

Switchover to the Digital Dividend

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The Digital Dividend: Opportunities and Obstacles

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Foreword

Like Siamese twins, the switchover to digital television is inseparable from the spectrum liberated as a result of the process. The twin of the switchover is called digital dividend. If we look closer at these twins, we realize that they are non-identical, as far as at least one important point is concerned. Whereas lots of facts and figures are being collected to document how countries are moving from analogue to digital television, much less information seems available on how they might wish to, or are obliged to, use the resulting digital dividend. Admittedly, when it comes to describing developments concerning the digitization of television the usable data are significantly more concrete than they are regarding policies for the digital dividend. And it is these policies that are decisive for determining the use of the freed up spectrum. Tracking policies becomes easier, however, if we take stock of existing legal frameworks within which these policies are being developed. This IRIS *plus* deals, in its Lead Article, with the rules and regulations currently determining the possible uses of the digital dividend, while its Related Reporting and its Zoom section provide legal and market information relevant to the implementation of digital television.

Clearly, the hunt for a share in the digital dividend is intensifying; among the hunters are incumbent broadcasters, new audiovisual media service providers, citizens' groups and even states. Yet the digital dividend is not fair game that may be shot by whoever possesses a qun. Rules exist that not only regulate the hunting but also the division of the prey and there are certified hunters. Among the latter we find various institutions concerned with shaping the legal conditions for the use of the digital dividend. For example, the Council of Europe views the digital dividend in light of fundamental rights such as the freedom of information and media pluralism related to this. The European Union guided by its internal market approach emphasizes the potential that the digital dividend has for economic benefit. More technically oriented institutions such as the ITU and CEPT focus on the demands of efficient spectrum management and common standards. Thanks to the efforts of these and several other institutions, states dispose of a core of rules and principles when establishing their national legal frameworks concerning how to use their portion of the digital dividend. The first part of the Lead Article details these core rules and principles and it stresses that even they are only work in process. Consequently, the second part of the Lead Article, looks at the latest developments concerning the policies of the international and European players.

How much time is left for the states before they have to produce viable concepts for the digital dividend? Again much depends on the twins and more precisely in our context on the pace for the switchover to digital television, which in turn is not only determined by



the status quo of technology and business models but also by law. As the Related Reporting shows, much remains to be done on the legal side in Albania, Bosnia Herzegovina, Bulgaria, the Czech Republic, Greece, Latvia, Poland, Romania, Russia and the Ukraine. How different the routes might be that eventually all lead to Rome becomes clear in the ZOOM section that describes and analyses the much more advanced situation in France, Germany, Italy, Spain, and the United Kingdom.

Strasbourg, December 2010

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The Digital Dividend: Opportunities and Obstacles

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Law- and policy-makers at the European level are engaging with the "digital dividend" – the radio spectrum freed as a result of switch-over from analogue to digital television – with an increasing sense of urgency. The issues involved are manifold and multidimensional. Unsurprisingly, relevant approaches to those issues by the Council of Europe and the European Union reflect their respective institutional priorities. Thus, for the Council of Europe, the promotion of various public interests and values (e.g. innovation, pluralism, cultural and linguistic diversity, education, knowledge, the prevention of digital exclusion, etc.) is of paramount importance.² The European Union, on the other hand, is more explicitly preoccupied with economic objectives (e.g. innovation, competition, consumer benefits, single market goals, etc.).³

Whereas the main approaches being pursued at the European level reveal differences in their focuses and emphases, they are both grounded in a realisation that coordinated, efficient strategies are necessary for maximising the full potential of the digital dividend. This concern for a coordinated approach across Europe is well placed for there are powerful dynamics at play at the national level. European States are at different stages in the switch-over process; some have already completed the transition to digital broadcasting,⁴ others are actively anticipating and/or addressing relevant law and policy issues⁵ and, inevitably, a final group of states is lagging behind.⁶

The emergent drive for European-level coordination of national approaches to the digital dividend has to contend not only with the phased reality of the digital switch-over, but also with divergent priorities in how the released spectrum is (to be) used. Policy decisions about the use to which the digital dividend is put have clear implications for regulatory authorities, audiovisual media service providers and users. It is therefore important to consider the translation of policy into practice from the differing perspectives of the various stakeholders.

¹⁾ Tarlach McGonagle would like to acknowledge that the lion's share of the work on this article was done by David Korteweg. The authors would like to thank Nico van Eijk for useful comments on a draft of this article.

²⁾ See, for example, the Council of Europe Committee of Ministers' Declaration on the allocation and management of the digital dividend and the public interest, 20 February 2008.

³⁾ European Commission Communication, Reaping the full benefits of the digital dividend in Europe: A common approach to the use of the spectrum released by the digital switchover, COM(2007) 700 final, 13 November 2007; European Commission Communication, Transforming the digital dividend into social benefits and economic growth, COM(2009) 586 final, 28 October 2009; European Commission Recommendation, Facilitating the release of the digital dividend in the European Union, 2009/848/EC, 28 October 2009.

⁴⁾ Finland, Germany, Luxemburg, the Netherlands, Sweden and Switzerland.

⁵⁾ E.g. Croatia, France, Ireland, Poland, Serbia and the United Kingdom.

⁶⁾ See generally: relevant reporting in IRIS — Legal Observations of the European Audiovisual Observatory and IRIS Merlin — database on legal information relevant to the audiovisual sector in Europe, http://merlin.obs.coe.int/; María Trinidad García Leiva & Michael Starks, "Digital switchover across the globe: the emergence of complex regional patterns", Media, Culture & Society, 2009 vol. 31 no. 5, pp. 787-806.

This article sets out to trace the main lines of relevant law and policy debates at the European level; identify the key issues at stake and critically analyse how the Council of Europe and European Union are engaging with the same. Other international standards and debates in other international fora will be examined too, as relevant. The article will conclude with a distillation of continuing and expected opportunities and challenges relating to the digital dividend.

A sense of how the key issues are dealt with in selected national laws and policy initiatives can be gleaned from the "Related Reporting" section following this article. Important comparative insights will be gained from selected national regulatory policies, strategies and experience to date, as set out in the "Zoom" section following this article.

I. General introduction

In Europe analogue terrestrial TV signals were and are generally transmitted in the 470-862 MHz frequency band, also called the UHF IV and V bands. The radio spectrum that becomes available as a result of the switch-over from analogue to digital terrestrial television broadcasting (DTT) in the UHF IV and V bands is called the digital dividend. The European Commission has defined the digital dividend as the radio spectrum that is available "over and above the frequencies required to support existing broadcasting services in a fully digital environment, including public service obligations." The freed up spectrum is the result of the better transmission efficiency of television signals by DTT compared to analogue broadcasting. Recent policy developments at the EU level concerning the digital dividend have focused on opening up the 790-862 MHz frequency (the 800 MHz band) for electronic communications services (ECS) in order to ensure the availability of this spectrum for wireless broadband. However, it is not precluded that other parts of the spectrum will eventually be subject to policy and regulatory intervention as well. For instance, the unused interleaved spectrum between broadcasting coverage areas (also called the "white spaces") could possibly be used by cognitive radio equipment, if the necessary technical conditions are met. 10

The 800 MHz band is considered very valuable because of its optimal balance between transmission capacity and distance coverage and its good signal propagation. ¹¹ Due to these characteristics, this frequency band is not only very attractive for its current users – mainly legacy television broadcasters, but also for new users like wireless broadband operators. ¹² Other legacy users and/or potential new users of this sub-band are, *inter alia*, users providing transport services, radiolocation services, applications such as wireless microphones, and public services such as security and safety services. As radio frequencies are a scarce resource, their allocation and assignment is of utmost importance to the various stakeholders using the radio spectrum for their services. In addition to being a scarce resource, radio spectrum is also considered a public good that can be used for both commercial and public purposes. The allocation, assignment and management of the radio spectrum is therefore a complex task involving various policy considerations and wide range of public and private stakeholders. ¹³

⁷⁾ UHF stands for Ultra High Frequency which is a range of electromagnetic waves with a certain frequency. Bands IV (470-582 MHz) and V (587-862 MHz) in the UHF range are used mainly for analogue and digital television broadcasting in Europe.

⁸⁾ Commission Communication, "Reaping the full benefits of the digital dividend in Europe", op. cit., p. 3.

⁹⁾ See the recently adopted European Commission Proposal for a Decision of the European Parliament and of the Council establishing the first radio spectrum policy programme. COM(2010)471 final. See Section III.5, below. Broadband means a high-speed fixed or mobile connection which allows the fast transmission of large amounts of data. Source: http://ec.europa.eu/avpolicy/info_centre/a_z/index_en.htm#b

¹⁰⁾ See Commission Communication, "Transforming the digital dividend into social benefits and economic growth", op. cit.
For further analysis, see: Andrew Stirling, "White Spaces - the New Wi-Fi?", International Journal of Digital Television,
2010 vol. 1 no. 1, pp. 69-83 and Sascha D. Meinrath & Michael Calabrese, "White Space Devices & the Myths of Harmful
Interference", 11 N.Y.U. J. Legis. & Pub. Pol'y 495 (2008).

¹¹⁾ Analysys Mason, "Exploiting the digital dividend – a European approach", Final report – Executive summary, 14 August 2009, p. 9.

¹²⁾ See particularly Article 6 of the European Commission Proposal for a Decision establishing the first radio spectrum programme, COM(2010)471 final.

¹³⁾ The European Commission refers in its proposal to the economic, safety, health, public interest, cultural, scientific, social, environmental and technical implications, *ibid.*, p. 9.

Although radio spectrum management is in principle the responsibility of individual states, it is clearly bound by an international – and particularly a European – regulatory and institutional framework. Radio spectrum does not respect national borders and without any international cooperation the exploitation of the radio spectrum would be seriously impaired by cross-border interference. The following section of this article will explore this regulatory and institutional framework at the international and European levels, in order to give a sense of the complexities of radio spectrum management. Particular emphasis will be placed on the European Union due to its detailed engagement with relevant issues. After sketching the regulatory and institutional framework, the policy developments at the EU level will be outlined to give an indication of the direction in which the EU is heading with regard to the digital dividend.

II. Institutional and regulatory framework

1. Council of Europe

The Council of Europe's interest in the digital dividend has so far primarily been articulated in texts adopted by the Committee of Ministers and the Parliamentary Assembly (PACE). The overall approach comprises incidental references in various standard-setting documents and a more detailed and concentrated focus in the Committee of Ministers' Declaration on the allocation and management of the digital dividend and the public interest (2008).¹⁴

1.1. Committee of Ministers

Despite the recent emergence of the term "digital dividend", underlying policy concerns had already been highlighted and addressed by the Council of Europe in its earlier standard-setting work. An example is the Committee of Ministers' Recommendation Rec(2003)9 to member states on measures to promote the democratic and social contribution of digital broadcasting. The substantive part of the Recommendation opens with a call on states' authorities to "create adequate legal and economic conditions for the development of digital broadcasting that guarantee the pluralism of broadcasting services and public access to an enlarged choice and variety of quality programmes, including the maintenance and, where possible, extension of the availability of transfrontier services". It contemplates the protection or adoption of "positive measures to safeguard and promote media pluralism, in order to counterbalance the increasing concentration in this sector".

The Appendix to the Recommendation sets out a set of basic principles for digital broadcasting, as well as key points for consideration in the context of the transition to the digital environment, from the perspectives of the public on the one hand, and broadcasters (especially public service broadcasters) on the other. According to those basic principles, states should adopt strategies for digital switch-over which seek to promote "co-operation between operators, complementarity 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". It is also recommended that relevant authorities encourage regional or local services in their licensing processes for digital broadcasting services.

As suggested by its title, the focus of Recommendation Rec(2003)9 (and its Appendix) is on digital broadcasting generally, but it gives pride of place to the public interest and public service dimensions. These emphases are recurrent across relevant standard-setting spearheaded by the Committee of Ministers, as is evident from other adopted texts such as the Declaration on guaranteeing the independence of public service broadcasting in the Member States¹⁶ and Recommendation Rec(2007)3 on the remit of public service media in the information society.¹⁷

¹⁴⁾ Adopted on 20 February 2008; see further: IRIS 2008-4/5.

¹⁵⁾ Adopted on 28 May 2003; see further: IRIS 2005-3/Extra.

¹⁶⁾ Adopted on 27 September 2006; see further: IRIS 2006-10/5.

¹⁷⁾ Adopted on 31 January 2007; see further: IRIS 2007-3/5.

The policy concerns raised in the aforementioned texts, especially Recommendation Rec(2003)9 are of clear relevance for the digital switch-over generally, but their predominant focus on broadcasting means that they do not capture the full breadth of the digital dividend debate, which is, of course, also relevant for non-broadcasting services and interests. In light of this observation, it is important to consider the Committee of Ministers' Recommendation CM/Rec(2007)16 on measures to promote the public service value of the Internet. There, the central aim is to involve all relevant stakeholders in the development of measures to promote the public service value of the Internet. The Recommendation's focus is therefore broader than digital broadcasting and the range of issues it addresses is organised into five main pillars: democracy, access, openness, diversity and security. Although the Recommendation does not include the digital dividend under any of the five pillars, the principles constituting those pillars are relevant to the digital dividend, perhaps most obviously the pillars of access and diversity.

As already noted, the Council of Europe's most direct engagement with the digital dividend to date has come in the form of the Committee of Ministers' Declaration on the allocation and management of the digital dividend and the public interest. The Declaration draws explicitly on relevant earlier Committee of Ministers' Recommendations, particularly Recommendation Rec(2003)9 and Recommendation Rec(2007)3. The Declaration's preamble points out the need to safeguard essential public interest objectives in the digital environment and to ensure that strategies for digital switch-over and for spectrum allocation and management strike a balance between economic objectives and public-interest objectives (e.g. the promotion of pluralism, cultural and linguistic diversity, and public access to audiovisual services). The Preamble recognises that the digital dividend presents an opportunity for broadcasters to "significantly develop and expand their services". It also acknowledges "the importance of stepping up efforts to ensure effective and equitable access for all persons to the new communications services, education and knowledge, especially with a view to preventing digital exclusion and to narrowing or, ideally, bridging the digital divide".

The substantive part of the Declaration focuses on the need to acknowledge the public nature of the digital dividend and to manage it in the public interest. It also focuses on the promotion of "innovation, pluralism, cultural and linguistic diversity, and access of the public to audiovisual services in the allocation and management of the digital dividend", while taking into account the needs of different types of broadcasters and other media (i.e., public service and commercial), as well as the needs of other existing or new spectrum users. Importantly, this widens the parameters of the Council of Europe's engagement with relevant issues beyond its erstwhile tendency to frame the debate primarily in terms of digital broadcasting and public service media. The Declaration's third and final substantive focus concerns the societal benefits that can accrue from the digital dividend: "an increased number of diversified audiovisual services, including mobile services, with potentially improved geographical coverage and interactive capability, as well as services offering high definition technology, mobile reception, or easier and more affordable access".

Furthermore, the Declaration acknowledges in a forthright manner a crucial dynamic in policy debates centring on the digital dividend, *viz.* that individual states have different policies for digital switch-over, as is their right, and that efforts at the international level to harmonise approaches to the digital dividend can therefore prove difficult to realise in practice.

1.2. Parliamentary Assembly

Like the Committee of Ministers, the Parliamentary Assembly (PACE) also strongly and consistently advocates a central role for public service media and the concerted promotion of public interest values in a changing media environment. In a couple of recently adopted texts, the PACE has sought to place attention for the digital dividend on the backcloth of its general emphasis on these policy priorities.

¹⁸⁾ Adopted on 7 November 2007; see further: IRIS 2008-2/3.

Thus, in Paragraph 7 of its Recommendation 1855 (2009), entitled "The regulation of audiovisual media services", ¹⁹ the PACE expressly endorses the Committee of Ministers' Declaration on the allocation and management of the digital dividend and the public interest. It observes that "[w]hen deciding on the allocation of the radio-frequency spectrum, member states should also balance the spectrum needs of various technologies relating to both broadcasting and telecommunications". It continues by noting that it "will be particularly relevant to look at the availability of the spectrum for countries outside the European Union and, for all countries, how spectrum resources can be allocated to optimise opportunities for public-service broadcasting".

In Paragraph 8 of its Recommendation 1878 (2009), entitled "Funding of public service broad-casting", 20 the PACE again explicitly references the Committee of Ministers' Declaration on the digital dividend and the public interest – and other relevant Committee of Ministers' Recommendations. In Paragraph 16.4, it describes the need to "ensure the allocation of an adequate radio-frequency spectrum for public service broadcasters during the digital switch-over and after analogue radio frequencies have been switched off" – in accordance with the Committee of Ministers' Declaration. It calls on "parliaments of all member states" of the Council of Europe to ensure that this aim is achieved.

In light of the above, it can be concluded that the approach taken by the PACE is by and large consistent with that pursued by the Committee of Ministers. The central feature of both approaches is a clear emphasis on the importance of public interest values and public service activities.

2. Organization for Security and Co-operation in Europe

The Office of the OSCE Representative on Freedom of the Media has also demonstrated an interest in some of the central themes in the digital dividend debate. Earlier this year, it presented a new commissioned study – *Guide to the Digital Switchover*.²¹ The Guide's aim is to highlight the "legal provisions (changes to existing laws, new laws or other legal instruments) and [the] regulatory interventions [that] are needed to allow and to encourage digitalization, and how to manage it".²² In doing so, the Guide examines selected "practical examples of the switchover and provides appropriate recommendations, both good and bad practices".²³ The digital dividend, however, does not feature as a separate focus in the Guide.

3. European Platform of Regulatory Authorities

Digital switch-over and the digital dividend are appearing with increasing regularity on the agenda of the European Platform of Regulatory Authorities (EPRA).²⁴ This is due not only to the licensing issues raised by the digital switch-over, but also to the new regulatory challenges posed by the interactive services facilitated by digital television. Relevant issues have been discussed at a number of EPRA meetings over the past few years. At the EPRA's 26th meeting in 2007, the issues were dealt with extensively in the context of the discussion "Regulatory Challenges of the Digital Future". The relevant Background Paper to that meeting sets out clearly and comprehensively the technical and regulatory background, as well as the aims and advantages of engagement with the

¹⁹⁾ Adopted on 27 January 2009; see further: IRIS 2009-3/3.

²⁰⁾ Adopted on 25 June 2009; see further: IRIS 2009-8/4.

²¹⁾ Katrin Nyman-Metcalf & Andrei Richter, *Guide to the Digital Switchover*, Study commissioned by the Office of the OSCE Representative on Freedom of the Media, March 2010; see further: IRIS 2010-4/1.

²²⁾ Ibid., p. 14.

²³⁾ Ibid.

²⁴⁾ Deirdre Kevin, "Plenary session: Regulatory Challenges of the Digital Future: Including the impact of the new telecom regulatory package on broadcasting and frequency issues", Background Paper, EPRA/2007/13 and "WG II: Current Status & Problems of Digital TV and Radio Implementation", Information Paper, EPRA/2007/11, 26th EPRA Meeting, Sofia, 3-5 October 2007, and "WG III: Regulatory Approach to Digital TV – Experiences and Lessons Learned", Information paper on status of digital television, EPRA/2008/12, 28th EPRA Meeting, Dublin, 29-31 October 2008.

digital dividend.²⁵ It also provides an overview of relevant developments at the international and national levels.

4. Intergovernmental Organisations' (IGO) Special Mandates on Freedom of Expression

On an annual basis, the four IGO Special Mandates for protecting freedom of expression – the UN Special Rapporteur on Freedom of Opinion and Expression, the OSCE Representative on Freedom of the Media, the OAS²⁶ Special Rapporteur on Freedom of Expression and the ACHPR²⁷ Special Rapporteur on Freedom of Expression – adopt joint declarations. The thematic focuses of these joint declarations vary from year to year and they offer keen insights into current thematic priorities for the realisation of the right to freedom of expression in practice. Although the texts are not legally binding in a formal sense, "as statements by leading official freedom of expression mandates, appointed by inter-governmental organisations, they provide authoritative interpretation of the scope of international guarantees of freedom of expression in different thematic areas".²⁸ In recent years, a couple of the joint declarations have contained focuses on the digital dividend and related issues.

In the preamble to their Joint Declaration on Diversity in Broadcasting, adopted at the end of 2007,²⁹ the Special Mandates emphasised "the complex nature of diversity, which includes diversity of outlet (types of media) and source (ownership of media), as well as diversity of content (media output)." In the section of the Joint Declaration entitled "On Diversity of Outlet", it is stated:

Consideration of the impact on access to the media, and on different types of broadcasters, should be taken into account in planning for a transition from analogue to digital broadcasting. This requires a clear plan for switchover that promotes, rather than limits, public interest broadcasting. Measures should be taken to ensure that digital transition costs do not limit the ability of community broadcasters to operate. Where appropriate, consideration should be given to reserving part of the spectrum for analogue radio broadcasting for the mediumterm. At least part of the spectrum released through the "digital dividend" should be reserved for broadcasting uses.

In their expansive Joint Declaration of 2010, entitled "Ten Key Challenges to Freedom of Expression in the Next Decade", the IGO Special Mandates stated that they "are particularly concerned about ... [t]he risk that the benefits from the switchover to digital frequencies will go largely to existing broadcasters, and other uses such as telecommunications, to the detriment of greater diversity and access, and public interest media". This concern was voiced in the section of the Joint Declaration dealing with "Commercial Pressures" which "pose a threat to the ability of the media to disseminate public interest content, which is often costly to produce".

It is therefore clear that the interest of the IGO Special Mandates in the digital dividend is firmly grounded in a concern for the preservation and promotion of public interest content and, more generally, diversity of content, as secured by media activities.

²⁵⁾ Deirdre Kevin, "Plenary session: Regulatory Challenges of the Digital Future: Including the impact of the new telecom regulatory package on broadcasting and frequency issues", op. cit.

²⁶⁾ Organization of American States.

²⁷⁾ African Commission on Human and Peoples' Rights.

²⁸⁾ Toby Mendel, "2007 Joint Declaration by the Four Special Mandates for Protecting Freedom of Expression", IRIS 2008-4/2.

²⁹⁾ Joint Declaration on Diversity in Broadcasting by the UN Special Rapporteur on Freedom of Opinion and Expression, the OSCE Representative on Freedom of the Media, the OAS Special Rapporteur on Freedom of Expression and the ACHPR Special Rapporteur on Freedom of Expression and Access to Information, 12 December 2007; see further: IRIS 2008-4/2.

³⁰⁾ Tenth Anniversary Joint Declaration: Ten Key Challenges to Freedom of Expression in the Next Decade by the United Nations (UN) Special Rapporteur on Freedom of Opinion and Expression, the Organization for Security and Cooperation in Europe (OSCE) Representative on Freedom of the Media, the Organization of American States (OAS) Special Rapporteur on Freedom of Expression and the African Commission on Human and Peoples' Rights (ACHPR) Special Rapporteur on Freedom of Expression and Access to Information, 3 February 2010, para. 6(c); See further, IRIS 2010-5/1.

5. International Telecommunications Union

On the global level, the International Telecommunications Union (ITU), a United Nations agency, plays an essential role in the management and coordination of the spectrum.³¹ The ITU, *inter alia*, allocates frequencies and registers frequency assignments.³² With regard to spectrum management, the ITU Radiocommunication Sector (ITU-R) is responsible for the radiocommunications sector. Its principal aim is to ensure "the rational, equitable, efficient and economical use of the radiofrequency spectrum by all radiocommunications services".³³ It tries to achieve this aim by implementing legally binding Radio Regulations and Regional Agreements, in order to determine how radio spectrum should be allocated and used without harmful interference³⁴ between radio communications services.³⁵ These instruments can be revised by a World Radiocommunication Conference (WRC) or a Regional Radiocommunication Conference (RRC).³⁶ Although all EU Member States are independent members of the ITU, the European Commission represents the Union's interests at the ITU as a non-voting sector member.³⁷

In order to facilitate new uses of the radio spectrum that becomes available as a result of the digital switch-over, the ITU-R revised the Radio Regulations at the last WRC in 2007 (WRC-07).³⁸ It identified and allocated the 800 MHz band to mobile broadband services other than broadcasting on a primary basis for Region 1³⁹ as from 17 June 2015. Prior to this revision to the Radio Regulations, a Regional Agreement (GE-06) was adopted, setting 17 June 2015 as the end of the switch-over period from analogue to digital broadcasting.⁴⁰ After this date, countries will no longer be required to protect analogue broadcasting services from neighbouring countries in, *inter alia*, the 800 MHz band. The GE-06 Agreement also established a frequency plan allocating the UHF IV and V bands to DTT by means of the DVB-T⁴¹ standard.⁴²

These developments have established the international framework necessary to allow for the introduction of mobile broadband services other than broadcasting in the 800 MHz band. Since WRCs are only held every three to four years, the upcoming WRC in 2012 (WRC-12) will be a crucial moment for the further development of an international framework governing the digital dividend.⁴³

³¹⁾ For the ITU Constitution & Convention, see: http://www.itu.int/net/about/basic-texts/index.aspx

³²⁾ Article 1.2 (a) ITU Constitution.

³³⁾ Article 12.1 (1) ITU Constitution.

³⁴⁾ According to Article 2(2)(b) of the Authorization Directive, "'harmful interference' means interference which endangers the functioning of a radionavigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radiocommunications service operating in accordance with the applicable Community or national regulations".

³⁵⁾ Article 4 ITU Constitution in conjunction with Article 54.1 ITU Constitution. Frequency allocations are contained in the Frequency Allocation Table (Article 5 Radio Regulations).

³⁶⁾ Article 13 ITU Constitution; Article 7 and Article 9 ITU Convention.

³⁷⁾ Christian Koenig *et al.* (Eds.), *EC Competition and Telecommunications Law* (2nd Edition), (Alphen aan den Rijn, Kluwer Law International, 2009), p. 582.

³⁸⁾ See the official website of the ITU for the documents of the WRC-07 (subscription/fee required): www.itu.int

³⁹⁾ Region 1 comprises Europe, Africa, the Middle East, west of the Persian Gulf including Iraq, the countries making up the former Soviet Union and Mongolia.

⁴⁰⁾ The GE-06 Agreement, covering both Region 1 and 3, was adopted during the RRC held in Geneva in 2006.

⁴¹⁾ DVB-T is a technical standard for terrestrial television as set by the Digital Video Broadcasting Project (DVB), an industryled consortium of, amongst others, broadcasters, manufacturers, network operators, software developers and regulatory bodies. See also: www.dvb.org

^{42) &}quot;Final Acts of the Regional Radiocommunication Conference for planning of the digital terrestrial broadcasting service in parts of Regions 1 and 3, in the frequency bands 174-230 MHz and 470-862 MHz (RRC-06)", Geneva 2006; see also: Nicola Weißenborn, "Broadcasters' Access to Broadcasting Frequencies", IRIS plus 2007-2, p. 4.

⁴³⁾ Article 13.3 ITU Constitution. The official website of WRC-12: http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=wrc-12&lang=en

6. European Conference of Postal and Telecommunications **Administrations**

On a regional level, the European Conference of Postal and Telecommunications Administrations (Conférence européenne des administrations des postes et des télécommunications - CEPT) offers a European forum for regulatory issues in the telecommunications and postal sector.⁴⁴ The CEPT was established in 1959 by the monopoly-holding postal and telecommunications administrations of 19 European countries in the "Arrangement establishing the European Conference of Postal and Telecommunications Administrations" (CEPT Arrangement).45 It is a regional organisation that operates independently of, but cooperates with, the European Union.46 The CEPT currently has 48 European countries, including all EU Member States, as members.

One of the CEPT's principal aims is to promote "further European harmonisation, inter alia of the radio spectrum, with an emphasis on practical cooperation between European countries to help realise Europe-wide regulatory harmonisation."47 In order to achieve this aim the CEPT can adopt non-binding recommendations, take decisions concerning its own modus operandi, and it can make special arrangements to reach certain commitments.⁴⁸ CEPT's tasks are divided between the Assembly, the European Communications Office (ECO) and several committees, including the Electronic Communications Committee (ECC).49 For the purposes of this article, only the latter will be briefly discussed, since the ECC's principal task is to adopt measures to harmonise the efficient use of radio spectrum, and because it has a task group that is working specifically on technical harmonisation measures concerning the digital dividend.50

The ECC can develop what it calls "deliverables", including ECC Decisions and CEPT Reports. ECC Decisions are measures on significant harmonisation matters that are, in principle, not legally binding on the member states except for the member states which voluntarily commit themselves to these ECC Decisions. CEPT Reports are the final studies by the ECC in response to mandates from the European Commission.⁵¹ The ECC has developed both kinds of deliverables mentioned above with regard to the issue of the digital dividend. As already mentioned, the CEPT cooperates with the European Commission on issues of spectrum management. Both actors signed a Memorandum of Understanding to expound the principles of their cooperation in 2004.52 Pursuant to Article 4 of the Radio Spectrum Decision, the European Commission issues mandates to the CEPT to develop "technical implementing measures" regarding the harmonisation of radio frequency allocation and of information availability.⁵³ Furthermore, the European Commission is able to make the results of the mandates it issues to the CEPT, binding on member states.54

On the basis of two mandates issued by the European Commission, the CEPT carried out several studies to define the technical conditions applicable to the 800 MHz band optimised for mobile/ fixed communications networks. 55 Consequently, the CEPT adopted several CEPT Reports containing

⁴⁴⁾ Nicola Weißenborn, "Broadcasters' Access to Broadcasting Frequencies", op. cit., p. 4.

⁴⁵⁾ CEPT Arrangement (last revised: April 2009); available at: http://www.cept.org/.

⁴⁶⁾ Article 2 CEPT Arrangement.

⁴⁷⁾ Article 4 CEPT Arrangement.

⁴⁸⁾ Article 8.1 CEPT Arrangement.

⁴⁹⁾ See the official website of CEPT for an organisational chart and more details on the respective tasks of the Assembly and the ECO.

⁵⁰⁾ Seethetaskgroup(TG4)webpageat:http://www.ero.dk/TG4?mid=58898BA5-D86D-4444-A6CF-0C2B7BD6A0EB&frames=no

⁵¹⁾ Article 10.1, Article 10.2 (together with Article 12) and Article 10.6, Rules of Procedure for the Electronic Communications Committee (and its subordinate entities), Edition 8, October 2009.

^{52) &}quot;Memorandum of Understanding Between the European Commission and the European Conference of Postal and Telecommunications Administrations ('CEPT')", 30 January 2004, available at: http://www.cept.org/DED471D2-A68C-4577-AD70-1F01EF3C9A72?frames=no&

⁵³⁾ Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a Regulatory Framework for Radio Spectrum Policy in the European Community (Radio Spectrum Decision).

⁵⁴⁾ Article 4.3 Radio Spectrum Decision. See also Recital 13 of the Radio Spectrum Decision.

^{55) &}quot;Commission mandate to CEPT on technical considerations regarding harmonization options for the digital dividend", 30 January 2007 DG INFSO/B4 and "Draft second Mandate to CEPT on technical considerations regarding harmonisation options for the digital dividend in the European Union", 3 April 2008.

their findings.⁵⁶ This led eventually to the adoption of an ECC Decision on harmonised technical and regulatory conditions in the 800 MHz band, defining the frequency arrangements and technical conditions for this band.⁵⁷ This ECC Decision sets out the common and minimum (least restrictive) technical conditions for using the 800 MHz band, once a member state designates this frequency band for mobile and/or fixed communications networks. Thus, even if countries adopt this ECC Decision, they do not have to adhere to these technical conditions as long as this frequency band is used for broadcasting services. At the time of writing only Germany, Slovenia, France (partly) and Switzerland have implemented this ECC Decision.⁵⁸

These CEPT deliverables provide the technical basis for the recently adopted European Commission Decision that sets out the technical requirements for the future use of the 800 MHz band for low-and medium-power electronic communications networks.⁵⁹

7. European Union

The so-called Telecommunications Package⁶⁰ of 2002 and particularly the Radio Spectrum Decision,⁶¹ established the regulatory framework to coordinate policy approaches and harmonise conditions regarding the availability and efficient use of the radio spectrum in the EU.⁶² In the context of the recent reform⁶³ of the Telecommunications Package, the regulatory framework for electronic communications networks (ECN) and services (ECS) has been revised in several significant respects as regards the issue of radio spectrum management, and thus the digital dividend.⁶⁴ The framework is based on a cooperation mechanism that mainly involves the European Commission and EU Member States.⁶⁵ The member states are represented in the Radio Spectrum Committee and the Radio Spectrum Policy Group, which will be discussed below (see ss. I.7.1.1. and I.7.1.2., below). The EU framework should be consistent with and take due account of the work of the ITU and other international organisations like the CEPT.⁶⁶

⁵⁶⁾ The relevant reports can be found at: http://www.erodocdb.dk/doks/doccategory.aspx?doccatid=16

⁵⁷⁾ ECC Decision on harmonised conditions for mobile/fixed communications networks (MFCN) operating in the band 790 - 862 MHz, (ECC/DEC/(09)03), 30 October 2009. See: http://www.ero.dk, under ECC Activities/Public consultations on ECC Decisions/Recommendations and Reports.

⁵⁸⁾ See: http://www.erodocdb.dk/doks/implement_doc_adm.aspx?docid=2324 (last visited: 10 September 2010).

⁵⁹⁾ Commission Decision 2010/267/EU of 6 May 2010 on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union, OJ L 117/95.

⁶⁰⁾ Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (Framework Directive), Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), Directive 2002/20/EC on the authorisation of electronic communications networks and services (Authorisation Directive), Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications).

⁶¹⁾ Decision No 676/2002/EC on a Regulatory Framework for Radio Spectrum Policy in the European Community (Radio Spectrum Decision).

⁶²⁾ For an overview of the 2002 Telecommunications Package, see: Nico van Eijk, "New European Rules for the Communications Sector", IRIS plus 2003-2; Nico van Eijk, "Comments on Electronic Communications Regulatory Framework", in: Oliver Castendyk, Egbert Dommering & Alexander Scheuer, Eds., European Media Law (Alphen aan den Rijn, Kluwer Law International, 2008), p. 1111 and Nico van Eijk, "Comments on Directive 2002/21/EC – 'Framework Directive' and Directive 2002/20/EC – 'Authorization Directive': Allocation of Frequencies for Broadcasting", in ibid., p. 1153.

⁶³⁾ Directive 2009/140/EC amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services (Better Regulation Directive); Directive 2009/136/EC amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (Citizens' Rights Directive); Regulation (EC) No 1211/2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office.

⁶⁴⁾ For a general discussion of the EU Telecoms reform and its impact on audiovisual media services, see: Sebastian Schweda, "The Telecoms Review': New Impetus for Audiovisual Media?", IRIS plus 2009-10.

⁶⁵⁾ Christian Koenig et al., Eds., EC Competition and Telecommunications Law (2nd Edition), op. cit., p. 588.

⁶⁶⁾ Recital 30, Better Regulation Directive; Article 1.3, Radio Spectrum Decision.

The following paragraphs provide a brief introduction to the legislative acts and regulatory actors that are relevant to the digital dividend discussion.

7.1. Radio Spectrum Decision

The Radio Spectrum Decision establishes a cooperation mechanism between the European Commission and the member states via the Radio Spectrum Committee as well as the Radio Spectrum Policy Group. 67 The latter is established by a separate Commission Decision (see s. I.7.1.2., below). 68 The Radio Spectrum Decision's principal aim is to establish a "policy and legal framework in the Community in order to ensure the coordination of policy approaches and, where appropriate, harmonised conditions with regard to the availability and efficient use of the radio spectrum necessary for the establishment and functioning of the internal market."69 While referring to several procedures to achieve this aim, the European Commission's main instrument is its ability to adopt binding technical implementing measures in order to ensure "harmonised conditions for the availability and efficient use of radio spectrum, as well as the availability of information related to the use of radio spectrum". 70 In creating this Community regulatory framework, the Radio Spectrum Decision refers to a broad range of aspects that should be taken into account, such as economic, safety, health, public interest, freedom of expression, cultural, scientific, social and technical aspects.⁷¹ Furthermore, according to Recital 3, radio spectrum policy should also contribute to freedom and plurality of the media. It also identifies the need for a coordinated approach towards EU interests in international negotiations where radio spectrum use affects EU policies.⁷²

7.1.1. Radio Spectrum Committee⁷³

The Radio Spectrum Committee (RSC), established under Article 3 of the Radio Spectrum Decision, assists the European Commission in the development and adoption of the aforementioned binding technical implementing measures. This advisory body mainly focuses on the technical aspects of spectrum harmonisation.⁷⁴ According to the Draft RSC Work Programme for 2010, the RSC will assist the member states and the European Commission in trying to gain the best results out of the negotiations with regard to the digital dividend during the upcoming WRC in 2012 (WRC-12).⁷⁵

7.1.2. Radio Spectrum Policy Group⁷⁶

The Radio Spectrum Policy Group (RSPG) comprises governmental experts from each member state, as well as a representative from the European Commission. Third party observers, such as from the CEPT, the European Parliament, or from EEA States, can also be invited to the RSPG meetings.⁷⁷

The RSPG has the task to assist and advise the Commission on radio spectrum policy issues, on coordination of policy approaches and on harmonised conditions with regard to the availability and efficient use of radio spectrum.⁷⁸ It assists and advises the European Commission on the

⁶⁷⁾ Article 4, Radio Spectrum Decision.

⁶⁸⁾ Commission Decision of 26 July 2002, establishing a Radio Spectrum Policy Group, 2002/622/EC, amended by Commission Decision of 16 December 2009, 2009/978/EU.

⁶⁹⁾ Article 1, Radio Spectrum Decision.

⁷⁰⁾ Articles 1.2 and 4.1, Radio Spectrum Decision.

⁷¹⁾ Article 1.2 (a), Radio Spectrum Decision

⁷²⁾ Article 1.2 (d), Radio Spectrum Decision.

⁷³⁾ Information about the activities of the RSC can be found at: http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/manage/eu/rsc/index_en.htm

⁷⁴⁾ Article 3, Radio Spectrum Decision. Council Decision 1999/468/EC (Comitology Decision), as amended by Council Decision 2006/512/EC.

⁷⁵⁾ http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/manage/eu/rsc/rsc_subsite/meeting_planning/index_en.htm

⁷⁶⁾ Information about the activities of the RSPG can be found at: http://rspg.ec.europa.eu/.

⁷⁷⁾ Articles 3 and 4, Commission Decision 2002/622/EC, amended by Commission Decision 2009/978/EU.

⁷⁸⁾ Article 2 Decision 2002/622/EC as amended by Decision 2009/978/EU.

preparation of legislative proposals establishing multiannual radio spectrum policy programmes. The RSPG also assists the European Commission in its proposals for common policy objectives, securing the interests of the European Union in international organisations, like the ITU.⁷⁹ The RSPG takes into account the economic, political, cultural, strategic, health and social aspects, as well as the various needs of radio spectrum users with the aim to ensure a fair, non-discriminatory and proportionate balance between the different interests.⁸⁰

Although several opinions adopted by the RSPG in the last couple of years are of relevance to the issue of the digital dividend, only the RSPG Opinion that specifically targets the digital dividend issue (RSPG09-291) and the recent RSPG Opinion on the Radio Spectrum Policy Programme (RSPG10-330) will be discussed later when dealing with the policy developments.⁸¹

7.2. Framework Directive and Authorization Directive82

The general regulatory principles for radio spectrum management are also laid down in the Framework Directive and Authorization Directive, as amended by the Better Regulation Directive. Due to the amendments by the Better Regulation Directive, these two directives have gained in importance in establishing the regulatory principles governing the field of radio spectrum management in the EU.⁸³ The key principles laid down in these two directives reflect the general aim of harmonisation and liberalisation of radio spectrum management in a coordinated manner, while recognizing that radio frequencies are a scarce public resource that has an important social, cultural and economic value.⁸⁴ Regulatory intervention should essentially be limited to a minimum so as to avoid harmful interference.⁸⁵ However, with regard to the aforementioned values, Recital 24 of the Better Regulation Directive explicitly states that, *inter alia*, the objectives of cultural diversity and media pluralism, and of social and territorial cohesion, should be taken into account in the process of spectrum management.

Recital 26 of the Better Regulation Directive is of particular importance for the digital dividend. It explicitly states that the switch-over from analogue to digital broadcasting increases the availability of radio spectrum in the EU, while it simultaneously recognises that the different situations in member states should be taken into account. In this respect, Recital 9 is also of potential relevance, because it recognises that easier access to radio spectrum facilitates the development of broadband services in remote regions, and can therefore help to tackle the problem of a territorial divide in the EU regarding broadband services (also called the "digital divide"). Hence, the digital dividend could play a role in the development of broadband services in remote regions, by increasing the availability of, and thus the accessibility to, radio spectrum. However, increased availability of radio spectrum alone is probably not sufficient to tackle the digital divide. A lower threshold to access radio spectrum is of pressing importance as well.

Against this background, a number of key considerations for policy makers at the member state level and EU level when deciding about the use of the digital dividend, will now be covered.

⁷⁹⁾ Article 2, Commission Decision 2009/978/EU in conjunction with Article 8a.3 and Article 8a.4 Framework Directive.

⁸⁰⁾ Recital 4, Commission Decision 2002/622/EC, as amended by Commission Decision 2009/978/EU.

⁸¹⁾ Adopted RSPG Opinions of relevance are: RSPG Opinion on the EU Spectrum Implications of Switchover to Digital Broadcasting, RSPG04-55, 19 November 2004; RSPG Opinion on WAPECS, RSPG05-102, 23 November 2005; RSPG Opinion on Multimedia Services, RSPG06-143, 25 October 2006; RSPG Opinion on the EU Spectrum Policy Implications of the Digital Dividend, RSPG07-161, 14 February 2007; RSPG Opinion on the Digital Dividend, RSPG09-291, 18 September 2009; RSPG Opinion on the Preparation of ITU World Radiocommunication Conferences RSPG09-294, 5 November 2009; RSPG Opinion on the Main themes of WRC-12 of interest for EU- Wide support, RSPG09-295, 5 November 2009.

⁸²⁾ Directive 2002/21/EC (Framework Directive), amended by Directive 2009/140/EC (Better Regulation Directive); Directive 2002/20/EC (Authorisation Directive), amended by Directive 2009/140/EC (Better Regulation Directive).

⁸³⁾ See the new Article 8a and the amended Article 9 of the amended Framework Directive, and the recitals of the Better Regulation Directive.

⁸⁴⁾ Recital 24, Better Regulation Directive; Article 9 Framework Directive, as amended by the Better Regulation Directive.

⁸⁵⁾ Recital 31, Better Regulation Directive.

7.2.1. A coordinated spectrum management strategy

One of the principal aims of the reform is to achieve a single European information space, through an efficient and coordinated spectrum management strategy. Recital 28 of the Better Regulation Directive sets forth that "strategic planning, coordination and, where appropriate, harmonisation at Community level can help ensure that spectrum users derive the full benefits of the internal market and that EU interests can be effectively defended globally".

Although radio spectrum management remains within the competence of the member states, it should be in accordance with the policy objectives and regulatory principles of Articles 8 and 8a Framework Directive, as amended by the Better Regulation Directive.87 The introduction of Article 8a Framework Directive contributes to the cooperative approach towards spectrum management by the European Commission and the member states. In pursuing this goal of cooperation, member states are now obliged to take a wide range of aspects into account, such as economic, freedom of expression, cultural, social and technical aspects. The introduction of a new legislative instrument to strategically plan and coordinate spectrum policy at the European level – the multiannual radio spectrum policy programme (RSPP) – is probably the biggest step towards a more coherent approach to radio spectrum policy.

Pursuant to Article 8a Framework Directive, the European Commission may submit an RSPP that sets out the policy orientations and objectives for the strategic planning and harmonisation of the use of radio spectrum, to the European Parliament and the Council. The scope of these policy orientations and objectives are limited to "the availability and efficient use of radio spectrum necessary for the establishment and functioning of the internal market" and, in appropriate cases, "to the harmonisation of procedures for the granting of general authorisations or individual rights of use for radio frequencies where necessary to overcome barriers to the internal market." 88 Furthermore, the RSPP is bound by the provisions and common principles of the Framework Directive and other Directives that are part of the Telecommunications Package, such as the principle of technological and service neutrality as discussed below. 89 In addition to the RSPP, the European Commission may also propose common policy objectives to the European Parliament and the Council in order to ensure the effective coordination of the interests of the EU in international organisations, like the ITU. 90

The RSPG's advisory role has extended to the new powers conferred upon the European Commission pursuant to the new Article 8a Framework Directive. Hence, the European Commission has to take "utmost account" of the opinion of the RSPG when proposing an RSPP or common policy objectives. The RSPG recently adopted its Opinion on the Radio Spectrum Policy Programme which is covered in the section on the policy developments below. The European Commission has also held a public consultation on the possible content of the RSPP. This has culminated in the recent adoption by the European Commission of a Proposal for a decision establishing the first radio spectrum policy programme which also addresses the digital dividend discussion.

⁸⁶⁾ Recital 3, Better Regulation Directive.

⁸⁷⁾ Article 8.1 and Article 9.1, Framework Directive.

⁸⁸⁾ Recital 28, Better Regulation Directive.

⁸⁹⁾ Article 8a.3, Framework Directive.

⁹⁰⁾ Article 8a.4, Framework Directive.

⁹¹⁾ Article 8a.3, Framework Directive.

⁹²⁾ Public Consultation/Call for Input in preparation for the Radio Spectrum Policy Programme:
http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/_document_storage/consultations/2010_
rspp/rspp_consultation.pdf . The responses to the Consultation can be viewed at:

http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/eu_policy/rspp/rspp_pc_rep/index_en.htm 93) European Commission, Proposal for a Decision of the European Parliament and of the Council establishing the first radio spectrum policy programme. COM(2010) 471 final.

7.2.2. Principle of technological and service neutrality

In order to increase flexibility in spectrum management and access to radio spectrum, the Better Regulation Directive incorporated the principle of technological and service neutrality.⁹⁴ This means that radio spectrum users should in principle be able to provide all types of ECS, and use all types of technology to provide these ECS in the radio frequency bands that are declared available for ECS.⁹⁵ However, there are exceptions to the principle of technological and service neutrality.

Besides proportionate and non-discriminatory restrictions to the principle of technological neutrality for mainly technical reasons, 96 restrictions are also possible in order to fulfil a non-exhaustive list of general interest objectives. 97 Of particular importance to audiovisual media service providers is the justification for an exception to promote "cultural and linguistic diversity and media pluralism, for example by the provision of radio and television broadcasting services". 98 The same general interest objectives allow exceptions to the principle of service neutrality. 99 Hence, member states could require that certain services, such as digital broadcasting services, can only be provided in certain parts of the digital dividend. But even if member states require certain specific services to be provided in a specific band, they cannot prohibit the provision of any other services in that specific band. Exceptions to this principle of non-exclusionary use of radio frequency spectrum are only allowed when they are justified to protect safety of life services or, "exceptionally" to fulfil other general interest objectives as defined by the member states. 100 This means that a member state has the option to prohibit the use of any other ECS in the digital dividend if it meets the requirements set in Article 9.4 of the Framework Directive.

Despite the fact that the aforementioned exceptions to the principle of technological and service neutrality are subject to a public consultation and a regular review process to test the necessity of these exceptions, member states still have a lot of leeway. 101 Not only does the ability "to define the scope and nature of an exception regarding the promotion of cultural and linguistic diversity and media pluralism" lie within the competence of the member states, the Framework Directive's use of the term "broadcasting" leaves open the question of whether the exceptions for broadcasting services also apply to television services transmitted, for example, via wireless broadband services. 102

7.2.3. General authorizations and individual usage rights

Another principle of the EU regulatory framework is that the use of radio frequencies shall be granted on the basis of general authorizations, unless it is necessary to grant individual rights of use in order to achieve a limited list of technical and general interest objectives. ¹⁰³ In principle, rights of use for radio frequencies should be granted through open, objective, transparent, non-

⁹⁴⁾ Recital 34, Better Regulation Directive. The principle of technology and service neutrality is also known as the "Wireless Access Policy for Electronic Communications Services" (WAPECS). See: European Commission, Communication on Rapid Access to Spectrum for Wireless Electronic Communications Services Through More Flexibility, COM(2007) 50 final, 8 February 2007; RSPG Opinion on Wireless Access Policy for Electronic Communications Services (WAPECS), RSPG05-102, 23 November 2005.

⁹⁵⁾ This principle is enshrined in Article 9 Framework Directive.

⁹⁶⁾ Restrictions are allowed to avoid harmful interference, ensure technical quality of services, maximise radio frequency sharing, safeguard efficient use, and protect public health against electromagnetic fields: Article 9.3 Framework Directive.

⁹⁷⁾ Restrictions are allowed to fulfil a general interest objective as defined by member states in conformity with Community law, such as, and not limited to: safety of life; the promotion of social, regional or territorial cohesion; the avoidance of inefficient use of radio frequencies; or the promotion of cultural and linguistic diversity and media pluralism, for example by the provision of radio and television broadcasting services. Article 9.4 Framework Directive.

⁹⁸⁾ Article 9.4 (d) Framework Directive.

⁹⁹⁾ Ibid.

¹⁰⁰⁾ Article 9.4, Framework Directive.

¹⁰¹⁾ Ibid; Recital 38, Better Regulation Directive.

¹⁰²⁾ Recitals 37 and 68, Better Regulation Directive. Article 5.2 Framework Directive. See also: S. Schweda, "The 'Telecoms Review': New Impetus for Audiovisual Media?", IRIS plus 2009-10, p. 13.

¹⁰³⁾ Article 5, Authorisation Directive. For the definition of the term general authorisation, see: Article 2.2 (a) Authorisation Directive.

discriminatory and proportionate procedures, and are subject to the requirements of Article 9 of the Framework Directive. Also in the context of usage rights, broadcasters are treated differently if they fulfil a general interest objective. They are exempt from the requirement of an open procedure with regard to granting individual usage rights.¹⁰⁴

7.2.4. Frequency trading

The liberalization of radio spectrum management is embodied in the introduction of the possibility to transfer or lease individual rights to use radio frequencies. 105 Member states are even obliged to allow this form of frequency trading in the bands that have been identified in implementing measures by the European Commission. 106 Also in this context, broadcasters are treated differently. Pursuant to Article 9b.3 Framework Directive, frequencies which are used for broadcasting are not covered by the aforementioned implementing measures. Member states can still voluntarily decide to allow undertakings using these frequencies to transfer or lease individual rights to use radio frequencies to other undertakings. As a consequence, broadcasters using frequencies within the digital dividend can only transfer or lease their individual rights, if the member states' national policies provide for this.

8. Conclusion

It can be concluded that the institutional and regulatory framework of radio spectrum management comprises multiple actors and guiding principles that each play a different but important role. In its approach, the Council of Europe could be described as being more hands-off than, say, the EU. It tends to expound relevant principles and offer a measure of guidance as to how those principles could be operationalised in practice. The same is true of the selected Joint Declarations by the IGO Special Mandates on Freedom of Expression, discussed above, which offer very limited operational guidance. Whereas the ITU sets out the main global and regional guiding principles for the allocation of radio frequencies with the aim of avoiding harmful interference, it is particularly the Radio Spectrum Decision and the Directives from the Telecoms Package that have created a substantive European regulatory framework. A cooperative process between the European Commission, the RSPG, the RSC, the European Parliament and the European Council establishes the strategic policies and rules that govern radio spectrum management in the EU. Despite the fact that the CEPT is not part of the EU, its cooperation with the European Commission affects the European regulatory framework considerably.

Certain key aspects are: the centrality of a cooperative approach on European Union level, fostering a flexible and liberal approach towards spectrum management through the principle of technological and service neutrality, frequency trading, general authorisations, and the exceptions that are available to the member states in order to fulfil certain public interest objectives. Regarding the latter, it should be noted that broadcasters are granted special treatment in order to promote cultural and linguistic diversity and media pluralism. In other words, according to the EU regulatory framework, member states should allocate radio spectrum in such a way as to bring the highest benefit to society in cultural, economic and social terms. This should be done gradually and with sufficient flexibility, in order to take due account of the different national contexts and legacy situations. 107

All these actors and principles are to be taken into account when dealing with the issue of the digital dividend. The following section of this article will trace the main lines in the policy developments by the relevant actors at the EU level, in light of the previously discussed key principles set out by the institutional and regulatory framework.

¹⁰⁴⁾ Article 5.2 Authorisation Directive.

¹⁰⁵⁾ Article 9b Framework Directive.

¹⁰⁶⁾ Article 9b.1 and 3 Framework Directive.

¹⁰⁷⁾ See further the references at fn. 6, supra.

III. Policy developments

1. Background

The EU has been working on policy considerations concerning the issue of the digital dividend since 2003, when the European Commission addressed the digital switch-over process in a Communication. ¹⁰⁸ The European Commission recognised that the digital switch-over is not merely a technical matter but also has economic and social implications. Initially, a common switch-off date was not envisaged by the European Commission. ¹⁰⁹ However, in 2005 it proposed a common switch-off date in all member states by the beginning of 2012. ¹¹⁰ After an Opinion ¹¹¹ of the RSPG on the policy implications of the digital dividend and two Communications on the RRC-06¹¹² and WRC-07, ¹¹³ the European Commission outlined the need for, and possible approaches to, achieving a coordinated approach towards the digital dividend on EU level. ¹¹⁴ It recognised that the full benefits of the digital dividend can only be realised through cooperation and the adoption of a common approach towards spectrum planning.

Political support for the further development of a coordinated approach was reached with the adoption of Council Conclusions and a Resolution by the European Parliament in 2008.¹¹⁵ The Council, *inter alia*, invited the European Commission to initiate the necessary preparatory steps "to define a coherent basis for the coordinated usage of spectrum on a non exclusive, non mandatory basis".¹¹⁶ The European Parliament particularly underlined the potential benefits of a coordinated approach in terms of economies of scale, interoperable wireless services and the avoidance of a fragmented situation. It also stressed that "decisions on digital dividend management should promote and protect general interest objectives linked to audiovisual and media policies such as freedom of expression, media pluralism, cultural and linguistic diversity and the rights of minors".¹¹⁷ The Council also recognised that the principle of flexible usage of the digital dividend should not trump the promotion of general interest objectives such as media pluralism and cultural and linguistic diversity.¹¹⁸ It should be recalled (as already discussed, *supra*) that these general interest objectives are also central to the approach taken by the Council of Europe.

In 2009, just before the adoption of the reformed Telecommunications Package, the European Commission adopted a Communication (see s. III.2., below) and Recommendation (see s. III.3.1., below) that provided a real impetus to the development of a common EU policy regarding the digital dividend. This has subsequently led to the adoption of a Commission Decision harmonising the technical requirements for the future use of the 800 MHz band for low- and medium-power

¹⁰⁸⁾ Commission Communication on the transition from analogue to digital broadcasting (from digital "switchover" to analogue "switch-off"), COM(2003) 541 final, 17 September 2003.

¹⁰⁹⁾ Ibid.

¹¹⁰⁾ Commission Communication, "Accelerating the transition from analogue to digital broadcasting", COM (2005) 204, 24 May 2005

¹¹¹⁾ RSPG Opinion on "EU Spectrum Policy implications of the digital dividend", 14 February 2007

¹¹²⁾ Commission Communication, "EU spectrum policy priorities for the digital switchover in the context of the upcoming ITU Regional Radiocommunication Conference 2006 (RRC-06)", COM (2005) 461 final, 29 September 2005.

¹¹³⁾ Commission Communication on the preparation of the World Radio Conference 2007, COM (2007) 371, 2 July 2007.

¹¹⁴⁾ Commission Communication, "Reaping the full benefits of the digital dividend in Europe: a common approach to the use of the spectrum released by the digital switchover", COM (2007) 700 final, 13 November 2007.

¹¹⁵⁾ Council Conclusions, "Reaping the full benefits of the digital dividend in Europe: A common approach to the use of the spectrum released by the digital switchover", 2877th Council meeting, 12 June 2008; European Parliament Resolution, "Reaping the full benefits of the digital dividend in Europe: A common approach to the use of the spectrum released by the digital switchover", (2008/2099(INI)), 24 September 2008.

¹¹⁶⁾ Council Conclusions, p. 4 (7a).

¹¹⁷⁾ European Parliament Resolution of 24 September 2008 on reaping the full benefits of the digital dividend in Europe: a common approach to the use of the spectrum released by the digital switchover, op. cit.

¹¹⁸⁾ Council Conclusions, p. 3 (4c).

¹¹⁹⁾ Commission Communication, "Transforming the digital dividend into social benefits and economic growth", COM(2009) 586 final, 28 October 2009; European Commission Recommendation 2009/848/EC on "Facilitating the release of the digital dividend in the European Union".

ECN in 2010.¹²⁰ Together with the recently adopted Proposal for a Decision establishing the first radio spectrum policy programme, these recent policy actions highlight the attention the digital dividend has gained from the European Commission as an important EU policy objective.¹²¹

These policy actions used the input of an Opinion by the RSPG on the digital dividend, and a study, commissioned by the European Commission and conducted by the consultancy firm Analysys Mason, on the socio-economic impact of the digital dividend (Study).¹²²

In its Opinion on the Digital Dividend (RSPG09-291), the RSPG provided policy advice on how to efficiently use the 800 MHz band for ECN and ECS, other than broadcast transmission networks and services. The key objective of the Opinion is to help the member states to exploit the digital dividend on a technological and service neutral basis. Since all actors recognise the societal and economic benefits, according to the Opinion, the key issue is to identify what additional benefits can be realised if the digital dividend becomes available in a coordinated manner, and how to maximise the benefits from a combined social, cultural and economic perspective. After identifying seven issues the benefits from a combined social, cultural and economic perspective. The identifying seven issues the Depinion concludes with nine recommendations to the European Commission, which are largely incorporated in the European Commission's subsequent policy documents.

The Study analysed and evaluated various social and economic aspects by applying different economic models, and concluded that the added economic value of the digital dividend largely depends on the quick development of a coordinated approach. According to the Study, a coordinated approach to the digital dividend, if achieved before 2015, would increase its potential economic impact by an additional EUR 17 - 44 billion over 15 years, depending on the demand scenario that is chosen. 126

2. Communication on "Transforming the digital dividend into social benefits and economic growth"

The aforementioned Commission Communication outlines a set of proposals for a common approach to the digital dividend: the EU roadmap. 127 The goal of the EU roadmap is, inter alia, to achieve the necessary coordination, further increase the size and quality of the digital dividend beyond what can be achieved by member states alone, and foster convergence between different national approaches. At the same time, sufficient flexibility is required so as to take due account of the different national legacy situations concerning terrestrial broadcasting. 128 The urgency for policy action at the EU level is underlined by the digital dividend's potential contribution to the Lisbon goals and the economic recovery of Europe by increasing spectrum resources. 129 According to the European Commission, this could greatly help in providing broadband access to rural areas, meet the growing demand for radio spectrum, stimulate innovation, and support the development of digital terrestrial broadcasting. Urgent actions addressing the immediate policy objectives of

¹²⁰⁾ Commission Decision 2010/267/EU on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union, OJ L 117/95.

¹²¹⁾ European Commission, Proposal for a Decision of the European Parliament and of the Council establishing the first radio spectrum policy programme, COM(2010) 471 final.

¹²²⁾ RSPG Opinion on the Digital Dividend, RSPG09-291, 18 September 2009; Analysys Mason, "Exploiting the digital dividend – a European approach", op. cit.

¹²³⁾ RSPG Opinion on the Digital Dividend, p. 4.

¹²⁴⁾ The seven issues are: the potential range of services that could use the digital dividend; the making available of the digital dividend on a coordinated basis; the timeframe for switch-over to DTT and country-specific specificities; the limits imposed by international frequency coordination requirements; cost issues; the risk of interference to terrestrial broadcasting by new ECN and ECS operating in the digital dividend; the risk of interference to cable systems operating in the 800 MHz band. See Chapter 4 of the RSPG Opinion on the Digital Dividend.

¹²⁵⁾ See Chapter 7 of the RSPG Opinion on the Digital Dividend.

¹²⁶⁾ Mason Study, p. 7.

¹²⁷⁾ Supra, fn. 119, para 2.2, p. 5.

¹²⁸⁾ Ibid., para 2.2, p. 5.

¹²⁹⁾ Ibid., p. 3-4.

economic growth, the prevention of a fragmented situation, and to provide clarity to member states, are established in the aforementioned Recommendation, adopted on the same day as the Communication (and discussed in s. III.3.1, below).¹³⁰

The European Commission proposes three strategic orientations for the mid- to long-term:

- 1. To tackle the issue of cross-border interference and increase the "knock-on effect", 131 it proposes the adoption of a common EU position regarding cross-border coordination with non-EU countries. 132 Taking the upcoming WRC in 2012 into account, the European Commission emphasises the importance of a common EU position on key objectives concerning the digital dividend. The fourth paragraph of the newly introduced Article 8a of the Framework Directive provides the legal basis that will allow the European Commission to propose such a common EU position. 133
- 2. According to the Mason Study, the added value that could be generated by opening up the 800 MHz band to ECS, other than broadcasting, on an EU-wide level, would be at least EUR 17 billion and up to EUR 44 billion.¹³⁴ Therefore, the European Commission might propose to the European Parliament and Council to set a deadline for member states to make the 800 MHz band available to ECS other than broadcasting, and cease the use of high-power broadcasting services in that sub-band.
- 3. Because radio spectrum is a scarce public resource, the European Commission proposes the possibility to agree on a minimum level of spectrum efficiency that should be reached by spectrum users. However, it also notes that a minimum level may entail costs, like the development of new technologies and appliances.

Besides these three strategic orientations, the European Commission identifies several promising long-term initiatives that could lead to further increases in the size and usability of the digital dividend. Although these long-term initiatives should be preceded by an impact assessment and analysis of their potential competitive impact, it is likely that they will be discussed during the preparatory phase of the upcoming RSPP.

3. Recommendation and Decision: Facilitating the release and technical harmonisation of the sub-band

3.1. Commission Recommendation

In order to avoid potential negative cross-border effects and harmful interference, member states are asked to refrain from introducing national measures that would impede the implementation of technical harmonisation measures as set forth in the Decision mentioned below. Therefore, the European Commission adopted a Recommendation in which it recommends member states to urgently undertake two actions: 137

¹³⁰⁾ These two urgent actions are: 1) timely switch-off of analogue TV broadcasting by 2012; 2) harmonised technical conditions applicable to the 800 MHz band, when used for ECS other than broadcasting.

¹³¹⁾ The likelihood that actions by a country will influence the neighbouring countries, and vice versa, could increase the potential of economies of scale if a common EU approach is being adopted.

¹³²⁾ Communication, para 4.1.

¹³³⁾ See also the paragraph on the Framework Directive.

¹³⁴⁾ Communication, p. 8.

¹³⁵⁾ Communication, p. 9-10. These seven initiatives are: (1) sharing future broadcasting network deployment plans between member states; (2) introducing a minimum digital transmission compression standard; (3) setting a standard of immunity to interference for receivers; (4) possible wider deployment of Single Frequency Networks; (5) EU support for research into "frequency-agile" mobile communications systems; (6) identifying future harmonised frequencies for legacy services; (7) adopting a common position on the potential use of the "white spaces".

¹³⁶⁾ Recitals 14 and 15, European Commission Recommendation 2009/848/EC on "Facilitating the release of the digital dividend in the European Union".

¹³⁷⁾ European Commission Recommendation 2009/848/EC.

- 1. Member states should fully switch over from analogue to digital transmission technology by 1 January 2012.
- 2. Member states should support harmonised conditions of use of the 800 MHz band for ECS other than broadcasting services and refrain from any actions that could hinder or impede the deployment of these ECS in that particular sub-band.

3.2. Commission Decision

The European Commission, with the assistance of the RSC and on the basis of the CEPT Decision and other deliverables mentioned above, recently adopted a Decision¹³⁸ that harmonised the technical requirements for the future use of the 800 MHz band for low- and medium-power ECN.¹³⁹ Member states are only obliged to apply the proposed harmonised technical requirements if they decide to open this sub-band for services other than broadcasting. This reflects the European Commission's recognition of the different national contexts and legacy situations which require a gradual and flexible approach towards the digital switch-over and the allocation of the spectrum.¹⁴⁰ In preparing this Decision, the CEPT provided the European Commission with several reports concerning the least restrictive technical conditions and other technical guidance to avoid harmful interference in the 800 MHz band.¹⁴¹ The Decision also takes into account the issue of cross-border interference. Member states are obliged to facilitate cross-border coordination agreements in order to enable the operation of terrestrial systems providing ECS.¹⁴² However, member states are exempt from the technical harmonisation requirements of the Decision in geographical areas where spectrum coordination with third countries requires them to deviate from the technical parameters of the Decision.¹⁴³

4. RSPG Opinion on the Radio Spectrum Policy Programme¹⁴⁴

In accordance with Article 8a of the Framework Directive (see above at s. II.7.2.), the RSPG has issued an Opinion on the soon to be adopted Radio Spectrum Policy Programme. The policy recommendations included in the Opinion are built upon three pillars: contribution to the EU2020 vision and the Digital Agenda, the issue of spectrum governance in the EU, and the issue of external relations.

The Opinion starts with underlining that one of the key objectives of the EU spectrum policy should be to enhance the quality of life of European citizens. This objective can be achieved by, *inter alia*, lowering access barriers for new and current uses and users of the radio spectrum. Ubiquitous broadband access, it is suggested by the RSPG, can also help to bridge the digital divide. 145

It also reaffirms the consensus among the European stakeholders that there are significant societal and economic benefits to be gained by making available a digital dividend in the 800 MHz band. It therefore recommends a coordinated, EU-wide approach based on the guiding principles of service and technology neutrality and harmonised standards. The RSPG considers 2015 as the appropriate deadline to make the 800 MHz band available for ECS other than broadcasting in a coordinated manner. It even suggests that the implementation date might be postponed if member states face frequency coordination issues with non-EU countries or if exceptional national or local circumstances would prevent the availability of this sub-band. With respect to member

¹³⁸⁾ Supra, fn. 59.

¹³⁹⁾ Since this Decision is a technical implementing measure its adoption is governed by the decision process of Article 4 of the Radio Spectrum Decision. See also the paragraphs on the Radio Spectrum Decision, RSC and CEPT.

¹⁴⁰⁾ Recital 4 European Commission Recommendation 2009/848/EC.

¹⁴¹⁾ See paragraph on CEPT.

¹⁴²⁾ Article 2.3, Decision.

¹⁴³⁾ Article 2.4, Decision.

¹⁴⁴⁾ RSPG Opinion on the Radio Spectrum Policy Programme, 9 June 2010, RSPG10-330.

¹⁴⁵⁾ RSPG10-330, p. 3.

¹⁴⁶⁾ Ibid, p. 3-4. See also Policy Objective 3 on p. 9.

states that have to negotiate bilateral agreements with non-EU countries, the RSPG suggests that technical and political support should be provided to member states requesting assistance in solving frequency coordination issues.¹⁴⁷

The considerations mentioned above are a part of more considerations that culminate into eleven policy objectives that, according to the RSPG, should form an essential part of the RSPP. The third policy objective reaffirms the consideration mentioned above that the 800 MHz band should be made available for ECS other than broadcasting services by 2015 with the exceptions as stated above.

5. Commission Proposal for a Decision establishing the first radio spectrum policy programme

The recent Commission Proposal for a Decision establishing the first RSPP (Commission Proposal) has proposed the policy orientations and objectives that should govern radio spectrum policy until 2015. The Proposal confirms the application of the regulatory principles of the Telecoms package in Article 2 and sets out its main policy objectives in Article 3.¹⁴⁸ Of particular interest to the issue of the digital dividend is Article 6, which mandates the freeing of the 800 MHz band by 2013 with the aim of using this spectrum for wireless broadband services.¹⁴⁹ Although Article 6 provides an exception to this deadline for member states because of exceptional national or local circumstances, an exemption to postpone the freeing up until 2015 has to be authorised by the European Commission. The deadline proposed by the Commission seems to clearly deviate from the deadline of 2015 as was suggested by the RSPG in its Opinion.

Another aspect of particular interest in the Commission Proposal is the introduction of a coverage obligation in order to ensure that access to broadband content and services using the 800 MHz band is encouraged in sparsely populated areas. The Commission Proposal also explicitly demands from member states to ensure that the freeing up of the 800 MHz band does not adversely affect users that use the spectrum for programme making and special events.

IV. Conclusion: Towards the adoption of the first Radio Spectrum Policy Proposal

The common denominator of all these policy initiatives is that radio spectrum, being a scarce public good, is a "precious treasure" ¹⁵¹ that should be allocated and managed as efficiently and flexibly as possible, taking into account the wide variety of issues involved and interests of the member states and various stakeholders. To achieve flexibility the policy proposals focus on lowering the threshold of *access* to spectrum, ensuring flexibility in spectrum *use* through the principle of technological and service neutrality, and allowing frequency trading. Exceptions to these principles should only be allowed to fulfil general interest objectives. These principles are clearly reflected in the policy framework that is incorporated in the reformed Telecoms Package.

Specific key issues concerning the digital dividend are the importance of EU-coordination in international negotiations concerning the digital dividend, particularly during the upcoming WRC-12; how to incentivise and agree on a deadline for the opening of the 800 MHz band to ECS other than broadcasting; encouraging access to wireless broadband services in the 800 MHz band in sparsely populated areas; and the adoption of minimum common objectives to secure and foster efficient use of spectrum in the digital dividend.

¹⁴⁷⁾ Ibid, p. 8.

¹⁴⁸⁾ Commission Proposal, Explanatory Memorandum, p. 5-6.

¹⁴⁹⁾ Ibid. p. 6. Recital 13 Commission Proposal.

¹⁵⁰⁾ Article 6.4 Commission Proposal.

¹⁵¹⁾ This characterisation of the radio spectrum was coined by Mr Pearse O'Donohue, Head of Unit, Radio Spectrum Policy of the European Commission, during a workshop about the Digital Dividend at the Spectrum Summit in Brussels 22 March 2010.



The question is not whether coordination, or in some instances, harmonisation is necessary, but to what extent coordination and/or harmonisation is needed to achieve all these principles and objectives. This will be a difficult question to answer, but decisions have to be made. The next step will be the incorporation of the policy initiatives that need the political support of the European Parliament and the Council in the first RSPP for 2011-2015.

Finally, in order to complete the regulatory, institutional and policy framework governing the digital dividend, it is important to recall the contributions of other international organisations, such as the Council of Europe, which are not formally driving the management and coordination of spectrum issues. The importance of their contribution – primarily in terms of promoting key principles and general policy statements about how those principles could be operationalised – should not be downplayed. They are an important complement to the announced attention for public interest objectives within relevant EU texts and activities.

Beyond the IGO framework, meaningful public consultations, involving all interested parties – industry and other stakeholders alike, as well as civil society representation – will remain a crucial dynamic in the advancement of the digital dividend on the international agenda. Due regard for the situational variety in member states' engagement with digital switch-over will also be a key determinant of progress at the policy and regulatory levels.