

The Commission's state aid policy on the digital switchover

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1. Introduction

Several Member States are currently introducing digital television transmissions which will ultimately replace analogue television transmissions. This process is known as the digital switchover and concerns all the commonly available transmission platforms for television signals, i.e. terrestrial, cable and satellite.

In recent months, the Commission has adopted four decisions — two of which are summarised in this Newsletter — on state support for the digital switchover. ⁽²⁾ While these decisions concern rather different types of state support, they indicate how similar measures would be assessed under the state aid rules. In this article, the authors propose an overview and interpretation of the Commission's framework of analysis, which builds on the refined economic approach to state aid presented in the State Aid Action Plan. ⁽³⁾

2. Background

2.1. The market for the transmission of TV signals

Television channels are delivered primarily through three technological platforms: terrestrial, cable and satellite. A more recent development is

that television can also be received via the Internet (for example by users with a DSL connection) ⁽⁴⁾ or wireless technologies. The use of different transmission platforms varies considerably across countries. For example, terrestrial TV has an audience share of less than 10% of households in the Benelux countries and Germany, compared to more than 80% in Italy and Greece. ⁽⁵⁾

In antitrust cases, the business model (pay TV vs. free TV) characterises the markets, not the platform. Terrestrial, cable and satellite platforms compete with each other at retail level and the potential shift of viewers from one to another exercises a certain constraint on retail conditions. ⁽⁶⁾ Looking at the market for supplying transmission services to broadcasters (the wholesale market), the platforms are not regarded as belonging to the same market. From a broadcaster's point of view, the platforms are complementary and broadcasters may have an interest in being present on all of them to reach a greater audience. ⁽⁷⁾

There are two modes of transmission: the traditional analogue mode and the more recent digital mode. Digital transmission allows better picture and sound quality and better use of frequency spectrum. However, it obliges broadcasters and network operators to update their transmission equipment and viewers must use set-top boxes. ⁽⁸⁾ Digitisation is most advanced for satellite trans-

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⁽²⁾ Three final decisions: N622/03 Digitalisierungsfonds — Austria of 16 March 2005, see OJ C 228, 17 September 2005, p.12, C25/04 Einführung des digitalen terrestrischen Fernsehens (DVB-T) in Berlin-Brandenburg — Germany of 9 November 2005 and NN64/2005 Digital Replacement Licences — United Kingdom of 25 January 2006. One decision to initiate the formal investigation procedure: C52/05 (ex CP101/04) Contributi ai decoder digitali — Italy, of 21 December 2005, see: http://europa.eu.int/comm/competition/state_aid/decisions/additional_docs.html

⁽³⁾ This article focuses on the compatibility assessment under Article 87(3)(c) and does not discuss the potential application of other Treaty rules.

⁽⁴⁾ Digital Subscriber Line.

⁽⁵⁾ European Commission, 9th report on the implementation of the telecommunication regulatory package. Annex 1: market overview, SEC (2003)1342.

⁽⁶⁾ See the discussion in Commission decision *Teleor/Canal+/Canal Digital* (case COMP/C2/38.287) of 29/12/2003, in particular para. 50. It appears however that even the distinction between pay TV and free-to-air TV is becoming increasingly blurred, see Commission decisions *BSkyB/Kirch Pay TV* (case COMP/JV.37) of 21 March 2000 and *Newscorp/Telepiù* (case COMP/M.2876) of 2 April 2003.

⁽⁷⁾ In some cases under Art. 7 of Directive 2002/21/EC (Framework Directive), the Commission has not, however, contested a finding by national regulatory authorities that wholesale broadcasting transmission markets should be defined on a platform-specific basis (FI/2004/0076, UK/2004/0111, SE/2005/0188, ES/2005/0252 and NL/2005/0270).

⁽⁸⁾ Such set-top-boxes are required to transform the digital signal to an analogue signal, since nowadays TV sets are not able to transform these signals by themselves. Future TV sets will most likely have the functionalities of such set-top boxes built in.

mission, where it was financed entirely by private operators. Both cable and terrestrial transmission networks are still largely operating in the analogue mode.

2.2. *The case for the analogue switch-off*

Numerous Member States are preparing the switchover from analogue to digital transmission of television. Since analogue terrestrial TV broadcasts use scarce frequencies which could have better alternative uses, the termination of analogue terrestrial transmissions has a public interest aspect that is not present for the switch-off of cable or satellite analogue transmission. This is the so-called 'digital dividend' from the more efficient use of the frequency spectrum allowed by the digital technique.

The Commission has recognised the importance of the digital switchover in its Action Plan eEurope 2005 and in three Communications relating to the digital switchover.⁽⁹⁾ In particular, the Commission is committed to the goal of analogue TV switch-off in Europe by 2012.

The 2003 Switchover Communication mentions market failure as a possible justification for public intervention. However, digitisation must take place in a framework of technological neutrality. According to the Communication, national authorities should ensure 'a regulatory level playing field. In principle, each network should compete on its own strengths. Any public support for one particular option cannot be excluded but should be justified by (1) well-defined general interests and (2) implemented in a proportionate way. Otherwise it would appear discriminatory and could jeopardise investments in other networks.'⁽¹⁰⁾

2.3. *Not all state measures constitute state aid*

Public authorities are using various means to facilitate and encourage the digital switchover, including regulatory means, financial support and information campaigns. Not all of these measures involve state aid and fall under European state aid rules. Moreover, the types of measures that involve state aid vary considerably and thus require a case-by-case assessment.

⁽⁹⁾ COM(2002)263 final, 'eEurope 2005: An information society for all', COM(2003)541 final, "Communication from the Commission on the transition from analogue to digital broadcasting (from digital 'switchover' to analogue 'switch-off')", COM(2005)204 final, 'Communication from the Commission on accelerating the transition from analogue to digital broadcasting' and COM(2005)229 final, 'i2010 – A European Information Society for growth and employment'.

⁽¹⁰⁾ COM(2003)541 final.

An example of a measure which the Commission did not consider to constitute state aid was the review of the financial terms of the Digital Replacement Licences ('DRLs') in the United Kingdom.⁽¹¹⁾ In December 2004, Ofcom, the regulator for the UK communications industries, issued these DRLs to the terrestrial broadcasters Channel 3 (better known as ITV), Channel 4, Channel 5 and Public Teletext. These licences replaced existing analogue licences and contained various obligations related to the digital switchover. In view of these obligations and of the diminished 'scarcity' value of the broadcasting licences, the regulator reduced the broadcasting licence fees — the so-called 'additional payments'.

The Commission considered that the reassessment of the additional payments was an intrinsic element of the licensing process, aiming to bring the fee into line with the market value of the DRLs, and not a discretionary measure relieving licensees of their normal operating costs. The revision of licensing arrangements is an example of how the transition to the digital mode can be encouraged and organised without relying on subsidies that could distort competition and taking into account both the advantages and the disadvantages that the operators derive from the switchover.

3. **The Commission's analytical framework for assessing compatibility**

3.1. *General approach*

The Commission recognises that the digital switchover may be delayed if the process is left entirely to market forces. So it has no objection to the principle of public intervention in this field. In its recent State Aid Action Plan, the Commission explained its general approach to state aid geared to support sustainable growth, competitiveness and cohesion. The Action Plan points out that Member States may use state aid to overcome a specific market failure or to ensure social or regional cohesion. However, in such cases, the Member State must demonstrate that state aid is the appropriate instrument to address the issue, that it is limited to the minimum necessary and that it does not unduly distort competition.⁽¹²⁾

It is generally recognised that the switchover to digital television may be hindered by certain market

⁽¹¹⁾ See footnote 2.

⁽¹²⁾ These long-standing basic principles of EU state aid policy have recently been confirmed in the State Aid Action Plan: Less and better targeted state aid: a roadmap for state aid reform 2005–2009. http://europa.eu.int/comm/competition/state_aid/others/action_plan/

failures. Moreover, there is a risk that not all parts of the population would benefit from the advantages of digital television (problem of social cohesion). These problems are more acute in the case of *terrestrial* TV because of the scarcity of available frequencies: running digital and analogue transmission in parallel — so-called ‘simulcast’ — to ensure a smooth transition is rather costly. Moreover, the terrestrial TV network has so far been used in many Member States to fulfil universal coverage obligations. This means that a high coverage of the population through digital transmissions must be achieved before contemplating the analogue switch-off.

3.2. Potential market failures related to the digital switchover

To decide whether a given state aid scheme for the digital switchover is necessary and proportionate, the Commission ought to examine the possible presence of market failures in the switchover process. The Commission should first assess whether there are genuine market failures which prevent the market from achieving economic efficiency. Next, whether state aid is the appropriate remedy for such market failures. Finally, whether the aid granted is the minimum necessary to achieve the objective. It is only if these conditions are met the state aid scheme can be considered to be necessary and proportionate, the criteria to be met for approval of the aid under Article 87(3)(c). The coordination problem, positive externalities, market power and uncertainty are examples of possible market failures in this field.

Coordination problem

The development of digital terrestrial broadcasting may be hampered by a coordination problem between market players. The problem may arise because broadcasters need to agree on common dates for switching off analogue transmission and for switching on digital transmission so as to overcome the lack of frequency spectrum and to minimise the costs of parallel transmission. Consumers may not be willing to shift to a digital platform until it carries a large number of programme channels. Accordingly, broadcasters might wish to await the arrival of other broadcasters before investing in moving to a digital platform themselves. In the absence of coordination, this approach might delay the switchover. There is therefore an interest in making broadcasters switchover simultaneously and in limiting the duration of the simulcast phase.

Broadcasters typically do not own the frequency spectrum occupied by their analogue transmissions but operate on the basis of licences. Often, the

licences for analogue terrestrial transmission are awarded for a limited period.⁽¹³⁾ So the authorities could solve the coordination problem by setting a common expiry date for all analogue licences or by fixing a mandatory switchover date.⁽¹⁴⁾ This seems sufficient to help broadcasters to plan a coordinated move into the new platform and consumers to adapt to the new transmission technology. State aid does not seem to be the most appropriate tool to address the coordination problem.

Positive externalities

The switchover may have positive externalities due to the better use of the frequency spectrum, i.e., the *social* benefit of more channels and services may exceed the *private* benefit of the incumbent broadcasters since the expected gains in terms of increased audience and advertising may not be large. Consequently, broadcasters may be reluctant to participate in the switchover. So, in principle, accelerating the analogue switch-off process to reap the benefits of the better use of the freed-up spectrum is a valid justification for public intervention.

However, to assess the appropriateness of granting state aid, all factors which are relevant in determining the economic position of the operators with respect to the switchover should be considered. What is the economic value of the digital licences that replace the analogue licences and that are awarded to broadcasters? What are the technical costs of digital transmission? What are the investments to be made for digitisation?

It appears that digital technology allows for greater transmission capacity at lower transmission costs and that the costs of upgrading the transmission equipment are not prohibitive. In connection with the transition to digital terrestrial TV, operators may also offer new interactive services and exploit different business models such as pay-per-view. As a result, the need for economic incentives to be given to operators in connection with the digital switchover should be carefully assessed. Regulatory intervention might be a sufficient and less distortive means of achieving the same goal.

The existence of positive externalities is also claimed for the development of interactive services, allowing viewers to benefit from such services as e-learning or e-government not only via personal computer, but also through the more ‘familiar’ TV set. The Austrian funding scheme for digi-

⁽¹³⁾ In Berlin-Brandenburg, the licences are granted for up to seven years.

⁽¹⁴⁾ As an example, Italy defined 31 December 2006 as the mandatory date for switchover.

tisation ⁽¹⁵⁾ included support for research activities and for the development of new services for digital TV, which the Commission found compatible with state aid rules. An important element for compatibility was the fact that funding was available to operators on all transmission platforms and was not limited to terrestrial TV. The 'public good' character of research and development activities is not a specific feature of terrestrial TV, but rather a general feature of these types of activities.

Market power

The presence of market power may prevent the market from securing the full benefits of competition between operators. Incumbent *broadcasters* might have an interest in delaying the launch of digital transmissions, given the likelihood that new operators enter the market and that they would be exposed to more competition for audience and advertising. *Network operators* might not feel sufficient competitive pressure to carry out the necessary investment to carry digital TV transmissions.

Under these circumstances, the emergence of new market players would certainly benefit consumers. However, there could be preferable alternatives to state aid for achieving this goal, such as regulated access to basic infrastructure ⁽¹⁶⁾ and open procedures for the licensing of operators. State aid might be appropriate only if antitrust control and regulatory intervention do not prove effective or sufficient and, for example, high investment or start-up costs prevent the launch of new services or act as a barrier to entry in the market.

Uncertainty

Uncertainty might sometimes prevent innovation and the development of new services. It has been argued that the digital terrestrial network could have significant advantages for consumers in terms of portability and mobility and could promote innovative services, but market players hesitate before launching digital terrestrial TV due to the uncertain response of consumers. Network operators are particularly concerned about the uncertainty that the platform will be able to reach a sufficient critical mass of viewers to make the infrastructure investment financially viable.

The relevance of this argument depends on the specific market circumstances. In countries with high penetration of analogue terrestrial TV, there is no particular reason to believe that insufficient demand hinders the development of digital

terrestrial TV. The issue may be more pertinent in areas where the digitisation concerns a platform that has a small penetration to start with. However, the successful launch in the past of entirely new, privately-financed transmission platforms such as satellite and DSL shows that the market can cope with this type of risk. There are also specific examples of digital terrestrial TV being launched without state aid in areas without a large audience for analogue terrestrial TV, for instance, in the German Rhine-Main region.

The risk associated with the launch of a new service can also be reduced by giving consumers some time to discover and adapt to the new service. Contrary to other platforms like satellite and cable, which are less constrained in terms of transmission capacity, terrestrial transmission suffers from the technical limits and the higher costs of parallel transmission of analogue and digital signals ('simulcast'). In this case, providing some financial assistance to broadcasters may be justified. Indeed, in the Austrian decision, the Commission took account of the above considerations and did not object to grants intended to co-fund the directly-attributable, additional costs of broadcasters during the simulcast phase. ⁽¹⁷⁾

3.3. Social and regional cohesion objectives in relation to the digital switchover

The digital switchover process also involves aspects of social cohesion: it is important to ensure a wide access to digital TV before contemplating analogue switch-off. Since the digital switchover entails some costs for consumers for the purchase of decoders, Member States may want to assist, in particular, disadvantaged groups of society such as elderly people or low-income households. Member States may also consider measures to ensure that all geographical areas continue to have appropriate TV coverage by imposing obligations on and possibly providing compensation for network operators. Public authorities also fund the transmission costs of public service broadcasters to ensure their presence in different platforms.

All these measures have to be assessed in their specific context. The methodology should be the usual one: firstly, to assess whether there are sufficient elements to indicate the presence of a social and regional cohesion issue; secondly, to assess whether state aid is the appropriate instrument to address the issue and, if so, whether the aid is limited to the minimum necessary.

⁽¹⁵⁾ See footnote 2.

⁽¹⁶⁾ On the basis of a finding of significant market power by the national regulatory authority under Directive 2002/21/EC (Framework Directive).

⁽¹⁷⁾ See footnote 2.

4. Examples of public support unlikely to conflict with state aid rules

On the basis of the above, there are certain forms of public support for digital switchover which appear less problematic from a competition point of view. ⁽¹⁸⁾ Member States may, for example, consider granting:

- (1) subsidies to consumers for the purchase of digital decoders. Such subsidies should be technologically neutral and not exclude specific platforms. In granting subsidies, the authorities may encourage the use of open standards for interactivity. Open standards enable consumers to benefit from interactive services offered by different operators. Examples of interactive services are electronic programme guides, news search, e-government and e-commerce services.
- (2) funding for the roll-out of a transmission network in areas where there would otherwise be insufficient TV coverage;
- (3) financial means to public service broadcasters to enable them to broadcast via all transmission platforms to reach the entire population. In this context, Member States have to set out clearly obligations on the public service broadcasters as to which transmission platforms should be used;
- (4) financial support as fair compensation to broadcasters which are required to give up the use of their analogue spectrum before their licences expire. The compensation should take into account the actual costs of the switchover to broadcasters, including the cost of adapting equipment for digital transmission and

of broadcasting in another channel/multiplex where applicable, as well as costs for frequency spectrum. When calculating spectrum costs, the granting of digital transmission capacity should be taken into account.

5. Conclusion

The Commission has recently assessed various public initiatives to support the switchover to digital TV under state aid rules. The Commission could not base its decisions on any of the existing regulations or guidelines and had to refer to the general principles of necessity and proportionality of aid. In the cases of *DVB-T in Berlin-Brandenburg* and of *Italian Decoders*, the necessity and proportionality analysis followed the refined economic approach presented in the State Aid Action Plan. This approach aims to provide a more structured and more economics-based assessment of the investigated measures. It tries to identify whether the aid is targeted at a market failure or an objective of social or economic cohesions, whether the aid is properly designed to achieve these objectives and whether, on balance, it has positive welfare effects.

The decisions in these cases show that, even when public intervention is in principle justified, — and indeed the Commission is firmly committed to encouraging the transition to digital TV — the granting of state aid should always follow a process of clearly identifying the problem to be addressed and of choosing the least distortive means of solving it. Only well-targeted aid is in line with the overall objective of ensuring fair competition and promoting competitiveness and technological development in Europe.

⁽¹⁸⁾ The examples are taken from Commission decision DVB-T Berlin-Brandenburg, see footnote 2.