DIGITAL CONVERGENCE: CHALLENGES FOR EUROPEAN REGULATION

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Abstract

The aim of this paper is to assess the impact of the forthcoming multimedia convergence on communications regulation in Europe and to propose an appropriate regulatory framework in the digital universe. It is divided in three parts. The first part attempts to identify the term "convergence" and explores the challenges that it poses to European policy makers. Part two assesses the extent to which traditional communications regulation models are applicable across digital communication outlets in the age of the converging value chain as well as the balance between competition law and sector-specific regulation to be adopted. In particular, it explores the importance of competition regulation and sector-specific media ownership and content restrictions and assesses whether they continue to occupy an important place in the new era. The third part puts forward proposals for introducing fresh rules to maximise the benefits of the digital convergence in terms of growth of industry and consumer access and choice.

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The Concept of Convergence

Convergence between the information technology (IT), telecommunications and media sectors is hardly a newly conceived notion. McLuhan (1964) argued as early as the 1960s that telecommunications networks and the broadcasting of information will together create the "global village." During the 1970s in the United States and Europe, to a lesser extent, telecommunications and IT enterprises came together to create new products and services, such as digital switches and Value Added Network Services. Also, convergence between broadcasting and telecommunications has been evident since the development of copper coaxial cable (now boosted by fibre optics), which enabled cable networks to deliver TV pictures. However, recent technological advances, such as digitalisation, compression, processing power and the Internet have accelerated the scope of convergence potential. The Internet, for example, can provide a full range of communication services including voice telephony and webcasting. The pace of convergence is also influenced by a series of structural changes in the information and communication industries, such as mergers and acquisitions of previously separated enterprises. The inexorable globalisation of the information and communication technologies, together with the tendencies towards commercialisation and further liberalisation are additional driving forces for convergence.

Convergence — the delivery of similar, existing or new, media, telephony and Internet services via the same transmission platform — can be present at three different, although interrelated, levels: the technological level (mainly due to digitisation of broadcasting, IT and telecommunications networks), the structural level (as a consequence of corporate alliances across different sectors), and the services and markets level (here we are referring to the new value-added and multimedia services).

Technological Convergence. Technological convergence is made possible due, firstly, to the widespread introduction of digital technology, which provides new means by which moving images and sound can be processed and delivered to consumer-citizens and, secondly, to the compression of the signal, which makes it possible to process vast volumes of information without loss of quality or functionality. Combined with digitisation, compression enables efficient use of spectrum, resulting in multi-channel. Other key technological developments, such as the growth in computer processing power, extended switching and optical fibre are also fundamental enablers of convergence, as they lead in efficient use of bandwidth and eventually capacity abundance.

Industry Convergence. Convergence at a structural level or business organisational convergence, as Noam (1998) calls it, causes a transformation of the global communication and information markets. Each of the traditional industries that are likely to be affected by convergence (i.e. IT, telecommunications and mass media) have been involved in a series of structural changes (i.e. mergers, acquisitions, joint ventures, etc.) to strengthen their position in the market. In Europe, merger and acquisition activity in the information and communications industries increased significantly after the deregulatory wave of the late 1980s and intensified during the 1990s (Murdock 1990; McQuail and Siune 1998; Iosifidis 1999). Although the pace of convergence at the level of ownership and control differs greatly through-

out the European Union, vertical and horizontal integration appear to be the two most common strategies that communications enterprises follow in order to survive in the digital age.

Merger and other alliances can be horizontal, that is, between enterprises involved in the same sector, or vertical, involving firms operating in different sectors. Examples of horizontal integration include the global alliances in the telecommunications industry, such as the Global One. Examples of vertical integration include the merger between Luxembourg-based CLT (owned by Audiofina, a holding company controlled by the Belgian entrepreneur Albert Frere) and Ufa (German Bertelsmann's audiovisual arm), which has created Europe's largest TV operator, with annual sales of US$3.1 billion in 1997 and currently the dominant player in European commercial television, and the January 2000 US$220 billion merger between the world's leading Internet company America Online (AOL) and the audiovisual giant Time Warner. The motives of such movements are well reported in a number of works (Iosifidis 1997; McQuail and Siune 1998; Gibbons 1999; Tambini 2001). They range from increasing market power and sharing the high cost of digital technologies (especially regarding horizontal mergers), to gaining access to know-how, acquiring contents, and uncertainty of market demand (the case in vertical mergers). The common aim of those alliances is to address the (potential) opportunities offered by technological convergence.

Market Convergence. Convergence at the level of services and markets occurs as a response to technological and industry convergence. The flexibility of digital information is creating the possibility for more and enriched conventional services, such as digital broadcasting and better quality mobile communications, as well as a whole range of new services and applications, such as home banking, home shopping, Internet-style data services, etc. It has been put forth (European Commission 1997) that the Internet will be used as a vehicle for the delivery to customers of both existing services, such as voice telephony and electronic mail, and brand new ones, such as World Wide Web. Nevertheless, the concern is that, whereas many new media services are becoming available, customer demand for them is still uncertain. There is some evidence of changing habits and indicators of willingness to pay for substitute products (for example, pay-per-view[1]). Demand-side issues though require more careful consideration and monitoring.

Regulatory Convergence?

All these technological, structural/economic and political developments have called into question the existing regulatory regime covering the wider communications and information industries. The arrival of digital technology and the development of the Internet, in particular, call for rapid policy development, which could permit a common approach across all different communications sectors. As we shall see below, the scene seems to have been set, at both EU and national levels, for a new approach, with provisions for migrating from today's regulatory frameworks to a future unified regime.

However, the use of a common approach across all sectors seems problematic. The Information Technology (IT) sector is characterised by a complete absence of regulation. IT markets have developed in an open environment dominated by large global players, in which competition law has played an important part (Clements

1998). Limited or no regulation at all has traditionally been applied to the print publishing industry worldwide in order to secure freedom of speech. Broadcasting and telecommunications have developed under different regulatory regimes. The content of the telephone calls was generally unregulated, whereas broadcasting content has been subject to strict regulation, reflecting national concerns over the transmission of indecent material as well as the promotion of social and cultural objectives. Broadcasting policies and telecommunications policies have served different objectives. The aim of the former has incorporated socio-cultural values, such as freedom of expression, cultural diversity and political pluralism, whereas the latter has been more directed at infrastructure and has mainly pursued economic goals. It would be a heroic task to try and collide those two different policy objectives.

Still, broadcasting and telecommunications sectors share some common characteristics. They have both lost their monopoly status and opened to competition from the private sector; satellite technology has enabled both sectors to enter the international arena; broadcasting and telecommunications can now be transmitted by wired or wireless means; audiovisual content can now be transmitted via telecommunications networks; cable companies can offer a menu of video and voice services; digital technology increasingly allows broadcasting to be a one-to-one communication (similar to telephony), offered for a price (for instance, pay-per-view and Video on Demand services). The ultimate example of convergence between broadcasting and telecommunications is the Internet. Using a computer, one can provide both telecommunications and broadcasting services, transmit voice, data, words, images and music. In the near future, those tasks would also be accomplished via a digital TV set or a 3G mobile phone. There is thus growing evidence that the separate worlds of telecommunications and broadcasting are coming together.

In the face of that evidence, there are increasing calls for a new approach to include all different information and communications sectors. There is an on-going discussion at both a supranational (notably European Union) and national (notably Britain) levels on whether technological convergence should result in regulatory convergence. There are two different issues related with that: the question of merging of regulatory bodies and the growing tendency to rely on competition policy to deliver the optimum economic and social efficiency across all converged sectors. We deal with these issues in turn.

The Debate over Institutional Integration

Over the past decade in Europe, regulatory reform in the broadcasting and telecommunications sectors has focused on opening monopoly markets to full competition. The liberalisation of communications markets has required a new set of regulatory principles that can ensure fair competition in the marketplace. One of the most visible institutional changes was the setting up of an independent regulator, separate from interested parties[2] in order to ensure fair and open competition in the sector. However, as competition developed, another important institutional change was the growing involvement of competition authorities, especially in telecommunications regulation. The trend towards globalisation and, especially in Europe, the creation of a single market, increased the intervening role of international competition authorities. The growing involvement of EC competition

authority reflects the need for consistent jurisdiction in the sector, which enables market participants to make rational business decisions. Convergence in the communication sector is also leading governments to consider future institutional changes, to take into account convergence between telecommunications and broadcasting. Governments and international institutions are now realising the need to develop a policy framework to accommodate new services and the evolving market place.

This last issue is best reflected in the current debate over regulatory reform in Britain. The British government, through its recent Communications White Paper (2000), expressed the view that convergence of communications services makes it increasingly problematic to designate an infrastructure as being specific to a particular service. It also makes it arbitrary to designate individual operators and services as they fall into one category or another. The Communications White Paper has made a case for merging telecommunications and broadcasting regulators into a super body, OFCOM (Office of Communications), across the lines of the FCC (Federal Communications Commission) in the United States. This has been further gone ahead with the Office of Communications Bill on 13 July 2001.[3] Searching for possible solutions to the current convergence problems, policy makers in Britain considered necessary to propose institutional integration of telecommunications and media regulations, both at the organisational level (regulator) and a normative level (laws).

Undoubtedly, the setting up of a single regulator would ensure that consistent and relevant rules are adopted across all converged sectors. However, concerns have been raised over attempting to put economic and social issues under the same roof. So far, regulatory bodies oversee the broadcasting and telecommunications sectors under different statutes and have different roles and functions. The ITC (Independent Television Commission) puts emphasis on content regulation, whereas OFTEL (Office of Telecommunications) is concerned with structural regulation. There is bound to be a clash between those two. Another fear is that the better-resourced telecommunications sector may dominate the smaller broadcasting sector under a converged regulator. Andrew Graham (2000) argued that, the new era requires effective regulation, but not a single regulator combining economic regulation with issues of political voice or quality of content, which are different in kind. There are no objective ways of measuring the latter. A separate regulatory body is required to deal with these separate public interests.

At a European Union level, the European Commission came to a conclusion not to proceed to the setting up of a European Regulatory Authority (ERA) but instead encourage co-operation of National Regulatory Authorities (NRAs). The Communications Review (European Commission 1999a, 9) reads: "The Commission considers at this stage that the creation of a European Regulatory Authority would not provide sufficient added value to justify then likely costs. In addition, it could lead to duplication of responsibilities, resulting in more rather than less regulation." The Commission considers that issues concerning disparity of interpretation and application of Community legislation (e.g. NRA assessment of operators with significant market power) are best dealt with by improving co-ordination and co-operation between NRAs. The above results were drawn from a study commissioned by the EC to canvass opinion among interested parties on, among others, the need for streamlining or changing current regulatory structures within the

European Union (European Commission 1999b). Regulatory co-operation between NRAs is of primary importance, especially in view of the intrusive and borderless nature of new technologies.

At a EU level, convergence also goes hand in hand with a growing trend to rely more on competition law, rather than sector-specific regulation to deliver economic and public policy objectives. The following sections attempt to address this issue. Let us first delve into the European policy for regulatory convergence.

EC Policy for Regulatory Convergence

The European Commission (EC), through its December 1997 Convergence Green Paper, opens a discussion at a EU level over the need for imposing fresh rules to maximise the benefits of the digital convergence in terms of job creation, growth of industry, consumer choice, cultural diversity and political pluralism. EC's objective is twofold: to create an economically viable EU media industry capable of competing globally, and to promote the "public interest" (i.e. enhanced service quality, consumer choice, access to new technologies, plurality, etc). The overall objective of the Green Paper was to support, rather than stifle the process of change and innovation. It was viewed by the EC as a means to achieve the European Information Society. Faith on convergence to create the information society appears very strong, and regulatory reform is viewed as a precondition to encourage convergence. As it is stated in the Green Paper, the opportunities provided by convergence should not be hampered or constrained by inappropriate regulation. A key message from the Green Paper is that convergence should not lead to additional regulation.

However, the Convergence Green Paper revealed the conflicts that existed (and still exist) within the EU between, on one angle, economic and industrial issues, and on another, socio-cultural implications. It could not be otherwise, as the Green Paper was the outcome of two different Director Generals (DGs), DGX (now Directorate of Education and Culture) and DGXIII (Directorate of Telecommunications), pursuing different cultures. Although the Green Paper spelled out different regulatory options,[4] the thrust of it argues in the direction of a future regulatory model based on the creation of a horizontal regulatory model to cover the whole range of existing and new services in the communications sector. The horizontal model means that there should be homogeneous treatment regardless of the service carried. The move towards a more horizontal approach implies, on the one hand, the prevalence of telecommunications concerns to broadcasting and, on the other, an increased reliance on competition policy rather than sector specific rules.

The consultation process (European Commission 1999c) followed the Green Paper revealed that it is necessary to adopt two separate approaches to the regulation of the transport of electronic signals and the infrastructures used for this, and the regulation of content. The Convergence Communication also confirmed the need for a more horizontal approach to all transport network infrastructures and associated services, irrespective of the types of services carried. The majority of respondents were also in favour of a setting up of an appropriate regulatory regime to new services, recognising the uncertainties of the marketplace and the need for the large initial investments involved in their launch while at the same time maintaining adequate consumer safeguards. One final message from the con-

sultation process was the increased faith on competition rules, accompanied by gradual phasing-out of sector-specific regulation, as the market becomes more competitive.[5]

In the past couple of years the emphasis for regulatory reform has rested on three fronts: accelerating liberalisation,[6] speeding up decision-making process and simplifying regulation. Much of the impetus for reform dates from the 1999 Communications Review, which proposed the main elements for a new framework for communications infrastructure and associated services. Being in line with the principle of technological neutrality, it proposed that the new framework covers all communications services, therefore applying to: telecommunications networks (fixed or mobile), satellite communications, cable TV networks and terrestrial broadcast networks, which control access to services. There followed the Lisbon summit of EU heads of government (Presidency Conclusions 2000), which set out a broad agenda intended to make the EU more competitive than the US by removing burdens on European companies. Erkki Liikanen, the EU's enterprise commissioner, has emphasised, in a number of speeches,[7] the need to improve the EU's approach to regulation, by both speeding up and sliming down its legislation. The Stockholm summit (Presidency Conclusions 2001), reviewed progress on competitive initiatives and re-emphasised the importance of setting out a new regulatory framework, with the following two principles: simplify regulation and speed up decision-making. In that way, it will avoid the risk being overtaken by the fast-moving evolution of markets and technology. In order to ensure legal certainty in the transition from the current framework to the new regulatory framework, the EC proposed five new Directives (Framework, Access, Authorisations, Universal Service and Data Protection), which would replace existing Directives (European Commission 2000).[8] The proposed Directives aim to establish a harmonised regulatory framework for electronic communications networks and services across the EU. They seek to respond to the convergent phenomenon by covering all sectors within their scope.

The Rationale for Regulation in the Digital Age

It might have become apparent by now that the EC intends to: (a) establish a harmonised regulatory framework for all communications services; (b) simplify and minimise regulation; (c) separate approaches to the regulation of infrastructure and the regulation of content; and (d) put more emphasis on competition law than in the past to achieve desirable economic and social objectives in the digital universe. Before assessing whether sector-specific or economic regulation provide an adequate regulatory response to the concerns expressed above, it is necessary to ask if and why we need regulation at all in the new era. While there has been much discussion about how the process of convergence and digital compression challenges audiovisual and telecommunications regulation, accompanied by calls for a "lighter" regulatory regime, few argue that "no regulation" is a valid option. In fact, limited or no regulation at all has traditionally been applied to the print publishing industry worldwide in order to secure freedom of speech. It is argued that the regulatory model within which publishers currently operate could also be adopted for all players in converging markets (i.e. freedom to set up a business and unrestricted access to the market, the application of general laws combined

with effective competition policy, etc). Publishing, according to European Publishers Council (1998), is an example of how competition can thrive in a highly competitive market without the need for sector-specific regulation. This view is in line with the wider argument that competitiveness is of fundamental importance given that European enterprises must prepare for global competition in a scale never experienced before.

The problem is that the characteristics of the publishing sector may not be applied to other sectors. For example, whereas it is quite inexpensive to launch a magazine, it is very costly to set up a TV network. The television industry involves high entry and operational costs, which prohibit many potential proprietors to launch even small/local TV stations (until, at least, digital technology, which promises to drive costs down, is fully realised). Regulation thus should be in place to facilitate market entry, ensure non-discriminatory access and oversee pricing. Secondly, convergence has not eliminated the need for management of spectrum. The trends towards convergence, competition and liberalisation may call for a shift of scarcity-based regulation to regulation tailored-made for the era of abundance. Still, new services and technologies have highlighted the need for regulators, at both national and global levels, to ensure adequate spectrum for all new technologies. Thirdly, regulation is required to ensure adequate technical standards and universal compatibility. Rules are needed to ensure that universal access is maximised. The move to pay-TV may deprive some parts of the population of certain kinds of program, such as popular sports and latest releases. In that way, it may widen the gap between information haves and have-nots and lead to the so-called "digital divide."[9] Fourthly, the principles of regulation, that is, to protect and promote values, such as freedom of expression and access to information, and balance these with acceptable limitations, such as protection of minors, diversity and impartiality, continue to occupy an important place in the converged era. Because broadcasters can exert tremendous communicative power and form public opinion, regulation is required to ensure that operators reflect a range of different views and cultures in a society and contribute to rational political debate (Humphreys 2000).

Fifthly, there is a real danger that the market, left alone, favours concentration of media ownership, partly due to the high basic costs of access to the media, and partly due to the ability of powerful enterprises to penetrate any market and achieve "synergies." According to Graham and Davis (1997), high quality multimedia content is expensive to produce in the first place but, once created, relatively cheap to edit or to change and even cheaper to reproduce. Put it another way, it has high fixed costs and low marginal costs — the natural creators of monopolies. High quality material can still be produced and yet cost very little per unit provided that it reaches a large number of people (exploiting economies of scale) and/or provided that it is used in a wide variety of different formats (exploiting economies of scope), but the exploitation of these economies of scale and scope imply concentration of ownership. Thus, Graham and Davis argue, even though the new technology has removed one source of monopoly, that of spectrum scarcity, it has replaced it with another, the natural monopoly of economies of scale. It is then a small step to argue that the previously state-run media monopolies will be replaced by private monopolies with the potential of both limiting competition and damaging pluralism.

In short, regulation retains its relevance and importance in the new digital era. It is needed for both creating regulatory stability and certainty that would enable the industrial sector to take rational business decisions, for example via spectrum management and the provision of technical standards (economic objective), and for delivering social benefits such as pluralism, diversity, affordability, interconnection and access. However, to achieve these objectives, regulation should adopt new methods and be more dynamic so as to cope with fast-changing environment. On the one hand, it should be flexible enough to encourage innovation, take into account technological convergence, provide for interconnection and protect against anti-competitive behaviour, especially in view of the increasingly complex nature of corporate alliances (see below). General competition law has an important role to play here. At the same time, regulation should re-define and promote the broader public interest in the new communications environment in order to incorporate social benefits associated with digital revolution. It should continue to pursue traditional social objectives, such as pluralism and diversity of sources, but at the same time it should address new considerations justified in the digital converged era (for example, access to the Internet and provision of necessary skills for its efficient use; TV content via the Internet; protection of intellectual property on-line; consumer protection on-line; e-commerce; affordable access to digital connectivity and broadband technologies; etc). Competition law may fail to address the social and cultural public interest objectives. Thus sector-specific regulation is still justified to guarantee those objectives, especially in the transitional period until full convergence is realised.

The following sections look at the connection between competition policy with three different issues (mergers, access and pluralism) and attempt to identify the strengths and weaknesses of competition policy to deal with each one of them effectively.

Competition Regulation and Merger Control

Competition policy is concerned firstly with preventing agreements between undertakings which reduce the effectiveness of the competitive process, secondly with controlling mergers which increase the probability of exercising undue market power, and thirdly with anti-competitive behaviour which enables firms either to acquire excessive market power or to increase barriers to entry for newcomers. The European Union's competition policy framework lies in the Articles 85-94 of the Treaty of Rome (81-86 under the new Treaty). Articles 85 and 86 (now 81 and 82), in particular, aim to maintain or increase competition in the Single European Market and ban restrictive practices, which distort or prevent competition or lead to a dominant position. In addition, a Regulation on the Control of Concentrations between Undertakings was adopted by the Council of the European Economic Community on 21 December 1989 and became effective on 21 September 1990. The Merger Regulation was intended to complement the Commission's anti-trust powers conferred by Articles 85 and 86 of the Rome Treaty and also give the Commission pre-emptive powers to deal with mergers.[10]

However, the Merger Regulation covers only large mergers, which affect competition on the market in question and, as a consequence, has allowed many mergers to proceed as they fell outside its scope (Iosifidis 1996; Just and Latzer 2000).

The process of industry convergence, resulting in numerous strategic alliances between previously separated companies, is seen quite favourably by the European Commission as this will lead to the creation of strong European companies capable of competing globally. Therefore, the Merger Task Force (the body which investigates merger cases at the European Commission) has only blocked few mergers in the wider communications industry since its inception. A notable example is the blockage of the MSG Media Services case in 1994, a joint venture of the German giants Bertelsmann AG, Taurus of the Kirch Group and Deutsche Bundespost Telekom, aiming at supplying administrative and technical services to pay-TV operators. It was prohibited on the grounds that it would have created a dominant position in three relevant markets — the administrative and technical services market, the pay-TV and the cable TV market. In May 1998 the EC decided to prohibit the so-called MSG II case, a proposed alliance involved once again Bertelsmann, Kirch, digital TV channel Premiere and Deutsche Telekom. All companies were to share control of Beta Research, a Kirch owned technical services outlet providing conditional access and subscriber management. The Commission's veto was prompted by two concerns: first, that the merger between Bertelsmann, Kirch and Premiere would have an adverse impact on the market for pay-TV; second, that Beta Research would dominate the conditional access system through the proprietary nature of Beta-owned D-Box (Levy 1999).

A more recent example was the blockage of the AOL/Time Warner merger with EMI, on the grounds that a dominant position could arise in the music industry, including the distribution of music via the Internet, which could then be extended to other content, such as movies, sport and entertainment. In fact, AOL/Time Warner and EMI withdrew their intention to merge after it became clear that the EC would block the deal. The completion of the merger, according to the EC, would have resulted in price increases without the loss of market shares, thereby forcing competitors to exit the market and prohibiting access to newcomers. EMI's withdrawal meant that the EC could clear the much bigger merger between the Internet company AOL and Time Warner. A third example was the veto of the Ł75bn deal between US telecommunications operators WorldCom and Sprint in June 2000. Mr Monti, the EU's competition commissioner, said at the time that the deal would have created a company with so much power over transmitting data on the Internet that it could have dictated prices and let to a raw deal for consumers. This case, involving two US companies, actually raised the EC's profile in antitrust investigations and mergers.

However, the above prohibitions are the exception, rather than the rule. Since its inception in 1989, the Merger Task Force, from a total of over 1,300 cases, has provided obstacles to just 12 cases and a further 14 have been withdrawn when it became clear that regulators would veto them. Six of those cases were in the wider media and telecommunications sectors.[11] Given the inexorable industry tendency towards further consolidation as well as the increased complexity[12] of mergers in the age of digital convergence, it is fair to say that reliance on competition law to provide open competition and protect the long-term interests of the consumer-citizen in the convergence era is limited.

Competition Regulation and Access Issues

The extent to which convergence challenges the principles underpinning existing regulatory approaches in the media industry can be shown by raising the issue of access to broadband networks, multimedia services, digital platforms, etc. Access issues are considered to relate to set-top boxes, Application Program Interfaces — APIs, Electronic Program Guides — EPGs and the local loop itself, as well as digital services besides television. The role of gatekeepers and the degree to which technical standards are open will be pivotal in determining whether viewers gain access to the content they want at a fair price and continue to enjoy it, even where the rights to content pass to a different distribution platform. This will also determine the extent to which viewers will be able to switch easily and inexpensively between platforms. In fact, access issues, in particular access to networks and digital gateways in a converging environment, has been highlighted in many comments sent back to the EC during the five-month public consultation following publication of the Convergence Green Paper (European Commission 1999c). Faith on competition law to provide for access was also apparent in the majority of those replies.

The role of competition regulator can perhaps best revealed with reference to broadcasting. Multiple delivery platforms with ownership straddling content production, the services in which content is packaged, delivery system encryption and revenue collection will lead (or have already led) to complicated competition issues. One such issue is bottlenecks. The increased capacity of digital pay-TV services that permit competition raises concerns regarding entry barriers and bottlenecks. A bottleneck facility or technology can be described as a technology without access to which it would be difficult for a third party to provide a service to consumers (Cowie and Marsden 1999). Although bottleneck facilities are not new in the communications industries, the transition to digital TV and impending convergence introduces the potential for new series of bottlenecks related to set-top-boxes, APIs and EPGs (Cave and Cowie 1996).

Another area is the ownership of TV rights for sports. The competition for sports rights is likely to intensify over the coming years due to multiplication of channels, thereby driving up the purchasing price of these rights and changing the way they are sold. This is bound to have a direct impact on viewer access to major sports events. Competition policy aims to prevent sports organisers extracting rents from market power by selling at a level above the minimum feasible and suppressing competition between different rights. In addition, competition policy places constraints on how rights are sold and intervenes to protect entry by new sporting organisers. Particular concerns include the selling of rights *by* leagues, where the league arguably acts as a *de facto* cartel of the constituent clubs, and whether live rights and delayed rights, which are partial demand substitutes, should be sold *to* different buyers. The application of competition policy to the sale of existing sports rights should aim to ensure that rents are not excessive and prices are kept low (Cowie and Williams 1997).

Competition law can thus play an increasingly important role, by ensuring that dominant positions in those areas are not created and companies with great market power do not abuse that power to the detriment of consumers. The law can also ensure acceptable conditions of service to all delivery platforms and for all service providers.

Competition Regulation and Media Pluralism

Competition policy and merger control rules ensure (or should ensure) that the competitive process is not threatened by either market structure or the conduct of firms. The growth of potentially competitive markets has raised their role. As shown above, and in spite of certain limitations, the role of competition policy and merger control becomes crucial for the smooth running of the converged communications market (as they can apply to all different sectors), and for remedying market abnormalities, for example, prevent monopoly formation, eliminate barriers to entry, etc. Their application though to the media industry cannot always safeguard other values and objectives such as pluralism[13] threatened by undue market concentration. Media policy has encompassed a much wider range of public values and objectives than the efficient functioning of private markets. The media play a central role as a disseminator of information, opinions and culture, and policies are often founded on broad principles governing the circulation of ideas and information that are fundamental values for pluralistic democratic societies. Precisely because of the nature of the media industry, competition policy objectives are not enough for preserving and promoting other policy objectives.

This is not to say that competition policy does not have a role to play in the cultural field. Policies promoting efficient competition may limit concentration of media control and, at the same time, may also promote the presentation of diverse points of view. Competition policy might favour pluralism, to the extent that it operates to prevent the erection of greater barriers to entry, or indeed to reduce the existing barriers rendering the market contestable. For example, Merger Task Force's Decisions to block the MSG Media Services case, the AOL Time Warner merger with EMI and the WorldCom/Sprint deal demonstrated above were made on economic grounds (i.e. denying the formation of a dominant position). However, it is not difficult to see that the proposed scheme would have created a very large player with a significant clout and scope for exercising influence in the cultural and political market.

Nevertheless, the safeguarding of a competitive environment and the promotion of pluralism are different objectives. Competition policy and pluralism/diversity concerns cannot be conflated. Promoting effective competition in a relevant media market[14] does not necessarily imply greater pluralism in the quality and variety of services and products on offer. Competition policy is about ensuring fair and effective competition. In the telecommunications sector, the main responsibility of the competition authorities is to react to anti-competitive market behaviour, such as mergers, cartels and predatory pricing and develop a competitive environment which prevents the dominant carrier from abusing its dominant position. In the broadcasting industry, it is concerned with creating an environment, which encourages investment (particularly in programming as well as in the necessary infrastructure) and guaranteeing access to conditional access systems that regulate consumer access to pay-TV services, and access to gateway and bottleneck facilities (EPGs, API). In these cases, competition policy and merger control provisions may enhance pluralism and diversity indirectly. However, there has to be a clear understanding that the primary objective of competition law is to safeguard competition. As such, the protection of social values requires different types of regulation.

The Convergence Regulatory Framework

It might have become obvious by now that: (a) the principles of media regulation are likely to remain important in the new age; (b) competition policy alone cannot provide adequate safeguards for economic, but particularly, socio-cultural objectives; and (c) that there is a need for a common regulatory framework to accommodate all converged sectors. However, the way regulation is shaped in the digital converged environment depends, to a large extent, on whether one considers convergence simply as an inevitable consequence of technological and communications service evolution, or as a process dictated by industry and/or political decisions. The two approaches have differing impacts on market development. The former assumes that services using different components (i.e. digital broadcasting, telecommunications and multimedia computing) will necessarily and automatically merge as a result of technological advancements. The latter imposes a requirement for political decision-making, outlining the objectives of "convergence policy," setting the conditions for bringing into the market new, Internet-style data services, etc.

Although in favour of the latter approach, it should be noted that excessive regulation in the future media market, yet uncertain as to *which* converged services will actually find a market, creates disincentives for new actors. Also, a line of balance should be drawn between protection and encouraging investment as, for many decades, Europeans have gained a reputation of being "regulation addicts," thereby stifling investment and innovation. For these reasons, it is advisable to leave service providers some flexibility as to the services on offer. This, however, should not be done to the detriment of social and cultural values.

Once the need for a new, common regulatory framework for the converged information and communications sectors is realised, the next step is to assess the extent to which traditional communications regulation models are applicable to new services as well as the balance between competition law and sector-specific regulation to be adopted. What we consider in the rest of this paper is a dual model in which competition law could apply, supplemented by flexible sector-specific regulation, especially with reference to broadcasting. This is particularly important in the short run, that is, until technological convergence is fully realised, and until incumbents are subject to significant competition. Sectoral content and/or ownership regulation have traditionally been imposed for consumer protection and also as a result of spectrum scarcity. There is a train of thought that digital convergence naturally leads to an end of the regulation of content and ownership, as it abolishes spectrum scarcity and blurs the boundaries between previously separated sectors. This is a strong argument but the simple fact is that broadcasting and telecommunications sectors have a long way until they are fully become indistinguishable. Convergence arrives slowly and, until at least it knocks our door, certain traditional restrictions still have a role to play. Further, technology might change the media environment, but that does not imply that concerns about pluralism, diversity, free speech, etc, traditionally protected by sectoral regulation, are less valid.

The Continuing Importance of Content Regulation

Content regulation is primarily the responsibility of Member States. Content issues are primarily national in nature, being directly and closely related to the cultural, social and democratic needs of a particular society. Each Member State of the European Union has imposed regulation designed to ensure the delivery of programming that competition alone cannot deliver. Governments have applied both negative content regulation — restricting diffusion of certain types of information, text, sound and images, imposing advertising restrictions — and positive — promoting access to content, guaranteeing quality, safeguarding diversity. Positive objectives have traditionally been met via the establishment of public service broadcasting in each Member State, with the remit of providing all citizens with high-quality and diverse material.

The role of content regulation remains crucial in the converged media age. Such regulation should aim increasingly at ensuring that public interest content reaches users in the multi-channel era. Content regulation will be required to provide the framework — particularly valuable at a time of rapid change — which also allows intervention to take place when the above values are at stake. Nevertheless, the traditional means of regulating through licensing broadcasters and imposing conditions on their licenses are challenged by the proliferation of channels of communication and the volume of material transmitted. In addition, the internationalisation of television and the development of cable and satellite TV have made it more difficult to maintain and manage content rules traditionally designed for off-the-air mass audience channels (Tambini and Verhulst 2001). Technological convergence will, in the future, make it increasingly difficult to distinguish between "broadcasting" and "telecommunications." The Internet, the catalyst of convergence, promises to transmit voice, data and video to users and raises questions as to whether it should (or could) be regulated at all.

In fact, the Internet provides a good example of current content regulatory challenges. There can eventually be limitless number of websites and multiple means of delivery to the end-user, and equally varied ways and means for controls to be evaded. An Internet service provider, depending on the services it offers, may be variously categorised as a publisher, journalist, broadcaster or phone company, each of which has historically had different liabilities for content it distributes. From a general regulatory and societal perspective, it may no longer matter whether a piece of indecent material (i.e. pornography) is obtained by mail, at a store, through the TV set, the mobile phone, or through the Internet (Levin 1999). Of course, a distinction can currently be made between indecent material transmitted via a universally available medium, like the TV set, a medium with fast growing home penetration rates, like the Internet, and a medium in its infancy, like the Third Generation (3G) mobile phones. However, technological developments are likely to change things in the near future. Regulation should be dynamic and flexible enough to anticipate and accommodate such changes. A consistent approach is needed to determine the types of material that are objectionable and then their dissemination could be banned regardless of the type of conduit used to obtain it, with regulation tailored as needed to fit the specific medium of transmission.

Content increasingly becomes network-independent, as it can be transmitted via different networks. Thus centralised, coercive and forceful content regulation

cannot apply in the new era. Although the rationale for regulation remains, central regulation is difficult to sustain. Therefore, new mechanisms and paradigms appropriate for a changing multi-channel, digital and on-line environment need to be considered (Tambini and Verhulst 2001).

The Case for Self-Regulation

A case can be made here for increased reliance on self-regulation. It has to be said from the outset that the term "self-regulation" is understood not as no regulation or no law, but as complementary to official regulation. It is a form of indirect intervention that assumes a communication (dialogue) between the state and a business interest. Under a scheme providing a mixture of official (legal) regulation and self-regulation, public authorities can specify general standards and principles, but their implementation rests with companies themselves. This process is also referred as "co-regulation," under which the state sets broad principles but leaves their enforcement to business groups. The state also sets procedures, which ensure business compliance.

The processes of co-regulation and self-regulation are also favoured at a EU level. Former Commissioner Bungemann, for instance, in an earlier speech (1997), expressed his objections to strict, official regulation, on the grounds, first, that content becomes network-independent and, second, that control of content and therefore responsibility of its use shifts from government to the individual URL. An EC Communication (European Commission, 1999d) states that "whilst it is for governments and public authorities to define public interest objectives, to lay down requirements related to the level of their protection and to adopt the regulations necessary for this effect, the operators and the users/viewers concerned can nevertheless contribute to the achievement of these same public interest objectives through the development of self-regulatory measures within the overall legal framework" (p.14). Erkki Liikanen, the EU's current enterprise commissioner, and Frits Bolkestein, the single market commissioner, in a joint submission to the EC, have called for the traditional system of statutory — and highly protective — regulation to be largely replaced by self-regulation by business groups. The commissioners argue that, the rapid evolution of markets and technology is one of the prime reasons why the traditional EU system has become so inefficient and difficult to operate. Their answer is to promote alternatives to "pure" regulation, including self-regulation by industries, or co-regulation under which the EU would set broad policy objectives, but leave the details — and enforcement — to self-regulating business groups (*Financial Times* 2001). On a global level, the World Summit for Regulators[15] pleaded clearly for a co-regulation for reasons that it would be impossible to regulate the Internet effectively if private and public bodies do not combine their efforts.

One area in which co-regulation or "enforced self-regulation" could work is telecommunications. Universal service in telecommunications could be supported through a system of "pay or play" in which enterprises may volunteer to provide universal service or, if they do not do so, are required to pay a levy to support its provision by others (Prosser 2000). Another area could be broadcasting, where the provision of public interest content by private channels could be encouraged by attributing a lower weighting to channels which carry a certain amount of such programming when measuring market shares. That favourable treatment would

allow them to proceed to certain corporate alliances, provided there is prior agreement with the regulator. In this way, other channels, which do not offer great amount of public interest programming, will certainly have a strong incentive to increase their output of such programming. A third area could be the Internet and the imposition of content ratings, whereby an agreed set of categories would be applied to websites, and which would inform users of the appropriateness of a given source. Equally, the ratings could be used for filtering "gatekeeper" software to bar access. The approach is currently favoured by the British government. The Internet Watch Foundation has been established, with government backing, in order to develop ways of developing ratings measures, as well as ways of detecting breach of rules and the dissemination of illegal or unsuitable material. Without such ratings, sites could not get access to search engines, or be carried by Internet Service providers (Svennevig and Towler 2000).

Effective self-regulation and/or co-regulation though require active consumer and citizen consultation based upon shared responsibility at all stages of development and implementation. If the public is to bear more responsibility it has to be aware of the role of self-regulation (Tambini and Verhulst 2001). The problem is that we do not yet have the required levels of public awareness. There is thus an imperative need to educate the public in how to protect themselves. If regulation is to become reactive rather than proscriptive, then steps should be taken to remedy the lack of public awareness.

The Continuing Importance of Transparency of Media Ownership

As with the case of content rules, European states have imposed ownership restrictions to protect social objectives, including pluralism and diversity. Nevertheless, ownership restrictions that are tied to vertically integrated sectors, which link programming production and dissemination to the audiences, might not make sense if the same programming can be provided by methods that range across the current terrestrial and satellite broadcasting, cable and telecommunications sectors. Indeed, convergence has already revealed the inadequacy of European Commission initiatives to harmonise sectoral ownership regulation (Gibbons 1999; Iosifidis 1997a). Increased pluralism, it is said, can be achieved through permitting the delivery of a greater range of services more closely targeted to individual needs and through lowering entry barriers so as to permit a greater number of actors to take part in the media. However, diversity of sources cannot always result in diversity of media content. As shown earlier, the model of external or numerical diversity, in which diversity of content is provided by separate media outlets, naturally favours concentration of capital and ownership in the broadcasting business. The formation of large, vertically integrated and diversified units has led to a corporate structure in which shares are normally dispersed, in which financial institutions and industrial corporations have significant holdings, and in which highly qualified managers make key decisions. In situations of dispersed share ownership, it is indeed very difficult to identify, first, who controls the firm in question and, second, the extent of the influence s/he can exert in the cultural and political domain. That is why it is difficult to sustain structural ownership rules.

The first issue, that of whether ownership is equated with control, had led the European Commission to initiate a study in order to reach a definition of "controller." The study, carried out by The European Institute for the Media (1994), identi-

fied five means of influencing a firm's decision-making centre: *direct links, indirect links, family connections, external financial or contractual relationships* and *unofficial agreements.* The study also identified five ways of wielding influence: *influence through ownership links (capital), influence through links with staff, influence through financial links (debts)* and *influence through contractual links (supplies, distribution).* The study concluded that, although ownership links are the most effective way of exerting influence in the market, the other three — financial, staff and contractual links — should also be taken into consideration. On the basis of these criteria it is then possible, with respect to each player, to evaluate by which ways and means s/he may exert a decisive influence on the operation and eliminate political pluralism and cultural diversity. Although such a qualitative definition of media control seems both to be better adapted to the complexity of current ownership and control/dependency structures and respond to various attempts at circumvention of media ownership rules, it was not favoured by the European Commission. Apparently the Commission was concerned that the four criteria of wielding influence defined in the study were not clear enough to ensure fair and impartial application throughout the European Union.

The second issue, that of identifying the most appropriate criterion for the measurement of levels of concentration and consequently media influence, has proven even more difficult to solve. First, the definition of the relevant market in a multimedia context is not a straightforward task, and therefore the measurement of market shares is also problematic. The difficulty here is that the outcome is extremely sensitive to the specific way in which restrictions are formulated. In particular, the choice between restrictions on *total audience reached, share of ownership in a channel, share of industry revenues,* etc, is crucial and leads to disparate results as to the level of concentration and the influence exerted. Recent work (Iosifidis, 1997b) showed that, even though the measurement of "influence" is problematic, there is a clear linkage between economic power and political/cultural pluralism, particularly because economic power can affect the range of material offered. The close relationship between economic power and pluralism indicates that criteria that are being used for the measurement of market power can also be used, at least in principle, for the measurement of media influence, and vice versa. Financial criteria, for instance, a long established method for measuring market power, could also be adopted for measuring "influence," that is, audience exposure to mass media. These, however, should be accompanied by audience figures, supposed to be more efficient for measuring pluralism in the market place for ideas. In the absence of a direct measure of influence, the study concluded that it is necessary to develop an approach combining the various sets of methods (i.e. numerical criteria, such as the number of channels controlled, economic criteria, such as company turnover and advertising/subscription income, and audience criteria, such as audience share and audience reach), and use it as an alternative technique to establish impact (Iosifidis 2001).

Conclusion

In this article the concept and process of convergence were investigated and the challenges that it poses to European policy makers were examined. The continuing importance of traditional regulatory mechanisms was assessed and the

need for imposing a new regulatory framework in the age of digital convergence was outlined. The argument put forth is that market rights and market creation envisaged by governments, industrialists and international institutions, such as the European Commission, should go hand in hand with realisation of public interest rights and freedoms. A combination of economic regulation with certain elements of sectoral regulation is required in the communications sector in order to meet the growing force of technological, economic/structural and social changes in the new era. In particular, emphasis should be placed on competition regulation to deal with key access points in the new environment, ensure open access for third parties and deal with anti-competitive corporate alliances. The provision of social objectives, including plurality of views and contents, could be achieved through maintaining flexible content regulation (including self-regulation) and through promoting transparency of media ownership.

Transparency of media ownership though presupposes that a great deal of information is available to media regulator. Such information, extracted from a wide range of indicators, will assist the regulator to decide whether the influence of a particular company is a cause of concern. A key regulatory role then is that of ensuring transparency of ownership and control of media actors. This is often neglected but is the key to any other regulatory actions; it is of greater importance now than ever given the complexity of the alliances. The most effective tool for regulation is information. If regulators have the power to collect detailed information and make it public, then in itself can solve many potential problems before they arise, and avoid others. All parties are well informed, and the market environment is at least a little closer to the ideal perfectly competitive market of economic theory, which assumes all actors have perfect information. The market imperfection of information deficiencies can be diminished in the information society if independent regulators ensure than adequate information about the sector and the operators is made public.

Notes:

1. An early notable example of demand for pay-per-view services was the 1994 fight between Bruno and Tyson, which was offered by Rupert Murdoch's British Sky Broadcasting for an extra pay of Ł10 to existing customers and attracted more than 15 million viewers.

2. The degree of independence of the regulatory authority in the telecommunications and broadcasting sectors varies substantially across Europe. In newly privatised markets, such as Greece, the newly established regulators have not enjoyed independence to the degree envisaged in countries like Britain and Germany, where there have traditionally been government bodies in the sector.

3. Office of Communications Bill (HL) 2001/02. In an explanatory text it is stated that "because it will be a complicated and time consuming task to establish a new regulatory regime and because the Communications Bill will not attain Royal Ascent before 2003, this Bill proposes to bring forward the establishment of an Office of Communications and to give it a preparatory function to ease the transition." Available on the Internet at http://www.thestationeryoffice.com.

4. The Green Paper presented three possible alternative regulatory options: (1) The separate development of current regulatory structures in IT, print industry, telecommunications and broadcasting; (2) The setting up of a separate horizontal legislation to oversee new convergent services in conjunction with existing ones; (3) The development of a fresh comprehensive common horizontal regulatory regime for all ICT services.

5. This key message relates mainly to access issues concerned with communications

infrastructure and associated services. The Convergence Communication noted that, with regard to public interest objectives such as the protection of minors and human dignity, open and competitive markets could not contribute.

6. Since 1998, the EC has been quite successful in initiating liberalised legislation. Examples of this are the provision for liberalising all telecommunications services and networks in January 1998 and the provision for liberalising the local loop in December 2000. In spite of relative success on the liberalisation front, the EC has suffered drawbacks on the harmonisation and implementation fronts. There might have been rapid development of competition, as illustrated by falling tariffs and a growing number of operators, but the EU telecommunications market remains fragmented and dominated by incumbent operators in all Member States.

7. See, for instance, Speech by Erkki Liikanen, "E-Learning in the Knowledge Society," eLearning Summit, La Hulpe, 10 May 2001. Available on the Internet at http://europa.eu.int (24 July 2001); Speech by Erkki Liikanen, "IT in the Future eEurope," eLearning Helsinki, 15 June 2001. Available on the Internet at http://europa.eu.int (24 July 2001).

8. The EC has already succeeded in passing legislation liberalising the last mile in telecommunications (Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on Unbundled Access to the Local Loop, OJ L 336, 30 December 2000).

9. The term "digital divide" refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access Information and Communication Technologies (ICTs) and to their use of the Internet for a wide variety of activities (OECD, *Information Technology Outlook 2000.* Available on the Internet at http://www.oecd.org (24 July 2001).

10. Until 1989, the Commission had powers to act against anti-competitive mergers and acquisitions only after they have taken effect and a restrictive practice or dominant position is established or strengthened. For many years the Commission had argued that it should have new, pre-emptive powers that would remove the uncertainty of retrospective action for the parties involved. In fact, competition rules that intervene after a problem of imbalance had arisen (for example, an anticompetitive practice has been established or a dominant position has already been created), may not be able to remedy the situation. The Merger Regulation (Council Regulation (EEC) No. 4064/89) was intended to deal with that problem. This is becoming more important today because, in order to gain maximum benefit from the information society, "gate-keeping" issues require a more direct anticipation in competition law.

11. See MSG Media Service in 1994, Nordic Satellite Distribution in 1995, RTL/Veronica/Endemol case in 1996, Deutsche Telekom/Beta Research in 1998, Bertelsmann/Kirch/Premiere in 1998 (MSG II), and WorldCom/Sprint in 2000. The AOL/Time Warner intended merger with EMI in 2000 withdrew after it became clear that the EC would prohibit it.

12. The complexity of mergers is a result of a shift in the nature of industry concentration, from one based on horizontal mergers to those involving vertical integration, as operators sought out alliances which would enable them to acquire the broad set of skills needed to address new markets. The CLT/Ufa and AOL/TimeWarner mergers are classic examples of that shift.

13. In an earlier work, pluralism was defined as a notion incorporating three positive elements: sufficient program diversity, that is, variety of program content; sufficient access to information; sufficient balance and accuracy in the provision of news and information (Iosifidis 1997a).

14. For a definition of the relevant market in the media industry both in terms of geography and the good in question, see Frazer 1992.

15. This Summit was organised by the Unesco in co-operation with the Association of National Audiovisual Authority, 30 November—1 December 1999, Paris.

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