Guide to the Digital Switchover
Guide to the Digital Switchover

Vienna 2010
Dear Readers,

The guide you hold in your hands tackles the digital switchover, a technological process that enables us to gain access to a previously unimaginable amount of information via television and radio. This development also makes it possible to impart information to others more easily than ever before. However, to what extent such technology is used to benefit people, how it can assist in creating a pluralistic society and to what extent it can break down the information gap that still exists in many areas of the OSCE region very much depends on the media laws and policies governing the switch.

If carried out properly, the digital switchover can safeguard human rights, including freedom of the media and the right to access information. If all parties involved in the process co-operate, including broadcasters, producers, resellers and consumer associations, the result is a media landscape that protects plurality of opinion and freedom of expression. Governments must believe that providing their citizens with pluralistic information can only strengthen their democracies. Well-informed people make well-informed decisions, which are the indispensable foundation that democracies can build upon.

We already live in the digital age, a time in which we can create truly democratic cultures with participation by all members of society. This guide aims to offer practical help to those OSCE participating States where the switchover is the challenge of the coming years. The current version is an update of the guide published in 2009 by my distinguished predecessor, Miklós Haraszti. The work was commissioned from two of the most renowned international experts in the field, Dr. Katrin Nyman-Metcalf and Dr. Andrei Richter.
The guide is a comprehensive examination of issues to be considered by all stakeholders involved in the switchover process, including the successes and pitfalls encountered.

As we all know, the digital revolution has many facets, the switchover from terrestrial to digital broadcasting being just one of them. The impact of the technologies of digitalization on society is universal. New media have affected society in an even more dramatic manner than electronic media did just a few decades ago. With new-media technologies, we can access and consume whatever media we want, wherever, whenever and however.

Do these new technologies change our basic views about media freedom? Perhaps they can. Media freedom and freedom of speech in the digital age means giving everyone, not just the few people who own or control traditional tools of mass communication, the chance to use these new technologies to participate in, to interact, to build and to talk about what they want to talk about, whether it be politics, public issues or popular culture. In other words, digitalization can give all of us the option to be part of the dialogue.

Why is this dialogue important? The answer is simple: because it allows people to express themselves, to influence and possibly even to change each other’s minds. When people make new things out of old things, when they produce, when they create, they exercise their freedom through their participation in society.

Governments have an indispensable role in this process. Easing access to, and dissemination of, information leads to continuous learning; it also opens ways to closer societal bonding and a closer relationship between those who produce information and those who consume it. Traditional mass media, especially in transition countries, are going through a process of transformation. We are all aware that the transition to digital broadcasting, if carried out in the spirit of media freedom, can lead to greater diversity.
of media services, including interactive data transmission, high-definition television, more targeted special-interest and pay-per-view programming and electronic commerce.

More frequencies available through digital broadcasting mean that spectrum scarcity can no longer function as a primary rationale for close government regulation of electronic media. With new technologies radically reshaping the communications and media landscape, traditional regulatory assumptions have been called into question, and in many cases old rules have become counterproductive. In an age of rapid technological change and convergence, government control on media is increasingly unjust, indefensible and, ultimately, unsustainable.

Our goal, and the aim of this guide is to find ways to strengthen media freedom in the digital age. To date, the level of media freedom and media pluralism throughout the OSCE region shows significant differences. Although in general more information is available and it is more easily accessible than before, new legislation and restrictive measures in many countries hinder the opportunities that new media, and the digital switchover, can offer.

This Guide is an organic product – to be updated and revised as circumstances warrant. If at any time you have questions, suggestions or remarks, please let our Office know.

Wishing you productive reading,

Dunja Mijatovic
Vienna, November 2010
Prepared by

Dr. Katrin Nyman-Metcalf, Professor and Chair of Law and Technology, Tallinn University of Technology, expert on communication law (katrinmetcalf@hotmail.com)

and

Dr. Andrei Richter, Professor of the Moscow State University School of Journalism, expert on media and telecommunications law (richter.andrei@gmail.com)

Commissioned by

The Office of the OSCE Representative on Freedom of the Media

Updated and published in November 2010
# Contents

I. **Executive Summary** ................................................................. 9

II. **Do’s and Don’ts in the Switch-Over Process** ............................ 17

III. **Recommendations** ................................................................. 21

IV. **Terminology** ........................................................................ 27

V. **The Guide to Digitalization** ..................................................... 33

1. **Introduction** ........................................................................... 34
   1.1 Why digitalize? ................................................................. 34
   1.2 The international legal situation ........................................ 35
   1.3 The current situation in Europe .......................................... 38
   1.4 The content and aim of this Guide ....................................... 39

2. **Infrastructure issues: How to avoid monopolization** ............... 40
   2.1 Competition law and digitalization .................................... 40
   2.2 Access to transmission facilities ........................................ 43
   2.3 Council of Europe Recommendations on media pluralism ....... 46
   2.4 Concentrations ................................................................. 48
   2.5 Selection of broadcasters ................................................... 50

3. **Programming in the digital era:**
   **How to avoid monopolization** ................................................. 54
   3.1 Pluralism of content .......................................................... 54
   3.2 Content obligations ............................................................ 59
4. Public Service Broadcasting in the digital era ......................... 61

5. The strategy: The planning process........................................ 67
   5.1 The Plan ........................................................................ 67
   5.2 Public participation in planning for digitalization ............ 70
   5.3 Assistance to public .................................................... 72
   5.4. Legislation .................................................................. 74

6. The Audience: social and economic issues ......................... 78
   6.1 Social and economic issues and access to broadcasting........ 78
   6.2 Pluralism and not just a multitude of channels .............. 80
   6.3 Subsidising receiving equipment ................................. 80
   6.4 Universal Service Obligation ...................................... 84
   6.5 Interoperability ........................................................... 85
   6.6 Consumer protection.................................................... 88

7. The Broadcasters: Economic and technical issues ............ 89
   7.1 Investments for digitalization ...................................... 89
   7.2. The transmission platform ......................................... 94
   7.3 Income of broadcasters .............................................. 95
   7.4 State aid ..................................................................... 96

8. The Regulator: Licensing issues ......................................... 100
   8.1 The licensing process ................................................ 100
   8.2 Examples of digital licensing ...................................... 102
   8.3 The role of the regulatory authority ............................. 106
   8.4 Moratoriums................................................................ 109
   8.5 State broadcasting ..................................................... 110
   8.6 The switch-off of analogue broadcasting ..................... 112

VI. Addendum. Relevant International Acts .............................. 115
I. Executive Summary
How digitalization can benefit free media

Digital broadcasting is a different way of sending signals, of packaging the signal that carries transmitted broadcast content, and of receiving and decoding the signals. Digital television can carry many more channels than analogue and will free up spectrum that can be used for a range of services.

In this way digitalization creates opportunities for the free flow of information and a pluralist media environment. From a freedom of the media point of view, the new technology would allow audiences to seek and receive more information and ideas via the broadcast media. It could also provide more opportunities for broadcasters to impart information to the public.

To achieve this, the process of digital switchover should be based on media law and policy that safeguards and strengthens freedom of expression, freedom of the media and access to information. Unless certain rules and principles are taken into account by national governments and regulators, there is a strong risk of negative effects of the digital television switchover, including further monopolization of the media market by the state or other players, less media pluralism, new barriers for cultural and linguistic diversity and for the free international flow of information.

The process of digitalization of broadcasting is ongoing throughout the world. The International Telecommunications Union (ITU) has set 2015 as the year for switch-off of analogue television broadcasting in the region in which Europe is included.
States bear responsibility for all digitalization-related media freedom issues

Currently, digitalization of television is lead by governments that adopt digitalization plans and set a timetable for the switchover. By switching off the existing analogue broadcasting system, the governments and national regulators boost the digital television signal and provide people with a greater choice of affordable digital options.

Social and economic issues

Important social and economic questions are connected with digital broadcasting. It is essential to take a citizen perspective, to deal with people rather than territories. States should ensure universal access to mass media, including minority and disadvantaged groups. Vulnerable groups may need special support, such as assistance to purchase equipment for digital broadcasting. Rules on assistance must be suitable for the specific country. It is important to inform people about the benefits of digitalization. In a digitalization plan, consumer protection issues must also be considered.

Stringent conditions should prevent companies that are awarded the right to transmit digital services from passing expenses on to the public, by means of imposing price controls on the new services.

Media pluralism and digitalization

Media pluralism is negatively influenced by the dominance of state broadcasters, when broadcasters are run as propaganda tools, and when they engage in unfair competition with private companies. Such an abuse of freedom of the media seems to get a boost in the switchover process.

The European Court of Human Rights has stressed that the licensing process must provide sufficient guarantees against arbitrariness, including
proper reasoning by the licensing authority of its decisions when denying a broadcasting licence.

The licensed operators should be obliged, also by strict regulations, to offer a range of digital channels that best serves a diversity of opinion.

Digitalization that will lead to more choice initially leads to risks of concentration, which risks need to be examined under competition laws. In some situations, concentration may be accepted if combined with guarantees for a plurality of views. Regulatory oversight is needed.

The fact that new receiving equipment (set-top boxes) will be needed for the audience, as well as new transmitting equipment for the broadcasters, may lead to less choice for a transitional period. The method chosen to introduce the set-top boxes should – in a transparent manner – reduce and shorten the temporary loss of choice.

A moratorium on issuing licenses for broadcasting is a necessary step in the digital switchover process as it allows the regulatory authorities to make plans and efficiently use the spectrum. However, there are instances when a moratorium is used for political purposes, to keep independent broadcasters from the air. This should be prevented.

There is concern that with the digital switchover, small local private broadcasters that operate over-the-air could not afford entry into market without outside help. Different regulatory measures have been adopted in Europe to guarantee access to the digital networks by existing over-the-air broadcasters and content providers. Network providers may be required 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 content providers.
Monopolization can be a problem at the programme provider level, but especially for service provision. Access provisions should ensure that the existence of only one network operator does not cause problems. All requests made in good faith for access should be met on a commercial basis.

The future of Public Service Broadcasting in the digital era

Public service broadcasting (PSB) remains one of the basic tools of democracies. By offering objective news reporting, a range of pluralistic opinions, and high-quality programs, PSB is indispensable in ensuring freedom and transparency of elections, in fighting hate speech and protecting minority cultures of a country. In the digital era, the importance of advertisement-free, public-service broadcasting only increases. Indeed, digital technologies provide for the possibility of expanding the spectrum of PSB programmes available. Of interest here is the digital expansion of PSB seen in the United Kingdom.

The common model in Europe is one of development of several multiplexes, including a free-to-air package available free to everyone with appropriate receiving equipment. The free-to-air package includes a variety of channels meeting different broadcast needs, and the package always “must carry” PSB channels. Pluralism, and not just a multitude of channels, is of importance here. Access to information and reduction of inequalities do not come automatically through a multitude of channels – it is important that there is real diversity. Therefore, providing PSB, with its mandatory internal pluralism, must be an integral part of the digitization reform.

Licensing

One of the key principles in digital broadcasting is that the licences for the transmission facility (the platform) and the programming content need to be
I. EXECUTIVE SUMMARY

kept separate. The manner of selecting broadcasters to be part of the digital multiplexes, especially the composition of the free-to-air (social) package, must remain transparent and open to public criticism.

If there are already monopoly and dominance problems, these tend to increase by digitalization – the ones who already “have” will have more. This means that such issues must be addressed in the process. Ownership and related disclosure rules designed to limit media concentration become even more relevant.

The European Platform of Regulatory Authorities (EPRA) points out how relevant the regulation of access to the new technical capacity is. Here, the role of national broadcasting authorities (NRAs) remains crucial. In allocating technical capacity, “beauty contest procedures” should be widely adopted as opposed to auctions which are more commonly used when allocating spectrum for telecom use. In any case, the right to transmit digital terrestrial television (DTT) channels through an aerial must be awarded under strict conditions.

Universal coverage and free access to digital audiovisual services of all citizens is yet another principle to be respected when licensing for the digital switchover process. The potential of digital television is to bring the information society into every home. Therefore, it is important to avoid exclusion, and in particular exclusion from free-to-air services and transnational television programmes.

Equipment and infrastructure

As for the equipment, instead of state support or in addition to it, the industry is encouraged to provide different types of devices at low cost. The early digitalizing countries have promoted competition and thus achieved inexpensive set-top boxes as well as more elaborate types of equipment.
However, ensuring interoperability between the different sets of equipments is a continuous task. Interoperability is promoted by the European Union, as this makes the European market more attractive for manufacturers. Standards are intended to be industry-led. Digital platform operators should strive to implement open application programme interface (API) which conforms to European standards and allows migration between systems.

The costs for building an infrastructure and who should pay for it pose challenges. The risk of broadcaster bankruptcy would also negatively affect pluralism and diversity. Partnership among governments, broadcasters, network operators and the industry is a possible way of financing. The model will depend on the structure of the broadcasting sector in the country in question.

Initial costs are high, and the increased attractiveness of digital broadcasting comes only after a time and at a cost. Private broadcasters are expected to carry some of the costs, which is reasonable, but it must be recognised that some incentives may be needed. The fact that advertising revenues in Europe generally have dropped and the market is rather unattractive is a problem.

Existing infrastructure should be used as much as possible. Sharing infrastructure is one way to keep down costs. This also has benefits for the environment.

Digitalization should not be allowed to cement or cause the dominance of the transmission facility owner or operator. Rules ensuring access to them are crucial. Their privatisation and structural separation are important, and digitalization should not be used to delay such developments.
Planning for digitalization

Planning for digitalization is important and should start as early as possible. Some basic questions must be answered first, in order to know if the country is ready to digitalize. There should be a transparent order in the broadcasting sector, plurality and diversity of broadcasting and a functioning independent regulator.

The first step is usually the adoption (by government or parliament) of a digitalization plan. Broadcasters and the regulator must be involved in preparing the plan, which would set out the legal changes needed to allow and encourage digitalization. All temporary moratoria or transitional concentrations of resources that may be necessary must figure in the plan. Prior to its adoption, the drafts must be open to public, civil and professional criticism. There may be a need for a special body to deal with digitalization.

Analogue television should not be switched off until there is a near universal penetration of digital signal. The switchover process should be market driven, but with co-ordination. While the MPEG 2 technology was most frequently used in the early days of digitalization in those countries that went through the process first, now mainly MPEG 4 is used. There are advantages of going immediately to MPEG 4; however, this is only feasible if it is decided early in the process.
II. Do’s and Don’ts for Policy-Makers and the Public in the Switch-Over Process
II. DO’S AND DON’TS FOR POLICY-MAKERS AND THE PUBLIC IN THE SWITCH-OVER PROCESS

• Do base the process of digital switchover on media laws and policies that would safeguard human rights, including freedom of expression, freedom of the media and access to information.

• Do develop a legislative framework and strategy for digital broadcasting drafted under the constant scrutiny of the public. The adopted strategy should lead to new legislation introduced to and adopted by parliament, rather than administrative decisions or presidential decrees.

• Do provide a digitalization plan, made by a responsible body (ministry, regulator) involving all concerned parties, including broadcasters and service providers.

• Do involve national broadcasting authorities (or national regulators) in the digital switchover planning and implementation.

• Do avoid exclusion of the consumers, and in particular exclusion from free-to-air services and transnational television programmes.

• Do set the date of analogue switch-off with caution, so that no part of the population would be excluded from digital terrestrial television.

• Do consider consumer protection issues, such as the possibility to migrate between service operators and the use of interoperable sets of equipment.

• Do provide public information campaigns on digitalization.

• Do require transmission facilities owners to provide universal service.

• Do introduce a moratorium on issuing licenses for broadcasting as it allows the regulatory authorities to make plans and efficiently use the spectrum. Don’t use a moratorium for political purposes to keep independent broadcasters off the air.

• Do guarantee access to the digital networks by existing over-the-air broadcasters. The national Public Service Broadcaster (PSB) shall be guaranteed a place.

• Do use digitalization for expanding the spectrum of PSB programmes available. Expansion of PSB should have clear public service value.
II. DO’S AND DON’TS FOR POLICY-MAKERS AND THE PUBLIC IN THE SWITCH-OVER PROCESS

• Do keep licences for transmission facilities (the platform) and for programming content separate. Don’t allow licensing to become a biased and non-transparent process during digitalization.
• Do ensure that the procedure for selecting the composition of the free-to-air (social) package remains transparent and open to public criticism.
• Do consider partnerships among governments, broadcasters, network operators and the industry as a possible way of financing digitalization.
• Do encourage people to start planning for the switchover and do not to leave it until the last moment.
• Do reassure people that analogue televisions will become obsolete and that the costs of conversion to digital television are reasonable.
• Do focus on the public and clearly communicate to viewers the rationale both for the switchover and for the time for implementation.
• Do involve all the main system players, broadcasters, producers, resellers, consumer associations. Cooperation is essential to information success.

• Don’t believe that more digital channels equals pluralism of opinion and freedom of expression.
• Don’t ignore the need to provide special support to the vulnerable groups, such as assisting them in obtaining equipment for digital broadcasting.
• Don’t allow the existence of only one network operator to cause problems for the freedom of competition between broadcasters and other content providers.
• Don’t design any state aid so as to give undue preference to one commercial operator over others. Governments should refrain from facilitating the transition to digital only to the state-run broadcasters where they still exist.
• Don’t ignore technological neutrality with respect to the application platforms; be flexible.
• Don’t encourage unnecessary disposal of TV equipment.
• Don’t panic, calm and balance transition: digitalization is challenge. Do it!
Digitalization will not solve chronic problems in the broadcasting sector such as government interference, monopolies, structural problems, a weak regulator or public service broadcaster. Such problems must be solved before digitalization, and parallel to planning for digitalization.
III. Recommendations
Media freedom and pluralism

- In the switchover process, governments and national regulators should take steps to increase pluralism of content and prevent concentration of property in broadcasting.

Social and economic issues

- The interests of the public, as well as the interests and constraints of all categories of broadcasters, particularly non-commercial, regional and local broadcasters, should be taken into account in the switchover process.
- 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. The development of technical means for parental control must not reduce the responsibilities of broadcasters and providers.
- Vulnerable groups should be supported so that they can get access to necessary receiving equipment. Decisions whether some groups get subsidised equipment, on what grounds and how, must be made according to the situation in each country.

Public service broadcasting

- The new technologies should serve the governments’ general goals of promoting both digital and public broadcasting. Such a possibility, though, should not represent unfair competition to private broadcasters and prevent the development of an independent television sector. Expansion of PSB should be considered to be distinctive and to have clear public service value.
III. RECOMMENDATIONS

- When selecting programming packages to go on the platforms, diversity and plurality is essential. The national Public Service Broadcaster shall be guaranteed a place and must-carry rules shall apply.
- As suggested by Recommendation (2003)9 of the Committee of Ministers of the Council of Europe, “must-carry” obligations imposed by member states should be reasonable; 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.

Legislative reforms, licensing

- The process of digital switchover should be based on media laws and policies that would keep safeguards essential for the preservation and strengthening of human rights, including freedom of expression, freedom of the media and access to information.
- States should develop a legislative framework and strategy for digital broadcasting. Such a strategy should seek to promote co-operation between operators, complementary platforms, the interoperability of decoders and the availability of a wider variety of content, including existing free-to-air television services.
- The strategy should be drafted under the constant scrutiny of the public in order to guarantee the pluralism of broadcasting services and public access to an enlarged variety of quality programmes. The adopted strategy should lead to new legislation introduced to and adopted by the parliament, rather than governmental decisions or presidential decrees.
- There should be a digitalization plan, made by a responsible body (ministry, regulator) involving all concerned parties, including broadcasters and service providers.
- There should be a public rule-making process and public information campaigns.
III. RECOMMENDATIONS

• Special attention should be given to an unbiased and transparent licensing process.
• The licences for programmes and that for the technical transmission shall be separate, both issued by an independent regulator.
• Any state aid shall be carefully designed so as not to give undue preference to one commercial operator over others. Liberalization and privatization in the media and communications fields should go in parallel with preparations for digitalization.

Equipment and infrastructure

• National broadcasting authorities (or national regulators) should be increasingly involved in the digital switchover, because their technical, economic and legal competence is crucial in designing the most suitable regulatory framework.
• The independence of regulatory and licensing bodies is vital for the execution of their functions and it should be achieved and maintained in law and practice.
• Governments should refrain from facilitating the transition to digital only to the state-run broadcasters wherever they still exist.
• Providers of transmission facilities are recommended to have a universal service obligation that should be monitored by an independent regulator.
• The regulator shall monitor rules on access in order to allow different companies to compete, even if the number of transmission facilities is limited.
• Equipment should be interoperable. The standards shall be market-made but with regulatory oversight.
Planning for digitalization

- Digitalization will not solve chronic problems in the broadcasting sector such as government interference, monopolies, structural problems or a weak regulator or public service broadcaster. Such problems must be solved before digitalization and parallel to planning for digitalization.
- The date of switch-off should be set with caution, so that no part of the population would be excluded from digital terrestrial television. A switch-off date, though in practice it makes broadcasters set a faster pace to the switchover process, should be revised if a danger of such exclusion arises. For this reason, monitoring the digital environment is also recommended.
IV. Terminology

1 In drafting the Terminology section wide use was made of the Digital Television Glossary published by the European Audiovisual Observatory in 2004, see: http://www.obs.coe.int/oea_publ/iris_special/2004_01.html as well as of the Digital TV Transition: Glossary by the U.S. Federal Communication Commission, see: http://www.dtv.gov/glossary.html
Analogous broadcasting – encodes television picture and sound information and transmits it as an analogue signal (one in which the message conveyed by the broadcast signal is a function of deliberate variations in the amplitude and/or frequency of the signal). All systems preceding digital television (e.g. NTSC) are analogue television systems. Analogue technology has been in use for the past 50 years to transmit conventional television signals to consumers.

Application programme interface (API) – is a key component of a set-top box (see below). It constitutes the link to the set-top box’s operating software, on which the application programmes are based. Because the API is the software platform for all subsequent applications, a proprietary API can be used to turn the set-top box into a means of restricting access. If the technical data from the API are kept secret, software developers will not be able to provide any suitable applications, and these will remain incompatible.

Complementarity – an expression for different technologies or other systems contributing to a whole and being able to act together.

Decoders – because a considerable part of digital programmes – and not just pay television – are encrypted, the capacity of the receiving equipment to decrypt these signals is an important aspect. This is implemented through the use of decoders.

Digital dividend - the radio spectrum freed as a result of the switchover from analogue to digital broadcasting.

Digitalization – the first step in the process of digital television broadcasting carried out by an analogue-to-digital converter, which encodes the original analogue signal. In wider sense, digitalization means the process of turning the analogue broadcasting system into a system of digital television and radio.
Electronic programme guide (EPG) – an application programme that is based on the application programme interface (API) (see above) in the set-top box (see below). For the EPG to work, it has to be interoperable with the API. EPG contains real-time information, which is more comprehensive than that of the basic navigator, on the current and future programmes of the broadcasters it covers. Using the EPG, viewers can request background and additional information about programmes. It may also contain video sequences and pictures.

Free-to-air – broadcasting that can be received by anyone with the appropriate equipment, without special payment.

High definition television (HDTV) – provides pictures with resolution of over 700 lines vertically by over 1000 pixels (see below) horizontally. The picture comes in the 16:9 format. In Europe there has been hardly any progress towards HDTV, because the existing television system is considered satisfactory.

Interoperability – the ability of devices or machines to work together with each other and to communicate in one language, in particular the capability of software and hardware produced by various manufacturers to work together.

Migration – the APIs (see above) that are currently available and the corresponding set-top boxes (see below) should be made to enable their compatibility with newer products, so that older set-top boxes do not become obsolete.

Multiplex (MUX) – merger of several data streams to form one unified stream, which can be separated again later.
IV. TERMINOLOGY

Must-carry - the legal obligation of cable companies to carry the analogue or digital signals of over-the-air local and public broadcasters.

Pixel – actually two words combined, “Picture” and “Element.” Pixels are tiny samples of video information, the “little squares” that “add up” to an entire picture. A pixel is the smallest area of a television picture capable of being sampled and transmitted through a system, and displayed on a monitor.

Platform of digital TV – all the technical and technological components that are necessary to bring programmes from the producer to the customer.

Receiving equipment - any equipment needed to receive broadcasting of any kind.

Regulatory authority (or Regulator) - broadcasting regulation usually encompasses the power to license broadcasters, to monitor whether broadcasters are fulfilling their legal obligations, and to impose sanctions if they fail to carry out those obligations. To these traditional functions those of organizing and co-ordinating the broadcasting landscape can be added.

Service providers – companies that offer the public a communication service (networks, telecommunication systems, internet, and so on). Service providers are normally not responsible for any content delivered on the communications service but just for the delivery of a signal.

Set-top box - the device required for the reception of digital television. Outwardly, this appears to be a device like the already known satellite television receiver, which is connected to the television. The set-top box got its name from its customary position on top of the television set – it is also referred to as the integrated receiver decoder (IRD). Its main task is to decompress and decode the data stream, so that a normal audiovisual signal can be sent to the television.
**Spectrum** – a range of electromagnetic radio frequencies used in the transmission of radio, data, and video.

**Standards** – introducing standards means coming to agreements or making commitments as to what the specification of the new technology might be. In Europe, most of these standards have been devised and established by the DVB (Digital Video Broadcasting) Group, an industry-led consortium of over 300 broadcasters, manufacturers, network operators, software developers, regulatory bodies and others in over 35 countries.

**Transfrontier television** – a term used primarily in European law (EU and Council of Europe) to denote television programmes that are transmitted across national borders.

**Transmission facility** – the structures, equipment and system used to transmit communications signals. The transmission can use different technologies and the facility encompasses whatever equipment and related facilities (masts, buildings, and so on) that are needed.

**Transmitting equipment** – a narrower concept than transmission facility, including the actual equipment like antennas, cables or similar.

**Universal coverage** – a signal (broadcasting or other communication) reaching very nearly all the population in a designated area.

**Universal service obligation** – a legal term for an obligation of the state to ensure that everyone has the possibility to have access to and use certain services that are regarded as essential for everyone, regardless of their economic situation, geographical location or other factors. Universal service obligation normally includes utilities like energy, water, as well as communications like telecommunications and some transport services. The universal service obligation is often carried out by private companies.
as a licence condition, but it is the responsibility of the state to ensure that services included in this obligation are indeed provided to all.

**Video-on-demand** - means that requested programmes are not broadcast immediately, but are broadcast by means of deferred transmissions: viewers can not watch programmes or films as soon as they are ordered, but they are granted access to their choice at a specified time.
V. The Guide to Digitalization
Chapter 1. Introduction

This Guide deals with the digitalization of broadcasting, especially television broadcasting, and explains the different issues that need to be taken into account when planning for digitalization. The Guide is aimed at anyone involved in the process, whether legislator, regulator implementing the rules, broadcaster, media professional or a citizen that forms part of the broadcasting audience.

Digitalization is an ongoing process that will affect all countries in due course – this is a consequence of decisions by the global body responsible for communications, the International Telecommunications Union (ITU).

There are many benefits with digital broadcasting, such as the possibility to fit many more channels into the radio frequency spectrum and to provide a higher quality of broadcasting. Digitalization is thus positive for media freedom. However, it is important to plan the process properly, as there are a number of challenges that need to be met in order to avoid negative consequences of this major change to the broadcasting landscape.

This Guide helps explain how to plan the digitalization process and how to ensure that it positively affects media freedom as well as the choice and quality available to the audience.

1.1 Why digitalize?

Digitalization means a different way of sending signals, of packaging the content of broadcasting while transmitting it and a different way (and equipment) for receiving and decoding the signal. Digital television can carry many more channels than analogue and will free up spectrum that can be used for a range of services, such as television services in standard or high
definition, wireless broadband, local television, wireless home hubs and others.

In this way it brings new opportunities for a free and pluralistic mass media. From a media freedom point of view, the new technology can allow audiences to seek and receive more information and ideas. It could also provide more opportunities for broadcasters to impart information to the public.

But to achieve this, the process of digital switchover should be based on media law and policy that would keep safeguards essential for preservation and strengthening of human rights, including freedom of expression, freedom of the media and access to information. Unless certain rules and principles are taken into account by national governments and regulators, there is a strong risk of negative effects of the digital television switchover, such as further monopolization of the media market by the state or other players, less media pluralism, new barriers for cultural and linguistic diversity and for international flow of information.

The process of digitalization is ongoing throughout the world. The ITU has set 2015 as the year for switch-off of analogue television broadcasting in the region in which Europe and parts of Central Asia are included. The need to digitalize thus follows from international legal obligations (as practically all states in the world are members of the ITU) but how to do it is up to each country within some given parameters.

1.2 The international legal situation

This Guide is based on a basic recognition of the freedom of the media that comes from numerous acts of the Organization for Security and Co-operation in Europe (OSCE). As it is well-known, the OSCE considers
that independent media are “essential to a free and open society and accountable systems of government and are of particular importance in safeguarding human rights and fundamental freedoms”. On a number of occasions, OSCE participating States reaffirmed that “freedom of expression is a fundamental human right and a basic component of a democratic society. In this respect, independent and pluralistic media are essential to a free and open society and accountable systems of government”. They also took, as the guiding principle of the OSCE, that they would safeguard this right.

Guarantees of the right to freedom of expression are enshrined in the Universal Declaration on Human Rights (UDHR), a United Nations General Assembly Resolution, as well as the International Covenant on Civil and Political Rights (ICCPR), a legally binding treaty for all OSCE member states. Freedom of expression is also guaranteed by the European Convention on Human Rights (ECHR) that was signed by most of the OSCE member states. International bodies and courts have made it very clear that freedom of expression and information is among the most important human rights. There is no doubt that freedom of expression is interconnected with freedom of the media. The European Court of Human Rights has held:

*Freedom of the press affords the public one of the best means of discovering and forming an opinion of the ideas and attitudes of their political leaders. In particular, it gives politicians the opportunity to reflect and comment on the preoccupations of public opinion; it thus enables*  

---


everyone to participate in the free political debate which is at the very core of the concept of a democratic society.⁴

While it is possible in a democratic society to regulate and put limits on the freedom of the media, such restrictions – according to OSCE commitments – always should be prescribed by law and be consistent with international standards⁵.

*Freedom of the media includes guarantees to public, state, private and community television, the most influential mass medium. There are international standards in the area of television enumerated in a number of acts. They set possible restrictions of broadcasting freedom, as well as certain standards in licensing and other forms of regulation of broadcasting.*

The Office of the Representative on Freedom of the Media of the OSCE is not the first international body to address issues of digitalization. The European Union (EU), Council of Europe, the European Broadcasting Union (EBU), the ITU and others are providing guidance and assistance in this complex process.⁶ This Guide is based on international standards as set by the United Nations and the above-mentioned international organizations relevant to the participating States of the OSCE. The Council of Europe that has a large membership (47 Member States in 2010) has issued a number of non-binding recommendations on media issues, including digitalization. The EU has the competence to issue legal acts that are binding for its Member

---

States. Even though the EU only has a membership of 27, its legal acts are often used as models by other states or are included as standards in agreements that the EU makes with other states.

1.3 The current situation in Europe

Experiments with digital broadcasting have been ongoing in Europe for some time. The first digital television broadcasts here took place in the United Kingdom in 1998 and in Spain in 2000. Both these countries experimented with a mixture of free-to-air and pay channels. The broadcasting companies there subsidized digital receivers hoping to attract enough customers to make it profitable. The lack of consumer interest, competition from existing pay-satellite television or other services meant that both ventures failed.

The current approach in Europe is different from the initial experiments, as it is lead by governments that adopt digitalization plans and set a timetable for the switchover, thus obliging private as well as public broadcasters and the audience to undertake the change. Switchover involves ensuring that people have adapted or upgraded their television sets and home recording equipment to receive the digital signal. The first such transfer was in the city of Berlin in Germany in 2002. The first country to digitalize was Finland in 2006 (completed totally in 2007). EU member states have made a commitment to finalize the switchover by 2012 even if some (such as Greece) may apply for an extension of some years. By 2010 the process has been completely implemented in Germany, Denmark, Finland, Luxembourg, the Netherlands and Sweden. In 2010 the switchover will be completed in Austria, Estonia, Latvia, Malta, Spain and Slovenia.

By switching off the existing analogue broadcasting system the governments and national regulators boost the digital signal and provide the population with a greater choice of affordable options.
Although there is no doubt that the OSCE participating States are free to regulate the transfer, their governments and regulators remain obliged under international covenants to promote, respect, and protect freedom of expression and freedom of the media.

1.4 The content and aim of this Guide

This Guide highlights what legal provisions (changes to existing laws, new laws or other legal instruments) and what regulatory interventions are needed to allow and to encourage digitalization and how to manage it. The Guide does not deal with the technical details related to digitalization or with copyright aspects of digitalization.

The Guide analyses some of the practical examples of the switchover and provides appropriate recommendations, both good and bad practices.

The Guide mainly deals with television, although many general issues relate to both television and radio. Digital Audio Broadcasting (DAB) was developed in Europe in the 1980s and was intended to replace analogue FM/AM for national and local broadcasting. Full-time broadcasts have been on the air since the mid-1990s. Digital radio has some problems of its own – analogue radio receivers are often very inexpensive, people have many of them, and there is very little interest in more expensive digital ones. Analogue radio already offers a wide range of choices. The freeing of spectrum through digital radio is also more problematic and less important than through digital television.
Chapter 2. Infrastructure issues: How to avoid monopolization

Because of the different relationship between content providers and transmission facilities in the digital broadcasting landscape, with expensive and complex transmission facilities that can act as a bottleneck, it is important to make sure that a few broadcasters cannot monopolize the broadcasting market. In legislation and regulation a lot of attention must be given to how to ensure plurality and diversity.

This Chapter explains what the legislator and the regulator need to do to avoid monopolization and ensure there is competition among broadcasters, as well as plurality and diversity of programming.

2.1 Competition law and digitalization

In market economies with free competition, legislation is needed to safeguard competition against attempts to distort it, either by collusion between companies, or by companies that have the power to distort competition by themselves. Such legislation is called competition law and its implementation is normally ensured by an independent competition authority. The way in which competition law applies and what exemptions there may be to it vary depending on the type of business concerned and on the structure of the market, both on the supply and demand side.

In addition to such differences, there are special rules for sectors that, for objective reasons, must be treated in a special way. The reasons for different treatment are usually found in two situations: a natural monopoly based on the use of special infrastructure (a network) or the special nature of the goods or services that used to be provided by the state. Energy, water and
communications services are some examples. In these sectors, the main role of competition law is to ensure that competition can exist, and this essential service would not be available without special rules. The essential facility in competition law terminology can be a network or other infrastructure, but it can also refer to the need for a special permission to conduct an activity, for example a licence.

The role of authorities is to ensure that competition is maintained as much as possible. In most market economies with liberalized utilities, the task of ensuring competition is shared by the competition regulator and special sector regulators. One of the main tasks of the sector-specific regulator is to ensure that the conditions for use of the infrastructure are just and equitable. For example, fixed telephone-service providers must be allowed to use the network of cables on terms that allow them to compete, regardless of network ownership. If the network owner is also one of the service providers, it is especially important to ensure the owner does not stifle competition. This is why it is quite common to prohibit infrastructure owners from providing a service. This has led to the dismantlement of former utilities monopolies in many countries. In the digital broadcasting context this kind of consideration would mean that owners of transmission platforms cannot also be content providers.

Digitalization leads to initial risks of concentration, which needs to be examined under competition law. This is because, due to their cost and complexity, usually only few transmission facilities exist. When the technology is new, it may be more difficult for broadcast content providers to organise transmission facilities. Anti-concentration laws, especially in the broadcasting field, have many aims: to preserve diversity, as well as cultural and business objectives.
**France** is an example of a country where the aim of preserving national, French, culture is much emphasized.

When it comes to providing programmes and views, pluralism of opinion guarantees plurality and diversity. While it is important to combat excessive concentration, sometimes a certain level of concentration should be allowed to ensure that viable companies exist. This must be combined with guarantees for a plurality of views. Competition law, as a rule, works under the premise that the freedom of enterprises should only be limited if there are overriding reason for the public good to do so, for example the protection of pluralism.

In many countries two separate systems and regulators look at concentration issues in the broadcasting area: the systems for concentrations and competition issues, and the systems for broadcasting.

The number of bodies is not decisive. In **Germany** for example, there is one body with internal plurality, meaning that within one body different sections deal with different matters and operate separately from one another even if part of the same structure, something not known in other countries.

In the digital era it may be necessary to be more flexible on possible numeric restrictions on media concentration, with set percentage rules of media legislation dropped in favour of more flexible, case-by-case rules, as is common in competition law.\(^7\)

---

In France, the Conseil Supérieur de l’Audiovisuel (French audiovisual regulatory authority, CSA) and the competition authority are both competent. The competition authority will ask CSA when a case involves an audiovisual company and CSA must give an opinion within a month. Even in cases where CSA has no such formal role, it can inform the competition authority. The bodies are not bound by the other’s opinions, as they examine different aspects. One may even allow what the other prohibits. However, they need to consult and the decision of one may be a significant factor in the decision of the other. How this works in practice is not easy to know, as the competition authority did not have competence for audiovisual companies until August 2008. This was changed in light of digitalization, with the convergence of technologies and competition aspects outside the broadcast content field playing a greater role.¹

### 2.2 Access to transmission facilities

Monopolization can pose problems at the programme provider level, but even more so at the service provider level. Having more than one network service provider is more desirable from a competitive viewpoint. However, this may be difficult to achieve, especially in small countries, and it may not be suitable for other reasons as well, such as excessive infrastructure installations. The access provisions should ensure that having only one network operator does not cause problems. At the same time, if competition can be encouraged, this should be done.

One key element of a digitalization strategy should be to promote cooperation among operators and ensure interoperability. There should be legal obligations that allow others’ access to the infrastructure.
The EU Access Directive\textsuperscript{8} 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. 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. The EU rules provide an example also for non-Member States.

Providing access means ensuring that companies controlling access to end-users, meaning controlling the wires or other installations that go into houses, to the receiving equipment used to see or hear broadcasting or to use other communications facilities, may be obliged by the regulatory authorities to provide access through interconnection to their networks. The EU Access Directive mentions digital radio and television broadcasting specifically.\textsuperscript{9} These provisions are aimed at service providers that have control over a facility that is essential for the provision of a service. In digital broadcasting this will be the platform operators who control the transmission facilities.

Given the complexity and cost of digital transmission, it is likely that there will be dominant companies, and the regulator will have an important role in ensuring that access rules are followed. Access rules in communications regulation should be maintained and improved for the digital environment so that they extend to new gateways.\textsuperscript{10}

\textsuperscript{9} Article 5.1(b) and Article 6 as well as Annex 1 Part II of the Access Directive 2002/19/EC.
\textsuperscript{10} See a discussion in “EBU Contribution to the European Commission call for input on the forthcoming review of the EU regulatory framework for electronic communication and services”, 30.1.2006 DAJ/ACB/mtp/jew.
In the telecommunications area there are precedents and experiences on how to ensure access to networks. The basic rule is that companies shall try to reach an agreement. Only if this does not work should the regulator step in. The situation for digital broadcasting is similar to that of telecommunications in that the infrastructure needed for transmission is expensive, and it would not make commercial, logistical or environmental sense for each service provider to have its own infrastructure. The regulator (competition regulator or sector-specific regulator) must ensure equitable access to the infrastructure for digital broadcasting.

It may be tempting for the regulator or the state to directly set prices and conditions to use the network as a shortcut to achieving a desirable market situation. However, this would be excessive interference 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.

Initially, when digital broadcasting is new, much responsibility falls on regulators, since there are no existing market conditions to uphold. Close cooperation between the different players in the sector is needed. There is no reason to halt ongoing privatizations of transmitter networks, but the new private bodies must understand that the prices they charge or the conditions they impose must be reasonable. If broadcasters cannot get access to the infrastructure under reasonable conditions, digitalization risks limiting plurality and diversity rather than promoting it. This is one of the elements that, from a regulatory viewpoint, make broadcasting in a digital environment similar to telecommunication. As opposed to analogue broadcasting where the equipment is relatively cheap and simple, in the digital environment the service providers and broadcasters will be dealing with only a few transmission providers.
The EU Directives can be seen as providing useful guidance on what the legislation should provide, as it is a reflection of a modern way to solve potential problems. Similar legislation applies also in many non-EU OSCE participating States. In the countries that have digitalized, the matter was solved in different ways but all of these European countries are bound by the EU Directives with which national legislation must be compatible.

2.3 Council of Europe Recommendations on Media Plurality

When planning digitalization, concentration issues must be high on the agenda of governments and regulators, as there is otherwise a risk that digitalization will lead to companies merging, smaller ones disappearing, and generally to less choice.

The Council of Europe is the European body that has issued specific recommendations on media and digitalization. It recommends that member states maintain regulations that limit the concentration of media ownership and any complementary measures which they may decide to choose to enhance pluralism. It also recommends measures to strengthen public service broadcasting as a crucial counter-balance to concentration in the private-media sector. Such measures have been enumerated in a number of acts.

They are discussed in the “Declaration on protecting the role of the media in democracy in the context of media concentration” and “Recommendation on media pluralism and diversity of media content” adopted on 31 January 2007 by the Committee of Ministers of the Council of Europe.

---

11 Appendix to Recommendation R (2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.
The Declaration notes that the media landscape is changing as a result of globalization and concentration. This is positive in that it leads to market efficiency, consumer-tailored content and job creation; however, it also poses challenges. It can undermine the diversity of media outlets in small markets, the multiplicity of channels and the existence of spaces for public debate. Media concentration can place a handful of media owners in a position to control the agenda of public debate. Thus, the Declaration underlines the desirability of separating the control of media and the exercise of political authority. It also highlights the importance of transparency of media ownership through appropriate regulatory measures and stresses that adequately equipped and financed public service broadcasting can counterbalance the negative consequences of strong media concentration. Policies encouraging the development of not-for-profit media can be another way to promote diversity of opinions.

The Recommendation reaffirms that media are essential for the functioning of a democratic society as they foster public debate, political pluralism and awareness of diverse opinions. It recommends that member states consider including in national law or practice a number of measures. These measures vary from rules concerning ownership regulation to rules relating to the allocation of broadcasting licences and must carry/must offer obligations.

Earlier, Recommendation No. R(99)1 of the Committee of Ministers of the Council of Europe tackled the development of broadcast concentration which might endanger media pluralism. It suggested that appropriate measures be taken, such as creating special media authorities with powers to take action against market concentrations, where necessary. Similarly, Recommendation (2003)9 called on Council of Europe states to put in place rules that limit concentration of media ownership.12

Resolution 1636 (2008) of the Parliamentary Assembly of the Council of Europe makes transparency of media ownership and economic influence over media one of the indicators for the media in a democratic society. Its text notes that “legislation must be enforced against media monopolies and dominant market positions among the media. In addition, concrete positive action should be taken to promote media pluralism”.

2.4. Concentration

As in telecommunications liberalization, in digitalization those that carry cost may, to some extent, do that in order for others to be able to compete with them. This naturally puts a stress on authorities to determine the best balance between allowing cooperation and giving special rights. When looking at issues such as concentration, special needs like very heavy infrastructure investment must be taken into account. It may be possible that certain concentrations are the only way to prevent companies from going bankrupt. If the rules are too strict on concentration or mergers, it may result in the providers not being able to afford digitalization. But any relaxing of rules must be carefully thought out, as competition law exists to benefit consumers.

Different areas of the broadcasting market show examples of concentration, such as analogue pay-television. Digitalization changes the way the media are consumed, bringing it closer to other communications services. When looking at concentration and possible regulatory intervention, the market definition is important. One question is whether pay-television and free-to-air are considered to be one market or different ones. Although the product is the same, the conditions are different. So far, the markets have usually

---

13 Item 8.18. See: http://assembly.coe.int/Main.asp?link=/Documents/AdoptedText/ta08/ERES1636.htm#1
14 See the discussion in Case T-158/00 of the European Court of First Instance.
been seen as different, but this may have to change. Digital television, even more than television as such, is a complex industry with significant sunk costs, oligopolistic tendencies, the need for special infrastructure and several bottleneck facilities.

Platform operators may control the consumer devices and determine their technology. In other words there are significant market failures.\textsuperscript{15} \textbf{Interoperability and access rules combat these negative tendencies but cannot avoid concentrations as such.} Platforms are competing for relatively scarce content and exclusive agreements may be necessary and may be permitted under competition law\textsuperscript{16} (under certain conditions)\textsuperscript{17}; however, concentrations in the market and barriers to entry must be monitored.

\textbf{Regulatory intervention is needed to combat negative effects of concentration, going beyond what may be a natural consequence of the market structure.} There is always a risk with regulating ex-post, as a situation cannot be reversed by regulation.\textsuperscript{18} These are the cases where sector-specific ex-ante regulation will be necessary. Many sources do not guarantee pluralism if they provide the same content. As competition law protects competition and not competitors, someone will not be protected if there is another voice that is financially stronger and thus does not need support but can deliver a service or product without it. If there are many actors (firms), that is usually enough from the competition law viewpoint, as it is then presumed that the market will determine what products they deliver and there will be choices for consumers. Traditional competition law is not

\begin{footnotesize}
\begin{enumerate}
\item Article 101 (former 81) of the Treaty on the Functioning of the EU and the exemptions from the ban on agreements or concerted practices between companies.
\item \emph{Ibid.} at pp 143-144.
\end{enumerate}
\end{footnotesize}
designed to deal with a situation where there may be competition through many actors but when the products they deliver are still very much the same. That is why broadcasting is dealt with by special regulators and under special rules under which also content matters can be taken into account. It is essential in the digitalization process to have an understanding of the real impact of different regulatory interventions.\textsuperscript{19}

As an example we can mention the case of a Spanish merger in the digital television market. The authorities looked at market power, but not at media power, control over the media as such. The interests of consumers were taken into consideration, but not necessarily the interests of citizens, outside of their role as consumers. This is the situation as explained above where the special situation for broadcasting, where not just the number of service providers is important but also the content, was not fully taken into consideration.

The previously mentioned change to the French law to allow competition authorities to examine mergers in the broadcasting area is another illustration of how different sets of regulatory rules, administered by different regulators, interact in a digital media landscape.

2.5 Selection of broadcasters

One of the key principles in the licensing of digital broadcasting is that the licensing process for the transmission facility (the platform) and programming content need to be separate. The manner of selecting broadcasters to be part of the digital multiplexes, especially the free-to-air (social) package, must be transparent and open.

\textsuperscript{19} Ibid. at pp 143-144 and 157-158.
Benefits of access to information and reduction of inequalities do not happen automatically and not just through a multitude of channels – it is important that there is real diversity. This must be kept in mind when deciding on the content (which channels) of broadcasting multiplexes. The key role of the PSB does not change. In a developed digital broadcasting market, viewers are more similar to consumers in a traditional sense; broadcasting can become more linked to viewer demands with more choice and diversity.

At the same time, there is the mentioned danger of monopolization if one service provider gets a dominant position. The barriers to entry for others will be quite high both because of the infrastructure costs and because consumers will be tied to a certain operator (in this case a broadcaster) through technical facilities, contract terms or programme preferences. This can result in fewer available media voices. If broadcasters cannot get access to transmission facilities they will not reach the audience and it may take a while before there is a real market for transmission with a choice between operators.

Regulators must identify situations where digital broadcasting may lead to an anti-competitive monopoly state-of-affairs, which is very difficult as it is normally necessary to promote or give some incentives in order to start up digital broadcasting and not stifle innovation.20 If there are already monopoly and dominance problems, these may be increased by digitalization. Such issues must be addressed without delay.

---

20 In Italy the so-called Gaspari Law (Law no. 112 of 3 May 2004) stipulated that only existing broadcasters could apply for digital experimental licences and there was no formal obligation to give back analogue frequencies. In December 2005 five multiplexes were licensed, to RAI and one commercial broadcaster, with the provision that any operator with more than one digital licence must give access to 40% of bandwidth to independent content providers.
Ownership rules and related disclosure rules designed to limit media concentration become even more relevant in the digital arena. In states with insufficient ownership-disclosure legislation and a lack of transparency, there is a serious risk of lack of pluralism. The mentioned problems of the broadcasting sector must be addressed parallel to the digitalization plans.

Competition rules alone may not be sufficient to ensure cultural diversity and media pluralism in the area of digital television. This indicates again the importance that the sector-specific regulatory authority keeps an eye on what obligations are stipulated for the players in the digital broadcasting market so that any monopolization is kept to a minimum. **Content issues need to be looked at separately from transmission, but the content that is desired according to the legislation and policy decisions of the country must have access to transmission.** There would be no point to rules on minority broadcasting, on public service broadcasting or other such matters, if the broadcasters can not access necessary infrastructure to transmit. The regulatory work and assessment of what the programming landscape should look like to fulfil the policy decisions made is an ongoing work and must be handled through continuous market analyses. The regulator must balance the needs of the infrastructure owner and other users of the infrastructure, meaning the broadcasters or other service providers that get to use the infrastructure.

In a country where general competition law and its application and enforcement are weak, it is all the more important that the regulator monitors the proper functioning of the market. There must be transparency of terms and conditions for access and interconnection. **The independent regulator must get sufficient powers and it is essential that the work**
of the regulator is objective, transparent, proportionate and non-discriminatory.\textsuperscript{21}

The EBU stresses that any revision of the EU regulatory framework for electronic communications should continue to take into account the links which exist between content and networks, and particularly concerning access to content. For the EBU, this concern covers access by citizens and consumers to content and access by content providers – not the least broadcasters – to networks and associated facilities which are necessary for reaching the public. This is crucial for general objectives like cultural diversity and media pluralism that the EBU as a broadcasting organization safeguards.

Competition laws cannot deal with only media aspects and are not sufficient for achieving public-interest objectives, such as media pluralism and consumer access to a broad range of content. The EBU concludes that this is why some after-the-fact rules, such as must-carry and access provisions, have to be maintained, and indeed improved, in the digital television era.\textsuperscript{22}

\textsuperscript{21} The Access Directive also requires public electronic communications networks meaning the infrastructure used for communication services (masts, cables etc) for the distribution of digital television to support wide-screen television services, the latest technology for television broadcasting. Special requirements for conditional-access systems to digital television and radio broadcasts are set out in an annex to the directive. Even for EU Member States, however, there are possibilities for regulatory authorities to set other criteria for the technology used and the requirements that can be made on service providers as the market is constantly evolving.

\textsuperscript{22} EBU contribution to the European Commission calls for input on the forthcoming review of the EU regulatory framework for electronic communications and services 30.1. 2006 EBU.
Chapter 3. Programming in the digital era: How to avoid monopolization

3.1 Pluralism of content

An important guarantee of freedom of information is observance of the principles of ideological and political diversity within society, which include pluralism of information and ideology within journalism. And freedom of information, in turn, ensures a climate of ideological pluralism within society and among sources of information.

Diversity of ideology, politics and information has its own internal logic. Ideological diversity presupposes a variety of opinions in politics, economics, religion, the arts, ethics and other domains. The contest of opinions is secured by free availability to the public of the requisite objective information and by public debate. This, in turn, provides a way to develop the best arguments to be tested at the political level; it leads to political pluralism. Political and ideological diversity are the result of diversity of information and vice versa. There is the primacy of ideological and political pluralism: diversity of information, including in the form of freedom of information, is a means to and not a goal of ideological and political pluralism.

Access to pluralistic media content is one of the signs of a civil society. Variety of information promotes an open society. Media coverage of various interests and viewpoints helps to mitigate extreme views and promote tolerance and willingness to compromise. It is appropriate to remember here that OSCE participating States have pledged to “take every opportunity offered by modern means
Thus, in the switchover process it is important that national regulators take steps to increase pluralism of content in addition to preventing of concentration of property in broadcasting. There are different models in Europe to select channels that go on multiplexes. It may be done by the regulator or the owner of the multiplex. If the latter system is selected, there are various rules and safeguards applied to ensure diversity.

Here are the measures to be introduced to influence or limit the freedom of the network operator to compose the multiplex. The current practice in Europe is as follows:

1. Must-carry rules for PSBs and other terrestrial channels are imposed in the Netherlands and Austria, whereas such measures are not necessary in the UK, Spain or Italy or whenever terrestrial broadcasters are allocated their share of the digital capacity.
2. In Norway the multiplex operator reserves some capacity for the so-called “open channels” and, should local channels require access to the platform, the network operator is forced to find an adequate solution.
3. 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. These measures are relevant as the capacity has not been allocated through a regular procedure, but has been more or less “purchased” by national broadcasters willing to operate on the DTT network. Such measures are aimed at avoiding bottlenecks.

---

created by the vertical integration of the DTT network operators that have their own channels. 24

The situation with concentration of analogue television in Italy may be close to that in the post-Soviet countries. Therefore, it is of interest to look into the efforts to provide plurality of content in the switchover process in this country.

Good practice in relation to this issue seems to be the decision of the Autorità per le garanzie nelle comunicazioni (Italian Communications Authority - AGCOM) of 6 July 2005. The decision followed relevant provisions of the Broadcasting Act of 2004. AGCOM set the terms for the independent content providers to be carried on a reserved quota of 40 percent of the capacity DTT multiplexes of the two major players in broadcasting, RAI and R.T.I. S.p.A. (part of Mediaset Group), until the complete implementation of the national digital frequency plan takes place. The content providers must:

- Respect the principles of pluralism and objectivity and offer programming with a wide coverage of various genres, so as to satisfy the tastes of different categories of viewers, especially during prime time;
- Respect fundamental human rights and refrain from transmitting violent or pornographic programmes;
- Offer attractive programming both in order to increase the audience share and the advertising revenues on DTT frequencies and comply with at least two of the following:
  1. Entertainment programming, such as talk-shows, games, programmes dealing with particular events (sports, social issues, culture, music);
  2. Programmes of general interest that deepen awareness of scientific, cultural, historical or musical issues;

---

3. Fiction, TV-films, serials, sit-coms and cinematographic works, in addition to the obligations regarding European works deriving from the Television without Frontiers Directive of the EU (later amended by the Audiovisual Media Service Directive)\textsuperscript{25};

4. Programmes devoted to children and young people.

Should the available capacity prove to be insufficient to satisfy all applications, priority has to be given to those who provide most of the above-mentioned genres. Capacity has to be assigned on fair, transparent and non-discriminatory conditions in order to ensure pluralistic programming.

For this reason, RAI and R.T.I. must inform the public at least 60 days in advance on their websites about their intention to assign DTT capacity, specifying the technical and economic conditions they intend to apply. All agreements between RAI/R.T.I. and the interested content providers must be submitted to AGCOM in advance, in order to verify their compliance with the above-mentioned obligations. AGCOM is also competent to deal with any dispute resolution that may arise during the validity of these agreements.\textsuperscript{26}

Other regulatory measures adopted to guarantee access are enumerated in a report by the European Platform of Regulatory Authorities. For example, network providers 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.\textsuperscript{27}

\textsuperscript{25} Directive 2010/13/EU.


The Recommendation on media pluralism of the Committee of Ministers of the Council of Europe further suggests that member states evaluate, at a national level and on a regular basis, the effectiveness of existing measures to promote media pluralism and content diversity, examining the possible need to revise them in light of economic, technological and social developments.

At the conferences devoted to the future of public-service broadcasting and the digital switchover held under the auspices of the OSCE Representative on Freedom of the Media in Almaty (10th Central Asia Media Conference, 16-17 October 2008) and Tbilisi (5th South Caucasus Media Conference, 13-14 November 2008), participants expressed concern that small, local and provincial private broadcasters that operate over-the-air would not be able to afford entry into the DTT market without outside help (e.g. stations like GALA-TV in Gyumri, Armenia). They are popular among the local audiences, they are important for informational and political pluralism of the media, but the government leaves them alone in the face of the mounting costs of switchover. Concern was raised that governments were satisfied with the inability of small private broadcasters to reach their audience.

The Council of Europe recommends that while encouraging a rapid changeover, governments should ensure that the interests of the public, as well as that of broadcasters, particularly non-commercial, regional and local broadcasters, are taken into account. In this respect, an appropriate legal framework and favourable economic and technical conditions must be provided.28

28 See: Appendix to Recommendation Rec(2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.
3.2 Content obligations

The Convention on Transfrontier Television\textsuperscript{29} of the Council of Europe and Audiovisual Media Services Directive\textsuperscript{30}, its parallel instrument in the European Union, enumerate certain important general interest objectives related to audio-visual content. These include obligations for member states to take measures to ensure that:

- Audio-visual services do not contain any incitement to hatred based on race, sex, religion or nationality;\textsuperscript{31}
- The availability of on-demand audio-visual media services which might seriously impair the physical, mental or moral development of minors is appropriately restricted;\textsuperscript{32}
- 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.\textsuperscript{33}

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. The development of new technical means for parental control must not reduce the responsibilities of broadcasters. All this should not mean, however, interference in editorial freedom. Digital broadcasting content is influenced by must-carry obligations

\textsuperscript{29} Adopted 5 May 1989. Text was amended according to the provisions of the Protocol (ETS No. 171), which entered into force on 1 March 2002. Now under new revision.
\textsuperscript{30} Directive 2010/13/EU 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)
\textsuperscript{31} Article 3b. Item 9 of Recommendation (2003)9 also addresses the issue of non-incitement to hatred and violence of racial and religious origin in digital broadcasting.
\textsuperscript{32} Article 3i. Again, Item 9 of Recommendation (2003)9 also addresses this issue.
\textsuperscript{33} Article 3k.
concerning PSB. 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.
Chapter 4. Public service broadcasting in the digital era

Public service broadcasting is a vital element of democracy. Whether run by public organizations or privately owned companies, public service broadcasting differs from broadcasting for purely commercial or political reasons because of its specific purpose: to operate independently of those holding economic and political power. It provides society with information, culture, education and entertainment; it enhances social, political and cultural citizenship and promotes social cohesion. To that end, it is typically universal in terms of content and access; it guarantees editorial independence and impartiality; it provides a benchmark of quality; it offers a variety of programmes and caters to the needs of all groups in society; furthermore, it is publicly accountable.  

These principles apply to whatever changes may have to be introduced to meet the requirements of the digital television and radio. Organized by the Office of the OSCE Representative on Freedom of the Media in 2008, the 10th Central Asia Media Conference declared that public service broadcasting is one of the basic tools of democracies – indispensable in ensuring the freedom and transparency of elections, in fighting against hate speech, and in protecting the minority cultures of a country by offering objective news reporting and by broadcasting high-quality programs.

The OSCE-sponsored conference further stresses that in the digital era, the importance of advertisement-free public service broadcasting with high-quality and objective programming only increases. This viewpoint is in line

---

with the position of the Council of Europe stating that “the specific role of public service broadcasting as a uniting factor, capable of offering a wide choice of programmes and services to all sections of the population, should be maintained in the new digital environment”\(^{36}\).

Recommendation Rec (2007)3 of the Committee of Ministers of the Council of Europe to member states on the purpose of public service media in the information society (of 31 January 2007) provides a focus on the implications of the new digital environment and the specific role of public service broadcasting in the information society. It states that the purpose is all the more relevant in the digital era and member-states should ensure that public service media can be offered via diverse platforms resulting in the emergence of new technologies.

The Recommendation suggests that member states guarantee the fundamental role of the public service media in the new digital environment; include provisions in their legislation and regulations specific to the purpose of public service media, covering in particular the new communication services; guarantee public service media the financial and organizational conditions required to carry out the function entrusted to them in the new digital environment in a transparent and accountable manner; enable public service media to respond fully and effectively to the challenges of the information society, respecting the dual structure of the European electronic media landscape of public and private broadcasters and paying attention to market and competition questions; and ensure that universal access to public service media is offered to all individuals and social groups.\(^{37}\)

\(^{36}\) Recommendation Rec(2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.

\(^{37}\) Recommendation Rec (2007)3 of the Committee of Ministers of the Council of Europe to member states on the purpose of public service media in the information society (Adopted by the Committee of Ministers on 31 January 2007 at the 985th meeting of the Ministers’ Deputies). See: https://wcd.coe.int/ViewDoc.jsp?id=1089759
Recommendation (2003)9 of the Committee of Ministers of the Council of Europe to member states on measures to promote the democratic and social contribution of digital broadcasting is very specific as to the principles applicable to public service broadcasting in the new environment. The first principle has to do with the purpose of PSB. It insists that

“...faced with the challenges linked to the arrival of digital technologies, public service broadcasting should preserve its special social purpose, including a basic general service that offers news, educational, cultural and entertainment programmes aimed at different categories of the public. Member states should create the financial, technical and other conditions required to enable public service broadcasters to fulfil this purpose in the best manner while adapting to the new digital environment. In this respect, the means to fulfil the public service purpose may include the provision of new specialised channels, for example in the field of information, education and culture, and of new interactive services, for example EPGs and programme-related on-line services. Public service broadcasters should play a central role in the transition process to digital terrestrial broadcasting”.

The second principle relates to universal access to public service broadcasting:

“Universality is fundamental for the development of public service broadcasting in the digital era. Member states should therefore make sure that the legal, economic and technical conditions are created to enable public service broadcasters to be present on the different digital platforms (cable, satellite, terrestrial) with diverse quality programmes and services that are capable of uniting society, particularly given the risk of fragmentation of the audience as a result of the diversification and specialisation of the programmes on offer. In this connection, given the diversification of digital platforms, the must-carry rule should be applied
for the benefit of public service broadcasters as far as reasonably possible in order to guarantee the accessibility of their services and programmes via these platforms”.

The third principle deals with issues of financing public service broadcasting:

“In the new technological context, without a secure and appropriate financing framework, the reach of public service broadcasters and the scale of their contribution to society may diminish. Faced with increases in the cost of acquiring, producing and storing programmes, and sometimes broadcasting costs, member states should give public service broadcasters the possibility of having access to the necessary financial means to fulfil their purpose”.

In terms of the role played by the PSB, in all cases under a study by the European Platform of Regulatory Authorities (EPRA), except Spain, the public broadcasters have been allocated one or more multiplexes, rather than the capacity to simulcast only existing terrestrial channels. In most cases, PSBs have been free to decide how to compose the multiplex.

Indeed, digital technologies provide for the possibility of expanding the spectrum of public service broadcasting programmes. This will serve the governments’ general goals of promoting both digital and public broadcasting. At the same time, such a possibility typically supported by the license fee or public funds should not represent unfair competition to private broadcasters and prevent the development of an independent television sector. Such expansion should be considered to be distinctive and to have

---

38 Appendix to Recommendation Rec (2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.

a clear public service value. Therefore it should be approved subject to conditions.

As an example digital expansion of the BBC, a public broadcaster in the United Kingdom, may be explained. In September 2001, the British Secretary of State for Culture, Media and Sport approved three new BBC digital channels (ministerial consent is required for new services under the Agreement with the Secretary of State which defines the powers of the BBC). Those programmes included two channels for children (one for those under six years old and one for those aged six to thirteen) and a television service specialising in culture, arts and ideas. In 2003, the Secretary further approved the BBC Digital Curriculum, a new learning resource aimed at schools, teachers, students and individual learners. In all cases approvals were conditional, requiring a high proportion of EU/EEA programming and a mixed programming schedule, including material which educates and informs as well as entertains. Opposition from the private sector was particularly strong in this case, and a total of 18 conditions have been attached to the latter approval to try to ensure that the service is distinct from, and complementary to, services provided by the commercial sector.

The conditions for the Digital Curriculum include requirements to innovate and promote educational and technological experimentation, to maintain high standards of content quality and editorial integrity and to publish annual plans of content covering the following five years. The BBC is required to report annually on the service’s performance and a review of the service was to be held after two years to establish whether the BBC is meeting the conditions. This review includes an independent element and public consultation, and also examines the impact of the BBC Digital Curriculum on the educational software market. The BBC also promised to spend half of the £90 million budget for content on commissioning services from the private sector.2
The Council of Europe recognizes the obligation of its member states to maintain and, where necessary, establish an appropriate and secure funding framework that guarantees public service broadcasters the means necessary to accomplish the purpose which is assigned to them by member states in the new digital environment.\textsuperscript{40}

\footnotesize{\textsuperscript{40} Recommendation Rec (2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.}
Chapter 5. The strategy: The planning process

It is very important for the success of this process to have a good digitalization plan that deals with all the various issues mentioned in this guide.

Many potential problems can be avoided if they are dealt with early and the solutions are clearly set out in a plan, developed in cooperation with all the relevant stakeholders. There are also various preliminary questions that need to be clarified to make the plan. The planning process should be as inclusive as possible. This Chapter explains the planning process and the content of the plan.

5.1 The Plan

Before the actual planning can commence it is important to answer some basic questions to know if the country is ready to digitalize. There should be order in the broadcasting sector, plurality and diversity of broadcasting as well as a functioning independent regulator before digitalization takes place, in order for the positive effects of it to be felt. It is not possible to “repair” problems with the legal-regulatory framework with a PSB or a state monopoly of transmission facilities through digitalization. Various aspects of the communications landscape in a country influence the process of digitalization, mainly the question how most people receive their broadcasts (the penetration of cable, broadband internet, direct broadcasting satellites or other forms of reception). This has a bearing on how many people will need to get the special digital-receiving equipment.

As digitalization entails changes for several different players, it is important that the process is well planned. The first step in the process is usually the
adoption by the government or parliament of a digitalization plan. Private broadcasters, as well as the PSB and the broadcast regulator, should be involved in the digitalization plan, as it is important that it is not seen as a partisan political document. The plan should set out what legal changes are needed to not just allow but also encourage digitalization. The need for adequate preparation of digitalization is pointed out by international organizations such as the Council of Europe and the EBU. This is important for legal certainty, an important principle of a rule of law state, that means a stable and reliable legal order, so that actions of the public authorities can be predicted and citizens and companies know what is expected from them.

It is important not to switch off analogue until there is a near universal penetration of digital broadcasting. This means that switch-off dates have to be flexible to take account of changes in the expected progress. A so-called soft launch, to use available frequencies and switch gradually, offers more time for planning. The disadvantage is that it is expensive to have simultaneous broadcasts in analogue and digital. A gradual switchover, by regions, also allows for more time and for learning from mistakes in one region before switching in others, but generally now the time is short for the switchover given the ITU timetable.

The switchover process should be market driven, but at the same time broadcaster coordination is needed to achieve a smooth technical and commercial implementation (e.g. compatible timetables). The EU has pointed out that member states which rely not only on a market-led approach but also on clear public policy action to coordinate broadcasters tend to be earlier in the adoption and switchover process. An important feature of coordination is agreement on the timing for different stages. The Commission in its Communication says this provides greater certainty for market players
supplying digital products and services and encourages them to stimulate demand.\footnote{COM (2005) 204 final, “On accelerating the transition from analogue to digital broadcasting”.
\footnote{Ibid.}}

Digitalization influences different technologies. Most of the European switchover plans focus primarily on terrestrial platforms. There is, however in modern regulation, a principle of technological neutrality, which means that regulation should neither impose nor discriminate in favour of a particular type of technology. It is only possible to take proportionate steps to promote specific technologies; for example, increasing spectrum efficiency.\footnote{Ibid.}

In any case \textbf{preparations should be made as early as possible, in consultation with those involved, including the broadcasting sector and civil society}. Digitalization should not be allowed to reduce diversity and plurality and should never be used as an excuse to limit free and independent broadcasting. If the broadcasting landscape in a country is not pluralistic and diverse, it would be better to delay digitalization and undertake other reforms first. Digitalization raises new questions of regulation and policy – new possibilities and many challenges. Incentives are needed in legislation, not just permitting but also encouraging digitalization.

Different digital video compression standards and file formats can be used to compress data to form small bits that can be transported and decompressed, normally using a decoder. Standards have been developed by the Moving Pictures Expert Group (MPEG), a working group of the International Organisation for Standardisation (ISO). The MPEG standards, with different numbers for different generation of standards, normally require different decoders. MPEG 2 was most frequently used in the countries that digitalized early. However, now MPEG 4 is most widely used. MPEG 4
equipment can be used to receive MPEG 2 signals but not the other way around. There are advantages of going immediately to MPEG 4 but this is only feasible if it is decided early in the process. Otherwise if people have one type of equipment they will not be interested in buying yet another type, especially as MPEG 4 is a more expensive technology. This problem is now faced by early digitalizers such as Sweden.

5.2 Public participation in planning for digitalization

Digitalization is a major change in the broadcasting landscape and of interest to viewers as well as to the industry. Maximum public participation in rulemaking including the making of the strategy is important. There may be a need for some special body to deal with digitalization, including spreading information. Many countries have special organs for digital switchover. Such an organ will also have an important role in publicizing and publicly discussing the issue. This body should work very closely with the independent regulator. Stimulating demand and interest for digital broadcasting is an important part of the switchover, not least to get people to buy set-top boxes and voluntarily migrate to digital. Such migration has been disappointing all over Europe, which underlines the importance of information to stimulate demand. Making people aware of the process is important. Information campaigns such as the web-pages in the UK, Finland and Sweden are examples of attempt both to create interest and to spread knowledge.
A separate body for digitalization was established in the United Kingdom. Digital UK is a not-for-profit organisation set up by the public service broadcasters and multiplex operators to lead the implementation of the switchover. This involves: coordinating the technical roll-out of a high power digital terrestrial television network; communicating with the public about digital switchover to ensure everyone knows what is happening, what they need to do and when; and liaising with stakeholders to ensure understanding of and support for the switchover programme.  

The tasks of the regulator remain very important and in case the regulator has a role in the selection of channels it is imperative to ensure that the decisions on the selection of channels is based on transparent and objective criteria. The regulatory authority should be able to act to resolve disputes between companies, for example, in cases where the multiplex operators select the channels. It is very important that the regulator is independent from any company. There should not be close links between the former state broadcaster or owner of the transmitters and the regulator, as there is a risk when they come from the same background.

One of the principles in the Council of Europe recommendation43 is that states should draw up a well-defined strategy for digitalization. In many countries public rulemaking processes have been held regarding the digitalization strategy. Even if the general public may not be so likely to contribute much in such a technically complex process, representatives of industry and other particularly interested parties will. The contribution is important for different aspects, such as the content of broadcasting, technical specifications, infrastructure matters and many others.

43 Recommendation Rec (2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.
Recommendation (2003)9 states that digital broadcasting strategies should be drawn up “in consultation with the various industries involved and the public”. It further requires such strategies to seek to promote cooperation between operators and to facilitate the public’s change over to digital broadcasting through measures to provide the public with wide-ranging information with particular attention to the elderly and the less-advantaged sectors of the population. Switchover also has the potential to contribute to better serve the specific needs of people with disabilities. Attention should be given to the inclusion of accessibility requirements in the user interface, such as electronic program guides and receivers. Another crucial factor for the success of the switchover is an effective strategy to inform consumers about programme availability on digital platforms and the equipment needed to receive such programmes.

### 5.3 Assistance to the public

There are different practical policies to facilitate the penetration of digital television receivers. Two kinds of such measures are noted by the European Platform of Regulatory Authorities (EPRA):

4. 1. Subsidies or other indirect financial support provided for families to encourage the purchase of the receivers;
5. 2. Standardization policies that should support the diffusion of the receivers or the integrated television sets.  

---

44 COM (2005) 204 final, “On accelerating the transition from analogue to digital broadcasting”.
An example of regulation for public financial support is the Law (296/2006) adopted in Italy on 27 December 2006. It 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 percent of the price paid for the equipment, up to a maximum deduction of €200 per decoder, with a total budget measure of €40 million.

For consumers, the changeover to digital broadcasting means acquiring new equipment to decode and decrypt digital signals and, therefore, a certain amount of expense. In order to avoid any form of material discrimination and any risk of “digital divide” between different social categories, the Council of Europe recommends that member states pay particular attention to ways of reducing the cost of such equipment.

Along the lines of this recommendation the United Kingdom in 2005 decided to assist the process of digital switchover by establishing the Digital Switchover Help Scheme to provide assistance to those aged 75 or over, those with a severe disability and those who are blind or partially sighted. The scheme is administered by the BBC and provides equipment to convert a TV set, helps with setting it up and provides any work necessary to improve the television aerial; it is free of charge to those receiving certain state benefits, while others will pay a contribution of £40 toward the cost.

In Lithuania the Government adopted in 2010 the Resolution on the Order on the remuneration of expenses caused by the purchase of the equipment necessary to receive digital television. In accordance with the act families

---

46 Comma 357 and Comma 361 of the Budget Bill for 2007
47 http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/960&format=HTML&aged=0&language=EN&guiLanguage=en#fn1 Similar measures were adopted in other countries, e.g. in Austria.
48 Appendix to Recommendation Rec (2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.
and persons with a low income (a monthly income of less than Litas 525, or €125, per capita) will acquire the right to get the remuneration from the State budget for the set-top boxes. The remuneration process will start 6 months prior to the analogue television switch-off date and will end 3 months after this date.  

5.4. Legislation

Transition to the digital environment offers advantages, but it also presents risks.

Adequate preparations must be made for it so that it is carried out in the best possible conditions in the interest of the public, as well as of broadcasters and the audio-visual industry as a whole. A balance must be struck between economic interests and social needs, but clearly a citizen perspective must be prioritized. In the coming years some significant migration obstacles will have to be overcome, although the future benefits of digital broadcasting are indisputable.

Both the European Commission and the Council of the EU acknowledge that such transition is not a purely technical issue. In light of the possible economic and social effects of switchover, the Commission sets out some criteria for policy interventions by member states. The premise is that market forces and consumer demand should be the driving mechanisms behind the switchover. In this perspective, policy interventions should be “transparent, justified, proportionate and timely” and should also be “formulated according
to clearly defined and specific policy goals and market difficulties”. Interventions should be non-discriminatory and technologically neutral.51

States should develop a legislative framework and strategy for digital broadcasting. This recommendation to all national governments has been set out by the Council of Europe in its Committee of Minister’s Recommendation (2003)9 on measures to promote the democratic and social contribution of digital broadcasting. This document provides that member states should “create adequate legal and economic conditions for the development of digital broadcasting”. In addition, it 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”.52

The digitalization strategy should not be drafted and adopted as a result of closed-door negotiations between the businesses and the government, but be under constant scrutiny of a wide public discussion to guarantee the pluralism of broadcasting services and public access to an enlarged choice and variety of quality programmes. It is preferable that the adopted strategy leads to new legislation introduced to and adopted by the parliament, rather than governmental decisions of presidential decrees. This will also help manage the transition without compromising legal certainty.


52 Recommendation Rec (2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting.
The legislation process of Hungary can serve as an example. Digital terrestrial television broadcasts have taken place here since 2004. A first draft of the strategy was published in October 2006. This was followed by two months of public consultation. The Prime Minister’s Office finalized the strategy in line with the outcome of the consultation, which was transposed into an official policy document. On 7 March 2007 the Government adopted the National Strategy for Digital Switchover and decided to take the regulatory measures necessary for its implementation. Later, in June 2007, the Parliament of Hungary adopted a statute on rules of broadcast transmission and digital switchover (Digital Switchover Act). This law introduces a clear separation of content regulation and regulation of broadcast transmission. It contains a set of provisions aimed at promoting the diversity of the media. In this respect the act introduces several obligations for cable operators and similar service providers for preserving and promoting the national culture, cultural diversity and pluralism of opinion. This includes the re-definition of “must-carry” rules. The most important feature of the Digital Switchover Act is the defining of the legal framework necessary for the introduction of digital terrestrial television services. This includes the introduction of interpretative provisions such as the notions of “multiplex”, “application programme interface”, “electronic programme guide”, or “interactive digital television service”. The Act also provides a clear framework for the utilisation of frequencies for broadcasting purposes and a series of rules promoting competition as well as specifies the tendering procedure for operators of terrestrial digital broadcast transmission services. Implementing the Digital Switchover Act is the task of the regulatory authority and a special parliamentary committee to elaborate and publish the call for tender for multiplex operators. Following adoption of the Act, tenders for national terrestrial multiplexes, conclusion of contracts for DTT and its commencement took place in 2008.
As other examples of laws on digital broadcasting adopted in the OSCE participating States the following selection can be mentioned.

A Digital Broadcasting Act has been adopted in **Slovakia**. The introduction of digital terrestrial television in **Ireland** was provided for in the Broadcasting Act of 2001. In **Italy** digital broadcasting is dealt with in a separate section of the Broadcasting Act no. 112/2004.

In the **Czech Republic**, the legal framework for digital television was established through adoption by the Parliament of amendments to the Media Act. The Act contains new legal definitions of the terms “EPG”, “electronic communication network” and “broadcasting services”. New guidelines concerning broadcasting concentration in the digital sector are also added. Broadcasters who give back their analogue capacities in accordance with a technical switchover plan will be given an additional licence for digital broadcasting. The responsibilities of the Broadcasting Council and the Telecommunications Office have been redistributed in order to separate completely the regulation of content and regulation of transmission.  

---
Chapter 6. The audience: Social and economic issues

For the audience to be able to enjoy the positive effects of digitalization with more choice and better quality, it is important to pay attention to how all groups in society will have access to broadcasting when the means of receiving it changes. Digitalization raises different social and economic issues about how people get access to varied and high quality broadcasting at reasonable prices. This includes if and how receiving equipment will be subsidized and also requirements for broadcasters to provide universal service.

6.1 Social and economic issues and access to broadcasting

In planning for digitalization, it is essential to take a citizen perspective, which means, inter alia, dealing with population coverage rather than coverage of territory. This is one of the issues pointed out by the Council of Europe. The Declaration on the allocation and management of the digital dividend and the public interest (Digital Dividend Declaration) includes provisions that governments should pay special attention to the promotion of access for the public to audio-visual services.

Recommendation (2007)3 of the Committee of Ministers to Member States on the purpose of public service media in the information society suggests that States “ensure that universal access to public service media is offered to all individuals and social groups, including minority and disadvantaged...

---

53 Recommendation R (2003)9 of the Committee of Ministers to Member States on measures to promote the democratic and social contribution of digital broadcasting
54 Declaration of the Committee of Ministers on the allocation and management of the digital dividend and the public interest (Adopted by the Committee of Ministers on 20 February 2008 at the 1018th meeting of the Ministers’ Deputies). See https://wcd.coe.int/ViewDoc.jsp?id=1252459&Site=CM&BackColorInternet=C3C3C3&BackColorIntranet=EDB021&BackColorLogged=F5D383
groups, through a range of technological means”.[55] To obtain the possible advantages of new technologies, the question of how to make sure that the largest number of people possible can actually use the new technology for their benefit needs to be paramount in the planning. This will include special attention to vulnerable groups that will not have the possibilities or the incentive to themselves embrace the new technology.

Vulnerable social groups and certain disabled people may need special support. The EU’s Television without Frontiers Directive (amended by the Audiovisual Media Service Directive) obliges States to encourage media-service providers to ensure that their services are gradually made accessible to people with a visual or hearing disability.

A benefit of digital broadcasting – in addition to the possibility for a multitude of channels – is the possibility of delivery of other information services to the population through the convergence of technologies. Different information society services increasingly use the same transmission means and can be collectively delivered or at least use (some of) the same infrastructure and terminal equipment. If handled well, digitalization can help eliminate inequalities of availability of such services and increase access to information. However, the fact that new receiving equipment (set-top boxes) will be needed for the audience, as well as new transmitting equipment for the broadcasters, may lead to less choice for a transitional period. In this respect there is a risk of growing inequalities between groups of population, based on economic differences and geographical factors.

---

6.2. Pluralism and not just a multitude of channels

It is essential that there should be pluralism and not just a multitude of channels. The common model in Europe is one of development of several multiplexes of digital television including a free-to-air package available to everyone who has the appropriate receiving equipment and the choice of other paying packages. More packages are to be developed gradually. A challenge for digitalization is to avoid too much of an increase in inequality of access to information between those people who subscribe to pay-channels and those who do not. The free-to-air package should include a variety of channels meeting different broadcast needs, PSBs always being among them.

The number of channels in the free package varies between countries. In most European countries, in addition to existing public service broadcasting channels and any others that are freely available, after digitalization an additional channel is offered free to the public. This may be a 24-hour news channel (Finland and Sweden) of which the public service nature is clear. Also the paying multiplexes should include diverse channels and the selection should ideally be made by an independent regulator based on objective and transparent criteria or if the choice is made by the multiplex owner, the regulator should be able to provide oversight and assist in case of any disputes.

6.3 Subsidizing receiving equipment

How and to what extent to subsidize receiving equipment is an important question. First of all it needs to be clarified how people receive analogue

---

56 In a large country like the United Kingdom, the free-to-air channels may reach up to 30 channels whereas in Sweden there are six and in Finland five plus radio.
television; that is the number of people who have cable or direct satellite receivers. This will determine how many people may need receiving equipment and what type of equipment is needed. The issue of whether there has been a significant amount of voluntary purchases also is important, as is the matter of other services and convergence, where there may be both more or less need for extra equipment.\footnote{In Italy the vast majority of people got (before the start of digitalization) their television broadcasting by terrestrial broadcasting (19 million television receivers out of 22 million), whereas in Germany there was at the start of digitalization 93% cable or satellite coverage. This has influenced for example the way and level at which the countries have dealt with subsidies for digitalization, as discussed elsewhere in this Guide. The availability of high-speed internet access is another factor as only with widespread such access will television via broadband be relevant.}

From the audience viewpoint, it is essential to have clear, transparent and fair rules on whether there is a possibility to get free receiving equipment such as set-top boxes or support to purchase such equipment. It is likely that criteria used in other contexts for providing social benefits may not be appropriate. The initial business model (tried in Spain and the United Kingdom) of giving away equipment free to subscribers failed due to slow consumer uptake.

There is a responsibility on the state to provide the possibility for all to be part of the process. There will be administrative work and costs related to the subsidized distribution of set-top boxes (or other technology), which must be taken into account when estimating the total costs of digitalization. The countries or regions that have digitalized early (Berlin, Finland and Sweden) have not given any free set-top boxes or support to people. The economic status of these countries must be kept in mind: they are relatively rich countries and the cost of a set-top box can reasonably be presumed to be affordable for most people. It is important that the rules for possible assistance are suitable for a specific country they apply to. In many countries the perceived welfare gains by digital broadcasting may outweigh the cost of the equipment for many people, especially as the market has been able
to provide equipment at a reasonable price. It may be sufficient to inform people about the benefits of digitalization and they will not be opposed to the relatively small investment needed. If there is no extra assistance in a country where many people live near the poverty line, there is a real danger that digitalization will lead to people being cut off from broadcasting and thus from an important source of information. They will not be able enjoy new digital services and will thus not be beneficiaries of the digital dividend.

Apart from the practical design and cost of any programme subsidizing decoders, it is important that such programmes do not favour only some broadcasters, thus creating uneven conditions of competition.

58 This was shown in surveys conducted in the UK in the early 2000s. See “A Guide to Digital Television and Digital Switchover”, 1 October 2004 edition, Ofcom (UK).
In this respect the Commission of the European Union in December 2005 initiated an investigation against Italy for breach of EU law in connection with the Italian scheme to subsidize digital television decoders. A complaint had been made by competing incumbent operators. The Commission pointed out that even those measures that support an objective of common interest (like digitalization) must be proportional and must not include unnecessary distortion of competition. The Italian explanation that the subsidy could be excused under rules regarding state aid of a social character was not accepted, as the subsidy was not only given to disadvantaged groups. It did not benefit just the consumers but also companies and, in any case, even such a subsidy should not discriminate between different operators. Other operators had to provide the equipment at their own cost. Nor did the Commission accept the argument that the aid was just a part of delivering services of general economic interest, something EU Member States can decide how to do. As terrestrial was the major means of receiving television in Italy, the impact of a subsidized programme was great. Italy attempted to defend the scheme by citing benefits of digital television, such as improved use of frequencies for greater pluralism, promotion of economic development, information technologies and e-society services. For projects of general interest, aid can only be given to address a market failure and if it is necessary and proportionate, which the Commission did not think was the case. The Italian subsidy system was later changed, as described elsewhere.

Even for the countries that are not bound by the specific EU legal provisions on state aid and competition, the principles pointed out by the Commission regarding the Italian scheme are of interest, as they highlight dangers of a wrongly designed subsidy programme. Such a programme would make competition difficult and discourage providers, especially new market entrants.
In conclusion, it can be said that it is important that people are not excluded from access to broadcasting at digitalization, and any subsidies granted should be reasonable and appropriate for the country in question.

### 6.4 Universal Service Obligation

The concept of universal service obligation (USO) is well known from telecommunications and other utilities. It means that certain essential services should be provided to everyone, even if the market by itself might not allow for such universal provision. The common examples are how telecommunication services, post or energy must be delivered to people who live far from population concentrations and who may be heavy users of the service. USO is normally linked to services of general economic interest, a concept that includes basic necessities of life. That should be a flexible, living concept in order to take into consideration changes in society. One example of this is the Internet, which was seen as a special service when it first appeared, but now would be seen in most European countries as a basic necessity to which everyone should have access.

Regarding broadcasting content, the must-carry rules (see above) for PSB is a kind of USO – it is a means to impose the provision of a certain service on private companies, based on the assumption that this service is valuable for the entire population and must be available for all. This obligation remains valid and is probably even more important in a digital broadcasting environment, with its multitude of channels. Otherwise there is a risk that many people would not have access to PSB through the different packages they subscribe to. PSB will not be available unless it is included in programme packages, as all broadcasting reception will be based on a
subscription with a company. Having PSB should not entail any extra cost for the viewer but it should be a responsibility of the service provider.59

Apart from the must-carry obligations that are related to content of broadcasting, the technical universal service obligation – similar to that of telecommunications – is relevant in the digital environment, as the complex and expensive transmission technology may act as a bottleneck, limiting the number of operators. The legislator and the regulator have an important task in ensuring that if the market does not manage to provide the possibility for universal access of digital broadcasting, obligations of such universal service will be imposed on certain operators. This imposition must be done in a transparent, proportional and non-discriminatory manner, in line with what is necessary without excessively interfering with private companies. It is important to stress that the USO only means that a certain service should be available at an affordable cost. It does not imply that the service should be free or that the state will actually ensure that everyone also uses the service – it only implies that it is there for them to use if they chose to. Each country needs to determine what is affordable, in relation not only to the income level of the population, but also to what can be seen as a legitimate part of disposable income to pay for certain services.

6.5 Interoperability

The USO deals with the availability of a service, given the correct equipment. As for the equipment, in some cases, instead of state support and/or in addition to it, the industry should be encouraged to provide different types of devices at a low cost. The early digitalizing countries have promoted

competition and thus achieved inexpensive set-top boxes, as well as more elaborate types of equipment for those especially interested. Interoperability is an important concept in this respect; it is also promoted by the EU, as this makes the market more attractive for manufacturers.

Although the government in a democratic market economy should not interfere directly with industry or prescribe prices, it can have a dialogue with the industry and see if there are possibilities for cheaper equipment. Technical specifications and standards should, to the extent possible, be adopted internationally to ensure the greatest possible interconnectivity and possibility for goods to move freely to permit an international market. The EU, which through its major impact on trade in Europe in reality sets standards also for non-EU members, holds the view that standards should be industry-led as much as possible. It is important not to lock the system into standards if there is still technological development, but to be flexible and open to interoperability between different standards.

The EU provides\(^{60}\) that member states shall take all the necessary measures to ensure that the operators of conditional access services, irrespective of the means of transmission, who produce and market access services to digital television offer to all broadcasters, on a fair, reasonable and non-discriminatory basis, technical services enabling the broadcasters’ digitally transmitted services to be received by viewers authorised by means of decoders administered by service operators. This essentially means that member states shall ensure that these services should work on different technological platforms.\(^{61}\)

\(^{60}\) Article 4 of Directive 95/47/EC on the use of standards for transmission of television signals. Some commentators find that the Directive was unclear in parts and the consequence was not the desired harmonisation. It also meant imperfect implementation by Member States. For example M. Arino “Digital war and peace: Regulation and Competition in European Digital Broadcasting” European Public Law 2004 Vol. 10 Issue 1 pp 135-160 at pp 137-138.

Similarly, Recommendation (2003)9 of the Committee of Ministers of the Council of Europe provides that member states should take measures aimed at a high degree of interoperability and comparability of reception, decoding and decrypting equipment and of systems granting access to digital broadcasting services.

The EU Framework Directive62 specifies that interoperability of digital interactive television services and enhanced digital television equipment at the level of the consumer should be encouraged in order to ensure the free flow of information, media pluralism and cultural diversity. It is desirable for consumers to be able to receive all digital interactive television services that consider, among other things, technological neutrality, future progress and the need to promote the uptake of digital television. Digital platform operators should strive to implement open application programme interface (API), which conforms to European standards and allows migration between systems.

The development of new audiovisual technology (such as interactive television systems, systems for delivery to handheld receivers, broadband delivery and high definition television) may entail new interoperability problems. Thus, ensuring interoperability is a continuous task. The EBU stresses that it is important to reaffirm that consumers must have access to a broad and diversified range of content and services on different platforms, with the highest possible quality and at the lowest possible price. The EBU believes that this objective can be best achieved through market competition. Interoperable standards and improved interoperability of digital devices will foster consumer acceptance, which in turn will promote the digital switchover.63 The early digitalizing countries such as Sweden, Finland

63 “EBU Contribution to the European Commission call for input on the forthcoming review of the EU regulatory framework for electronic communication and services”, 30.1.2006 DAJ/ACB/mtp/jev
and the United Kingdom, have put great emphasis on the need for the equipment to be suitable for different content providers, so that viewers can change providers even after having purchased the equipment.

6.6 Consumer protection

In the digitalization plan, consumer protection issues must also be considered. The extent to which changes to laws or new legal provisions are needed depends on the general consumer protection framework in the country. If there is strong consumer protection legislation, this will apply also to digital broadcasting, and there is no need for specialized legislation. However, if consumer protection in general is weak, special legal provisions in sector-specific law may be needed.

The EU stresses the need for stronger consumer protection related to different electronic services and other new business models. The issues that tend to come up in this context are similar to telecommunications issues, and include matters such as clear billing (especially when several services may be on the same invoice), possibilities to cancel contracts, and rules on equipment that do not lock consumers into one provider for an unreasonable time.
In the **United Kingdom**, in February 2008 the communications regulator Ofcom\(^1\) issued new proposals on how providers of communication services must clearly indicate any extra charges appearing on consumer bills, so that the consumer can easily understand what they are paying for. The user must understand what different charges are included in a bill. Ofcom also has a special advisory committee for the elderly and disabled people, in order to ensure that the needs of these groups are especially taken into account in the digitalization process and in other changes to the communications landscape.

In **Finland**, by clicking on a special link on the website, people can ask questions or make complaints, and a special telephone number is provided that can be called for any consumer issues related to digitalization.

In **Sweden**, the main operator runs its own blog page where consumer issues can be discussed by anyone who wants to make a comment or raise a question.

---

### Chapter 7. The Broadcasters: Economic and Technical Issues

Digitalization is initially very expensive for broadcasters who have to make major investments. They may only see returns of these investments in the long term. This Chapter explains the issues broadcasters have to deal with regarding investments and infrastructure, and how the state can provide assistance without distorting competition.

#### 7.1 Investments for digitalization

Although there are various players that may benefit from digitalization, such as new broadcasters that may get the spectrum made available,
manufacturers of equipment, and providers of other services, these players may not be the same ones that have to carry the initial costs. Costs for building infrastructure, who should pay for this and in what manner pose challenges for states switching to digital broadcasting. If the burden is put on broadcasters alone, there is a real risk of them going bankrupt.

As mentioned before in this Guide, this may be very negative for plurality and diversity. One possibility is to form partnerships between government, broadcasters, network operators and the industry (perhaps in the frame of the so called Public Private Partnerships, or PPP).

PPP is an increasingly popular concept in many contexts in Europe, as a means to get necessary private capital for projects of public interest. The model will depend on the structure of the broadcasting sector in the country in question; for example, if transmission facilities are owned by the state or concentrated in one company (such as a privatized company emanating from a former state monopoly). There is no one common European model. Each country has to find the best way, including answering the question how industry and private broadcasters can be encouraged to make the investments without at the same time being given undue preference in the competition process.

What must be recognized when estimating costs and investment readiness of private entities is that the initial costs are high, and the increased attractiveness and investment potential of digital broadcasting comes only after a time and at a cost. The time and size of advantages are not known, and the issue is too new everywhere to be able to make any exact comparisons with other countries. As studies point out, digital television is
not a gold mine, and the companies involved need to have considerable investment ability.\textsuperscript{64}

It is clear that in all digitalization processes, private broadcasters are expected to carry some of the costs. Although this is reasonable, it must be recognised that some incentives may be needed in order for these broadcasters to be willing to make the necessary investments. Such incentives may be a reduction or total lifting of the broadcasting licence fee for a certain period, conditional on proceeding with digitalization or an extension of the terms of broadcast licences.

In Finland, the Act on the State Television and Radio Fund of 1 July 2002 provided for a three-step approach to ease the investment burden on broadcasters. First, there was a cut in operating licence fee paid by the commercial television companies by 50 percent, while digital broadcasters could waive it completely until 31 August 2010. Second, the television licence fee paid by households was increased by 13 percent as of 1 January 2004. Third, the annual television licence fee was to be annually increased as long as both analogue and digital transmissions are carried out (i.e. the simulcast period).\textsuperscript{12}

A similar fee increase was introduced in Austria. At the same time, in Ireland in 2002 and in Switzerland in 2003 the governments turned down the public broadcasters’ requests that the additional costs of broadcasting both analogue and digital channels during the transition period be funded through a temporary increase in licence fees.\textsuperscript{13}

\textsuperscript{64} Like the parent company of the operator BSkyB in the United Kingdom that subsidised many years of losses before any profitability of its digital branch. See A. Wessberg “Digital - a challenge for Europe” 2003/4 Diffusion online, EBU pp 2-5.
In the United Kingdom, the so called “digital dividend” is a reduction of the fee paid for the use of the frequency connected to the number of viewers that adopts one of the three digital platforms. These kinds of policies can be a strong incentive for the broadcasters to adopt strategies that help the rapid take up of digital platforms.  

In Estonia, the Broadcasting Act amendment of 18 June 2008 abolished the license fee of the two major private broadcasters of some 20 million kroons each to the state budget. The fee was intended to compensate losses of the PSB for abstaining from advertising in its programmes. The amendment was motivated by the need to relieve private broadcasters from the financial burden for the duration of the switchover period. The absence of the fee after 1 January 2009 is compensated from the state budget.

In Malta, there is no fee for analogue broadcasters that broadcast the same content on digital.

Another way of supporting broadcasters was used outside of Europe, in Australia, where regulatory obligations to provide children’s programmes and Australian domestic content were relaxed for some time, in order to allow digital services to be established. This latter method carries risks for plurality and diversity, as well as for the quality of broadcasting, and it would not be compatible with European obligations in the Transfrontier Television Convention and other agreements.

Another incentive is to guarantee a company a certain monopoly for a limited period of time, in order to give them confidence that they will be able to recover their investments. This concept is well known from utilities
regulation, but it is nevertheless complex, as it cements a monopoly or at least dominant position, which is bad for competition.65

Existing infrastructure should be used as much as possible also for digital broadcasting. Environmental impact, popular resistance (many new masts), as well as the cost of new installations must be taken into account when deliberating on expanding or creating parallel infrastructure. Using already existing infrastructure makes sense, as does the modernization in stages. Transparency and publicly available procedures to ensure that all relevant views are taken into account must be applied when considering the ways to install infrastructure. Many believe that a terrestrial network is the best for most of digital television, supplemented by satellite. The terrestrial network largely already exists, and terrestrial networks are the only ones that can be received on portable receivers in a useful manner.

However, television via broadband is also an interesting technology. The EU applies the principle of technological neutrality, as its priority is to make digital broadcasting available, regardless of how. Such a principle is suitable also outside of the EU.

Co-location and other sharing of infrastructure is a means to keep down costs. This approach also has benefits for the environment. Many countries have rules on obligatory sharing in telecommunications legislation and similar provisions can be used in the digital environment as well (and in some countries, such issues are covered by already existing communications legislation capable of covering also digital broadcasting). This is not the same as access rules (which will be described below), but concerns the physical installations only, including masts, buildings and similar structures.

---

65 Cases C-320/91 Courbeu and C-280/00 Altmark from the European Court of Justice (the EU Court).
7.2. The transmission platform

In many countries, the network operator that is responsible for the transmission platforms for digital broadcasting is a state-owned or a formerly state-owned body. This body would normally be dominant or would be even a monopoly, but digitalization should not be seen as a means to cement the dominance of this body or at least not the potential negative consequences of such dominance. Access rules are crucial, but it must be recognized that such rules may strengthen the dominance of the company holding the network if it limits the development of other networks.

In many countries, the broadcasting transmitter network has been separated from the broadcaster as well as privatized, which is a positive development. Privatization and structural separation are separate issues from digitalization, and digitalization should not be allowed to delay such developments. It may be useful to study experiences from telecommunications liberalization, as the issues are similar. The involvement of the telecommunications regulatory body is important.

Regardless of possible public ownership of the transmission network, access provisions must be strictly applied and ownership of transmission facilities should not entail any interference in broadcasting content. This is a regulatory issue for the independent regulator. Furthermore, all broadcasters, including the PSB, must be protected from government interference, just as in the analogue broadcasting system. As the EU points out, state policy interventions should be transparent, justified, proportionate and timely to minimize the risk of market distortion. These are good aims for all OSCE participating States.

7.3 Income of broadcasters

One added problem in the financing of digitalization is that advertising revenues in the world generally have dropped. When there is low penetration as well as fragmentation of the audience, the market is rather unattractive for advertisers, which means that digitalization may mean less revenue for broadcasters. In Australia, due at least in part to lobbying from broadcasters (commercial ones relying on advertising or subscription ones) instead of using digitalization to allow multiple channels, it was initially to be used to introduce HDTV that uses a lot of spectrum and thus permits a better quality rather than higher quantity (better television rather than more television). One reason for this was to avoid fragmentation of the market. The initial Australian digitalization legislation was amended, as means had to be found to make digital attractive to the population. The examples of successful digitalization, where the audience was interested in the process, included having more programmes (notably the UK), and Australia realized that it also had to go down the road of more channels if it were to convince the population of the benefits of digitalization.67

The Australian example illustrates that there is probably no way to avoid the negative trend of broadcast advertising, which is exacerbated by the current economic crisis in most parts of the world. Popular behaviour has changed, and traditional broadcast advertising is not as attractive as it was when large numbers of people could be expected to watch the same programme at the same time.

The advertising industry is aware of the changes and has, for some years, examined other advertising possibilities, such as more targeted advertising

---

on Internet and mobile phones. This change is ongoing, but it is relevant to
digitalization in that it will lead to a reduction in advertising income for many
broadcasters at a time when they need to finance the expensive transition
to digitalization. The expectations of private broadcaster contributions to the
costs of the process must be reasonable in this context.

7.4 State aid

State funding and government-guaranteed investments may be needed
for digitalization, given the size of the necessary investment. However,
these must be carried out carefully so as not to unduly favour any one
operator and not violate state aid and other competition rules. The EU is
investigating if certain financing of digitalization violates state aid provisions,
which indicates that the European view is that digitalization as such is not an
excuse for not following other rules.

The European Commission examined the case of Berlin-Brandenburg and
the support given to digitalization of terrestrial television in 2005. This case
sets the standards and limits of state funding in the EU, and it also provides
guidance for non-EU Members.68 The broadcasting authority (MABB)
provided financial assistance for the switchover, and allocated multiplexes
to commercial channels that in exchange for the assistance undertook to
broadcast in digital format, regardless of audience figures, for five years. For
broadcasters not already available terrestrially, a different type of agreement
was made. The money came from the MABB budget, which receives money
from licence fees. PSB covered its cost from subscription fees.69

---

68 The Commission decision has been appealed to the Court of First Instance, Case T-8/06. HAS THE APPEAL
BEEN RESOLVED BY NOW?
69 C. Schoser (DG Competition) “Commission rules subsidy for digital terrestrial television (DVB-T) in Berlin
Brandenburg illegal” Competition Policy Newsletter, 2006, Number 1 (European Commission, Brussels), pp
93-96.
The Commission examined whether the support was state aid and if it should be allowed. The Commission found that the economic advantage was not eliminated through the selection procedure: this was, in fact, not open to competition and was instead uncertain and non-transparent. The amount compensated varied between channels, the system was selective (supporting only one transmission platform) which might affect viewer preferences.\textsuperscript{70}

The reasons to give state aid for digitalization is that it is an object of common interest or that aid is needed to support innovation. But as the Commission found, there is no reason to only support terrestrial and not other platforms. The principle of technological neutrality was violated. There might be market failures in need of correction, but this was not seen to justify the aid in question in Berlin-Brandenburg.

Regulatory intervention related to the transmission licence would have been a less distorting means of achieving the same result, or maybe the market could have dealt with the uncertainties.\textsuperscript{71} The aid was given to commercial broadcasters and they were not given a special public service task in exchange. Promoting pluralism is not specific to the terrestrial platform either. Cable and satellite also contribute and may be equally or even more suitable eligible for aid, given relevant viewing patterns.\textsuperscript{72}

State support in different forms was examined in other countries as well, apart from Germany. The Italian support schemes directed at users were examined above in this Guide. In the United Kingdom, attention was focused at the funding for BBC, especially in 1999 when an additional digital subscription fee was under discussion. Private broadcasters said they would

\textsuperscript{70} Ibid.\textsuperscript{71} Ibid.\textsuperscript{72} Ibid.
complain to the EU Commission. In the end, the UK government decided against the special fee and also decided that BBC could moderately increase its fee over a number of years. That digital services should be available to all was seen as BBC’s contribution to digitalization. It was found that the BBC could make efficiency savings as well as increase its commercial revenues from selling programmes. It is predicted that the situation for BBC will change – with a distinction being made between core public service and other channels or tasks. It may have to find partners for commercial ventures.\(^\text{73}\)

There have been several complaints to the EU Commission on the preferences given to PSBs in many EU member states.\(^\text{74}\) The situation of PSBs regarding state aid and other EU legal provisions generally is dealt with in special rules but these deal with general issues and not with specific extra support to digitalization.

The need for the public financial support for the switchover process is well-acknowledged in parts of Europe. The European Commission recognises that the switchover may be delayed if left entirely to market forces. It also recognizes that public intervention can be beneficial through regulation, financial support to consumers, information campaigns or subsidies, in order to overcome a specific market failure or to ensure social or regional cohesion. The onus is on the EU member states to demonstrate that aid is the most appropriate instrument, it is limited to the minimum necessary, and it does not unduly distort competition. Acceptable forms of public support for the digital switchover may be:


\(^{74}\) Ibid.
• funding for the roll-out of a transmission network in areas where there would be insufficient coverage;
• financial compensation to a PSB in order to reach the entire population;
• subsidies to consumers for the purchase of digital decoders as long as they are technologically neutral, especially if they encourage the use of open standards for interactivity;
• financial compensation to broadcasters which are required to discontinue analogue transmission before the expiry of their licences, provided this takes account of granted digital transmission capacity.
Chapter 8. The Regulator: Licensing issues

8.1 The licensing process

The key to stipulate regulatory functions of broadcasting in the interest of freedom of the media is in the process of licensing broadcasters, both analogue and digital.

Article 10 of the European Convention for the Protection of Human Rights and Fundamental Freedoms stipulates that:

“1. Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. This Article shall not prevent States from requiring the licensing of broadcasting... enterprises.

2. The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary”.

Under the third sentence of Article 10 paragraph 1 of the European Convention for the Protection of Human Rights and Fundamental Freedoms, states are permitted to regulate, by means of a licensing system, the way broadcasting is organized in their territories, particularly in its technical aspects. Special attention should be given to an unbiased and transparent
licensing process, as was stated in a number of recent European documents and decisions of the European Court of Human Rights.

Judgments of the European Court of Human Rights underline that the grant of a licence may also be a technical issue, but it is usually made conditional on matters such as the nature and objectives of a proposed station, its potential audience at national, regional or local level, the rights and needs of a specific audience and the obligations deriving from international legal instruments. This may lead to interference by those whose aims will be legitimate under the third sentence of paragraph 1, even though they may not correspond to any of the aims set out in paragraph 2 of Article 10. However, the compatibility of such interference must be assessed in the light of the requirements of paragraph 2 of Article 10.75

In particular, the Court has stressed that the manner in which the licensing criteria are applied in the process must provide sufficient guarantees against arbitrariness, including the proper reasoning by the licensing authority of its decisions denying a broadcasting licence.76

On 20 December 2000, the Committee of Ministers of the Council of Europe adopted Recommendation Rec (2000)23 to member states on the independence and functions of regulatory authorities for the broadcasting sector, 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. The decisions made by the

---

75 Demuth v. Switzerland, no. 38743/97, § 33, ECHR 2002-IX. and Meltex Ltd and Mesrop Movsesyan v. Armenia, no. 32283/04, § 76, ECHR 2007-

76 Glas Nadezhda EOOD and Anatoly Elenkov v. Bulgaria, no. 14134/02, §§ 49-51, and Meltex Ltd and Mesrop Movsesyan v. Armenia, no. 32283/04, § 81, ECHR 2007-....
regulatory authorities in this context should be subject to adequate publicity. Moreover, they should be:

- duly reasoned, in accordance with national law;
- open to review by the competent jurisdictions according to national law;
- made available to the public. 77

Recommendation (2003)9 on measures to promote the democratic and social contribution of digital broadcasting suggests that, when awarding digital broadcasting licences, the relevant public authorities should ensure that the services on offer are many and varied, and encourage the establishment of regional or local services that meet the public’s expectations at these levels.78

8.2 Examples of digital licensing

According to a study by the European Platform of Regulatory Authorities, different approaches have been adopted for the allocation of digital capacity (the spectrum). In most cases (Germany, UK, Netherlands, Italy, Spain, Austria, Ireland and Lithuania) the capacity is allocated to one or more network/multiplex operators. In other cases (Sweden and Finland) the capacity is allocated directly to channels. In evaluating the regulatory model though, what appears to be relevant is how access to this capacity is regulated, rather than who has been assigned the capacity.

Two regulatory approaches seem to emerge: in a first group of countries (Finland, Germany and Sweden), the channels’ line-up is the result of a

77 Recommendation Rec (2000) 23 of the Committee of Ministers to member states on the independence and functions of regulatory authorities for the broadcasting sector.
78 Basic principles for digital broadcasting / Appendix to Recommendation Rec (2003)9. See: https://wcd.coe.int/rsi/common/renderers/rend_standard.jsp?DocId=38043&SecMode=1&SiteName=cm&Lang=en
selection made by the regulator or government through public procedures that are very similar to those used in the analogue environment; in this case whether the frequencies are allocated directly to the broadcaster or to a network operators, the line-up of channels that have access to the capacity is predefined by the government or the regulator.

In a second group of countries (Italy, UK and Norway), the capacity is managed as a whole by a multiplex/network operator who is relatively free to use the capacity and 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 in order to preserve public interest objectives such as diversity and pluralism.

The beauty-contest procedure remains to be widely adopted as a way to allocate technical capacity, as opposed to auctions which is more commonly used when allocating spectrum for telecom use, such as telephony, wireless and Internet.  

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. In other words a beauty contest allows the allocation of licences on the basis of detailed plans submitted by applicants. The essential feature of the other procedure, an auction, is that licences are awarded to those that bid the highest price.

In any case the right to transmit digital terrestrial television (DTT) channels is awarded with conditions attached. For example, in Austria in February 2006, the Kommunikationsbehörde Austria (national communications authority)
granted to Österreichische Rundfunksender GmbH & Co KG (ORS) the licence to operate a terrestrial multiplex platform until 1 August 2016. The licensing decision sets out detailed conditions for the transmission of digital terrestrial television. ORS is required to increase its coverage in stages. It must carry both national TV channels and, to a limited extent, the regional channels produced by the public broadcaster Österreichische Rundfunk (ORF). Private broadcaster ATV is also entitled to have its national terrestrial channel ATV+ transmitted via the ORS multiplex platform. Fees charged for the transmission of channels and additional services must be reasonable. ORS is also obliged to treat all applicants equally when calculating these fees.\(^{80}\)

Earlier Kommunikationsbehörde issued the Multiplex Selection Criteria Decree, which set out the legal selection criteria. Preference were to be given to applicants who could quickly achieve a high level of population coverage, offer excellent signal quality, include the broadcasting companies, offer a consumer-friendly service, submit a strategy for promoting the distribution of suitable receivers and offer a range of digital channels that best serves diversity of opinion.\(^{81}\)

Similar obligations may refer to other platforms. The French audiovisual regulatory authority CSA in 2006 issued a recommendation obligatory for all cable operators on implementation of Article 34-1 of the Freedom of Communication Act (1986, as amended). This Article was intended to ensure that homes in blocks of flats that no longer connected to an aerial, but to a cable distribution network, were able to receive the terrestrially broadcast television channels that were normally received in the area, for which no payment was charged, without being obliged to subscribe to a package of

---


pay channels. The CSA’s attention was drawn to the conditions and time taken for implementing this “extended aerial service”, and to the rates being charged by certain cable operators for renting an adaptor.

Article 34-1 states that the amount charged must cover only “the cost of installation, maintenance, and replacement of the network”. This means that if the rate being charged for the aerial service plus the unencrypted terrestrially broadcast digital television channels is more than what was being charged previously for the aerial service without these channels, the cable operators will have to provide the CSA with justification for the increase.82

Similar arrangement regarding cable transmission of public and private free-to-air channels was reached in 2004 in Germany.83

Stringent conditions aim to prevent companies from passing their expenses on the public by means of imposing price controls on the new platforms. There could be other restrictions when the dominant position of the service providers is taken into account. For example, in Spain the key digital pay-television player controlled by national and international media groups is restricted as to the length of the broadcasting contracts that it may sign with Spanish soccer clubs; it must also allow third parties to distribute its theme-specific channels. It is not permitted to have exclusive rights to channels produced by the largest U.S. studios or international producers. It also is obliged to grant independent programmers access to its platform under reasonable, transparent and non-discriminatory conditions.84

---

In the CIS region, many countries take the example of digitalization from Russia, where so far only 10 percent of the population have access to digital television technology85. In Russia (see 8.5 below) the exact line-up for the first multiplex was confirmed by a Presidential Decree of 24 June 2009. In October 2009, the moratorium was lifted for those areas where spectrum allocation for the first multiplex of digital television had been completed. Existing analogue television broadcasting channels that were incompatible with the digital plan in progress were to be repositioned to different frequencies. The lifting of the moratorium aimed to permit the renewal of analogue licences after their expiration (the maximum licence term in Russia is 5 years). Nevertheless by the end of the moratorium some television companies failed to renew their licences, especially if their frequencies were taken during the freeze by the future first multiplex or even kept vacant so as not to interfere with digital television.

In Belarus and Kazakhstan the line-ups of channels for the first multiplexes have been approved by the governments. On the other hand, in Ukraine the line-up was selected in an open procedure by the national regulator.

8.3 The role of the regulatory authority

According to a study by the European Platform of Regulatory Authorities, the role of national broadcasting authorities (NRAs) remains crucial as far as the digital switchover is concerned. The main policymaking activity carried out by the NRAs seems to be supporting the legislature in drafting the relevant acts, followed by the governance of the analogue switch-off. As far as implementation of policy is concerned, the main activity of NRAs is drafting and carrying out licensing procedure, followed by frequency allocation and composition of multiplexes. As it appears from the experience of the

85 See http://www.rosbalt.ru/2009/05/13/640331.html
countries that have already launched DTT, the NRAs increasingly will be
involved in the challenges posed by the digital switchover. Their technical,
economic and judicial competence is crucial in designing the most suitable
regulatory framework. Also, as in the digital broadcasting scenario, in most
countries terrestrial broadcasters will become “network operators”, new
knowledge and professional skills will have to be gained. These skills will be
needed in order to manage this “double nature” of the broadcasting that will
be regulated, on one hand, as a communication network, and on the other
for the audio-visual contents carried. 86

In Ireland by the Broadcasting Act of 2001, the Independent Radio and
Television Commission (IRTC), established by statute in 1988 to regulate
the independent audio-visual sector, was renamed the Broadcasting
Commission of Ireland (BCI) and given an increased role. It is required to
ensure that the number and categories of broadcasting services made
available “best serve the needs of the people of the island of Ireland,
bearing in mind their languages and traditions and their religious, ethical and
cultural diversity” (s.11(2)). It is also expected to develop and enforce codes
regarding taste and decency, as well as advertising and teleshopping.87

Recommendation Rec (2000)23 to member states on the independence and
functions of regulatory authorities for the broadcasting sector suggests that
the independence of regulatory and licensing bodies is vital for the execution
of their functions. It invites the member states of the Council of Europe
to “include provisions in their legislation and measures in their policies
entrusting the regulatory authorities for the broadcasting sector with powers
which enable them to fulfil their missions, as prescribed by national law, in

86 Working Group on Digital Terrestrial Television in EPRA Countries. Final Report. 2 June 2004. See at the official
site of EPRA, the European Platform of Regulatory Authorities, at: http://www.epra.org/content/english/press/
papers/DTTWG_finalreport.doc
an effective, independent and transparent manner, in accordance with the guidelines set out” alongside this document.88

The Declaration of the Committee of Ministers on the independence and functions of regulatory authorities for the broadcasting sector provides as follows:

“In most Council of Europe member states, the members of regulatory authorities are appointed by the parliament or by the head of state at the proposal of parliament. In some member states, in order to ensure that the membership of the regulatory authority reflects the country’s social and political diversity, part or all of the members are nominated by non-governmental groups which are considered to be representative of society. Further, in a few member states, the law provides objective selection criteria for the appointment of members. By contrast, in a number of countries, members are appointed by sole decision of one state authority, e.g. the head of state or a state department, often without clearly specified selection criteria. The appointment of members of regulatory authorities by the head of state and/or parliament has sometimes been criticised advancing that, in such cases, membership would represent or reproduce political power structures.

Concerns have often been raised that the nominating or appointing bodies could exert pressure on the members after their appointment. In fact, in some member states, the members of regulatory authorities are frequently accused of acting on behalf of the state body that designated them or political formation behind the designating or appointing authority.”89

88 Recommendation Rec (2000) 23 of the Committee of Ministers to member states on the independence and functions of regulatory authorities for the broadcasting sector.
Such independence is a well-established principle in Europe, recently confirmed by a key act – Resolution 1636 (2008) of the Parliamentary Assembly of the Council of Europe. Its text notes that one of the indicators for the media in a democratic society is that “regulatory authorities for the broadcasting media must function in an unbiased and effective manner, for instance when granting licences”.  

8.4 Moratorium

A moratorium on issuing licenses for broadcasting may be a necessary step in the digital switchover. It allows the regulatory authorities to make plans and efficiently use the spectrum while making everything ready to start licensing digital broadcasters. It also makes broadcasters do practical steps to switch their signal from analogue.

At the same time, as also highlighted by the Office of the Representative on Freedom of the Media of the OSCE, there may be attempts to use such a moratorium in political aims, for example, to keep independent stations from the air.

To give an example, on 19 September 2008, the OSCE Representative on Freedom of the Media asked the Government of Armenia to review the adopted amendments to the TV and radio law that introduced a moratorium on issuing new broadcasting licenses until the planned digital switchover of 20 July 2010. This moratorium makes it impossible for Armenia to comply with the June 2008 decision of the European Court of Human Rights, which found that denials of licenses for television station A1+ violated Article 10 of the European Convention on Human Rights, and urged the country to

---

90 Item 8.15. See: http://assembly.coe.int/Main.asp?link=/Documents/AdoptedText/ta08/ERES1636.htm#1
allow the station to apply for a new license in a fair competition. A1+ is an independent channel which repeatedly has been denied a broadcasting license.

The moratorium effectively contravenes the decision of the ECHR. While the digital broadcasting switchover is cited by the Armenian authorities as the reason for the amendment, a moratorium on tenders for broadcasting licenses should not be the first step in the digitalization process. As it has been reported, the ban on broadcast licensing competitions in Armenia caused serious concerns for both the media and international organizations.\(^91\)

Digitalization should not be allowed to reduce diversity and plurality, and it should never be used as an excuse to limit free and independent broadcasting. If the broadcasting landscape in a country is not pluralistic and diverse, it would be better to delay digitalization and undertake other reforms first.\(^92\)

**8.5 State broadcasting**

Media pluralism is negatively influenced by the dominance of state broadcasting. When broadcasters are under government control, media freedom is endangered. This problem may get a boost in the switchover process.

---


For example, the Russian government has approved a federal programme under which five out of the eight digital TV channels to be obligatory provided to the audience free of charge in 2011 will belong to the state-run company while the remaining three are run by companies close to and/or partly owned by the state.

The channels were selected by the government without public discussion or transparent procedures. The Russian authorities named this set a “social package”, meaning that the federal and regional public budget will cover all expenses on the digital transfer of this particular set of programmes in three platforms – DTT, cable and satellite. Its final composition was confirmed by a decree of the President. There was no explanation available as to why, for example, a sports channel was prioritized over an educational programme, or why particular channels were selected from an array of other private networks. No room was reserved for regional broadcasters, with the exception of St. Petersburg’s 5 kanal.

All other broadcasters will have to pay a market price for the transfer. In their case the government puts the burden of financing the switchover solely on the broadcasters themselves. That means that there is no guarantee that existing over-the-air private channels will be kept on multiplexes after the switch-off of analogue TV planned for 2015. The first multiplex of the DTT system, as well as two subsequent ones, will be operated by the state-owned RTRS company.

Instead of introducing the long-awaited broadcasting law in the country, it is planned to only slightly amend the current governmental regulations on licensing and other aspects of relations in broadcasting.93 The policy papers on development of broadcasting in the Russian Federation adopted by the

Government do not envisage introduction of public broadcasting together with or in parallel to the switchover to digital television and radio.\textsuperscript{94}

As the OSCE pointed out, governments should refrain from facilitating transition to digital television only to the state-run or loyal broadcasters. Otherwise it would violate of one of the well-established principles in Europe, recently confirmed by \textbf{Resolution 1636 (2008) of the Parliamentary Assembly of the Council of Europe}. Its text notes that one of the indicators for the media in a democratic society is that the media “have fair and equal access to distribution channels, be they technical infrastructure (for example, radio frequencies, transmission cables, satellites)”.\textsuperscript{95}

\section*{8.6 The switch-off of analogue broadcasting}

To conclude this Guide, let us take a look at the date of the analogue switch-off.

It appears that the analogue switch-off date is the strongest and most effective policy tool in the hands of governments. As it has been experienced in Germany, a very close and certain switch-off date may be extremely functional in a successful and rapid transition to digital.

The European Commission states that switch-off should only take place “when digital broadcasting has achieved almost universal penetration”.\textsuperscript{96}

\begin{flushright}
\textsuperscript{95} Item 8.16 of the Resolution 1636 (2008) of the Parliamentary Assembly of the Council of Europe “Indicators for media in a democracy”. See: http://assembly.coe.int/Main.asp?link=/Documents/AdoptedText/ta08/ERES1636.htm
\end{flushright}
We have noted in this context (see 6.1) recommendations of the Council of Europe to promote access of the public to audiovisual services. In addition, the EU’s Audiovisual Media Services Directive (AMSD) obliges member states to encourage media-service providers to ensure that their services are gradually made accessible to people with a visual or hearing disability.\textsuperscript{97}

The OSCE noted on many occasions that the switchover process ends with the switch-off of analogue broadcasting. The date of such a switch-off should be set with much caution, so that no part of the population would be excluded from digital terrestrial television. A switch-off date, though in practice it makes broadcasters set a faster pace to the switchover process, should be revised if a danger of such exclusion arises. For this reason, regular monitoring of digital environment is recommended.

\textbf{The United Kingdom} presents an example of how the switch-off could be done in practice. Analogue broadcasting in the UK is to be switched off in regional stages between 2008 and 2012. Digital television in the form of Freeview (a joint venture between the BBC and commercial broadcasters) has been successful. Freeview is transmitted on television multiplexes, five out of six of these being licensed by Ofcom (the sixth is operated by the BBC under its Royal Charter). Ofcom, the UK communications regulator, makes it part of the licence conditions to ensure that coverage by digital terrestrial television is achieved after switchover to a degree equivalent to that of current analogue television coverage. For the two multiplex licence holders carrying public service television channels, coverage of 98.5 per cent of the UK population will be required. To achieve this, the multiplexes will be required to broadcast from all 1,154 sites currently used for analogue transmissions, and nine additional transmission relays will be necessary.

\textsuperscript{97} Article 7 of the Directive 2017/13/EU.
Lists of sites from which transmissions must be made are included in the conditions. The three commercial multiplexes not carrying public service broadcasting channels will be required to achieve 90 percent coverage after switchover. An annual report on compliance must be sent to Ofcom by holders of multiplex licences.\textsuperscript{98}

VI. Addendum. Relevant International Acts
European Union

Council of Europe


- Recommendation Rec (2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting. Adopted by the Committee of Ministers on 28 May 2003 at the 840th meeting of the Ministers’ Deputies. See: https://wcd.coe.int/rsi/common/renderers/rend_standard.jsp?DocId=38043&SecMode=1&SiteName=cm&Lang=en


- Recommendation CM/Rec(2007)2 of the Committee of Ministers to member states on media pluralism and diversity of media content (Adopted by the Committee of Ministers on 31 January 2007 at the 985th meeting of the Ministers’ Deputies). See: https://wcd.coe.int/ViewDoc.jsp?id=1089699

- Recommendation Rec (2007)3 of the Committee of Ministers of the Council of Europe to member states on the remit of public service media in the information society (Adopted by the Committee of Ministers on 31 January 2007 at the 985th meeting of the Ministers’ Deputies). See: https://wcd.coe.int/ViewDoc.jsp?id=1089759

- Declaration of the Committee of Ministers on protecting the role of the media in democracy in the context of media concentration (Adopted by the Committee of Ministers on 31 January 2007 at the 985th meeting of the Ministers’ Deputies). See: https://wcd.coe.int/ViewDoc.jsp?id=1089615
• Declaration of the Committee of Ministers on the allocation and management of the digital dividend and the public interest ( Adopted by the Committee of Ministers on 20 February 2008 at the 1018th meeting of the Ministers’ Deputies). See: https://wcd.coe.int/ViewDoc.jsp?Ref=Decl(20.02.2008)&Language=lanEnglish&Ver=0002&Site=COE&BackColorInternet=9999CC&BackColorIntranet=FFBB55&BackColorLogged=FFAC75

• Declaration of the Committee of Ministers on the independence and functions of regulatory authorities for the broadcasting sector. Adopted by the Committee of Ministers on 26 March 2008 at the 1022nd meeting of the Ministers’ Deputies. See: https://wcd.coe.int/ViewDoc.jsp?id=1266737&Site=CM
