional costs. That network would also contain national public service programmes based on the principle of 'must carry' rules.

The implementation of the Strategy has been very limited, almost non-existent. One of the main causes for this delay is multi-year revision of the legislative framework for regulating the electronic communications and electronic media (broadcasting, audiovisual media services). Only after several revisions and long debate, the Law on Electronic Communications and the Law on Electronic Media Law were harmonised. The preceding two-year period was characterised by the lack of clear division of roles and responsibilities of the main stakeholders in the process, primarily the roles of the regulatory authorities in relation to the allocation of the broadcasting frequencies.

After several amendments to the Law on Electronic Communications, and the adoption of Law on Electronic Media in 2010 an adequate legal framework was established. In addition, the Digital Broadcasting Law was adopted in 2011.

The following legislation is crucial for the process of digital switchover:

- the Law on Electronic Media of 2010,
- the Law on Electronic Communications of 2008, as amended,
- the Digital Broadcasting Law of 2011.

While the adoption of the digital switchover law was defined as one of the first steps to be made according to the 2008 Strategy, its adoption occurred only in 2011. Although most of the Strategy recommendations were not followed, that was not the case with the analogue switch of date. Namely, very ambitiously the mid-2011 Digital Broadcasting Law regulates that analogue TV broadcasting should be switched off on 31 December 2012.

3.8.2 The regulatory authority

In line with the laws listed in 3.8.1., the two regulatory authorities share responsibilities in the field of digital switchover:

The *Agency for Electronic Communications and Postal Services* (Agencija za elektronske komunikacije i poštansku djelatnost, hereinafter: EKIP) is established as an independent regulatory authority, functionally independent of all entities that exploit telecommunications networks and provide electronic communications networks, equipment or services, and of the entities providing postal services. In the field of electronic communications, EKIP is authorised, *inter alia*, to:

- Adopt Radio Frequency Allotment Plan and control the application thereof;
- Perform permanent monitoring of radio frequency spectrum;
- Conduct coordination of the use of radio frequencies with administrations of neighbouring countries;
- Encourage rational use of electronic communications infrastructure;
- Implement public tender procedure and assign limited resources (radio frequencies, numbering and addresses) on non-discriminatory basis, to electronic communications network operators and electronic communications service providers;
- Issue licences for radio stations, numbering and addresses;

- Supervise the activities of operators in electronic communications sector, in terms of compliance with the Law, bylaws and applicable technical regulations and standards;

The *Agency for Electronic Media* (Agencija za elektronske medije, hereinafter: AEM) is an independent regulatory body in the field of audiovisual media services (hereinafter: AVM services), which exercises public authorities in compliance with the Electronic Media Law and its Statute.

Within the framework of its main activity, AEM is authorised, *inter alia*, to:

- propose a development programme for the AVM services sector;
- prepare, in cooperation with EKIP, the basis for the development of a part of the plan for allocation of radio-frequency spectrum related to the terrestrial broadcasting;
- give consent on a part of the proposed radio-frequency assignment plan related to the terrestrial broadcasting;
- award licences for provision of AVM services (broadcasting licences and licences for provision of on-demand AVM services). When the provision of these services is based on the usage of broadcasting frequencies, the licences (authorisations) are issued on the basis of a public tender;
- define the level of fees for the awarding and use of licences for provision of AVM services;
- keep register of the providers of AVM services and electronic publications.

According to the Article 11 of the Law on Electronic Media, the two regulatory authorities are obliged to cooperate and coordinate their work in the field of radio frequencies intended for AVM service providing, in accordance with this Law and the Law on Electronic Communications.

3.8.3 The role of stakeholders

The Digital Switchover Strategy of Montenegro identified as key players in strategy implementation:

- Parliament and Government, who are responsible for timely adoption of proper legislative framework and, if needed, the financing or subsidy scheme.
- Ministries for: culture, sport and media; economic development; finance; labour, social welfare and health care; education and science: after the adoption of relevant regulatory frameworks, these ministries would be in charge of fully supporting the process by concerted measures and policies.
- regulatory bodies for broadcasting and telecommunications (AEM and EKIP): within their competences and exercising mutual cooperation they should define and carry out frequency allocation in a timely, transparent and efficient manner. Their significant contribution will be to promote the process and ensure a wide forum for exchange of opinions, recognition of problems and possible solutions.
- Broadcasting Centre of Montenegro, which was established by the Government of Montenegro, as an operator of the backbone of the broadcasting system. This company is the only telecommunication operator owned by the state of Montenegro. It manages the system which counts around 130 emission/transmission objects. In the second quarter on

2008, RDC set in motion the digital radio relay system of transmission, which enables connection of 38 most important emission locations in Montenegro.

- educational institutions (academia, secondary and primary schools): with their regular, specialist and other trainings and curricula these institutions can greatly contribute to accelerating the process and taking it to a successful closure.
- broadcasters (commercial and public), who are among most important stakeholders essentially determining the success of the process by the timeframe for their inclusion. They will have to be the first to start the process by offering new, better-quality services, and on the other hand, being an important user of the new digital distribution and transmission systems.
- consumers and broadcasters associations: they should give significant contribution to education, raising awareness and promotion of digitalisation, and protect the interests of the target groups they represent.
- reception equipment suppliers (STB and IDTV): prompt setting of the ASO date and specification of STB and other equipment will enable proper quality offer to be created and consumer (viewer) protection, as well as reduced opposition due to imposed change of receivers..
- end users: all known advantages of the digital compared to analogue broadcasting will stimulate the sales of IDTV and STB for digital reception only if clearly and strongly promoted. Without certain subsidies, a share of households will be facing the inability to cover the costs of switching from analogue to digital receivers. In case the switchover from analogue to digital broadcasting systems fails to provide good coverage, certain households would be facing other costs of transition to other distribution systems for radio/TV signals (satellite, cable...).

The Digital Broadcasting Law (2011) regulates some of the above-mentioned roles and responsibilities especially when it comes to the regulatory authorities, government and ministries. According to the Article 10, the following will be provided in order to ensure that two programs of the national public service broadcaster (Radio and Television of Montenegro - RTCG) are broadcasted digitally: (1) construct the first DTT network for national coverage i.e. at least 85% of the Montenegrin population and (2) secure funds for the increased electric energy costs during the simulcast for the first multiplex operator (RDC). The necessary funds are to be provided from the Budget of Montenegro and other sources of funding (donations, credits etc.).

3.8.4 Allocation and use of broadcasting spectrum resources

EKIP plans the broadcasting spectrum in accordance with provisions of the Law on Electronic Communications (Article 64).

In line with that, in accordance with the national Frequency Bands Allocation Plan, after obtaining the consent of the AEM Council, in the third quarter of 2011, EKIP adopted the Frequencies Assignments' Plan for Digital Broadcasting. This document is the basis for allocation of broadcasting spectrum resources for DTT.

In line with the Article 7 of the Digital Broadcasting Law, EKIP is in charge for setting the distribution ratio of the multiplex capacities for either AVM or electronic communication services. This is done with the approval of the AEM Council.

On the basis of public tender, AEM awards licences (authorisations) for (1) broadcasting by using the multiplex capacity (Articles 98 to 104 of the Law on Electronic Media) and (2) multiplex operators (Articles 116 and 118 of the Law on Electronic Media). The content, conditions, criteria, and timeframes for the organisation of both tenders have been regulated by the Law and by-laws, adopted by the AEM Council.

Within 15 days after their issuing, AEM is obliged to notify EKIP about any issued licences (authorisations) for using the broadcasting frequencies for AVM services (access to multiplex capacity for digital broadcasting or multiplex as a whole). On the basis of this notification, EKIP is obliged to issue the approval for multiplex operator for the use of radio frequencies allocated for broadcasting.

Approvals for the use of radio frequencies for broadcasting may be issued for the period not longer than fifteen years. The validity of the approval may be, at a request of the holder thereof, extended if all the conditions prescribed for use of such radio frequencies are met. Transfer or assignment of the right to use radio frequencies to another natural person or legal entity is prohibited, unless prior consent of AEM and EKIP is obtained.

3.8.5 Selection of multiplex operators

The Digital Broadcasting Law defines the *transmitter network operator* as a legal entity or a natural person who carries out the operation of the electronic communications network for digital terrestrial broadcasting. In accordance with Article 4 of Digital Broadcasting Law, any legal entity or natural person who received an approval to broadcast programme through terrestrial broadcasting network in accordance with Law on Electronic Media, and approval for the use of frequencies in accordance with Law on Electronic Communications, acquires the status of a network operator

The *multiplex operator* is defined as a legal entity or a natural person who provides public electronic communications services of multiplexing and transmission of multiplexed signal to the multiplex transmitter network. In accordance with Article 5 of Digital Broadcasting Law, any legal or natural person who provides public electronic communication services of operating the multiplex, on the basis of registration in accordance with Law on Electronic Communications, acquires the status of the multiplex operator. For the distribution of radio and/or television programmes, the multiplex operator is required to obtain approval for the distribution by AEM in line with the Law on Electronic Media. Access to multiplex is the service provided by the multiplex operator, through any electronic communications network, from the point of access to the network.

To understand the relations, rights and obligations of both the multiplex and network operator as well as the role of EKIP and AEM in the licensing procedure, all three laws have to be taken into consideration. Having in mind the different terminology used for different “licences” and procedures, one have to be very careful when identifying each stakeholders’ right and obligation.

Furthermore, the Digital Broadcasting Law stipulates that the network operator is obliged to submit to EKIP, within 90 days from issuing authorisation to use the frequency, at least one contract with the multiplex operator. While the Law allows for the same entity to be both the network and multiplex operator, in those cases the obligation of accounts separation is imposed (Article 6).

Article 17 of Digital Broadcasting Law provides that on the effective date of this Act, the Broadcasting Centre of Montenegro will acquire the status of the first multiplex operator and of the first network operator, without following tender procedure for the allocation of radio frequencies. The Broadcasting Centre is obliged to provide coverage of 85% of the population not later than 1 July 2012. The Broadcasting Centre must submit to EKIP a request for approval to use frequencies that are intended for digital television and must be registered as a multiplex operator, within 30 days from the date of enactment the Digital Broadcasting Law. The Broadcast Centre is required to submit to AEM a request for approval for distribution of audiovisual media services, within 30 days from the date of enactment of the law.

3.8.6 Selection of content/services providers

The Electronic Media Law provides in Article 98 that AEM is authorised to issue licences for broadcasting via terrestrial, cable, Internet or satellite transmission, digital or analogue transmission. Internet webcasting is not subject to licence. The broadcasting licence may be issued either or upon request or on the basis of a public competition. Article 99 provides that AEM must open a tender for granting the rights to broadcast when a legal entity or a physical person intends to broadcast programme via frequencies envisaged in Radio Frequencies Assignment Plan for analogue broadcasting, or in case when a person intends to exercise right to access multiplex for digital terrestrial broadcasting (hereinafter: tender for granting the rights to broadcast). Prior to open tender, AEM is obliged to acquire from EKIP information and data on available frequencies or free resources within multiplex of digital terrestrial radio broadcasting, intended for broadcasting of AVM services.

The Digital Switchover Law provides in Article 9 that for the purpose of digital broadcasting of the national public broadcasting service signal, the Radio and Television of Montenegro has the right to access the first multiplex network covering the entire territory of Montenegro, without conducting a public tender procedure, for the transfer of two television programmes in standard quality (SDTV). For the purposes of digital broadcasting of the local public broadcasting services signals, such services obtain the right to access the multiplex of the local coverage network. The Broadcasting Centre of Montenegro is obliged to perform the transmission and broadcasting of the national public broadcasting service.

The right of access for the first multiplex network covering the entire territory of Montenegro for other audiovisual media services providers, as well as other networks, will be implemented on the basis of open competition in accordance with the Electronic Media Law. The public tender must be clearly defined in terms of capacity utilization for providers of audiovisual media services during the transitional period, to create the conditions for the introduction of high definition television (HDTV) for the purposes of national public service broadcasters.

3.8.7 Regulation of relations between broadcasters and multiplex operators

Again, all three laws have to be observed in defining these relations.

The multiplex operators are obliged to distribute programs of electronic media who acquired right to access multiplex of digital terrestrial broadcasting system in accordance with the Law on Electronic Media (Article 84). When including any broadcaster's program in its catalogue, the multiplex operator has to observe the copyright legislation. Having in mind that, this Law regulates the multiplex operator as any other multi-channel service provider (i.e. cable, IPTV, DTH operator), there is a certain lack of clarity when defining the multiplex operators' obligations in relation to the must carry rule (PBS programs) or foreign channels.

Article 7 of Digital Broadcasting Law allows for the multiplex operator to be AVMS provider (broadcaster) too, but the obligation of accounts separation has to be met.

During the simulcast period, the broadcasters who have obtained the right to access the capacity of the first multiplex are waived from the obligation to pay any fee to the RDC as the first national network/multiplex operator for all the locations previously used for analogue broadcasting (Article 12 of the Digital Broadcasting Law).

Electronic Communications Law requires in Article 37 that any conditional access systems to services of digital television or radio services must have such technical facilities to allow the possibility for full control, by the operators of public communication network over services provided. Operators of conditional access services, providing access to digital television and radio services that broadcasters of particular programmes depend on, are obliged to offer to the broadcasters under non-discriminatory conditions, technical services enabling their subscribers to have access to services by those broadcasters by using decoders. Operators of conditional access services must keep separate accounting for the provision of conditional access services.

Article 38 of Law on Electronic Communications provides that in case a network used for distribution of signal of radio and television programme represents a dominant method of reception of such programmes in a particular area of the service, EKIP, upon a request from AEM, may assign an obligation on an operator to broadcast particular programmes or contents, as determined by AEM.

Article 39 of Law on Electronic Communications requires the operators of networks performing broadcast and distribution of radio and television programmes to undertake measures for prevention of broadcast of illegal programmes and other contents and apply measures stipulated by the media and programme content laws and regulation.

3.8.8 Public interest provisions

The Article 55 of the Electronic Media Law sets out the obligations of broadcasters in relation to programme content. A broadcaster must respect the privacy and dignity of citizens and protect integrity of minors. A broadcaster must duly publish audio and visual warning for programmes with content that can harm the physical, health, mental, moral, intellectual, emotional and social development of children and youth, and that such programmes are clearly marked during broadcasting. Such programmes may be broadcasted in time and manner when the possibility for minors to see or hear them is minimal. It is prohibited to broadcast programme contents that contain pornography or whose contents highlight and support the violence, drug addiction or other forms of criminal behaviour, as well as programmes that abuse the credulity of viewers or listeners.

3.9 Serbia

3.9.1 General

The *Strategy of the Development of Broadcasting in the Republic of Serbia by 2013*, adopted in 2005 (hereinafter: Broadcasting Development Strategy) points out that the current situation in broadcasting is somewhat chaotic since a large number of broadcasters do not comply with basic legal requirements and many operate without the required licences for frequency use.

Two legislative acts are relevant for the digital switchover:

- the *Broadcasting Law* (Zakon o radiodifuziji) of 2002, as amended, which regulates, *inter alia*, the terms and procedure for issuing licences for radio and television programmes, and
- the *Electronic Communications Law* (Zakon o elektronskim komunikacijama) of 2010, which regulates, *inter alia*, radiofrequency spectrum management, use and monitoring; media content distribution and broadcasting.

Article 104 of the Electronic Communications Law sets out the basic rules for the digital switchover, and authorises the minister of telecommunications and information society to regulate the details of the switchover in a by-law. In February 2011, the Minister issued the *By-Law on the Switchover from Analogue to Digital Television Programme Broadcasting and the Access to Multiplex in Terrestrial Digital Broadcasting* (hereinafter: the Switchover By-Law), which regulates the manner and time schedule of the switchover; the requirements and timetable for setting up the

network for digital TV programme distribution on the territory of the Republic of Serbia; multiplex structure requirements; and the scope of use of radio-frequencies necessary for successful switchover to digital television programme broadcasting.

3.9.2 The regulatory authority

Two regulatory authorities share responsibilities in the field of digital switchover:

The *Republic Broadcasting Agency* (Republička radiodifuzna Agencija, hereinafter: RRA) is authorised by the Broadcasting Law to adopt the Broadcasting Development Strategy in Serbia (with the consent of the government), to issue broadcasting licences, to provide technical, organizational and policy conditions for the production and broadcasting, to supervise the operation of broadcasters in Serbia, to prescribe rules binding on the broadcasters, and to ensure the implementation of broadcasting policy in the Republic of Serbia.

The *Republic Agency for Electronic Communications* (Republička agencija za elektronske komunikacije, hereinafter: RATEL) is authorised by the Electronic Communications Law to implement and promote the policy set within the electronic communications sector, to encourage competition on the market of electronic communications networks and services, to improve capacity and quality of services, securing the development of electronic communications market and the protection of interests of electronic communications users.

Both agencies have the status of a legal entity, functionally independent from government authorities and entrusted by the law with the exercise of public authority for the purpose of efficient implementation of the public policies in the sectors of broadcasting and electronic communications, respectively.

The law requires both agencies to cooperate in the regulation of broadcasting activities. The Broadcasting Law requires that RRA, when preparing the Broadcasting Development Strategy, must obtain and take into account the opinion of the regulatory body responsible for telecommunications. The Electronic Communications Law provides that RATEL, in determining the conditions and methods of use of radio-frequencies for media content distribution and broadcasting, must cooperate with the broadcasting authority. When a special law prescribes that the licence for the use of radio-frequencies is covered by the licence to broadcast programme, RATEL grants an individual licence upon request of the authority in charge of broadcasting.

3.9.3 The role of stakeholders

There are no specific rules on the participation of stakeholders in the preparation of the digital switchover, other than the provision of Article 104 of the Electronic Communications Act, under which the Ministry is required, in the procedure of drafting the by-law on the digital switchover, to conduct public consultations not shorter than 30 days.

Indirectly, various stakeholders may be represented in the managing boards of both agencies, since the members of both boards are to be appointed from among the ranks of reputable and highly respected experts holding academic degrees in the areas of relevance for the activities of the respective Agency.

3.9.4 Allocation and use of broadcasting spectrum resources

The management of the radio-frequency spectrum falls under the competence of RATEL. According to Article 85 of the Electronic Communications Law, the use of radio frequencies may be granted on the basis of an individual licence issuance procedure (upon request or following the completion of the public bidding procedure), on the basis of general authorization issuance procedure, or for special purposes. Individual licences are granted on the basis of a public bidding procedure in cases where this manner of granting licences is stipulated in the Allocation Plan due to limited availability of radiofrequencies within a specified radio-frequency band. Article 90 sets out the general rules of the bidding procedure. Individual licences are granted for a period of ten years at most, and may be extended under conditions related to granting new individual licences. The right of use of radio frequencies granted in the form of an individual licence can neither be renounced, nor leased nor transferred to a third party in any other way.

In determining the conditions and methods of use of radio frequencies for media content distribution and broadcasting, RATEL must cooperate with RRA. When a special law prescribes that the licence for the use of radio frequencies is covered by the licence to broadcast programme, the RATEL grants an individual licence upon request of RRA, for a period determined in the licence for broadcasting programme. Such was the case with licences for analogue programme broadcasting. The agencies must also cooperate in the preparation of Broadcasting Development Strategy, wherein, based on the analysis of different needs of citizens and community groups for information, education, cultural, sporting and other facilities, RRA determines the number and type of emitters, the desired service area and other parameters of the public tender.

3.9.5 Selection of multiplex operators

Until recently, most of the technical broadcasting and transmission infrastructure in Serbia was operated by the national broadcaster, i.e. Radio-Televizija Srbije (RTS). The Broadcasting Development Strategy points out that this position could not guarantee an equal position of all electronic media. For this reason, the Serbian government set up a public enterprise “*Emisiona tehnika i veze*” to take over Serbia's broadcast infrastructure from national broadcaster and provide TV, radio and mobile signals throughout Serbia as part of the country's digital switchover plan. The public enterprise must enable equal access to its technical facilities to all licensed broadcasters in Serbia.

Article 104 of the Electronic Communications Law imposes upon the public enterprise “*Emisiona tehnika i veze*” the task of establishing an electronic communications network for multiplexing, distributing and broadcasting digital television programme. For this purpose, the public enterprise is granted an individual licence for the use of radio frequencies by RATEL.

The Switchover By-Law provides that the switchover to digital broadcasting of television programmes will be carried out by establishing a multiplex and network for distributing digital television signals, and an appropriate user base for receiving digital signals. The data flow within the multiplex must be at least 2 Mb/s for a single television programme. The television programmes are broadcast in standard definition (SDTV).

3.9.6 Selection of content/services providers

Article 104 of the Electronic Communications Law provides that the public enterprise “*Emisiona tehnika i veze*” must give the holders of the licence for television programme broadcasting access to the multiplex it operates. The Switchover By-Law specifies in Article 5 that the first multiplex consists of television programmes of Radio-Televizija Srbije and of other holders of national or regional broadcasting licences. The second multiplex will be composed of programmes of local broadcasting licence holders.

Licences for television programme broadcasting are regulated in the Broadcasting Law, which provides that a licence issued by RRA must be obtained prior to any programme broadcasting through terrestrial, cable or satellite transmission, either digital or analogue. A programme broadcasting licence is not required for Internet webcasting. The public broadcasting service of the Republic of Serbia and of autonomous regions acquires the right to produce and broadcast programme directly on the basis of the Broadcasting Law.

The broadcasting licence, as defined in Article 39 of the Broadcasting Law, entitles the holder to broadcast a specific radio and/or television programme through terrestrial broadcasting, cable distribution systems, and satellite radio communications or in any suitable manner, for an unlimited number of users. The broadcasting licence establishes certain technical and programme standards for the production and broadcasting of radio and television programmes. An integral part of the (analogue) broadcasting licence is the licence to use a certain radio frequency, which is issued by RATEL upon request by the RRA. Programme broadcasting licences are issued, in principle, on the basis of a public competition, when free broadcasting frequencies are available.

The holder of a broadcasting licence may only be a domestic legal entity or natural person who is registered to produce and broadcast radio and television programmes and which has its seat or domicile in the Republic of Serbia. A domestic legal entity in which the founders are foreign legal entities registered in countries where the internal regulations do not allow or enable the determination of the origin of the initial capital, cannot participate in a public competition for a broadcasting licence. Foreign natural or legal person may participate in the founding capital of the holder of the broadcasting licence up to 49% of total capital.

3.9.7 Regulation of relations between broadcasters and multiplex operators

Article 101 of the Electronic Communications Law regulates the obligation of broadcasting. At request of the broadcasting authority, RATEL may designate an operator of electronic communications network for media content distribution and broadcasting, who must distribute one or more radio and/or television programmes at the national, provincial, regional or local level, when:

- 1) a significant number of end-users use the electronic communications network of that operator as the only or primary way of receiving media content, and
- 2) it is necessary in order to achieve the clearly set objectives of public interest, as established by the broadcasting authority, taking into account the principles of proportionality and transparency.

Article 102 the Electronic Communications Law provides the special obligation of access provision. RATEL may impose on the operator of electronic communications network for media content distribution and broadcasting the obligation to enable, under acceptable and non-discriminatory conditions, access to application programming interfaces and electronic programme guides to the extent necessary for the purpose of offering services to end-users.

Article 102 the Electronic Communications Law lays down rules on conditional access services. The operator of electronic communications network for media content distribution and broadcasting who offers services of conditional access to media content (conditional access service operator) must provide technical possibilities for full control of offering media content via such a system. The conditional access services operator is be obliged to offer all electronic media broadcasters, under fair, reasonable and non-discriminating terms, technical services which give their subscribers the access to media content by means of conditional access devices. The conditional access services operator may not hinder the reception of media content which are distributed and broadcast without conditional access.

3.9.8 Public interest provisions

Article 68 of the Broadcasting Law lays down certain standards concerning the content of the programmes broadcast, which the programme broadcasting licence holders must follow:

- applying international and national standards in the production and broadcasting of quality programming, both from a technical standpoint and from the standpoint of programme content;
- providing free, full and timely information to citizens;
- conveying important urgent announcements relating to the endangerment of life, health, safety or property;
- contributing to raising the general cultural and cognitive level of citizens;
- contents that can harm the physical, mental or moral development of children and youth may not be broadcast, or they must be clearly marked as such if broadcast between 24.00 and 06.00 hours;

- licence holders may not air programmes that contain pornography or the contents of which emphasize and support violence, drug abuse or other forms of criminal behaviour, as well as programmes that abuse the credulity of viewers or listeners;
- programmes must comply with the prohibition of advertising of political organizations and provide equal representation to registered political parties, coalitions and candidates during the election campaign;
- the programmes for children of preschool age must be synchronized in Serbian language or languages of national and ethnic communities.

3.10 Slovenia

3.10.1 General

On 16 February 2006, the Government of the Republic of Slovenia adopted the Strategy of the Republic of Slovenia for the switchover from analogue to digital broadcasting. The Strategy proposed the analogue broadcasting be switched-off at the end of the year 2010, this decision also having been followed by a firmer commitment in the form of a new Digital Broadcasting Act. The Strategy was revised in 2009, with the main goals and objectives remaining unchanged. The 2009 revision of the Strategy injected new impetus into the procedure of digitalisation and reaffirmed the proposed main goals: analogue switch-off to be executed by the end of 2010, 4 to 5 new multiplexes using freed spectrum to be set up by 2011, digital broadcasting for mobiles and broadband wireless access in rural areas to be enabled in 2011.

As proposed, analogue broadcasting has been switched off on December 1 2010 (except for a certain number of smaller analogue transmitters that remained active until June 2011, covering areas not yet covered by Multiplex A. At the present, two regional multiplexes (A and B) and several more local multiplexes are active, whereby Multiplex A is operated by the PSB RTV Slovenia while Multiplex B is operated by Norkring Ltd. Local multiplexes are operated by local broadcasting companies and intended mainly for broadcasting of local TV channels. Slovenian multiplexes use the MPEG-4 standard for coding the broadcasted signal.

The following legislation was/is crucial for the process of digital switchover:

- the Electronic Communications Act of 2004, as amended in 2006,
- the Mass Media Act of 2001, as amended in 2006,
- the Digital Broadcasting Act of 2007
- the Act on RTV Slovenia of 2005.

3.10.2 The regulatory authority

The *Agency for Postal Services and Electronic Communications* (Agencija za pošto in elektronske komunikacije, hereinafter: APEK) is established as an independent regulatory authority. In the field of electronic communications, APEK is authorised, *inter alia*, to:

- Manage the radio frequency spectrum of the Republic of Slovenia;
- Adopt a radio frequency allotment plan;
- Issue decisions on the assignment of radio frequencies;
- Encourage contractual arrangements for the shared use of property and capacities for digital broadcasting in compliance with the act regulating electronic communications;
- Assign radio frequencies for multiplexing;
- Conduct the public tender procedure for the providers of digital programme services and make the selection on the basis of a grounded proposal by the Broadcasting Council;
- Lay down the conditions and criteria for the selection of providers for dissemination of digital radio and television programme;
- Issue licences for performing radio or television activities;
- Reserve a part of the tendered capacity of the multiplex system for dissemination of special television and radio programming.

In the area of broadcasting, APEK manages the radiofrequency spectrum and supervises the content as to ensure compliance of broadcasting media and content with the rules set by Mass Media Act (2006) and Act on Audiovisual Media Services (2011). It issues licenses for performing radio and television activities to radio and television broadcasters, conducts public tenders for obtaining radio frequencies for analogue broadcasting and public tenders for obtaining the right to disseminate programme in digital broadcasting technique. While being responsible for implementation of the act governing audiovisual media services, APEK is competent also for monitoring of the programme output of radio station; grants statuses of special importance to radio stations and TV channels which comply with the requirements for local, regional or student service of special importance; and is in charge for proposing the national strategy on development of radio and television.

3.10.3 The role of stakeholders

Stakeholders, recognized as bearing the most important burden of the switchover, were set forth by the Strategy of the Republic of Slovenia for the switchover from analogue to digital broadcasting as:

- *Content providers* (the public service broadcaster included), were expected to move to the digital terrestrial platform and to introduce new TV programmes and services.
- *Multiplex operators* were (together with other stakeholders, equipment manufacturers and Public Service Broadcaster) entrusted with the task of reconciliation of technical requirements for Slovenia, the start of the simulcasting and the introduction of broadcasting in high definition technique.
- *APEK* as the regulatory agency for electronic communications was responsible for the allocation of frequencies to the public radio television operator. It also carried out the public tender and allocation of frequencies to the second multiplex operator; the tenders for allocation of frequencies for digital broadcasting of local television programmes; and the tenders for granting the digital programme licenses. Beside that, APEK took care of the call centre that offered assistance to the viewers in the time of switch off.

- *Ministry of the Economy* – Directorate for Electronic Communications played a key role in preparing the legislative framework (namely the new Digital Broadcasting Act and the amendments to the Electronic Communications Act).

3.10.4 Allocation and use of broadcasting spectrum resources

Article 35 of the Electronic Communications Act provides that natural or legal entities may only use specific radio frequencies on the basis of a decision of APEK granting them the right to use this frequency. The Agency issues a decision on the assignment of radio frequencies in accordance with the general act on the radio frequency allotment plan and the relevant international agreements, pursuant to a public tender.

APEK shall issue decisions on the assignment of radio frequencies for a fixed period of time not longer than 15 years, whereby a legal exception is granted for the assignment of radio frequencies intended for aeronautical and maritime mobile services. The validity of a decision on the assignment of radio frequencies may be extended on the proposal of its holder if all the prescribed conditions for the use of those radio frequencies are met. Transfer of the right to use radio frequencies to another natural or legal person is linked to a prior consent by the APEK.

3.10.5 Selection of multiplex operators

Digital Broadcasting Law defines the *transmitter network operator* as a legal entity or a natural person who carries out the operation of the electronic communications network for digital terrestrial broadcasting. In accordance with Article 4 of Digital Broadcasting Law, any legal entity or natural person who received an approval to broadcast programme through terrestrial broadcasting network in accordance with Electronic Media Law, and approval for the use of frequencies in accordance with Electronic Communications Law, acquires the status of a network operator

The *multiplex operator* is defined as a natural or legal person that manages or intends to manage a multiplex system and public communications network for digital broadcasting (Art 3 Digital Broadcasting Act). Multiplex operators are entrusted with the task of planning and setting up a network for digital broadcasting in compliance with the public tender requirements for allocation of radio frequencies for broadcasting, and with the general act adopted by APEK.

According to the Digital Broadcasting Act, multiplex operators can act as stand-alone operators - managers of a multiplex system or also as both managers of the system and content providers. In the latter case, special obligations regarding transparency are prescribed. Namely, an operator acting both as manager and content provider is obliged to perform the activities of a multiplex system operator through a legally independent company or keep separate financial accounts for activities associated with multiplex system management

Generally, radio frequencies for multiplexing are assigned by the Agency in accordance with the radio frequency allotment plan by and according to the procedure laid down by the Electronic Communications Act. The Digital Broadcasting Act provides for a legal exception as regards the tender procedures for public broadcasting. As set forth in article 15, public tender shall not be required when assigning radio frequencies for a single multiplex system with geographical coverage of the entire territory of the Republic of Slovenia when the use of such multiplex is intended primarily for public broadcasting in compliance with the act regulating public broadcasting. In addition to other required elements that comprise the application for assignment of radio frequencies set forth by the electronic communications Act, the tenderer must enclose in the tender for obtaining radio frequencies for a multiplex system a time frame and spatial plan for the setting up of a network. The decision on the assignment of radio frequencies for a multiplex system is amendable and revocable.

3.10.6 Selection of content/services providers

Primary condition - Licence for performing radio or television activities

Only a broadcaster in possession of the licence for a particular radio or television programme service (licence for performing television or radio activities for this service, hereinafter: the licence) can be granted the right to be present in a digital multiplex.

All the broadcasters, wishing to obtain the right to be present in a digital multiplex, must therefore hold the licence for the programme service they are tendering, before they submit their tender. This licence is issued by APEK to a broadcaster for radio or television programme service meeting the following conditions: registered radio or television activities and the decision of the Ministry of Culture on the entry of the radio or television programme in the register of media. The application for the licence must contain data on the type of activity (radio or television), the name of the programme service and the programme requirements that the broadcaster must fulfil during dissemination of the programme service.

Programme requirements that must be defined in the application and the conditions under which they can be changed are stipulated in a secondary act issued by APEK

Selection of content providers (Article 104 of the Mass Media Act)

Content providers can obtain the right to be present in a digital multiplex through public tenders, which are conducted by APEK. The final selection of the program services is made on the basis of a grounded proposal by the Broadcasting Council and in accordance with the Electronic Communications Act. The Agency decides on the submitted offers by issuing a decision on the selection of broadcasters and grants the selected broadcasters the right to be present in a digital multiplex.

The conditions and criteria for the selection of TV channels for digital broadcasting on the tendered area are laid down by APEK in agreement with the Broadcasting Council.

The criteria that will be taken into account in the process of selection between the interested broadcasters on a public tender are the diversity of the programmes offered in terms of genre and theme, the proportion of in-house production, the amount of production of Slovenian audio-visual works for television programme or the amount of Slovenian music for radio programme, the duration (scope) of the programme service and adequately balanced reporting in daily informative programme. Priority shall be given to the programme services that are already broadcasted via analogue broadcasting radio frequencies in the tendered area and to free-to-air (not encoded) programmes.

3.10.7 Regulation of relations between broadcasters and multiplex operators

Article 12 of the Digital Broadcasting Act provides that the multiplex system operator in a particular geographical area is obliged to ensure all content providers equal and non-discriminatory conditions for accessing the multiplex system in respect of the right to disseminate programmes using digital broadcasting technology in the relevant geographical area. As pointed out previously, an operator acting both as manager and content provider is obliged to perform the activities of a multiplex system operator through a legally independent company or keep separate financial accounts for activities associated with multiplex system management.

In addition, Article 15 of the Digital Broadcasting Act requires the multiplex operator in a particular geographical area to ensure inclusion in the multiplex system of all content providers that are entitled to disseminate their television or radio programming using digital broadcasting technology for that area to the extent of the capacity of the multiplex system prescribed for that purpose by APEK.

Electronic Communications Act requires in Article 114 that operators of conditional access services, providing access to digital television and radio services that broadcasters of particular programmes depend on, are obliged to offer to the broadcasters under non-discriminatory conditions technical services enabling their subscribers to have access to the broadcaster's services. Operators of conditional access services must keep separate accounting for the provision of conditional access services.

3.10.8 Public interest provisions

The Article 4 of the Mass Media Act sets out the goals and objectives that mass media are to promote, in order to gain public support. These are the assurance of plurality and diversification of the mass media, the protection of the Slovenian national and cultural identity, the promotion of cultural creativity in the area of the mass media, a culture of public dialogue, the consolidation of the social state based on the rule of law and the development of education and science.

The dissemination of programme that encourages national, racial, religious, sexual or any other inequality, or violence and war, or incites national, racial, religious, sexual or any other hatred and intolerance is prohibited by Article 8 of the same Act.

Broadcasters are prohibited from presenting scenes containing excessive violence or pornography that could seriously harm the mental, moral or physical development of children and other minors.

4 COMPARATIVE OVERVIEW OF THE NATIONAL LEGAL FRAMEWORKS

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
Albania	Digital Broadcasting Law of 2007 (Law No. 9742) Radio and television law of 1998 (Law No. 8410)	Public consultations and conferences; Inter-institutional and technical Task Force	National Council on Radio and Television declares available frequencies and issues licences upon applicant's request	Competition process opened by the NCRT. The public broadcaster was given the right to operate two national digital networks.	The NCRT issues programme licences to applicants who ask to broadcast their programmes through a terrestrial or satellite network platform, according to an agreement with operators of the networks.	Network operators must provide their services based on fair, reasonable and non-discriminating conditions. A network operator may be issued a licence for the broadcasting of one radio or television programme and vice-versa.	Programming must present the facts and events in a fair and unbiased manner. Free broadcasting of short public interest notices related to health, natural disasters, and public order. Subvention schemes for the digital switchover discussed in the strategy.
Austria	Audiovisual Media Services Act (AMD-G) of 2001, amended in 2010.	Stakeholders can participate in the "Digital Platform Austria" work group, whose task is to support the regulatory authority (KommAustria) in drawing up scenarios for the introduction, expansion and further development of digital broadcasting.	Licences to operate a MUX platform are allocated by KommAustria on the basis of a public tender (with the exception of pilot tests).	MUX operators are selected based on an invitation to tender and an assessment according to specific criteria ("beauty contest"). In accordance with the digitization concept and provided that transmission capacities are available, KommAustria must issue an invitation to tender regarding the planning, the setting up and the operation of terrestrial MUX platforms.	Requirements concerning the selection of channels are imposed on the MUX operator in the operating licence. Applicants for a licence for providing terrestrial television services must present agreements regarding the use of transmission capacities of a MUX operator. Existing analogue television channels must be integrated into the package of digital channels in the respective coverage area upon request	The digital channels and additional services must be broadcast under fair, equal and non-discriminatory conditions. MUX operators must invoice the costs for the technical dissemination to the providers on a <i>pro-rata</i> basis. Operators of a multiplex platform for <i>mobile terrestrial broadcasting</i> are restricted to operating a communications service, and must be separated from providing content.	Priority for the applicant, who will better ensure an offer of digital channels providing a diversity of opinions, including Austria-specific content. This goal must be secured by conditions in the multiplex licence The resources of the Austrian Digitization Fund are earmarked for promoting digital transmission technologies and digital applications based on European standards in connection with broadcasting programs.

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
Bosnia & Herzegovina	<p><i>Law on Communications of BH of 2003</i></p> <p><i>Law on the Public Radio-Television System of BH</i></p> <p><i>Telecommunications Sector Policy</i></p> <p><i>Broadcasting Sector Policy</i></p>	<p>Throughout the process of framing and implementing the project of transition to digital broadcasting in BH, the leading stakeholders have had the opportunity to express their position on focal issues of the digitalisation. They have been invited to the roundtable meetings, conferences, workshops and other activities organized by the DTT Forum and the CRA. With the aim of informing, educating and involving the interested parties within the communications sector in BH in the switch-over process to digital terrestrial broadcasting, the DTT Forum and the CRA have also issued newsletters and initiated the webpage on the DTT process in BH.</p>	<p>On 20 April 2010, the CRA issued a Decision on the terms and conditions for the utilization of Multiplex A (MUX A) by public broadcasting services for terrestrial digital television broadcasting during the transition period.²⁹ The decision establishes the terms and conditions for usage of Multiplexes A for digital terrestrial television broadcasting of the three public RTV services. The decision provides public RTV services with the right and obligation to broadcast their own television programmes via digital terrestrial signal covering the whole territory of BH.</p>	<p>Multiplex A is intended for use by the three public broadcasting services (PBSs). Accordingly, no procedure for selecting multiplex operators is provided. As until the present date the tender for the Multiplex B and C has not been issued, the criteria and the procedure for selecting the multiplex operators are being prepared at the moment.</p>	<p>Multiplex A is intended for use and broadcasting by the three public broadcasting services (PBSs). At present, the tenders for the Multiplex B and C have not been issued, the criteria and the procedure for selecting the content/service providers are being prepared.</p> <p>The CRA is authorised to award licences for broadcasting regardless of the transmission platform. The licence for broadcasting via terrestrial networks may be awarded on the basis of a public competition. In the process of harmonising its rules and regulations with the Audiovisual Media Services Directive, the CRA has devised the Rule for the Provision of Audiovisual Media Services which, inter alia, defines terms and</p>	<p>This particular issue is at present being dealt with as part of preparation of detailed action plan.</p>	<p>The protection of public interest is guaranteed under the Law on Communications which sets out the regulatory principles of broadcasting including the <i>protection of freedom of expression and diversity of opinion while respecting generally accepted standards of decency, non-discrimination, fairness, accuracy, and impartiality.</i></p> <p>As stated above, the <i>Broadcasting Sector Policy</i> lists the following tasks of the CRA:</p> <ul style="list-style-type: none"> - to protect the plurality and diversity of the media (concentration limit), and, above all, to provide a constant and balanced development of the radio sector in the country; - by granting concessions for digital broadcasting to radio and television stations, to take into account the interests of citizens as its primary task; <p>The CRA has harmonized all its rules and codes with the Audiovisual Media</p>

²⁹ Official Gazette of BH, No. 38/10 of 10 May 2010.

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
					conditions for awarding the licence for television broadcasting via terrestrial transmission to be applied after the DSO. In the transition period, the CRA shall ensure that all existing broadcasters have guaranteed access to multiplexes with at least the same coverage as in the analogue broadcasting.		Services Directive. The <i>Code on audiovisual and radio media services</i> and <i>Code on Commercial Communication</i> (in application as of 1 January 2012) lay down the basic principles on the programme contents of all audiovisual and radio media services in BiH regardless of the distribution platform. Apart from the general programme standards (regarding, e.g., impartiality and fairness, hate speech, violence, protection of consumers), codes entail special provisions for the protection of minors, as well as special provisions on specific programme topics (e.g. on privacy, religion, court trials, alternative medicine etc.).
Croatia	<p><i>Electronic Communications Act of 2008 as amended in 2011</i></p> <p><i>Electronic Media Act of 2003 as amended in 2007 and 2008, afterwards new <i>Electronic Media Act in 2009</i></i></p> <p><i>Croatian Radio-</i></p>	The stakeholders had taken part in the process of analogue to digital television broadcasting switch-over in Croatia by participating at various activities: Forum on digital television broadcasting, organized by the Croatian regulatory authority HAKOM and	The broadcasting spectrum is managed by HAKOM whereby the Agency acts in view of achieving the goal of efficient management of the radio frequency spectrum based on the principles of objectivity, transparency, proportionality and non-	The selection of network operator is carried out via the tendering procedure of granting licenses for the use of radiofrequency spectrum, while multiplex operator can provide its service upon the notification to the HAKOM. The notification is not linked with license	Generally, the selection of digital television content providers is governed by the Electronic Media Act. As provided by Article 73 et seq., the Council of the Agency for Electronic Media issues public tenders for the awarding of conces-	As provided for by the the Ordinance on the Transition from Analogue to Digital Broadcasting of Radio and Television Programmes and Access to Multiplex Positions in Digital Terrestrial Broadcasting, multiplex operator must enable radio broadcasters and television	The Electronic Media Act lays down the basic principles on the programme contents that are broadcast in the programmes of the radio and television stations in HR. Apart from the general programme standards (regarding, e.g., decency, impartiality and fairness, hate speech,

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
	<i>Television Act of 2010</i>	the Working Group for the Preparation of the Implementation and Application of the DVB Technology and Services in the Republic of Croatia, established by the Ministry of the Sea, Transport and Infrastructure.	discrimination. Use of frequencies is assigned via an individual licence via a public tender or public auction procedure where so envisaged.	granting procedure. Multiplex operator may broadcast only the radio and television programmes by the electronic media broadcaster that has been granted the right of access to multiplex positions, in accordance with provisions regulating electronic media service, i.e. the Electronic Media Act.	sions to carry out the activities of television and radio media service. Such public tender is issued for a free transmission capacity of an individual radio or television programme within the multiplex. The right to perform the activities of providing television and radio media service broadcasting is obtained on the basis of a decision on the selection of the most advantageous tenderer and the contracted concession contract with AEM and HAKOM.	broadcasters as well as operators of other access to capacities within the multiplex in accordance with the principles of objectivity, transparency, proportionality and non-discrimination	violence, nudity, pornography), the code entails special provisions for the protection of the children and minors.
Hungary	<i>LXXIV of 2007 on the rules of broadcasting and digital switchover, as amended in 2007, 2010 and 2011s</i> <i>Act I of 1996 on radio and TV broadcasting</i>	The Ministries of Informatics and Communications, and of National Cultural, National Radio and Television Board, National Communications Authority, etc.), programme providers, network operators as well as customer representatives, were involved in the designing of the Digital Switchover Strategy, by making comments to the draft.	The right to operate a digital broadcasting network can be obtained on the basis of a tender procedure. The licence includes the construction of the digital free-to-air broadcasting network or station, the right to use the radio frequencies allocated, the right to provide, ancillary digital service to subscribers or to other providers..	MUX operators are selected based on a public tender procedure. Digital Switchover Act lays down the evaluation criteria that must be included in the documentation of the call for applications for the right to operate a digital broadcasting network.	The Digital Switchover Strategy recommends that the first MUX would host all the public service channels as determined by media policy (weak model), the channel positions remaining on MUX1 as well as MUX2 and MUX3 could be used freely by the winning bidder (strong model). The winning service providers have	The operator of the digital free-to-air broadcasting network or the free-to-air broadcasting station is entitled to use only the part of the available data transmission capacity not contracted for broadcasting for the purpose of ancillary digital service, and/or electronic communication service. Rules on the right to access conditional access	The obligation of digital broadcasting network operators of giving air raid and disaster warning and related information to the general public. Digital set-top-boxes may be subsidised during the three-month period preceding the termination of the public service analogue free-to-air broadcasting in a competition-neutral manner.

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
		A consultative committee was formed, representing the stakeholders.			the opportunity to fill up the available channel capacities, alongside the channels specified by the media authorities, with channels of their own choice. The law lays down extensive must-carry provisions concerning programmes of public interest.	systems and to digital interactive television services and electronic programme guides.	
Italy	<p>Legge 6.06.2008 n. 101 - art. 8 novies</p> <p>MSE Decree 10.09.2008 (on G.U. n.238/2008)</p> <p>MSE Decree 13.11.2008 (on G.U. n.273/2008)</p> <p>AGCOM Resolution n. 181/09/CONS (7 April 2009)</p> <p>AGCOM Resolution 435/01 CONS</p> <p>Decreto legislativo 31 luglio 2005, n. 177, Testo unico dei servizi di media audiovisivi e radiofonici ((G.U. 07.09.2005 N. 208 Suppl. Ord. n. 150)</p>	<p>Providers of contents, including, in addition to current broadcasters, publishers, producers of programmes, cinematographic companies, and the video game industries;</p> <p>providers of services who may be either current broadcasters or providers already operating on other platforms and, in general, providers of information society services;</p> <p>network operators, identifiable among current broadcasters, but also operators of telecommunications or other networks;</p> <p>manufacturers of termi-</p>	Authorization by the AGCOM	Authorisation by the Ministry of Economic Development, frequencies allotted by the Authority (separate procedure).	<p>Broadcasters no longer have to take part in a tendering process. An authorisation (rather than a licence) is granted to every applicant fulfilling certain minimum requirements concerning professional and economic standards.</p> <p>However, such an authorisation does not secure the access to the digital terrestrial transmission network and the licensee must negotiate with the multiplex operator to get access and be distributed.</p>	<p>AGCOM has defined a procedure - AGCOM (Resolution n. 449/08/CONS) - according to which network operators that have more than one analogue licence must reserve 40% of the transmission capacity in their digital multiplexes for third party content providers on transparent and non-discriminatory terms. In addition this rule was set forth to increase pluralism in the DTT and to allow newcomers to broadcast new channels on DTT</p>	<p>Article 35-bis of the TU provides for a special responsibility of broadcasters as regards coverage of sports events. Broadcasters, including analog, and radio stations in broadcast commentary of sports events, especially football, are bound to contribute to the broadening of values of fair play, sportsmanship and respect among the young in view of preventing the phenomena of violence or disruption of public order.</p> <p>Article 34 of the TU prohibits broadcasting of scenes of gratuitous violence or those gruesome or pornographic</p>

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
		nals and equipment identifiable among hardware manufacturers and software developers.					nature, which can seriously impair the physical, mental or moral development of minors.
The former Yugoslav Republic of Macedonia	<p>No specific digital broadcasting legislation.</p> <p>The <i>Law on Broadcasting Activity of 2005</i>, as amended, regulates the conditions for and manner of pursuing broadcasting activity and matters of public interest in the field of broadcasting.</p> <p>The <i>Law on Electronic Communications of 2005</i>, as amended, governs the use and control over the radio frequency spectrum.</p>	<p>Broadcasting Council is obliged to draft a Strategy for Development of Broadcasting Activity in cooperation with competent institutions from the field of broadcasting, electronic communications and information society, and the views and positions of non-governmental organisations and other entities form the area of broadcasting should be taken into consideration.</p>	<p>Authorization to use a broadcasting frequency may be issued by AEK in accordance with the Plan for Allocation and Utilization of Radio Frequencies, or by way of a public tender. Prior authorization for programme broadcasting by the Broadcasting Council is required.</p> <p>Rules not adapted for digital broadcasting.</p>	<p>No specific rules exist. The Broadcasting Development Strategy envisages the selection of MUX operators via a public competition.</p>	<p>The Broadcasting Development Strategy provides that the existing licences of the broadcasters for analogue transmitting will be directly converted into licences for digital transmitting (for content providers). New competitions should be launched for the other interested subjects that want to broadcast new programme services national and regional level. The multiplex operator will conclude an adequate contract with the providers whose contents are included in the multiplex.</p>	<p>No specific rules exist. The Strategy stipulates that MUX operators may obtain the right to provide content, but must form a separate legal entity for that purpose. All content providers must be given equal and fair conditions for access to the MUX. They may participate in the MUX supervising council.</p>	<p>The Broadcasting Law contains general public interest rules concerning the content of television programmes (prohibition of programmes that encourage or invite to military aggression or incite national, racial or religious hatred and intolerance, etc.).</p>
Montenegro	<p>Law on Electronic Media of 2010</p> <p>Law on Electronic Communications of 2008, as amended</p> <p>Digital Broadcasting Law</p>	<p>The Law on Electronic Media requires AEM to publish at its web site the draft of a general act regulating rights and obligations of the AVMM service providers and invite all interested</p>	<p>On the basis of public tender, AEM awards licences (authorisations) for (1) broadcasting by using the multiplex capacity (Articles 98 to 104 of the Law on Electronic Media) and (2)</p>	<p>Other multiplex operators are selected on the basis of the public tender organised by AEM.</p> <p>Multiplex operators have to register with EKIP and obtain its approval for</p>	<p>AEM must open a tender for granting the rights to broadcast when an applicant intends to broadcast programme digital terrestrial MUX.</p>	<p>A network operator may also obtain a licence to act as multiplex operator, and <i>vice versa</i>. A network operator who is at the same time also a multiplex operator is obliged to keep separate accounting</p>	<p>A broadcaster must respect the privacy and dignity of citizens and protect integrity of minors. A broadcaster must duly publish audio and visual warning for programmes with content that can harm the physical,</p>

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
	of 2011	<p>subjects to submit their complaints, suggestions and proposals, in period that shall not be shorter than 15 days.</p> <p>The law requires EKIP to acquire the opinions of interested parties concerning the conditions of use of frequencies, market value of frequencies and on limiting number of approvals for radiofrequencies.</p>	<p>multiplex operators (Articles 116 and 118 of the Law on Electronic Media).</p> <p>Within 15 days after their issuing, AEM is obliged to notify EKIP about any issued licences (authorisations). On the basis of this notification, EKIP is obliged to issue the approval for multiplex operator for the use of radio frequencies allocated for broadcasting.</p>	<p>the use of radio frequencies.</p> <p>As an exception, the Digital Broadcasting Law provides that on the effective date of this Act, the Broadcasting Centre of Montenegro will acquire the status of the first multiplex operator and of the first network operator, without following tender procedure.</p>	<p>The right of access for the first multiplex network will be implemented on the basis of open competition.</p> <p>As an exception, the Radio and Television of Montenegro (being the national PBS) has the right to access the first multiplex network without a public tender procedure.</p>	<p>for the management of the multiplex and for the network management. If multiplex operator is also an AVMS provider (broadcaster) it has to keep separate accounting for providing these services.</p>	<p>health, mental, moral, intellectual, emotional and social development of children and youth, and that such programmes are clearly marked during broadcasting.</p>
Serbia	<p><i>Broadcasting Law (Zakon o radiodifuziji) of 2002, as amended</i></p> <p><i>Electronic Communications Law (Zakon o elektronskim komunikacijama) of 2010</i></p> <p><i>By-Law on the Switch-over from Analogue to Digital Television Programme Broadcasting and the Access to Multiplex in Terrestrial Digital Broadcasting</i></p>	<p>No specific rules on the participation of stakeholders in the preparation of the digital switch-over, other than the provision of Article 104 of the Electronic Communications Act, under which the Ministry is required, in the procedure of drafting the by-law on the digital switch-over, to conduct public consultations not shorter than 30 days.</p>	<p>Individual licences are granted on the basis of a public bidding procedure in cases where this manner of granting licences is stipulated in the Allocation Plan due to limited availability of radiofrequencies.</p> <p>In determining the conditions and methods of use of radio frequencies for media content distribution and broadcasting, RATEL must cooperate with RRA.</p>	<p>The Electronic Communications Law imposes upon the public enterprise "Emisiona tehnika i veze" the task of establishing an electronic communications network for multiplexing, distributing and broadcasting digital television programme. For this purpose, the public enterprise is granted an individual licence for the use of radio frequencies by RATEL.</p>	<p>The public enterprise "Emisiona tehnika i veze" must give the holders of the licence for television programme broadcasting access to the multiplex it operates.</p> <p>The first multiplex must consist of television programmes of Radio-Televizija Srbije and of other holders of national or regional broadcasting licences. The second multiplex will be composed of programmes of local broadcasting licence holders.</p>	<p>At request of the broadcasting authority, RATEL may designate an operator of electronic communications network for media content distribution and broadcasting, who must distribute one or more radio and/or television programmes at the national, provincial, regional or local level.</p> <p>The law provides the special obligation of access provision and lays down rules on conditional access services.</p>	<p>the Broadcasting Law lays down certain standards concerning the content of the programmes broadcast, which the programme broadcasting licence holders must follow, e.g., conveying important urgent announcements relating to the endangerment of life, health, safety or property; the prohibition daytime broadcasting of contents that can harm the physical, mental or moral development of children and youth, etc.</p>

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
Slovenia	<p>Electronic Communications Act of 2004, as amended in 2006</p> <p>Mass Media Act of 2001, as amended in 2006</p> <p>Digital Broadcasting Act of 2007</p> <p>Act on RTV Slovenia of 2005</p>	<p>- Broadcasters or terrestrial television programmes, (the public broadcasting service included) were expected to move to digital terrestrial platform and to introduce new TV programmes and services</p> <p>- Multiplex operators were (together with other stakeholders as equipment manufacturers and Public Service Broadcaster) entrusted with the task of reconciliation of technical requirements for Slovenia</p> <p>- APEK as the regulatory agency for electronic communications, whose role has been extremely important as it was responsible for the allocation of frequencies to network operators, took also part in active promotion of DSO</p> <p>- Ministry of the Economy – Directorate for Electronic Communications played a key role in preparing the necessary legislative framework (namely the new Digital Broadcasting Act</p>	<p>APEK issues a decision on the assignment of radio frequencies for broadcasting in accordance with the general act on the radio frequency allotment plan and relevant international agreements, pursuant to a prior public tender.</p> <p>The Digital Broadcasting Act allows frequency licenses for a single multiplex aimed at public broadcaster to be issued via administrative procedure only, that is without a public tender.</p>	<p>Beauty contest, save for the exception of assigning radio frequencies for a single multiplex system with geographical coverage of the entire territory of the Republic of Slovenia when the use of such multiplex is intended primarily for public broadcasting.</p>	<p>Only a broadcaster in possession of the licence for a particular radio or television programme service can be granted the right to be present in a digital multiplex.</p> <p>All the broadcasters, wishing to obtain the right to be present in a digital multiplex, must therefore hold the licence for the programme service they are tendering, before they submit their tender. This licence is issued by APEK.</p>	<p>Multiplex system operator in a particular geographical area is obliged to ensure all content providers equal and non-discriminatory conditions for accessing the multiplex system in respect of the right to disseminate programmes using digital broadcasting technology in the relevant geographical area. If acting both as manager and content provider, the operator is obliged to perform the activities of a multiplex system operator through a legally independent company or keep separate financial accounts for activities associated with multiplex system management.</p>	<p>Assurance of plurality and diversification of the mass media, the protection of the Slovenian national and cultural identity, the promotion of cultural creativity in the area of the mass media, a culture of public dialogue, the consolidation of the social state based on the rule of law and the development of education and science are set forth as objectives in Mass Media Act</p> <p>The dissemination of programme that encourages national, racial, religious, sexual or any other inequality, or violence and war, or incites national, racial, religious, sexual or any other hatred and intolerance and scenes containing excessive violence or pornography that could seriously harm the mental, moral or physical development of minors is prohibited by the same Act.</p>

	Relevant legislation	Stakeholders' participation	Frequency use rights	Selection of network and MUX operators	Selection of content providers	Relations MUX operators v. content providers	Public interest provisions
		and amendments to the Electronic Communications Act).					

5 FINDINGS AND RECOMMENDATIONS

5.1 General findings

The conditions concerning the transition from analogue to digital terrestrial television broadcasting are very diverse and vary considerably from country to country across the SEE region. Activities related to DSO are currently taking place, at least to a certain extent, in all of the countries included in this study, regardless of the existence of an appropriate legal framework. In some countries (e.g. Austria, Croatia, Slovenia), the terrestrial switchover process has already been completed and analogue terrestrial broadcasting discontinued, or is about to be switched off (e.g. Italy, Hungary). In some other countries, the organised transition to digital broadcasting has only been initiated (e.g. Albania, Bosnia and Herzegovina, Montenegro, Serbia, and Macedonia). Some broadcasters started simulcasting their programme in digital format even before the official start of the switchover phase in the respective countries (in some cases, this happened without the required authorisations for the use of broadcasting frequencies). Nevertheless, all the countries from the project area, that have not yet done so, plan to complete the national terrestrial switchover process during the next few years.

The characteristics of national legal frameworks regulating the digital switchover also vary significantly in the region. Some countries have adopted specific digital broadcasting laws (e.g. Slovenia, Hungary, Montenegro); others have just amended the existing legislation on electronic communications and mass media (e.g. Italy, Croatia, BiH) or have not adopted any specific digital broadcasting legislation at all (e.g. Macedonia). The legislation may be very comprehensive and detailed (such as Hungarian), or may lay down just the general rules for the switchover and leave the details of their implementation to the regulatory authority (e.g. the Albanian law).

Due to the differences mentioned, it is not possible to present in this study any general findings that would apply in the same way to all countries included, or to formulate such recommendations that would be equally relevant for all countries in the region. Most generally, it is advisable, of course that the experience (both positive and negative) of the early-adopter countries in the implementation of digital switchover should be taken into account. Since all the SEE countries concerned are either EU Member States or EU aspirants, the European regulatory framework for electronic communications and for audio-visual media should be followed in the planning and implementation of the digital switchover.

5.2 Planning the digital switchover

Digitalisation brings significant changes in broadcasting. It is imperative, therefore, that the process is well planned, and that the planning is conducted in a transparent manner with the coop-

eration of all relevant players in the digital switchover process. The first step in the process is usually the adoption by the government or parliament of a digitalisation strategy, which would set out the legal changes needed to allow and encourage digitalisation. The need for adequate preparation of digitalisation has been pointed out by the European Commission and by international organizations, such as the Council of Europe and the EBU. Recommendation Rec (2003)9 of Council of Europe's Committee of Ministers provides that States should draw up a well-defined strategy that would ensure a carefully thought-out transition from analogue to digital broadcasting. Such a strategy *“should seek to promote co-operation between operators, complementarities between platforms, the interoperability of decoders, the availability of a wide variety of content, including free-to-air radio and television services, and the widest exploitation of the unique opportunities which digital technology can offer following the necessary reallocation of frequencies.”*

All countries encompassed in this study have followed the above recommendations and the example of EU Member States by preparing and publishing national strategies for the switchover from analogue to digital broadcasting. This is certainly an instance of a good practice, since it ensures that the transition is better planned well ahead and that the process is transparent and predictable, which contributes to legal certainty of all players in the digitalisation process – both companies and consumers.

However, the analysis of switchover strategies shows that such documents often turn out to be rather abstract and somewhat remote from specific problems that may be foreseen in the concrete country. For example, they may elaborate on the advantages of the digital over analogue broadcasting, discuss various technical aspects of digital broadcasting in general, present the overview of European Union legislation and policy initiatives in the field of digital switchover, including the experience of individual Member States, etc. What such strategies typically lack is the operative content adapted to the specific economic and technical conditions in the broadcasting market of a specific country, e.g. concrete tasks of specific national authorities in the digital switchover process and time schedules for the completion of such tasks in order to complete the switchover by a certain date.

A part of the problem may also stem from the fact that digital switchover strategies are typically prepared by independent regulatory authorities, while the adoption and especially the implementation of the strategies (through adopting the necessary legislative and administrative measures) is the task of the relevant government ministries. The latter may prioritise goals that are politically desirable, rather than what is technically and financially feasible. In Republic of Macedonia, for instance, the government has rejected the strategy prepared by the regulatory agency.

In order to avoid the possibility of day-to-day political meddling into the digital switchover process, the adopted strategy should lead to new legislation introduced to and adopted by parliament, rather than administrative decisions or presidential decrees. In Serbia, for example, the switchover is mainly regulated in a by-law adopted by the competent minister upon the proposal by the regulatory authority, which does not guarantee the same level of legal certainty to the players in the switchover process as rules laid down in legislation adopted by parliament.

It is also often left up to the government to provide additional funding to the public service broadcasters, needed for transition of their services to digital broadcasting. The lack of such funding may delay the switchover, since PSBs are usually accorded an important role in the digital switchover, as private broadcasters (especially in smaller countries) are reluctant to invest in a technology that is not effectively supported by the state.

Most strategies of the countries from the project area do include a target date for analogue switch-off, however, the setting of such dates often seems to be motivated by political purposes rather than based on realistic estimates. The unrealistically set target dates for the digital switchover usually cannot be reached. There also seems to be little coordination of the switchover plans between the countries in the region, which is not optimal, since all the benefits of digital broadcasting can only be fully achieved once all countries in the region have completed the analogue switch-off.

The date of switch-off should be set with caution, so that no part of the population would be excluded from digital terrestrial television. It is important not to switch off analogue until there is a near universal penetration of digital broadcasting. A switch-off date should be revised if a danger of such exclusion arises. Recently, Bosnia and Herzegovina, and Serbia have delayed the date for the transition to digital broadcasting and Hungary has postponed the date of the analogue switch-off. It should be noted, that such delays are not specific only for the countries in SEE region, since many Central and Western European countries have also faced delays of the analogue switch-off, although several years earlier.

Missing the deadline initially set in the switchover strategy is not critical by itself. It is important, however, that the planning of the transition to digital broadcasting takes into account the technical and economic changes that may require postponing of the switch-off. Rather than simply ignoring the deadlines set in the switchover strategy, the strategies should be amended accordingly and adopted to the new circumstances. For this reason, switch-off dates should be flexible to take account of changes in the expected progress, and a mechanism for monitoring the progress of the digital environment is also recommended.

In order to be more concrete and adapted to the specifics of the respective country, the digital broadcasting strategies (including the relevant legislation and executive regulation, if necessary) should be updated in regular intervals to take into account the challenges encountered in the digitisation process thus far, based on the input and experience of all stakeholders. For example, Austria, which first adopted its digitisation concept in 2003, upgraded the document accordingly in 2007 and in 2011. Similarly, Slovenia's switchover strategy of 2006 was updated in 2009.

5.3 The role of stakeholders

The legislative framework and strategy for digital broadcasting should be drafted under the constant scrutiny of the public. The Council of Europe's Recommendation (2003)⁹ states that digital broadcasting strategies should be drawn up *"in consultation with the various industries involved*

and the public". All concerned parties, including private broadcasters, as well as the public broadcaster and the broadcast regulator, should be involved in the digitalisation plan, as it is important that it is not seen as a partisan political document. Prior to its adoption, the drafts must be open to public, civil and professional criticism. Even if it is not so likely that the general public will contribute substantially in a rather demanding debate, both in terms of technical specifics and societal aspects of this complex process, representatives of the industry and other particularly interested parties, as NGO-s and academia, might present many valuable insights concerning the content of broadcasting, technical specifications, infrastructure matters, affordability of equipment etc.

In all the SEE countries included in this study, various stakeholders in the digital switchover had the possibility to present their views and comment on the draft switchover strategy. However, public participation in the planning of the digital switchover should not remain a one-time event. Consultation with the stakeholders is not sufficient if it occurs only in the phase of preparation of the digital switchover strategy. Typically, at such time most stakeholders have not yet had enough experience with digital broadcasting to foresee all issues that may be relevant to them. Therefore, it is advisable, that permanent mechanisms for the participation of stakeholders in the planning and the supervision of the digital switchover should be put in place. A special body may be formed, bringing together the representatives of public authorities, regulatory authorities, broadcasters multiplex and network operators, in order to oversee the execution of the digital switchover process and assist in making further policy decisions. Such a body can also have an important role in spreading information and publicly discussing the issues of digital switchover relevant to the consumers. This body should work very closely with the independent regulator. The "Digital Platform Austria" appears as a good example of such a special participatory work group for digital switchover.

5.4 Allocation and use of broadcasting spectrum resources

Even if specific legislation regulating digital broadcasting does not exist, the right to use specific frequencies for broadcasting digital signal may be granted under the general legislation on electronic communications and spectrum management. Nevertheless, such approach should be avoided. Whereas in analogue television, available frequencies were each allocated to an individual broadcaster, in digital terrestrial television broadcasting, multiple channels and additional services may be bundled by a single multiplex operator and transmitted using a shared frequency. A single broadcaster typically does not produce a number of channels sufficient to fill the entire multiplex capacity, especially in SDTV, therefore multiplex operators will include in the multiplex stream channels produced by different broadcasters. The allocation of frequency rights to network operators should be subject to specific rules, separate from the traditional rules for the allocation of frequencies for analogue broadcasting. In Europe, different approaches have been adopted for the allocation of digital capacity (the spectrum). In most cases the capacity is allocated to one or more network operators, to multiplex operators or directly to channels. All SEE countries included in this study have followed the model of allocate frequency rights to network and/or multiplex operators, which are often, but not necessarily, the same entity, and thus acting as the manager of the network facilities and the administrator of the multiplex capacity at the same time.

In several instances, the existing broadcasters in some SEE countries (e.g. in Serbia, Macedonia and Albania) started broadcasting their programme in digital format without any required authorisations or frequency rights at all. Such problem is specifically reported in Albania and Serbia. Thus, a specific issue that the digital broadcasting legislation in these countries should address is the manner of legalising the operation of such broadcasting networks (e.g. by setting out specific conditions under which frequency rights and multiplex licences may be granted to existing operators).

A somewhat different problem concerning frequency use may be detected in Italy, where licences for radio frequency use seem to be issued by the competent authorities beyond the internationally coordinated frequency plans contained in the relevant international agreements, such as Geneva 2006 agreement. This results in a situation in which every frequency or channel is in operation regardless of whether Italy has the right to use it or not, consequently causing interference to the Geneva 2006 channels allocated to the neighbouring countries. DVB-T is no exception. This problem might seriously affect the digital switchover and overall DTT roll-out in the Adriatic region with the first negative consequences already occurring in Slovenia and Croatia (causing harmful interference to both analogue and digital broadcasting). If not addressed timely and efficiently, this problem might seriously jeopardise not only the digital switchover process but also the future of the DTT as an important platform for free-to-air and FTA access to diverse and pluralistic audiovisual media services and especially TV programming. Furthermore, it might negatively affect the efficient release and use of digital dividend for bridging the digital divide in the region.

5.5 Selection of network and multiplex operators

The role of network and multiplex operators differs significantly from the role of traditional analogue broadcasters, since network and multiplex operators provide the service on which several broadcasters depend for transmitting their programme to the audience. Therefore, specific legislation should regulate the selection and role of multiplex operators, separating it clearly from the role of content providers. The European Platform of Regulatory Authorities (EPRA) points out how relevant the regulation of access to the new technical capacity is, and stresses that the role of national regulatory authorities remains crucial in this respect.

Most SEE countries accorded the main role in selection of network and multiplex operators to national regulatory authorities, which are responsible to determine the number of multiplexes and to manage public tenders for the selection of operators. Typically, however, in some countries special rules apply for public service broadcasters, who obtained the right to operate a multiplex *ex lege*, without a public tender. Such an exception is reasonable, due to the special public interest role of such institutions, and as a means of speeding up the switchover process. However, this solution should not be extended to the operation of further multiplexes, especially when they are intended mainly for broadcasting of commercial services.

In allocating technical capacity, “beauty contest procedures” are widely adopted as opposed to auctions, which are used more commonly when allocating spectrum for telecom use. Under a

beauty contest, or comparative selection, applicants set out their cases for being awarded licences on the basis of the criteria set out in the conditions for a licensing bid. A beauty contest allows the allocation of licences based on detailed plans submitted by applicants. The essential feature of, an auction, however, is that licences are awarded to those that bid the highest price. In most of the SEE countries the policy documents foresee that also in the future, network/multiplex licences should be awarded on the basis of a public tender. In Italy, however, the decision to allocate frequencies for 5 new DTT multiplexes using a "beauty contest" method has become controversial, since the critics believe that the government would have been able to generate significantly higher licence fees had the multiplexes been allocated through an auction process.

A lack of market-based approach is noticeable in the selection of network/multiplex operators in countries, such as Serbia, that have not provided general procedures for granting the right to operate a multiplex, but simply gave the task of setting up and operating a multiplex to a newly established public enterprise, which operates the existing technical broadcasting and transmission infrastructure. While such approach may be a pragmatic measure, justified by the need to speed up the transition to digital broadcasting, it should be replaced in the long term by an open tender procedure, through which private entities may compete for the right to operate a multiplex.

A noticeable weakness of several laws regulating the procedure for the selection of network and multiplex operators is that the rules are rather abstract and leave too much discretion to the regulatory authority in deciding the selection criteria. Since the main criteria for the selection of multiplex operators at the tender procedure reflect the basic policy choices, they should be determined by the digital switchover strategy and stipulated in the law to ensure that the allocation and assignment of radio frequencies are based on objective, transparent, non-discriminatory and proportionate criteria. Laying down the basic criteria in legislation also ensures that the main political choices are decided by the parliament and thus help avert subsequent political interference in activities of the regulatory authority in pursuing its policies concerning the digital switchover.

5.6 Selection of content/service providers

One of the key principles in digital broadcasting is that licences for the transmission facility (the platform) and for the content should be kept separate.

Programming licences for digital broadcasting are generally granted under similar procedure to that which applied to analogue broadcasting. Council of Europe adopted Recommendation Rec (2000)23 in which it recommended that the basic conditions and criteria governing the granting and renewal of broadcasting licenses should be clearly defined in the law. The regulations governing the broadcasting licensing procedure should be clear and precise and should be applied in an open, transparent and impartial manner.

If licensed broadcasters cannot get access to transmission facilities they cannot reach the audience. Especially in the first phases of digital switchover, no real market exists for transmission facilities, and broadcasters cannot choose between different multiplex operators. Thus, it is im-

portant that national regulators have a certain role in selection of content providers that will use a specific multiplex or in imposing the requirements regarding fair access to network/multiplex in the licenses of operators, in order to protect pluralism and diversity and prevent concentration.

Two regulatory approaches emerge concerning the selection of channels for multiplexes: in a first group of countries (Slovenia, Croatia, Montenegro), the channels' line-up is the result of a selection made by the regulator through public procedures that are very similar to those used in the analogue environment, and are typically based on a beauty contest model. In a second group of countries (Italy, Austria, Hungary, Albania), the capacity is managed as a whole by a multiplex/network operator who may select the channels as part of the line-up. In this case, some limitations or constraints (must carry, capacity reserved to special categories of broadcasters and the like) are imposed on the multiplex operator in the operating licence in order to preserve public interest objectives such as diversity and pluralism. The conditions laid down either in legislation or in operating licence limit the freedom of the network operator to compose the multiplex and thus blur the distinction between the two models of selection mentioned.

In any case, the legislation typically guarantees the public broadcaster and other existing analogue broadcasting licence holders the right to be included among the channels offered on the first multiplexes in operation. This may be achieved by must-carry rules laid down in the law (e.g. in Hungary) or additionally imposed in the multiplex licence (e.g. in Austria). Such provisions are justified since they permit a faster transition towards analogue switch-off and thus the freeing of additional broadcasting frequencies. In Italy, specific measures are adopted to guarantee access to the platform for "independent channels", i.e. channels not owned by the broadcasters that will operate through DTT capacity. Such measures are aimed at avoiding bottlenecks created by the vertical integration of the DTT network operators that have their own channels.

A specific problem concerning the selection of channels that appear in a certain multiplex has arisen in Slovenia. The digital switchover strategy foresees that MUX A, operated by the public broadcaster RTV Slovenia, is to be reserved primarily for the non-profit channels of the public broadcaster. MUX B, on the other hand, whose operator, Norkring, was selected at a public tender procedure, was intended to provide transmission services to all the channels offered by commercial broadcasters. In the transitional period, however, all programme services of the existing broadcasters, the public and commercial ones, were transmitted via MUX A, which was the first to start operating and to cover the majority of population. The problem stems from the fact that even after the MUX B started operating, the commercial broadcasters chose to keep transmitting their channels through MUX A, due to the more beneficial pricing offered and better coverage. Norkring believes that this is a case of unfair competition by the public broadcaster. While Norkring's pricing is bound by strict licence conditions, RTV Slovenia is only required to keep separate accounting for the operation of the multiplex, and to charge a cost-based price. Due to Norkring's complaints, the competent ministry proposed in 2011 an amendment to the Digital Broadcasting Act, which would prevent RTV Slovenia from transmitting commercial programmes through the multiplex it operates. Such regulation would be in line with Article 5 of Authorisation Directive, which allows an exception to the requirement of open procedures for granting broadcasting frequency rights only where this is necessary to achieve a general interest objective as

defined by Member States in conformity with Community law. The proposed amendment was not yet discussed by the government, and its adoption is postponed due to early parliamentary elections taking place in December 2011.

5.7 Regulation of relations between broadcasters and multiplex operators

Digitalisation leads to initial risks of concentration, since usually only few transmission facilities exist, due to their cost and complexity. It should be therefore prevented that digitalisation would cause or cement the dominance of the transmission facility owner or multiplex operator. Rules ensuring access to them are crucial in order to preserve content diversity and pluralism, as well as other cultural and business related objectives.

The EU Access Directive stresses that all requests for access made in good faith should be met on a commercial basis. The parties can determine conditions, but when there are significant differences in negotiating power, and when some companies rely on the infrastructure of others, there must be a regulatory framework and an independent regulator to ensure that the market works and different companies can compete even when the number of transmission facilities is limited. However, ensuring equitable access to the infrastructure for digital broadcasting should not be done by direct setting of prices and other conditions for use of the network, since this would interfere excessively into the free market and the usual benefits of a free market such as competitive prices and higher quality would be lost. Prices and conditions should be set by the market and the regulator should step in only if the market fails.

For example, multiplex operators may be required by regulation to offer fair, transparent and non-discriminatory conditions. Network providers, as well as platform operators, may be required to publish a price list for the technical services offered to the content providers (and also scrambling of the signal, EPG, and so on). When the network or platform operator is also a broadcaster, it could be required to keep separate accounting for its different activities.

Most SEE countries included in this study have adopted in their legislation rules on access to transmission facilities, modelled on the EU Access Directive. The general requirement that multiplex operators broadcast all digital channels and additional services under fair, equal and non-discriminatory conditions is usually contained in legislation. It is recommended that more specific obligations of multiplex operators in relation to content providers should be detailed in conditions attached to the operating licence. The regulatory authority should be able to act to resolve disputes between multiplex operators and content providers. For example, in Slovenia, the regulatory agency has carried out the process of price controls with the operator of the first multiplex, and required from it to eliminate certain irregularities in the calculation of prices for digital broadcasting that had not been in line with the requirements of the operating licence.

In Serbia, the broadcast network was spun off from the public service broadcaster to form an independent public company tasked only with operating the broadcast network infrastructure. In conditions where this company is the only multiplex operator, this may be considered a good practice, since it removes the potential conflict of interests in the treatment of RTV Serbia's channels and channels by commercial broadcasters.

5.8 Content obligations

It is obvious that in the switchover period, which provides access to a wide variety of content, the governments and national regulators should be particularly vigilant to ensure respect for the protection of minors and human dignity and the non-incitement to violence and hatred. All this should not mean, however, interference in editorial freedom. In some countries, the content obligations are contained in the general mass media legislation, in other cases there are specific content-related provisions in the digital broadcasting laws.

The Convention on Transfrontier Television of the Council of Europe and Audiovisual Media Services Directive enumerate certain important general interest objectives related to audiovisual content. These include obligations for member states to take measures to ensure that:

- Audiovisual media services do not contain any incitement to hatred based on race, sex, religion or nationality;
- The linear audiovisual media services do not contain any content which might seriously impair the physical, mental or moral development of minors;
- The availability on-demand audiovisual media services which might seriously impair minors is restricted and technically protected, in order to be available to adults only;
- For the purpose of short news reports, any broadcaster has access on a fair, reasonable and non-discriminatory basis to events of interest to the public which are transmitted on an exclusive basis by a broadcaster under their jurisdiction;
- The broadcasters do not broadcast on an exclusive basis events of major importance for society in such a way as to deprive a substantial proportion of the public of the possibility of following such events;
- The audiovisual commercial communications (advertising, sponsorship, product placement, teleshopping) are readily recognisable; do not use subliminal techniques; do not use surreptitious techniques, respect human dignity; do not include/promote discrimination (e.g. based on sex, nationality, religion); protect the minors; do not encourage behaviour harmful to health, safety or the environment; do not promote tobacco or prescription medication;
- The audiovisual media services promote the production and access to the European audiovisual works.

Most SEE countries have included in their legislation provisions imposing the above content obligations, although not necessarily in the laws governing the switchover.

Another typical content focus can be noticed in the country specific requirements, according to which a priority in the selection of channels should be given to those providing content related

with the respective country or its national culture and language (e.g. in Austria). The choice of digital broadcasting content is also influenced by must-carry obligations concerning public broadcaster's programmes or other programmes of general interest. Recommendation (2003)⁹ of the Committee of Ministers of the Council of suggests that "must-carry" obligations imposed by member states should be reasonable, that is they should be proportionate and transparent in the light of clearly defined general interest objectives, and could, where appropriate, entail a provision for proportionate remuneration. Such "must-carry" obligations may include the transmission of services specifically designed to enable appropriate access by disabled users.

5.9 Public interest provisions

Beside public policy relating to the protection of pluralism and diversity of broadcasting content, already discussed above, there are also some other aspects of public interest that should be taken into account during the transition from analogue to digital broadcasting. Even if the legislation in most SEE countries does not regulate in detail funding or co-financing models for the elimination of obstacles for a successful switchover, the switchover strategies usually acknowledge that digitalisation presents a financial burden both for broadcasters and for viewers.

In relation to the affordability of the digital receivers, the readiness of viewers to purchase appropriate receivers may have to be stimulated by covering a part of the price of such equipment. However with decrease of prices and increased availability of the digital equipment, general subsidies are becoming less relevant. Special attention should be paid to the most vulnerable groups (pensioners, low-income households, persons with disabilities). From the audience viewpoint, it is essential to have clear, transparent and fair rules on help schemes available. It is likely that criteria used in other contexts for providing social benefits may not be appropriate. When providing such a support, strict regulations and general rules should be applied in order to avoid irregularities and to avoid the breach of rules on the prohibition of state aids.

An example of regulation for public financial support is the Italian law that granted an income tax deduction to consumers who would purchase television sets with integrated tuner and digital decoders during 2007. The income tax reduction was equal to 20 per cent of the price paid for the equipment, up to a maximum deduction of €200 per decoder, with a total budget measure of €40 million. The latest amendments to the Hungarian digital broadcasting legislation provide that the financial resources of the digital switchover process (licensing fees) might be used for the public communication in connection with the digital switchover process. Another example is Croatian case, where the Government Decision determined the criteria and standards for subsidising natural persons who pay radio and television fee, when purchasing receivers of digital television signals (technology neutral). The right to subsidy was exercised on the basis of a non-transferrable voucher entitled to the subsidy in the amount of HRK 75.00 (€10).

To speed up the switchover and to safeguard media pluralism the public investments in digital broadcasting and transmitting equipment are also possible, provided that distortion of market is avoided.