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POLICY AND REGULATION ISSUES FOR NETWORK-BASED CONTENT SERVICES

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FOREWORD

The initial version of this report was presented to the Working Party on the Information Economy (WPIE) in 1996. The Committee for Information, Computer and Communications Policy (ICCP) recommended that it be made public in 1998.

The report was prepared by Jeremy Beale of the OECD's Directorate for Science, Technology and Industry. It is made available on the authority of the Secretary-General.

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1. INTRODUCTION

OECD governments have made a general policy commitment to encouraging the development of new network-based multimedia services. Given the ongoing rationalisation of traditional manufacturing and service industries, such new services constitute a vital foundation for future economic growth and job creation, as well as a means for improving living standards and potentially the nature of employment itself. In a number of ways, however, existing media policies and regulatory arrangements are ill suited to encouraging the development of the content required for new network-based services to reach their full economic potential.

Reforms are needed in three inter-connected areas: general policy frameworks; regulatory institutions and procedures; and specific public support programmes. This paper will outline the issues and forces for change which OECD Member countries are grappling with, as well as some of the reforms being developed to promote content in new network-based services. The paper focuses on audio-visual content as the area where content policies and regulations are most heavily concentrated. The questions generated by the analysis in the various sections are summarised in the Conclusions section of the paper.

The purpose of the paper is to provide a general analysis of the broad issues involved in content policies and regulations, and the reforms needed for the wide-scale development of content for network-based services. Such general analysis is intended to help guide OECD Member countries in identifying areas where more detailed and technical economic and regulatory analysis can usefully be carried out in the future.

2. POLICY FRAMEWORKS

2.1 Introduction

Policy frameworks provide general structures for market development. As such, they can significantly affect the speed of investment, innovation and demand for new services and related products, as well as the decline in investment and demand for traditional services and products. OECD governments agree on the need for market liberalisation as a general framework for speeding the development of the emerging Global Information Infrastructure and Global Information Society (GII-GIS). Existing policy frameworks for media content were, however, designed for when content was produced and embedded either in the form of discrete material goods such as phonographs, CD-ROMs and video cassettes, or in single-media broadcast networks (cinema, radio and TV) with little or no interactive capabilities. The GII/GIS will only grow, though, through the rapid innovation, production, and delivery of information and entertainment in rich interactive and multimedia networked services. It is increasingly recognised that policy frameworks need to be reformed to deal with the interactive and multimedia capabilities which digital networks provide for producers and users of service content.[1]

2.2 Market structure, ownership and access

Most countries promote domestic audio-visual content production through a variety of policy measures and institutions. But the most comprehensive policy frameworks are usually contained in legislation concerning broadcasting markets, content ownership and programming. OECD countries have been considering the implications for TV and radio broadcasting of a digital environment for quite some time. It is generally recognised that digitisation, and the dissolution of technological distinctions between voice, data and audio-visual traffic which it involves, challenges the practicality of distinct regulatory frameworks for individual media services and for the regulation and promotion of audio-visual content production. For new network-based multi-media content, traditional broadcasting policy frameworks need to be modified. This may usefully occur through the application of measures which have been developed for data transmission and telephony markets over the past decade. In particular, measures for open access to essential resources (should such access not be available via market mechanisms) to ensure non-discrimination, innovation and competition may be usefully applied to support traditional broadcasting concerns for ensuring pluralism in ownership, cultural creativity and diversity.

2.2.1 Pluralism, public broadcasting and cultural diversity

Traditionally, one of the main justifications for the public regulation or ownership of broadcasting was that the limited number of services which could be offered on available channels required public authorities to ensure plural social representation and choice in programming. Digitisation of communications networks (telecommunications, data and broadcasting), and the proliferation of channels which digitisation allows, significantly alters this situation. Digitisation increases opportunities for new service development, diverse ownership and competition in product markets. As a result, a number of OECD countries have introduced -- or are in the process of formulating -- legislation, which will liberalise broadcast network, markets.

However, as the number of channels increases, networks are able to carry a wider variety of services which can be accessed through a variety of terminal equipment. Countries are therefore also trying to define overall policy frameworks for the migration to a fully digital environment, covering enhanced audio-visual services (such as near or full video-on-demand) as well as new multimedia and interactive services such as home shopping, games and social services.[2] Such comprehensive frameworks are important because of the possibility that -- irrespective of whether or not channels are offered separately or bundled together -- in some countries existing market structures for content production and delivery could mean that many channels are in effect under-utilised or are qualitatively inadequate to attract sufficient consumers to make the investments profitable.[3] The goal is not, of course, to guarantee success for every channel launched, but to structure an environment within which providers have appropriate flexibility to create services or packages of services that consumers find valuable.

While governments generally recognise the need to liberalise markets for the delivery of audio-visual services, the debate on overall policy frameworks has also involved the question of which public broadcasting services should be preserved and developed within the new environment, and which can be developed on a purely commercial basis. A continuing role is usually seen for public broadcasters as providers of general programming, and also in terms of universal coverage requirements. Multi-channel transmission of individual services dedicated to particular “thematic” programming (such as sport, news, films or “lifestyle” and talk shows), catering to more individual tastes, is seen as having restricted market possibilities and representing the limit of commercial broadcasting opportunities.[4] Similarly, though, the development of a multi-channel environment, if instituted within a market structure and a regulatory framework which ensures liberal and open access to service providers, also increases opportunities for broadcasting by ethnic minorities, as well as sub-national and supra-national interests. Governments may in fact reserve some channels precisely for these purposes in licensing arrangements as part of an open access regime.

The Internet, with its potential for the development of services at radically reduced costs relative to traditional broadcasting, expands these opportunities even further; but it also increases the challenges to traditional policy frameworks and the demand for innovative policy responses. Multi-channel and multi-platform delivery and access opens opportunities for greater thematic distinctions between services, and for clearer regulatory distinctions between services in respect to cultural vis-à-vis commercial goals. As discussed below, these distinctions can then be reflected in specific licensing arrangements rather than in detailed legislative arrangements.[5] Governments wishing to promote cultural (and linguistic) diversity are therefore more fruitfully engaged in positively encouraging the promotion of these new multimedia services than in attempting to restrict market access. Domestic frameworks which facilitate the development of multi-channel and multi-platform broadcasting through guaranteeing access to service providers representing a variety of social, economic and political interests can in turn provide a potentially powerful platform for the development of international services. A need for mandatory access should only exist, however, where there is a problem of market failure (e.g. a technological bottleneck).

The convergence of digitised content production and distribution processes can, however, blur traditional distinctions between the cultural and commercial inputs established in traditional information and entertainment goods and services. But this possibility can be used commercially to promote cultural potential. Many countries are in fact realising that the economic value of cultural forms of intellectual content is potentially enhanced by the growth of a GII/GIS. The great art collections and cultural artefacts which exist in and form the historical heritage of different countries around the world could give shape to -- and can be transformed by -- new digital products and services in ways which may alter the relative shares of countries in global content markets. But this can only happen if governments consciously ensure domestic and international policy frameworks, which promote open access for various types of services within the context of growing global, content markets.

2.2.2 Foreign ownership and imports

A contradiction potentially exists between the view of the GII as a means of promoting economic growth and job creation in domestic content production and export, and traditional attempts to conserve and promote domestic content through restrictions on the entry of foreign content into domestic markets. The traditional means for restricting foreign access to domestic markets -- quotas on broadcasting of foreign-produced content, or limits on foreign ownership of broadcasting entities -- can be hard to attain even for traditional broadcast media. The development of multi-channel transmission and the subsequent dedication of individual channels to particular “thematic” (in contrast to general) programming, makes such quotas increasingly difficult to maintain across the board in each programme category. As multi-channel and multi-platform delivery of content grows, broadcasters are having to focus on the social and cultural tastes of more targeted groups of consumers. This phenomenon in information and entertainment services reflects a more fundamental shift in OECD countries, based on the relative decline of mass production based on economies of scale, and the associated rise of opportunities for batch-production based on economies of scope. Within this context, there is an increased need for domestic producers to link with foreign groups in order to gain access to specialised forms of expertise in capital, marketing and content-creation, and to maximise the returns on international markets when national markets are still small and immature.[6]

Joint ventures and co-productions are becoming a means by which content providers are gaining entry into markets and expertise previously dominated either by national producers or by foreign imports. Joint ventures in European film production, for instance, are growing significantly.[7] Such arrangements are also occurring in multi-channel digital TV broadcasting and the subsequent need for more differentiated service content. In Japan, for instance, Mitsui & Co. plans to air the German company Bertelsmann's TV programmes on PerfecTV, Japan's first 70 channel digital satellite broadcaster in exchange for a 35% stake in Bertelsmann T1-New Media GmbH. T1 was formed in 1993 as a content producer for interactive media, such as CD-ROMs and on-line products.[8] In addition, Bertelsmann will sell 35% of a software development arm to Mitsui for the development of computer game software for sale in Japan and Europe.[9] Rupert Murdoch’s News Corp. was the first foreign media company to take a large stake in a Japanese broadcaster when it set up a joint venture with Softbank, the country’s largest PC wholesaler, to buy a 21.4% stake in TV Asahi. JSkyB and PerfecTV have now merged. Like a number of other countries, Japanese law has traditionally prohibited foreigners from owning more than 20% of a broadcaster.

The challenges, which such developments pose for Member, countries’ traditional policy frameworks will be heightened even more by the interactivity and internationalisation of production and delivery offered by Internet-based broadcast services. According to the U.S. research firm, The Yankee Group, Internet broadcasting will be worth $5.7 billion in revenues by the year 2000, compared to about $10 million in revenues a year at present.[10] Within this context, OECD governments have begun to recognise the negative effects on domestic market development of restrictive measures on foreign ownership and have started to remove or modify them. Canada, for instance, has raised the maximum allowable foreign owned voting shares in a Canadian broadcasting or cable TV company from 20% to 33%.[11] The interactive and international means by which content creation, packaging and delivery occurs with new Internet-based services suggests that even halfway measures are relatively ineffective.[12] Policy frameworks which take into account the blurring of distinctions among consuming, producing and advertising activities (discussed in Section 2.4 below) will also be required even more by the increased capabilities for international production and delivery of content allowed by the interactive technologies of the Internet.

2.2.3 Cross-media ownership and vertical integration

A related question governments have been addressing is whether cross-media ownership restrictions may be a barrier to the development of new services incorporating content from different media, and whether and/or to what extent vertical integration may slow down or speed up service development. Vertical integration and cross-media ownership can be a means by which distributors guarantee access to content resources and exhibition facilities, but may not in themselves stimulate content production, and in fact can have the opposite effect. Concentration may deter content production and innovation if large distribution companies or publishers can monopolise content resources and see little profitable demand for product development.

This issue is to a certain extent a question of scale. Large companies may not consider product development worthwhile until markets of sufficient size have developed, while SMEs may develop products for niche markets because they are satisfied with smaller returns (though they may also be faced with greater costs of capital). Within the new digital environment, the rate of return from economies of scope may produce greater aggregate wealth generation than economies of scale, given the sizeable expenses (and heavy losses) involved in large-scale audio-visual production. Even where small companies exist on the content producing side, however, their growth could be stunted by the prevailing vertical integration of larger companies if those companies exercise market power to limit the ability of SMEs to exhibit their product on larger companies distribution networks. Should this happen, some governments may wish to adopt regulations to guarantee SMEs access to these distribution networks. On the other hand, one of the benefits of digital technologies in general is their ability to reduce corporate overheads and tie together more efficiently production and distribution systems.

The correct response to this dilemma is to maintain a balance between competitive markets and the growth of SMEs on the one hand, and efficient and highly competitive large enterprises on the other. The key questions which policymakers need to address in trying to strike this balance are the degree to which (1) competition can exist for the same product within different delivery media such as cinema, satellite, cable and terrestrial over-the-air TV, and the Internet; (2) the degree to which competition can exist for delivery of the same product between different media.[13] Eventually, competition will exist for the provision of services' content irrespective of the technological delivery platform, but regulatory frameworks need to take account of the process of transition. To the extent that competition exists within and between different levels of the production and distribution chain, there seems little need for regulatory constraints on vertical integration amongst companies. To the extent that competition is limited at various points along the chain, regulatory measures may be needed to increase possibilities for market access and substitution. These questions apply to international as well as national markets.

This balanced but flexible approach fits with the developing nature of audio-visual markets. Traditionally, market domination of audio-visual markets has been based on blockbusters which could reap large returns and economies of scale, as capital and labour costs have been high. This is changing as digital technologies bring down the costs of producing many (though not all) types of audio-visual service. Nevertheless, an important aspect of present technological innovations in blockbusters is their function as an investment pole and test-bed for advanced digital technologies with much wider applications within economies in general.[14] In turn, as delivery systems increase bandwidth, companies, which have developed advanced digital audio-visual technologies for the film industry, may be able to identify new, more popular services in which they will then have a technological advantage.

In this wider sense, blockbusters remain necessary -- as smaller projects cannot by themselves draw the same scale of risk capital. OECD countries therefore cannot rely upon SMEs alone to perform this technological function. Nevertheless, the large Hollywood studios generally outsource special effects work, or form close partnerships with the SMEs involved. In order for the process of technological spin-off to occur, close networking of computer firms and film producers is necessary. The development of "Silicon Valley" IT start-up companies has been characterised by close networks of venture capitalists, lawyers and others with a deep and close understanding of sectoral developments who can provide a "peer-review" for product development and commercial strategy.[15] In addressing the question of vertical integration and cross-media ownership, governments need to take into account the desirability of fostering such layered networks, while at the same time ensuring that they remain open and dynamic to new players. As the Internet develops, this inter-networking as well as the question of its openness, should become a more international phenomenon - as it has been with the development of outsourcing in other industries.

2.3 Intellectual Property Rights (IPRs)

The rate and development of new services will to a large extent be affected by the technological capabilities of companies producing and distributing different media content, including their ability to produce, keep and gain access to intellectual property. There can be no increased trade in services until the content of those services is defined as a tradable good; intellectual property rights, which grant certain monopoly privileges to individual suppliers, do this through commercially-oriented principles for "intangible, corporeal" content.[16] The regulatory regimes for intellectual property rights adopted by governments will be important in shaping the nature and distribution of technological capabilities and in determining the rate of growth of global markets for network-based services.

In effect, IPRs allow economic actors to form licensing agreements of one kind or another in order to produce goods and services. The economic rationale for such rights is that they encourage investment in creative activities and prevent piracy of ideas. IPR protection represents a trade-off between restricting output of certain creative products for a limited period of time and stimulating investment that will increase the production of intellectual property over time.

The key issue in relation to the role of IPRs in the transition to a digital environment is their definition of different forms of content, and the regulatory framework, which applies through licensing arrangements to their diffusion throughout the broader economy. While the cost of production and reproduction of digital services is increasingly low, the costs of research and development for these products are often increasing. Traditionally, this process would be covered either by patents (which cover original invention of practical content, and which have to be registered) or copyrights (which cover originality of "artistic or literary" publication, performance or broadcast of content, which exist from the moment a work is created and which do not require registration).[17] However, in regard to digital works where content is produced, distributed and consumed in an interactive and networked environment, such clear-cut distinctions are becoming increasingly difficult to make. This increasing ambiguity may involve companies in complex and expensive legal disputes, thus potentially threatening the rapid and optimum development of new services.

Such issues are of vital importance for the future growth of new services within the GII/GIS. Of immediate concern for media and computer companies is the piracy of audio-visual and software content, which is widespread in some countries, and which amounts to billions of dollars a year. The industry is working on technological means to prevent such piracy, and electronic signatures and watermarking are two areas of development. But the issue is particularly tricky in regard to international trade in digitised Internet-based services, as rights for different contents may differ between countries. Because Internet-based services enable world-wide access to, creative interaction with, and delivery of content for new multimedia services this is a problem which will become more pressing as technologies develop in sophistication. As a result, the World Intellectual Property Organisation (WIPO), a specialised agency of the United Nations, has become an increasing centre of activity in these issues. In December 1996, after five years of negotiation, agreement was reached at WIPO on two new treaties clarifying standards for global protection of intellectual property rights in literary and artistic works, including the rights of performers and producers of phonograms, particularly in the digital networked environment.

2.4 Finance and Investment

Network-based delivery of content offers OECD countries the opportunity to develop a whole range of new content-creating activities. This opportunity will only be realised, though, if governments enable the private sector to take advantage of the greater commercial and artistic capabilities of interactive and multimedia production and delivery by facilitating new forms of market supply and demand, in addition to the specifically domestic content-creation measures of the past. This would mean, for instance, relaxing existing restrictions on advertising in order to allow the development of new services such as home- and on-line shopping, as well as ones in which advertising and information/entertainment content is more amorphously mixed.

As discussed in Section 4 below, governments have devised a range of positive public support programmes for content creation for international markets. While respecting specific social and cultural values, such measures need to be comprehensively placed within a straightforward and transparent framework of institutional procedures and practices. Agreement on the outlines of an international framework for content promotion may also be necessary if such measures are not to result in anti-competitive practices and trade friction. While it is premature to say in any detail of what such a framework would consist, it is possible to outline the regulatory arrangements and various public support programmes which OECD governments have either put in place for content promotion or are currently discussing for network-based content production and delivery.

3. REGULATORY INSTITUTIONS AND PROCEDURES

3.1 Introduction

Policy frameworks will only result in general and balanced market development if the structure of regulatory institutions and procedures takes account of both the evolution of particular product markets and general economic conditions and social interests at national and international levels. Because of the rapid pace and widespread impact of current technological and commercial developments in content production and delivery, regulators need to be able to provide a framework in which a reasonable balance is achieved between the rate at which capital and human investments in existing product markets are amortised and general demand and supply for new services developed. This can only be achieved through decision-making processes, which are widely viewed as open, transparent and non-discriminatory.

3.2 Institutional frameworks

OECD governments have in the past sought to achieve consensus on audio-visual policies through a range of independent or semi-independent institutions, which, while having a broad political mandate, regulate markets free from day-to-day political influence.[18] These institutions exist side-by-side with government policy-making departments.[19] The rapid and widespread technological and commercial pace of developments in digital content production and delivery means that decision making processes need to be open, transparent and non-discriminatory, and some rationalisation of institutional authorities may be needed to more effectively achieve this within the new services environment.

With the increased number and variety of network-based services, competition policy also needs to play a much greater role in the regulation of audio-visual content. In a number of OECD countries, constitutional constraints may qualify the degree to which competition policy can be applied to content issues, for instance, in the guarantees for free speech in the U.S. Constitution in relation to intellectual property issues, and in public broadcasting in European Union countries guaranteed under the Amsterdam Treaty. However, the evolutionary nature of convergence also means that competition policy needs to be applied with a more constant and detailed attention to market, sectoral, product and technological evolution than traditional anti-trust authorities have tended to adopt in the past.[20] With a more constant attention to market development, competition and public good concerns can be more consistently addressed by regulatory institutions and applied in licensing arrangements and commercial codes of practice in relation to sector-specific and overall market conditions than in more ad hoc arrangements. In a number of OECD countries, existing regulatory institutions and procedures could perhaps be simply modified to perform this function.

3.4 Licensing arrangements

Governments have traditionally used the licensing of broadcasting facilities to ensure the implementation of policy goals in respect to foreign and domestic content carriage. The restricted electromagnetic spectrum available for analogue transmission provided a technological rationale for the regulatory procedures, which underpinned these policy goals; licensing of film distribution via cinema networks has also been used for similar purposes in some countries. However, with the greater number of channels available for broadcasting which digital terrestrial over-the-air, satellite and cable technologies allow, a restrictive approach becomes increasingly difficult to maintain or justify on grounds of economic efficiency or social equity.

The extra broadcasting capacity made available by the greater efficiencies of digital transmission presents governments with the question of how to allocate spectrum to free over-the-air broadcasters vis-à-vis pay services. Tied to this is another question of which system of allocation (say, auctioning versus giving away spectrum) will stimulate service development and be most equitable.[21] One way of dealing with this is to attach "must-carry" conditions or other minimum service requirements to licenses, though this can increase the regulatory burden on companies. Another way of dealing with the issue is through establishing a differentiated licensing system, made up of a mix of class and specific licenses (with only the former facing "must carry" conditions but being offered spectrum at lower cost than the latter), similar to the manner in which the issue has been dealt with in telecommunications in a number of OECD countries.

Even more profound questions arise as regards the growth of Internet broadcasting. This both allows national broadcasters, who have traditionally been confined to a geographical area, to broadcast internationally, and allows foreign-based broadcasters to enter domestic markets. How will national regulators handle this incoming content if it is un-licensed? Will the requirement for nationally based broadcasters to have licenses discriminate against them if Internet-based broadcasters are not required to have licenses? And if governments do want to require Internet broadcasters to have licenses in order to operate, who are they going to require this of -- entities based in other countries (and if so how will this be achieved?), or ISPs in their own country who provide the content broadcaster with network access? Increasingly, as spectrum becomes more available and services more varied, governments' ability to determine license conditions on a national basis will decline. Instead, they will be moved towards making and negotiating commercial codes of practice - and ultimately this will require efforts at international co-ordination.

3.5 Commercial codes of practice

Governments can regulate content markets through measures, which establish certain product standards; these collectively represent commercial codes of practice for companies producing and offering content. While such codes are vital for companies to determine what service standards need to be achieved in different markets, digital technologies in some instances challenge the traditional forms by which the value and goals contained in such measures are realised and maintained. For example, the international production and distribution of audio-visual services containing advertising or pornography on the Internet can undermine traditional national standards concerning these in audio-visual broadcasts. On the other hand, digital technologies also provide the means by which many new and positive services can be created which support the positive social values which traditional measures aim to enshrine.

The traditional means by which governments have attempted to regulate controversial content are being challenged by digital means of production and distribution. Such traditional means have usually been defined in relation to *broadcast* services, as the individual consumption of offensive material has usually been considered a private right (subject to certain limits, usually to do with child pornography and bestiality). The digital production and delivery of content has altered this relatively straightforward distinction, either by allowing increasingly targeted and closed delivery of content ("narrowcasting" to "closed user groups"), which undermines the general concept of broadcasting, or through the Internet making access easier to material which is international, interactive and indirect.

Governments are considering various approaches to dealing with this phenomenon. The U.S. administration at present prefers a voluntary approach, in which individuals choose their own censoring devices or proxies (e.g. church groups), and with content providers rather than content programmers or deliverers deciding their own classification systems. Some European governments have called for a more definitive role for government in deciding what is appropriate material - and this is being pursued by the European Commission.[22] The Australian Broadcasting Authority (ABA), which has to date done what is perhaps the most extensive report on the issue, has advocated a system, which takes elements of both approaches. Under the ABA's proposal, government will leave it to industry to define a standards classification system, but has devised a checklist of items it believes need to be covered by such a system (including a process for informing and removing offensive providers of content) which will be used to provide or withhold official sanction of industry-defined systems. Individual providers of services are free not to adopt this system, but will receive less legal security from prosecution than officially sanctioned providers. The United Kingdom has taken a path somewhere in between the U.S. and Australian systems, with industry being left to define standards, with no official sanctioning but the implicit threat that unless the private sector acts the police will intervene.

Within the bounds of what is officially sanctioned, the key issue has become that of defining a rating system. In the United States, an industry working group has proposed an age-based rating system along the lines of cinema classifications. Canada has decided upon a content-based rating system. In Japan, MITI is paying up to 200 million yen to subsidise an experimental project which will rate the content of each home page by the degree of violence, lewdness or illicitness of the information offered. The system is being developed by an industry association of about 100 computer makers and network operators.[23] MPT has also been conducting research and development of content filtering technology in co-operation with Yokohama City since 1997, the purpose of which is to demonstrate the effectiveness of the filtering software that blocks access to illegal and/or harmful content. In the project, parents, teachers and experts of education and info-communications in selected model areas, with due consideration to the right of children to know, establish rating standards, and develop model systems by promoting pilot filtering experiments. In its application, it will become necessary for each community to introduce specific variations of the model system on a selective basis, taking into account the historical and cultural background of each community.

Another set of measures relate to advertising. A number of countries restrict the amount of advertising which may be broadcast, either in terms of quality (e.g. no advertising of certain goods during children-viewing time) or quantity (e.g. no more than a certain amount of advertising during the broadcast of a film or over a period of 24 hours). With the development of services -- particularly over the Internet -- which combine elements of advertising or promotional content with information and entertainment content, these measures become increasingly difficult to maintain in their present form.

Discussion of commercial codes of practice which are applicable internationally is problematic, given the wide cultural differences which exist over what is acceptable, and the need for the private sector to lead the development of services for the GII. However, there are indications of interest in *some* common standards being agreed upon by governments and the private sector, if only to establish clear trading conditions. The clear goal must be to support the rapid and easy growth of firms developing on-line services within a reasonably comprehensive framework of commercial standards for decency, advertising, IPRs, etc., defined in a straightforward and transparent manner. As interactivity in network media grows, and as content becomes increasingly focused on specific customer markets, however, discussions over commercial codes of practice in controversial content will become ever more related to questions concerning the reform of specific markets on the demand side. (The development of commercial network-based multimedia edu-tainment services would be one example where this might occur.) Within this context, OECD governments will need to work closely with industry to identify the barriers (potential and actual) presented to international growth by commercial codes of practice, and to identify possible solutions in co-operation with the private sector.

4. PUBLIC SUPPORT PROGRAMMES

4.1 Introduction

As we have seen, a large number of institutions exist for the promotion of domestic content within OECD countries. In particular, national public broadcasters have often been dedicated to promoting and carrying a certain quantity of domestically produced audio-visual content, while direct grants, tax write-offs and low-interest loans are also provided for film production, and (in some countries) the development of special (and in particular digital) effects. On the other hand, many countries also have a range of measures (for instance, advertising controls) which in effect restrict the development of content markets in one way or another. In contrast to traditional media, however, the digital technologies underlying the emerging GII/GIS vastly expand the number of channels available for the delivery of services, provide possibilities for the consumption of rich interactive and multimedia forms of content, and enable the globalisation of production and delivery. These developments challenge the effectiveness of national public support programmes and the efficacy of restrictive measures on both the demand and supply sides.

The impact of digital network-based forms of production and delivery on government attempts to stimulate domestic content production through specific forms of sponsorship and restriction of access to domestic markets by foreign producers needs to be considered within a broad perspective. Governments use a range of programmes to support the financing of domestic audio-visual production. Increasingly, such forms of assistance are seen as replacing more restrictive public support programmes such as broadcasting quotas which aim to keep foreign content out. But the plethora of programmes employed by different government agencies at local as well as national levels -- and in the European Union at regional, national and local levels -- means it is difficult to make direct cross-country comparisons of actual spending. However, as the following outline of various country programmes shows, there is no real “level playing field” for the development of international content markets in network-based services.

4.2 National programmes

OECD governments are increasingly relying upon policies aimed at indirectly stimulating domestic content creation through tax breaks or increased contributions from the private sector or non-profit organisations, rather than direct funding measures. This is sometimes a matter of historical tradition (as with public broadcasting in the United States), partly the result of increasing pressures to reduce government spending and budget deficits and partly the product of a growing realisation that direct funding is less effective than indirect support. Governments employ a range of means for financing domestic film production.[24]

4.2.1 Australia[25]

According to the Australian Bureau of Statistics there were 1 179 businesses producing film and videos in Australia in 1993/94 – 58% of these were based in New South Wales (NSW) and 28% in Victoria. All production companies operating outside the television networks are described in Australia as independent production companies. The leading independent film and television production companies in Australia do not dominate the industry on anything like the scale of the US majors. Australian independent companies raise funding with outside investors on a project by project basis and similarly, production crew are engaged on a project by project basis. Some production companies combine regular television production with occasional “one- off” productions.

Table 1 provides details of government film expenditure in Australia. In 1967 the Australia Council for the Arts (now the Australia Council) was established. Although primarily focusing on opera, drama and ballet, it was also required to advise the government on grants for filmmaking for television production. In 1969 the Australia Council for the Arts announced a plan to secure a film and television industry which advised the establishment of:

- a national film and television school;
- a film and television fund;
- an overseas film and television marketing board; and
- an experimental fund for low budget productions, with a television outlet for experimental films and programmes.

The government accepted these recommendations and in 1970 the federally funded Australian Film Development Corporation (AFDC) was established. In 1975 the AFDC was re-established with broader powers to become the Australian Film Commission (AFC), administering government funds to assist the development of both feature and non-feature films and film-related organisations.

Between 1972 and 1978, state funded government film agencies were also established in every state, providing a larger base for both finance and production. With the exception of Tasmania these agencies continue to function. And in addition to the existing Swinburne Film and Television School (now VCA School of Film and Television) in Melbourne, the Australian Film and Television School was established in Sydney in 1973, later to include radio training and renamed the Australian Film, Television and Radio School (AFTRS) in 1984.

In 1981 the Commonwealth government provided further assistance to the film industry through a tax incentive scheme commonly known as 10BA (Division 10BA of the Income Tax Assessment Act). The scheme, designed to attract greater private investment in film and certain types of television programmes, allowed investors to claim a A$ 150 deduction for every A$ 100 spent on eligible production costs. In addition, every $ 50 earned on the investment was exempt from tax. Under these concessions producers financed more than 900 projects in eight years leading to the boom in film production which saw a virtual cottage industry grow into a production industry employing some 6 000 full-time workers at its peak.

The AFC and the State film agencies were key players in the film industry in the 1970s, investing in 90% of films made and contributing 60% of the funds. With the advent of 10BA tax concessions, their role changed as the finance raised under 10BA between 1980 and 1988 dwarfed those available through the agencies. But demand for investments in "non-deductibles" (the component of budgets ineligible for 10BA deductions) meant the participation of the AFC and Sate film agencies was nevertheless often critical to a film going ahead. But concern about the burgeoning cost to government of the 10BA scheme, and its effectiveness as an industry assistance mechanism, led to concessions being progressively reduced in 1984 from 150-50 to 133-33 and then to 120-20.

In 1988 the Australian Film Finance Corporation (FFC) was established as the Commonwealth Government's principal mechanism for financing Australian features, mini-series, telemovies and documentaries and division 10BA was reduced to providing a 100% deduction for eligible production expenses. The level of funding provided for the FFC has supported a lower level of production activity than under the 10BA scheme. In addition, a crisis at the commercial television networks from servicing high interest payments on debt and the depth of the 1980s recession both in Australia and overseas also contributed to a reduction in production levels. In the period 1988/89 - 1994/95 Australia produced an average of 26 features, 12 mini-series, 9 telemovies and 14 series or serials per year.

4.2.2 Canada

The Canadian film and video production sector is characterised by a large number of relatively small companies. In 1991-92, of 722 companies, 4% earned revenues of at least C$ 5 million, amounting to 51% of industry revenues.[26] The number of film and video distributors has been growing, however, particularly amongst Canadian controlled groups. Tables 2 and 3 provide figures for producers and distributors in Canada.

In order to stimulate domestic content production, the government established the Canadian Film Development Corporation in March, 1967. The Corporation, publicly known as Telefilm Canada, is responsible for fostering the growth and development of the private sector of the Canadian film, television and video industry. Through Telefilm Canada, the Government of Canada provides support, as a partner, to the private sector for the production of film and broadcast material, at all stages from screenplay development to final production and beyond to the distribution and marketing of the finished product in Canada and abroad.

The Corporation has established two major production funds. The first fund is the Feature Film Fund (C$ 24 million) can provide funding for up to 49% of a project's production budget, though it will not normally invest more than $ 1.5 million. The second fund is the Canadian Broadcast Programme Development Fund, with an annual budget of $ 64 million in 1995-96 for independent television producers, finances up to one-third of a production budget of a dramatic, documentary, children's or variety TV programme (though in cases of very high Canadian content its participation may increase to 40% and in exceptional cases to 49%). The Corporation also has a Feature Film Distribution Fund ($12.4 million), a pilot project to support feature films with production budgets of less than $ 1 million without a prior commitment from a Canadian distributor; the Interim Financing Fund ($ 8 million) for ad hoc purposes; the Production Marketing Assistance Fund ($ 2.8 million); the Loan Guarantee Programme, guaranteeing up to 85% of loans not exceeding $ 1 million per project (and not exceeding $ 25 million in outstanding guarantees at any one time); and the Commercial Production Fund ($ 9 million), up to $ 1.5 million, not exceeding one third of the budget and with at least 65% of the loan guaranteed.

The National Film Board of Canada (founded in 1939) also has an annual $4 million programme to co-produce "culturally relevant" films (and in particular documentaries, animation and full-length features) with independent producers. In addition, the Canadian Production Fund, which receives contributions from cable TV companies, is expected to generate $ 300 million over five years to support independent producers and production companies affiliated with private broadcasters. Individual provinces have also established various support programmes. For all these programmes, there are major requirements concerning Canadian ownership, personnel and content.

The music recording broadcasting industry is also considered to be important by Canada. In the 1991 census, 14 525 Canadians were reported as being employed in music or music-related occupations. The sound recording industry (including wholesalers and retailers) has been growing rapidly over the past few years, with revenues increasing 41% to $ 861 million between 1993-94. In 1994, there were 484 operating private radio stations in the country, with revenues of $ 766 million, up 3% from the year before but down from the high of $ 780 million in 1990. Almost 97% of revenues came from the sale of airtime, though in 1994 private radio stations recorded the fifth yearly aggregate loss at $ 28 million. The public broadcaster, the Canadian Broadcasting Corporation, received federal support of $ 1.1 billion in 1994, in addition to operating revenues of $ 350 million ($ 292 million of which came from sales of air time). As with private broadcasters, costs have been growing faster than operating revenues and government funding.[27]

The Canadian Radio-television and Telecommunications Commission (CRTC) regulates radio broadcasting, and has in place a number of policies for promoting Canadian music, including quotas on broadcast airtime. In addition to the funding for the CBC, the government spent $ 5.5 million supporting the sound recording industry in 1994.[28] Licensees of private radio stations are asked to make annual financial commitments to Canadian talent development as part of their licence renewal applications. Included in the CRTC's Canadian talent development approach are guarantees from private broadcasters to provide money to non-profit music development organisations such as FACTOR in Toronto and MusicAction in Montreal, which provide assistance to the Canadian independent recording industry. The Federal Minister for Canadian Heritage has asked the CRTC to reconsider whether radio licensees should give similar treatment to FACTOR and MusicAction.[29]

4.2.3 European Union

The European market has been among the fastest growing in the world with a current market growth rate of 6% a year in real terms, that is being sustained even in today's low growth climate. The US has benefited most from growth in Europe, increasing its sales of programming in Europe from US$ 330 million in 1984 to US$ 3.6 billion in 1992. In 1991, 77% of American exports of audio-visual programmes went to Europe, of which nearly 60% to the EC, this being the second largest US industrial sector in export terms, while the European Union's annual deficit with the US in audio-visual trade amounts to about US$ 3.5 billion. Some impressive growth figures from recent studies suggest that by the end of the century the demand for audio-visual products will double in Europe, expenditure on both audio-visual hardware and software growing from ECU 23 to ECU 45 billion.[30]

The MEDIA II Programme, adopted for a period of five years (1996-2000), aims at promoting and developing the European audio-visual programme industry. The financial resources available for the programme amount to ECU 310 million: 45 ECU million to support training initiatives; 265 ECU million to support development of projects and companies as well as distribution. Financial support granted to companies takes the form of loans or subsidies up to a maximum of 50% of the costs of operations, although support given to training initiatives will in certain cases cover as much as 75% of costs and will in all circumstances take the form of non-repayable grants. It focuses on three priority areas grouping about 20 action lines:

Support in the field of project *development* is directed primarily at film and television drama, documentaries and animation. Producers and creators of works with commercial potential on the European market are eligible for financial and technical assistance for scriptwriting, for putting together the financial package and producing the business plan. One of the programme's prime objectives is to encourage the emergence of big-budget European productions capable of winning back market share for European films and so producing a knock-on effect for the kind of productions that -- while possibly less ambitious -- go to make up the characteristic diversity of European cinema.

Production companies are also being encouraged to improve their organisational structure, to develop medium-term production plans and to seek European partners to set up new networks. This approach is particularly relevant to companies in the new technology sectors (computer graphics, special effects, multimedia), animation and audio-visual archives, which are urged to co-ordinate their efforts under the umbrella of a common sectoral development plan.

In the priority area of *distribution* (cinema, video, television), MEDIA II aims to encourage distributors to invest in the production of promising films to add to their catalogues and to enhance their chances of world-wide distribution by increasing the number of copies available and the amount spent on promotion. One of the best ways of doing this is to build strong and lasting links between distributors and to encourage multilingualism by means of dubbing and subtitling. Incentives are also being offered for the creation of networks of commercial cinemas with a policy of showing mainly European films.

MEDIA II is focusing its effort in the television sector on independent production companies. These are capable of producing high-quality works which can be shown outside their country of origin, provided they are backed from the outset by the various national television channels in Europe. Loans will be available for co-productions bringing together independent production companies and broadcasters who agree to show their programmes in their particular area. A series of other services and measures are being introduced to promote independent productions and improve their access to the market, mainly through film and television markets, fairs and festivals.

To help professionals adapt to the demands of a European market, the MEDIA II *training* programme will support initiatives to improve skills in the economic and commercial management of audio-visual projects and companies, including the legal aspects. The development of course modules on screenplay techniques and the use of new technologies is also being encouraged, to help creative artists produce programmes of high artistic and commercial quality. Finally, the programme will support co-operation and exchanges of know-how between training institutions, professionals and of course companies themselves.

Assistance under the MEDIA II programme is mostly given in the form of advances on earnings and repayable loans, but subsidies are awarded for multilingualism and training. Special attention will be paid to the specific needs of countries with only a small production capacity and/or a limited language audience and to the development of SMEs. These measures will complement regional and national initiatives by the Member States. Tables 4-7 give an overview of national support policies for audio-visual production in Europe.

Another programme is EURIMAGES, run by the European Commission on behalf of the Council of Europe. EURIMAGES provides production finance for European co-productions. It has a complicated funding mechanism, but can provide between 10-12% of the production budget of qualifying films. Eurimages supports 16 European co-production projects. At its 42nd meeting, in April 1996, the board of management of Eurimages agreed to support 12 feature films and four documentaries at a total amount of FFr26.17 million. A number of regional support programmes also exist amongst Nordic countries.

The economics of traditional film making creates a problem in replacing government with private financing, as institutional investors look for high rates of return to compensate for the uncertainties of the business. New forms of finance are being developed in the development of new, network-based multimedia services, however, including quasi-public, joint public/private sector and private co-production ventures. One example is Multimedia Investissements, a group that unites 24 major European groups involved in multimedia and new audio-visual technologies. A limited joint-stock company set up under French law, the group brings together the BBC, Virgin Interactive, Bertelsmann, the Kirch Gruppe, Canal+, Compagnie Générale d'Images, Havas, France Télévision, Thomson Multimédia, CLT, Nethold, the Belgian LBO, the Greek Megachannel, the Dutch Teleac, NOB and Philips, Spanish Prisa, Italian RAI and RCS, the Irish RTE, the Finnish Sanoma, the Norwegian Schibsted, and the Swedish Kinnevik and TV4. The group aims to contribute to developing the European multimedia programmes industry through co-production of content-based works between big companies and SMEs using new technologies: "off-line": CD ROM, DVD; "on-line" (WEB sites, Internet, interactive television and all types of satellite, telephone network, cable networks); and cinema and video productions using non-standardised new technologies. Around 15 investment funds are being created to finance at least 50% and up to 70% of selected projects. Financial partnerships will be required to provide a return on investments in order to guarantee real follow-up of project development and distribution during the whole of the project's commercial life span. Commitments this year involve an investment of 10 million ECUs. Three million ECUs are being invested by the European Commission and the remainder by industrial partners together with smaller publishers.

Establishment of the EASDAQ, which it is hoped will match the NASDAQ in North America, should also help high-technology companies in Europe raise development capital in a more conventional manner.

4.2.4 United States

Audio-visual production in the United States has in the past been dominated by the Hollywood studios and their integrated cinema distribution networks. While the biggest studios still have relatively high shares of film and television programme production, these shares and rankings can be quite volatile from year to year. Moreover, the broadcast networks are playing an increasing role in producing, either on their own or via joint ventures, television programming and many cable networks also contract for original programming. In addition, a large number of audio-visual producers independent of the Hollywood studios do exist. As in other countries, the exact number varies from year to year, but over 1 600 production companies, studios and networks are currently listed in the Hollywood Creative Directory, a standard industry reference guide.

With respect to distribution, in the case of broadcast television, FCC ownership regulations currently prohibit ownership of more than one television station per local market, but there are several large national station groups (see Table 9). The multi-channel video programming delivery (MVPD) sector remains concentrated, with cable accounting for 87% of multi-channel households nationally.[31] Very few areas are served by more than one cable system. Satellite television is widely available but accounts for a small share of multi-channel household subscribers. At the national level, cable television ownership is moderately concentrated, with ownership concentration having increased over the past few years (see Tables 10 and 11). There is an ongoing debate in the United States about how much actual competition as opposed to potential competition there is for cable, especially from satellite services.

Nowhere near the same degree of public support for domestic content production exists in the United States as in other OECD countries. Nevertheless, individual states provide a range of incentives to attract production, and federal funds were distributed for film and video art productions by the National Endowment for the Arts (total spending on film and video was $ 900 000 in 1995)[32] while significant funds were distributed through the Corporation for Public Broadcasting (CPB), an independent private non-profit corporation whose main job is to distribute federal funding to public television and radio stations. CPB also provides support for national television and radio programming, but is not a producer. CPB is the only public broadcasting organisation that receives a direct federal appropriation. In 1995, federal funding for the CPB amounted to $ 292.6 million. However, this figure represents only around one fifth or less of the funds received by public broadcasters, as a range of state, local, educational, business and subscribers contributions are also made to the budget.[33] In order to place this figure in perspective, Table 12 provides figures for government spending on broadcasting in a number of OECD countries.

5. CONCLUSIONS

OECD countries are moving towards establishing policy frameworks, regulatory arrangements and public support measures which promote the market-oriented development of content for network based information and entertainment services. But the sheer variety of agencies regulating and providing direct support for domestic content production, the continued restrictions on foreign content and media ownership, plus structural rigidities in the chain of production and supply mean that a "level playing field" in and expansion of international markets for content remain elusive. The paper suggests the following questions could be useful areas for further research and analysis:

- How can traditional broadcasting frameworks be modified for new network-based multi-media content through the application of principles which have been developed for data transmission and telephony markets over the past decade? In particular, how can principles of open access to essential resources to ensure non-discrimination, innovation and competition be usefully applied to traditional broadcasting concerns in regard to ensuring pluralism in ownership, cultural creativity and diversity? What are the essential elements of overall policy frameworks needed for the migration to a fully digital environment, covering enhanced audio-visual services (such as near or full video-on-demand) as well as new multimedia and interactive services such as home shopping, games and social services?

- How can greater legislative distinctions be made between services in respect to cultural vis-à-vis economic goals, and clearer regulatory distinctions made between cultural and commercial services? In what ways can these distinctions be reflected in licensing arrangements?

- In what ways can governments support links between domestic producers and foreign groups in order to increase access to specialised forms of expertise in capital, marketing and content-creation, and to maximise the returns on international markets when national markets are still small and immature?

- In what ways can policies for content promotion support on-line content creation by SMEs, as well as increasing electronic links between SMEs and between SMEs and large enterprises without protecting vertical integration and cross-media ownership which is premature to market development and harmful to competitive product development? In particular, what steps do governments need to take to ensure that vertical integration between content producers and distributors does not lead to effective closure of content resources and distribution systems to potentially new and innovative suppliers?

- What are the measures which governments can take to clarify the ownership, registration and licensing of intellectual property rights in a global information society, and in what ways can such measures encourage the production and distribution of valuable content and promote economic growth?

– What new forms of market supply and demand can governments stimulate in order to allow the private sector to take advantage of the greater commercial and artistic capabilities of interactive and multimedia production and delivery, in addition to the specifically domestic content-creation measures of the past? In what ways, for instance, can existing restrictions on advertising be modified in order to allow the development of new services such as on-line home-shopping and education?

– In what ways do decision-making processes need to be made more open, transparent and non-discriminatory, and what restructuring of institutional authorities is needed to achieve this?

– In what ways can competition policy play a greater role in the regulation of audio-visual content? Specifically, how can competition policy be applied with a more constant and detailed attention to market, sectoral, product and technological evolution? What would be the elements of an international framework agreement, which could ensure that programmes for the promotion of domestic content production do not to result in anti-competitive practices and trade frictions?

Table 1. Australian Federal Government film industry expenditure

Year	Australian Film Commission	Film Australia	Australian Film, TV and Radio School	Australian Children's TV Foundation	National Film and Sound Archive	Australian Film Finance Corporation	Total
	A$M	A$M	A$M	A$M	A$M	A$M	
94-95	18.7	6.4	10.7	2.1	9.1	54.0	101.0
93-94	17.9	6.5	10.5	2.0	9.1	57.0	103.1
92-93	17.0	5.9	10.7	1.2	8.3	61.9	105.0
91-92	16.6	6.8	10.3	1.2	8.2	68.0	111.1
90-91	16.1	5.6	16.6	1.2	9.3	66.0	114.8
89-90	16.1	5.9	9.0	0.6	8.6	54.8	95.0
88-89	15.5	15.9	10.7	0.6	7.6	70.0	120.3
87-88	20.6		23.0	0.5	4.5		48.6
86-87	21.1		16.4	0.5	4.2		42.2
85-86	20.2		8.7	0.5	3.4		32.8

Source: Australian Film Commission.

Table 2. Film, video and audio-visual production, Industry Canada, Summary

(1990-91 to 1994-95)

	1990-91	1991-92	1992-93	1993-94	1994-95
Number of productions (by specialisation)					
Theatrical features	19	20	15	15	11
Conventional pay television	119	137	138	164	181
Advertising	61	58	58	58	58
Government and educational	123	123	113	116	96
Industry	183	182	166	157	166
Other production companies	134	130	99	129	129
Other	102	92	78	109	70
Total	741	742	667	743	706
Number of productions					
Theatrical features	54	56	31	44	38
Television productions *					
under 30 minutes	----	2 223	3 099	2 713	1 207
30-74 minutes	----	4 867	3 994	5 550	3 897
75 minutes or more	----	414	88	235	390
Television sub-total	----	7 504	7 181	8 498	5 476
TV commercials	3 619	3 929	3 908	3 637	4 335
Music videos	217	209	146	126	46
Corporate videos *	---	4 069	3 332	3 377	2 912
Home videos *	---	141	279	181	139
Educational productions *	---	262	297	209	139
Other *	987	3 721	939	712	841
Total	17 634	19 891	16 113	16 784	13 990
Production revenue (by client type) ($ millions)					
Distributors					
Theatrical features	17.0	8.5	3.76	3.7	42.0
Other placements	12.3	74.2	63.6	55.9	78.3
Conventional television	146.1	138.0	200.3	236.8	290.2
Pay television	32.5	33.9	7.3	23.4	18.0
Non-theatrical					
Advertising	131.9	137.0	147.3	146.0	142.8
Government	38.0	45.0	45.8	70.3	35.8
Educational	5.0	3.5	2.1	3.2	2.2
Industry	95.1	78.1	54.1	68.4	75.2
Non-theatrical sub-total	270.0	263.6	249.2	288.0	256.1
For other production companies	89.3	50.2	42.1	87.4	90.1
Other	14.0	13.3	20.3	38.7	22.5
Total	581.2	581.8	586.4	733.9	797.4
Non-production revenue ($ millions)	119.3	106.4	111.0	262.6	312.4
Total Revenue ($ millions)	700.6	688.2	697.4	996.5	1 109.8
Exports ($ millions)	80.6	82.8	132.0	148.8	163.1
Total Operating Expenses ($ millions)	693.5	611.9	637.0	909.7	1 045.7
Profit Margin (% of total revenue)	1.0	11.1	8.7	8.7	5.8

1. Due to a change in methodology in 1991-92, the data for these categories are not strictly comparable with data from previous years.

Source: Statistics Canada - 87F0010XPE.

Table 3. Canadian film and video distribution and videocassettes wholesaling, number of firms by principal activity and financial control

(1990-91 to 1994-95)

	1990-91	1991-92	1992-93	1993-94	1994-95
Both distributing and wholesaling					
Canadian control	22	13	7	8	9
Foreign control	1	2	1	1	1
Total	23	15	8	9	10
Film and video distribution only					
Canadian control	90	100	99	104	116
Foreign control	18	17	16	16	19
Total	108	117	115	120	135
Videocassette wholesaling only					
Canadian control	35	29	27	23	21
Foreign control	6	4	4	4	2
Total	41	33	31	27	23
Total distributing and wholesaling					
Canadian control	147	142	133	135	146
Foreign control	25	23	21	21	22
Total	172	165	154	156	168

Source: Statistics Canada - 87F0010XPE.

Table 4. European public support for film and video, 1994

(in ECUs 1 000)

Country	Total subsidies	Support production	%	Support distribution	%	Support exploitation[1]	%
Germany	76 440	59 272	77.54	7 794	10.20	9 374	12.16
Austria	14 902	14 041	94.22	861	5.78	----	----
Belgium	8 150	7 847	96.28	303	3.72	----	----
Denmark	10 470	9 860	94.17	239	2.28	371	3.55
Spain	21 703	19 997	92.14	636	2.93	1 070	4.93
Finland	6 204	5 289	85.25	727	11.72	188	3.03
France	124 950	50 572	40.47	8 234	6.59	66 144	52.94
Greece	4 921	4 504	91.53	417	8.47	ND	----
Ireland	1 673	1 673	100.00	----	----	----	----
Italy	74 408	31 330	42.10	19 581	26.32	23 497	31.58
Netherlands	9 090	8 963	98.60	127	1.40	----	----
Portugal	5 489	4 727	86.12	338	6.16	424	7.72
United Kingdom	1 888	1 888	100.00	----	----	----	----
Sweden	16 304	15 443	94.72	608	3.73	253	1.55
Total EU	**376 592**	**235 406**	**62.51**	**39 865**	**10.59**	**101 321**	**26.90**
Iceland	5 356	5 356	100.00	----	----	----	----
Norway	7 929	7 929	100.00	----	----	----	----
Switzerland	7 897	7 589	96.10	308	3.90	----	----
Eurimages	21 139	21 139	100.00	ND	----	----	----
EFDO	11 245	----	----	11 245	100.00	----	----
Nordic Film F.	6 439	6 002	93.21	437	6.79	----	----
Gen. TOTAL	**430 603**	**283 421**	**64.92**	**51 855**	**11.88**	**101 321**	**26.90**

1. Support to distribution and exhibition.

Source: International Federation of Film Producers Association (FIAPF), “Film Funds 1994” (Paris: April 1996).

Table 5. European public support for film and video, 1994

(in ECUS 1 000)

Country	Number of films produced	Subsidies volume	Number of supported films	Average. support per film	Production Investments	Supp. vol./ prod. investment (%)	Supp. vol/ box office receipts (%)
Germany	60	59 271	79[1]	750	181 86	32.59	9.29
Austria	24	14 041	32	439	NA	----	19.32
Belgium	15	7 847	15	523	NA	----	7.80
Denmark	14	9 860	13	758	13 257	74.38	18.32
Spain	44	19 997	60	333	52 857	37.83	7.29
Finland	11	5 289	13	407	6 461	81.86	16.28
France	115	50 572	115	440	339 212	14.91	7.83
Greece	11	4 504	25	180	NA	----	14.74
Ireland	18	1 673	10	167	69 304	2.41	4.90
Italy	95	31 330	50	627	156 128	20.07	7.28
Netherlands	16	8 963	14	640	9 267	96.72	9.91
Portugal	13	4 727	10	473	NA	----	30.96
UK	63	1 888	NA	----	123 624	1.53	0.34
Sweden	32	15 443	39	396	34 923	44.22	15.62
Total EU	**440**	**235 406**	**475**	**496**	**986 893**	**23.85**	**7.67**
Iceland	3	5 356	16	335	10 361	51.74	6.51
Norway	11	7 929	19	417	13 339	59.44	14.90
Switzerland	37	7 589	29	262	NA		6.43
Gen. Total	**486**	**264 134**	**539**	**1 510**	**1 010 593**	**25.00**	**7.70**

1. The difference between the produced films and the number of supported films arises from the fact that one and the same film can be supported twice, or even more times by different institutions (for example by the Filmfoerdungsanstalt and then by regional institutions).

Table 6. European public support for film and video, 1994

(in ECUs 1 000)

Country	Total Funds	Selective support[1]	Share (%)	Automatic support	Share (%)	Regional support	Share (%)	Eurimages	
								majority cop.	minority cop.
Germany	59 272	23 279	39.27	12 085	20.39	23 908	40.34	4	19
Austria	14 041	7 187	51.19	116	0.82	6 738	47.99	0	3
Belgium	7 847	6 199	79.00	1 648	21.00	0	0.00	2	9
Denmark	9 860	7 818	79.29	2 042	20.71	0	0.00	1	5
Spain	19 997	11 049	55.25	6 431	32.16	2 517	12.59	6	7
Finland	5 289	5 289	100.00	0	0.00	0	0.00	2	1
France	50 572	20 174	39.89	27 360	54.10	3 038	6.01	17	28
Greece	4 504	4 504	100.00	0	0.00	0	0.00	4	1
Ireland	1 673	1 673	100.00	0	100.00	0	100.00	2	2
Italy	31 330	18 276	58.33	13 054	41.67	0	0.00	11	8
Netherlands	8 963	8 963	100.00	0	0.00	0	0.00	2	5
Portugal	4 727	1 522	32.20	3 205	67.89	0	0.00	2	5
United Kingdom	1 888	902	47.78	0	0.00	986	52.22	4	17
Sweden	15 443	10 182	65.93	5 261	34.07	0	0.00	1	6
Total EU	**235 406**	**127 017**	**53.96**	**71 202**	**30.24**	**37 187**	**15.80**	**58**	**116**
Iceland	5 356	5 356	100.00	0	0.00	0	0.00	2	0
Norway	7 929	6 484	81.78	1 445	18.22	0	0.00	3	1
Switzerland	7 589	5 122	67.49	0	0.00	2 467	32.51	1	6
Gen. Total	**256 280**	**143 979**	**56.18**	**72 647**	**28.35**	**39 654**	**15.47**	**64**	**123**

1. Certain film projects are supported because of their cultural and artistic value, in contrast to automatic support, which is decided by economic criteria like budget, employment of nationals, etc.

Source: International Federation of Film Producers Association (FIAPF), “Film Funds 1994” (Paris: April 1996).

Table 7. Subsidies to distribution and exhibition in Europe

Country	Subsidies to distribution		Eurimages	Subsidies to theatres	
	Amount	Conditions	Films aided	Amount	Conditions
Germany	7 794	*Germany films only:* • Subsides for the distribution of films whether their -production has been supported or not (promotion, prints, subtitling or dubbing). *Germany and foreign films:* • Support for the making of prints for national distributors of art films, and for towns with less than 20,000 inhabitants.	2	9 374	Subsidies from Länder for local art film theatres.
Austria	861	• Support for Austrian, German and Swiss films (co-production agreements): prints. • Support for the distribution of difficult films.	0		No support for exhibition. Only Länder provides exhibitors with very marginal subsidies.
Belgium	303	*Belgian francophone films only*: • Promotion material, subtitled print for films which have benefited from selective support.	1		No support for exhibition.
Denmark	239	*Danish films only:* • Subsidies for the making of prints in the Danish language and one English subtitled print for films, which have benefited from selective support. *Danish films and foreign films*: • Making of prints of artistic foreign films. • Subsidies for acquisitions of extra prints.	1	371	Refurbishment and modernising of theatres. Support for the making of prints.
Spain	636	*EU Films*: • Selective support for distribution: subsidies for prints of difficult films, subtitling and promotion.	4	1 070	Financing for theatres programming the film benefiting from a selective support for distribution. Maintenance of theatres in rural areas.
Finland	727	*Finnish films only:* • Selective support for the making of prints for artistic quality films with limited potential public.	0	188	Upgrading and refurbishment of theatres in thinly populated areas.

Table 7. Subsidies to distribution and exhibition in Europe (*continued*)

Country	Subsidies to distribution		Eurimages	Subsidies to theatres	
	Amount	Conditions	Films aided	Amount	Conditions
France	8 234	Automatic support for distributors when they contribute to the financing of *French films*. Selective support for *French* or *Foreign* difficult films and for independent distributors. Selective support for the making of prints to distribute in small towns. Structural support to companies distributing little known foreign films.	6	66 144	Automatic financing for the upgrade of theatres. Selective support for art theatres, for small theatres and for the creation of theatres in little-equipped zones. Support for the making of prints for towns with a market of less than 35 000 admissions.
Greece	417	Marginal.	0	NA	Dependant on compliance with screen quotas.
Ireland		No support for commercial distribution.	0		No support for exhibition.
Italy	19 581	Support for *Italian* and *foreign films.*	6	23 497	A system of programming quotas was abolished for a system of taxation incentives (reduction of the Entertainment Tax) when programming 25% of national films.
Netherlands	127	*Support for Dutch films*: • Distribution guarantee. • Support for Dutch distribution companies.	0		Marginal support from the government.
Portugal	338	*Portuguese films and co-productions*: • Prints and promotion.	0	424	Financing for refurbishment and equipment.
UK		No financial support but following up on the programmes of theatres.	5		Support only for the few state-owned theatres.
Sweden	608	Support given to quality films without any conditions of nationality.	0	253	
Total EU	**39 865**		**25**	**101 321**	
Iceland		No support for distribution.	0		No support for exhibition.
Norway		Does not take quite the form of a direct financing (theatres are owned by municipalities).	0		Managed by the National Association of Municipal Cinemas.
Switzerland	308	Marginal amounts given to Swiss art films.	0		No support for exhibition.
Total General	**40 173**		**25**	**101 321**	

Source: International Federation of Film Producers Association (FIAPF), "Film Funds 1994" (Paris: April 1996).

Table 8. U.S. film distributors -- market shares of total domestic revenue, 1994

Company	Market Share (%)	Cumulative (%)
Disney Buena Vista Miramax	21.0 (16.1) (4.9)	21.0
Warner Bros.	19.1	40.1
Universal	16.9	57.0
Sony TriStar Columbia	9.7 (7.5) (2.2)	66.7
Fox	8.5	75.2
Paramount	8.0	83.2
New Line	5.1	88.3
Savoy	3.5	91.8
Gramercy	2.7	94.5
All others	5.5	100.0

Source: Market Share Reporter, cited on Consumer Project on Technology (CPT) Web site.

Table 9. Top 25 TV groups in the United States

(July 1996)

Rank	Group or Firm	Stations	% of US TV homes reached
1	Westinghouse/CBS	14	31.5
2	Tribune (Renaissance)	16	25.7
3	NBC	11	24.7
4	Disney/ABC	10	24.1
5	Fox	12	22.1
6	Silver King	16	22.0
7	Paxson	16	18.0
8	Chris Craft	8	17.7
9	Gannet	15	14.1
10	Univision	11	12.9
11	New World	10	12.8
12	Telemundo	8	10.4
13	Viacom	12	10.1
14	Young	13	9.1
15	Sinclair/River City	22	8.9
16	Scripps Howard	9	8.0
17	A.H. Belo	7	8.0
18	Cox	7	7.7
19	Hearst	7	7.3
20	Post-Newsweek	6	7.0
21	LIN TV	9	6.3
22	Providence Journal	11	5.4
23	Pulitzer	10	5.2
24	Ellis Acq./Raycom	22	4.0
25	Allbritton	8	3.9

Source: Broadcasting and Cable Magazine, 8 July 1996, p. 12., cited in Consumer Project on Technology (CPT) Web site.

Table 10. Concentration in the US Multichannel Video Programming Distribution (MVPD) industry (1997)

Rank	Company	Percent of Subs.
1	TCI	25.54
2	Time Warner	15.97
3	Media One	6.95
4	Comcast	5.84
5	Cox Cable	4.44
6	Cablevision Systems	3.92
7	DirectTV/USSB	3.58
8	Primestar	2.40
9	Jones	2.0
10	Century	1.62
Top 25		84.94
Top 50		89.92

Source: Federal Communications Commission, Fourth Annual Report, December 31, 1997.

Table 11. Changes in concentration in the U.S. cable industry

(Based on Total Subscribers)

Share	1990	1991	1992	1993	1994	1995	1996
Top 1	24.0	24.5	25.2	24.3	24.8	25.9	28.0
Top 2	36.7	37.1	37.9	36.9	37.3	42.1	46.9
Top 3	42.0	42.3	43.2	42.3	42.4	48.9	54.6
Top 4	45.6	46.0	48.2	47.2	47.2	54.6	61.4
Top 10	61.6	61.4	64.1	63.2	63.3	73.2	80.2
Top 25	80.8	80.2	84.5	83.1	83.4	88.5	91.5
Top 50	91.2	90.9	94.5	93.1	92.4	95.2	96.6

Source: Federal Communications Commission, Fourth Annual Report, December 31, 1997.

Table 12. U.S. Internet access providers: annualised revenues as of April 1996

(millions of dollars)

Company	Revenue	% of market	Cumulative %
MCI	97.02	13.5	13.5
UUNET	96.50	13.4	26.9
NETCOM	96.40	13.4	40.3
AT&T	90.72	12.6	52.9
PSInet	68.32	9.5	62.4
Sprint	28.30	3.9	66.3
Supernet	25.50	3.5	69.8
BBN Planet	20.55	2.9	72.7
ANS	14.01	2.0	74.6
CERFnet	10.99	1.5	76.2

Source: Joel Maloff, the Maloff Company, cited in Consumer Project on Technology (CPT) Web site.

Table 13. Government expenditure on broadcasting, in selected OECD countries, 1995

(millions US$)

	Terrestrial and satellite	Radio	Cable	Other
Australia	372.51	222.04	. .	. .
Canada	2 325.27	0.00	0.00	46.10
Denmark	452.89	1.34	0.00	0.00
France	1 799.18	605.33	140.25	0.00
Japan	0.00	19.82	. .	. .
Netherlands	669.78	204.36	0.00	0.00
Switzerland	422.17	261.42	0.00	. .
U.K.[1]	2 983.60	. .	0.00	13.88

1. Note: Total government expenditure on broadcasting is for both BBC and S4C.

Source: OECD Communications Outlook 1997.

NOTES

1. For a discussion of best policy practices for the demand-led development of Internet-based multimedia services in particular, see Chapter 11 of the OECD Jobs Strategy report, *Technology, Productivity and Job Creation: Best Policy Practices* (Paris: OECD, 1998).

2. For instance, the “Building the Information Society: Moving Canada into the 21st Century”, Ministry of Supply and Service Canada, May 1996; the UK OFTEL’s “Beyond the Telephone, the Television and the PC - II,” submission to the Culture, Media and Sport Committee Inquiry Into Audio-Visual Communications and the Regulation of Broadcasting, January 1998; “Beyond the Telephone, the Television and the PC - III,” submission to the Culture, Media and Sport Committee Inquiry Into Audio-Visual Communications and the Regulation of Broadcasting, March 1998; and “Digital Television and Interactive Services: Ensuring Access on Fair, Reasonable and non-Discriminatory Terms,” Consultative Document, March 1998; the U.S. 1996 Telecommunications Act and hearings of the Federal Communications Commission on broadband digital television; the work of the National Office for the Information Society being carried out in Australia; the review of digital TV carried out in Sweden; the Federal Multimedia law in Germany; and the ongoing debates over the European Commission’s *Green Paper on Convergence in the European Union*.

3. Investments in new digital broadcasting *per se* are growing, though haphazardly. In Australia, Optus Vision, Telstra and Australis have pulled back from initially ambitious cable and satellite investments. In the UK, BSkyB and cable companies and terrestrial over-the-air broadcasters are advancing with plans for digitisation transmission. In the United States, cable TV and telecommunications companies are continuing with their investments, but on a less sizeable scale and on a more differentiated basis than initially planned. In Japan, NTT is pushing ahead with its plans to wire the country with fibre optic cable by 2015. In Germany, Bertelsmann has withdrawn plans to develop digital TV in Germany because of inadequate content. In this case, company spokesmen are reported as saying that new TV distribution channels are only profitable if extensive film and sports programming can be provided. See *Financial Times*, 14 January 1997. DF1, the digital TV network launched by Bertelsmann’s rival, Kirch, significantly undershot subscriber targets. This was despite Kirch having a significantly greater number of deals for rights to sport and film content.

4. See OFTEL, *Competition Issues in Terrestrial Broadcast Transmission - A Consultative Document,* October 1996, Chapter 2.

5. For an outline of the arguments for this, and the possible institutional measures for handling such a licensing arrangement, see Annex A, “Beyond the Telephone, the Television and the PC - III,” OFTEL submission to the Culture, Media and Sport Committee Inquiry Into Audio-Visual Communications and the Regulation of Broadcasting, March 1998.

6. See Patrick Vittet-Philippe, "New Digital Services and the Information Society: Contribution to a Reflection in Progress," Note for the File, European Commission DG XIII, February 1996, pp.9-10, 53.

7. See, for example, "The European Film Industry Under Analysis," First Information Report 1996, European Commission DG X, Brussels, November 1996, pp.14-15.

8. *Wall Street Journal*, B5, Nov. 18, 1996.

9. “Mitsui, Bertelsmann team up in Japanese, European multimedia,” *Nikkei* 19 November 1996.

10. Therese Poletti , “Internet “push” technology coming on strong”, *Reuters New Media*, January 1, 1997.

11. *New York Times*, D7, 15 April 1996.

12. For a discussion, see Patrick Vittet-Philippe, "New Digital Services and the Information Society: Contribution to a Reflection in Progress," Note for the File, European Commission DG XIII, February 1996.

13. For a discussion, see OCDE/GD(96)60, Committee on Competition Law and Policy, *Competition Policy and Film Distribution,* Series Roundtable on Competition Policy, No. 3. See also, OECD, *Competition Policy and a Changing Broadcast Industry* (Paris: 1993).

14. This is perhaps similar to the way in which the defence sector used to act.

15. See *Financial Times*, Special Supplement, “IT: US Report” 2 October 1996, p.XII.

16. Copyright Law Review Committee, “Copyright Reform: A Consideration of Rationales, Interests and Objectives,” (Canberra: Office of Legal Information and Publishing, The Attorney General’s Legal Practice, Feb. 1996), p.13.

17. This is something of a simplification of the common law vis-à-vis civil law concepts of copyright. Civic law concepts contain the notion of moral rights of the author, which puts them somewhere between the originality concept inherent in patent rights and the common law concept of copyright, which is of the purely economic right of a publisher. For a discussion, see OCDE/GD(97)210: “Patents and Innovation in the International Context”, Working Party on Innovation and Technology Policy, 11-12 December 1996.

18. For instance, the Australian Broadcasting Authority (ABA) and Australian Film Commission; the Canadian Radio and Telecommunications Commission (CRTC), Canadian Film Commission and Canadian Council; the French Conseil Supérieur de l’Audiovisuel (CSA) and Centre National de la Cinématographie (CNC); the UK Independent Television Commission, OFTEL, British Film Commission and British Council; the U.S. Federal Communications Commission and National Foundation for the Arts and Humanities.

19. For instance, the Australian Department for Communications and Arts; the Canadian Heritage; and National Heritage in the United Kingdom.

20. U.S. authorities (the Federal Trade Commission and Justice Department) found this in trying to determine the antitrust implications of Microsoft's development and packaging of it's Microsoft Network into its Windows operating system and graphical interface. Such concerns lie behind the restructuring of responsibilities and regulations for conditional access between the Independent Television Commission (ITC) and OFTEL in the United Kingdom. See Department of Trade and Industry, "The Regulation of Conditional Access Services for Digital Television," 11 January 1996 (last updated 19 March 1996).

21. See “Advanced Television Systems and their Impact upon the Existing Television Broadcast”, Transcript of Proceedings, MM Docket No. 87-268, Federal Communications Commission, Washington, DC Dec. 12, 1995.

22. The main framework is for a Charter, proposed by Commissioner Bangemann. See also Green Paper on the Protection of Minors and Human Dignity in Audio-Visual and Information Services, (Brussels: European Commission, October 1996).

23. “MITI plans to filter Net smut”, *Asahi*, 15 November 1996.

24. See, for example, “Canada’s Culture, Heritage and Identity: A Statistical Perspective,” Statistics Canada - Cat. No. 87-211, p.24; “The European Film Industry Under Analysis,” First Information Report 1996, 11 November 1996, European Commission, DG XD, p.13.

25. Much of what follows is taken from Australian Film Commission, “Australian Film and Television: An Overview,” September 1996.

26. Robert E. Babe, “Canada”, in *Media Ownership and Control in the Age of Convergence* (International Institute of Communications, Global Report Series: London 1996), p. 29.

27. See “Canada’s Culture, Heritage and Identity: A Statistical Perspective,” Statistics Canada - Cat. No. 87-211, p.61, 64, 79, 80-81.

28. “Canada’s Culture, Heritage and Identity: A Statistical Perspective,” Statistics Canada - Cat. No. 87-211, p.25.

29. Canadian Heritage Press Communiqué, “Government Responds to Appeal of CRTC Decisions on Canadian Talent Development”, 15/11/96.

30. Commission of the European Communities, “White Paper on growth, competitiveness, and employment - The challenges and ways forward into the 21st century,” COM(93) 700 final, Brussels, 5 December 1993.

31. See 1997 FCC Competition Report (Washington, D.C.: Federal Communications Commission, 1997), p5.

32. National Endowment for the Arts *Annual Report 1995*.

33. The Association of America's Public Television Stations (APTS), “Charges and Realities: The Facts Behind Misrepresentations of Public Television” (WWW home-page, last revised: 22 January 1997): “Federal investment is matched $5 to $1 with funds from local public-private partnerships.”