

Unclassified

DAF/COMP/GF(2013)2

Organisation de Coopération et de Développement Économiques  
Organisation for Economic Co-operation and Development

19-Feb-2013

English - Or. English

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS  
COMPETITION COMMITTEE**

Cancels & replaces the same document of 13 February 2013

**Global Forum on Competition**

**COMPETITION ISSUES IN TELEVISION AND BROADCASTING**

**Background Note**

-- Session II --

*This background note is circulated under Session II of the Global Forum on Competition to be held on 28 February and 1 March 2013.*

**JT03334885**

Complete document available on OLIS in its original format

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## COMPETITION ISSUES IN TELEVISION AND BROADCASTING\*

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## 1. Introduction

1. The broadcasting landscape all over the world has been undergoing significant technological and structural changes. These transformations have given consumers access to a greater variety of communications and media services than ever before. For example, in the past television content could be accessed by the viewer at a specific point in time and only at a fixed location. However, convergence is changing the way in which consumers use communications services and consume content as broadcasting content is increasingly available over the Internet and on various wireless portable devices.

2. While the technological evolution and the emergence of new products and services have rendered media markets more competitive overall, thereby directly benefitting consumers, some market developments raise competition problems, especially in the area related to content. Accordingly, the purpose of this Background Note is to examine competition issues that arise in the provision of television broadcasting to viewers and the extent to which these changes are making television broadcasting more competitive. The topic is of timely importance from the perspective of the Global Competition Forum as broadcasting, both through radio and television services, forms an important part of the information and communications technologies (ICTs) and ensuring widespread access to broadcasting services may not only reduce the digital divide, but it may also help foster development and alleviate poverty.

3. Ensuring widespread access to radio and television broadcasting is important for a number of economic and non-economic reasons both in the OECD as well as in non-OECD economies. Economically speaking, broadcasting is a significant economic sector in its own, and it can produce significant spill-over benefits in many related markets. Moreover, while radio and television broadcasting continues to be the major source of information in general, it constitutes “a principal source of information for illiterate segments of the population”, which becomes particularly important in times of emergencies.<sup>1</sup>

4. Although the broadcasting sector has undoubtedly become more competitive over the course of the last decade, competition authorities throughout the globe have become more active in launching policy interventions. In some cases these also involved a consideration of public interest criteria other than competition concerns. Social and cultural objectives pursued by regulatory policy in the broadcasting sector generally fall beyond the scope of this paper. However, it must be borne in mind that economic and non-economic objectives are often intertwined, and with one intervention the authorities may simultaneously pursue both goals.

5. In response to challenges brought by convergence as well as a growing number of competition concerns many countries decided to carefully scrutinize their media markets, or at least some segments of it. In March 2012, for example, Australian Government released the Final Report on Convergence Review, which presented its findings on the operation of media and communications regulation in Australia, and assessed its effectiveness in achieving policy objectives in the converged environment.<sup>2</sup> In 2011, ICASA, the South African regulatory authority, launched a Discussion Document to review and analyse a number of aspects related to the broadcasting transmission market.<sup>3</sup> In 2009, New Zealand released a Report which

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<sup>1</sup> ITU (2010), World Telecommunication/ICT Development Report 2010: Monitoring the WSIS targets, 9th Edition, available at: [http://www.itu.int/dms\\_pub/itu-d/opb/ind/D-IND-WTDR-2010-PDF-E.pdf](http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-WTDR-2010-PDF-E.pdf)

<sup>2</sup> The Review examined in particular the issue of media ownership laws, media content standards, the production and distribution of Australian and local content as well as the allocation of radiocommunications spectrum. The Final Report is available at: [http://www.dbcde.gov.au/\\_\\_data/assets/pdf\\_file/0007/147733/Convergence\\_Review\\_Final\\_Report.pdf](http://www.dbcde.gov.au/__data/assets/pdf_file/0007/147733/Convergence_Review_Final_Report.pdf)

<sup>3</sup> ICASA (2011), Regulatory Framework for Broadcasting Transmission Services, Discussion Paper for Comment, Notice 346 of 2011, available at:

assessed competition concerns in the television broadcasting market, and in particular whether there is a need for sector-specific regulation,<sup>4</sup> while in Hong Kong the Legislative Council conducted a hearing to scrutinize allegation of potentially anti-competitive conduct by the dominant terrestrial broadcaster, TVB. The Competition Commission in the UK, on the other hand, upon the referral from the regulatory authority, Ofcom, examined the state of competition in the pay-TV market.<sup>5</sup>

6. Market studies and investigations are only one of many steps countries can take to ensure that their respective national broadcasting markets function effectively. Most, but not all, of the OECD countries take a pro-active approach to regulate their national broadcasting markets. Policy interventions usually rely on *ex post* application of general competition law as well as *ex ante* sector-specific regulations. While traditionally regulation relied on technological factors such as spectrum scarcity as well as high costs of encryption and decryption systems, these assumptions have been gradually eroded by significant technological developments. However, while the traditional rationales for broadcasting regulation may no longer apply in most countries, new and challenging competition concerns have arisen.

7. In many non-OECD economies, some of which have only recently liberalised the broadcasting sector,<sup>6</sup> broadcasting continues to face serious problems. Eltzroth points out that while “the structure and regulation of other key economic sectors have been transformed since the early 1990s, in many states there is comparatively little evolution in broadcasting with respect to critical issues on content, advertising, relationship with content creators, cross-border transmissions, treatment of infrastructure and new infrastructure elements, competition rules, independence of regulators, licensing, independence of the press and news gathering, rules on defamation, and intellectual property rights”.<sup>7</sup>

8. While the challenges that the OECD and non-OECD economies will face may differ to some extent, and some of them may be income related, pursuit of competitive markets is worth the resources it requires. As the ITU noted in its report “In countries where there is a single government broadcaster and multichannel alternatives are either non-existent or prohibitively expensive or illegal, there is not much demand for television. On the other hand, where governments have adopted a liberal attitude towards broadcasting, content is more varied and households find ways to get around income or electricity constraints”.<sup>8</sup>

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<https://www.icasa.org.za/Portals/0/Regulations/Working%20Docmuments/Broadcasting%20Transmission%20Services/Draft/Discussion%20Document%20on%20Broadcasting%20Transmission%20Services%20%2034371.pdf>

<sup>4</sup> The Ministry of Economic Development and the Ministry of Culture and Heritage of New Zealand (2009), Television Broadcasting: Competition Issues, Report to the Minister of Broadcasting and the Minister for Communications and Information Technology, available at: <http://www.beehive.govt.nz/sites/all/files/Departmental%20Analysis%20of%20Competition%20in%20Broadcasting.pdf>

<sup>5</sup> Competition Commission (2012), Movies on pay TV market investigation, A report on the supply and acquisition of subscription pay-TV movie rights and services, available at: [http://www.competition-commission.org.uk/assets/competitioncommission/docs/2010/movies-on-pay-tv/main\\_report.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/2010/movies-on-pay-tv/main_report.pdf)

<sup>6</sup> In Africa, for example, according to the [www.balancingact-africa.com](http://www.balancingact-africa.com) portal, “35% of countries in Africa now have TV stations other than a sole Government broadcaster: others are joining this list but far too slowly”, ‘Open or closed broadcasting markets: will all of Africa step up to the plate in 2012?’, available at: <http://www.balancingact-africa.com/news/broadcast/issue-no120-0/top-story/open-or-closed-broad/bc>

<sup>7</sup> Eltzroth, C. (2006), ‘Broadcasting in Developing Countries: Elements of a Conceptual Framework for Reform’, The Massachusetts Institute of Technology, *Information Technologies and International Development*, vol. 3, no. 1, pp. 19-37.

<sup>8</sup> ITU (2010).

## 2. An overview of technological and regulatory developments in broadcasting

### 2.1 Description of broadcasting

9. The penetration of new technologies and the dynamic effects of convergence are changing the way that consumers access and view audio-visual content. As broadcasting services are continuously evolving, it is no longer possible to provide a uniform, all-encompassing definition of 'broadcasting' that is adequate to capture all the particular features of the market for broadcasting services. There is a plethora of audio and video services provided via different media that escape the traditional boundaries of broadcasting. YouTube, which initially started operating as a peer video upload website, today offers viewers access to content posted by some of mainstream broadcasters, such as the UK's BBC. However, at a general level, the term broadcasting has been defined as "the business of producing interactive information content and distributing it via telecommunications services."<sup>9</sup>

10. This topic is specifically focused on *television and broadcasting* and the matters that competition authorities should be concerned with to ensure that consumers are able to derive maximum benefit from television broadcasting services. However, the implications of technological convergence make drawing a bright line around what does, and does not, constitute television broadcasting increasingly complicated and challenging.

11. In 1998, when the Competition Committee of the OECD last considered the issues of Competition in Broadcasting, it was alert to the potential disruptive effect new technologies could have on the sector. Even then the primary focus was on how changes in technology and consumer demand were altering the operation of broadcasting and removing the traditional rationales for broadcasting regulation. The trend towards the convergence of networks, services, firms, and devices within the information and communications industries was identified, and the Committee foresaw that this would facilitate a dramatic change in the broadcasting industry. The transformation was characterised as a change from the old analogue to the new digital model. In the former, a limited amount of information was transmitted one way across a limited bandwidth to a mass audience. In the latter, a potentially unlimited amount of information can be transmitted interactively to a fragmented audience over a wide range of broadband telecommunications paths.

12. Today, it is clear that the disruptive potential from convergence is being realised in the broadcasting industry and as such the industry cannot easily be defined according to discrete characteristics of transmission, audience or even modes of viewing. As a consequence, many of the traditional rationales for broadcasting regulation have been removed and new competition concerns have arisen. Fundamental changes have occurred through a realignment of the boundaries between telecommunications and broadcasting sectors. These include:

- fixed and mobile broadband networks that are capable of carrying a diversity of voice and video content;
- the internet that has blurred the distinction between private (telecoms) and public (broadcasting) communications;
- distinctions between the character of the message whether data, voice, or audio visual images are obsolete, and
- the equipment used to record, transmit and or receive messages is no longer relevant in distinguishing telecoms and broadcasting services.

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<sup>9</sup> OECD (1998), Regulation and Competition Issues in Broadcasting in the Light of Convergence, DAF/COMP/GF(98)1.

13. In particular, the immediate impact of convergence is that the market for television viewing is no longer exclusively concerned with whether video services are viewed on a dedicated television or another device capable of projecting images. The distinction between television and video services is rapidly narrowing, particularly with respect to recorded programming.

14. As a source of interactive content delivery, the broadcasting industry competes at one level with the delivery of entertainment and news services via other industries including print media, movie releases in cinemas and recorded media via DVDs. However, broadcasting has few substitutes when the timeliness of the information is critical, such as in times of emergencies and for the currency of news and information. And in particular, for the immediate delivery of the play by play results from the outcome of sporting events, it appears that broadcasting (and possibly traditional television broadcasting) has no substitutes, despite technological developments. Accordingly, competition problems continue to arise at the points in the value chain for the development and delivery of broadcasting products and services where broadcasters may be able to exercise significant market power, either through controlling the supply of specific content, or as a bottleneck in the provision of distribution/delivery services.

#### *2.1.1 The stages of production – content production and distribution*

15. The broadcasting industry includes firms that are active in the vertically related stages of content production and/or content distribution. The stages of production for content principally concern production and development. Content delivery and its “carriage” can meld when the content is packaged into brands, or organised into channels to be delivered to consumers. Delivery of the content through retail services requires that the content be translated into a form that can be decoded by terminal equipment at the point of viewing by the customer. Retailing also involves managing associated accounting and client services. Content distribution depends upon the provision of broadcasting infrastructure which provides communication to and from the wholesale service provider and at the retail level. Finally, terminal vending provides the necessary equipment to decode or translate the signal into receivable audio visual messages.

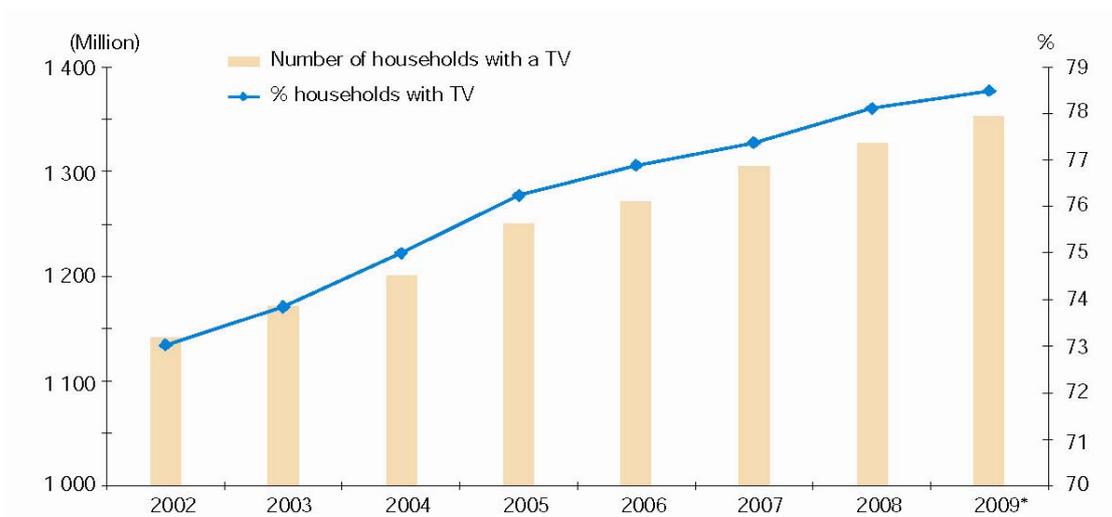
**Table 1. The Multimedia Value Chain**

<b>Stage:</b>	<b>Example:</b>
Content production and development	Hollywood studios, television studios, production houses, web publishers.
Content aggregation and packaging into channels (like products)	Free to air broadcasters, major cable channels (CNN, HBO)
Retail Service provision (transmission, decoding and customer accounting)	Local cable providers, satellite providers, internet service providers
Infrastructure Provision	Telecoms, satellite broadcasters, other transmission
Terminal vending	Manufacturers of televisions, set top boxes and devices capable of accessing the internet.

2.1.2 *Delivering television broadcasts: multiple platforms*

16. The term broadcasting platforms refers to the types of networks that are used to carry the television signal to the viewer. Today, television is usually provided via one of the following modes: i) analogue terrestrial broadcast; ii) digital terrestrial broadcast; iii) direct-to-home satellite broadcast; iv) cable, and v) Internet Protocol and Over-the-top television (OTT), and as can be seen from the graph below its global coverage is continuously increasing.

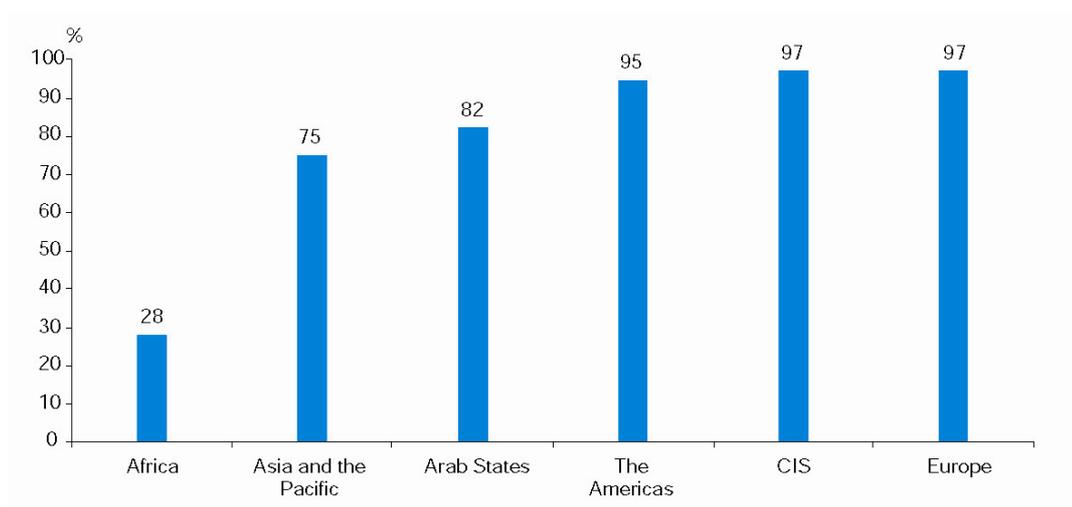
**Figure 1. Proportion of households with a TV, 2002-2009 (around the world)\***



Note: \*Estimate.

Source: ITU World Telecommunication/ICT Indicators database

**Figure 2. Proportion of households with a TV, by region, 2009\***



Note: \*Estimate.

Source: ITU World Telecommunication/ICT Indicators database.

- i. *Analogue terrestrial broadcast*: it has been the traditional method used to broadcast television signals essentially since the inception of television. The signals are sent by radio waves from a national network of masts and antennae and are received by viewers through an aerial. However, countries around the world are now in the process of abandoning traditional analogue terrestrial television broadcasting and moving towards digital television broadcasting.<sup>10</sup> In some countries, such as United States, France or Ireland, there are no longer any analogue television broadcasters.<sup>11</sup> Kenya planned to be among the first African countries to implement digital broadcasting with switchover initially planned for 2012. However, in accordance with a ruling issued by the High Court in Kenya in a case lodged by a consumer group, the switchover process is to be delayed as the cost of acquiring set-top boxes necessary to access digital signal would leave large portion of the population without access to television services.<sup>12</sup>
- ii. *Digital terrestrial broadcast*: like standard analogue television, digital terrestrial television (DTT) is transmitted by radio frequencies. The difference lies in the use of multiplex transmitters which allow the reception of multiple channels in the same space as has been previously occupied by just one analogue channel. The viewer receives the signal via a digital set-top box, or another integrated receiving device capable of decoding the signal received by a standard aerial antenna.
- iii. *Direct-to-home satellite broadcast*: satellite television is delivered to the viewer via communications satellites. The signal is received by satellite dishes and set-top boxes. In many areas of the world, and in particular those that are not covered by terrestrial or cable providers, satellite television has the potential of providing a wide range of channels and services.
- iv. *Cable television*: the television signal is delivered via optical fibre and/or fixed coaxial cables, which allows the provider to avoid the traditional system of radio broadcasting antennae. This technology has been deployed extensively predominantly in the Americas, Asia and the Pacific and Europe regions. It is, however, virtually non-existent in the Arab States and Africa, where DTH satellite TV has been successful and where the cost of deploying cable television would be extremely high.
- v. *Internet Protocol and Over-the-top television (OTT)*: IPTV is yet another option for multichannel television. It is delivered by broadband operators via high-speed ADSL or fibre-optic connection. In addition, viewers can also resort to OTT TV, the most recent and potentially disruptive development in the broadcasting industry. The difference between IPTV and OTT TV is that the former is generally offered by telecommunication operators (i.e. Orange TV in France or AT&T U-Verse in the US) over managed network with guaranteed quality of service, while the latter is provided by content owners (such as BBC in the UK, Hulu in the US), or dedicated start-up players (such as Netflix in the UK and US, or Roku) without the internet service provider (ISP) or network operator being involved either in the control of the content or its access by viewers. Characteristic of OTT TV is that it is accessible on multiple devices that access the internet -

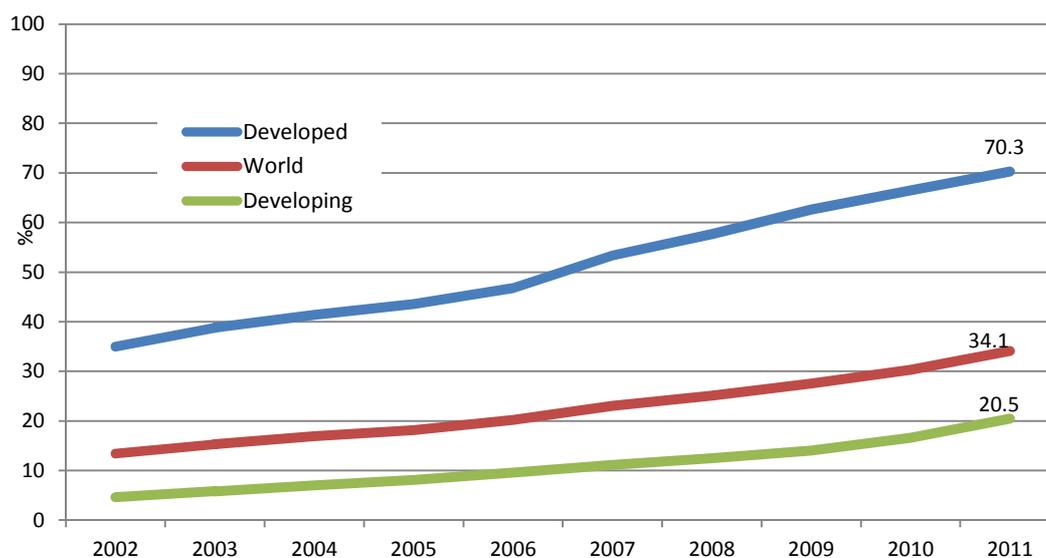
<sup>10</sup> For example, European, African and Middle Eastern countries signed in 2006 at the ITU Regional Radiocommunication Conference a treaty whereby they agreed to phase-in digital broadcasting until 2015, when analogue broadcasts would cease to be provided.

<sup>11</sup> In the US, analogue terrestrial broadcasting ceased to exist on 12th June 2009. In Ireland, the analogue terrestrial television service was completely switched off on 24th October 2012, while in France in the night from 28th to 29th November 2009.

<sup>12</sup> Source Article 19 (2013), 'Kenya: Digital switchover must protect the right to freedom of expression', available at: <http://www.article19.org/resources.php/resource/3583/en/kenya:-digital-switchover-must-protect-the-right-to-freedom-of-expression>

including connected televisions that permit one-one transactions, whereby the viewer can select the broadcast that they wish to view.<sup>13</sup> Because of its recent entry, there is some difficulty obtaining reliable data, but there appears to be few technical constraints to the increasing penetration of OTT in markets where broadband capacity is adequate and devices readily available. Consumer devices for viewing OTT include a wide variety of internet enabled devices, and even cable broadcasters are also migrating to IP-based protocols to allow for the delivery of more interactive media.

**Figure 3. Percentage of households with Internet access by level of development, 2002-2010**



The developed/developing country classifications are based on the UN M49, see:

<http://www.itu.int/ITU-D/ict/definitions/regions/index.html>

Source: ITU World Telecommunication /ICT Indicators database

17. Today, all the platforms compete and struggle to increase their appeal in order to gain wider audiences. Of course, the popularity and market share of each platform will vary throughout the world.<sup>14</sup> While the provision of television services via new technologies (i.e. Internet Protocol, fixed and wireless broadband) will complement terrestrial broadcasting, the European Broadcasting Union (EBU) is of the view that the terrestrial broadcast platform will continue to play a major role at least for the next 5-10 years as new technologies may not provide a viable alternative for distribution to a mass audience, in particular in the sparsely populated areas.<sup>15</sup>

<sup>13</sup> In Canada, for example, it is identified as only coming into existence with the launch of Netflix in September 2010. Miller, P. H. and R. Rudniski (2012), Market Impact and Indicators of Over the Top Television in Canada, Report prepared for the Canadian Radio-television and Telecommunications Commission (CRTC), p. 2, available at: <http://www.crtc.gc.ca/eng/publications/reports/rp120330.htm>

<sup>14</sup> See for example OECD (2012), Communications Outlook: Chapter 6, Broadcasting and Audiovisual Content, DSTI/ICCP/CISP(2012)9/CHAP6.

<sup>15</sup> EBU (2011), The Future of Terrestrial Broadcasting, Technical Report 013, available at: <https://tech.ebu.ch/docs/techreports/tr013.pdf>

### 2.1.3 *Changes affecting the provision of traditional broadcasting*

18. Free-to-air TV broadcasting has the qualities of a public good, in that it is non-excludable (anyone with a TV receiver can access it) and non-rivalrous (an unlimited number of receivers can pick up the signal). As the history of the soap opera illustrates, private TV networks originally developed programs as a means to package advertising. Revenue streams from subscription services were facilitated by the transmission of encrypted signals across cable and satellite networks and the development of proprietary terminal decoders, or “set top boxes” which substantially changed the market for TV broadcasting.

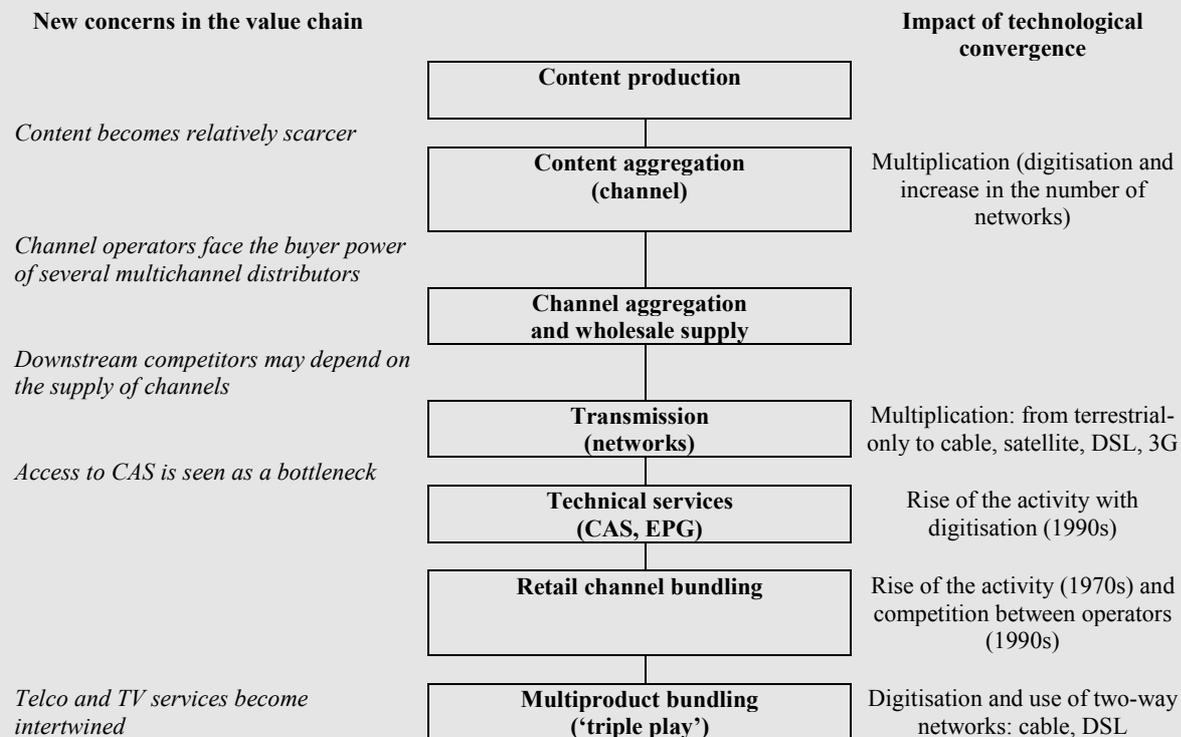
19. Another fundamental change affecting traditional broadcasting is due to the migration of networks to Internet Protocol (IP) packet switching data transmission. Combined with significant broadband penetration and increases in computing power that have significantly increased bandwidth and the proliferation of digital devices this has enabled different devices and applications to use the same networks, and facilitated the ability of the communication industry to offer new and bundled services. This allows consumers to receive and decode video services across a variety of fixed and mobile devices, including computers, game terminals phones and tablets.

20. In this environment, asymmetric regulation across services can have the effect of creating a competitive advantage for incumbents and potentially limiting the opportunities available for consumers. According to the World Bank, the overarching implication of the effects of convergence for regulation is the need to have a technology neutral approach in the design of regulation and its administration by regulatory institutions. “As converging services travel over the same access infrastructures, it might be necessary to converge regulators and the legal framework as well, in order to promote efficient regulatory decision making, and minimise possibilities for arbitrage and forum shopping.”<sup>16</sup>

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<sup>16</sup> World Bank (2007), Regulatory trends in Service Convergence, Policy Division, Global Information and Communications Technologies Department, Washington, D.C, p. 11.

**Box 1: Impact of Technological Convergence on the Television Value Chain**



Source: Pablo Ibañez Colomo<sup>17</sup>

The table illustrates reductions in entry barriers due to the effect of digital compression technologies and the development of new networks, but also the areas of new concern for competition in the value chain. The multiplication of networks and increases in transmission capacity has allowed multichannel distributors to bundle together television channels at the wholesale level for delivery in different retail combinations, including on a subscription-free basis through terrestrial networks. The focus of new concerns becomes access to content which becomes relatively scarcer in the context of a multiplication of networks. The development of technical services for digital television is also a potential bottleneck as it created a new level of the value chain, whereby encrypted TV signals could be restricted to paying customers through a Conditional Access System (CAS), and end user navigation assisted by means of an Electronic Programme Guide (EPG). These systems may be configured to restrict access to certain distribution networks. The development of multichannel bundles combining triple or quadruple play offers, with telecommunication services, such as voice telephony and the internet may also create opportunities for exclusion.

<sup>17</sup> Ibañez Colomo, P. (2012), *European Communications Law and Technological Convergence: Deregulation, Re-regulation and Regulatory Convergence in Television and Telecommunications*, Volume 79 of European Monographs, Wolters Kluwer Law & Business.

#### 2.1.4 Interconnection

21. Network regulation is concerned with ensuring that access to essential facilities is open to new entrants on fair and reasonable terms and that network operators do not abuse their dominant market position to exclude competitors in upstream and downstream markets. Interconnection and the use of networks become complex, particularly in the transition period to increasing convergence, when interconnection must be managed effectively for competition to take hold. Interconnection regulation may be further complicated as convergence alters the profiles of interconnecting parties, for example mixing broadcasters and telecom operators, or entirely new entrants. In such an environment, existing interconnection agreements and regulatory arrangements may not be adequate for the range of new and different services that can travel across the same facilities.

22. Traditionally, the Internet model for network infrastructure has relied on voluntary interconnection and regulators have not normally imposed special obligations for internet backbone interconnection, except in merger cases. However, OECD (2012) identifies a potential regulatory role in the private interconnection arrangements between Internet service providers (ISPs) for the carriage of data on the internet backbone networks.<sup>18</sup>

*The rise of digital content distribution will bring backbone practices into the regulatory foreground. Whether a relationship is considered peering (settlement-free) or transit (one party pays the other for transport) has major economic consequences. For example, in late 2010, Level 3, the largest United States backbone provider, accused Comcast of unreasonably imposing a recurring monthly fee on traffic it delivered to the broadband provider.<sup>19</sup>*

*Under the parties' prior contract, Comcast actually paid Level 3 for transit. However, after Level 3 became the primary delivery network for Netflix, it began sending substantially more downstream traffic to Comcast customers than it was receiving. Comcast claimed the fee was necessary to recover its additional costs to handle the new traffic, whereas Level 3 saw an anticompetitive move to disadvantage a competitor to Comcast's cable television service. The FCC declined to become involved, stating that this was a commercial dispute rather than a network neutrality issue. A similar battle may be brewing in Europe, where several major carriers are seeking supplemental payments from Internet-based content providers.<sup>20</sup>*

#### 2.1.5 Content regulation: Must-carry and must-list program guides

23. Content regulations, including “must carry” requirements, are generally applied to broadcasters as a condition of licensing and are typically directed at local, regional or public service channels. Their purpose is to ensure that the broadcaster includes in its schedule a minimum level of programming content that meets certain requirements. These usually require locally produced content or are intended to address particular audience characteristics, for example programs in a particular language or dealing with specific subject matter such as children’s programmes.

<sup>18</sup> OECD (2012), The Development and Diffusion of Digital Content, OECD Digital Economy Papers, No.213, p. 34, available at: <http://dx.doi.org/10.1787/5k8x6kv51z0n-en>.

<sup>19</sup> Stelter, B. Netflix Partner Says Comcast “Toll” Threatens Online Delivery, N.Y. TIMES MEDIA DECODER, November 29, 2010, at <http://mediadecoder.blogs.nytimes.com/2010/11/29/netflix-partner-sayscomcast-toll-threatensonline-video-delivery>; Golding, D. The Real Story Behind the Comcast-Level 3 Battle, GIGAOM, December 1, 2010, at <http://gigaom.com/2010/12/01/comcast-level-3-battle>.

<sup>20</sup> Parker, A. and T. Bradshaw (2011), EU Telecoms Groups Seek Charging Shake-Up, FT.COM, July 12, 2011, at [www.ft.com/intl/cms/s/0/cce9b8b0-abcf-11e0-945a-00144feabdc0.html#axzz1Ro7wOyD4](http://www.ft.com/intl/cms/s/0/cce9b8b0-abcf-11e0-945a-00144feabdc0.html#axzz1Ro7wOyD4).

24. In a converged environment, content formerly dedicated to a specific network can be readily made available on different infrastructures and platforms, leading to different standards for content regulation. This creates particular challenges for ensuring that broadcasting services achieve the social objectives of promoting and protecting cultural traditions, or protecting citizens from exposure to potentially harmful material.

25. Regulation requiring a minimum level of domestic content is typically a feature of broadcasting licensing requirements. However, the requirements of must carry legislation for broadcasters may not be required from IPTV providers. Similarly, IPTV may not be required to provide supported services such as closed captioning to make television more accessible to segments of society. In contrast to traditional broadcasting platforms, countries have fewer opportunities to regulate internet content, and therefore apply fewer standards, and if the principles of net neutrality are pursued, countries will likely have less opportunity to do so in the future.

### **3. Challenges for competition policy**

26. In the aftermath of the technological changes that took place, incumbent broadcasters were forced to compete with cable and satellite television providers, on the one hand, as these started to gain foothold in the market, and with telecommunications providers, on the other, as these expanded the scope of their activities. Although in the course of the last decade there has been an overall increase in the number of competing television operators throughout the world, competition in television broadcasting continues to be restricted in a number of countries.

#### **3.1 Market access and barriers to entry**

27. Convergence has allowed new firms to enter previously protected markets, creating competition among a number of players in areas that formerly constituted separate markets, including: cable operators, providers of television services delivered via the internet (IPTV), telecom operators, and terrestrial broadcasters. Even if, overall, the broadcasting sector is becoming increasingly competitive, a number of issues relating to barriers to entry arise as a consequence of convergence, which, in turn, has implications for competition policy.

28. Barriers to entry (and exit) are important to the extent that only in their presence market power is likely to be sustainable over time. Therefore, to determine whether a given merger or behaviour of a dominant firm is anti-competitive, competition authorities are expected to carefully examine entry and exit conditions in a given market.

29. Depending on the definition, barriers to entry may refer to the established firm's ability to earn supra-competitive profits (Bain)<sup>21</sup> or to "a cost of producing (at some or every rate of output) that must be borne by a firm which seeks to enter the industry but is not borne by firms already in the industry" (Stigler).<sup>22</sup> Entry barriers can arise from governmental policies, capital requirements, economies of scale or product differentiation. While they exist to varying degrees in all media industries,<sup>23</sup> it is often considered

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<sup>21</sup> Bain, J.S. (1954), 'Economies of Scale, Concentration, and the Condition of Entry in Twenty Manufacturing Industries', *American Economic Review*, vol. 44, no. 1, pp. 15-39.

<sup>22</sup> Stigler, G. J. (1968), *The Organisation of Industry*, Homewood, IL: Richard D. Irwin. See also Baumol, W. J. and R. D. Willig (1981), 'Fixed Costs, Sunk Costs, Entry Barriers and Sustainability of Monopoly', *Quarterly Journal of Economics*, vol. 96, no. 3, pp. 405-431.

<sup>23</sup> Picard, R. G. (2002), *The economics and financing of media companies*, New York, Fordham University Press.

that the broadcasting industry is one of the most difficult to enter. According to Picard and Chon, new entrants planning to enter into broadcasting markets typically face six critical barriers:<sup>24</sup>

- *Governmental policy:* Barriers to entry of that type may be regulatory or administrative in nature. Competent authorities take into account economic as well as cultural and social factors when issuing broadcasting licenses. This may lead to distortions of competition. For example, in Zambia, radio or TV licenses included conditions which allowed only for short broadcasting radius. This restriction was apparently justified by the need to ensure a community nature of the broadcasting operators.<sup>25</sup> Generally, the governmental ability to control entry and affect the levels of competition in the market tends to be higher with respect to terrestrial rather than satellite television. Because the promotion of competition in the broadcasting sector requires that regulatory barriers be lowered as far as possible, rules governing market entry should be clear, transparent and non-discriminatory.
- *The presence of existing dominant broadcasters:* Such broadcasters usually have a long-established relationship with the viewers and most likely also with advertisers, which has to be challenged by new entrants.
- *Availability of suitable programming:* Successful entry into television broadcasting markets requires access at reasonable prices to desirable programming. Access to such programming refers both to its production and/or acquisition from third parties. Acquisition of some of the content, which may turn out to be critical to attract viewers, is likely to constitute a significant cost to new market players.
- *Audience behaviour:* In the presence of established dominant broadcasters, new entrants have to come up with offers sufficiently attractive to convince viewers to alter their existing patterns of viewing and channel choice. Commercial broadcasters, whose operations are financed through advertising fees, need to establish within a rather short period of time an audience base that will attract a sufficient number of advertisers.
- *Consumer costs:* Most likely, new entrants will offer their television broadcasting services using cable, satellite or digital terrestrial technologies, all of which require viewers to incur hardware-related costs. Difficulties and costs that viewers may encounter when switching between different television broadcasters has the potential of discouraging them from altering their established patterns of viewing altogether. For example, consumers who switch from one satellite television operator to another generally have to incur costs related to the rental or purchase of adequate equipment, such as set-top boxes. However, where different platforms, i.e. satellite, cable, IPTV, are effectively competing against one another, one could expect the switching costs to be low as individual platforms would be likely to charge low or no fees at all for installation and necessary equipment in order to convince subscribers of the other platforms and/or television operators to switch.<sup>26</sup>
- *Capital requirements:* Where the level of capital required is prohibitively high, it may constitute a significant barrier to entry. However, broadcasters may resort to joint ventures and other agreements that would render capital requirements less strenuous.

<sup>24</sup> Picard, R. G. and B. S. Chon (2004), 'Managing Competition Through Barriers to Entry and Channel Availability in the Changing Regulatory Environment', *The International Journal on Media Management*, vol. 6, no. 3&4, pp. 168-175.

<sup>25</sup> See contribution from Zambia, DAF/COMP/GF/WD(2013)21.

<sup>26</sup> For example, in the UK Sky has an offer which includes free Sky and HD Box.

30. Naturally, as the television broadcasting industry continues to evolve some of the above mentioned features may cease to constitute a barrier to entry. Moreover, some features may act like a barrier to entry in one country, but not in another. For example, in Singapore content fragmentation created a significant barrier to entry for new entrants as all the top multi-national channel-producing companies sold their channels exclusively to subscription TV licensees.<sup>27</sup> In comparison, in some other countries, less than 15 per cent of top ten channel-producing companies sold their channels exclusively to pay-TV licensees. Competition authorities should therefore regularly assess the features of their respective national markets and potential for new entry.

### 3.1.1 *From transmission to exclusive premium content as bottleneck and source of market power*

31. The provision of TV broadcasting services requires that new entrants obtain access to transmission (telecommunications) services as well as access to content. In the era of analogue broadcasting, legacy television regulatory models have typically considered transmission capacity to constitute a major barrier to entry since given the capacity constraints of the radio spectrum it was believed that the number of television channels would remain limited. Moreover, if just one or a small number of broadcasters controlled the already limited transmission capacity, one could rationally expect that competition would not flourish.

32. However, as Seabright and Weeds point out: “with digital transmission [...], spectrum constraints on the number of channels are effectively removed and scarcity rents are eliminated. Existing transmission capacity is sufficient to meet demands (at current and anticipated future levels) and there is a strong incentive to utilise spare capacity that militates against using access to transmission as a barrier to entry”.<sup>28</sup> In other words, digitalisation, which led to a substantial increase in transmission capacity by compressing television signals and the decreasing cost of reproducing and transmitting information, is considered to have significantly reduced some of the entry barriers in the broadcasting sector.

33. In the EU, assessment of high and non-transitory barriers to entry forms part of the three-criteria test which, if fulfilled, leads to the imposition of *ex ante* regulation.<sup>29</sup> In fact, the Commission Recommendation of 2003 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation included in the list the market for broadcasting transmission services to deliver broadcast content to end users (ex market 18).<sup>30</sup> However, under the 2007 Recommendation, which replaced the former, the market is no longer regulated.<sup>31</sup> In the Commission’s

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<sup>27</sup> See contribution from Singapore (2013), DAF/COMP/GF/WD(2013)33.

<sup>28</sup> Seabright, P. and H. Weeds (2007), ‘Competition and market power in broadcasting: where are the rents?’ in Seabright, P. and J. von Hagen (eds.), *The Economic Regulation of Broadcasting Markets*, Cambridge University Press.

<sup>29</sup> In the EU, national regulatory authorities impose sector-specific obligations when the three-criterion test is fulfilled. Under this test, the authorities examine whether i) there exist ‘high and non-transitory’ barriers to entry, ii) whether the market structure does not tend towards effective competition in a relevant time horizon, and iii) whether the application of competition law alone would not adequately address the market failure(s) concerned.

<sup>30</sup> Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, O.J. [2003] L 114/45.

<sup>31</sup> Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, O.J. [2007] L 344/65.

view and on the basis of the comments received from national regulatory authorities, while some entry barriers may still exist in the market, the market dynamics are such that effective competition can be expected within the relevant time horizon. The second criterion of the three-criterion test is therefore no longer satisfied as “there is evidence of greater platform competition as the transition from analogue to digital delivery platforms occurs”.<sup>32</sup>

34. However, despite greater platform competition and apparently sufficient transmission capacity to satisfy both current and future needs, competition concerns have not ceased to exist. Their source has simply shifted to other related areas. Some of the transmission assets, for example, such as terrestrial transmission sites, are simply too expensive to be duplicated. Regulatory authorities concerned about potential exploitation of control over such assets may choose to regulate conditions under which access to them is to be granted.<sup>33</sup> Moreover, when such assets are controlled by a dominant firm, there is a risk that such a firm may unilaterally engage in anti-competitive behaviour. The *Astra/Abertis* case from the Spanish competition authority, concerning abuse of dominant position, clearly illustrates that access to transmission facilities may still raise serious competition concerns, even if generally it is considered that transmission no longer creates barriers to entry.<sup>34</sup>

35. The success of entry into television broadcasting is moreover determined by the ability of new broadcasters to gain access to the content that consumers demand, and to differentiate their offering from that of incumbent broadcasters. Whereas technological convergence, and digitisation in particular, have gradually resolved the problem of spectrum and channel scarcity, convergence has not, as a matter of fact, had any direct impact on the provision of content. As there are only a few blockbusters and a limited number of premium sport events every year, content has consequently become scarcer, and has effectively become a new bottleneck in the broadcasting market.

36. Within premium content one should distinguish in particular sport events and blockbuster Hollywood movies.<sup>35</sup> While both types of content are traditionally considered to be a key element driving the demand for pay-TV subscription, they tend to display different features. The problem of bottleneck is most acute for content that is time critical, and therefore for which broadcasting has no adequate substitutes, and also content demanded by a mass audience, for which traditional broadcasting technologies have a competitive advantage. Major professional sporting events fit all these criteria.<sup>36</sup>

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<sup>32</sup> European Commission, Explanatory Note Accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, SEC(2007) 1483/2.

<sup>33</sup> Comreg (2012), Market Review: Broadcasting Transmission Services in Ireland, Consultation Paper and Draft Decision, Document No. 12/77, Available at: [http://www.comreg.ie/\\_fileupload/publications/ComReg1277.pdf](http://www.comreg.ie/_fileupload/publications/ComReg1277.pdf)

<sup>34</sup> See the summary of the case in Section 4 of the Background Note.

<sup>35</sup> For example, Ofcom defines premium film rights as the rights from the main six Hollywood studios in the period 12 months following their theatrical release.

<sup>36</sup> In the second half of the twentieth century television revolutionised the way millions of people around the world experience sport. Because of television, millions of people could simultaneously share the experience of watching such major events as the FIFA World Cup or the opening ceremony of the Olympic Games. Not surprisingly, the demand for the sports broadcasting rights has grown substantially during the last decades. This growth has been mostly driven by an increasing number of broadcasters operating in the market and expanding market share of commercial broadcasting. Initially, when the provision of television was dominated by public networks, fees for rights to broadcast sport events used to be relatively small as public broadcasters were monopolists. However, as commercial television gained more audience and

37. While the pay-TV market does not seem to exhibit natural monopoly features, (exclusive) access to premium content is generally considered to be of essential importance for the functioning of pay-TV markets.<sup>37</sup> Such a view has been expressed around the world by competition authorities as well as market players. For example, the European Commission in its decision concerning merger transaction between NewsCorp and Telepiù, expressly stated that “access to premium contents, mainly recent films and football events but also other sport events, is vital to the successful operation of a pay-TV”.<sup>38</sup> In South Africa, MultiChoice, created out of the subscriber-management branch of M-Net, and M-Net, which for the last two decades has been the only licensed pay-TV provider, jointly submitted that “for subscription broadcasting services, exclusivity is the primary basis on which these services will attract and retain subscribers”.<sup>39</sup> However, as the Ministry of Economic Development and the Ministry of Culture and Heritage of New Zealand point out in the report issued jointly on competition issues in television broadcasting “any broadcaster that can ‘lock up’ long-term rights to all or most premium content potentially has the capacity to dominate the retail market and exercise market power”.<sup>40</sup>

38. Barriers to accessing content and related competition concerns can arise from various sources, such as for example the integration of content owners and transmission providers, or existing contractual arrangements. Traditional broadcasting companies that transmit via cable, terrestrial, and/or satellite may all have legacy relationships providing privileged access to specific content that create obstacles for new entrants. Telecommunications companies may also create “walled gardens” only allowing access to content providers with which they have arrangements.

### 3.1.2 *Scarcity of spectrum and lack of effective management*

39. The move from analogue to the more efficient digital spectrum has significantly reduced the scarcity of frequency capacity allowing more channels to be carried across fewer airwaves.<sup>41</sup> This removes a number of the potential monopoly arguments for licensing a limited number of broadcasters and allows for the operation of a wide range of new services, and the evolution of existing services. However, as service licensing has moved towards technology and service neutrality, the allocation and management of spectrum has to provide the opportunities for different portions of spectrum that can host new services and technologies.

40. Also, even though the problem of spectrum scarcity has to some extent been reduced, anti-competitive behaviour in the spectrum market can still arise, in particular when spectrum holders seek to

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started to compete with incumbent broadcasters, the fees for sports television rights have increased exponentially,<sup>36</sup> while the broadcasting of sport events has shifted from public to commercial pay-TV television. For example, for the right to broadcast 2006 and 2008 Olympics, NBC paid \$1.508 billion, whereas for the 2010 and 2012 events, it paid \$2.201 billion, a boost of 33 per cent. The skyrocketing costs of acquiring sports broadcasting rights can be explained by i) the strategy usually pursued by pay-TV operators who require exclusivity, which in turn facilitates their strategies to foreclose the market, on the one hand, and ii) the strategy pursued by the right holders, on the other, who seek to extract maximum rents from the sale of their content.

<sup>37</sup> According to Spence and Owen, the content for which demand is rather inelastic will rather be provided to the viewer under subscription than on advertising-based television. Spence, M. and B. Owen (1977), ‘Television Programming, Monopolistic Competition, and Welfare’, *Quarterly Journal of Economics*, vol. 91, no. 1, pp. 103-126.

<sup>38</sup> European Commission [2003], Case No COMP/M.2876, *NewsCorp/Telepiù*.

<sup>39</sup> ICASA (2005), *Subscription Broadcasting Services: Position Paper*.

<sup>40</sup> The Ministry of Economic Development and the Ministry of Culture and Heritage of New Zealand (2009).

<sup>41</sup> It has been identified in some cases as six times more efficient.

establish a strong position in the provision of downstream services. The scope for such behaviour is greater when spectrum allocated for a particular use is scarce. Scarcity may directly result from the regulation that can explicitly pre-empt some spectrum. For example, Cave (2010) points out that “40 per cent of the spectrum below 1 GHz is used for terrestrial broadcasting, and a TV station, for instance, may not be allowed unilaterally to stop broadcasting and instead use its assigned frequencies to transmit cellular phone calls”.<sup>42</sup> Also, assignment of frequencies may be based on anti-competitive criteria. Recently, the European Commission has launched proceedings against Bulgaria’s government alleging that in 2009 the Bulgarian government assigned five digital frequencies to only two broadcasters – Latvia’s Hannu and Slovakia’s Towercom – by “limiting without justification the number of companies that could potentially enter the market”.<sup>43</sup>

41. Accordingly, the risk of anti-competitive behaviour in spectrum markets can be limited with the introduction of appropriate tools in the spectrum regulation itself. However, it must be pointed out that concerns arising with respect to spectrum management in low- and middle-income countries may be quite different than those that arise in high-income countries. The World Bank notes that “developing countries may have a shortage of spectrum demand rather than of supply”, and that “all small markets with potential for fast growth, large areas without service, incomplete infrastructures, administrative restriction on entry, and capital shortages all denote spectrum underutilization”.<sup>44</sup>

42. When regulatory measures turn out to be insufficient to prevent the risk of anti-competitive behaviour, individual anti-competitive practices in the spectrum market can be addressed by general competition law. For example, when a given merger involves transfer of spectrum, and there is a risk that such a transaction may have an adverse impact on competition, competition authorities may approve merger, however subject to remedies affecting control over spectrum.

### 3.1.3 *Ownership controls*

43. One of the impacts technological developments and convergence have on the media market is the increased attractiveness of joint ventures and mergers both at national as well as global level. High concentration in media markets may pose different and greater concerns than in other industries. In particular, it may have a negative effect on diversity and plurality, which is of fundamental importance in media industries.

44. In most industries, market failure and anti-competitive behaviour or practices lead to higher prices. However, in information-heavy media markets, where market players provide so-called ‘credence goods’, higher concentration, and less competition may diminish the quality of reporting.<sup>45</sup> While

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<sup>42</sup> Cave, M. (2010), ‘Anti-competitive behaviour in spectrum markets: Analysis and response’, *Telecommunications Policy*, vol. 34, pp. 251-261.

<sup>43</sup> Berra, S. (2013), ‘DG COMP sues Bulgaria over digital TV’, 28 January 2013, available at: <http://www.globalcompetitionreview.com/news/article/32968/dg-comp-sues-bulgaria-digital-tv/>

<sup>44</sup> World Bank (2008), ‘Managing the Radio Spectrum: Framework for Reform in Developing Countries’, Policy Research Working Paper WPS 4549.

<sup>45</sup> Stucke and Grunes quote in their article as an example media’s response to comments made by then Senator Obama during the 2008 presidential campaign. In response to a question posed at a campaign stop in Oregon, then Senator Obama stated that he would seek to enforce the antitrust laws more strongly, if elected, and pointed out that media consolidation raised in that regard particular concerns. The authors point out that “none of the twenty prominent newspapers surveyed by the American Antitrust Institute independently reported the comments”. Some of the major newspaper, such as The Washington Post and The New York Times, discussed the response from the U.S. legal community to the comments made by the Senator, however, without mentioning concerns of media consolidation that were singled out. Stucke, M E.

competition law can address the issue of concentration and choice, it can by no means guarantee that ownership will be dispersed and that new entry will occur. Given that competition law and policy pursues economic objectives, such as efficiency and consumer welfare, it cannot provide adequate protection for diversity and plurality of media. It is for that reason that many jurisdictions across the world have adopted special rules on the maximum level of ownership within particular media platforms (concentration limits) and/or across different media platforms (cross-ownership limits). Such rules, however, may also seek to promote competition.

45. In the United Kingdom, for example, Ofcom has a statutory duty to review the media ownership rules regularly and make recommendations for any change to the Secretary of State.<sup>46</sup> In the US, the Federal Communications Commission (FCC) is required under Section 202(h) of the Telecommunications Act of 1996 to review its media ownership rules every four years to determine whether they are in the public interest as the result of competition, and when necessary to modify or repeal any existing regulation that no longer meet the criteria. The last Quadrennial Regulatory Review took place in 2010, and in December 2011 the FCC adopted and released a Notice of Proposed Rulemaking.<sup>47</sup> Currently, the FCC has in place:

- Local television ownership rule
- Local radio ownership rule
- Newspaper/Broadcast cross-ownership rule,
- Radio/television cross-ownership rule, and
- Dual network rule.

46. According to the FCC, the dual network rule is necessary to promote both competition and localism. While the rule permits common ownership of multiple broadcast networks, it prohibits a merger between the “top four” networks: ABC, CBS, Fox and NBC. Such prohibition, according to the Commission, is justified by the fact that given “the level of vertical integration of each of the top four networks, as well as their continued operation as a “strategic group” in the national advertising market, a top-four network merger would give rise to competitive concerns that the merged firm would be able to reduce its program purchases and/or the price it pays for programming”.<sup>48</sup> The dual network rule was also upheld by the U.S. Court of Appeals for the Third Circuit, which found that it was justified given vertical integration as well as the ability of the top four broadcast networks to reach a larger audience than other networks.<sup>49</sup>

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and A. P. Grunes (2009), ‘Toward a Better Competition Policy for the Media: The Challenge of Developing Antitrust Policies that Support the Media Sector’s Unique Role in Our Democracy’, *Connecticut Law Review*, vol. 42, no. 1, pp. 101-146.

<sup>46</sup> Last revision took place in November 2012, and Ofcom recommended no changes to the existing rules. See contribution from the UK, DAF/COMP/GF/WD(2013)39. See also:

<http://stakeholders.ofcom.org.uk/market-data-research/other/media-ownership-research/rulesreport2012/>.

<sup>47</sup> FCC (2011), Notice of Proposed Rulemaking in the matter of 2010 Quadrennial Regulatory Review – Review of the Commission’s Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, available at: [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-11-186A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-186A1.pdf)

<sup>48</sup> FCC (2011), para. 136.

<sup>49</sup> *Prometheus Radio Project v. Federal Communications Commission* (2011), 652 F.3d 431 at 464.

47. While ownership control rules are imposed with a view to ensure diversity and plurality of views, the role of competition in that regard is of enormous importance. Generally, assessing the quality and veracity of information is a difficult task, and even more so when the quality of information would have to be determined in isolation. Competition, on the one hand, allows “consumers to judge quality more accurately because they can benchmark one firm’s reporting against the other”,<sup>50</sup> while on the other, it can lower supply-driven bias.<sup>51</sup>

48. It must be pointed out that while ownership control may help ensure diversity and pluralism, the efficacy of such rules from a competition policy perspective depends on how broadcasting and media services are defined. Precise distinctions become less feasible in the context of ‘multiple-play’ services that blur the boundaries between audio-visual transmissions across different platforms. For example, it may be relevant to ask whether video content provided to mobile devices constitutes a broadcasting service.

49. Similarly, in this dynamic environment taking account of how technological developments are redefining the telecommunications and media sectors, it can be complicated to identify how the acquisition of firms might hamper the development of competition and potentially create opportunities for the control of media “pipes” to be used to stymie competition in downstream media markets.

#### 3.1.4 *Television channel numbering*

50. Channel numbers can have significant local recall among consumers, giving established television stations a competitive advantage. This is a matter to be managed in the allocation of the digital spectrum and the migration of analogue channels. It may also arise with respect to the delivery of IPTV across different platforms, because the channels come from different geographic locations and so the aggregation of channels may lead to overlapping channel numbering. In the US, for example, the Federal Communications Commission (FCC) proposed during the process of switch-over from analogue to digital to implement a channel election process to allow station licensees to choose which channel they prefer.

#### 3.1.5 *The impact of disruptive technologies*

51. Clearly, the television sector is currently in turmoil. From a one-way medium it has been continuously evolving into a two-way medium where viewers no longer need to access a given programme at a specific point in time as was the case under the static distribution models offered by traditional terrestrial broadcasting. The traditional TV business model based on proprietary and vertically-integrated distribution networks is being challenged by more personalised programming. Where viewers can access content on multiple platforms, broadcasters can establish a more direct relationship with the viewer, thereby leading to a long-term fragmentation of the audience, which splits the time they devote to media among a plethora of channels and platforms.

52. One of the latest developments affecting the television broadcasting industry is the so-called ‘Over-the-top’ television or services (OTT). As it has been already explained, this essentially refers to the delivery of video bit-streams over broadband transmission networks rather than via traditional cable, satellite and other traditional broadcast means, in addition to other services typically provided via Internet. However, the relevance of OTT TV or IPTV should not be discussed merely from the perspective of

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<sup>50</sup> Gentzkow, M. and J. M. Shapiro (2008), Competition and Truth in the Market for News, *Journal of Economic Perspectives*, vol. 22, no. 2, pp. 133-154.

<sup>51</sup> See Stucke and Grunes (2009) for the overview of studies that showed how competition among alternative sources of media reduces supply driven-bias, which refers to distortive, self-censored, or biased news coverage and reporting.

delivering digital television over the Internet. It is argued that OTT TV is likely to lead to the reinvention of the way in which we experience television.<sup>52</sup>

53. Increasing competition from converged market players who provide TV, telecommunications and internet services, and altering structure of the television broadcasting industry<sup>53</sup> leaves competition authorities in front of unparalleled levels of complexity. Given that technological changes are rapid and most of the time unpredictable, one cannot rationally expect competition and regulatory authorities to correctly predict either the outcome of the current changes or the exact nature of the new challenges. Nonetheless, since governments continue to play an important role in the design of media policy, which covers television broadcasting, competition and regulatory authorities should at least attempt to conduct their ongoing investigations bearing in mind the potential of technological changes to completely alter currently existing market structures, which in turn may render some of the current competition concerns obsolete. While it is not possible to predict what the television consumption pattern will look like in five or ten years from now, it is safe to assume that television broadcasting will continue to evolve towards a broadcasting model whereby viewers consume content in a more interactive, personal and mobile manner. Where competition authorities have the powers to do so, they may consider carrying out market studies or investigations to assess altering patterns of television consumption, and corresponding changes in market structures. In the absence of such powers, when investigating individual cases competition authorities should carefully examine the dynamic aspect of the market, and the impact it may have on the growth of competition.

### 3.1.6 *Overlapping regulatory jurisdictions*

54. In an increasingly globalised economy, where it is a common practice for converged players in the communications markets to offer triple- or quadruple-play services, the risk of jurisdictional conflicts between various authorities and the need for a close co-operation between them becomes more acute. At the moment, the most pertinent issue concerns conflicts arising at the national level, and in particular between different potentially competent regulatory authorities, and between regulatory and competition authorities.

- *Telecommunications and broadcasting regulatory authorities:* Bearing in mind convergence that has taken place in the technological and economic conditions underlying the provision of telecommunications and audiovisual services, an increasing number of scholars assert that a similar convergence, at least at a minimum level, should take place in relation to the respective regulatory regimes.<sup>54</sup> The key question is whether current national legal frameworks provide stability and long-term direction to the communications industry, and at the same time allow service providers and users the flexibility to deploy and use services provided over new technologies.

In practice, the market failures, or policy issues concerning the quality of, or access to content are distinguishable from the issues concerning ensuring access to carriage of data, so separating the regulatory functions for content and carriage should not pose particular problems. Standards for a

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<sup>52</sup> For the description of potential modifications in the consumption of television content see for example Meyer, L. (2006), 'Three scenarios for TV in 2015', *Communications & Strategies*, no. 62, pp. 93-108.

<sup>53</sup> In the US, for example, AT&T and Verizon Communications, like many other telecommunications providers around the world, now rely on proprietary fibre networks to compete directly with traditional cable and digital satellite broadcasters.

<sup>54</sup> For a discussion on the impact of convergence on sector-specific regulation, see for example Yoo, C. S. (2009), 'The Convergence of Broadcasting and Telephony: Legal and Regulatory Implications', *Communications & Convergence Review*, vol. 1, no. 1, pp. 44-55.

certain level of broadcasting service have not traditionally had to distinguish their usage. In a converged environment, where not all content is under the control of the regulatory jurisdiction, the implications of establishing standards for only a restricted range of services may have to be evaluated.

There is however an issue with treating like services in a like manner and ensuring that similar services are treated the same way under the law. The arguments for distinguishing access to telecommunications and broadcasting may no longer apply, when both services carry the same products. However, in jurisdictions where there is a separate regulatory authority for telecoms and broadcasting, one regulator may assert that their rule overwhelms the other. This creates potential opportunities and incentives for forum shopping or regulatory arbitrage, which undermines the efficiency of regulation and raises the costs for service providers.

Joint regulation advocated for by some scholars also calls for a single converged regulatory authority. This has already been adopted in some OECD countries such as the UK (Ofcom) and Italy (Agcom). There are also a number of examples from the non-OECD economies where individual countries have decided to set up a converged regulator in response to challenges brought by convergence “to eliminate obsolete rules that were hampering investment and slowing competition in the ICT sector”.<sup>55</sup> This is, for example, the case of South Africa and India, where a converged regulator was established with a view to capture the converging nature of the ICTs.<sup>56</sup>

- *Regulatory and competition authorities:* As convergence has led to the erosion of natural monopolies and created the scope for intermodal competition, some commentators argue that consequentially there will be less scope for sector-specific regulation, and more for conventional antitrust law.<sup>57</sup> Irrespectively of whether this is the case, potential conflicts may also arise when regulatory and competition authorities issue conflicting decisions concerning the same matter. To decrease the risk of jurisdictional conflicts and divergent decisions, some countries have adopted less or more formal agreements, or memorandums of understanding, which prescribe specific co-operation procedures.

55. In addition to conflicts that may arise at the national level, the risk of international overlaps between competing jurisdictions is becoming more pronounced as more content shifts to the Internet. One of the findings of the Media Convergence Review Panel in Singapore was that local media licensees are increasingly vulnerable to “online competition from overseas media service providers who are not subject to local regulatory regimes”.<sup>58</sup> To address this unlevel playing field, the Panel proposed that “Singapore’s broadcast licensing framework should cover both local and foreign broadcasting services delivered over the Internet and receivable by the Singapore public”, while acknowledging the difficulties of putting such a solution into practice.<sup>59</sup>

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<sup>55</sup> García-Murillo, M.A. (2005), Regulatory responses to convergence: Experiences from four countries, *Info*, vol. 7, no. 1, pp. 20-40.

<sup>56</sup> The Independent Communications Authority of South Africa (ICASA) was created in the aftermath of a merger of two separate regulatory authorities: the South African Telecommunications Regulatory Authority (SATRA) and the Independent Broadcasting Authority (IBA).

<sup>57</sup> Geradin, D. and M. Kerf (2003), *Controlling market power in telecommunications: Antitrust v. sector-specific regulation*, Oxford, England: Oxford University Press.

<sup>58</sup> Contribution from Singapore, DAF/COMP/GF/WD(2013)33.

<sup>59</sup> Ibid.

### 3.2 *Market definition*

56. Market definition is, beyond doubt, one of the most important analytical tools that competition authorities use to examine and evaluate competition problems. This is so because competition analysis cannot in general be carried out independently from market definition.<sup>60</sup>

57. Market definition in television broadcasting is likely to be challenging given that the broadcasting sector comprises a multitude of relationships. To properly define the relevant market, and identify potential competition concerns, competition authorities must, in the first place, have a clear understanding of both demand- and supply-side substitutions all the way along the value chain. Since the broadcasting of television involves a multitude of players, analysis of substitution must take into account all of them, including advertisers, viewers, broadcasters, infrastructure/network operators, or content rights-holders.

58. Furthermore, the market definition exercise will be complicated even further by the presence of a number of features which are frequently found in audio-visual product and service markets, such as the presence of high fixed and low marginal costs, bundling, non-price competition, two-sided nature of markets, vertical integration in the production and distribution process, and rapid and often unpredictable technological development.

59. With the migration towards Internet Protocol traffic and increasing reliance on Internet-based products and services, where television programming can be accessed via multiple devices, the process of defining the relevant market is likely to become more complex. However, as the Report prepared for the Canadian regulator, CRTC, points out “this additional level of complexity does not mean, that established tools and methodologies are outdated. The core objective, and so the core tools, of determining the boundaries of a market – to help identify market power, that is, the ability of a firm or a group of firms to profitably maintain prices above the competitive level for a non-transitory period of time – remain relevant”.<sup>61</sup>

60. The exact delineation of the relevant market will be determined by a number of factors. The nature of the relationships and the extent to which the broadcasting sector in a given country is integrated is one of them. While market definitions are likely to vary among individual broadcasting markets and across jurisdictions, on a general level one can differentiate between i) a wholesale market for ‘raw content’, ii) a wholesale access market to the infrastructure, and iii) a retail market.

61. Furthermore, competition authorities may identify markets more narrowly on the basis of:

- the type of broadcaster (i.e. commercial vs. public), and in particular the provision of pay-TV as opposed to free-to-air television;<sup>62</sup>

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<sup>60</sup> On the importance and developments in the area of market definition, see OECD (2012), Market Definition, DAF/COMP(2012)19.

<sup>61</sup> Csorgo, L. and I. Munro (2011), Market Definition Issues for Audio and Audio-Visual Distribution Products and Services in a Digital Environment, Report prepared for the Canadian Radio-television and Telecommunications Commission (CRTC), available at <http://www.crtc.gc.ca/eng/publications/reports/rp110215.htm>

<sup>62</sup> For example, in the 2003 News Corp/Telepiù merger, the European Commission held that “there is a clear distinction, from the viewpoint of both customers and suppliers, between free-to-air TV and pay-TV”, (*News Corp / Telepiù*, para. 19). In this case, no distinction was made with respect to the means of transmission of the relevant content. In a more recent acquisition of the remaining 60.9% of the British Sky

- the type of platform that is used for transmitting the television broadcasting (i.e. cable, satellite, digital terrestrial, etc);
- the type of pay-TV services (pay-per channel, pay-per view, video-on-demand, digital interactive broadcasting),<sup>63</sup> and
- the type of premium content that is provided, in particular premium sport channels and premium film channels.<sup>64</sup>

62. Defining the relevant market in highly dynamic sectors with highly differentiated products and services will often require competition and regulatory authorities to rely on a robust set of data and information. While market definition from prior cases may be helpful, competent authorities will have to rigorously define the relevant market in the context of each case in order to capture dynamic and evolving competition between new television broadcasting services.

### 3.3 *Platform competition*

63. Where television broadcasting is provided over different platforms one has to examine the degree of potential substitution between them to understand the extent to which a given market is competitive. In some countries, deployment of cable networks that reached near-universal penetration has gradually marginalised terrestrial technologies, as was for example the case of the Benelux countries in the 1980s. Other countries, on the other hand, such as the UK, France, Spain or Italy continued to rely predominantly on the terrestrial platforms.

64. Certainly, the provision of television services via new technologies (i.e. Internet Protocol, fixed and wireless broadband) will complement terrestrial broadcasting, and render provision of television broadcasting more competitive. However, these new technologies may not be a perfect substitute for traditional broadcasting. For example, Internet Protocol and fixed or wireless broadband are unlikely to provide a viable alternative for distribution to a mass audience, in particular in the sparsely populated areas. Moreover, in terms of substitutability with other modes of transmission, it is often argued that the quality offered by the IPTV tends to be lower than the one enjoyed by the viewer via other digital TV networks. However, IPTV operators are continuously introducing changes, which are meant not only to improve their coverage, but also to bring the level and reliability of their TV services closer to the quality offered by the traditional digital TV operators.

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Broadcasting Group PLC (Sky) by News Corp, the Commission again found that the retail supply for pay-TV and free-to-air TV constituted separate markets. Case M.5932, *News Corp / BSKyB*, 21 December 2010.

<sup>63</sup> In *News Corp/ BSKyB* (2010), the European Commission found that “within the pay-TV market, the retail supply of non-linear services”, such as DVDs, pay-per-view and video-on-demand, and “linear channels belong to two separate markets”, paras. 106-107.

<sup>64</sup> In Europe, following the migration of broadcasting rights to pay TV, competition authorities have consistently adopted a narrow market definition regarding whether forms of content other than the specific sport are substitutes and whether platforms other than pay TV offer suitable programming. This is largely based on the large differences between the prices that are paid for premium sports content and premium sports channels and any alternatives.

65. Given the potential of new technologies, and in particular of IPTV and OTT to completely redesign the way in which viewers experience television, thereby upsetting existing market structures, it is not surprising that established television operators may seek to hamper the entry and/or expansion of the new players. The ‘cable only’ cartel case from South Korea illustrates how cable operators sought to prevent the entry of IPTV operators.

**Box 2: ‘Cable only’ cartel between five multiple system operators (MSO), (South Korea, 2011)<sup>65</sup>**

In May 2011 the South Korean competition authority, KFTC, issued a cease and desist order and imposed on 24 system operators active in the pay-TV market a total fine of approximately 6.7 million Euros. According to the authority, from November 2008 until May or July 2010 the operators participated in the cartel agreement whose objective was to hamper the development of IPTV as a new competing platform.

*The background of the South Korean pay-TV market*

In South Korea, television industry consists of free-to-air and pay-TV broadcasting markets. The following group of players operate within the pay-TV market:

- *System Operators (SOs)*: they operate more than seventy broadcasting channels in each regional area. Their revenues come from subscription and installation fees, as well as fees from renting set-top boxes to consumers. There are one hundred system operators in seventy-seven regional broadcasting areas.
- *Multiple System Operators (MSOs)*: are the SOs who operate their business in at least two regional areas and have many affiliated SOs. There were eight MSOs in 2009, and 78 of 100 SOs belonged to one of the eight MSOs. The top three MSOs have 63.4% market share in the system operator market.
- *Satellite Broadcasters (SBs)*: they transmit their broadcasting service to consumers on a national wide basis. There are two Satellite Broadcasters.
- *Internet Protocol TV (IPTV)*: they transmit their broadcasting service to consumers on a national wide basis. Since IPTV was permitted in February 2009, three IPTV broadcasters entered into the pay-TV market.
- *Program providers (PPs)*: they contract with System Operators (or Satellite Broadcaster, or IPTV) and provide their content. Their revenues come from both SOs (or SBs or IPTV) in exchange for the supply of the broadcasting content and from advertisement fees in return for releasing advertisement during the showing of the content. There are one hundred eighty-four PPs undertakings the in pay-TV market.

In 2008, the imbalance between SOs and PPs was increasing. Even though there are many SOs in the pay-TV market, most of them are affiliated with one of 8 MSOs. Therefore, MSOs have a power to decide which channel will be granted to individual PPs. In particular, the top three MSOs, who have 63.4% market share, have strengthened their position in the SO market. On the other hand, there are also many PPs (about 184), and each PP really wants to contract with MSOs to acquire a low and most preferred channel number,<sup>66</sup> as such channels can attract more viewers, which in turn can bring more advertising revenues.

<sup>65</sup> KFTC (2011), Case Number, 2010서감2951, KFTC Decision number: 2011-153.

<sup>66</sup> Most preferred channels are usually near the channel of public broadcasters (MBC - 11, KBS – 9, SBS – 6) or near the channel of the popular home shopping.

Given the above features of the pay-TV market, there is an imbalance between numerous PPs and a just a few MSOs with respect to supply and demand of broadcasting channels. As a result, PPs become more structurally dependent on MSOs than before with respect to contracts concerning channel assignment. At the same time, MSOs are in the position to engage in a number of unfair practices that can affect the PPs, such as i) unilateral changing of the channel number, ii) unilateral refusal to renew contracts, iii) requiring the PPs not to supply its popular contents (movie, sports) to their competitor (SBs or IPTV) by threatening them that unless they accept such a constraint, MSOs will either stop contracting altogether or will give the less attractive channel number.

*The cartel 'cable-only' agreement*

Since the Multimedia Broadcasting Business Act was enacted in January 2008, it was expected that new IPTV operators would enter the pay-TV market as competitors. However, five MSOs<sup>67</sup> reached an agreement in order to ensure that PPs would provide content only to them. Such policy sought to prevent the IPTV operators from successfully entering the market. Still, one of the PPs, One Media<sup>68</sup> decided to provide its content to IPTV in October 2008. The five MSOs were concerned that many other PPs may follow One Media's policy. Therefore, together with their affiliates, the five MSOs<sup>69</sup> concluded on 14 October 2008 an agreement, called "cable only". First, under this agreement, the MSOs decided to punish One Media by decreasing the number of One Media's channels transmitted through their broadcasting facilities. Second, the MSOs collected together money and offered another PP, CJ Media<sup>70</sup> who was planning to contract with IPTV, financial support (approximately 25 million dollar) on the condition that it would not provide its contents to IPTV.

*The effect of the cartel agreement: Substantial lessening of competition*

After the agreement, the five MSOs together with their nineteen affiliates decreased the number of channels of One Media by 19%~28% when they renewed the contracts in 2009, so that One Media would no longer be able to supply its content to the decreased channels. CJ Media, encouraged by the financial support it received from the cartel participants decided not to provide its contents to IPTV. The action directed at One Media brought a threat and signalled to other PPs that they would be better off not supplying their programs to IPTV. As a result, many other PPs chose not to provide their contents to IPTV operators. Since IPTV operators could not secure any good and popular contents from many other PPs as well as from the top two PPs -CJ Media and One Media – they could not succeed in winning consumers and increasing their market share in the pay-TV market. In other words, IPTV providers could not compete effectively with the established cable TV broadcasters. Overall, the cartel among the five MSOs i) hindered the commercial freedom of PPs, ii) allowed the MSOs involved to strengthen their monopoly or oligopoly market position in their regional areas, iii) restricted the substantial competition in the pay-TV market, and iv) decreased consumers' right to choose among various channels.

<sup>67</sup> Each multiple system operator has many affiliates which operate their business with monopoly or oligopoly in their regional areas. The 5 MSOs are: Tbroad (Korea's largest MSO with 29 per cent market share in 2009), CJ Hellovision (19.3 per cent market share in 2009), C&M (the third market share of 18 per cent in 2009), Hyundai HCN (the fourth market share of 8.5 per cent in 2009), and Curix (which in 2009 after merged with Tbroad)

<sup>68</sup> One Media is a program provider (PP) which in 2008 had the second market share of 17.9%. It makes movies and animations, etc, and is the most popular PP between movie PPs.

<sup>69</sup> Total examinees was 24 undertakings because 7 affiliates of Tbroad, 6 affiliates of Hyundai HCN, 6 affiliates of Curix engaged in the cartel in each their region area.

<sup>70</sup> CJ Media is also a program provider (PP) with the market share of 19.6% (in 2008) in the program provider market.

### 3.4 *Vertical integration and downstream foreclosure*

66. Over the years, one can observe a widespread trend of firms trying to increase as far as possible the degree to which they are vertically integrated.<sup>71</sup> In fact, growing trends towards vertical integration in the broadcasting industry have raised concerns among both regulatory as well as competition authorities, some of which decided to launch public consultation to examine those concerns.<sup>72</sup>

67. While vertical integration has some advantages, as it may, for example, reduce costs, it also increases the ability of a firm, which increases its presence in an increasing number of markets along the value chain, to foreclose entry into one or more of the related markets where the company is already dominant. In such circumstances, vertical integration may in itself constitute a barrier to entry. The OECD 1998 paper distinguished between five different representative industry structures. Convergence generally has been found to have the effect of making the actual market structure of the broadcasting sector more disintegrated.

- *The “fully-integrated” structure* – under this structure the roles of content provider, infrastructure provider, “packager” and terminal equipment provider are integrated. It is a closed system in which different vertically integrated service providers are incompatible. This is characteristic of pay and satellite TV where the terminal equipment is dedicated to the service provider and consumers incur costs to have multiple service providers. Under this structure entry costs are high and must cover all levels. Where the number of broadcasters is limited, they may be able to exert market power on both advertisers and consumers.
- *The “Liberalised Terminal Market” Structure* – Under this structure, the customer’s terminal equipment is capable of receiving signals from different broadcasters, and customers can switch without incurring new terminal costs. This is characteristic of free to air television, and Internet TV which can be viewed on multiple devices.
- *Partially Disintegrated Structure: I* – This reflects a structure in which content providers are separate from the infrastructure providers/packagers, which can purchase the content they offer. This reduces the barriers to entry in the content business, unless there are vertical exclusive arrangements between content and infrastructure providers.
- *Partially Disintegrated Structure: II* – When no content or infrastructure packager/providers have market power, a market structure may emerge under which consumers can access all content through any infrastructure provider. Under this structure content providers can market their content directly to consumers.
- *Fully Disintegrated Structure* – Under this structure the consumer can purchase each of the components of broadcasting market separately. The consumer has a large choice of terminal equipment and the means by which to access a range of packagers. This describes the structure that is facilitated by the delivery of audio-visual services over the Internet. As the different segments of the industry are completely separated, entry is open and a bottleneck in one segment such as infrastructure cannot easily be extended to control over content, or vice versa.

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<sup>71</sup> See for example Groupe d’analyse, Ltée (2012), ‘Vertical Integration in TV Broadcasting and Distribution in G8 Countries and Certain Other Countries’.

<sup>72</sup> “The broadcasting industry is changing very quickly through the consolidation of ownership and the widespread adoption of new media platforms. Major transactions have produced vertical integration: the ownership by one entity of both programming and distribution properties, of both production and programming properties, or of all three – production, programming, and distribution properties”. Chair of the Canadian regulatory authority, CRTC, Konrad von Fickenstein, November 2010.

#### 4. Competition policy concerns in the decisional practice of national competition authorities (NCAs) and courts

68. In recent years, many jurisdictions all over the world have witnessed significant competition policy interventions in the television broadcasting sector. Investigations carried out by competition authorities involved potential restrictions of competition through abuse of a dominant position or monopolization, mergers as well as anti-competitive horizontal and vertical agreements. Competition authorities were most often concerned about foreclosure resulting from lack of access to premium content or to transmission facilities. In Europe, access to premium content has already been examined by competition as well as regulatory authorities competent in the field of broadcasting in Austria, France, Italy, the Netherlands, Spain, and the UK under abuse of dominance and/or merger provisions. Investigations concerning abuse of a dominant position with respect to broadcasting transmission have been carried out in France, Hungary and Spain.

##### 4.1 Access to and exclusivity over premium content: potential for anti-competitive behaviour

69. As it was already pointed out in the 1998 OECD Background Note on Regulation and Competition Issues in Broadcasting: “[I]n general, barriers to entry into the market for content production are low [...] as there are a myriad of small and large audio-visual content producers in all OECD countries”.<sup>73</sup> However, they are not low for all types of content. As economic theory reveals, both rights holders and broadcasters have incentives to contract with each other on an exclusive basis with respect to premium content. Given that content is a highly-differentiated product, television operators seek to acquire premium content as a means to differentiate their offerings from that of their rivals in order to compete effectively for a wider audience. They are particularly interested in acquiring it on an exclusive basis as they want to strengthen their position in the market and constrain competition from other market players.<sup>74</sup> As for the rights holders of premium content, i.e. major Hollywood studios and sports organizations, it comes as no surprise that they tend to sell their rights on an exclusive basis within a given territory given that they seek to extract maximum rent for their content.

70. Exclusivity mixed together with the scarcity of premium-content,<sup>75</sup> accompanied by very intense competition among pay-TV operators has led to skyrocketing prices for broadcasting rights,<sup>76</sup> while premium content, which is considered to be one of the main drivers for demand for pay-TV services has to a great extent migrated towards pay-TV.<sup>77</sup> Whereas Hollywood blockbuster movies and sports are both

<sup>73</sup> OECD (1998), Regulation and Competition Issues in Broadcasting, DAFFE/CLP(99)1, available at: <http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/1920359.pdf>

<sup>74</sup> While the extent of exclusivity may vary among industries, in broadcasting it has been generally considered to be vital for the successful entry in the pay-TV market. In contrast, in the market for videogames, games of all major producers can be acquired for each console, i.e. Microsoft Xbox, Nintendo Wii and Sony PlayStation.

<sup>75</sup> As it has been pointed out earlier, premium content is now considered to be the new bottleneck in the broadcasting industry. See, for example, Geradin, D. (2005), ‘Access to Content by New Media Platforms: A Review of the Competition Law Problems’, *European Law Review*, vol. 30, no. 1, pp. 68-94.

<sup>76</sup> Wachtmeister asserted that acquisition prices for broadcasters are higher as are the returns for the rights holders when competition on the demand-side is more intense, see Wachtmeister, A-M. (1998), ‘Broadcasting of sports events and competition law’, *Competition Policy Newsletter*, no.2, pp. 18-28.

<sup>77</sup> For example, investigation carried out by Ofcom in the pay-TV market revealed that for the fifty seven per cent of adults that subscribe to pay TV services, content drives purchasing decisions. Eighty-seven per cent of consumers surveyed cited content as a “must have” element of their TV choices, in particular the sports rights and premium films that are not available via free to air transmission.

considered premium content, the competitive situation in the provision of such content may differ, as is illustrated by the findings of the UK Competition Appeal Tribunal and Competition Commission.

**Box 3: Access to content and pay-TV markets (UK, Competition Commission)**

In March 2007, in response to submissions received from BT, Setanta, Top Up TV and Virgin Media, Ofcom launched an investigation into the pay-TV market. Having carried out extensive analysis and three public consultations, it:

- released its findings concerning the pay-TV market, which led to the imposition of a wholesale must offer remedy for Sky Sports 1 and 2, and
- it referred for market investigation to the Competition Commission (CC) two related markets: i) the market for the rights to broadcast movies from the major Hollywood studios in the first subscription pay-TV window (FSPTW), and ii) the market for the wholesale supply of pay-TV packages, including core premium movie channels.

The Ofcom Pay TV market review concluded that the pay TV market in the UK is not effectively competitive due to the restricted distribution by Sky of its premium sports and movies channels.<sup>78</sup> With respect to the broadcasting of movies, Ofcom considered that both markets displayed features which had an adverse effect on competition as the way in which these movies are sold and distributed created a situation in which Sky had the incentive and ability to distort competition. The outcome of such a situation was less choice, less innovation and higher prices, which were detrimental to consumer welfare.

In August 2012, the Competition Commission released its final report, in which it disagreed with some of the assumptions accepted by Ofcom. In particular, the CC found that Sky’s position in the acquisition and distribution of movies in the FSPTW has not adversely affected competition in the pay-TV retail market. On the basis of evidence it gathered, the CC concluded that the availability of the most recent movies was significant to the subscription decisions of only a relatively small minority of pay-TV subscribers, and that consumers attach more weight to other service attributes, like price or having a broad range of content. It also found that since the launch of new and improved OTT services, such as LoveFilm and Netflix, competition and consumer choice have increased.

Around the same time that the Competition Commission found the pay-TV market for movies to be more competitive than alleged by Ofcom, the Competition Appeal Tribunal cancelled the wholesale must offer (WMO) remedy imposed by Ofcom on Sky. In accordance with the remedy, which was imposed in March 2010, Sky was required to offer Sky Sports 1 and 2 at regulated, significantly reduced, wholesale prices to retailers on other platforms.

71. To ensure access to the premium content, competition authorities may intervene at different levels of the value chain, and in particular in acquisition and exploitation markets.

- *Acquisition markets* involve contracting between right holders and channel operators.
- *Exploitation markets*, on the other hand, involve dealings between television operators and multichannel distributors).

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<sup>78</sup> Some fifty nine percent of consumers who regularly watch sport on TV cited football matches as “must-have” content with a particular focus on FA Premier League matches.

72. In acquisition markets, right holders prefer to deal on an exclusive basis, which renders acquisition markets similar to a ‘pure’ bidding market where television operators compete ‘for’ and not ‘in’ the market

73. The intervention of competition authorities with exclusive licensing agreements is generally driven by three different types of concern: i) horizontal restriction of competition, ii) vertical restriction of competition, and iii) other concerns, such as cross-platform bundling of television rights.<sup>79</sup>

74. With respect to horizontal restriction of competition, one of the main issues in broadcasting is the collective selling of media rights on behalf of member sporting clubs.<sup>80</sup> The benefits of collective selling are taken to be promoting a sporting league as a whole, rather than individual games, and the attraction of higher revenues that can be redistributed among the less competitive clubs and reinvested in the sport (players and facilities), ultimately benefiting the public which follows the sport. It is also proposed that, as exclusive rights make an overall programme more attractive, it encourages broadcasters to compete by developing their own facilities in order to win any auction. Against this, collective selling can also limit supply through restrictive agreements not to broadcast all the matches in a fixture, or concentration of market power among a few broadcasters who may attempt to foreclose the broadcast market.

75. Different national courts in Europe have reached different decisions on collective selling.<sup>81</sup> Cases in Europe have focussed on the necessity of joint selling to the promotion of the league, and the impact of joint selling on the downstream broadcast market. Italy and the Netherlands have prohibited collective selling on the basis that the redistributive aims could be achieved by less restrictive sharing agreements, while in France the national federation is granted by law the right to exploit all broadcasting rights.<sup>82</sup> There has also been a tendency for broadcasting rights to be sold in Europe on an exclusive basis. The Commission has accepted that exclusivity could benefit the public by giving broadcasters the incentive to invest in delivering a high quality product, but that deals involving periods longer than one year would be scrutinised for their potential to limit competition in broadcast markets.

76. Overall, the approach of competition authorities towards the assessment of exclusive contracts concerning access to premium content has evolved over time. In the 90s, competition authorities in the EU Member States used to agree with the dominant broadcaster’s view that exclusive access to content was necessary for the effective functioning of the pay-tv market. Moreover, in the EU, the European Court of Justice (ECJ) considered in the landmark *Coditel II* case that the grant of exclusive broadcasting licenses by film producers fell within a lawful exercise of copyright under Article 101(1) TFEU.<sup>83</sup>

77. The formulation of remedies in more recent cases, however, clearly indicates that competition authorities have changed their policy approach, which now seeks to ensure that competing broadcasters have can access to premium content on a non-discriminatory basis.

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<sup>79</sup> Ibañez Colomo (2012).

<sup>80</sup> Potentially anti-competitive practices in the context of joint selling may in particular arise from price-fixing or output restrictions.

<sup>81</sup> For an overview of competition issues related to collective selling and sport broadcasting, see OECD (2010), *Competition and Sport*, DAF/COMP(2010)23.

<sup>82</sup> Articles 17 and 18 of the Law No. 84-610 of 16 July 1984 (Loi du 16 juillet 1984 relative à l’organisation et à la promotion des activités physiques et sportives).

<sup>83</sup> Case 262/81, *Coditel SA, Compagnie générale pour la diffusion de la télévision, e.a. v. Ciné-Vog Films SA e.a.* [1982], ECR I-3381.

78. Agreements granting exclusive access to premium content are rather common in the broadcasting industry. However, as they have turned the pay-TV industry into a ‘competition for the market’ model, where similarly to a pure bidding market the winner takes all, competition authorities have become concerned about potential anti-competitive effects of such exclusive contracts. The extent to which they may lead to foreclosure of rival firms depends to a great extent on the investment undertaken as well as the length of the exclusivity period. Posner, for example, acknowledged that exclusivity is unlikely to pose competition problems when it is granted for a short period, and there are efficiencies arising from it. However, negative effects are possible when exclusivity is granted for a longer period of time.<sup>84</sup>

79. Where competition authorities are concerned that exclusive contracts for premium content may have an adverse impact on competition, they tend to impose behavioural remedies relating to access to content, for example, as a condition to merger clearance.<sup>85</sup> In the *News Corp/Telepiù* decision, the European Commission, for example, having found that the length of the exclusive contract would have hampered new entry, agreed to clear the merger subject to conditions. Those conditions effectively sought to reduce the length of exclusivity to a maximum period of three years for movies and two years for football rights. A similar approach has been followed by the Spanish Council of Ministers in *Sogecable/Canal Satelite Digital/Via Digital* merger<sup>86</sup> and in France in the *Canal Plus/TPS* merger.<sup>87</sup> Certainly, content-related remedies imposed by competition authorities may help new media platforms to gain access to premium content. However, some commentators assert that such remedies in themselves are insufficient to create a level-playing field in the market for the acquisition of such content.<sup>88</sup>

80. Moreover, the exclusive licensing strategy and the following grant of broadcasting rights to the highest bidder may not necessarily be the most optimal strategy either for the rights holders or for the broadcasters. As a matter of fact, some rights holders, in particular in the sport industry, are exploring potential benefits of shared access and non-exclusive contracting with different multimedia platforms. Evens (2010) points to the example of Eredivisie Live, which is the digital channel broadcasting games of the football’s top-tier league in the Netherlands. Evens explains that rather than selling broadcasting rights exclusively to the highest-bidding platform, the Dutch soccer league signed distribution contracts with all platform operators (i.e. cable, satellite, terrestrial, xDSL), but ceded control of pricing to the platforms.<sup>89</sup>

<sup>84</sup> Posner, R. A. (1974), ‘Exclusionary Practices and Antitrust Laws’, *The University of Chicago Law Review*, vol. 41, no. 3, pp. 506-535. The overview of a sample antitrust literature on exclusive dealings indicates that competition scholars take different positions with respect to the impact such dealings may have on competition. For example, according to Weeds, exclusive distribution benefits consumers because it intensifies price competition. According to Armstrong or Harbord and Ottaviani, on the other hand, downstream competition would intensify if exclusive dealings were banned. Weeds, H. (2007), ‘TV Wars: Exclusive Content and Platform Competition in Pay TV’, 5th International Workshop on Media Economics, Bologna, Italy; Armstrong, M. (1999), ‘Competition in the Pay-TV Market’, *Journal of the Japanese and International Economies*, vol. 13, no. 4, pp. 257-280; Harbord, D. and M. Ottaviani (2001), ‘Contracts and competition in the pay-TV market’, London Business School Working Paper.

<sup>85</sup> For example, in *Vivendi/Canal+/Seagram*, the European Commission concerned about the strengthening of the dominant position by Canal+, required the merged entity to provide at least 50 per cent of its rights to a competing multichannel operator in France. Commission Decision [2000], Case No COMP/M.2050, *Vivendi/Canal+/Seagram*.

<sup>86</sup> Decision of the Council of Ministers of 29 November 2002, *Sogecable/Canal Satelite Digital/Via Digital*, BOE (2003), 12/1707.

<sup>87</sup> Autorité de la Concurrence (2006), La décision du 30 août 2006 autorisant l’acquisition de TPS et CanalSatellite par Vivendi Universal et Canal Plus.

<sup>88</sup> See in particular Geradin, D. (2005).

<sup>89</sup> Evens, T. (2010), ‘Challenging content exclusivity in network industries: the case of digital broadcasting’, 21st European Regional ITS Conference, Copenhagen.

81. Finally, as attempts by competition authorities to force sharing of the premium content may fail, countries may choose to introduce principles laid down by the agencies or the courts in the relevant national legislation. This was, for example, the case in France. When the attempt of the French NCA did not produce desirable results in terms of sharing of the premium content in TPS case,<sup>90</sup> the French legislator decided to issue a Decree<sup>91</sup> which established the three-year limit on exclusivity following the principles laid down in the *UEFA Champions League* case. To resolve the problem of providing access to important sport events various other countries, such as for example Australia, the US, the UK, or Ireland, have adopted socially- and culturally-motivated anti-siphoning legislations.

#### **4.2 *Unilateral exclusionary behaviour: downstream foreclosure and leveraging of dominant position***

82. There remains considerable scope for unilateral exclusionary behaviour in the television broadcasting sector. Despite significant increases in transmission capacity facilitated by digitalisation, lack of access to transmission infrastructure may still raise competition concerns.

**Box 4: Abuse of dominant position in the markets for wholesale services of access to broadcasting centres for transmission of DTT signals and for the retail services of transporting DTT signals (Spain, CNC, 2012)<sup>92</sup>**

In April 2010, following a complaint lodged by SES Astra Ibérica S.A. (Astra), the Spanish Competition Authority (CNC) launched an infringement proceeding against Abertis Telecom S.A.U. (Abertis). Astra is the main provider of satellite services for the Digital+ pay-TV platform in Spain, whereas Abertis owns a nationwide transport and broadcasting network for audiovisual services. Transmission centres forming part of the Abertis' national network cannot be replicated, which renders access to them essential for the provision of the DTT signal transport for national and regional operators.

The CNC examined whether wholesale prices Abertis charged for the collocation of equipment at its DTT signal broadcast transmission centres in combination with retail prices it charged in contracts with national and some of the regional television operators amounted to an abuse of dominant position. Upon the conclusion of its investigation, the CNC found that an abuse of dominant position has effectively occurred in the market for wholesale services of access to broadcasting centres for transmissions of DTT signals and for the retail services of transporting DTT signals in Spain. The abuse took form of a margin squeeze between the wholesale and retail prices, and the company was consequently fined with nearly 14 million euro fine. According to the CNC, given the fact that entry was technically viable and economically possible, the absence of genuine competitors could only have resulted from the anti-competitive behaviour of Abertis, which had effectively blocked entry by alternative operators.

83. Moreover, in light of the growing trend towards vertical integration in the broadcasting industry, the conditions under which a vertically-integrated firm supplies its channels at the downstream or retail levels may also be found to fall foul of the national provisions concerning monopolisation or abuse of dominant position. Anti-competitive behaviour may in particular arise out of refusal to deal, margin squeeze, discrimination, tying and bundling. The last two may become more relevant with the emergence of triple- and quadruple-play services.

<sup>90</sup> See Decision of the Conseil de la Concurrence (2003), Case 03-MC-01, Interim Measures requested by TPS.

<sup>91</sup> Decree n. 2004-699 of 15 July 2004 implementing Article 18-1 of Law n. 84-610 of 16 July 1984 on the exploitation by sports leagues of television rights for competition and sports events, Journal Officiel n. 163 of 16 July 2004.

<sup>92</sup> CNC (Spain), Resolución, Expte. S/0207/09 Transporte Televisión.

### 4.3 Remedies in individual cases

84. Increasingly, decisions issued by the competition authorities in the area of television broadcasting are related to access to premium content. With a view to ensure a level-playing field in the television broadcasting regulatory and competition authorities have available to them a number of ways to remove the problem of exclusivity through the imposition of *ex ante* or *ex post* measures. Regulatory authorities may, for example, impose wholesale access obligations as was the case with Sky in the UK, while competition authorities may clear mergers subject to access remedies.

85. It appears that nowadays merger transactions in the television broadcasting market are rarely prohibited. Increasingly often competition authorities clear merger transactions, even if they create a “near-monopoly” position, focusing instead their efforts on the imposition of appropriate commitments and *ex post* control of the market. For example, in 2006 the Spanish competition authority cleared the merger between Audiovisual Sport (AVS) and the biggest player in the Spanish pay-TV market, Sogecable SA, only on the condition that AVS would guarantee third party access to football content on fair, transparent and non-discriminatory basis.

86. In the 2011 merger of Comcast, the largest cable operator in the US, and the broadcasting company NBC Universal, the Department of Justice required Comcast to make available to online video distributors (OVDs) the same package of broadcast and cable channels that it sells to traditional video programming distributors, and to offer an OVD broadcast, cable and film content that is similar to, or better than, the content the distributor receives from any of the joint venture’s programming peers. The settlement also prohibited Comcast from retaliating against any broadcast network (or its affiliate), cable programmer, production studio or content licensee for licensing content to a Comcast/NBC competitor, or for raising concerns with the Federal Communication Commission or Department of Justice. Additionally, Comcast was required to give other firms’ content equal treatment under any of its broadband offerings that involve usage-based pricing. Comcast was not allowed to impose licensing terms on programmers or video distributors that seek to limit online distributors’ access to content.

87. However, as there is a risk that merging firms may fail to comply with imposed commitments, competition authorities may also want to review *ex post* whether competition in the affected market is working effectively. An interesting example of *ex post* review comes from the French competition authority, Autorité de la Concurrence.

**Box 5: Withdrawal of the decision authorising acquisition of TPS and CanalSatellite by Vivendi Universal and Canal Plus Groupe (France, 2011)<sup>93</sup>**

In 2006, the Autorité de la concurrence authorised the acquisition of TPS and CanalSatellite by Vivendi Universal and Canal Plus Group. As the merger between two main operators on the French pay-TV market led to the creation of a monopoly in channel publishing and the distribution of premium pay-TV offerings (as the new entity would hold a 75 per cent share of the downstream market), and consequently it carried significant anti-competitive risks, the Authority imposed a set of 59 commitments as a condition for merger clearance. In particular, according to the final decision adopted by the Minister, the new entity had to (i) provide, on an unbundled basis, at the wholesale level a premium film channel and few other channels, and (ii) offer the leading premium television bundle in competing multichannel bundles.

In September 2011, the authority issued a decision in which it i) withdrew the 2006 decision authorizing the merger, and ii) imposed a fine of 30 million Euros. The Authority held that 10 out of 59 commitments were breached. Although Canal Plus Group put forward, as a mitigating circumstance, the fact that the company complied with more than 80% of the imposed commitments, the Authority stressed that the commitments varied significantly both in terms of the nature and scope, and consequently it was not possible to simply consider the proportion of the commitments that the new entity has complied with.

It is the first decision in which the Authority has cancelled the previously cleared merger on the grounds that the new entity failed to comply with the commitments.

Canal Plus appealed the Authority's decision before the French Constitutional Court arguing that the Authority has acted beyond its constitutional mandate.

## 5. Conclusions

88. For the timely transmission of interactive audio-visual content, television broadcasting has few substitutes. Effective competition in television broadcasting is necessary to ensure diversity in products and services, providing a range of outlets for political and social expression, to lower prices and to promote and share the benefits of the information economy.

89. However, television broadcasting is no longer simple to define. Technological convergence is blurring the modes of transmission and expanding the range of devices for viewing audio-visual content. An increasing range of audio visual content is increasingly becoming available to be viewed on multiple devices and delivered across multiple broadcasting platforms, and this is fundamentally changing the nature of markets for television broadcasting, rendering the process of defining relevant markets much more complex.

90. Even as television broadcasting has become more competitive, opportunities for exercising market power will continue to arise where there are barriers to entry in the carriage of broadcasting signals and in the control of audio-visual content. Increasing access to high-speed broadband networks and the transition to digital transmission is reducing the market power of some traditional broadcasting platforms.

<sup>93</sup> Autorité de la Concurrence (2011), Décision no. 11-D-12 du 20 septembre 2011 relative au respect des engagements figurant dans la décision autorisant l'acquisition de TPS et CanalSatellite par Vivendi Universal et Groupe Canal Plus. Decision (in French) available at: <http://www.autoritedelaconcurrence.fr/pdf/avis/11d12.pdf>. See Press Release in English, available at: [http://www.autoritedelaconcurrence.fr/user/standard.php?id\\_rub=389&id\\_article=1697](http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=389&id_article=1697)

However, in an environment of multiple broadcasting platforms, access to the supply of high value content is becoming relatively scarcer for providers.

91. Globally, the market for pay-TV is growing as is the market for OTT broadcasting services. However, in geographical markets where internet penetration is low, traditional modes of broadcasting remain dominant. Moreover, for content where timely delivery to a mass audience is demanded, such as sports and to a lesser extent, theatrical movie releases, traditional modes of broadcasting still retain a competitive advantage over new modes of broadcasting.

92. With respect to remedies imposed in individual cases, there is a growing body of practice among competition authorities to constrain the licensing terms for the use of content to address the problem of exclusivity. These include, for example, requirements on the market players to charge fees on a per subscriber basis or limiting the duration of exclusive contracts. However, any specific remedy may be feasible in one, but not in another case.

93. The traditional economic rationales for regulation of content and carriage are based on barriers to market entry and rely on the effective control of distinct models of broadcast service delivery. As a consequence of convergence, in some areas the original rationale for regulation may no longer exist. In other cases there may be arguments for changes to regulation to ensure that there is a level playing field across different modes of transmission. This could lead to convergence of the roles of broadcasting and telecommunications regulators, which in turn could reduce the potential for conflicting decisions or opportunities for forum shopping and regulatory arbitrage. Furthermore, a reduced reliance on *ex ante* regulation will place more demands on competition law to ensure diversity in products and services.

94. The creation of increased opportunities for competition in the market for the provision of television broadcasting services clearly has the potential to improve broadcasting services and to produce positive effects in many other sectors that rely on the timely flow of information. This is true both in OECD and non-OECD countries, irrespective of the existing technological differences and monetary constraints. As the ITU reports, “It would be erroneous to assume that the broadcasting digital divide is due purely to income. Though income is a barrier, particularly for the poorest of households (even in middle-income nations), data suggest that electricity is an even greater barrier and that content, though difficult to quantify, also seems to play a major role”<sup>94</sup>. Accordingly, even in countries where access to electricity is constrained, when content is available consumers can find the means to still receive television broadcasting. Interventions by competition authorities that successfully remove bottlenecks on the provision of content, or those that arise in related sectors (such as electricity), and allow for the adoption of technical alternatives in broadcasting models can unlock significant potential in the broadcasting sector.

95. Barriers to entry are likely to continue to arise through access to transmission platforms, coming from the behaviour of the firm as well as technical limitations. The dynamic nature of the sector at this time would in many cases be expected to reward a review by competition agencies to identify the opportunities for competition in the market for the delivery of television broadcasting services. This applies to both OECD and non-OECD countries where the developments associated with convergence create diversity in the market for television broadcasting services. Such a review should consider developments in other related sectors, such as telecommunications, or other emerging platforms for carriage, that may have an impact on the development of the television broadcasting sector. This will assist with defining the market, identifying risks associated with vertical integration and any limitations on access to premium content that should be removed. Thus equipped, competition agencies should be better placed to facilitate development of a level-playing field for competition in the sector.

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<sup>94</sup> ITU (2010).

## BIBLIOGRAPHY

- Armstrong, M. (1999), 'Competition in the Pay-TV Market', *Journal of the Japanese and International Economies*, vol. 13, no. 4, pp. 257-280
- Bain, J.S. (1954), 'Economies of Scale, Concentration, and the Condition of Entry in Twenty Manufacturing Industries', *American Economic Review*, vol. 44, no. 1, pp. 15-39.
- Baumol, W. J. and R. D. Willig (1981), 'Fixed Costs, Sunk Costs, Entry Barriers and Sustainability of Monopoly', *Quarterly Journal of Economics*, vol. 96, no. 3, pp. 405-431.
- Cave, M. (2010), 'Anti-competitive behaviour in spectrum markets: Analysis and response', *Telecommunications Policy*, vol. 34, pp. 251-261.
- Competition Commission (2012), Movies on pay TV market investigation, A report on the supply and acquisition of subscription pay-TV movie rights and services, available at: [http://www.competition-commission.org.uk/assets/competitioncommission/docs/2010/movies-on-pay-tv/main\\_report.pdf](http://www.competition-commission.org.uk/assets/competitioncommission/docs/2010/movies-on-pay-tv/main_report.pdf)
- Comreg (2012), Market Review: Broadcasting Transmission Services in Ireland, Consultation Paper and Draft Decision, Document No. 12/77, Available at: <http://www.comreg.ie/fileupload/publications/ComReg1277.pdf>
- Csorgo, L. and I. Munro (2011), Market Definition Issues for Audio and Audio-Visual Distribution Products and Services in a Digital Environment, Report prepared for the Canadian Radio-television and Telecommunications Commission (CRTC), available at <http://www.crtc.gc.ca/eng/publications/reports/rp110215.htm>
- EBU (2011), The Future of Terrestrial Broadcasting, Technical Report 013, available at: <https://tech.ebu.ch/docs/techreports/tr013.pdf>
- Eltzroth, C. (2006), 'Broadcasting in Developing Countries: Elements of a Conceptual Framework for Reform', The Massachusetts Institute of Technology, *Information Technologies and International Development*, vol. 3, no. 1, pp. 19-37.
- Evens, T. (2010), 'Challenging content exclusivity in network industries: the case of digital broadcasting', 21<sup>st</sup> European Regional ITS Conference, Copenhagen.
- FCC (2011), Notice of Proposed Rulemaking in the matter of 2010 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, available at: [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-11-186A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-186A1.pdf)
- García-Murillo, M.A. (2005), Regulatory responses to convergence: Experiences from four countries, *Info*, vol. 7, no. 1, pp. 20-40.

- Gentzkow, M. and J. M. Shapiro (2008), Competition and Truth in the Market for News, *Journal of Economic Perspectives*, vol. 22, no. 2, pp. 133-154.
- Geradin, D. (2005), 'Access to Content by New Media Platforms: A Review of the Competition Law Problems', *European Law Review*, vol. 30, no. 1, pp. 68-94.
- Geradin, D. and M. Kerf (2003), *Controlling market power in telecommunications: Antitrust v. sector-specific regulation*, Oxford, England: Oxford University Press.
- Groupe d'analyse, Ltée (2012), 'Vertical Integration in TV Broadcasting and Distribution in G8 Countries and Certain Other Countries'.
- Harbord, D. and M. Ottaviani (2001), 'Contracts and competition in the pay-TV market', London Business School Working Paper
- Ibañez Colomo, P. (2012), *European Communications Law and Technological Convergence: Deregulation, Re-regulation and Regulatory Convergence in Television and Telecommunications*, Volume 79 of European Monographs, Wolters Kluwer Law & Business.
- ICASA (2011), Regulatory Framework for Broadcasting Transmission Services, Discussion Paper for Comment, Notice 346 of 2011, available at: <https://www.icasa.org.za/Portals/0/Regulations/Working%20Docuements/Broadcasting%20Transmission%20Services/Draft/Discussion%20Document%20on%20Broadcasting%20Transmission%20Services%20%2034371.pdf>
- ITU (2010), World Telecommunication/ICT Development Report 2010: Monitoring the WSIS targets, 9<sup>th</sup> Edition, available at: [http://www.itu.int/dms\\_pub/itu-d/opb/ind/D-IND-WTDR-2010-PDF-E.pdf](http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-WTDR-2010-PDF-E.pdf)
- Meyer, L. (2006), 'Three scenarios for TV in 2015', *Communications & Strategies*, no. 62, pp. 93-108.
- Miller, P. H. and R. Rudniski (2012), Market Impact and Indicators of Over the Top Television in Canada, Report prepared for the Canadian Radio-television and Telecommunications Commission (CRTC), p. 2, available at: <http://www.crtc.gc.ca/eng/publications/reports/rp120330.htm>
- The Ministry of Economic Development and the Ministry of Culture and Heritage of New Zealand (2009), Television Broadcasting: Competition Issues, Report to the Minister of Broadcasting and the Minister for Communications and Information Technology, available at: <http://www.beehive.govt.nz/sites/all/files/Departmental%20Analysis%20of%20Competition%20in%20Broadcasting.pdf>
- OECD (2012), Communications Outlook: Chapter 6, Broadcasting and Audiovisual Content, DSTI/ICCP/CISP(2012)9/CHAP6.
- OECD (2012), The Development and Diffusion of Digital Content, *OECD Digital Economy Papers*, No. 213, p. 34, available at: <http://dx.doi.org/10.1787/5k8x6kv51z0n-en>
- OECD (2010), Competition and Sport, DAF/COMP(2010)23.
- OECD (1998), Regulation and Competition Issues in Broadcasting in the Light of Convergence, DAF/CLP(99)1.

- Picard, R. G. (2002), *The economics and financing of media companies*, New York, Fordham University Press.
- Picard, R. G. and B. S. Chon (2004), 'Managing Competition Through Barriers to Entry and Channel Availability in the Changing Regulatory Environment', *The International Journal on Media Management*, vol. 6, no. 3&4, pp. 168-175.
- Posner, R. A. (1974), 'Exclusionary Practices and Antitrust Laws', *The University of Chicago Law Review*, vol. 41, no. 3, pp. 506-535.
- Seabright, P. and H. Weeds (2007), 'Competition and market power in broadcasting: where are the rents?' in Seabright, P. and J. von Hagen (eds.), *The Economic Regulation of Broadcasting Markets*, Cambridge University Press.
- Spence, M. and B. Owen (1977), 'Television Programming, Monopolistic Competition, and Welfare', *Quarterly Journal of Economics*, vol. 91, no. 1, pp. 103-126.
- Stigler, G. J. (1968), *The Organisation of Industry*, Homewood, IL, Richard D. Irwin
- Stucke, M E. and A. P. Grunes (2009), 'Toward a Better Competition Policy for the Media: The Challenge of Developing Antitrust Policies that Support the Media Sector's Unique Role in Our Democracy', *Connecticut Law Review*, vol. 42, no. 1, pp. 101-146.
- Wachtmeister, A-M. (1998), 'Broadcasting of sports events and competition law', *Competition Policy Newsletter*, no.2, pp. 18-28.
- Weeds, H. (2007), 'TV Wars: Exclusive Content and Platform Competition in Pay TV', 5<sup>th</sup> International Workshop on Media Economics, Bologna, Italy.
- World Bank (2008), 'Managing the Radio Spectrum: Framework for Reform in Developing Countries', Policy Research Working Paper WPS 4549.
- World Bank (2007), *Regulatory trends in Service Convergence*, Policy Division, Global Information and Communications Technologies Department, Washington, D.C
- Yoo, C. S. (2009), 'The Convergence of Broadcasting and Telephony: Legal and Regulatory Implications', *Communications & Convergence Review*, vol. 1, no. 1, pp. 44-55.