



ANALYSIS OF NATIONAL A/D SWITCHOVER STRATEGIES

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1 INTRODUCTION

The purpose of this document is to provide an overview of the national A/D switchover strategies of those countries that are involved in the SEE Digi.TV project (dark blue countries on the below map), namely: Austria, Albania, Bosnia and Herzegovina, Croatia, Hungary, Italy, Montenegro, Republic of Macedonia, Serbia and Slovenia.



The analysis of the national A/D switchover strategies is essential for further development of digitalization in the region and is as such important for other Work packages of the SEE Digi.TV project too. National A/D switchover strategies are namely providing the information on how the process will be executed, when, and on the basis of which technologies. All this information is important for executing aligned development of other frameworks - Legal, Technical, Economic and Public awareness.

The most important and key elements of the strategies (such as ASO schedule, Regulatory matters, Financial impacts, Technical details etc.) have been selected and analysed for each country and are summarised in a comparison table where the reader can quickly get an overview of the different national strategies' indication concerning the selected element.

The current document will be the basis of the second deliverable of WP5 (Economic framework) since it will include regional guidelines on how the strategies should/could be further developed and ensure that these strategies become more and more aligned with other countries' strategies.

The second chapter of this document provides an EU level overview on the most important strategic documents while the third chapter concludes the overview.

The most important part of the present deliverable is the comparison table that is a separate Excel table attached to this document. It provides a detailed overview of the national strategies.

2 OVERVIEW OF STRATEGY DOCUMENTS AT EU LEVEL - TRANSITION FROM ANALOGUE TO DIGITAL BROADCASTING

The process of digital switchover is a global issue. The mandatory international agreements were made within the International Telecommunications Union (ITU), two Regional Conferences on Radio communication were held in 2004 (RRC-04) and in 2006 (RRC-06) including 120 countries from Europe, Africa, Middle East, Iran and Russia. The agenda of these conference included specifically issues of frequencies planning for DVB-T in all European and African countries and the majority of Asian countries. On RRC-06, the outcome was the approval of a frequency plan for the future digital broadcasting.

Simultaneously, EU member states have concluded that an effective use of the spectrum and the accomplishment of EU policy objectives, such as the development of internal market, competition, change and increase, cannot be achieved by a fragmented spectrum and the EU bodies and the Member States are co-ordinating their efforts with the following – legally non-binding – strategy documents:

1. **'eEurope 2005: An information society for all - An Action Plan to be presented in view of the Sevilla European Council 21/22 June 2002' – May 28, 2002 COM (2002) 263**

As for the digital switchover, the Action Plan stated that in order to speed up the transition to digital television, Member States should create transparency as far as the conditions for the envisaged switchover are concerned and *Member States should publish by end 2003 their intentions regarding a possible switchover*. These could include a road map, and an assessment of market conditions, and possibly a date for the closure of analogue terrestrial television broadcasting which would enable the recovery and re-farming of frequencies. National switchover plans should also be an opportunity to demonstrate a platform-neutral approach to digital television, taking into account competing delivery mechanisms (primarily satellite, cable and terrestrial).

2. **Communication of the European Commission on the transition from analogue to digital broadcasting (from digital 'switchover' to analogue 'switch-off') – September 17, 2003 COM (2003) 541**

The Communication addressed the switchover process, which is a complex process with social and economic **implications going well beyond the pure technical migration** with a special focus on Member States' policies for digital TV migration and suggested the type of information that could be included in national switchover plans (annex 2).

The Communication stated that **Market forces and consumer demand must drive** broadcasting digitisation and it is also crucial that market players inform consumers so that they know when to migrate and what the options are. Successful switchover will be facilitated by co-

ordinated action from the numerous players involved – broadcasters, equipment manufacturers, retailers, governments and others.

Member State policy interventions should be transparent, justified, proportionate, and timely to minimise the risks of market distortion that requires careful impact assessment. Trying to force switchover against industry and users' interest may lead to unsustainable outcomes. Member State policy interventions should also be non-discriminatory and technologically neutral. Any differentiated treatment of market players must be justified. Digital TV switchover should be an inclusive process encompassing various networks, business models and services, including free-to-air TV, better picture quality or data and interactive services. Analogue switch-off should only take place when digital broadcasting has achieved almost universal penetration, taking all the above possibilities into account, to minimise social cost.

Policy intervention should take place at national level first, EU has also a role to play, in particular in view of the internal market aspects. **Possible EU contributions** concern notably: benchmarking, equipment standards, consumer information, facilitating and promoting access to added value services. The Communication also proposed to launch a debate on spectrum aspects of switchover within the new Community spectrum policy framework. The top-level objective was to encourage efficient and flexible spectrum usage, while preserving the service mission of broadcasting.

It was not envisaged to propose a common switch-off date or the prohibition of selling analogue receivers at EU level.

3. Communication of the European Commission on interoperability of digital interactive television services – July 30, 2004 COM (2004) 541

The Communication set out the Commission's position on the interoperability of digital interactive television services pursuant to the Framework directive (Art. 18). The Communication stated that the benefits of mandating open standards including MHP would include increased consumer choice and legal certainty, leading to lower prices for receivers and acceleration of the switchover from analogue to digital television. The Commission concluded however, that there was no clear case for mandating standards at present; the issue should be reviewed in 2005.

4. Communication of the European Commission on accelerating the transition from analogue to digital broadcasting – May 24, 2005 COM (2005) 204

The Communication reviewed the status of the digital transition and based on relevant strategic documents (communications, Member States' switchover plans published within the framework of the eEurope action plan, opinion of the Radio Spectrum Policy Group) proposed a deadline for switch off of analogue terrestrial broadcasting throughout the EU.

The Communication stated that switchover will generate benefits for the consumer (improved picture quality, better sound, better portable and mobile reception, more TV and radio channels

and enhanced information services) and provides additional spectrum capacity released by terminating analogue terrestrial television ('switch-off') offering a unique opportunity for the re-use of a premium part of the radio frequency spectrum for other electronic communications services. The Communication added that the earlier the transition from analogue to digital broadcasting is started at national level and the shorter the transitional period, the sooner these benefits are realised.

However, the Communication experienced little or no coordination of the switchover plans of Member States and established that Member States that have announced a switch-off date, have two groups: i) planning to switch off by 2010 the latest, ii) switch off by 2012. Economic and social benefits for the EU as a whole will only be fully achieved once all Member States have completed switch off, therefore the Commission proposed that the beginning of 2012 be agreed for switch-off in all Member States. Those Member States who have not yet announced switch-off dates are encouraged to publish, by the end of 2005, plans to show how they would achieve switch-off by the beginning of 2012.

With regard to the spectrum released by switch-off of analogue terrestrial television, Member States' spectrum plans should be flexible enough to allow the introduction of other electronic communications services. Part of any spectrum dividend should be made available for pan-European services.

5. 'i2010 – A European Information Society for growth and employment' – June 1, 2005 COM (2005) 229

The new policy framework the Commission undertook to examine the rules affecting the digital economy to make their interplay more coherent and oriented to economic and technological realities by – i. a. – actively promoting fast and efficient implementation of the existing and updated acquis governing the information society and media services. It declared the intention to propose a revision of the 'Television without Frontiers' directive to modernise the rules on audiovisual media services. Spectrum access across the EU should be facilitated through market mechanisms, which would be assisted by the planned switching off of analogue terrestrial television by 2012. Commission committed to consolidate its proposals by defining a strategy for efficient spectrum management in 2005 to be implemented in the 2006 review of the electronic communications framework.

6. Communication of the European Commission on EU spectrum policy priorities for the digital switchover in the context of the upcoming ITU Regional Radiocommunication Conference 2006 (RRC-06) – September 29, 2005 COMM (2005) 461

The Communication aimed at presenting EU priorities concerning radio spectrum availability in the context of the digital switchover and the upcoming ITU Regional Radiocommunication Conference 2006 (RRC-06).

The Communication emphasized that the Commission and the Member States should ensure that the regulatory treatment to be given to the spectrum dividend complies with the EU framework for electronic communication services and is consistently applied across the EU.

The Commission also called on Member States to adopt a common position in the RRC negotiations to ensure that the end of the transition period, namely the end of general legal protection of analogue channels will take place at the earliest proposed date, as close as possible to 2012.

7. Communication of the European Commission 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’ – November 13, 2007 COMM (2007) 700

The Communication described the benefits of the digital dividend to be freed up by the switchover from analogue to digital terrestrial TV by the end of 2012. The digital dividend may be used for wireless broadband communications services, but also for Additional terrestrial broadcasting services and mobile multimedia, since broadcasters should be able to claim a fair stake in the digital dividend in return for their efforts and investment in the digital switchover.

The most optimal use of the digital dividend is only possible if Member States work together and if the EU dimension of spectrum planning for the digital dividend is reinforced. Accordingly, the Commission is proposing to move towards a common spectrum plan at EU level. Nevertheless, the Commission recognised that the spectrum situation may vary in each Member State depending on the specific broadcasting environment, in particular the extent of reliance on terrestrial TV, notably to support public service obligations. There are also clear differences of timing and strategy in national plans regarding the digital switchover which need to be considered. The common spectrum plan would therefore have to be phased in with sufficient flexibility to accommodate legitimate national specificities, such as local social and market needs.

8. European Parliament resolution 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 – September 24, 2008 (2008/2099(INI))

The Resolution emphasized the need for digital switchover which, together with the development of new information and communication technologies and the digital dividend, will help to bridge the digital divide and contribute to the achievement of the Lisbon goals and noted the divergence

in national regimes relating to spectrum allocation and exploitation; which differences may represent obstacles to the achievement of an effectively functioning internal market. The EP urged the Member States to release their digital dividends as quickly as possible (meaning the accomplishment of the digital switchover), allowing citizens of the Union to benefit from the deployment of new, innovative and competitive services; emphasises that, for this purpose, the active cooperation between Member States to overcome obstacles existing at national level for the efficient (re)allocation of the digital dividend is required.

9. Communication of the European Commission on transforming the digital dividend into social benefits and economic growth – October 28, 2009 COM (2009) 586

The Communication stated that the digital dividend spectrum will become available throughout Europe within a relatively short space of time, as all Member States should complete the switch-off of analogue TV by 2012 at the latest. The Communication outlined a set of proposals for a common approach to the digital dividend in Europe.

The Communication emphasized that Member States which have not yet completed the digital switchover are requested to reaffirm their commitment to the effective switch-off of analogue TV broadcasting by accepting an EU target date of 1 January 2012, and to complete all the necessary preparatory measures, since the digital dividend will only become fully available after the switch-off of analogue broadcasting.

10. Communication of the European Commission on “A Digital Agenda for Europe” COM (2010) 245 – August 26, 2010

According to the Communication the Commission intends to coordinate the technical and regulatory conditions applying to spectrum use and, where necessary, harmonise spectrum bands to create economies of scale in equipment markets. As a guiding principle, it is stated that a forward-looking European spectrum policy should, while accommodating broadcasting, promote efficient spectrum management, by mandating the use of certain digital dividend frequencies for wireless broadband by a fixed future date, by ensuring additional flexibility (also allowing spectrum trading) and by supporting competition and innovation. The Commission also will ensure the implementation of the provisions of the Audiovisual Media Services Directive concerning cultural diversity, where appropriate through co- and self-regulation and request information from Member States on their application.

3 CONCLUSIONS OF THE ANALYSIS OF THE NATIONAL A/D SWITCH-OVER STRATEGIES

The aim of the analysis was to compare analogue switch-off strategies of the countries of South Eastern Europe (Albania, Austria, Bosnia and Herzegovina, Croatia, Hungary, Italy, Macedonia, Montenegro, Serbia and Slovenia).

The comparison had two goals:

1) give a **comparable and practical overview** on the main aspects of the various activities for the sake of the digital transitions in the countries (see below); in two categories: i) as defined in the national strategy; ii) as realized/planned to be realized in December 2011:

- DTT roll-out: which multiplexes are available, schedule and coverage of roll-out
- ASO schedule: planned ASO dates/areas
- ASO priorities: main principles of the implementation of digital transition
- Regulatory matters: which documents regulate the analogue switch-off
- Institutional framework: a constitutional structure executing the ASO
- Licensing model: how the network operators/broadcasters are licenced as for the digital networks
- Financial impacts: necessary financial resources and calculations
- STB subsidy: how and whom should be subsidized, in which form
- Technical: technological issues (transmission, compression etc.)
- Programs: available free-to-air and pay programs, must carry
- Extra services: interactive, on-demand etc.
- Market shares: distribution of viewers on cable-satellite-terrestrial platforms
- DTT Coordinator: organization co-ordinating/leading the ASO efforts
- Information activities: how the affected people are informed
- Status of DAB, DVB-H and pay TV
- Digital dividend: plans on the future usage

The comparison shows the variations and deviations of concept and the realization thereof in case of each country, and also shows the differences or similarities on how ASO is managed in these 10 countries.

2) Based on the comparison, articulation of **alignment proposals** for each country/group of countries for optimizing the efforts, share the experiences, show the way ahead or the potential outcome for the states that are in earlier phases of implementation.

As for the comparison, Annex 2 of the Communication of the European Commission on the transition from analogue to digital broadcasting (from digital 'switchover' to analogue 'switch-off') –

September 17, 2003 COM (2003) 541 suggested a checklist of items that could be included in national switchover plans:

1. Strategic plan for switchover, approved or in preparation, if any; Relevant regulation.
2. Policy objectives for digital broadcasting: social, cultural, political, economic, etc.
3. Spectrum management policy choices and scenarios, before and after switch-off: services, coverage, assignees, conditions of use, spectrum allocation intentions, objectives for 2004 Radio Regional Conference negotiations.
4. Implementation choices to best fulfil policy objectives, trade-offs, justification: types of networks, modalities of service, role of authorities, main players, licensing, etc.
5. Tentative calendar for achieving objectives, including target dates for switch-off, and status.
6. Stakeholders' involvement in switchover strategy design and implementation: mechanisms for consulting and processing feedback, players involved, commitments.
7. Criteria for achievement of policy objectives, mechanism/ indicators for monitoring and retro-feeding into or reviewing strategy.
8. Market assessment (e.g. cost/ benefits analysis) justifying certain modalities of public intervention (rather than others) in and beyond areas of exclusive public competence.
9. Policy obligations and incentives (political, informational, regulatory, financial, other); Implementation modalities; Targeted value-chain segments (transmission, content, reception, consumption, other).
10. Areas for possible EU co-ordinated action, now or in future.

The national switch-over strategies provide a very colourful picture as for length, structure and content, but most of them also show a great deal of similarity on the conceptual level. Except the Italian strategy (that followed the points of the EU Commission's checklist), the countries determined their own format and structure for presenting their concept. As for the content, all countries covered the areas proposed by the communication.

Three general areas could be identified that are covered more or less by the various types of strategies:

- pure **digital switchover policy** focusing on the important issues of analogue switch-off
- overall audio-visual **media policy** involving strategies for the content provision and broadcasting
- **radio-spectrum policy** concentrating on digital dividend and broadband communication

All strategies include elements from these areas, and the majority of the strategies put the main emphasis on the digital switch-over and deals with issues from the other two areas as necessary for providing on a complete picture on analogue switch-off (for another example the Macedonian strategy includes a very detailed and complete media strategy as well).

There are typical parts in all strategies, such as EU-regulation and framework, own national regulatory framework, status of frequencies in the given country, market overview, status of public

broadcasting, licencing plans, objectives, implementation plans with more or less details, economic impacts, digital dividend etc.

The strategies are not so homogenous concerning the elaboration of **digital switchover action plans**. A few documents committed to present a detailed and specific action plan (some other documents give annual breakdown of tasks). The addition of detailed actions plans could contribute for a coherent and planned course of actions and would allow the countries to (re)consider the time management of the various activities, so the countries involved should consider the elaboration of such actions plans with the necessary flexibility.

Another excellent possibility for the evaluation of the progress is the comparison of the status of **digitalization in other countries**. Many documents reflect to the progress in the world, but a few provide an outlook with more details on the status of digitalization in the world and in the surrounding European countries. These strategies give an overview of the digitalization abroad with special attention to the neighbouring countries, which is crucial from strategic point of view, since the realization of digital transition in a given country is also subject to progress in the neighbouring countries due to the necessary co-ordination of frequency management. It is therefore recommended that the countries should overlook the status of digitalization in their neighbouring countries, identify the areas of necessary co-operation in order to boost the progress. This outlook is also a great chance for sharing ideas and experiences in all areas of digital transition, from a small TV advertisement spot to the STB subsidy scheme alternatives.