[EUROPA]

Economic Implications of New Communication Technologies on the Audio-Visual Markets

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Preface

This report represents the findings of a study undertaken on behalf of the European Commission. Queries on this report should be directed to the following:

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In conducting our study we carried out extensive consultation with the European audio visual industry as part of our interview programme and the Delphi programme. We wish to express our thanks to all those involved and identified in Appendices III and IV.

We would also like to thank Director General X, in particular, Gregory Paulger and Xavier Troussard and their colleagues in DG XIII.

We would also like to thank NERA, Screen Digest and Stanbrook & Hooper. In particular, Mark Shurmer for his painstaking efforts.

A special word of thanks to David Fisher, Screen Digest for his instructive editorial comments and assistance with the graphics.

The views expressed in this report are those of the study team and are not necessarily those of the European Commission or of the individuals consulted in our study. All the information has been assembled in good faith and to the best of the ability of the study team. Neither Norcontel (Ireland) Ltd., NERA, Screen Digest, Stanbrook & Hooper, nor the Commission accept any responsibility for the acuracy or completeness of the information contained in this report. The information and views do not constitute commercial advice or a legal opinion and should not be acted upon without further professional advice. Norcontel, NERA, Screen Digest, Stanbrook & Hooper and the Commission accept no responsibility for loss arising from decisions based on this study.

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Executive Summary

1.0 Introduction

1.1 Aims and Objectives of Study

The purpose of the study was to analyse the economic effect of new communication technologies on audio-visual markets. In particular, the study was to identify how the current sources of revenue to the European audio-visual industry may grow in the future and how they may have an impact on the producers of audio-visual content.

Coping with uncertainty is, of course, a challenge faced in any forecasting exercise. As someone once said forecasting was always difficult, particularly forecasting the future. Such problems are, however, exacerbated in this study by the fact that we are seeking to assess the likely impact of developments over a ten year time frame for an industry that is experiencing rapid and arguably technological change. Over this period, it is possible that the new communications technologies may transform the very nature of the AV market. For the present, however, new applications remain at an early stage of market development and the longer-term level of consumer demand for the new service introductions remains unclear.

Moreover, many have argued that the world stands on the edge of an information revolution that could potentially be as significant as the preceding industrial revolution. The timing and the magnitude of the impact of such developments, especially in the context of the AV market, remains uncertain and represents a major complicating factor particularly towards the latter end of the projection period.

Nonetheless, this study represents the first case of projecting the evolution of these services, based on addressing all the AV market segments collectively, carrying out an in-depth analysis and taking account of market realities.

1.2 Scope of Study

As to the scope of the study, the following media markets were considered:

- broadcasting
- film industry
- video
- packaged and on-line multimedia.

The analysis of the media markets was carried out in the following 7 member states; Denmark, France, Germany, Ireland, Italy, Spain and the UK. The selected countries represent a balanced choice of market conditions such as size, AV service evolution and geographical presence.

As per the terms of reference, the following scope of the term audio-visual markets was considered: Audio-visual markets are characterised by the simultaneous provision and reception of sound and moving images, irrespective of the means of delivery to the public at large or to individuals at their own request, and irrespective of the technical means of distribution or transmission, be it terrestrial, satellite, cable, packaged media or any other technical device.

2.0 Our Approach

In contrast to many previous studies, this report does not simply consider the prospects for new media in isolation. Instead, it presents an integrated analysis of the likely developments across all the AV market segments and considers future growth prospects in the light of the many competing demands for the consumer and advertiser ECU. The revenue projections for the different segments are set against the growth in total AV expenditures and thus the undoubtedly great technological opportunities are bounded by the harsh commercial realities of what consumers, advertisers and governments can realistically be expected to consume and pay for.

The study also projects the flow of industry revenues from final demand through to the content provider. This has required the generation of a new and comprehensive set of data relating to industry revenues across the different content provider segments. In this regard, the study represents data and analysis across the seven member states at a much lower level of disaggregation than has previously been available.

Finally, the study considers the prospects for the European content provider industry in the light of projected market developments and against the background, the current strengths and weaknesses of the industry.

The modelling methodology adopted is essentially one of a top-down approach, comprising of a number of stages, see Exhibit 1.

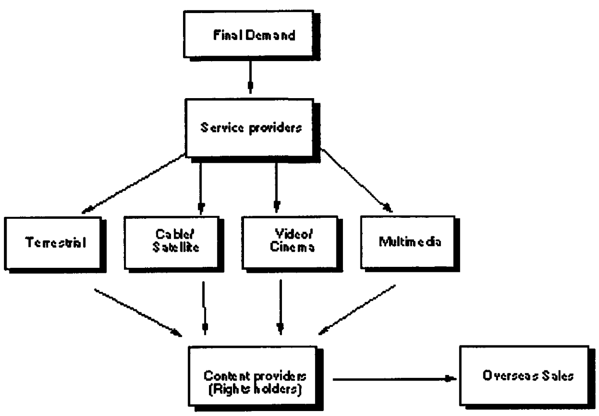


Exhibit 1: Overview of Modelling Methodology

- Final demand for AV product

Our starting point is to project the final demand for AV product by consumers, either by means of direct payment or indirectly via the television licence fee, and by advertisers.

- The distribution of revenues amongst service providers

This issue here is how much of the aggregate AV expenditure will be captured by each of the various service providers segments:

- broadcasters, both free-to-air and pay TV;
- film and video distributors;
- multimedia distributors and services

- Revenue accruing to rights holders

The distribution of revenues across service provider segments is also important in terms of its impact upon the third and final stage of the modelling exercise: the implications for content providers. This is perhaps the most difficult stage of the process since the structure of the European content industry tends to be highly fluid, with teams coming together only for particular productions and then disbanding. To cope with this problem, our unit of analysis is that of the programme rights holders: a relatively more stable and quantifiable business unit.

The results of this analysis are detailed in Chapters 3 to 6 of this study and the key results are summarised below.

3.0 Key Findings

3.1 Audio Visual Expenditures

- In terms of audio-visual expenditures (licence fee, AV advertising, consumer expenditure), we project strong real growth across the seven Member States considered (Exhibit 2). Total AV expenditures are expected to increase from 31.8 billion ECU in 1995 to 53.9 billion ECU in 2005 (in 1995 prices)

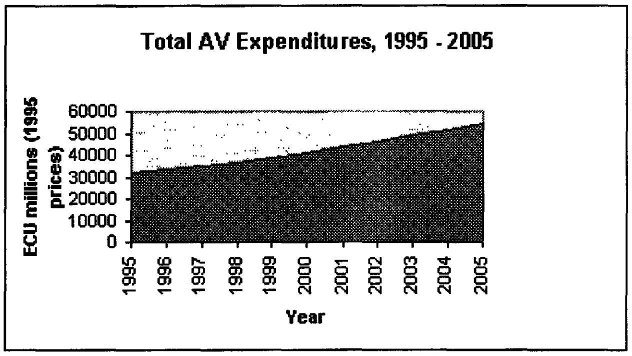


Exhibit 2: Total AV Expenditures, 1995 - 2005

- The rate of growth varies across expenditure categories and across Member States. Broadly speaking, we expect licence fee revenues to remain flat in real terms, reflecting growing public expenditure constraints with the downwards pressure on the licence fee, compounded by the increasingly competitive broadcasting environment (Exhibit 3).

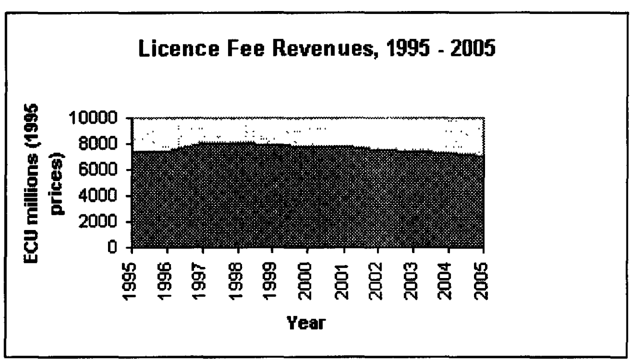


Exhibit 3: Licence Fee Revenues, 1995 - 2005

- We expect AV advertising growth to be largely linked to general economic growth with some catch-up experienced by the developing commercial TV markets. Moreover, the introduction of digital broadcasting will allow free-to-air further flexibility and may contribute to growth of advertising expenditures. On-line advertising will grow in importance over the period and will, in the first instance, be additional to rather than a substitute for traditional AV advertising (Exhibit 4).

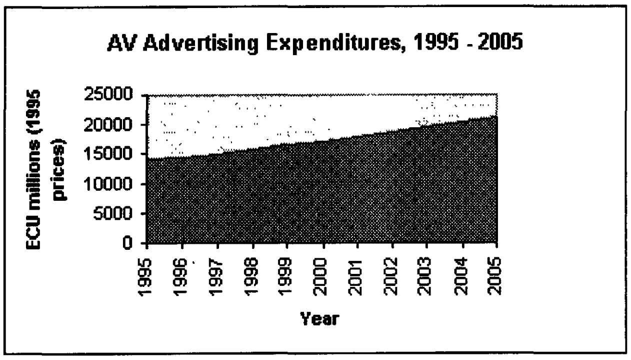


Exhibit 4: AV Advertising Expenditures, 1995-2005

- The strongest growth in AV revenues will come through direct consumer expenditures, continuing the trend of the early 1990s with rapid expansion of pay-TV and on-line multimedia services (Exhibit 5). We project consumer AV expenditures to increase from ECU 10,500 million in 1995 to ECU 25,665 million in 2005.

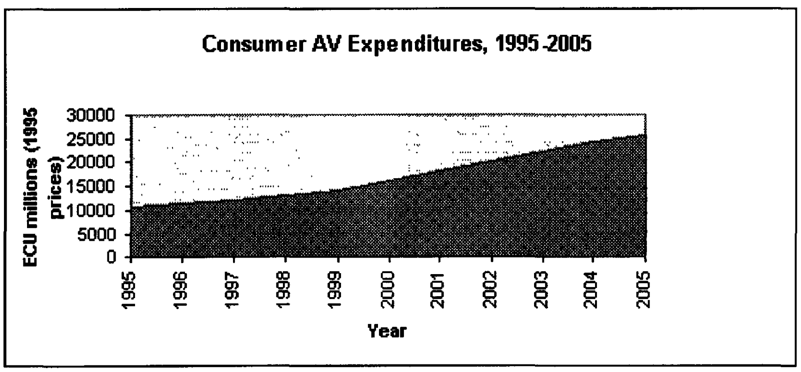


Exhibit 5: Consumer AV Expenditures, 1995-2005

- The introduction of digital television services not only offer an expansion of free-to-air opportunities but will also grow the market for pay television services and extend the sector into a new world of pay per view and additional interactive services. On-line multimedia will grow rapidly towards the latter five years of the projection period and by 2005, will in many markets, vie with pay television as the largest consumer AV expenditure category.

- The positive rates of AV expenditure growth are partly attributable to general economic growth forecast over the period (GDP estimates are based on various independent projections, together with NERA estimates) - as disposable incomes and company profits grow, then we would expect expenditures on leisure goods (including AV) to increase correspondingly. But the rates of growth projected for many of the AV product sectors are above that which we would expect from economic growth alone and also reflect the increased functionality, lower distribution costs and the development of new product markets that the advent of the new communication technologies heralds.

- Digitalisation in part means new ways of delivering product to the home, increasing functionality and lowering distribution costs. This will lead to some developments and substitution in the way AV products are delivered. Developments in transactional TV including NVOD and VOD, for example, can be seen as a natural new method for delivering film product to the home. Over time, this may replace more traditional markets such as video rental, though the significant installed base of VCRs coupled with the (low) initial take-up of transactional TV will mean that the decline is gradual rather than dramatic.

- The increased functionality of digital products combined with the lower distribution costs of VOD and NVOD should allow service providers (and ultimately content providers) to extract higher margins. It may also lead to the expansion of markets - one of the most promising results from the early interactive TV trials is the increased 'buy-rates' of 'video products', not only of new blockbuster film releases but also of back catalogue product and the generation of new markets such as 'echo' or 'catch-up' TV.

- Other digital developments may represent wholly new markets - examples of off-line or on-line multimedia are notable here. These and other developments, some even yet to be imagined, will draw new revenues into an ever expanding AV sector.

AV expenditures by category

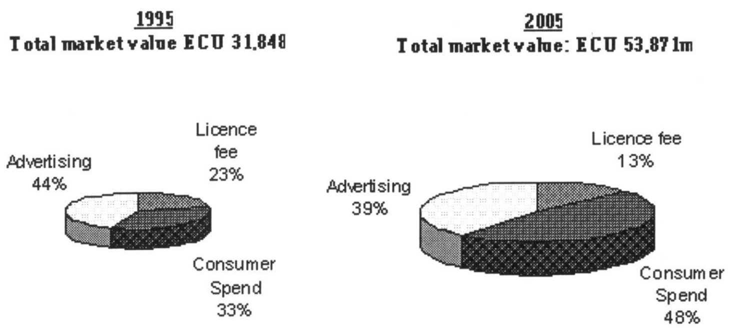


Exhibit 6: AV expenditures by category

3.2 Content Provider Revenues

The economic prospects for the European audio-visual content industry set out in this report is one of opportunity and growth. The scene is set for expansion of the AV content industry, but for the market projections to be realized, some changes are necessary. The new communication technologies reviewed in this study, offer for the most part, only limited assistance to the creative process of audio-visual manufacture. They do, however, lay the foundation for strong growth in audio-visual expenditures and this presents a growing market opportunity for European content providers.

- ***European Content Provider Revenues to Grow***

The European content provider revenues in these countries grow from ECU 8911 million in 1995 to ECU 16,117 million in 2005, increasing their share of total AV expenditures from 28% in 1995 to 30% in 2005. The chart shows that free-to-air TV continues to contribute the greatest share of revenues (Exhibit 7).

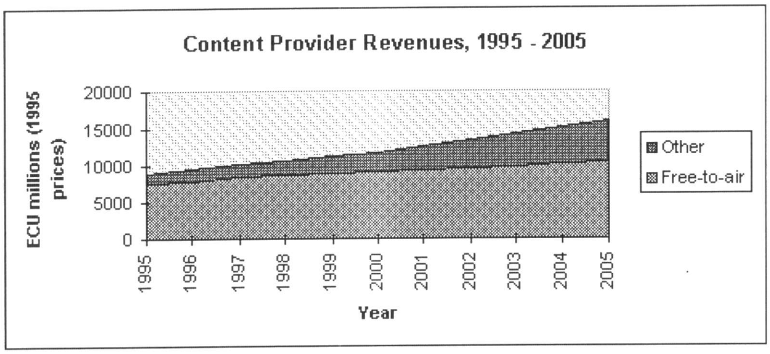


Exhibit 7: Content Provider Revenues, 1995 - 2005

- ***Free TV Remains Driving Force of European AV Content Industry***

Free TV remains the engine room for the European audio-visual industry and we project a growth in real terms from ECU 7500 million in 1995 to ECU 10,400 million in 2005, representing an increase of 28%. Whilst it remains important, the headline figures hide a shift in the demand for different types of programming such that the market tends to polarize through a limited amount of high cost product, combined with a growing demand for low cost product to fill the non-peak hours and new niche programme services.

- ***Consumer AV expenditures grow in importance***

We project content provider revenues from sectors other than free-to-air will grow from ECU 1400 million in 1995 to ECU 5700 million in 2005 (Exhibit 8)

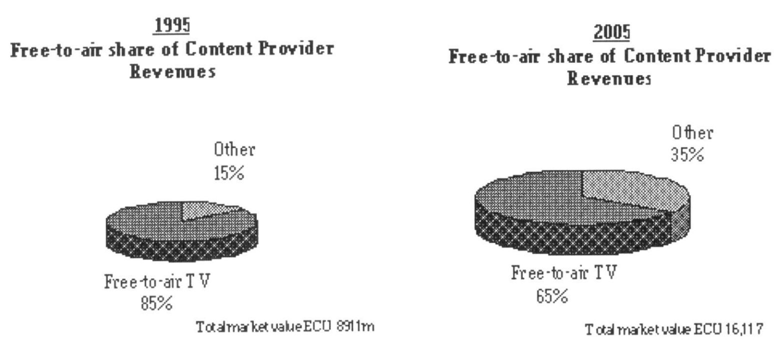
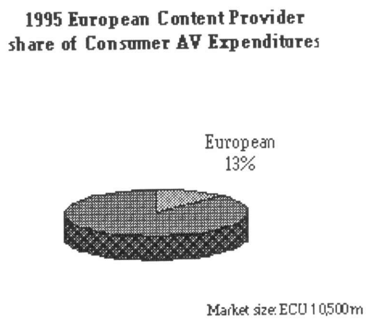


Exhibit 8: Free-to-air TV share of Content Provider Revenues

- *European Share of Consumer AV Expenditures to Increase*

More significantly and possibly the most fundamental key finding of this study is that, as the audio-visual market expands, the European content providers will have the potential to benefit substantially more as they capture a greater share of the revenues, especially from new services. Advertising and the licence fee will remain as important sources of AV finance and will continue to underpin the free-to-air TV sector. At the same time, we expect there to be strong growth in direct consumer expenditures on AV product. This is an area in which Europe has traditionally performed less well, with pay TV and video rental dominated by US product. In light of projected market developments, however, we expect European content providers to capture a growing share of this expanding revenue source. This is in part because of the new emphasis by pay TV operators on domestic content as they seek to become mass market players. It is also due to the expected strong growth of multimedia, an area which European content providers are already performing well, and one in which demand for locally originated product is expected to be high.

Exhibit 9 shows the European content provider share (excluding free-to-air) of the aggregate consumer expenditures revenues increasing from an average of 13% in 1995 to 21% of the market in 2005.



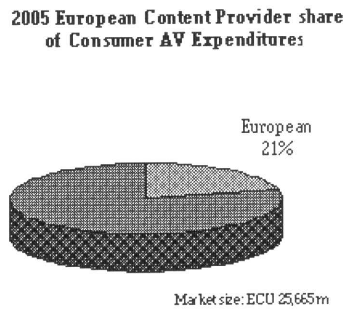


Exhibit 9: European Share of Content Provider Revenues

Exhibit 10 shows the growth of the "Other" share (representing 35% of content provider revenues in 2005). In addition to the growth of free TV, we expect to see significant growth in multimedia where European content providers are already establishing a strong production base. Moreover, on-line multimedia is estimated to grow to ECU 2481 million or 15% of the total content provider revenues in 2005.

In video sell through, the growing importance of non-film products presents new market opportunities for European content providers.

In pay TV, which although at present is dominated by largely American films and live sporting events, we expect to see increased investment in European originated product as pay TV operators seek to expand the range and diversity of their programme offerings.

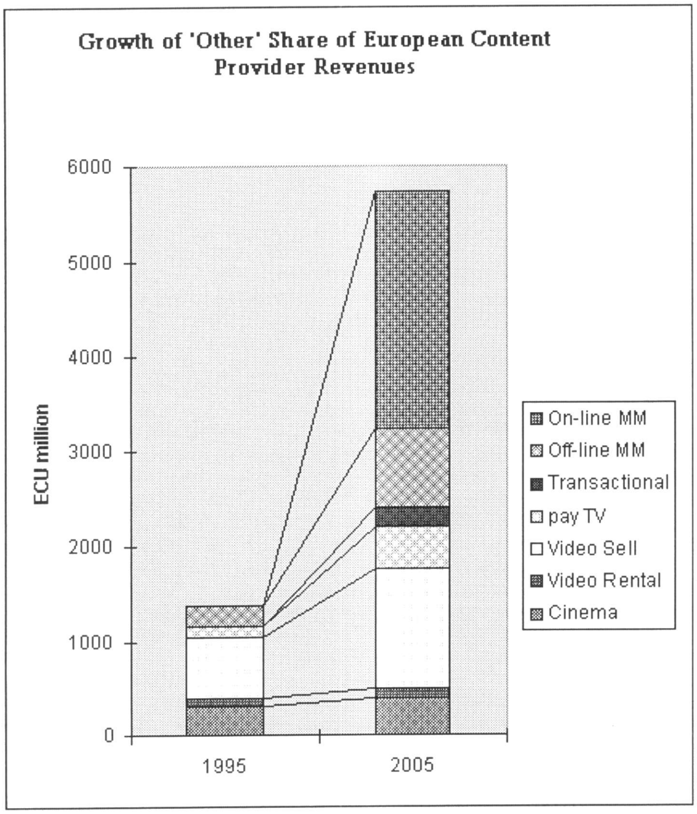


Exhibit 10: Growth of 'Other' share of European Content Provider Revenues

3.3 Implications for Content Providers

- ***The Scene is set for Expansion of the AV Content Industry, but some changes are necessary***

The changing pattern of demand for European product will disrupt existing market structures and the European content industry will need to be able to react to these new demands if the full benefits of the new media age are to be realized.

Among the key challenges to be faced are the following;

- **The growing importance of marketing and brand awareness.**

In an environment of ever increasing choice, the most successful product will be that which manages to differentiate itself from the mass of offerings, in order to generate a large financial return. In this respect, access to funds both for initial production and for subsequent marketing efforts, will become increasingly important across all the audio-visual sectors. This can already be witnessed, for example, by the growing promotional budgets which accompany film releases and by the increasing amount of resource allocated by broadcasters to promotional purposes. In both cases, larger companies may have significant advantages.

While a number of large European media companies already exist across a number of sectors we expect the pressure for further industry consolidation to continue.

- **Smaller companies need to achieve economies of scale**

Smaller companies will continue to play a significant role in that they will remain major contributors to the innovative process, though they will find it increasingly necessary to form relationships with larger companies if they are to survive and prosper. In particular, it will be important to realise economies of scale especially in distribution which will increasingly become Europe-wide.

- **Need to sell product internationally**

The increased fragmentation of the audio-visual markets is likely to mean that the financial return available to producers in any one national market is likely to diminish over time. It will there, become important to sell product across national boundaries. In order to do this successfully, companies will need to reconcile the tension between producing content with local domestic appeal and making it sell internationally. In this regard, we expect the trend towards increased international co-productions to continue. In addition, we expect increased moves towards the sale of programme formats across national boundaries.

- **Localisation is critical**

The European market is fragmented by language and culture; those publishers who are serious about success across Europe must incorporate provision for local language and culture versions of products early in their title development plans. Organisations with experience of multi-cultural relations will benefit in growing this new industry.

- **Need to sell product and maximise rights in new media**

At the same time, digitalisation will enable a new range of market opportunities, not least, the emergence of transactional TV and off-line and on-line multimedia markets. The selling of product across different delivery media and the optimisation of release windows become an even more important element of a content provider's competitive strategy. In this regard, the process of content creation will require a co-ordinated approach to the issue of the exploitation of rights across the delivery media from the very outset.

In addition, the exploitation of programme archives will present new and important revenue earning potential for the content creation industry. The key to success here will be the abilities to refresh and repackage content in new and exciting ways.

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[EUROPA] [Commission] [DG X] [Audiovisual Policy] [Key documents]

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Chapter 1: Introduction

1.1 Background to Study:

The study "Economic Implications of New Communication Technologies on Audio-Visual Markets" is part of the preparation for the Green Paper on New Audio-Visual Services currently being prepared by the services of the European Commission. In response to a call for proposals (No. PO/95-87/D3), Norcontel (Ireland) Ltd. in conjunction with National Economic Research Associates (NERA), Screen Digest and Stanbrook and Hooper were awarded the contract to carry out this study.

1.2 Aims and Objectives of Study

The purpose of the study was to analyse the economic effect of new communication technologies on audio-visual markets. In particular, the study was to identify how the current sources of revenue to the European audio-visual industry may grow in the future and how they may have an impact on the producers of audio-visual content.

1.3 Scope of Study

As to the scope of the study, the following media markets were considered:

- broadcasting
- film industry
- video
- packaged and on-line multimedia.

As per the terms of reference, the following scope of the term audio-visual markets was considered: Audio-visual markets are characterised by the simultaneous provision and reception of sound and moving images, irrespective of the means of delivery to the public at large or to individuals at their own request, and irrespective of the technical means of distribution or transmission, be it terrestrial, satellite, cable, packaged media or any other technical device.

In contrast to many previous studies, this report does not simply consider the prospects for new media in isolation. Instead, it presents an integrated analysis of the likely developments across all the AV market segments and considers future growth prospects in the light of the many compaeting demands for the consumer and advertiser ECU. The revenue projections for the different segments are set against the growth in total AV expenditures and thus the undoubtedly great technological opportunities are bounded by the harsh commercial realities of what consumers, advertisers and governments can realistically be expected to consume and pay for.
The study also projects the flow of industry revenues from final demand through to the content provider. This has required the generation of a new and comprehensive set of data relating to industry revenues across the different content provider segmants. In this regard, the study represents data and analysis across the seven member states at a much lower level of disaggregation than has previously been available.
Finally, the study considers the prospects for the European content provider industry in the light of projected market developments and against the background, the current strengths and weaknesses of the industry.

1.4 About this Study

Despite the title of the study, many of the technologies considered here are not "new" in any radical sense: for the most part they are merely digital ways of doing things which were available before. Digitisation, however, is of course the key to the usefulness of these technologies for the supply of "new services". For the purposes of the study, the key new applications investigated were:

- digital satellite TV (direct-to-home)
- digital terrestrial TV
- digital cable TV
- microwave video transmission (MVDS or "wireless cable")
- interactive packaged multimedia: CD-ROM, CD-i, 3DO, game formats
- Video CD and DVD.
- near-video-on-demand (NVOD) via cable or satellite (multiple channels, staggered start times etc.)
- pay-per-view
- true video on demand via cable TV or telephone type networks (ADSL, ATM, fibre/coax ISDN etc.)
- interactive TV (enhanced TV plus back-channel)
- Internet/World Wide Web or on-line service via conventional modem/telephone connection
- Internet/World Wide Web or on-line service via high-speed cable modem
- Internet-to-TV set system
- electronic distribution to cinema (satellite/cable to video cinema)

There seems little doubt that technology exists to enable these new market opportunities. However, some key uncertainties remain:

- the first and perhaps most significant, concerns the attitude of the consumer towards these new products and services
- the regulatory framework in which these services must develop and at the same time protect the general interest of the public, including the future of public funding for AV product, whether through the licence fee, support for the domestic film industry or other such means
- the ability and speed of creative producers to harness and use new technology
- the future role of advertising as a source of finance for television, cinema and new interactive services.

Some of these uncertainties are becoming clearer as the world moves closer to the commercial realisation of the new communications technologies. In this context, the study looked at current and completed trials of interactive TV services in Europe and around the world. Analysis of the results of these trials has been complicated by the inevitable commercial secrecy surrounding many of the detailed findings. In broad terms, however, the trials appear to show that entertainment services and in particular those combined with dynamic, refreshed content can attract consumer interest and stimulate buy-rates over and above that achieved under existing media. Despite this, the very high levels of up-front infrastructure investment needed must cast some doubt over the price competitiveness of wire based systems over the short - term and large scale deployment of services is not expected before the year 2000. On the other hand, digital satellite services have already been launched in Italy, France, the Benelux and elsewhere and represent the first commercial manifestation of the new digital broadcasting age. At the same time, Internet connections continue to grow apace across Europe. At present, bandwidth and speed of access constraints limit its applicability to the AV industry but this may change soon with the advent of new developments such as the introduction of high-speed cable modem access.

1.5 Methodology and Approach

The study was carried out in two parts, as follows:

Part 1: Economic Trends. This involved a wide-ranging review of recent literature and other studies, a profiling exercise seeking to identify the strategies of various players in the industry, a review of the interactive trials referred to above and of technological developments, and an extensive interview programme with industry.

Part 2: Empirical Analysis and Projections. This required a new economic model which, building on quantitative and qualitative data, utilises the development of a scenario - based approach in order to analyse the prospects for new and traditional audio-visual markets.
In addition to the interviews, industry consultations were carried out during both parts of the study. The approach methodology is shown in Exhibit 1.1:

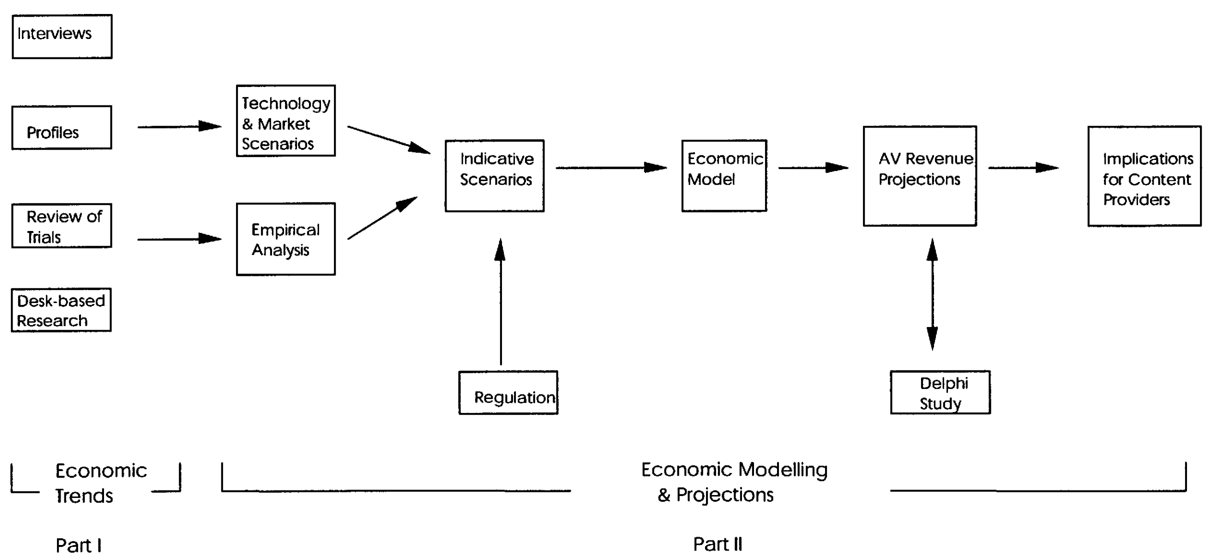


Exhibit 1.1: Approach Methodology for Study

The interim report, presented to the Commission in July 1996, concentrated on Part I of the study. It included the interview results, the review of interactive trials, a panorama of current trends in the audio-visual markets studied and a summary of market research reports. The proposed methodology for the economic model was also presented and discussed.

1.6 Final Report

The final report details the economic modelling and projections for seven European countries. In agreement with the Commission, the selected countries are: Denmark, France, Germany, Ireland, Italy, Spain, and the UK. Its focus is on the implications for the European audio-visual content industry. In particular, it;

- presents projections across the 7 member states of the growth in aggregate AV expenditures arising from the licence fee, AV advertising and direct consumer payment;

- presents estimates of the proportion of these funds that will flow down the value chain to the content provider industry and in particular to the European content providers

- considers the future of the European content industry in the light of projected market developments and the current strengths and weaknesses of the industry.

This Final Report breaks down into the following chapters:

Chapter 1 **Introduction**

Chapter 2 **Economic Modelling and Projections**

The methodology is described, with particular emphasis on the top-down and bottom-up approaches to projecting the flow of industry revenues from final demand through to the content provider.

Chapter 3 **Audio-Visual Expenditures: Drivers and Inhibitors**

This chapter identifies the key drivers and inhibitors in each of the audio-visual markets and concludes with the likely development of each market over the 10 year projection period.

Chapter 4 **Projections for Audio-visual Expenditures**

A scenario is proposed of the likely developments for each market sector in each of the seven Member States, partly based on an analysis of historical data and key economic indicators. A set of projections for licence fee revenue, advertising revenue and consumer expenditure is then presented.

Chapter 5 **Content Providers: Drivers and Inhibitors**

This chapter outlines the key drivers and inhibitors that influence the proportion of revenues that flow to the European content providers and concludes with the likely development of the markets over the 10 year period.

Chapter 6 **Projections for Content Provider Revenues**

Following on from the projections of the aggregate audio-visual revenues, we then identify the proportion of these revenues that flow to the European content providers. This is achieved by applying a similar methodology to that used in calculating the aggregate revenues. A scenario is proposed of the likely developments that may influence the European flow of revenues for each of the seven Member States. Together with an analysis of the historical data, projection of the associated EU share of revenues.

Chapter 7 **Implications for Content Providers**

To conclude, we then analyse the different audio-visual markets to identify how Europe can exploit these projected revenues and in particular, identify the type of content that is likely to be produced. The types of business models / relationships necessary to succeed are then advocated based on the strengths and weaknesses of the European content providers in the various markets. Finally, we present the key findings of the study.

Chapter 2 Economic Modelling and Projections

2.1 Introduction

The aim of the economic modelling and empirical analysis component of the study is to produce a series of quantitative and qualitative projections of the development of the European audio-visual sector over the next ten years. In particular, it is concerned with forecasting the likely impact of new communications technologies in terms of:

- the effect that new applications will have on existing audio-visual markets (television, film and video industries); and
- the development of related new markets as a result of the exploitation of new technologies, and to consider what role existing producers of audio-visual works might play in these new markets.

For the economic modelling exercise, we have adopted a top-down methodology (see Exhibit 2.1). This begins with an analysis of the final demand for AV product by consumers, advertisers and business. We then consider the breakdown of this aggregate expenditure across the different service provider segments including broadcasting, the film and video sectors, and new or multimedia services. Finally, we calculate the resulting "pot of money" available to content providers, netting out the proportion likely to be spent on non-European works in order to focus on the future prospects for European content providers.

Projections are provided for the ten year period 1996 to 2005. To deal with the inherent problems of uncertainty in projecting forward market developments over such a period, we develop indicative scenarios to shape our calculations at each stage of the modelling process. An overview of our approach is illustrated in Exhibit 2.1.

This chapter describes the above methodology in more detail. It is structured as follows: we begin with a brief discussion of the underlying rationales and objectives for using indicative scenarios; next, we outline an economic model of the production of AV product; finally, the modelling methodology is detailed and the resulting issues for detailed scenario development discussed. The chapter is structures as follows:

- 2.2 Scenarios
- 2.3 An Economic Model of AV Production

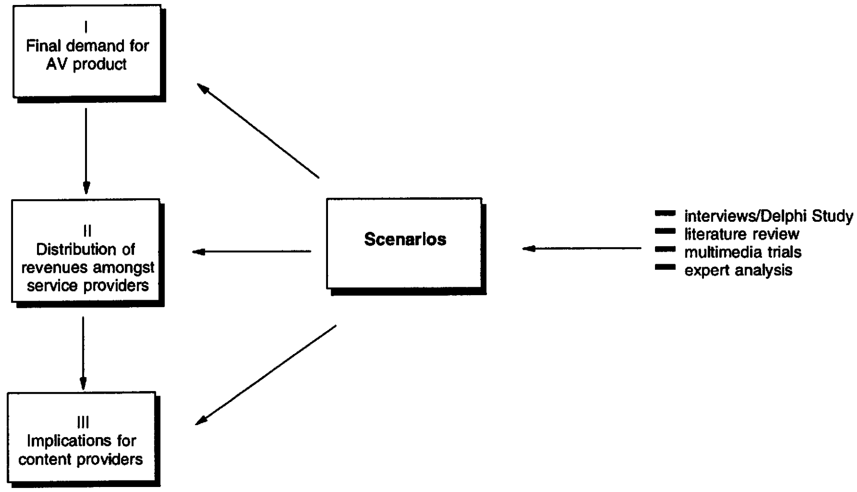


Exhibit 2.1: Overview of Approach to Modelling and Projections

2.2 Scenarios

Coping with uncertainty is, of course, a challenge faced in any forecasting exercise. As someone once said forecasting was always difficult, particularly forecasting the future. Such problems are, however, exacerbated in this study by the fact that we are seeking to assess the likely impact of developments over a ten year time frame for an industry that is experiencing rapid and arguably technological change. Over this period, it is possible that the new communications technologies may transform the very nature of the AV market. For the present, however, new applications remain at an early stage of market development and the longer-term level of consumer demand for the new service introductions remains unclear.

Moreover, many have argued that the world stands on the edge of an information revolution that could potentially be as significant as the preceding industrial revolution.[1] The timing and the magnitude of the impact of such developments, especially in the context of the AV market, remains highly uncertain and represents a major complicating factor particularly towards the latter end of the projection period.

Against such a background, it is important therefore to utilise a modelling framework that is capable of handling a wide range of possible permutations, while at the same time yielding a useful and manageable set of results. The mechanism to be used in this study is the creation of indicative scenarios.

The scenarios have been developed on the basis of analysis of historic data, with future trends adjusted where appropriate to take account of the results of the interviews, literature review and analysis of multimedia trials.

The resulting scenarios are used as tools for analysis, providing the necessary inputs with which to produce projections of the likely development of the AV market over the next ten years (see Exhibit 2.2).

[1] See, for example, the Bangemann Group Report on Europe and the Global Information Society - Recommendations to the European Council (26.05.1994) and the Commissionís Communication on Europeís way to the Information Society (COM (94) 347 final, 17.07.94).

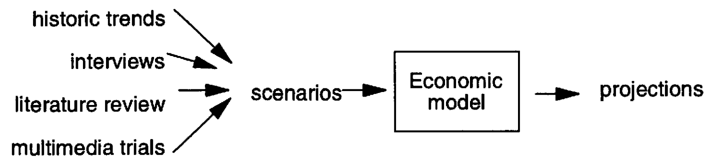


Exhibit 2.2: Role of Scenarios as Tools for Analysis

The scenarios need to be defined along a number of dimensions each following the three stage modelling approach outlined below.

2.3 An Economic Model of AV Production

The range of value adding activities likely to be involved in the provision of AV content can be conceptualised as comprising of four elements or stages:

- content creation;
- service provision, including the packaging and marketing of content and the presentation of services to the consumer;
- transmission/distribution of content to the consumer;
- consumer premises equipment.

These stages are perhaps best illustrated by way of example, and Exhibit 2.3 details the four stages of AV value chain for the broadcasting and electronic publishing sectors.

Stage/sector	Broadcasting	Electronic publishing
1. Content creation	TV/film producer	news agencies other content providers
2. Service provision	broadcaster/multiplexer	publisher
3. Transmission/distribution	terrestrial/cable/satellite	on-line (Internet, interactive TV) off-line (CD-ROM)
4. Consumer premises equipment	TV, set-top box	TV, PC

Exhibit 2.3 Audio-visual Value Chain Model

The main focus for the present study centres on the implications of market developments for the first element of the value chain, the content providers. However, it is important to recognise that there are interdependencies and interlinkages between each of the stages, not least because of vertical integration in both up- and down-stream markets. Thus, for example, broadcasters often produce and package much of their own content, and some (e.g. cable operators) may even own part of the consumer premises equipment (the cable set-top box). Also important is the relative economic power of the players at each stage of the value chain and the potential for control of any network bottlenecks that may emerge. Thus in the field of pay TV, attention has focused upon the development of conditional access systems.

The modelling exercise therefore seeks to disentangle the value accruing at each stage of the AV value chain, placing a particular emphasis on the implications of market developments for the content providers. This process consists of a number of stages, as described below.

2.3.1 Modelling Methodology

The modelling methodology adopted is essentially one of a top-down approach, comprising of a number of stages, see Exhibit 2.4.

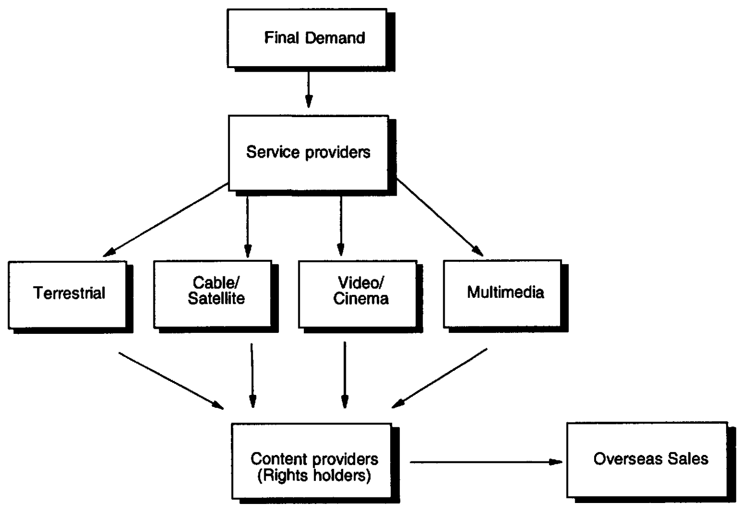


Exhibit 2.4: Overview of Modelling Methodology

- Final demand for AV product

Our starting point is to project the final demand for AV product by consumers, either by means of direct payment or indirectly via the television licence fee, and by advertisers.

Technological advance heralds great opportunities for AV markets of which, the expansion of distribution outlets ("new pipes to the home") and the development of new interactive applications are perhaps the most significant. At the same time, it is important to bear in mind the economic realities of the applications made possible by the new technologies. Household incomes are growing at a much slower pace and, moreover, AV expenditure must compete with other leisure spending.

The projecting of aggregate AV expenditures is therefore important in defining a limit to market growth, taking into account both economic variables(largely households disposable incomes and relative prices) and social factors (such as time constraints and user inertia in the adoption of new technologies).

In developing indicative scenarios it is important not only to consider the historic link between AV expenditures and economic growth, but also any evidence as to a possible change in the importance of AV product relative to other options for consumer and advertising expenditure. Moreover, it is necessary to distinguish net growth in the AV sector from simple substitution of expenditures between different service provider segments.

- The distribution of revenues amongst service providers

This issue here is how much of the aggregate AV expenditure will be captured by each of the various service providers segments:

- broadcasters, both free-to-air and pay TV;
- film and video distributors;
- multimedia distributors and services

Calculations of the distribution of revenues are based on analysis of historic data, together with an assessment of the prospects for growth in each of the service provider segments over time. In developing the scenarios, key issues include the potential demand for new multimedia services, and the likely impact of the proliferation of (digital) television services. Revenue projections for new service introductions were further validated with a reference to a bottom- up approach focusing on the projection of the various new hardware platforms over time, with reference to the likely costs of adoption, the perceived benefits of proposed new services and analysis of historical analogueies. Software market revenues were then determined on the basis of calculating average annual software spend per household for each of the software platforms: the averages were again based on historic data, together with analysis of likely shifts over time.

- Revenue accruing to rights holders

The distribution of revenues across service provider segments is also important in terms of its impact upon the third and final stage of the modelling exercise: the implications for content providers. This is perhaps the most difficult stage of the process since the structure of the European content industry tends to be highly fluid, with teams coming together only for particular productions and then disbanding. To cope with this problem, our unit of analysis is that of the programme rights holders: a relatively more stable and quantifiable business unit.

In each sector of service provision, we estimate the proportion of revenues flowing back to rights holders from analysis of existing data. This can be thought of as the total "pot of money" available to content providers. It is also necessary to net out the amount likely to be spent on non-European product, again on the basis of analysis of current data, in order to focus on the future prospects for European content providers. Given projections for the growth of the various service providers segments and our analysis of the potential shift in the flow of revenues to the content provider sector, and to European interests in particular, we then consider the likely implications for the European content industry.

Chapter 3 Aggregate Audio-visual Expenditures: Drivers and Inhibitors

3.1 Introduction:

This chapter considers the general prospects for the AV industry and identifies the key drivers (and inhibitors) for growth across the different market segments. This analysis is then used to inform the development of the country specific scenarios described in detail in chapter 4. The chapter is structured as follows:

- 3.2 Licence Fee
- 3.3 Advertising
- 3.4 Consumer Expenditure

3.2 Licence Fee

The funding of public service broadcasting through the licence fee is the subject of intense political debate throughout Europe. Projecting the level of the licence fee is difficult as it is all too often subject to the vagaries of short-term political considerations and public expenditure constraints. These difficulties are further compounded in a number of countries by the prospect of impending elections with the possible change in administration perhaps shifting attitudes towards publicly funded broadcasting.

Changing face of broadcasting

Over the longer-term, much of the discussion and debate across Europe will be stimulated by the changing face of broadcasting. Significant features include:

- increasing consumer choice and the consequent continuing fragmentation of viewing shares
- the continued growth in the multi-channel environment, with the already significant growth in the number of channels accelerated still further by the increasing use of digital compression technologies;

- the continuing trend towards direct payment for TV through subscription and pay TV services, especially for premium film and sport events;
- the increasingly competitive commercial environment.

Together these trends seem likely to spell an increasingly difficult environment for publicly funded television services, the result of which may lead to a reassessment by the public of their willingness to countenance future increases in the licence fee and may in the longer term lead to an even more fundamental reappraisal of the role of public service broadcasting.

Public broadcasting remains strong

It is significant to note that public broadcaster's share of the audience has been in decline in many European countries for a number of years. At the beginning of the 1990s, it was common to see public broadcasters securing upwards of 50% audience share, even in countries where commercial television was established. In 1995, only a handful of public broadcasters had more than half the total viewership. However, even for countries where commercial broadcasting is well established, public broadcasters share of audience has tended to level out at around 40 - 45 % share. and indeed in some countries, such as France, has increased substantially. This suggests strong and continuing public support across much of Europe for the unique range and mix of programming offered by the public broadcasters.

But competitive pressures are increasing

At the same time, the increased income of pay TV services, the fastest growing source of broadcasting revenues over the last 5 years, and the probable continuing strength of TV advertising revenues will significantly reduce licence fee revenues' share of total broadcasting revenues. This, combined with intensified competition for scarce resources including talent and programme rights (especially for first-run films and live sporting events) will place increasing pressures upon public broadcasters programme budgets. There is some circularity in the fact that sustaining the range and diversity of public broadcasters programmes will provide the justification for maintaining (or increasing) licence fees, but that this range and diversity can be provided only if public broadcasters are adequately funded. Breaking this circle will in part depend on the ability and commitment of government's and public broadcasters in conveying the continuing need for well-funded public broadcasting.

Downward pressure on licence fee

Against this background, we expect there to be growing downwards pressure on the real level of the licence fee (and hence licence fee revenues) over the next ten years. The ability of individual governments to resist this downwards pressure will depend upon public and political sentiments towards publicly funded broadcasting, and our scenarios are based on varying assumptions about this and in particular, take into account any public pronouncements about the future level of the licence fee and the future for publicly funded broadcasting more generally as well as the level of demonstrable public support for public service broadcasting as evidenced, by example, with reference to viewing shares.

The current state and changing nature of public service broadcasting in each national market is illustrated by reference to the following indicators:

- Current licence fee level and the level five years ago

- Current licence fee revenue and the revenue five years ago
- Licence fee revenue as a proportion of total broadcaster revenues
- Public broadcasters share of viewing

3.3 Advertising

Audio-visual advertising revenues across the 15 countries amounted to some 16,500m ECU in 1995. Of this television advertising expenditure (TV adspend) represented nearly 98% total with the remainder largely comprised of cinema advertising. On-line multimedia advertising over the WWW and Internet for the moment remain marginal, though is widely expected to grow over time (this is discussed further below).

TV advertising continues to grow

Various studies have shown that in stable market conditions the rate of growth of TV adspend is closely linked with the general rate of economic growth. In the UK, for example, TV adspend is strongly correlated with GDP growth tending to outperform economic growth in boom years and to under perform economic growth in a recession. This relationship may be affected by a number of additional factors including:

- **Years since commercial television introduced**. The level of TV adspend as a share of GDP varies markedly across different countries (from 14% in Denmark to 45% in the UK). At least part of this difference can be attributed to the relative maturity of the commercial television sector in each country. As advertising financed television develops, investment in television advertising is stimulated such that the level of TV adspend, and its share of total adspend increases. We expect higher growth rates in newly liberalised countries as they experience some catch-up with the more mature television advertising markets.

- **The introduction of new TV channels**. Closely linked to the maturity of the commercial TV sector is the impact of the introduction of new advertising financed channels. The nature of the impact may be mixed and depends partly on the level of pent-up demand for air-time. In the short-term, an increase in the number of channels may lead to greater competition amongst broadcasters for the same advertisers, with the result that TV ad prices and possibly even total TV adspend may fall. In the longer-term, this activity may attract new advertisers to the television medium, especially given the advent of niche special interest channels, with the result that total TV adspend increases, though there is clearly a limit to this potential new growth.

- **National restrictions on TV advertising.** The EU directive requires that no more than 15% of airtime can be dedicated to advertising. Some countries have additional local limits and advertising by public sector broadcasters is often subject to tight control. The impact of any relaxation of such additional controls may help to stimulate TV adspend, thought the precise extent and nature of the impact will again depend upon the impact on the supply of air-time and factors such as the level of pent-up demand.

Free-air networks to dominate despite future fragmentation

The advent of the multi-channel and multimedia age has lead to some debate over the long term prospects for the TV advertising market. The medium's key strength is as an influential mass-market tool that reaches virtually all households and has a wide appeal across all ages and demographic groups. However, there is a danger that the increasing number of channels may fragment the viewing market to such an extent that television will lose its mass-market reach. We believe that any such impact will be mitigated over the medium term by the continuing popularity of the major free-to-air networks. In this regard, it is significant to note that even in the US, where multi-channel pay TV environment has been established for some considerable time, the major networks still account for around 60% of the viewing share. Similarly, in the UK, the recent auction of a fifth analogueue terrestrial TV licence attracted a top bid of demonstrating the perceived value of a terrestrial TV network even in the wake of imminent digital TV and multimedia developments.

On-line multimedia advertising growing but marginal

For the moment, on-line multimedia advertising on the Internet and WWW remains small. According to the New York based Jupiter Research, overall spending on Web advertising should reach over $300 million in 1996. Most of this expenditure is North American, reflecting both higher levels of Internet penetration and the current dominance of US content. As European Internet penetration increases, we expect to see some growth in European on-line advertising revenues, but for the short term they are assumed to be pretty marginal.

We further expect that most on-line advertising will, in the first instance, be additional to rather than a substitute for traditional AV advertising. Some on-line advertising may represent new expenditures, though it is likely a growing proportion will represent substitution from direct marketing and print markets. We therefore expect on-line advertising to provide an initially small but growing positive contribution to total AV advertising expenditures.

The current state and development of the AV advertising market in the member states is observes with reference to the following indicators:

- Total AV adspend
- Average growth / year of AV advertising spend 1990 - 1995
- TV adspend as a share of total advertising
- Level of TV adspend as a share of total advertising relative to EU average
- AV adspend as a share of GDP
- Average AV adspend as a share of GDP / year 1990-1995

3.4 Consumer Expenditure:

3.4.1 Cinema:

Growth of multiplexes helps growth in admissions

The growth of the multiplex cinema has had a profound impact on the exhibition industry - both in terms of raising admissions and squeezing out existing 'old style' cinemas. Cinema admissions in the EU have increased from 593 million in 1990 to 666 million in 1995. It is this growth in admissions which is driving renewed investment in modernising Europe's exhibition infrastructure. This is illustrated in Exhibit 3.1. The year 1995 witnessed the start of a renewed interest in multiplex building with a 15% expansion in total screens. This year, growth is expected to reach 25%. By the end of 1997, it is estimated that 57% of all screens in the UK will be housed in multiplex screens. No other country in Europe, with the possible exception of Ireland, has yet reached that level of development and in this respect they can be characterised as 'emerging markets'. The principle factors hindering the further modernisation of Europe's cinema infrastructure are a mixture of cultural factors and planning issues. There is strong evidence to suggest that the move to multiplexing with the consequent improvement in the 'viewing experience', together with associated developments at out of town sites, such as restaurants and bars, are encouraging more people to go to the cinema and to go more frequently, reversing earlier declines.

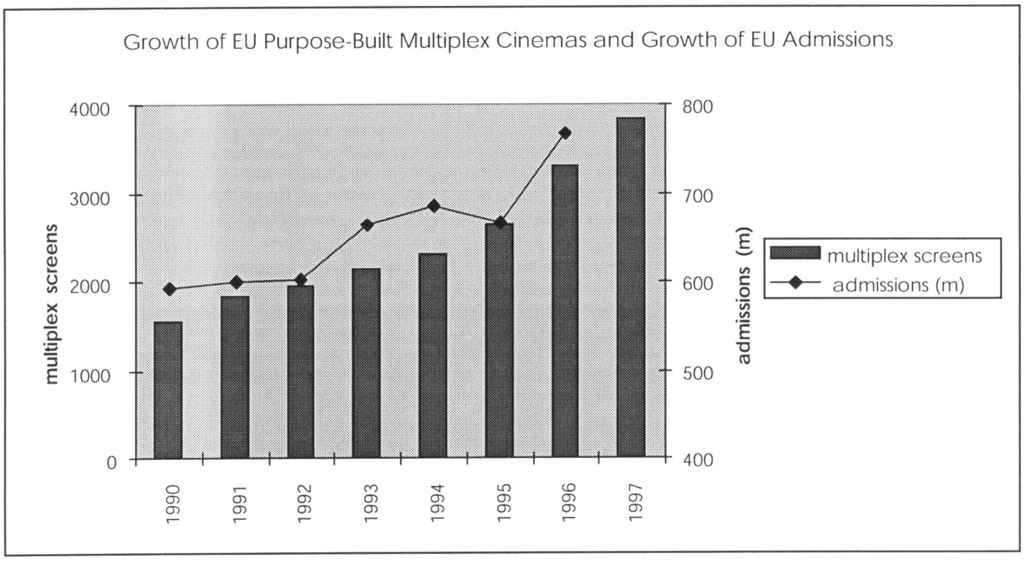


Exhibit 3.1: Growth of Multiplex Cinemas and Admissions

Box-office revenues to remain 'hit-driven'

Cinema box office revenues exhibit some variation year-on-year and depend heavily on the release of blockbuster hits. This cyclical nature of hit production is difficult to predict over anything but the short term, when reference can be made to films in production but not released. Our modelling approach is therefore focused on picking out long term trends in consumer expenditures at the box office.

The underlying strength and potential development of the cinema box office market in the countries can be illustrated by reference to the following indicators:

- cinema admissions per head;
- average ticket prices; and
- proportion of screens that are multiplex screens.

3.4.2 Video rental

Gradual shift from rental to sell-through

There has been a general trend away from video rental towards sell-through, albeit not at the same pace across the EU and it is expected that the less mature EU markets will experience continued change in this area in the next 10 years. However, the volume of rental business has stabilised at a new level, following the sharp drop in rental transactions between 1990 - 1993. Within the EU, the number of rental transactions has remained consistent for three consecutive years at around 640 million. This is only two thirds the level of 1990.

As a consequence of the decline of the rental industry, the number of rental outlets has decreased from 30,483 in 1990 to 26,595 in 1995. Future consolidation of the rental sector may occur as more chains develop with greater market power, leading perhaps to slightly higher rental charges, based on better perceived service.

Rental sector under threat from competing media

Looking towards the future, the video rental sector faces a continuous and growing threat from other forms of competing media such as cinema, pay TV and the advent of new transactional television services. The recent success of the cinema in attracting people out of their homes for a night out to see a film is seen as a significant factor in the decline of the rental business. In the longer-term, the advent of NVOD and VOD services would appear to provide new direct substitutes for video rental. Any decline of the sector is, however, likely to be gradual due to the large installed base of VCRs and the expected slow roll-out of transactional TV services.

The current state of the rental industry in the various national markets can be depicted by reference to the following indicators:

- the number of rental transactions per VCR home;
- the number of VCR homes per rental outlet;
- and the average spend per video household.

3.4.3 Video Sell - through

Market continues to grow

As expenditure on video sell-through continues to increase, one of the most important factors contributing to this growth has been the new form of promotions of retail videos made by video distributors, particularly Walt Disney.

Another key driver is the large quantity of software created specifically for retail video and a growing trend for 'collectable' video titles such as classic film. This has contributed greatly to the 'gift' phenomena. The continuing growth of the cinema industry and the success in recent movies will also help to improve the prospects of the sell-through industry.

The EU average sell-through sale price continues to decrease thus making it an increasingly attractive purchase for own ownership or as a gift. The maturity of the distribution structure is an important driver for the sell-through industry. The number of sales outlets in the EU continues to increase and was up 19% on the 1995 figure. Continuing development of supermarket chains and kiosks as part of the distribution chain are having a significant impact on the industry.

DVD sustains the upward trend

The eventual launch of DVD is expected to make a slight impact towards the latter part of 1997 and a gradual penetration in some countries in the remaining years of the first five year period. The penetration of DVD will be expected to make slightly more gains in the second five years in all EU countries. This will help to sustain the continuing growth over the next ten years.

The key indicators that underline the current strength of the sell-through market in the various countries are:

- the number of purchase transactions per VCR home
- average video purchase price
- average spend per VCR home.

3.4.4 Pay TV

Pay TV services in Europe are predominantly subscription based. Consumers pay either a relatively low fee for a basic package of general entertainment and niche programming, or a much higher fee for premium services, such as movie and sports channels. PPV services are relatively new in Europe, but have a longer history in the US where they are largely to premium sporting events. Across Europe, pay TV utilises all available forms of delivery; terrestrial, satellite and cable.

Premium Services

Films and sports are the key drivers

Content is the main driver when establishing pay TV channels and maintaining the market shares of existing services. Premium content is that which is most highly valued by viewers and is therefore the content that they are most prepared to pay for. This, more than increased choice, has been the determining factor encouraging subscriptions to pay TV. Sport and films are the two key formats. These genres have been behind the success of BSkyB and CanalPlus.

The key priority for pay TV companies is gaining and keeping subscribers, rather than maximising ratings and selling advertising. Marketing and promotional initiatives include clear, i.e. unencrypted, broadcasts of part of Canal Plus's schedule, which promote the channel to potential subscribers. BSkyB sees its monthly SkyTV Guide magazine as encouraging customer loyalty.

Public reluctance to pay for otherwise 'free' content

There is some debate and reluctance by the public in countries where subscription TV is relatively new about why they should have to pay for something that was hitherto available free of charge, and although this may slightly inhibit the rate of growth of the market in the first five

years, we assume that broad acceptance brought about by behavioural changes will be widely achieved in the second five years. In any case, the recent growing trend to purchase rights to exclusively offer sports events on premium channels will forcefully drive the market.
This effect may in part be mitigated by the presence of a strong free-to-air broadcasting sector. The relatively slow take up of pay TV services in Germany and Italy is certainly part explained by the existence of a wide choice of existing terrestrial broadcasters, which currently retain the rights to many of the key film and sports programming.

Consumer confused in multi-operator market

A significant inhibitor of the market is consumer confusion brought about by the fact of more than one service being available. In the early years in the UK, both Sky and BSB suffered from confusion in the market. FilmNet and TV1000 in Scandinavia have a similar problem now and for a while it looked as though digital TV developments in Germany would follow the same path. At the moment, the European pay TV markets are too small to support more than one operator in a country. However, many broadcasters hope this may change with the advent of digital television. The hope is that several broadcasters will be able to offer premium services through the same set-top box, possibly sharing use of the same smart card or using multiple smart cards. Apart from the competition / regulatory issues raised by this, there is the question of how many types of services can justify premium rates. Thus, if one company ties up all rights to key film and sports properties, there may be some doubt that premium rates can be charged for other types of programming.
In addition, the price of rights also increases when there is competition, and this is inevitably passed on to the consumer. This may not be so true of the US, which is a much bigger market, although it is still an open question as to how many competing pay direct-to-home services can be supported.

Digital may pose problems in transition

Furthermore, the introduction of digital services and continued growth of pay TV may incur problems for some operators who are already providing pay TV services. Specifically, analogueue receivers will have to be upgraded in order to take advantage of new digital services. BSkyB, as with other 'legacy' broadcasters will have to continue old analogueue and newer digital services side by side for at least the next five years, assuming they deliver in 1997. Otherwise, broadcasters will be forced to subsidise receiver equipment upgrades. This is exactly what BSkyB are attempting to do by luring financial institutions to offer interactive banking services in return for a decoder subsidy contribution.

Transactional Services

The transition to digital facilitates the introduction of so-called transactional services including Pay - Per-View (PPV), Near-Video-On-Demand (NVOD) and Video-On-Demand (VOD).

In order to satisfactorily address the key drivers and inhibitors of the transactional or on-demand, consumer market, it is necessary to first look at the US experience, essentially PPV offerings, and then draw conclusions relevant to Europe.

Analogue PPV limited

Sellers of addressable technology and distributors are only too well aware of PPV's lacklustre US history. Limited addressability, lack of channel capacity and technological constraints have held back PPV in the US and therefore, on the world stage too. The US PPV business, which is now 10 years old, earned just $590 million in revenues in 1995. This is insignificant when compared to the $9 billion total revenues in the home video rental industry. The challenges to developing a successful PPV business in Europe, therefore should not be under estimated. In the US, PPV failed to live up to its expectations; it did not deliver three things that the consumer expected; convenience, choice and control.

Move to digital overcomes past constraints

However, the influx of digital services should strengthen the menu of offerings and make the services more convenient to purchase. Indeed, PPV is now viewed so attractive that it is helping to drive the digital box, rather than simply being a passenger with the addressable converter. Contributing to this renewed optimism is the NVOD success of the digital DirecTv Inc. direct broadcast satellite system in the States, which averages a 150 to 200 % buy-rate per subscriber (up to two movies a month), as compared to US cable's average of 35 %. However, NVOD still only accounts for 15 per cent of DirecTV's total per subscriber revenues of $40 per month.
Technologically advanced NVOD PPV services and popular out-of-market sports offerings are seen as two of DirecTv's most attractive features, driving its digital service into US homes at a rapid rate. Indeed, high value content is the key fundamental driver of PPV, even more so than Premium Channels. In 1996, US PPV/NVOD revenues are expected to increase 20% to about $713 million. It is clear that one of the major factors that pump up that revenue is increased capacity, enabling increased shelf space devoted to PPV.

Europe learns from US mistakes

One important positive factor in favour of European developments is that operators are learning from mistakes made in the US. As digital services are launched throughout Europe, similar success should also be realised, and PPV will possibly sell the digital box. These launches are starting with 6 to 24 channels devoted to PPV. Indeed, Nethold is expected to launch 24 on-demand channels in 1996 on digital DTH platforms in Sweden, Denmark, Finland, Norway and the Netherlands and to expand eventually to 48 dedicated channels. In the UK, BSkyB is expected to devote 60 - 80 digital channels next year to PPV, NVOD and multiplexed services. Nethold's on-demand plans incorporate an angle to lure cable operators, promising them instant additional capacity and new services with new revenue streams. It's struck two significant deals in the Netherlands. A good proportion of cable companies are in the 15-20 channel range in terms of size. By putting in the digital IRD in the consumer's house, they essentially can drive the digital platform over their analogue cable system, and increase the number of channels to 80. In this bouquet are the transactional services.

The single most important European PPV test came last March, when Sky offered DTH subscribers and UK cable operators, the Frank Bruno / Mike Tyson boxing match. Sky was clearly pleased with 660,000 sales and an impressive 15% buy rate, as compared to the US average of 3 to 4%.
The Kirch Group's new digital NVOD operation of eight channels was launched in July this year. According to DF1 executives, revenues will be small in the short term, as the market for pay TV needs to be established first. However, DF1 expect that 20% of its revenues to come from PPV.

In summary, quality PPV and near video-on-demand (NVOD) features which are greatly facilitated by the move to digital, will help to drive the European market, as it has in the US. In addition, digital set-top boxes will increasingly have interactive capabilities (via a modem to the PSTN in the case of digital satellite and terrestrial services). The emergence of 'Internet TV' type services is likely to encourage greater consumer take-up.

The key indicators that describe the current state and potential of the pay TV markets are the following:

- penetration of cable and DTH households;
- number of years since pay-television was introduced; and
- the growth of subscription to premium movie channels.

3.4.5 Multimedia

As the business models for both the developing packaged Off-line sector and the emerging On-line sector are evolving at a different pace, we have decided to treat them separately in the course of this study.

Multimedia off-line

Multimedia is here defined to include electronic screen-based games, as well as interactive educational and reference software products that are aimed at the consumer. We have chosen to concentrate only on those formats that we believe are important for the future development of the industry. We have excluded portable games systems and the rapidly dwindling markets for 8-bit cartridges.

The multimedia market is essentially driven by a number of key factors such as MPC penetration, wide range of localised CD-ROM titles, CD Console penetration, efficient distribution structure, competitive pricing and availability of an affluent population.

Strong home MPC sales a good sign for multimedia market

The growth in the installed base of multimedia computers is attributed to decreasing hardware prices and a growing demand for entertainment, educational and personal productivity software.

Due to the memory required to store multimedia, CD ROMs are the most common delivery media today.
The installed base of multimedia PCs has been inceasing rapidly and will continue to gain momentum. By the end of 1996, an estimated 17.8 million personal computers are multimedia capable up from 8.28 million in 1995.

	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
	000s	000s	000s	000s	000s	000s	000s
France	0.0	1.0	3.5	37	280	1080	2120
Germany	0.0	5.0	25.0	127.0	1110	3220	4810
Italy	0.0	1.0	14.0	48.0	250.0	1040	1640
Spain	0.0	1.0	8.0	20.0	105.0	720.0	1200
UK	0.0	5.0	17.5	84	509	1200	2300
Benelux	0.0	0.5	2.5	32	223	1180	2016
Rest of Europe	0.0	0.6	10.6	59	414	2190	3744
EUROPE TOTAL	0.0	13.0	70.0	312.0	2700	8288.5	17,880

Exhibit 3.2: PCs with CD ROM drives: Active installed base estimates

The growth in the installed base of multimedia computers is due to;

- the availability of higher performance systems as standard offering now
-
- drives and soundcards available at lower prices
- the increasing availability of CD ROM titles
- and the growing public awareness of the capabilities of multimedia PCs

CD ROM drive prices falling while performance increases

The performance of CD ROM drives, measured by the speed at which the disc spins (the transfer rate), has increased rapidly since the first single-speed drive was introduced in 1985.

	1985	1992	1993	1994	1995
Single-speed	$1000 +	$500-600	$200-300	$150-250	Obsolete
Double-speed		$600	$400-500	$250-400	$100-250
Triple-speed			$450-600	$450-550	$150-300
Quad-speed				$1000	$200-400

Exhibit 3.3: CD ROM Drive Price / Performance History

Consumer software sales growing rapidly

The growing demand for consumer software products is a positive indicator of the growing market for multimedia titles. The main driver of growth in the European multimedia market is the strong rise in sales of multimedia CD ROMs for personal computers, which have now become the single most important format. In volume terms, it is estimated that European CD ROM sales increase nearly five-fold in 1995 to 14.9 million units, worth nearly $1000m at retail.

Consumer title prices declining

Worldwide prices of consumer multimedia CD ROM titles are declining rapidly. Consumer CD ROM title decreased to an average price of less than $30 in 1995 due to intense competition for shelf space.

Multimedia game platforms - life cycle

From its origins, the games sector has progressed through a series of clear market phases based on the life cycles of the dominant console technology of the period. Now that the 16-bit console life cycle is drawing to an end, industry expectations have turned to the new generation of 32-based machines to generate a new phase of market growth.

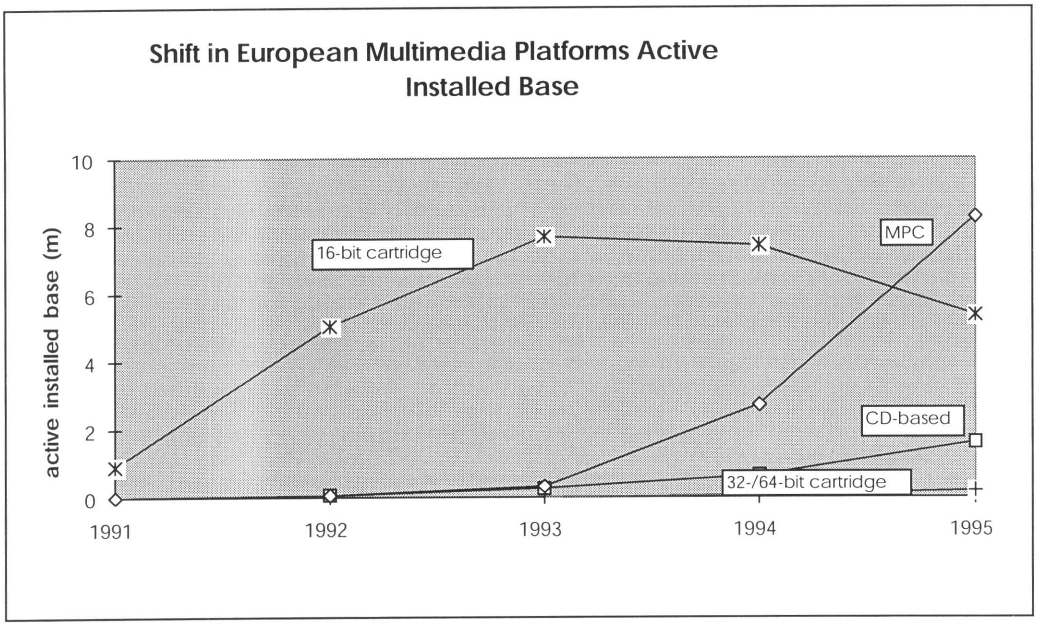


Exhibit 3.4: Shift in European MM Platforms: Active Installed Base

The multimedia games market is dominated by Nintendo and Sega - and is also attracting new players such as Philpips, The 3DO Company, Apple and Sony. Sega's satrun and Sega CD, 3DO's Interactive Multiplayer, Sony's Playstation and Philips CD-i player are example of the emerging consumer device category.

Games playing is and will continue to be, an important activity and area of expenditure. However, dedicated games platforms have a history of being proprietary, fashion-driven and relatively short-lived. Existing games consoles from Nintendo and Sega have been successful in Europe over the last few years, but are only suitable for a narrow sub-set of games types, and have a narrow core of target users.

The Console Gap

The year of 1995 was seen by many to be the 'swansong' year for the 16-bit video game market. However, Sega and Nintendo still managed to sell an estimated 1.5 million new 16-bit consoles to European consumers during the year. That is more than all the newer CD-based consoles combined, and is not bad for a dying format. The fact that 16-bit machines can be purchased for a third of the price of their CD-based counterparts has certainly helped maintain the level of sell-through, especially in the gift sector.

- Nevertheless, the total European 16-bit software market has plummeted an estimated 45.5 per cent since its peak in 1993. Publishers have been used to top 16-bit cartridge titles selling 300-400,000 units across Europe; in 1995 a good performance was 100,000 and bad performance 30,000 or less.

- The 1995 market would certainly have been considerably worse were it not for some exceptionally strong games titles still being released for the 16-bit systems. Blockbuster titles like Electronic Arts' FIFA Soccer and Nintendo's Donkey Kong series helped keep the format alive.

- However, the success of such hits should not mask the fact that the majority of 16-bit releases performed poorly in 1995. This is so despite the fact that most publishers cut back their 16-bit release schedules for 1995 after the 1994 experience of severly over-stocked trade channels. This is a function of the inevitable tendency for sales to be increasingly concentrated amongst the top titles.

Saturn and Playstation get the nod

With the 16-bit console market in its decline phase, it is thought that the leading platforms to succeed will be the Sega Saturn and Sony Playstation, usually alongside the MPC. If there is some consensus appearing, the bias seems to be favouring the Playstation. While every industry participant hopes the next-generation console market will grow fast, early sales for publishers have inevitably been constrained by the limited installed base. Nevertheless, initial software sales for both Saturn and Playstation systems have been strong Initial software sales for both Saturn and Playstation systems have been strong. At 3-4:1, the early ratio of discs purchased per installed machine has been as high, if not higher, than that achieved during the launch phase of Sega and Nintendo's 16-bit consoles. The net result of this is that the Playstation/Saturn business (essentially only a reality in the final quarter of 1995), achieved a software market value ($124m) nearly 30 per cent of that for the entire year's mature 16-bit business. For publishers, that means it is already possible to ship over 100,000 units of a single Playstation title across Europe, a sales level equivalent to a strong CD-ROM games release.

The big question now is whether the growth of this 32-bit CD-based market can be sustained. A key influence on this will be the introduction strategies of rival new systems. Whereas previous console market phases (4-bit, 8-bit, 16-bit) had time to achieve a level of stability and maturity, the smooth growth of the 32-bit life cycle is already threatened by the prospect of 64-bit machine launches. Already, Sony are planning to launch an upgrade of the Playstation with integrated Internet / WWW access.

Distribution structure underdeveloped

Across Europe, the interactive entertainment distribution business is still under-developed and requires considerable investment to bring it to a level comparable to music and video. In general terms, the games industry is moving towards a hybrid of music and video industry `hits driven' distribution models, with some companies operating integrated physical distribution services, others leaving physical dissemination to third parties, and exclusive distribution contracts generally becoming common. Parts of the edutainment sector are closer to the highly fragmented book publishing model.

These trends will be accentuated by the current expansion under way in the retail channel for interactive multimedia software, particularly CD-ROM. The more that mainstream entertainment product retailers take up multimedia products and become important to overall market share, the greater will be the power of those distribution companies which already supply them with leading music and video products

The current strength and potential of the multimedia market is observed by referencing the following indicators:

- MPC penetration;
- no. of CD-ROM purchases per MPC HH;

- purchase price of CD ROM;
- CD console penetration;

The off-line multimedia market in Europe is emerging as looking comparatively healthy, mainly driven by the strong rise in the sales of multimedia CD-ROMs for personal computers, which have now become the single most important format. The decreasing price of MPCs is helping to fuel this growth. However, the average number of CD purchases per MPC household is disappointingly low and continues to inhibit the full market potential.

New CD-based video games from Sega and Sony are making a strong contribution and have a good ratio of software purchased to hardware ownership. This market is expected to continue to grow in the short term as the 16-bit games cartridges market continues to decline. In summary, we believe the multimedia market will continue to grow at current rates for the next five years as the number of platforms becomes even more consolidated. The development of consumer - driven CD-ROM titles and a better distribution structure will enable the market to grow at a slightly higher rate of current growth for the following five years.

Multimedia on-line:

The present state of the demand for on-line multimedia services is not well known. This is essentially due to the fact that today, the supply side and technology drive the market. Killer market applications have not developed and the market continues to be fragmented.

The two key platforms for multimedia in the home will be the TV set-top box, offering simple operation via remote control and the MPC with modem . The types of usage and level of usage on both these platforms will be different and the revenues generated will also differ.

There are a number of key drivers such as Internet access, high speed access, competitive pricing, content, culture, and switching costs which will develop the on-line multimedia market.

Internet access:

The enormous amount of attention that the Internet, and specifically the WWW, generated in 1995 helped spur explosive growth in the number of consumer subscribers to on-line services and Internet-access providers. Subscribership was also facilitated by declining prices for both home computers and modems, as well as for on-line services, and the increased accessibility and ease -of-use of Internet navigational software.

Aggressive marketing by leading consumer on-line providers such as Compuserve, AOL / Bertelsmann and MSN played a significant role in growing the market.

In the short term, it will be difficult to include extensive multimedia content via on-line services, as most installed modems are low baud rate and most on-line services offer a maximum transfer rate of 14.4kbps. However, a number of technologies such as fractal compression and high speed access techniques are becoming available which will overcome this problem.

High - speed access:

By increasing the utility of the Internet and improving reliability, the advent of technologies that provide faster transmission speeds will also spark Internet use over the next 10 years. Currently, one of the major drawbacks to using the Internet is that it can be extremely slow in providing information. The arrival of cable modems may help to alleviate this problem by stepping up the speed at which data is transmitted. We expect cable modems to be deployed in 2-3 years on cable TV networks with a fibre optic backbone.

In addition to cable modems, wireless modems are being tested as a form of high-speed data delivery. As part of DTH systems, the modems are capable of rapidly downloading full-motion video, audio and data. The caveat is that upstream data is sent through telephone lines at a much slower speed. Such a system is being proposed by BSkyB as part of its digital pay TV launch in 1997 with a range of added value services such as home shopping and home banking.

Advances in the ease of implementation, the cost of installation and utilisation charges is helping to increase ISDN penetration throughout Europe. However, charges are still such that its users are primarily business. However, this is not the case in Germany, where there is phenomenal growth in the number of consumers using ISDN in the home to access the Internet. This is as a result of Deutsche Telekom aggressively marketing ISDN and charging a nominal fee for installation and utilisation.

Another promising modem technology that will permit consumers to access content more quickly is that of ADSL, using the telephone line connection. The promising results of initial trials indicate that this may be deployed by various telecom operators from the year 2000 onwards.

Competitive Pricing:

Price is one of the most important drivers in stimulating the uptake of on-line services. It affects not only the speed of adoption but also the usage of new services. Price is influenced by many factors - the size of the local relative to international market, the degree of competition, the originality of the product and the degree of risk taken in its production.

One of the major factors that has limited on-line and Internet service growth has been the high cost of the hardware needed in order to use these services. As home computer and modem prices fall, and as inexpensive devices (usually called Network Computers / STBs) that can access the Internet without the need of a computer are introduced, the hardware hurdle should be less of an impediment to growth. However, it is interesting to note that not all users with MPCs are subscribers to on-line services.

One of the factors that has hampered subscribership to Internet-access providers has been insufficient and ineffective marketing by the telecom operators. However, this is gradually changing and in addition, most are charging all links to the Internet at local charges. However, in general, telecommunications charges in Europe are not encouraging users to subscribe to on-line services. The impact of market liberalisation measures in 1998 should, however, see the price of telecommunications in Europe begin to fall.

Content:

On-line multimedia services is about access to content. Content is an extremely important differentiator between European countries because the impact of language, culture and consumer needs determines that generally the most effective content is local content. Consequently, the presence (or absence) of local content can play a major role in stimulating uptake of certain services. This is marked in emerging areas such as the Internet where in several markets only a few local content providers have emerged, although this situation appears to be changing rapidly.

Culture:

Culture, in this instance, describes the various components of attitude that contribute to the growth of on-line multimedia services. These include consumer attitudes, language, education, political commitment, and the longevity of a competitive market place. The individual effect of these differences in culture is impossible to model. However, collectively, they do contribute to the development of a positive environment in which on-line services will prosper.

According to research carried out by Inteco, much of the activity, such as home - based education, home banking, telephone - based information services, which can be regarded as precursors of demand for multimedia -based services, are concentrated in a number of households - those which are relatively wealthy and well educated.

Switching Costs:

On-line multimedia has the potential to be a mass market service if the digital STB/ integrated digital receiver becomes ubiquitous with TV households, whether services are received terrestrially, via cable or DTH. It is expected that the decoders will decrease rapidly in price and in some cases they may be either subsidised by the service provider or rented. As the cost will be considerably less that the purchase of a MPC, it is likely to be the dominant platform. However, it is likely to lead to less intense usage compared to the MPC usage.

We believe the following indicators are the most suitable in illustrating the current state and potential development of the multimedia markets in the various countries:

- MPC penetration
- Modem penetration
- Internet hosts / 100 Inhabitants;
- growth of Internet hosts;
- ISDN penetration; and
- Pay TV penetration.

The continuing explosion in the number of Internet subscribers will be a major factor in preparing the market place for on-line multimedia services. In general, there are few on-line multimedia services being delivered to the subscriber today. However, this is rapidly changing. Unless, there is a supply of locally produced content that takes into account different cultures, then there will not be a sustainable industry. In most countries this is beginning to occur.

Competitive pricing of telecommunication costs, content costs and equipment are vital for the long term growth. It is our belief that the market will grow quickly in the initial five years, capitalising on an increasing installed base of MPCs and digital STBs and supply of locally produced audio-visual content. In the second five years, as the 'early adopters' will have been surpassed, and peoples resistance is slowly overcome, penetration rates of hardware will soar amongst the mass market, thus fuelling increased growth rates of the on-line market.

Chapter 4 Projections for Aggregate AV Expenditures

This chapter provides economic projections for licence fee revenue, advertising revenue and consumer expenditure in each of the seven member states.
We begin by presenting the most likely scenario for each market per country. The scenario is partly based on an analysis of historical data and key economic indicators together with market developments that are likely to have an effect on that market. Each scenario is then concluded with a qualitative assessment of the economic future of that market. We then present the projected growth of revenues for each market segment, per country, over the period 1996-2005.

The chapter is structured as follows;

- 4.1 Germany
- 4.2 Denmark
- 4.3 Spain
- 4.4 France
- 4.5 Great Britain
- 4.6 Ireland
- 4.7 Italy

4.1 Germany (DE)

Summary:

Total AV expenditures for Germany are projected to grow from ECU 8,621.5 million in 1995 to ECU 14,737.4 million by 2005 (see Exhibit 4.1.1). Direct consumer AV expenditure continues to grow in importance accounting for 40.6% of total AV expenditures in 2005 up from 26.6% in 1995. Advertising's share of the total is projected to remain fairly constant at 40.6% in 2005 (40.9% in 1995), while television licence fee revenues fall from 32.5% of the total in 1995 to 18.7% in 2005.

Within direct consumer expenditures, on-line multimedia emerges as the largest market segment in 2005 with a total value of ECU 1,802.7 million. Other significant growth sectors are video sell-through (ECU 1,068.1 million in 2005) and off-line multimedia (ECU 1,065.2 million in 2005). The pay TV market in Germany is projected to reach ECU 807.9 million, held back in part by the continuing strength of the terrestrial free-to-air market.

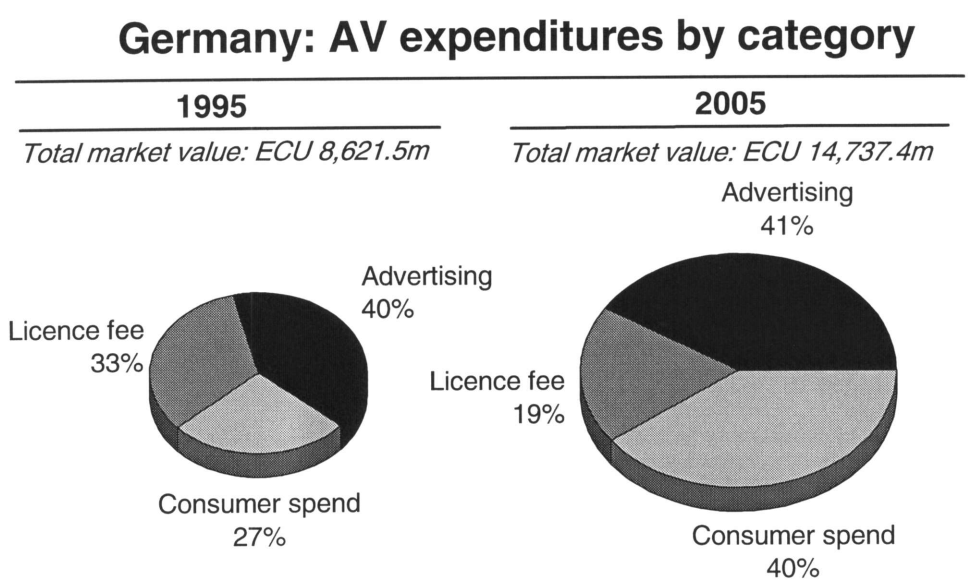


Exhibit 4.1.1: Summary of Aggregate AV Expenditures: Germany.

Licence Fee

Indicators:

Current Level: ECU 149 (1990: ECU 110.5)

Licence fee revenue: ECU 2802.1 million (1990: ECU 2169.5 million)

Licence fee revenues as percentage of total revenues: 71%

Public broadcasters share of viewing: 39%

Country Specific Details:

Germany is the largest television market in Europe. There are 20 national free-to-air channels and their numbers are growing because the size of the German market is attractive and it is easy to reach a large number of households through satellite and cable. Five channels achieve viewing shares of more than 10%, namely RTL, SAT.1, ARD1, ZDF and PRO 7. Other significant channels include ARD 3, the regional services broadcast by the stations that make up the ARD network, with 9% of viewing , RTL 2 with 5% and Kabel 1 with 3%.
The two main public broadcasters are ARD and ZDF.

Public Announcements on Licence Fee:

The Monthly Licence fee was recently increased by DM 4.45 to DM 28.25, with effect from 1 Jan '97 and to be maintained until year 2000. Pleased with the far - reaching efficiency drive, the government will probably give ZDF will most of this increase, which will add 50% to the channel's licence fee revenues. ARD will have to make further savings to guarantee extra income.

General perception of public sentiment / political commitment:

The public audience share of ARD and ZDF has been falling rapidly since 1990, though more gradually in the last two years. They are experiencing problems with their funding. The advertising that they can show is restricted to 20 minutes per day. Competition from the private sector had caused their viewing share to fall; in turn this has pushed down advertising sales, causing financial problems. However, they may be turning the corner as both recently recorded their first increase in advertising revenues for 4 years. ZDF and ARD are trying new ways of competing, planning a children's channel from 1 January 1997. A documentary channel is also under consideration.

There is a strong cultural policy in favour of maintaining the presence and quality of the public stations.

Conclusion:

On the basis of the recent political agreement to award a licence fee increase of approximately 18% and to be maintained until the year 2000, we believe it reasonable to assume average growth of 1.8% per annum in real terms for the first 5 years.

The growing popularity of commercial channels and the huge potential in pay TV from Premiere and DF1 will provide an increasingly difficult environment for licence fee revenue. Accordingly, we believe that the decline of the licence fee revenue in the second five years to be an average 1.9% per annum.

	1st 5 years	**2nd 5 years**
base scenario	Average growth rate of 1.8%	Average decline rate of 1.9%

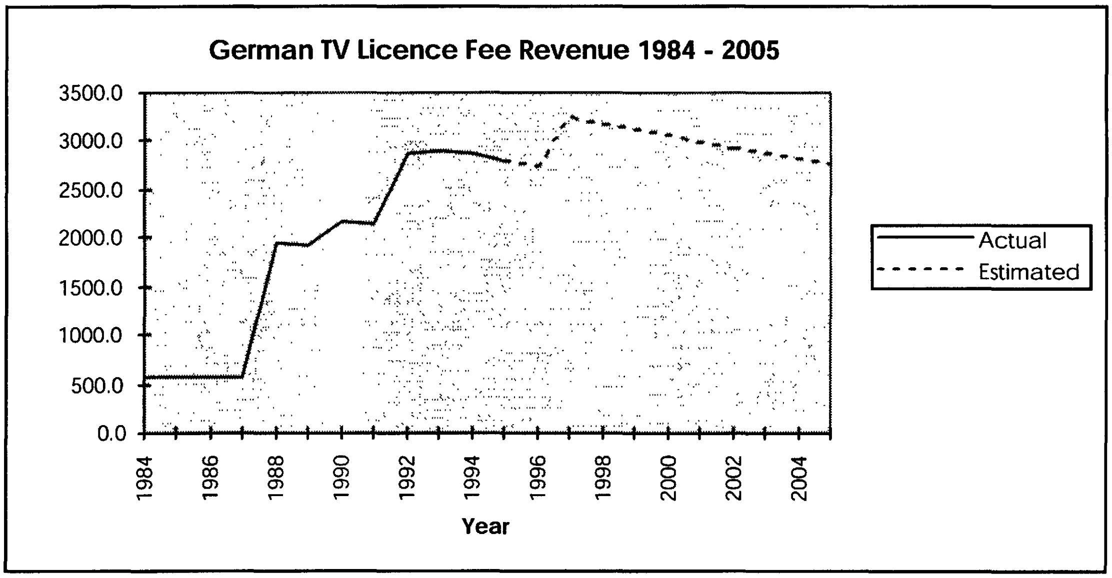


Exhibit 4.1.2: German TV Licence Fee Revenue

Advertising

Indicators

Total AV adspend: ECU 3528.0 million
Average growth / year of TV advertising spend 1990- 1995: 14.28%

TV adspend as a share of total advertising: 20.5% (1992: 16.1%)
Level of TV adspend as a share of total advertising relative to EU average: 9.5% below

AV adspend as a share of GDP: 0.21%
Average AV adspend as a share of GDP / year 1990-1995: 0.17%

Country Specific Details

Discussion on market structure:

Although the Germany economy has shown signs of slowing down, there is a steady recovery from the recession and the effects of reunification.

There is a very strong commercial broadcasting sector in Germany with commercial revenues achieving 41% of aggregated public and private TV revenues. Commercial channels have a combined audience share in excess of 60%. 5 channels achieve viewing shares of more than 10%, namely RTL, SAT. 1, ARD 1, ZDF and PRO 7. Other significant channels include ARD 3, the regional services broadcast by the stations that make up the ARD network, with 9% viewing share, RTL 2 with 5% and Kabel 1 with 3%. RTL topped the ratings in 1995 with a 17.6% audience share.

The TV advertising market has expanded vigorously during 1995. After years of relatively poor performance, broadcasters have pursued aggressive marketing strategies, particularly, state channels. Encouraging advertisers with free air-time spots and special terms for big spenders, channels have overhauled their programming schedules, producing more popular programmes aimed at a more affluent portion of the channel. While few of the special interest channels achieve a large share of the TV audience, the growth of these niche markets has attracted non-traditional customers to the TV advertising sector, particularly mail-order businesses. As a result the healthy TV sector is likely to expand its share of advertising expenditure. In the first 9 months of 1996, commercial TV advertising revenues increased by 14%; ZDF's and ARD's increased by 7.5% and 1.5% respectively.

Under new ownership regulations, which eliminates the 49% ownership limit and replaces it with a maximum 30% viewer market share, both Bertelsmann and Kirch will have room for expansion. Under the revised state treaty, companies can own or part-own as many channels as they wish providing they do not exceed the 30% limit.

Likely impact of new media
Based on the relatively high penetration of ISDN for Internet access and PCs in the home it is expected that additional advertising budgets will be attracted to these new forms of media.

Conclusion:

On the basis of the continuing recovery of the Germany economy from recession and the effects of unification, and the increasingly competitive TV advertising market, we believe the market will grow at a rate of 6-7% for the next five years.

This growth is expected to continue in the second five years as economic recovery continues and new channels and new forms of media such as Internet and WWW begin to make an impact on existing saturated channels.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 6.6%	Average growth rate of 5.6%

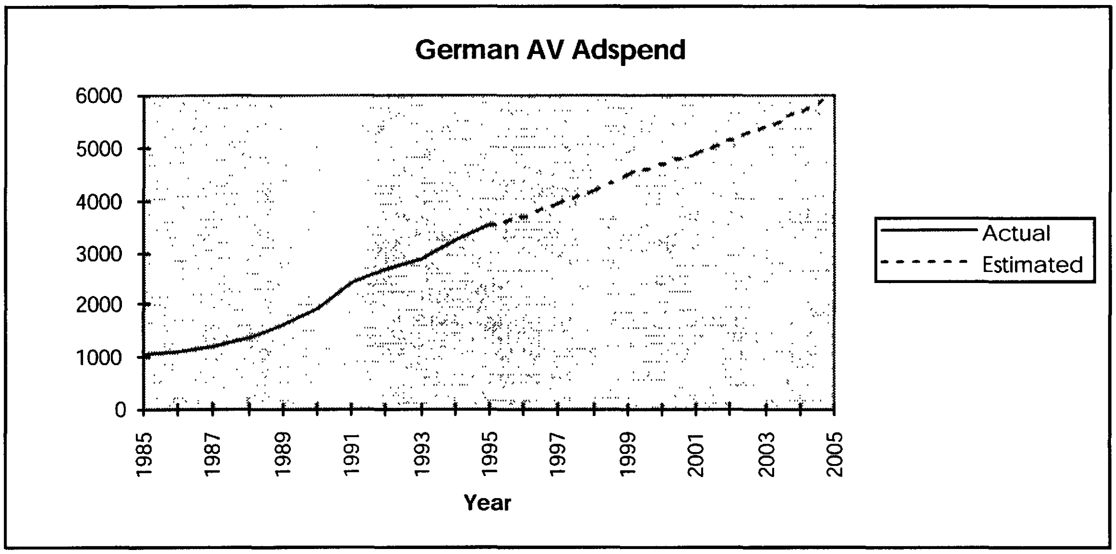


Exhibit 4.1.3: German AV Adspend

Consumer AV Expenditure

General Consumer AV Expenditure Indicators

Consumer AV expenditure as % of GDP: 0.14%
Average consumer expenditure / year as % of GDP 1990-1995: 0.11%

GDP / capita: ECU 20,822 million (1990: ECU 18724 million)

Average daily hours TV viewing: 2.9

TV Households: 36,085,000

VCR Penetration: 65.9% (1990 - 52.4%)
Average growth / year of VCR penetration for period 1991 - 1995: 4.37%

Cable Penetration: 41.4% (1990 - 28.3%)
Average growth / year of cable penetration for period 1990 - 1995: 2.62%

Satellite Penetration: 25.6% (1990 - 3%)
Average growth / year of satellite penetration for period 1990 - 1995: 4.52%

Cinema Box Office

Indicators

Gross cinema box office revenues: ECU 631.4 million (1990: ECU 518.8 million)

Average annual cinema admissions per head in 1995 was 2.1 (1990 - 1.7)
Level of average annual admissions relative to EU average: 23% greater than EU average 1.7
Growth of average annual cinema admissions for period 1990 - 1995: +25%

Average ticket price in 1995 was ECU 4.6 (DM 9.5)
EU average ticket price: ECU 4.9
Average ticket price in 1994 was ECU 4.5 (DM 9.2)

Multiplex Screens as proportion of Total Screens 6.5%
Level of multiplex screens as proportion of total screens relative to EU average: 11% below EU average of 17.4%
Growth of multiplex screens as proportion of total screens period 1990 - 1995: 5.9%

Country Specific Details

Discussion of market structures:

The cinema building boom continues unabated, especially in the under-developed former East Germany. The total number of German screens increased by 106 from 3795 in 1994 to 3901 last year.

A very significant 34% of cinema tickets sold in Germany during June 1996 were for locally produced films. Overall, local films took 20% of admissions for the first half of 1996 compared with yearly averages of 10% this decade.

Likely impact of new media:
It is thought that the impact of any new media is likely to be insignificant due to the added value of the 'social experience' in going to the cinema.

Conclusion

As the multiplex build continues, we expect that the sector will continue to grow at an average rate of 1-2 % over the next five years.

Due to the relatively small absolute value of multiplex screens as a proportion of the number of total screens, we expect the multiplex build to continue in the second five years. This together with a sustaining of the current popular nationally produced movies will enable the market to grow constant in real terms for the following five years..

	1st 5 years	**2nd 5 years**
base	Average growth rate of 1-2%	Average growth rate of 0%

Video Rental

Indicators

Total video rental expenditure: ECU 395.0 million (1990: 632.2 million)

Average rental transactions per VCR home: 6.7
Level of average rental transactions per VCR home relative to EU average: 9% below EU average 7.3

Average spend per video household: ECU 16.6
Level of average spend per video household relative to EU average: 13% below EU average ECU 19

VCR homes per rental outlet: 3946 (1990- 1585)
Growth / year of VCR homes per rental outlet 1990 - 1995:+149%

General Country details

Discussion of market structure:

Germany is still more video rental orientated than purchase but this is gradually changing.
This is reflected in the continuing decrease in the number of video rental outlets. It is expected that the current trend in the switch from rental to sell-through will continue.

Germany's video rental market grew by 1.4% in the first half of 1996. However, these figures are expected to improve in the autumn with the rental release of major titles. Growth for the year is estimated to be 3-5%. Although the trend of the decline in the video rental market is not expected to be reversed, it may be slowed down by recent recovery.

Likely impact of other media:

DVD is not expected to make any significant impact on the rental sector. However, the growing pay TV market may impact it.

Conclusion:

Although there was positive growth in 1996, this will at best help to slow the decline of the market. In conclusion, we believe it reasonable to assume that the market will decline at an average rate of 1-2% for the next 10 years.

	1st 5 years	**2nd 5 years**
base	Average negative growth rate of 1-1.5%	Average negative growth rate of 1.5-2%

Video sell-through (including DVD)

Indicators:

Total video sell-through expenditure: ECU 555.1 million (1990: 188)

Average video purchase transactions per VCR home: 1.7 (1991 - 1.3)
Level of average video purchase transactions per VCR home relative to EU average: 30% below EU average 2.4

Average video purchase price: ECU 12.1 (DM 24.94)
Level of average video purchase price per VCR home relative to EU average: 15% below EU ECU 14.3.
Average video purchase price per VCR home 1994: ECU 14.6

Average spend per VCR household: ECU 23 (1991 - ECU 17.6)
Level of average spend per video household relative to EU average: 28% below EU average ECU 32.3

General Country Specific Details

Discussion of market structure:

The number of sell-through outlets has remained constant during 1994 and 1995, following the 30% increase between 1993 and 1994.

Average sell-through prices fell for the second year running; 6.8% decrease in 1994 and a 8.1% decrease in 1995.
However, the video sell - through market remains healthy in 1996 with sales up 13% on same period in 1995.
Likely impact from competing media:
It is expected that Germany will be an early adopter of DVD (following its early adoption of consumer appliances) and that this will have a positive impact on the sell through market.

Conclusions:

On the basis of the distribution market stabilising at a new level and the continuing trend from rental to sell-through, we believe it reasonable to expect that the growth of the sector continues at current rates for the next 5 years.

For the second five years, we believe DVD will be the most significant factor in sustaining slightly lower growth.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 6-7%	Average growth rate of 4-5%

Pay TV

Indicators

Total pay TV expenditure: ECU 374.1 million (1990: ECU 11.0 million)

Cable TV connected HH: 41.4%
Growth / year of cable TV connections 1990-1995: 2.62%

DTH connected HH: 25.6%
Growth / year of DTH connected HH 1990 - 1995: 4.52%

Number of years since pay TV introduction: 10

General Country Specific Details

Premium Services

Discussion of market structure:

Prior to the launch of the digital DF1 channel in July this year, Germany had only one pay-television channel, Premiere. Premiere had 1.15m subscribers at the end of March 1996. The annual growth in subscribers of the service has been steadily declining from 1990 (229%) to 1995(19%). Its growth has been hampered by the large number of channels already available, the fact that 14.6m households already pay basic cable subscriptions, and also the fact that its shareholders' interests in free-to-air content and the launch of digital services have restricted its access to high-value content. The five year old service has yet to make a profit.

DF1, the first digital TV for Germany and Austria, was launched on 1 July 1996. DF1 anticipates 200,000 subscribers by the end of 1996; 700,000 by the end of 1997 and 3 million by the year 2000. DF1 has been very successful in purchasing TV rights output for Hollywood major Paramount, various children's channels, and the World Cup soccer competitions for 2002 and 2006. In addition, DF1 has secured TV rights of operas and musical performances in various countries during the last ten years. These will be exploited in due course.

Likely impact of new media

Discussion of issues in switch to digital pay - TV.

Bertelsmann and Kirch have entered into a co-operation agreement, with Kirch settling the problem of a standard decoder and clarifying the future of Premiere. The accord called for the partners to develop Premiere into a digital service. On the basis of the expected projections for DF1, and a common standard for the decoder, consumers may now be more enticed to move to digital as it will allow them to choose the pay TV channel it prefers. Instances of competing pay TV platforms in Europe have not traditionally encouraged growth of the market but in fact confuse the consumer.

Conclusions:

The German track record in the pay TV market is not an impressive one and would not inspire confidence in the future. However, as pointed out earlier there are justifiable reasons why it did not take up. We believe the competition between Premiere and DF1 will lead to higher quality programming and more choice for the consumer which should encourage growth of the market. However, this is subject to a single digital platform becoming available in Germany. We therefore, believe that the market will exhibit strong growth and that this will continue for the next 5 years.

The competition of the pay TV sector in Germany could have been much more fierce this year had it not been for the failure of other proposed launches including the BSkyB alliance with Germany. However, it is possible that more launches may loom on the horizon in the near future. This will only encourage the market more. In the second five years, we believe the market will continue to grow, though at a slower rate as more and more consumers are enticed to the pay TV premium events.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 13-14%	Average growth rate of 2%

Transactional TV

The DF1 launch of 50 digital channels includes nine movie pay channels organised by genre; the Cinedom pay-per-view service (offering new movies, sport and entertainment); and other pay-channels devoted to children's programming and documentaries s well as third party niche services. In addition, services offering home shopping and home banking are also planned.

Conclusion:

Although there is no precedent in Germany for the level of demand for these types of services, we assume as in other European markets, that as a critical number of premium service subscribers is attained, the market for transactional services will grow proportionally.

	1st 5 years	**2nd 5 years**
base	Market to grow to ECU 96 million by year 2000	Average growth rate of 7-8%

Multimedia: Off-line

MM off-line expenditure: ECU 335.5 million (1991: ECU 17.4 million)

MPC Model

Indicators

MPC Penetration: 6.6%
MPC penetration 1994 : 2.3%
Growth / year of MPC penetration for period 1993-1995: 2.2%

Average no. of CD-ROM purchases per MPC HH: 1.9 (1992: 1.1)

Average purchase price of CD ROM ECU 49.7 (1992: ECU 64.2)

CD Consoles Model

Indicators

CD Console Installed base: 266,500 (1994: 94,500)

General Country Specific Details

Discussion of market developments:

Due to its booming CD-ROM sector over the last couple of years, Germany is now the largest market for interactive entertainment software in Europe. Because its growth has been so related to the rise of the MPC and less dependent on the earlier cycles of the cartridge business, the total German market has steadily increased in size over the last five years.

As evident in all markets, 16-bit cartridge market has declined. Nintendo has a better market share in Germany than elsewhere in Europe.

Germany is the CD-ROM market driver of Europe, accounting for nearly 40% of all CD-ROM software sold in Europe. The main driver for this is the relatively low prices of MPCs.

Germany's market size is augmented by the additional German-speaking markets of Austria and Switzerland. As Germans are generally comfortable with English-language product, they German CD-ROM market was able to start earlier with imported titles. However, localisation of titles into German language is vital to achieving good sales and the number of German-language CD-ROMs (both localised and German-originals) is growing dramatically. In 1995, there were 1500 German-language releases, double the 1994 number.

The German CD-ROM market is heavily dominated by games. Thus, despite the relatively poor track record for dedicated games machines in Germany, there is obviously a considerable underlying demand for games. Accordingly, the edutainment market is relatively poorly developed, estimated to account for no more than 5% of 1995 figures.

The distribution structure is fragmented and at an early stage of development.

Conclusion

The largely homogeneous base for a multimedia platform in the MPC, positions Germany for sustained growth. Together with decreasing hardware prices, expanding supply of German titles and developing distribution channels will allow the market to grow at current rates of 15-17% for the next 5 years and at a lower rate for the following five years.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 16-17%	Average growth rate of 8-9%

Multimedia: On-line

Indicators

PC Path:

MPC Penetration as % of Households: 6.6%
Modem Penetration as % of Households: 4%
Internet hosts / 100 Inhabitants: 0.67
Growth / year of Internet hosts 1994-1996: 86.5%
ISDN lines/ main telephone lines: 1.41

TV Path:

Multi-channel Penetration of TV HH: 67%

General Country Specific details

Broadband Infrastructure rollout:

The OPAL project, which can reach 37 cities, has allowed the development of fibre optics into the local loops, to both business and residential customers. In the former East Germany, more than one million households have been connected to broadband networks, based on Fibre-To-The-Building, or Fibre-To-The-Curb architectures.

The extensive cable TV network is already at full capacity. There are currently no plans to upgrade this network in the former Germany.

General market discussion:

The development of multimedia applications over networks in Germany involving 7 major trials were put on hold in November 1994 for a variety of reasons. Yet, Deutsche Telekom (DT) whose cable TV network has over 24 million homes connected to it and has development agreements with Microsoft and Intel to develop German services, will be the main driving force behind multimedia in Germany.

Germany has a high number of Internet hosts and is growing at approximately 90% per year.
AOL / Bertelsmann and T-On-line are growing rapidly with in excess of 20000 new subscribers per month. Home banking is proving to be very popular.

The growth in ISDN (of approximately 67% per year for 1995 and 1996), especially into residential homes, has taken DT by surprise. Most residential connections are being used for high speed Internet access.

Conclusion:

The very extensive cable TV network, rapidly growing DTH market and ISDN growth will be significant drivers for the development of multimedia on-line services in Germany. Together with a growing availability of local content from service providers such as AOL / Bertelsmann and T-On-line will enable constant real growth for the next 10 years.

	1st 5 years	**2nd 5 years**
base	Market to grow to ECU 186 million by year 2000	Average growth rate of 60%

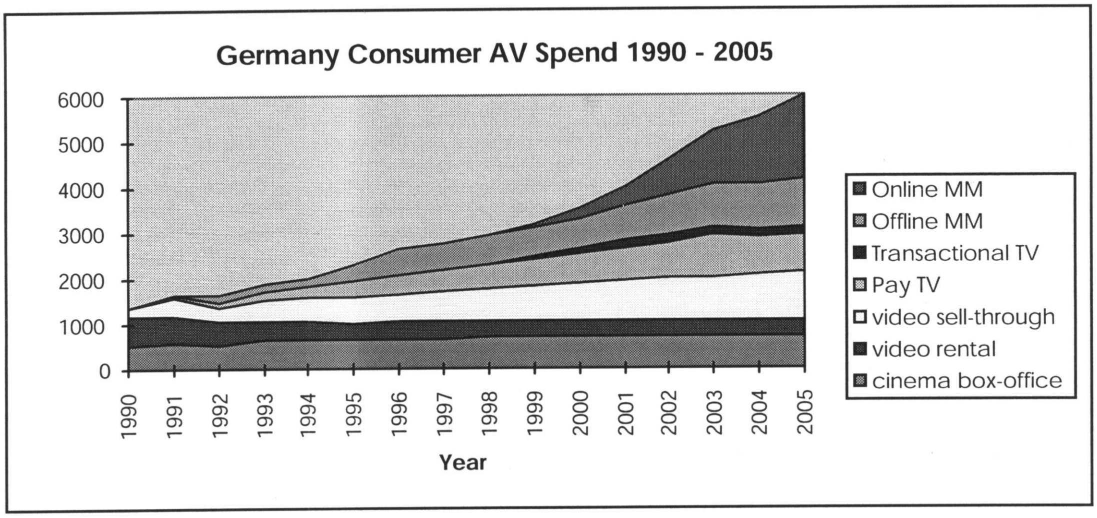


Exhibit 4.1.4: German Consumer AV Spend

4.2 Denmark (DK)

Summary:

Total AV expenditures for Denmark are projected to increase from ECU 766.6 million in 1995 to ECU 1163.5 million in 2005. Consumer AV expenditure increases its share of the total from 29.7% to 42.5% over the period, while advertising remains reasonably constant at 26.7% in 2005 (24.9% in 1995) with licence fee revenue falling from 45.4% in 1995 to 30.8% in 2005 (see Exhibit 4.2.1).

The 1996 penetration rates for MPCs (12%) and Internet connections (4%) in Denmark are significantly above the European average. We expect these sectors to continue to experience strong growth over the next ten years, such that in 2005 on-line multimedia represents the largest consumer AV expenditure category at ECU 113.2 million, while off-line multimedia sales reach ECU 81.2 million in the same year. Pay TV also advances strongly to ECU 77.1 million in 2005.

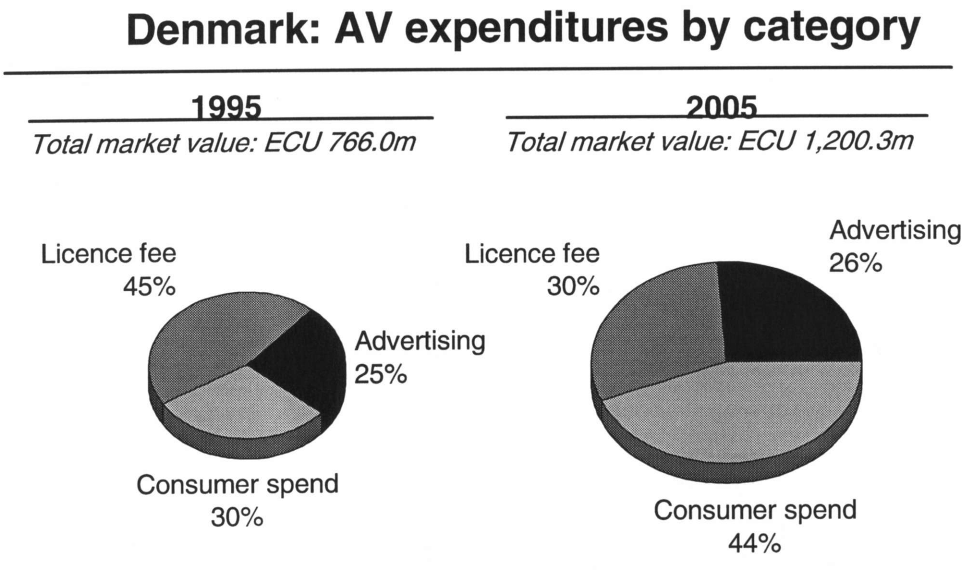


Exhibit 4.2.1: Summary of Aggregate AV Expenditures: Denmark

Licence Fee

Indicators:

Current Level: ECU 172 (1990: ECU 186)

Licence fee revenue: ECU 348.0 million (1990: ECU 313 million)

Licence fee revenues as percentage of total revenues: 77%

Public broadcaster's share of viewing: 69% (1990 level 92%)

Country Specific Details:

There are 3 state run networks DR (28%), DR2 and TV2 (41% - partially privatised), and private networks TV3 (11%) and Kanal 2 (3.9%). While TV2 is a commercial channel, Danmarks Radio relies entirely on licence fee income. Denmark is heavily reliant on TV licence funding but this is expected to change in the future. The licence fee is perceived to be relatively expensive in Denmark. In addition, Filmnet is the main pay TV company.
A third terrestrial national channel may be allocated for digital transmissions, with two channel bandwidths going to DR and TV2 and any other digital channel capacity going to third parties.

Public Announcements on Licence Fee:

The licence fee has recently being agreed by the Government to approve a 3.3% increase per annum until the year 2000. This increase is greater than the estimated 2.4% level of inflation over the period. In the year 2000, there will be a new political agreement to decide the next 4 years.

General Perception of public sentiment / political commitment

DR's 2nd channel, DR2, is now operating and being delivered via satellite. It is intended to complement DR/TV, at the same cost of the licence fee to the consumer. However, as only 60% of Danish TV households have the capacity to receive it via cable or satellite, the new channel has provoked a public and media outcry.

The recent media legislation passed in May this year and reform of DR reaffirms the political commitment to allow public broadcasting change with the times. However, licence fee revenue will not be used to develop new services, but must be self-financed.

In order to remain competitive, the broadcaster initiated a four-year plan in 1993, splitting radio and TV services to reduce administrative costs. The efficiency drive included staff rationalisation, with savings passed on to the programme departments. The plan has been largely successful.

Conclusion:

It is clear from the recent Government media legislation and the political agreement to annually increase the licence fee at a rate greater than the projected rate of inflation, that the broadcaster is being allowed the flexibility to adapt to the changing environment following its successful 1993 four-year competitiveness plan. Unless a highly unexpected political decision reversed the recent political approval of the licence fee until the year 2000, we believe it reasonable to assume licence fee revenue growth of 1% in real terms for the next 5 years.

In the second five years, the trend towards less reliance on the licence fee revenue as the main source of broadcaster revenue continues as the process of reform becomes established. In particular, the broadcaster will establish revenue generating subsidiary companies other than radio and TV, and shift towards pay subscription TV. In conclusion, we believe licence fee funding will decline by an average annual rate of 0.4% for the second five years.

	1st 5 years	**2nd 5 years**
base scenario	Average growth rate of 1%	Average decline rate of 0.4%

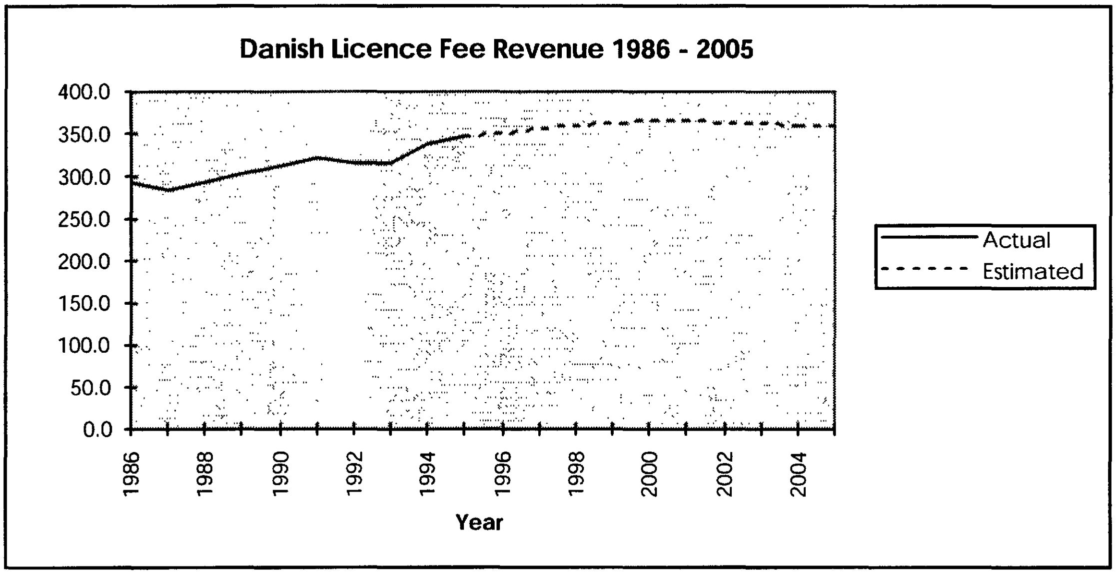


Exhibit 4.2.2 Denmark TV Licence Fee Revenue

Advertising

Indicators

Total AV adspend: ECU 190.9 million
Average growth / year of AV advertising spend 1990- 1995: 9.36%

TV adspend as a share of total advertising: 19.5% (1992: 14.8%)
Level of TV adspend as a share of total advertising relative to EU average: 10% below

AV adspend as a share of GDP: 0.14%
Average AV adspend as a share of GDP / year 1990-1995: 0.12%

Country Specific Details

Discussion on market structure:

The Denmark TV commercial advertising market is significantly behind other European markets and as such offers significant potential . Historically, the Danish advertising market remains dominated by newspapers but this is expected to change in the future. In particular, the television advertising market in Denmark has experienced strong growth, growing by 50.6% between 1990 and 1995 and this is projected to continue as Denmark is experiencing an economic boom at the moment.

The Danish TV market is going to exhibit increasing commercialisation of programmes. In TV2, Programme and Advertising Departments are being merged to commercialise their programme structure. More significantly, it is legislated that TV2 will become a wholly advertising and sponsorship- financed broadcaster by 1 January 1998. They will need to increase their advertising revenues as a result of the shift of 15% licence fee funding to 0% funding.

As a result of new media legislation, local broadcasters may network and this will increase competition for advertising revenues. Kanal 2, Copenhagen based local TV station, can now network with local partners in the major cities of Denmark. This will be a major competitor of TV advertisers for TV2. In addition, the launch of new channel DR2 will also compete effectively for audience share with TV2 and this may inhibit their advertising potential revenues. Also indirectly assisting local broadcasting, is the recent decision to increase the amount of advertising from 10% to 15% of programme hour. This decision is seen as part of increased liberalisation of advertising regulations. This will tend to grow the market.

The prices of advertising air-time is decreasing, which is increasing demand and as a consequence, television airtime is generally in short supply. However, but new satellite channels - which half the population receive - have absorbed some of this demand, thereby providing additional competition.

Likely impact of new media
According to broadcaster TV2, growth of new revenues is expected from Internet/WWW of approximately 5% in 5 years time. Denmark has a very high penetration of Internet access and one of the highest penetration of PCs in the home.

Conclusion:

The changes introduced by the new media legislation will promote a stable regulatory environment for the next 4 - 5 years and will encourage development of the commercial advertising market. In addition ,the launch of new channels such as DR2 and the possibility that local broadcasters may network, will increasingly expand the advertising market and in particular increase the TV share of the ad market. As a consequence, we believe the TV ad market will grow at 6% per annum, approximately, over the next 5 years.

This trend will continue in the second five years but compounded with the heavy PC penetration in the workforce and in the home, the penetration and growth of Internet access, will enable additional growth of 1-2% from Internet/WWW advertising. We therefore expect an average growth rate of 5% per annum for the second five years.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 6%	Average growth rate of 5%

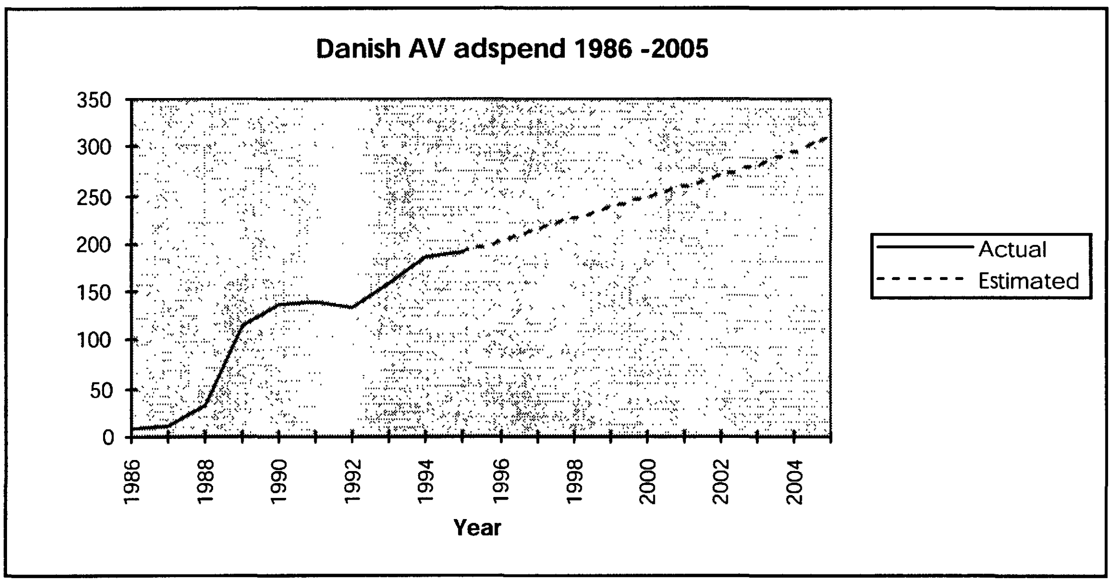


Exhibit 4.2.3: Denmark AV Adspend

Consumer AV Expenditure

General Consumer AV Expenditure Indicators

Consumer AV expenditure as % of GDP: 0.17%
Average consumer expenditure / year as % of GDP 1990-1995: 0.15%

GDP / capita: ECU 25,941 million (1990: ECU 23,115 million)

Average daily TV hours viewing: 2.61

TV Households: 2,322,700

VCR Penetration: 68.1% (1990 - 45.9%)
Average growth / year of VCR penetration for period 1990 - 1995: 4.4%

Cable Penetration: 54.9% (1990 - 51.1%)
Average growth / year of cable penetration for period 1991 - 1995: 0.76%

Satellite Penetration: 41% (1990 - 17.1%)
Average growth / year of satellite penetration for period 1990 - 1995: 4.78%

Cinema Box Office

Indicators

Gross revenues: ECU 49.3 million (1990: ECU 50.1 million)

Average annual cinema admissions per head in 1995 was 1.7 (1990 - 1.9)
Level of average annual admissions relative to EU average: same as EU average 1.7
Growth of average annual cinema admissions for period 1990 - 1995: -10.5%

Average ticket prices in 1995 was ECU 5.2 (41 Dmk)
Average ticket price level relative to EU average: 6% greater than EU average ECU 4.9
Average ticket price in 1994 was ECU 5.0 (39.4 Dmk)

Multiplex Screens as proportion of Total Screens is 16.6% (1990 - 11.2%)
Level of multiplex screens as proportion of total screens relative to EU average; almost same as EU value 17.4%
Growth of multiplex screens as proportion of total screens period 1990 - 1995: 5.4%

Country Specific Details

Discussion of market structures

The increased quality of large cinemas and the growth in multiplex screens is assisting growth in admissions. There were four new cinemas built last year though this is expected to slow down in two years time.

Assisting this growth in admissions is increased popularity of good Danish films. Indeed, it is suggested that film producers have developed skills to produce ‘hit type’ movies.

This success in the rising admissions is evident in cinema box office revenues from ticket sales which are up 45% in first half results of 1996.

Likely impact of new media

We do not expect other forms of entertainment such as DVD or NVOD having a significant impact on the 'night-out' of going to the cinema.

Conclusion

The current multiplex build in Denmark together with the increased popularity of nationally produced programmes will encourage more people to go to the cinema and will in our belief, grow the market by 4-5% in real terms over the next 5 years.

In the second five years, we believe a new level of market maturity is reached after five years, and this will enable a more moderate growth rate of approximately 1% per annum.

	1st 5 years	2nd 5 years
base	Average growth rate of 4% - 5%	Average growth rate of 1%

Video Rental

Indicators

Total video rental expenditure: ECU 66.2 million (1990: ECU 93.2 million)

Average rental transactions per VCR home: 2.1 (1991 - 5.2)
Level of average rental transactions per VCR home relative to EU average: 3.5 times below EU average 7.3

Average spend per video household: ECU 44.9 (1991 ECU 57.8)
Level of average spend per video household relative to EU average: 2.3 times above EU average ECU 19

VCR homes per rental outlet: 984 (1990 - 867)
Growth of VCR homes per rental outlet 1990 - 1995: +13%

General Country details

Discussion of market structure

The number of video rental outlets has remained relatively stable for the past 4 years. However, the market is undergoing some ownership consolidation and as a result the number of outlet owners may decrease in 1996.

In addition to this ownership consolidation, there is a price war going on in the video rental market to bring about a shake out of the market structure by a few large companies. This has caused the price of new video rentals to decrease as much as 50%.

Turnover in previous years was largely accounted from rental of old movie videos. But this is becoming increasingly available free on TV. Therefore, revenues will mainly come from premium new titles. However, there are fewer new titles being released. Compounding this problem, the average transactions per VCR home continues to decrease.

Fierce competition between the broadcasting channels to offer movies - free of charge - will continue to impact the rental sector.
Against these odds, the 1996 figures for video rental are expected to increase by 6.5% over 1995.

Likely impact of other media

DVD is not expected to make any significant impact on the rental sector.

Conclusion:

On the basis of the increasingly competitive rental market and reduced rental prices, we believe there will be sustained current growth for the next 2-3 years. However, as the market achieves a new level of consolidation, we believe there will be a reversal of current growth trends to a gradual decline over the following 8 year period. On average, this will imply negative growth rates of 1-2% for the 10 year period.

	1st 5 years	**2nd 5 years**
base	Average negative growth rate of 1 - 1.5%	Average negative growth rate of 1.5 - 2%

Video sell-through (including DVD)

Indicators

Total video sell-through expenditure: ECU 59.1 million (1990: ECU 12.2 million)

Average video purchase transactions per VCR home: 3.8 (1991 - 1.4)
Level of average video purchase transactions per VCR home relative to EU average: 58% above EU average 2.4

Average video purchase price: ECU 9.5 (74.66 Dmk)
Level of average video purchase price per VCR home relative to EU average: 26% below EU average ECU 14.3
Average video purchase price per VCR home 1994: ECU 11.7

Average spend per VCR household: ECU 40.1 (1991 - ECU 16.1)
Level of average spend per video household relative to EU average: 20% above EU average ECU 32.3

General Country Specific Details

Discussion of market structure

The distribution market is geographically saturated. Approximately, 60% of all consumer shops retail videos. In addition, supermarkets, hypermarkets, gas stations are increasingly involved in the retail.

The number of video sell-through outlets increased dramatically in 1995 from 1150 in 1995 to 3000 in 1995. This is largely due a number of retail kiosks becoming involved in that year.

In order to bolster gift sales an aggressive marketing strategy through TV advertising is expected to encourage people to purchase.
The historical data s a market positively growing. The arrival of Disney in 1992 boosted sales revenue and has continued to date. The exception was in 1995 because of the large return of shipped videos sent out in the end of 1994.

The number of units is expected to increase but price is decreasing. Therefore the outlook for 1997 & 1998 is to maintain current market levels.

Likely impact from competing media
DVD is believed to make a small impact in Xmas 1997. However, it requires both the software and hardware sides to encourage the market. The video industry is preparing itself for DVD arrival in Denmark. Hardware distributors believe DVD will arrive very soon. However, it is not expected to make any real impact for 3 - 4 years. Pricing of the hardware is the key strategy according to industry.
CDs had a slow establishment in Denmark. This was because of the attachment to LPs and because of the luxury tax on the hardware. As soon as the tax was removed, the hardware prices dropped. In the same analoguey, some industry experts believe DVD prices will follow same.
Once the price is affordable, Denmark is a relatively fast adapter of new devices e.g. very high penetration of PCs and modems.

Conclusions:

There is potential for the number of purchases per person to increase or in some cases to convince traditional non-buyers to start purchasing videos. Some 56% of VCR owners never purchase a video. Aggressive marketing is expected to aid the growth of the sell-through market to continue to grow at current rates of 9-10% for the next 5 years.

A lower growth rate of 5%-6% is expected to be sustained throughout the second five years as DVD begins to make an impact.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 9-10%	Average growth rate of 5-6%

Pay TV

Indicators

Total pay TV expenditure: ECU 34.4 million (1990: ECU 5.4 million)

Cable TV connected HH: 54.9%
Growth / year of cable TV connections 1990-1995: 0.76%

DTH connected HH: 41%
Growth / year of DTH connected HH 1990 - 1995: 4.78%

Number of years since pay TV introduction: 10

General Country Specific Details

Premium Services

Discussion of market developments

The pay - TV market in Denmark is relatively small but a host of new launches is set to open and develop the market in 1997. The market has a high penetration of cable and satellite and this is an encouraging factor for any operator.

Pay TV operator Multichoice launched FilmNet Scandinavia in Copenhagen in September 1985 and in the rest of Denmark in 1988. FimNet has a penetration of approximately 5% of TV HH and had a growth rate of approximately 35% per year for the period 1990 - 1994.

DR and the commercial broadcaster TV2 are to launch a satellite-delivered pay TV sports service in partnership with Tele Danmark in 1997. DR and TV2 have secured exclusive rights for the national soccer league and European Cup matches. This will face stiff competition from two pan-Nordic sports channels, owned by Nethold and Kinnevik, that are already. There is currently a public debate in Denmark about paying to watch public national sports events. in operation.

Satellite delivered channels TV3 and DR2 can expect some knock on effect from the fact that FilmNet, whose terrestrial based outlet FilmKanalen, was closed down on October 1 (due to Government regulations). They will attempt to lure subscribers to its new satellite positions with tempting discounts.

Pay TV is perceived as expensive with subscription fees of 40 pounds / month

Conclusions:

The high installed base of cable and satellite subscribers is favourable to a healthy development of pay TV in Denmark. Due to the continuing growth of subscribers and the planned launch of two new digital packages in 1997 we believe, that the market will continue to grow at current rates of 11%-12% for the next 5 years and stabilise at a lower growth rate of 3%-4% in the second five years.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 11-12%	Average growth rate of 3-4%

Transactional TV

Multichoice are to launch a digital bouquet of 20 TV channels including movies on demand in January 1997. They expect to sign up 10000 subscribers in the first year, but believe very high growths are possible in subsequent years as new services such as home banking / shopping are launched.
According to Multichoice, they predict a golden future for pay TV in Denmark, anticipating a 30% audience share in 5 years' time.

Tele Danmark launched its set-top box system for its 670,000 cable TV subscribers in late 1995 with pay-per-vies and computer software delivery and as of January 1996, the hybrid fibre coax cable system expanded its capacity from 32 channels to 256 channels, many of which will be for pay-per-view or interactive.

Although transactional services are not expected to make a significant impact in the first five years as the market attains a critical number of subscribers, growth rates of 12-13% are expected in the second five years.

	1st 5 years	2nd 5 years
base	Market to grow to ECU 6.8 million by year 2000	Average growth rate of 12-13%

Multimedia: Off-line

MM off-line expenditure: ECU 18.6 million (1992: ECU 3.4 million)

MPC Model

Indicators

MPC Penetration:12%
Growth rates of MPC penetration: not available
Growth / year of MPC penetration for period 1993-1995: not available

Average no. of CD-ROM purchases per MPC HH: 1.7 (1992: 1.1)[2]
Average purchase price of CD ROM ECU 46.1 (1992: ECU 73.2)

CD Consoles Model

Indicators

CD Console Installed base: 109,000 (1994: 36,000)

General Country Specific Details

Most CD software available in Denmark is localised product originating either form English or Scandinavian titles. However, there is a growing sector of original product produced by small, privately owned production companies. CD games dominate the market. It is estimated that the individual consumer is purchasing 4-5 CD-ROM per year and that the family purchases 2-3 CD-ROM per year.

There is a good distribution structure with all markets efficiently covered. The main distribution outlests and share of market are;

Bookstores: 35% - DOG and IDE
Hypermarkets: 30- 35% - Dansk Supermarket and FDB
Specialist software shops: 30-40%

In addition, there are a number of Government programmes to support the development of the multimedia sector in Denmark.

Conclusion

[2] Estimate based on extrapolated data for 'Rest of Europe'

It is estimated that Denmark has one of the highest (if thee highest) MPC penetration rates in Europe. This is the main driving factor in growing the supply of titles to the market place, either localised or original product. In addition, the continuing development of an already efficient distribution structure positions Denmark in an enviable position as thre is continued expansion of shelf space. In particular, the developed state of the hypermarket and bookstore as significant retail outlest is unusual in Europe and may account for the unusually high purchase rates per consumer. In conclusion, we believe the market will continue to grow at current rates of 20-21% for the next five years and at a rate of 8% for the following five years.

	1st 5 years	2nd 5 years
base	Average growth rate of 20-21%	Average growth rate of 8%

Multimedia: On-line

Indicators

PC Path:

MPC Penetration as % of Households: 12%[3]
Modem Penetration as % of Households: 12%
Internet hosts / 100 Inhabitants: 1.5
Growth / year of Internet hosts 1994 - 1996: 102%
ISDN lines as % of main lines: 0.16

TV Path:

Multi-channel Penetration of TV HH: 95.9%

General Country Specific details

Broadband Infrastructure rollout:

Denmark has an advanced cable TV network passing 75% of homes and a penetration of 60%. In addition, the local loop is now open to competition to provide services and charges are falling dramatically. Danish telecom market is now liberalise and increased competition is expected to decrease on-line connection charges and it is likely the telecom operators may subsidise financing of modem/connection in order to kick start the market, as happened for the mobile phone market.

Discussion of Market Developments:

The Danish market is exploding with encouraging activity. Denmark has the highest penetration of PCs in the home and Internet hosts per 100 inhabitants. In addition, it has a staggering 12% household penetration for modems and 4% have Internet access. It augurs extremely well for a fast growing on-line multimedia market.

[3] The European Commission Industry-Research Task Force on Educational Multimedia: December ë96

In addition, two digital launches will be available in 1997 which will attract subscribers and follow the TV path. Services will include non traditional type such as home banking, shopping, gambling and others. This represents a new opportunity for content providers.

Diatel is a virtual shopping centre offering connections and services to the consumer sector. It is using the French Minitel technology and has been on the Danish market for less than two years. It was purchased by Tele Danmark in late 1996. Tele Danmark will change the Diatel platform to WWW and gradually close down Diatel.

Politically, the country is encouraging the take up of Internet and on-line services through various initiatives. At the beginning of 1995, a plan called "Info Society 2000" was launched at the national level, with the ambition to build up a computer network, linking public administrations and large companies, with a possibility given to users to access the system through a Citizens Card.
Danish telecom market is now liberalise and increased competition is expected to decrease on-line connection charges and it is likely the telecom operators may subsidise financing of modem/connection in order to kick start the market, as happened for the mobile phone market.

Conclusion:

The market has opened up such that hardware is being purchased at an alarming rate, the Government and public administrations are encouraging the take-up of new services through various initiatives and the regulatory office has opened up telecom competition. All of this gives rise to a bullish future for growth of on-line services in Denmark. Most people speak English and there is a strong demand for information.

	1st 5 years	2nd 5 years
base	Market to grow to ECU 6.9 million by year 2000	Average growth rate of 70-80%

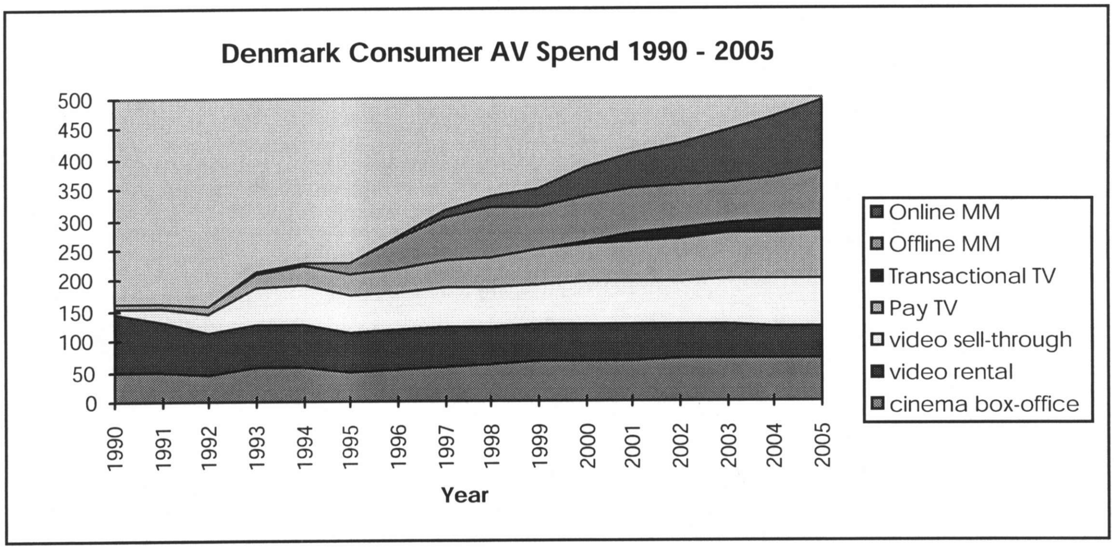


Exhibit 4.2.4: Denmark Consumer AV Spend

4.3 Spain (ES)

Summary:

Total AV expenditures are projected to increase from ECU 2318.8 million in 1995 to ECU 4,151.4 million by 2005 (see Exhibit 4.3.1). Direct consumer expenditures increases its share of total AV revenues from 42.4% in 1995 to 61.1% by 2005, with advertising revenues falling from 57.6% in 1995 to 38.9% in 2005.

Pay TV is projected to remain the largest single direct consumer expenditure category reaching ECU 611.8 million in 2005. On-line and off-line multimedia sales are projected to increase to ECU 465.8 million and ECU 347.1 million respectively over the same period.

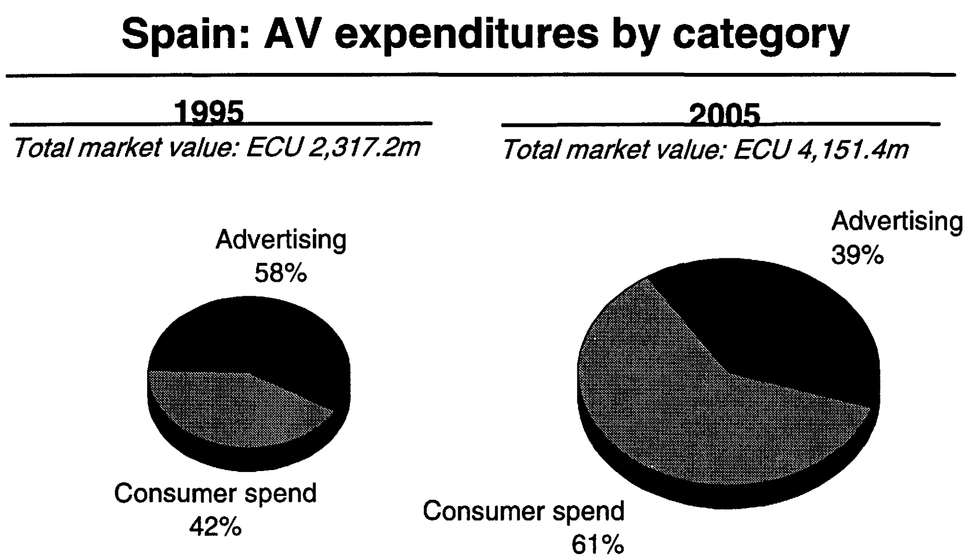


Exhibit 4.3.1: Summary of Aggregate AV Expenditures: Spain

Licence Fee:

There is no licence fee funding in Spain.

Advertising:

Indicators:

Total AV adspend: ECU 1335.2 million
Average growth / year of TV advertising spend 1990- 1995: -4.5%

TV adspend as a share of total advertising: 37.3% (1992: 32.2%)
Level of TV adspend as a share of total advertising relative to EU average: 7% above

AV adspend as a share of GDP: 0.31%
Average AV adspend as a share of GDP / year 1990-1995: 0.38%

Country Specific Details

Discussion on market structure:

There are five national terrestrial channels and a large number of regional broadcasters. RTVE, the public -sector broadcaster, offers two channels. It held a monopoly which was gradually eroded by regional stations, such as TeleMadrid and TV3, launched in the late 1980s, and effectively ended in 1990 when the first national private television services commenced broadcasting. The licence fee was abolished in 1990.

Since the introduction of commercial television, there has been dramatic growth in the volume of the advertising market, which has doubled in value. However, the introduction of commercial television did not increase advertising revenues dramatically but in fact encouraged widespread rate discounting. This discounting limited the effectiveness of television advertising and encouraged channel-hopping by viewers. More seriously, the discounting resulted in all advertising - supported channels saddled with massive debt, from which they are now only recovering from.

Legislation to privatise regional broadcasters may further increase the competition for advertising revenues. Ownership of the private channels is fragmented and the presence of local media groups is increasing. In January 1996, Sotelcin, a consortium led by Spanish regional newspaper Group Correo and including Prensa Espanola and Prensa Iberica, announced its intention to acquire 25% of Telecinco, one of the three private channels.
RTVE is slightly ahead of its competitor Antena 3 with a 27% audience share, although they slipped behind them at the beginning of the year. This was enabled by RTVE securing exclusive rights for EURO '96 soccer tournament. This produced a slight upturn in advertising spending, which led to a sharp increase in advertising broadcasts on TVE-1.
The private generalist stations, Telecinco and Antena 3, have also had to find solutions to the fierce impact competition has had on their balance sheets. Telecinco, through a tough reduction in debts programme and a recovery in its audience share to 21.6%, announced the station's best results to date in July 1996. This has led to increased advertising revenues.

Likely impact of new media
The low levels of Internet assess and MPC penetration imply that the effect of on-line advertising will be very marginal.

Conclusion:

In an effort to counter the damage to revenues due to discounting, the television networks have now made an effort to stop the discount war and improve the editorial environment for advertisements. This is likely to stimulate investment in television advertising and prevent an expected migration of advertisers to the print sector. On the basis of these new practices and the continuing growth of the economy, we expect continued growth for the next ten years.

	1st 5 years	2nd 5 years
base	Average growth rate of 0.5%	Average growth rate of 3.6%

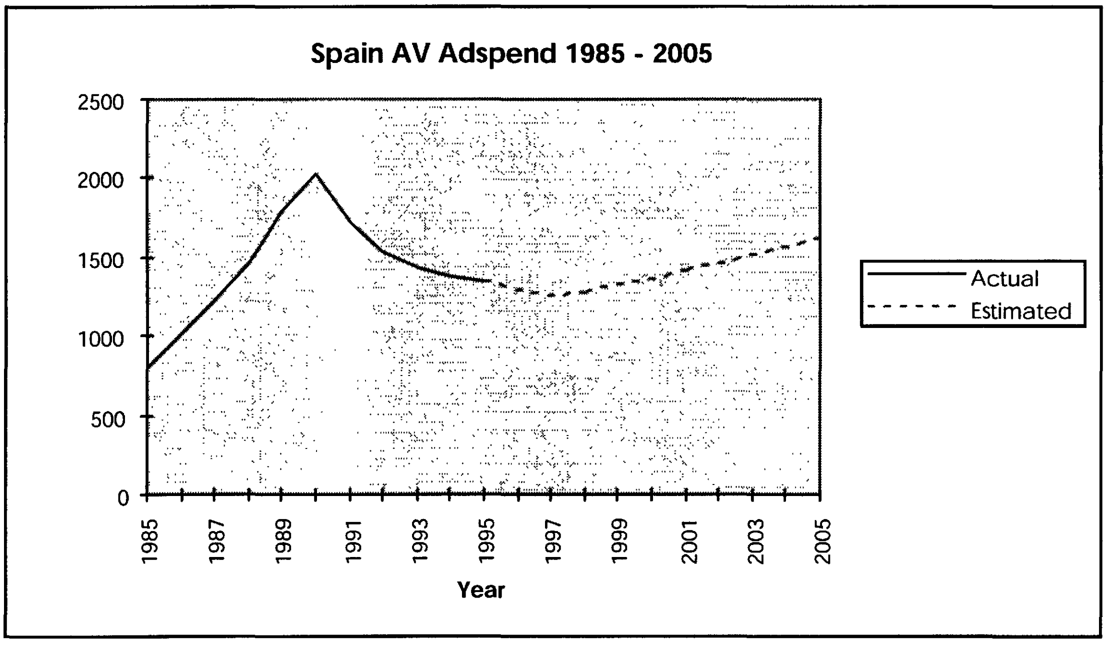


Exhibit 4.3.2: Spain AV Adspend

Consumer AV Expenditure

General Consumer AV Expenditure Indicators

Consumer AV expenditure as % of GDP: 0.23%
Average consumer expenditure / year as % of GDP 1990 - 1995: 0.18%

GDP / capita: ECU 10,995 million (1990: ECU 10,118 million)

Average daily hours TV viewing: 3.52

TV Households: 12,090,300

VCR Penetration: 56.5% (1990 - 41.5%)
Average growth / year of VCR penetration for period 1990 - 1995: 3%

Cable Penetration: 3.3% (1990 - 0.9%)
Average growth / year of cable penetration for period 1990 - 1995: 0.48%

Satellite Penetration: 6% (1992 - 0.9%)
Average growth / year of satellite penetration for period 1990 - 1995: 1.7%

Cinema Box Office

Indicators

Gross revenues: ECU 295.9 million (1990: ECU 223 million)

Average annual cinema admissions per head in 1995 was 2.3 (2.0)
Level of average annual admissions relative to EU average: 35% greater than EU average of 1.7
Growth of average annual cinema admissions for period 1990 - 1995: 15%

Average ticket prices in 1995 was ECU 3.9 (pta 513)
Average ticket price level relative to EU average: 20% below EU average of ECU 4.9
Average ticket price in 1994 was 3.8

Multiplex screens as proportion of total screens: 7.6%
Level of multiplex screens as proportion of total screens relative to EU average: 9.8% below EU average of 17.4%
Growth of multiplex screens as proportion of total screens period 1990 - 1995: 4.9%

Country Specific Details

Discussion of market structures

Spain is one of the least multiplexed cinema markets in Europe with only 8% of all screens housed in modern complexes. However, major expansion is on the way as Warner Bros in conjunction with local media giant Prisa and the Portuguese company Lusomundo, plan to establish 20 new multiplexes over the next 4 years.

The new relaxed approach of the government towards screening quotas and dubbing licences may help to increase the cinema revenues.

Cinema admissions in Spain continue to increase and revenues were up 6% in 1995.

Likely impact of new media
We do not expect any new forms of media to make a significant impact on this sector.

Conclusion

On the basis of the planned rapid build rate of multiplexes and the relaxed approach of Government towards quotas, we believe the market will continue to grow in real terms at 3-4% per annum for the next five years.

On the assumption that a new level of maturity enters the market in five years time, we believe the market will grow at a constant rate in real terms for the following five years.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 3-4%	Average growth rate of 0-0.5%

Video Rental

Indicators

Total video rental expenditure: ECU 197.5 million (1990: ECU 296.4 million)

Average rental transactions per VCR home: 13.3
Level of average rental transactions per VCR home relative to EU average: 78% above EU average 7.3

Average spend per video household: ECU 29.9
Level of average spend per video household relative to EU average: 57% above EU average ECU 19

VCR homes per rental outlet: 2,157 (1990 - 792)
Growth of VCR homes per rental outlet 1990 - 1995: +172%

General Country details

Discussion of market structure

Spain is much more rental orientated than sales although this is gradually changing.
Not surprisingly then, the Spanish are among the most frequent renters in Europe although the low average rental charges keep the revenue level down. However, there is a steady decline in the number of transactions since the '90s, although it may be stabilising or slowing down now.

Likely impact of other media
The growing pay TV market may impact video rental.

Conclusion:

On the basis of the high frequency of rental in Spain, and the position of the market as more rental than sell-through orientated, we believe it reasonable to assume the market will grow at a rate of 2-3% for the first five years.

In the second five years, the market is expected to decline due to the increasing penetration of pay TV and a gradual shift from rental to sell-through. We therefore, believe the market will decline at a rate of approximately 1% per annum.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 2.5-3%	Average negative growth rate of 1.2%

Video sell-through (including DVD)

Indicators

Total video sell-through expenditure: ECU 187.1 million (1990: ECU 49.8 million)

Average video purchase transactions per VCR home: 1.8 (1991 - 0.5)
Level of average video purchase transactions per VCR home relative to EU average: 25% below EU average 2.4

Average video purchase price: ECU 19.5 (pta 2517)
Level of average video purchase price per VCR home relative to EU average: 36% above EU average ECU 14.3
Average video purchase price per VCR home 1994: ECU 15.5

Average spend per VCR household: ECU 28.4 (1991- ECU 12.72)
Level of average spend per video household relative to EU average: 13% below EU average ECU 32.3

General Country Specific Details

Discussion of market structure

The video sell through market in Spain is still developing. The number of sell-through outlets is slightly increasing during the last few years.
The no of videos purchased per VCR household continues to steadily increase having quadrupled between 1991 and 1995.
Bucking the trend in most European countries, the average video purchase price actually increased in recent times.

Likely impact from competing media
It is expected that DVD will have a minor impact on the sell-through sector.

Conclusions:

As the market is still developing and growing, we believe current growth rates of 5% will continue for the next 5 years. The following five years may also grow at current rates as any decline on the traditional cassette sell-through market may be compensated by the development of the DVD market.

	1st 5 years	2nd 5 years
base	Average growth rate of 5%	Average growth rate of 5%

Pay TV

Indicators

Total pay TV expenditure: ECU 246.5 million (1990: ECU 3.1 million)

Cable TV connected HH: 3.3%
Growth of cable TV connections 1990-1995: 0.48%

DTH connected HH: 6%
Growth of DTH connected HH 1990 - 1995: 1.6%

Number of years since pay TV introduction: 6

General Country Specific Details

Premium Services

Discussion of market structure

Satellite and cable markets are comparatively young in Spain. Satellite broadcasting was regulated in 1993 and cable in 1995. However, pay - TV is a fast growing market in Spain. Canal Plus España has more than one million subscribers. It has achieved average growth rates of approximately 79% per year during the last 5 years.

Canal Plus and Sogecable to launch a 40 channel digital service in Spain in January 1997.

A number of other digital DTH launches are also planned.

Conclusions:

The rapid growth in pay TV is set to continue aided by the continuous growths of Canal Plus España and the expected developments of new launches in 1997. On this basis we believe that average growth rates of 8% per annum will continue for the next 5 years and at a lower rate for the following five years.

	1st 5 years	2nd 5 years
base	Average growth rate of 8%	Average growth rate of 3%

Transactional Services

As mentioned above, a new number of new digital launches are planned for 1997 including state broadcaster RTVE, Antena 3 and the telephone company Telefonica. However, a looming battle has loomed very recently with the defection of Antena 3 switching from Telefonica platform to that of rival Sogecable/Canal Plus. The deal is a big blow for Telefonica since Antena 3 has a virtual monopoly on televised soccer. Without PPV soccer, Telfonica's digital satellite plan is thought to be significantly less viable.

Antena 3, Televisio Catalunya and Sogecable Canal Plus have formed a company to pool rights to first and second division soccer.
However, in the main, growth in transactional services is expected from Canal Plus subscribers through a rights agreement with Antena 3. The market is expected to reach ECU 60 million by the year 2000.

	1st 5 years	2nd 5 years
base	Market to grow to ECU 60 million by year 2000	Average growth rate of 9.5%

Multimedia: Off-line

MM off-line expenditure: ECU 66.9 million (1991: ECU 8.5 million)

MPC Model

Indicators

MPC Penetration: 2.5%
MPC penetration 1994: 0.9%
Growth / year of MPC penetration for period 1993-1995: 0.8%

Average no. of CD-ROM purchases per MPC HH: 1.7 (1992: 1.1)

Average purchase price of CD ROM ECU 42 (1992: ECU 73.2)

CD Consoles Model

Indicators

CD Console Installed base: 144,500 (1994: 53,500)

General Country Specific Details

The overall interactive entertainment market in Spain is relatively strong due to the Spanish cartridge video games market.

The Spanish have been comparatively slow to adopt MPCs and those that are installed in Spanish homes tend to be of lower specification than most other European markets. This is related in part to the relatively low number of attractive CD-ROM titles published in Spanish. Localisation into Spanish is vital for CD-ROM importers, but the costs of doing so often outweigh the returns.

The Spanish market for non-games CD-ROMs is particularly strong. Art and culture titles are estimated to account for 15 - 18% of sales.

The Spanish distribution structure is controlled by 6-9 key retail accounts.

Conclusion

The slow take-up of MPCs is inhibiting the full growth potential of the market. In addition, the limited availability of original titles in Spanish is delaying the purchase of MPCs. On this basis, we believe the market will develop more slowly, though experience continuous growth over the next ten years.

	1st 5 years	2nd 5 years
base	Average growth rate of 50-60%	Average growth rate of 12.5%

Multimedia: On-line

Indicators

PC Path:

MPC Penetration as % of Households:2.5%
Modem Penetration as % of Households:n/a
Internet hosts / 100 Inhabitants: 0.16
Growth / year of Internet hosts 1994 - 1996: 81%
ISDN lines as % of main lines: 0.19

TV Path:

Multi-channel Penetration of TV HH: 9.3%

General Country Specific details

Broadband Infrastructure rollout:

Cable TV networks are not very extensive in Spain because the legislation on developing them and introducing them has not been passed yet. Cable TV is expected to spread rapidly to a large percentage of households once this sector has been opened up and the laws are enacted. The legislation provides for the cable to be used as a support for all connectivity services: voice telephony, data and bi-directional interactive services. Major changes in multimedia cable service are expected in the coming months.

General discussion:

The relatively low level of Internet hosts is growing rapidly at an average growth rate of 80% per year.

Although ISDN is in its infancy in Spain, it is growing at an average growth rate of 93% per year for the past two years. However, expensive telecommunications charges practically prohibit any usage in the home for high speed Internet access.

Conclusion:

The low level of MPC penetration together with the low level of Internet hosts, though both developing rapidly, will in our belief enable the market to grow in constant real terms for the next 10 years.

	1st 5 years	2nd 5 years
base	Market to grow to ECU 38.7 million	Average growth rate of 50-60%

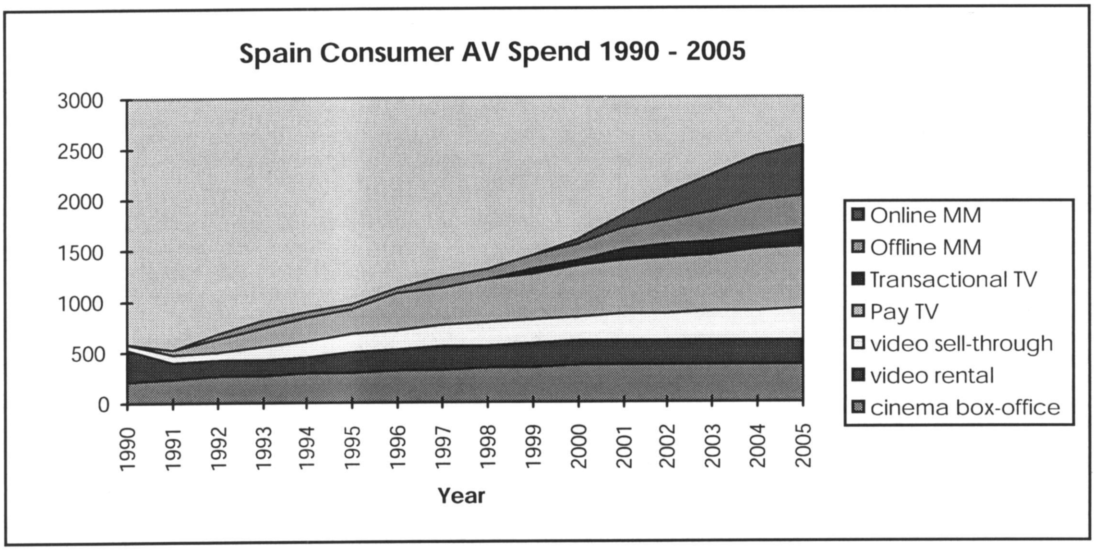


Exhibit 4.3.3: Spain Consumer AV Spend

4.4 France (FR)

Summary:

Total AV expenditures for France are projected to grow from ECU 6,437.1 million in 1995 to ECU 11,799.7 million by 2005 (see Exhibit 4.4.1). Direct consumer AV expenditure continues to grow in importance, accounting for 52.9% of total AV expenditures in 2005, up from 44.5% in 1995. Advertising's share of the total is projected to remain fairly constant at 40.4% in 2005 (41.1% in 1995), while television licence fee revenues fall from 14.4% of the total in 1995 to 6.7% in 2005.

Within direct consumer expenditures, the largest market segment remains pay TV which nearly doubles in size to reach ECU 2,079 million by 2005. On-line multimedia is expected to grow rapidly from 1999 to reach ECU 1,057 million in 2005. Other strong growth sectors include transactional TV (ECU 540 million in 2005) and off-line multimedia (ECU 539 million in 2005).

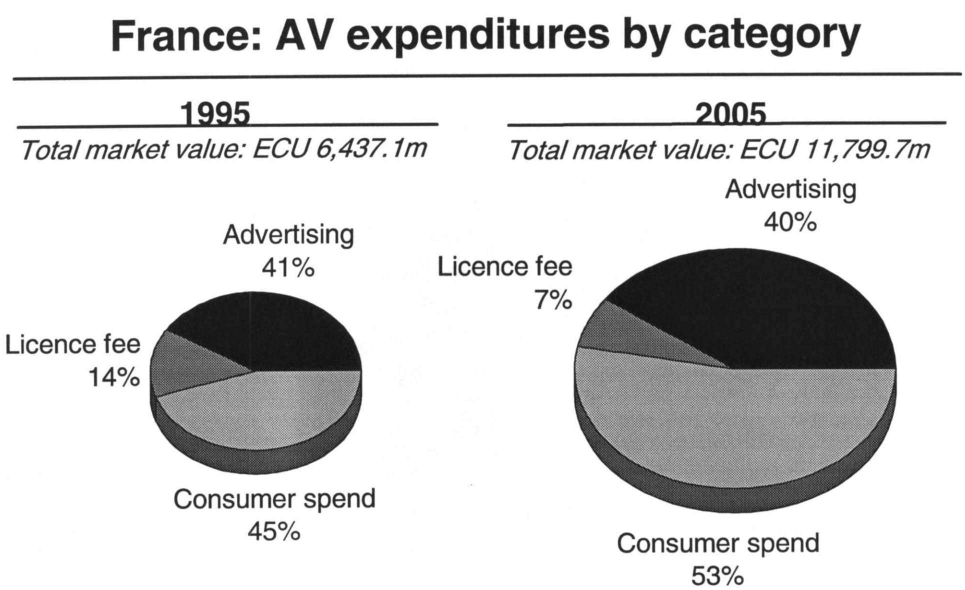


Exhibit 4.4.1: Summary of Aggregate AV Expenditures: France

Licence Fee

Indicators:

Current Level: ECU 102 (1990: ECU 81.1)

Licence fee revenue: ECU 927.2 million (1990: ECU 686.9 million)

Licence fee revenues as percentage of total revenues: 58%

Public broadcaster's share of viewing: 40.7%

Country Specific Details:

There are three state run networks in France; TF1 (37.3% audience market share), France 2 (23.1%), and France 3 (17.6%) and five private networks (including three pay TV networks); M6 (11.5%), Canal+ (4.4%), La Cinquieme (1.3%), Arte (1.2%) and others (2.9%). The operations of the two main public-sector channels, France 2 and France 3, have been combined in one company, France Television. France Television also funds ARTE, a non-commercial cultural channel which is a joint venture with its German counterparts.

Public Announcements on Licence Fee:

The Government raised the licence fee by 4.5% in 1995 for the year 1996. However, the government have decided not to increase the licence fee for 1997 as a part of measures aimed at cutting state spending. These public expenditure reductions are likely to continue for the next few years.

General Perception of public sentiment / political commitment

There is a very strong consensus in France for the protection of culture. The position of the state broadcaster is likely to remain as a result.
The licence fee is decided on a yearly basis by the Parliament. There is no reasonable chance that it would disappear in the next 5 years, based on the strong political commitment for the continuing role of the public broadcaster.

The French TV industry continues to be dominated by two giants: private broadcaster TF1 and pay TV network Canal Plus. Competition will increase even further due to the arrival of Canalsatellite and future arrival of TPS and ABSatcom and the subsequent growth in penetration for subscription TV. This may reduce the political and consumer acceptance of supporting and paying for a TV licence in the second 5 years. .
France 2 and France 3 national and regional broadcasts of evening news are the most watched in the country. However, stifling competition between France 2 and TF1 is perceived to lower the quality of programmes.
In general, public broadcasting is held in positive regard, especially for news and modest, quality games shows. This is reflected in the improved audience shares in 1995.

Conclusion:

On the basis of the on-going Government pressures to reduce public expenditure for the foreseeable future and the increasingly array of channels, we believe that the TV licence revenue will decline in real terms at an average rate of 1.2% in the first five years.

In the second five years, an average decline rate of 1.9% may also be realised because of the growing penetration of subscription TV and the subsequent financial environment in which it becomes increasingly difficult to justify the licence fee.

	1st 5 years	**2nd 5 years**
base scenario	Average decline rate of 1.2%	Average decline rate of 1.9%

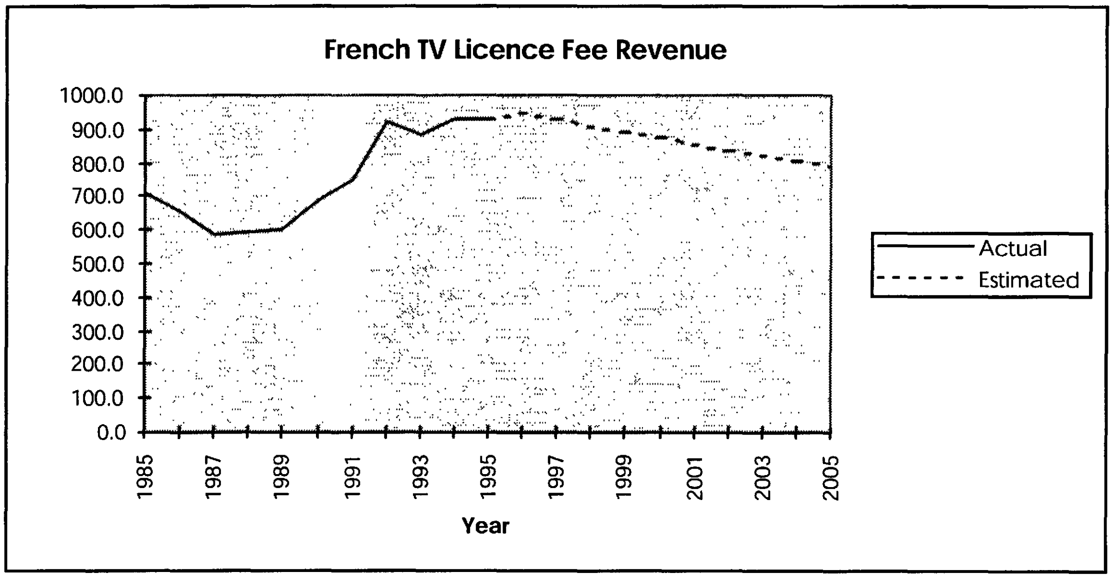


Exhibit 4.4.2: France TV Licence Fee Revenue

Advertising

Indicators

Total AV adspend: ECU 2643.1 million
Average growth / year of AV advertising spend 1990- 1995: 4.03%

TV adspend as a share of total advertising: 32.5% (1992: 29.4%)
Level of TV adspend as a share of total advertising relative to EU average: 2.5% above

AV adspend as a share of GDP: 0.22%
Average AV adspend as a share of GDP / year 1990-1995: 0.2%

Country Specific Details

Discussion on market structure:

Advertising expenditure has continued to rise significantly as France pulls further out of recession.
Television advertising has flourished in 1995. Advertisers spent 7% more on TF1, while France 3 benefited from a 49% increase in advertising sales. Private network M6, continues to grow and posted a 12% increase in advertising revenues in 1995.

Market leader TF1, the largest advertising revenue earner in Europe, was granted permission to increase the amount of advertising it carries.

Audience shares are likely to fragment after the implementation of new cable, digital and satellite services. However, with the 1998 parliament likely to rescind the current ban on TV advertising by retailers, we expect TV advertising to become increasingly important to French advertisers.

Likely impact of new media:
On the basis of the slow penetration of Internet/WWW access, we do not expect other forms of media to make a significant impact in France.

Conclusion:

Based on average GDP growth rates of around 2.5% p.a. over the projection period, and the increasing importance of TV advertising, we assume average growth rate of 9.1% in advertising expenditures over the 5 year period.

For the second five years with GDP growth rates falling to an average of 2.5% per annum, we believe advertising growth rates will fall to an average of 4.8%.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 9.1%	Average growth rate of 4.8%

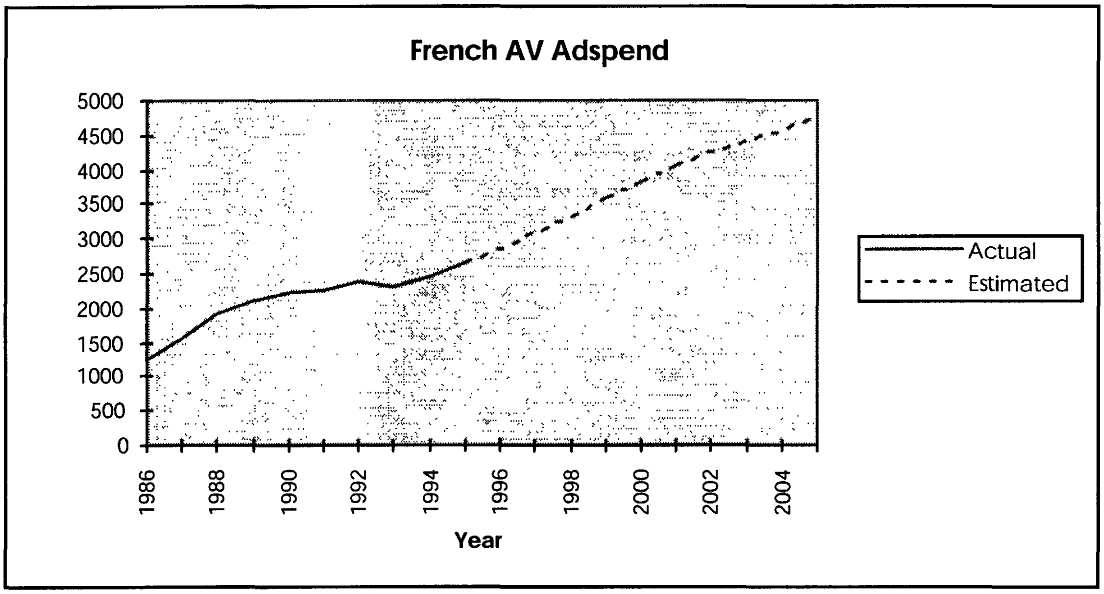


Exhibit 4.4.3: France AV Adspend

Consumer AV Expenditure

General Consumer AV Expenditure Indicators

Consumer AV expenditure as % of GDP: 0.24%
Average consumer expenditure / year as % of GDP 1990 - 1995 : 0.24%

GDP / capita: ECU 20,761 million (1990: ECU 19,261 million)

Average daily hours TV viewing: 3.01

TV Households: 22,028,000

VCR Penetration: 66.8% (1990 - 46.4%)
Average growth / year of VCR penetration for period 1990 -1995: 4.08

Cable Penetration: 5.2% (1990 - 2.0%)
Average growth / year of cable penetration for period 1990 - 1995: 0.64%

Satellite Penetration: 4.6% (1990- 2.2%)
Average growth / year of satellite penetration for period 1990 - 1995: 0.48%

Cinema Box Office

Indicators

Gross revenues: ECU 654.4 million (1990: ECU 691.1 million)

Average annual cinema admissions per head in 1995 was 2.2 (1990 - 2.2)
Level of average annual admissions relative to EU average: 30% greater than EU average of 1.7
Growth of average annual cinema admissions for period 1990 - 1995: 0%

Average ticket prices in 1995 was ECU 5.0 (34.8 FF)
Average ticket price level relative to EU average: 2% greater than EU average of ECU 4.9
Average ticket price in 1994 was ECU 4.9

Multiplex Screens as proportion of total screens: 13.8%
Level of multiplex screens as proportion of total screens relative to EU average: 3.6% below EU average of 17.4%
Growth of multiplex screens as proportion of total screens period 1990 - 1995: 3.2%

Country Specific Details

Discussion of market structures

The increasing build of multiplex screens has helped to increase the size of the market and provide open competition, a healthy sign of the market. The general consensus is that the present situation in the French cinema market has never been so good.

However, future multiplex planning applications may be restricted following recent legislation designed to curb constructions on the outskirts of towns. New multiplexes or extensions of existing complexes less than 5 years old will not be able to have more than 1500 seats.

The box office revenues increased by 26% in May '96 over '95. In that month, 68% of revenues were from taken from locally produced films, a proportion that is double the yearly averages of the previous 5 years.

Likely impact of new media:
The social experience and entertainment value associated in going to the cinema would indicate that subscription TV will have a minimal affect on cinema admissions.

Conclusion

On the basis of the continuing growth in multiplexes and the popularity of nationally produced films, we believe it reasonable to assume average growth rates of 1-1.5 % for the next five years.

On the basis of the market achieving a new level of maturity in five years time, we believe it reasonable to assume that the market will grow constant in real terms for the following five years.

	1st 5 years	2nd 5 years
base	Average growth rate of 1.5-2%	Average growth rate of 0-0.5%

Video Rental

Indicators

Total video rental expenditure: ECU 168.6 million (1990: ECU 205.2 million)

Average rental transactions per VCR home: 3.3 (1990 - 5.5)
Level of average rental transactions per VCR home relative to EU average: 45% below EU average 7.3

Average spend per video household: ECU 11.5 (1990 - ECU 19.8)
Level of average spend per video household relative to EU average: 40% below EU average ECU 19

VCR homes per rental outlet: 12760 (1990 - 4186)
Growth / year of VCR homes per rental outlet 1990 - 1995: +204%

General Country details

Discussion of market structure:

The focus of market shift from video rental to video sell - through continues in France, indicating the maturity of the markets.

The French market distribution structure was consolidated further during 1995 with the number of video rental outlets falling from 2100 to 1200.

The general decline of the rental business may be slowed down following recent changes in release windows. The maximum theatrical distribution window for films in France is to be cut from 12 to 9 months. Films will be released on video based on box - office performance tier system.

Likely impact of new media:
We do not believe DVD will make any significant impact on the video rental market.

Conclusion:

Video rental market showed significant first-half growth of 23% in 1996. However, as the market matures to a new level following rapid consolidation in the number of rental outlets and the strong shift from rental to sell-through, we believe it reasonable to assume negative growth rate of 2% for the ten years.

	1st 5 years	**2nd 5 years**
base	Average negative growth rate of 2%	Average negative growth rate of 2%

Video sell-through (including DVD)

Indicators

Total video sell-through expenditure: ECU 616.9 million (1990: ECU 432.4 million)

Average video purchase transactions per VCR home: 2.3 (1991 - 2.0)
Level of average video purchase transactions per VCR home relative to EU average: almost same as EU average 2.4

Average video purchase price: ECU 16.6 (FFr 115)
Level of average video purchase price per VCR home relative to EU average: 16% above EU average of ECU 14.3
Average video purchase price per VCR home 1994: ECU 26.2

Average spend per video household: ECU 41.9 (1991 - ECU 43.2)
Level of average spend per video household relative to EU average: 29% above EU average ECU 32.3

General Country Specific Details

Discussion of market structure:

There is an increasing number of people purchasing videos. The development of the distribution chain is helping this growth. The French sell through market is dominated by hypermarkets (40-60% of total video sales). Large shopping chains, supermarkets and kiosks are providing this mechanism. Kiosks are not expected to grow as they have previously done so but will continue to operate. 15 M video tapes were sold in 1995 via kiosks. The kiosk market is not a permanent market but they do help to grow the number of purchasers.

As a result of the open competition, prices of videos have dropped by 20% and are estimated to decrease a further 10% in 1997.

The video sell through market is forecast to grow in value by 10- 15 % in 1997.

Likely impact of new media:
The organisation of the market place will change because of the transfer from VHS to DVD. It is perceived in France that DVD will be a fast growing market, focusing on quality of product. This will contribute to growth of market. DVD is expected to make an impact in 1998.
French video distribution industry are awaiting development of DVD. They are very interested in getting product into the market place. The software industry is very dependent on the marketing of the hardware.

Conclusions:

With the continuing development of the distribution chain and decreasing purchase prices, more people are purchasing videos. We therefore believe, that the growth of the sell through market will continue at current rates of 2-2.5% for the next five years. In addition, we believe the second five years will also continue to grow at current rates because of the previous drivers and also because of the early impact that DVD is expected to make on the French video market.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 2-2.5%	Average growth rate of 2-2.5%

Pay TV

Indicators

Total pay TV expenditure: ECU 1181.6 million (1990: ECU 970 million)

Cable TV connected HH: 5.2%
Growth / year of cable TV connections 1990-1995: 0.64%

DTH connected HH: 4.6%
Growth / year of DTH connected HH 1990 - 1995: 0.48%

Number of years since pay TV introduction: 12

General Country Specific Details

Premium Services

Discussion of market structure:

The French pay TV market which has come through a period of stability during the last five years is suddenly the centre of great activity with up to 3 digital packages being launched. Today, the French market accounts for 41% of all EU movie pay TV revenues.

Canal Plus have passed the 4 million subscribers level, reaching 20% of TV homes. Subscriber growth rates have been approximately 5.7% per year for the period 1990-1995.

Although, the competition in the pay TV market is healthy, it can also drive the cost of rights soaring through the roof as service providers try to differentiate themselves from one another. This inevitably increases the cost to the consumer and may inhibit those are sensitive to the price of the service.

Discussion of issues in switch to digital pay - TV.
The large subscriber base of 20% of TV homes using analogueue STB's may appear to represent a major problem in convincing people to switch to digital services. However, it is likely that the French industry will assist subscribers with the move as most of the STB are rented.

Conclusions:

The continuing growth of the French pay TV market, the rapid growth of CanalSatellite of 25000 subscribers a month, and the planned launch of new pay TV services will enable the industry to sustain its current growth of 9-10% for the next 5 years. There may be a slight levelling of the growth of 3-4% in the last 5 years as the market attains a new level of maturity.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 9-10%	Average growth rate of 3-3.5%

Transactional TV

Canal Plus through its digital bouquet, service have already signed up 100000 subscribers in its first four months of operation. Basic subscribers are offered the pay-per-view service Kiosque and, from September, pay-per-view French football. A nine French first division football matches played each week can be viewed. For FFr50, the viewer can watch one match; for Ffr100 all the matches. Movies will cost FFr 28-38. With the recent launch of PPV soccer, it is expected that the number of subscribers will double by year end.

In addition, TPS hopes to launch its digital cable and satellite package by Christmas '96. It aims to have 200,000 subscribers within 18 months and 1 million after 5 years according to
The eight digital satellite channels are mostly already available to French homes by terrestrial means. In 1997, the Eutelsat bouquet will be supplemented by demand services like pay-per-view and NVOD.

To add more spice, ABSat is to launch their 30 channel digital bouquet in 1997.

Conclusion:

The already substantial no of new digital pay TV subscribers in France should facilitate very good prospects for transactional services, especially NVOD. In addition, the maturity of the French pay TV market and the acceptance to pay for these services should enable rapid growth of 13-14% in the second 5 years.

	1st 5 years	**2nd 5 years**
base	Market to grow to ECU 162 million by year 2000	Average growth rate of 13-14%

Multimedia: Off-line

MM off-line expenditure: ECU 208.6 million (1991: ECU 38.4 million)

MPC Model

Indicators

MPC Penetration: 3.5%
MPC penetration for 1994: 1.2%
Growth / year of MPC penetration for period 1994-1995: 1.7%

Average no. of CD-ROM purchases per MPC HH: 1.7 (1992: 1.1)

Average purchase price of CD ROM ECU 49.7 (1992: ECU 65.6)

CD Consoles Model

Indicators

CD Console Installed base: 316,500 (1994: 125,500)

General Country Specific Details:

The French CD-ROM market has been slow to develop because of the initial scarcity of attractive French-language titles. However, during 1995 that situation has changed dramatically with the number of French CD-ROM releases multiplying by 3.5 times.

For most CD-ROM importers, localisation into French is vital. To illustrate this, Broderbund's blockbuster CD-ROM Myst sold only 6000 copies in its original format, while the French version has sold over 20,000 units.

A distinctive feature of the French CD-ROM market is the importance of the non-games sector. Remarkably, 18-22% of all sales are accounted for by art/culture titles - the second biggest market after games.

There is a wide variation in CD-ROM prices on the French market, with a cluster around the FFr 99 price and others up at FFr 1,700. However, in a recent survey by FNAC, 88% of respondents thought the price of CD-ROMs was still too high.

The French interactive entertainment software market is well established. France has historically been an explosive market for cartridge-based video game consoles. As the 16-bit console goes into decline, France has been Sony's biggest initial success story, with its Playstation launch there exceeding all expectations.

Discussion of Market Structure:

There was a 52% increase in the number of CD-ROM retail outlets in France in 1995 compared to the 1700 in 1994. The French retail channels for CD-ROM are highly concentrated, with 80-90% of all sales accounted for by eight retails groups. FNAC alone controlled 25% of French CD-ROM market in 1995 and with other similar specialist stores, accounted for 35-40% of the market. Super/Hypermarket chains are increasingly moving into CD-ROM retailing, having

been responsible for 65-70% of video game cartridge sales. The leading group Leclerc Centers (360 stores) has started opening specialist departments called Espaces Culturels. It expects to have 20 open by year end and 80 by the year 2000. It is estimated that there were 200 French super/hypermarket outlets selling CD-ROMs in 1994 and 600 by end of 1995.
Additional channels of distribution include a trial distribution of CD-ROMs through new kiosks and a specialist mail order company.

Conclusion:

Driven by an increasing penetration of MPC's, increasing supply of French titles and developing distribution structure, we believe the market will continue to grow at current rates of 9-10% for the next 10 years.

	1st 5 years	2nd 5 years
base	Average growth rate of 11-12%	Average growth rate of 9-10%

Multimedia: On-line

Indicators

PC Path:

MPC Penetration as % of Households: 3.5%
Modem Penetration as % of Households: 2%
Internet hosts / 100 Inhabitants: 0.34
Growth / year of Internet hosts 1994 - 1996: 66%
ISDN lines as % of main lines: 0.69

TV Path:

Multi-channel Penetration of TV HH: 9.8%

General Country Specific details

Broadband Infrastructure rollout:

A grand cable TV nation-wide plan called - autoroute d'information- is in place with the aim of linking every French household with fibre optic cable by the year 2015. The projected cost is between FFr 150 and FFr 200 billion. The country's cable TV operators are also actively involved in testing interactive multimedia services.

General discussion on market:

Internet usage and growth is low considering the size of the country and the penetration of PCs. French consumers see little benefit to use on-line services when most of the content is English - language based. This slight reluctance by the French to Internet is most likely due to the Minitel experience (see section 3.4.5).
Multimedia on-line information services will face strong competition from Minitel. It is far cheaper for service providers to offer services via Minitel, and a high proportion of the potential users for such multimedia services already have Minitel terminals in their households. The fact that consumers are familiar with Minitel will, in principle, make them less resistant to seeing the

PC as a communications device. However, it is clear that the content of PC based on-line services should be clearly differentiated from what is available via Minitel.
Minitel experience has contributed towards making France a European leader in the use of home-banking, phone-based information services and mail order for clothes/tapes, CDs.
Minitel is used predominantly by users in the higher income bracket. Those that can afford it tend to be extensive users of on-line services. Minitel is adopted by 26% of households and 50% of households with a PC have Minitel also.
Electronic banking is becoming very popular in France using the public videotext service.
In addition, opportunities for home shopping are good in France because of the relatively strong mail-order market. The launch of digital satellite services providing transactional services such as home shopping and banking will help to further stimulate take up of on-line services.
Encouraging this growth are France Telecom, who reduced their Internet access tariffs to a local charge, irrespective of the distance they are from an Internet server.
Furthermore, France Telecom offers a reduction on the cost of additional telephone lines to a domestic address.
A new bill has been passed which change the country's telecoms regulations and permit a host of new multimedia services to be trialed.

Electronic media and publishing group Matra-Hachette are setting up an interactive games channel in partnership with France Telecom.

Conclusion:

The success of Minitel maybe the obstacle to the current growth of Internet. Although, it appears that French experience of Minitel lends itself favourably to the growth of on-line multimedia services, there is also some point of concern as to why the Minitel users should switch. It is absolutely necessary for Internet providers to succeed, their content must be in French and must differentiate itself from Minitel services. As happened in the CD-ROM market, we believe that suitable French Internet on-line content will become available. France Telecom, who are encouraging the growth of Internet and Matra Hachette games channel together with home shopping and banking services from Canal Plus and Havas will be the major movers to establish multimedia services in France. In conclusion, we believe, the market will continue to grow significantly for the next 10 years.

	1st 5 years	**2nd 5 years**
base	Market to grow to ECU 68 million by year 2000	Average growth rate of 100%

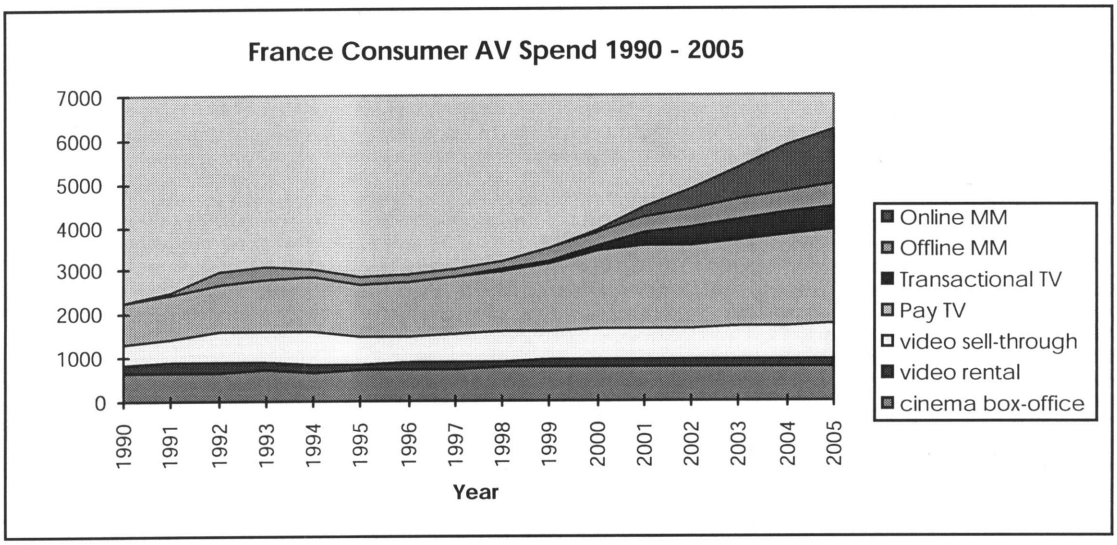


Exhibit 4.4.4: France Consumer AV Spend

4.5 Great Britain (GB)

Summary:

Total AV expenditures are projected to increase from ECU 9,026.2 million in 1995 to ECU 14,800.4 million in 2005 (see Exhibit 4.5.1). Direct consumer expenditures increases its share of total AV expenditures from 34.5% in 1995 to 49% in 2005. Advertising expenditure's share falls from 42% in 1995 to 37% in 2005, while licence fee revenue's share falls from 23.4% to 14% over the same period.

Pay TV remains the single largest direct consumer expenditure category at ECU 2,019.9 million in 2005, closely followed by video sell-through at ECU 1909 million ECU. On-line and off-line multimedia sales are projected to increase to ECU 1276 million ECU and ECU 605 million respectively by 2005.

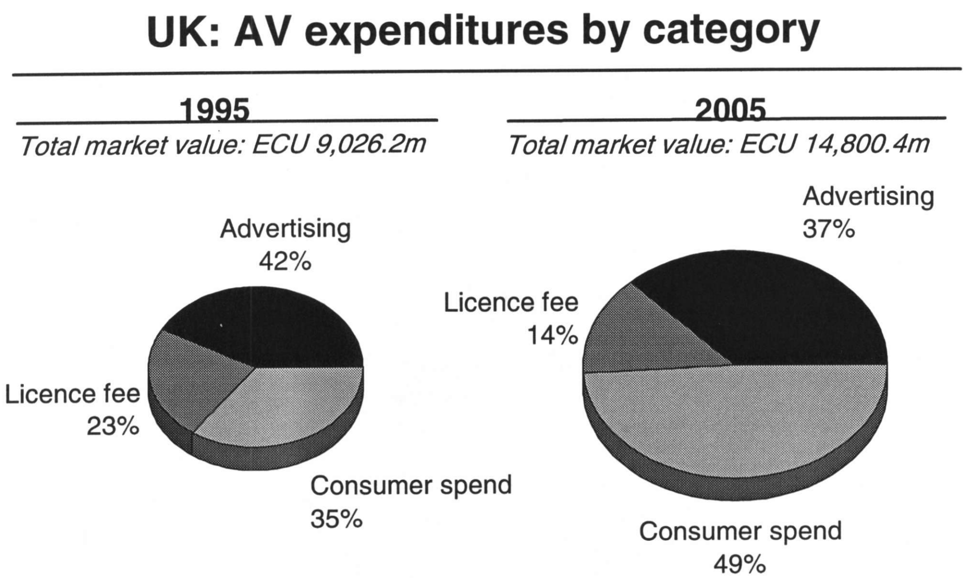


Exhibit 4.5.1: Summary of Aggregate AV Expenditures: Great Britain

Licence Fee

Indicators

Current Level: ECU 108 (1990: ECU 99.3)

Licence fee revenue: ECU 2113.8 million (1990: ECU 1764.5 million)

Licence fee revenues as percentage of total revenues: 83%

Public broadcaster's share of viewing: 44.3%

Country Specific Details:

The terrestrial market consists of four national networks, with a fifth frequency added at the end of 1996. There is one state run network, BBC, with two channels (44.3%), BBC1 and BBC2. These take no advertising and rely on the licence fee for funding. ITV (38%) is made up of a network of 15 private regional franchises. Channel 4 (10.5%) is a public service broadcaster and also relies on advertising as its main source of revenue. Channel 5, the fifth frequency, is now broadcasting, though many have to retune their video recorders because of signal interference.
Pay-television is dominated by BSkyB, which offers DTH satellite packages of basic and premium channels and is also the dominant supplier of programming to the cable industry.

In mid-1995, the government announced plans for digital terrestrial TV, designating six DTT multiplexes of at least three channels each. Most existing TV sets will need a decoder to receive the new signals. The five existing terrestrial channels will have automatic carriage, and must simulcast at least 80% of their analogue lineups.

Public Announcements on Licence Fee:

Changes to the level of licence fees have been linked to the Retail Prices Index (RPI) since 1988. Currently the rate is Relative Price Index (RPI) - 0% until end of 1996. The Government is conducting a review of the licence fee with a view to establishing levels over a five year period commencing April 1997.

General Perception of public sentiment / political commitment

There is a positive political commitment to the role of public broadcasting in the UK.
Even though the UK has a very strong commercial broadcasting market for over 10 years, there appears to be stability in the battle for audience share. During the past 5 years, BBCs' audience share is remaining at the 44% level. The free-to air channels are held in high regard. There is a good perception of quality programming.

The BBC have made a strong case for an increase in the licence fee above the level of inflation to match increasing real costs of production and increasing costs of rights particularly sports rights. The BBC also argues that an increase is necessary for it to compete in the digital age. The case cites "efficiency ",savings which have produced additional funds for production but asserts that for the BBC to remain a world-class broadcaster it will need to increase the levels of production spend.

Conclusion:

Any substantial increase would be subject to intense political pressure and will be influenced by a possible change of government in 1997. However, based on the continuing importance of public service broadcasting, we believe that there will be a one-off increase of the order of 3% in 1997 followed by index linking for the next five years. Further increases in the second five years are more problematic.

Accordingly, we believe that the licence fee will remain constant in real terms until 2001. Beyond this period, we expect the licence fee to remain constant in nominal terms, implying a decrease in its level in real terms.

	1st 5 years	2nd 5 years
base scenario	Average growth rate of 1.7%	Average decline rate of 2%

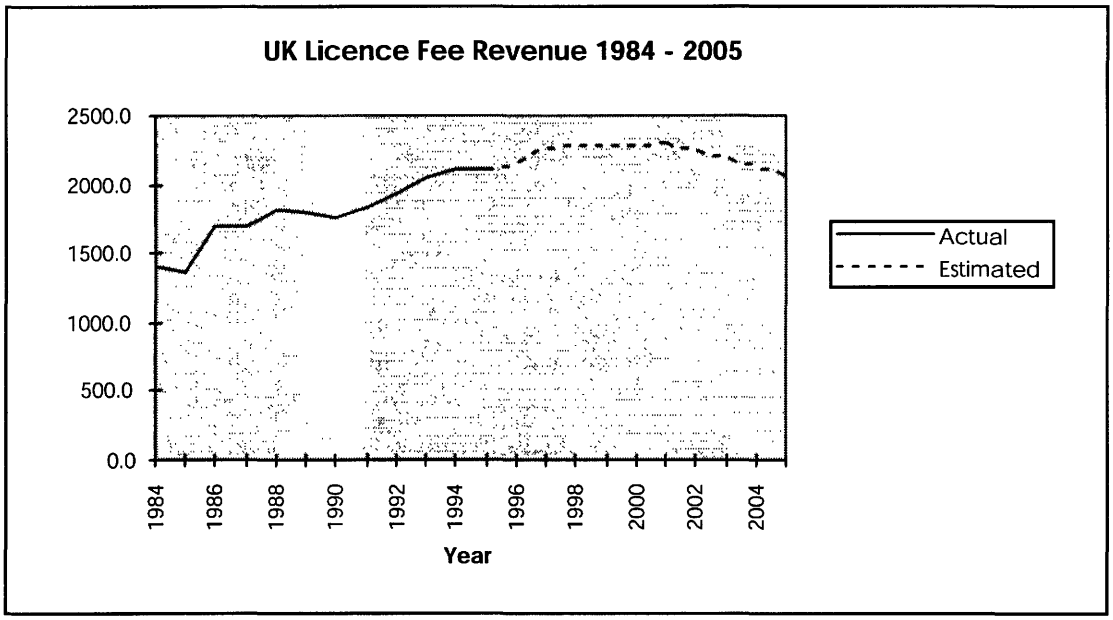


Exhibit 4.5.2: Great Britain TV Licence Fee Revenue

Advertising

Indicators

Total AV adspend: ECU 3796 million
Average growth / year of AV advertising spend 1990- 1995: 1.07%

TV adspend as a share of total advertising: 31.7% (1992: 31.2%)
Level of TV adspend as a share of total advertising relative to EU average: 1.7% above

AV adspend as a share of GDP: 0.45%
Average AV adspend as a share of GDP / year 1990-1995: 0.42%

Country Specific Details

Discussion on market structure:

The UK is a very mature advertising market. Advertising spend historically tracks GDP growth.

The introduction of new digital channels together with the introduction of Channel 5 in 1997 will lead to some fragmentation of the audience which in turn will imply some re-distribution of the spend from existing channels. The advertising funded Channel 5 has been awarded to an organisation with a track record in popular television. This is expected to win market share for them.

Historically, the introduction of additional channels such as Channel 4, has resulted in an increase of overall advertising spend.

Likely impact of new media
There is the prospect that advertisers will experiment with WWW and other on-line channels. We think that such experiments will be marginal in terms of the overall spend since conventional channels will continue to hold the major share of the audience and thus be able to deliver the mass audiences required by most advertisers.

Conclusion:

On the basis of the continuing growth of the UK economy and the addition of new TV channels to the market, it is expected there will be a growth in advertising spend of 3.- 4% in the first five years followed by 4.5 -5 % in the second five years. The increased optimism for the second five years is in part, due to the growth of additional revenues from the WWW and other on-line channels.

	1st 5 years	**2nd 5 years**
base scenario	3.4 % real growth	4.7% real growth

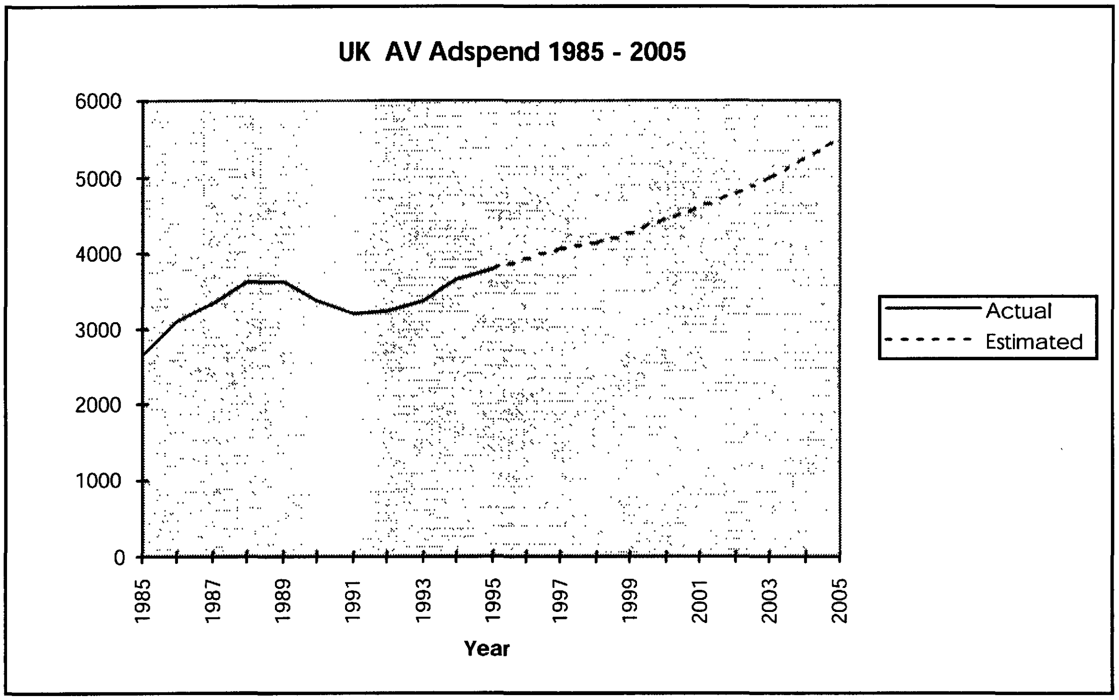


Exhibit 4.5.3: Great Britain AV Adspend

Consumer AV Expenditure

General Consumer AV Expenditure Indicators

Consumer AV expenditure as % of GDP: 0.37%
Average consumer expenditure / year as % of GDP 1990 - 1995: 0.3%

GDP / capita: ECU 14,736 million (1990: ECU 13,510 million)

Average daily hours TV viewing: 3.34

TV Households: 22,752,100

VCR Penetration: 72.3% (1990 - 63%)
Average growth / year of VCR penetration for period 1990 - 1995: 2.26%

Cable Penetration: 5% (1990 - 0.7%)
Average growth / year of cable penetration for period 1990 - 1995: 0.86%

Satellite Penetration: 15.5% (1990 - 5.6%)
Average growth / year of satellite penetration for period 1990 - 1995: 1.98%

Cinema Box Office

Indicators

Gross revenues: ECU 480.0 million (1990: ECU 386.1 million)

Average annual cinema admissions per head in 1995 was 2.0
Level of average annual admissions relative to EU average: 17% greater than EU average of 1.7
Growth of average annual cinema admissions for period 1990 - 1995: +20%

Average ticket prices in 1995 was ECU 4.7 (£3.4)
Average ticket price level relative to EU average: 4% below EU average of ECU 4.9
Average ticket price in 1994 was ECU 4.5 (£3.2)

Multiplex Screens as proportion of Total Screens: 45.4%
Level of multiplex screens as proportion of total screens relative to EU average: 28% above EU average of 17.4%
Growth of multiplex screens as proportion of total screens period 1990 - 1995: 14.1%

Country Specific Details

Discussion of market structures

The number of multiplex cinema screens in the UK is the largest in any of the European countries. Yet further building is taking place particularly on the outskirts of large cities. It is forecast[4] that 57.5% of all screens will be multiplexed by 1997.

[4] Screen Digest, May 1996

Since the development of multiplex cinemas with the concomitant increase in admissions has taken place during a period where video sales have continued to increase, it is likely that the present building programme will produce a continuation of growth over the next 5 years with a plateau of building and growth being reached some time in the following five years.

The factors which may affect the steady growth of cinema revenues may be either:

- price competition as the number of screens reach saturation point
- a severe economic downturn
- a dearth of attractive films.

Likely impact of new media:
It is expected that cinema admissions will be less affected by a proliferation of channels or by NVOD or VOD, all of which take place in the home.

Conclusion

Given the continuing increase in multiplex build, the steady supply of blockbuster titles, and the perceived entertainment value of going to the cinema, we believe it will continue to grow at 1-2% for the next 5 years.
In the second 5 years, we believe the multiplex build will have stabilised and that the market will have attained a new level of maturity. We therefore, believe constant in real terms for the second five years.

	1st 5 years	**2nd 5 years**
base scenario	Average growth rate of 1.9%	Average growth rate of 0-0.5%

Video Rental

Indicators

Total video rental expenditure: ECU 551.6 million (1990: ECU 804.6 million)

Average rental transactions per VCR home:12.6
Level of average rental transactions per VCR home relative to EU average: 72% above EU average 7.3

Average spend per video household: ECU 32.6
Level of average spend per video household relative to EU average: 71% above EU average ECU 19

VCR homes per rental outlet: 3312 (1990 - 1586)
Growth of VCR homes per rental outlet 1990 - 1995: 108%

General Country details

Discussion of market structure:

There has been a gradual decline in the number of video rentals in the UK from 373 million transactions in 1990 to 217 million in 1995. This has now stabilised. However the gradual switch from rental to purchase will probably continue as the price differential between rental and sales continues to narrow.

The effect of the introduction of competition from more free-to-air channels carrying yet more feature films, the staple offering of the video rental market, is problematic.

The ubiquitous availability of VCRs together with a mature and well organised market for offering video at low rental costs suggests that this market will continue for the foreseeable future.

Several supermarket multiples are currently trialing video rental in their stores. While shelf space is at a premium, the supermarket owners obviously believe they will be able to squeeze more out of this market through additional channels. In the US, this video rental channel accounts for 13% of rental revenue.

The first half results for the UK in 1996, show the market has grown by 3% on same time last year.

Likely impact of other media:
We do not believe that DVD will make any significant impact on this market.

Conclusion:

While there has being a steady trend away from rental to sell through, we believe the market has completed its consolidation, at least for the next five years. Furthermore, recent figures show the industry decline may be slow over the projection period. This together with a high VCR penetration, leads us to believe that the market will decline at a rate of 1%-2% over the ten years.

	1st 5 years	**2nd 5 years**
base scenario	Average negative growth rate of 1.4%	Average negative growth rate of 2%

Video sell-through (including DVD)

Indicators

Total video sell-through expenditure: ECU 952.3 million (1990: ECU 533.6 million)

Average video purchase transactions per VCR home: 4.2 (1991 - 3)
Level of average video purchase transactions per VCR home relative to EU average: 75% above EU average 2.4

Average video purchase price: ECU 15.2 (£10.81)
Level of average video purchase price per VCR home relative to EU average: 6% below EU average ECU 14.3
Average video purchase price per VCR home 1994: ECU 15.1 (£10.58)

Average spend per VCR household: ECU 56.3 (1991- ECU 39.9)
Level of average spend per video household relative to EU average: 74% above EU average ECU 32.3

General Country Specific Details

Discussion of market structure

In contrast with the decline in the number of outlets in the rental sector, the number of video sales outlets has remained stable at around 20000 for most of this decade.

The growth in the sales of videos from 40 million in 1990 to 73 million in 1995 may partly echo the decline in video rentals but also reflects a growing purchasing "habit" of buying videos as gifts or as impulse purchases. In turn, this also reflects a lowering of prices in real terms for videos over this period.

The retail sector has grown by 18% in the first half of 1996 compared to same time last year

Likely impact from competing media
Since purchases of videos and eventual purchases of DVD programmes are substantially decided by decisions to make gifts or desire to acquire ownership (as with books) it is probable that growth rates will be unaffected by proliferation of channels or NVOD. A constraining factor may be the availability of shelf space in retail outlets which is near to capacity.

We do expect that the UK, traditionally an early adopter of new consumer goods and technology, will have a quicker rate of take up of DVD compared to most other European countries. Also, the flexibility of the DVD in that the movie will be available in many different languages on the disc, will help to sustain the video sell through industry in the UK.

Conclusions:

The ubiquitous availability of VCRs together with an established market for video sales (the UK was a pioneer in this area) suggests that current growth in the video sell through market will continue with a shift to DVD as these players gain acceptance. On this basis, we believe it reasonable to assume growth at current rates of 7% for the next 5 years and slightly lower growth rate during the following five years.

	1st 5 years	**2nd 5 years**
base scenario	Average growth rate of 7%	Average growth rate of 5%

Pay TV

Indicators

Total pay TV expenditure ECU: 896.8 million (1992: 386.9 million)

Cable TV connected HH: 5%
Growth / year of cable TV connections 1990-1995: 0.86%

DTH connected HH: 15.5%
Growth / year of DTH connected HH 1990 - 1995: 1.98%

Number of years since pay TV introduction: 7

General Country Specific Details

Premium Services

Discussion of market structure

In the UK, pay TV is dominated by BSkyB, which offers DTH satellite package of basic and premium channels and is also the dominant supplier of programming to the cable industry. It currently has over 3 million subscribers and has an average growth per year of 28% for its premium channels.

BSkyB has also announced plans for the launch of a 150 channel digital satellite service in autumn 1997.

UK cable operators have the network infrastructure to offer digital services and this could be implemented within a short time-span. The cable operators own the set-top boxes; consumers do not need to be persuaded to upgrade. Additionally, the government of the UK is among the first to develop a policy for digital terrestrial broadcasting.

Discussion of issues in switch to digital pay - TV.

The switch to digital will be faced with many obstacles; it will be very difficult for cable companies to factor into their already tight business models considerable investment to upgrade consumer hardware and it will be a formidable challenge for BSkyB to convince the 3.5 million satellite homes that have acquired analogueue set-top boxes.

Conclusions:

Due to the continuing growth in subscribers and the provision of premium content, it is projected that pay TV will continue to grow at current levels of 10% for the next 5 years. The arrival of digital terrestrial services will also grow the market. However, the transition to digital for BSkyB subscribers is not so clear, given the large subscriber base with analogueue STBs. The outlook for the second five years is therefore for sustained growth but at a lower rate of 3-4%.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 10%	Average growth rate of 3-4%

Transactional TV

BSkyB have being very successful with two recent PPV sporting launches and this is encouraging for the growth of this development of pay TV transaction services. They have also announced that they are investing in new feature films. They also extended its deal with soccer's English Premier League for a further four years, paying $1 billion from the 1997/1998 season. It also signed a controversial deal with the English Rugby Union, worth $131 million over five years. As the operator launches its digital bouquet, we expect transactional services such as PPV and NVOD to grow at rapidly.

	1st 5 years	**2nd 5 years**
base	Market to grow to ECU 276.6 million by year 2000	Average growth rate of 6-7%

Multimedia: Off-line

MM off-line expenditure: ECU 235.8 million (1991: ECU 35.6 million)

MPC Model

Indicators

MPC Penetration: 5.5%
MPC penetration 1994: 1.7%
Growth / year of MPC penetration for period 1993-1995: 1.7%

Average no. of CD-ROM purchases per MPC HH: 1.9 (1992: 1.1)

Average purchase price of CD ROM ECU 41.3 (1992: ECU 61.4)

CD Consoles Model

Indicators

CD Console Installed base: 380,600 (1994: 170,350)

General Country Specific Details

General Market Discussion

The UK is the second largest interactive entertainment market in Europe. However, the total UK software market has being on a downward cycle since the decline of 16-bit and 8-bit cartridge business. This year should see the market grow to a new high as CD-ROM sales continue to accelerate and 32-bit CD systems start to fulfil their potential.

The UK has traditionally been Europe's strongest market for console-based video games, both in terms of hardware and software. However, competitive pricing and price discounting has suppressed overall retail revenues generated from software.

The UK is almost invariably the market in Europe where new interactive entertainment systems launch first. This means that as early adopters, UK software companies have been able to benefit from early penetration of hardware, but are also first to suffer in the down turn phase of a technology and product life cycle, as happened in the decline of the 16-bit cartridge market.

The large and rapidly growing installed base of MPCs is a main driver in the CD-ROM games market. Additionally with the common language, the UK market acts as a launch pad for Europe for CD-ROMs originating in the US.

It is estimated that the UK edutainment CD-ROM market share is approximately 15% and the remainder games.

The UK retail sector is well organised and efficient but generally demands the highest margins on software products. There is a growing overlap between retail channels for mainstream entertainment products (music and video) with interactive software. In addition, non-core outlets like supermarket chains Asda and Tesco have started stocking CD-ROM . The distribution structure is shifting towards the video distribution model in which large publishers primarily use one exclusive distributor to physically move their stock out to the trade and use their own sales teams to deal directly with the key retail accounts, leaving independents to be handled by the exclusive distributor/wholesaler. A consequence of this is likely to be the steadily increasing importance of mainstream entertainment produce physical distributors like Polygram, Warner Music, BMG etc. Another consequence is a squeeze on the traditional wholesaler-distributors.

Conclusion

The rapidly growing installed base of hardware, the steady supply of content and the highly developed distribution structure will enable current growth of 7-10% to be continued for the next 10 years.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 7%	Average growth rate of 10%

Multimedia: On-line

Indicators

PC Path:

MPC Penetration as % of Households:5.5%
Modem Penetration as % of Households:2%
Internet hosts / 100 Inhabitants: 0.98
Growth / year of Internet hosts 1994 - 1996: 90%
ISDN lines as % of main lines: 0.68

TV Path:

Multi-channel Penetration of TV HH: 20.5%

General Country Specific details

Broadband Infrastructure rollout:

Most cable networks are of an advanced nature with an abundance of capacity. Two-way distribution should be easily available. Interactive services are largely planned by cable operators.
BT is concluding the most advanced interactive multimedia trial in the world using existing telephone lines as the transmission medium. Deployment on a commercial scale is expected in the latter end of the first five year period.

General market discussion:

The UK has a high level of Internet hosts and is experiencing growth of approximately 90% per year.

Modem prices and telecommunication costs are falling rapidly. Cable TV subscribers can now avail of very competitive telecommunication charges.

ISDN penetration is growing at approximately 47% per year but charges prohibit its usage for high speed Internet access.

The recent announcement by BSkyB and possible co-operation with BT to deliver services such as home shopping and home banking via satellite to the home and use the telephone for the return channel could be a major driver for on-line services in the UK.

Although DTH is growing more rapidly, the future of cable TV is more assured since it offers the added advantage of cheap telephony. In urban areas, therefore, cable may squeeze out satellite.

Conclusion:

The advanced state of the cable TV network, the growing cable and satellite penetration, and the continuous development of local content positions the UK for continuous growth at current levels for the next 10 years.

	1st 5 years	2nd 5 years
base	Market to grow to ECU 124 million by the year 2000	Average growth rate of 60-70%

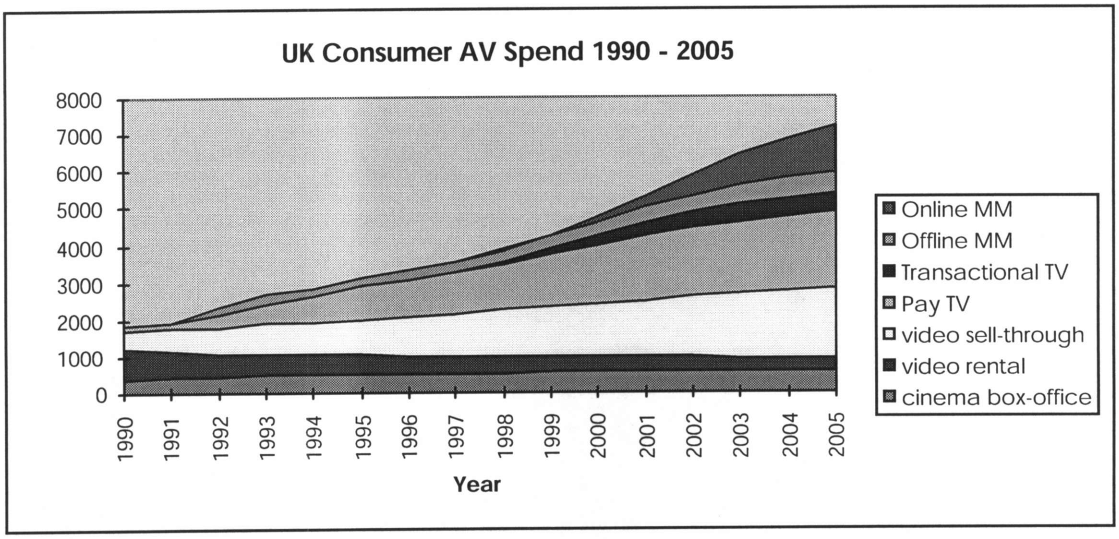


Exhibit 4.5.4: Great Britain Consumer AV Spend

4.6 Ireland (IE)

Summary:

Total AV expenditures for Ireland are projected to grow from ECU 308.8 million in 1995 to ECU 492 million by 2005 (see Exhibit 4.6.1). Direct consumer expenditures continue to grow in importance increasing its share of total AV revenues from 44.2% in 1995, to 53.9% in 2005. Advertising's share is expected to remain reasonably constant at 33.6% in 2005 (35.5% in 1995), while television licence fee revenues fall from 20.3% of the total in 1995 to 12.5% in 2005.

As a legacy to the current strength of the sector in Ireland, video rental is expected to remain as the single largest consumer expenditure category in 2005, despite falling from a peak of ECU 64.7 million in 1998 to ECU 57 million in 2005. However, significant growth categories include pay TV with potential revenues of ECU 46.9 million in 2005 (ECU 11.4 million in 1995) and on-line and off-line multimedia which reach ECU 47.5 million and ECU 32 million respectively in 2005.

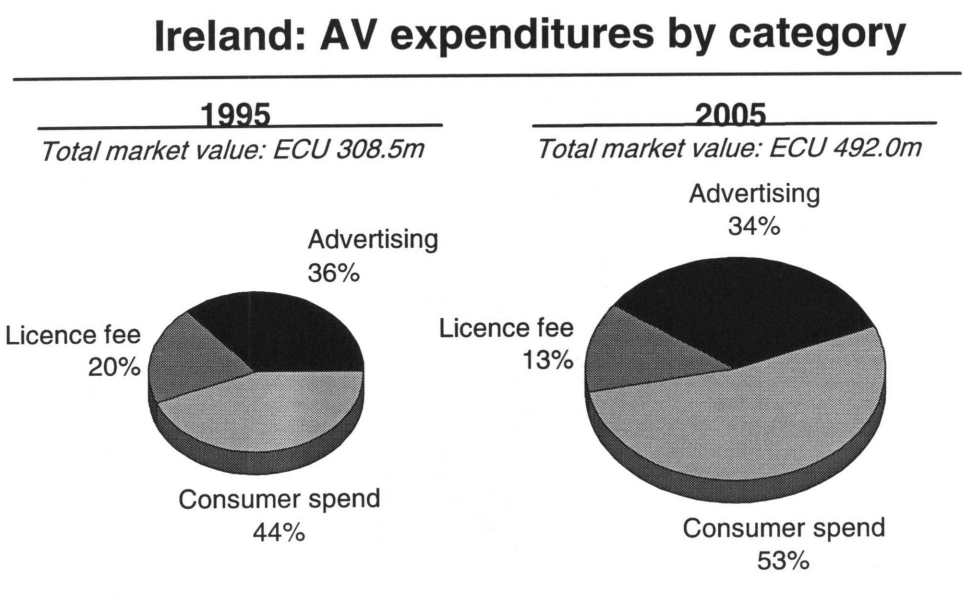


Exhibit 4.6.1: Summary of Aggregate AV Expenditures: Ireland

Licence Fee

Indicators:

Current Level: ECU 78 (1990: ECU 79.7)

Licence fee revenue: ECU 62.5 million (1990: 63.9)

Licence fee revenues as percentage of total revenues: 36%

Public broadcaster's share of viewing: 60%

Country Specific Details:

There are two state run networks in Ireland; RTE with two channels, RTE 1 (43%), RTE 2 (17%) and recently launched (Irish only speaking network) channel, TnaG. There is no commercial television in Ireland at the moment. Competition to RTE comes from British terrestrial channels which are available in two-thirds of TV homes, due to overspill and cable and satellite penetration. Several BSkyB channels are also provided.

Public Announcements on Licence Fee:

The Government announced on 9 July 1996, an approved licence fee increase, the first in 10 years, in the cost of the TV licence. The increase approved is IR £8, representing an increase of 13%. This brings the licence fee to a new total of £70. In addition, the Government, has agreed in principle to indexation of the licence fee, subject to agreement between the Minister for Arts, Culture and the Gaeltacht and the Minister for Finance on the formula to be used.

General Perception of public sentiment / political commitment

"The establishment of Telefis na Gaeilge - with a strong Government commitment to the on-going funding of the station - is a clear strengthening of the concept of public service broadcasting in Ireland", according to the Minister for Arts, Culture and the Gaeltacht.

The Governments recent decision to grant approval for an increase in the licence fee, the first for 10 years, for an indeterminate duration, indicates the political commitment to broadcasting in Ireland.

According to RTE, it will maintain their present market share as a terrestrial broadcaster through

- improved programme quality especially drama material in an Irish setting
- enhanced news programming again with an emphasis on improving local news coverage

The broadcaster will come under increasing cost pressures. The cost of rights for sports and feature films will soar and they hope to fund this through resale of their own schedules and offering on-line services such as News on demand. RTE will broaden their scope for collecting revenues by developing the resale of RTE schedules to cable stations in the US and the UK where there are population groups with Irish background. They are also experimenting with WWW live audio broadcasts of major events to the Irish people worldwide and have an expanding range of on-line services available from their web site.

RTE's present audience share of 60% + despite the fact that programmes are received from the UK and the very high penetration of cable TV in Dublin. The broadcaster is perceived as providing good quality programmes on news coverage and 'chat shows'.

Conclusion:

The role of the traditional broadcaster in Ireland will remain for the foreseeable future. The recent launch of Telefis na Gaeilge and the financial on-going commitment to it by the Government indicates a very strong commitment to public service broadcasting in Ireland. In addition, the approved licence fee increase for the indefinite future secures the licence fee revenue for the broadcaster for the projection period of this study. The licence fee increase, previous to the 1996 decision, was in 1986. That increase was not index linked and the licence fee remained fixed for 10 years.

On the basis of the political commitment and the positive historical track record on the licence fee, we believe the current licence increase awarded in 1996 will be maintained for the next 10 years. In addition, we believe the Government will approve indexation of the licence fee, at least for the next 5 years. Therefore, we believe the licence fee revenue growth will be an average 1.8% per year for the first five years and an average decline rate of 1.9% in the second five years (due to the non indexation of the licence fee during this period).

	1st 5 years	**2nd 5 years**
base scenario	Average growth rate of 1.8%	Average decline rate of 1.9%

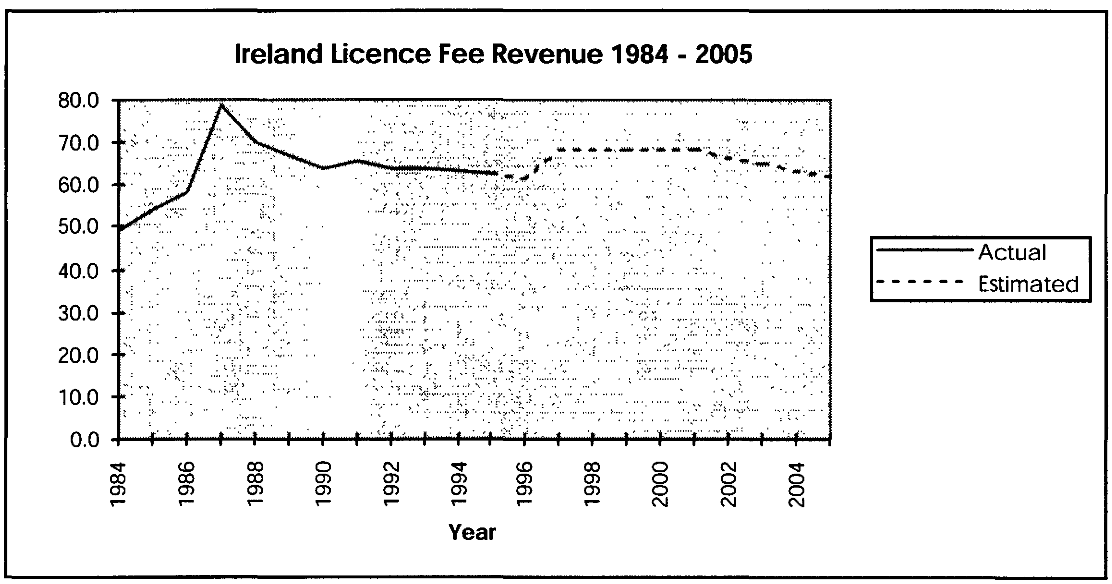


Exhibit 4.6.2: Ireland TV Licence Fee Revenue

Advertising

Indicators

Total AV adspend: ECU 109.6 million
Average growth / year of TV advertising spend 1990- 1995: 6.78%

TV adspend as a share of total advertising: 32.7% (1992: 30.1%)
Level of TV adspend as a share of total advertising relative to EU average: 2.7% above

AV adspend as a share of GDP: 0.23%
Average AV adspend as a share of GDP / year 1990-1995: 0.21%

Country Specific Details

Discussion on market structure:

There is no domestic commercial TV advertising market in Ireland at the moment, but this will change in he near future.
The Irish economy is currently enjoying an economic boom with strong GDP growth. It is forecast that GDP growth figures will be over the 5% level to 1999, with a maximum of 6.5% in 1996 and continuing to grow between 2% and 3.9% between 2000 and 2005

Currently the broadcasting regulations require that 10% of programme transmission hours may be devoted to advertising, subject to a maximum of 7.5 minutes in any one hour.
Advertising is an area where RTE will be exposed in the long term. Advertising currently accounts for about 60% of their total revenues.

Telefis na Gaeilge, the new Irish terrestrial service was launched on 31/10/96. It will be broadcasting for 3 hours a night. It is possible that some advertising revenues will be shared with RTE and the new channel.

However, the expected launch of a new terrestrial channel, TV3, in 1997 which will be privately owned and funded via advertising, will be a major competitor to RTE. They hope to achieve a 15% audience share in Ireland and encourage small Irish companies to advertise on TV who previously could not because of the high cost. Given the popularity of the established state channels, this should have the effect of expanding total viewing, thus making space available for new and existing TV advertisers.

The broadcaster believes that there will be average real growth of 5% p.a. over the next 5 years and average real growth of 3.5% over the following 5 years. It believes this will result in a reversal of negative growth in the second 5 years due to other commercial broadcasters such as BSkyB or UTV or a third channel in Ireland which would be private.

Likely impact of new media
The broadcaster also believes that new forms of advertising such as on-line advertising will account for growth of 1-2 % in real terms for the second 5 years.

Conclusion:

On the basis of the strong underlying growth of the economy, the likely growth of the overall advertising market due to development of commercial television, and the expected impact of on-line advertising, we believe there will be average growth rates of 5.4% for the first five years and average growth rates of 3.7% for the second five years.

	1st 5 years	2nd 5 years
base	Average growth rate of 5.4%	Average growth rate of 3.7%

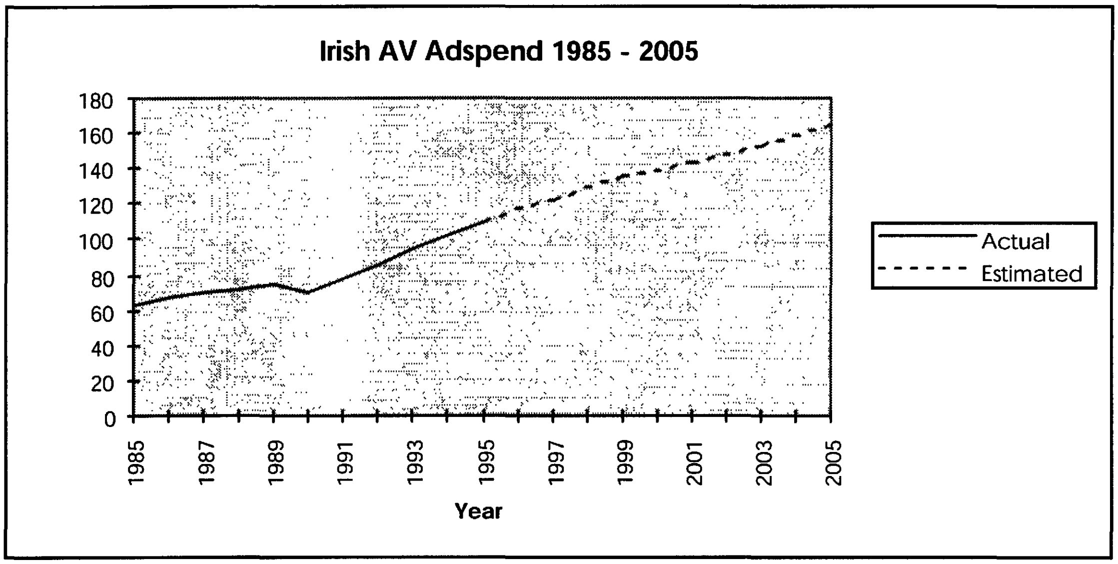


Exhibit 4.6.3: Ireland AV Adspend

Consumer AV Expenditure

General Consumer AV Expenditure Indicators

Consumer AV expenditure as % of GDP: 0.27%
Average consumer expenditure / year as % of GDP 1990 - 1995: 0.25%

GDP / capita: ECU 13,429 million (1990: ECU 10,472 million)

Average daily hours TV viewing: 3.13

TV Households: 1,112,900

VCR Penetration: 63.1% (1990 - 48.4%)
Average growth / year of VCR penetration for period 1990 - 1995: 2.92%

Cable Penetration: 40.8% (1990: 36.9%)
Average growth / year of cable penetration for period 1990 - 1995: 0.78%

Satellite Penetration: 8% (1990: 1.9%)
Average growth / year of satellite penetration for period - 1995: 1.22%

Cinema Box Office

Indicators

Gross revenues: ECU 33.7 million (1990: ECU 26.7 million)

Average annual cinema admissions per head in 1995 was 2.6
Level of average annual admissions relative to EU average: 56% greater than EU average 1.7
Growth of average annual cinema admissions for period 1990 - 1995: + 33%

Average ticket prices in 1995 was ECU 3.6 (£2.80)
Average ticket price level relative to EU average: 25% less than EU average price of ECU 4.8
Average ticket price in 1994 was: ECU 3.3 (£ 2.6)

Multiplex screens as proportion of total screens: 38.4%
Level of multiplex screens as proportion of total screens relative to EU average: 21% above EU average of 17.4%
Growth of multiplex screens as proportion of total screens period 1990 - 1995: 25.5%

Country Specific Details

Discussion of market structures

The cinema exhibition structure in Ireland is considerably developed. The number of multiplex screens as a proportion of all screens is estimated to stabilise at the end of 1997 at around 42%.

The average number of cinema admissions in Ireland (9th in World Top 40 ranked in 1995, and highest in EU) is set to continue, especially with a steady stream of Irish produced but international market oriented films, thus providing less reliance on the US blockbuster titles which are also popular.

Going to the cinema is Ireland is almost habitual; it is perceived as a social outing, usually in combination with going for a meal or a drink.

Likely impact of new media:
The eventual arrival of DVD and the growing pay TV market is not expected to make a significant impact on the cinema industry in the projection period of this study.

Conclusion

Given the increasing number of multiplex screens together with other social centres such as bars & restaurants, and the recent successes in nationally produced movies, we believe there will be continued growth of 4-5% for the first 5 years.

As the growth of multiplexes is expected to be much more gradual in the next 5 years and indeed stabilise, we believe it reasonable to expect constant in real terms in the 2nd 5 years.

	1st 5 years	2nd 5 years
base	Average growth rate of 4-4.5%	Average growth rate of 0%

Video Rental

Indicators

Total video rental expenditure: ECU 60.1 million (1990: ECU 62.5 million)

Average rental transactions per VCR home: 35.2
Level of average rental transactions per VCR home relative to EU average: 5 times greater than EU average 7.3

Average spend per video household: ECU 86.4
Level of average spend per video household relative to EU average: 4.5 times greater than EU average of ECU 19

VCR homes per rental outlet: 648 (1990 - 425)
Growth / year of VCR homes per rental outlet 1990 - 1995: +52%

General Country details

Discussion of market structure

In contrast to most of Europe, the rental market in Ireland is buoyant. Ireland are the highest frequenters to the rental store.
There is a mature video rental distribution network in place which enables approximately 600 VCR homes per video rental store which is very low in comparison with European standards. The number of video rental outlets is relatively stable over the last 3 years.

The penetration of VCRs in Ireland is set to continue to grow at approximately 2% p.a. for the next 3-4 years.

Likely impact of other media

Although DVD is not expected to make any significant impact on video rental in Ireland, the market will tend to follow other similar European models in a trend away from rental towards sell-through.

Conclusion:

On the basis of the vibrant video rental business in Ireland and no real threats of competing media in the next 5 years, we can expect constant in real terms for the first 5 years.

In the second 5 years we can expect a gradual shift to sell-through to cause a decline in the rental market and would expect the market to decline at a rate of 1-2%.

	1st 5 years	2nd 5 years
base	Average growth rate of 0.5-1%	Average negative growth rate of 1-2%

Video sell-through (including DVD)

Indicators

Total video sell-through expenditure: ECU 24.5 million (1990: ECU 13.9 million)

Average video purchase transactions per VCR home: 2 (1991 - 2)
Level of average video purchase transactions per VCR home relative to EU average: 17% below EU average 2.4

Average video purchase price: ECU 7.4 (£5.71)
Level of average video purchase price per VCR home relative to EU average: 48% below EU average ECU 14.3
Average video purchase price per VCR home 1994: n/a

Average spend per VCR household: ECU 27.6 (1991 - ECU 26.6)
Level of average spend per video household relative to EU average: 15% below EU average ECU 32.3

General Country Specific Details

Discussion of market structure:

The video sell-through market is considerably under developed with no real increase on the number of videos sold during the last 4 years. Correspondingly, the average spend per video household is stable and one of the lowest in the EU.
However, Virgin and HMV chains continue to develop the sell-through distribution market by including increasing stock of videos in their expanding retail outlets.

We may see a boost of the video sale market in the near future as the Irish broadcaster will tend to increase its revenue generation in this area through release of Irish cultural programmes, not usually broadcast.

Likely impact from competing media:

DVD is not expected to make any significant impact within the next 10 years.

Conclusions:

On the basis of the considerable potential in the sell - through market, and no serious competition from other forms of media, we believe that the current growth rates of 7-8% will continue for the next five years and at a slightly lower rate for the second five years.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 7-8%	Average growth rate of 5-6%

Pay TV

Indicators

Total pay TV expenditure ECU: 11.4 million (1992: ECU 2.3 million)

Cable TV connected HH: 40.8%
Growth / year of cable TV connections 1990-1995: 0.78%

DTH connected HH: 8%
Growth / year of DTH connected HH 1990 - 1995: 1.2%

Number of years since pay TV introduction: 4

General Country Specific Details

Premium Services

Discussion of market structure

BSkyB is the pay TV service provider in Ireland via cable TV, MMDS and DTH. Of these, DTH is the fastest growing market with average growth rates of 1.22% per year, compared to 0.78% for cable

The penetration of pay TV services in Ireland grew from approximately 5% in 1995 to 10% in 1996 and is expected to increase to 14% by 1997. It is estimated, that to achieve a penetration of 20%, it will take the following five years.
It is believed that pay TV will be available from the terrestrial broadcaster in 5 years.

Discussion of issues in switch to digital pay - TV.

Given that the largest group of subscribers to pay TV in Ireland are connected by cable with analogueue STB's this will certainly inhibit the potential growth in the first five years in the move to digital services.

Conclusions:

On the basis of increased marketing and promotional offers to premium services for cable TV and increasing growth in DTH subscribers, we believe that current growth will continue for the next 10 years.

	1st 5 years	2nd 5 years
base	Average growth rates of 7-8%	Average growth rates of 7-8%

Transactional Services

Although there is no precedent in Ireland for the level of demand for these types of services, we assume as in other European markets, that as a critical number of premium service subscribers is attained, the market for transactional services will grow proportionally.

	1st 5 years	2nd 5 years
base	Market to grow to ECU 4 million by year 2000	Average growth rates of 11-12%

Multimedia: Off-line

MM off-line expenditure: ECU 6.9 million (1991: ECU 1.2 million)

MPC Model

Indicators

MPC Penetration: 1.4% (estimated[5])
Growth rates / year of MPC penetration: n/a

Average no. of CD-ROM purchases per MPC HH: 1.7 (1992: 1.1) [6]
Average purchase price of CD ROM ECU 46.1 (1992: ECU 73.1)

CD Consoles Model

Indicators

CD Console Installed base: 109,000 (1994: 36,000)

General Country Specific Details

General Market Discussion:

There is a relatively modest 14.7% penetration of PCs in the home. However, this represents a legacy of various different platforms, most of which are not suitable for multimedia. However, most new PCs currently sold in Ireland are of MPC specification.

The distribution market in Ireland is fragmented though there are a plans by the larger chains such as HMV and Virgin to develop throughout the country.

The market benefits from a steady supply of CD-ROM content from the UK and the US.

[5] Based on estimated data of 16000 MPCs currently, provided by Compustore (Ireland)
[6] Estimate based on extrapolated data for 'Rest of Europe'.

In general, the market follows the trends in the UK though usually with 2-3 years time lag.

Conclusion

We believe the market will continues to grow at the current rate for the next 5 years and at a lower rate of 8-9% for the following five years.

	1st 5 years	2nd 5 years
base	Average growth rates of 24-25%	Average growth rates of 8-9%

Multimedia: On-line

Indicators

PC Path:

MPC Penetration as % of Households: 1.4%
Modem Penetration as % of Households: n/a
Internet hosts / 100 Inhabitants: 0.61
Growth / year of Internet hosts 1994-1996:110%
ISDN lines as % of main lines: 0.08

TV Path:

Multi-channel Penetration of TV HH: 48.8%

General Country Specific details

Broadband Infrastructure rollout:

In general, the roll-out of a local loop broadband infrastructure in Ireland is significantly behind most of Europe.
It is estimated that within 3-4 years, the Cablelink network will have been upgraded to allow additional services to be delivered to the subscriber. A return path will be made available on a demand basis.
Cable modems will be evaluated next year though Cablelink are following closely the US model as a market monitor. Deployment is expected towards end of 1997.
Telecom Eireann have no plans at the moment to develop the local loop.

General market discussion:

The Government have established an Information Society Steering Committee which is currently completing a number of studies to advise on policy in this area. A nation-wide public awareness campaign has also been launched.

Telecom Eireann has pledged to provide all Internet access within the country at a cost of a local charge. However, modem prices are still considered expensive.

Although there are only 2 main Internet providers for the consumer market, there is a constant development of local content. Numerous television advertisers also refer people to their Web sites for further information.

ISDN is still in its infancy although expected to grow at approximately 40% for the next five years. However, telecommunications charges are prohibitive for high speed Internet access usage.

The expected growth of BSkyB digital satellite venture in the UK will most likely have the same growth in Ireland, although 2 - 3 years later. This will be a major driver in the development of on-line services for the TV.

Conclusion:

Although there is a small installed base of hardware, the number of Internet hosts and growth of Internet hosts has been very encouraging. It is expected that the market will continue to grow rapidly for the next 10 years.

	1st 5 years	**2nd 5 years**
base	Market to grow to ECU 3.5 million by year 2000	Average growth rates of 70-80%

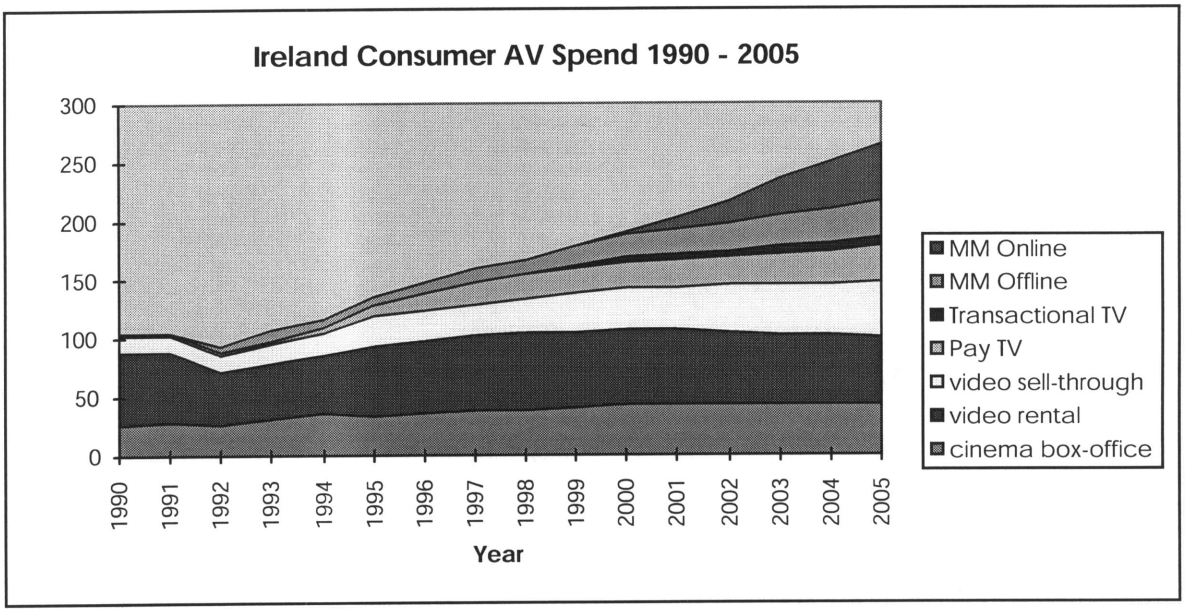


Exhibit 4.6.4: Ireland Consumer AV Spend

Norcontel (Ireland) Ltd, NERA, Screen Digest, Stanbrook & Hooper

4.7 Italy (IT)

Summary:

Total AV expenditures for Italy are projected to increase from ECU 4,368.7 million in 1995 to ECU 6,726.5 million in 2005 (see Exhibit 4.7.1). Direct consumer expenditures continue to grow in importance increasing its share of total AV revenues from 20.6% in 1995 to 43% in 2005. Advertising expenditure falls from 53.1% in 1995 to 41.9% in 2005, while television licence fee revenues fall from 26.3% of the total in 1995 to 15.1% in 2005.

On-line multimedia is projected to emerge as the largest single direct consumer expenditure segment by 2005, with a total market value of ECU 870.3 million. Pay TV revenues reach ECU 557.6 million by 2005, while the off-line multimedia market totals ECU 478 million in the same year.

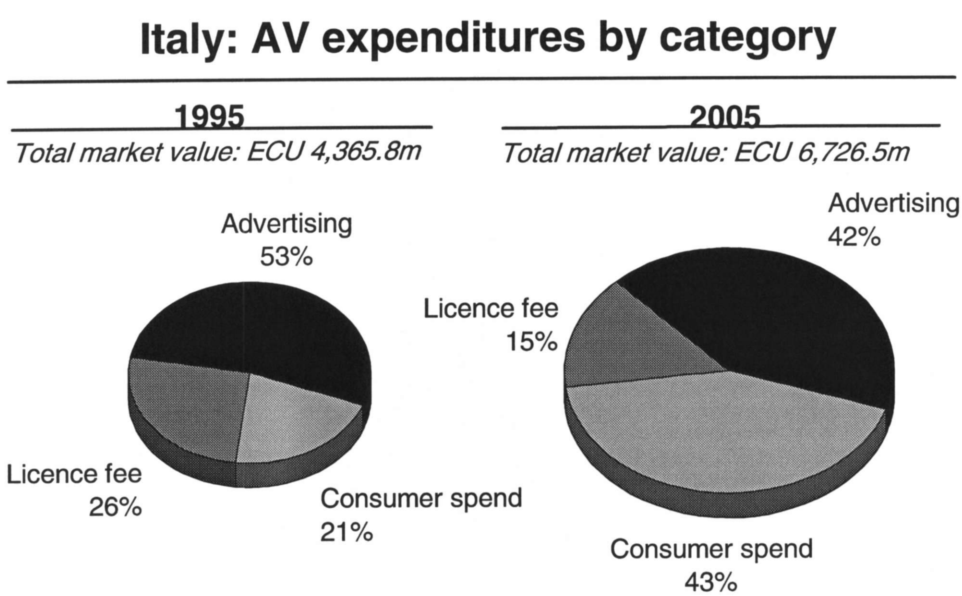


Exhibit 4.7.1: Summary of Aggregate AV Expenditures: Italy

Licence Fee

Indicators:

Current Level: ECU 83 (1990: ECU 79.7)

Licence fee revenue: ECU 1149.5 million (1990: ECU 989.5 million)

Licence fee revenues as percentage of total revenues: 61%

Public broadcaster's share of viewing: 47.9%

Country Specific Details:

The Italian TV market is almost entirely terrestrial free-to-air. There is one state run network, RAI (47.9%) which has three channels and receives income from the licence fee and also takes advertising. In addition, there are three private run networks including Fininvest (43%) and numerous regional and local stations. Fininvest has three channels also and together with RAI account for more than 90% of television viewing.

Public Announcements on Licence Fee:
RAI was in severe financial straits, with a huge loss in 1993. Recognising the broadcaster's financial hardship, the Government increased the annual licence fee 5.4% in April 1994, the first rise since 1987.

General Perception of public sentiment / political commitment

Draft media legislation is creating uncertainty for the public broadcaster. However, according to Italy's deputy Prime Minister, it is hoped that the new broadcasting legislation will increase the quality and quantity of Italian television in terms of its drama output. There is a proposal to replace one of RAI's three free-to-air channels with an advertising-free regional service financed by a licence fee.

Recent draft legislation requiring state broadcaster RAI to spend 20% of its licence fee revenues on European productions, would imply a political commitment to the continuance of the licence fee

Conclusion:

Based on the expected performance levels and financial commitment on European productions of the state broadcaster, we believe the licence fee revenue will continue to grow constant in real terms for the next 5 years.

In the second 5 years, we believe downward pressures arising from the increasing multi-channel environment will mean the market will decline at an average rate of 2.4%.

	1st 5 years	**2nd 5 years**
base scenario	Average growth rate of 0%	Average decline rate of 2.4%

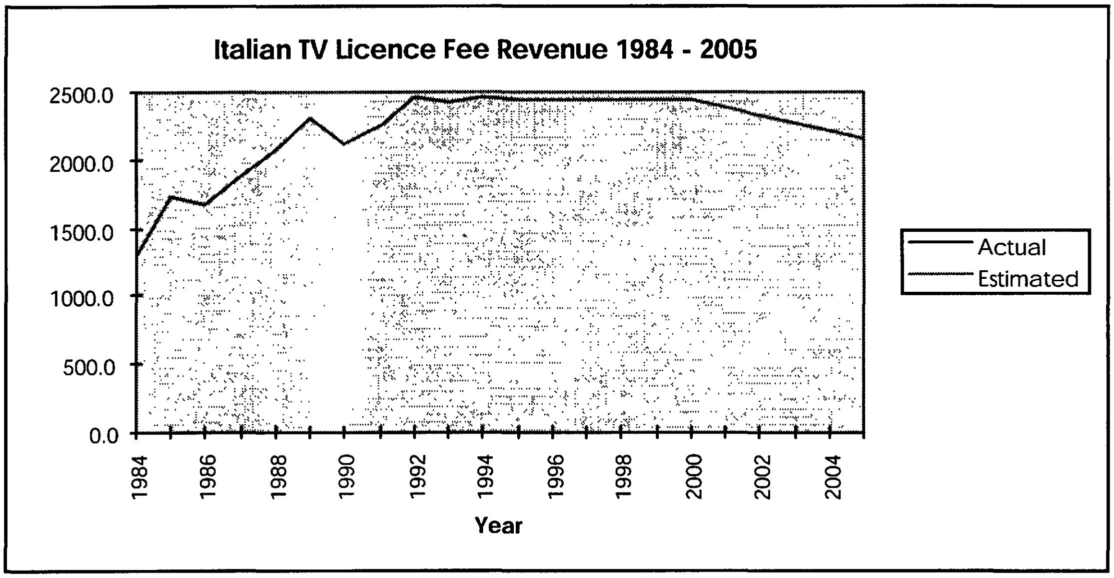


Exhibit 4.7.2: Italy TV Licence Fee Revenue

Advertising:

Indicators

Total AV adspend: ECU 2317.4 million
Average growth / year of AV advertising spend 1990- 1995: 1.1%

TV adspend as a share of total advertising: 54.9% (1992: 50.8%)
Level of TV adspend as a share of total advertising relative to EU average: 25% above

AV adspend as a share of GDP: 0.3%
Average AV adspend as a share of GDP / year 1990-1995: 0.3%

Country Specific Details

Discussion on market structure:

Television dominates the Italian advertising market, accounting for more than 60% of expenditure on display advertising. There are several hundred local television broadcasters in Italy, but viewing and advertising are dominated by two companies, Fininvest and RAI, with their six national operators. RAI receives income from the licence fee and also generates advertising revenue. Combined, the two companies account for more than 90% of television viewing and 85% of advertising.

At the end of 1994, the 1995 Broadcasting Act, which enshrines the national television duopoly of RAI and Fininvest, was declared illegitimate by the Italian constitution. New draft legislation is currently being discussed in Parliament. Specifically, the draft aims to limit each TV company's revenues to 30% of overall media income and national channels to 20% of all network sales. For broadcasters owning more than two channels, 2% of air-time would be all that they could offer to advertisers.

While the television industry is undergoing a period of upheaval, Cecchi Gori Group have entered the TV market. They have begun to construct national networks through piecemeal purchases of local stations and anticipate a share of 4 - 4.5% of the country's TV market. This will increase the competition in the TV advertising market.

Likely impact of new media
New Media such as cable / satellite and Internet will compete for advertising revenues more with specialised traditional media such as news papers and magazines.

Mediaset have estimated that the impact of satellite / cable and On-line services / Internet on the audience of terrestrial traditional TV in Italy will cause a maximum reduction of TV consumption of 3% to 7%.

Conclusion:

With the advent of cable and satellite services, the review of broadcast TV legislation is likely to provoke considerable competition for television advertising expenditure. Latest figures show advertising revenues are up 6% in 1996 relative to 1995. On the basis of the uncertain broadcasting legislation and the increased competition arriving from competing media, we believe the market will grow moderately at 0.8% over the next 5 years.

Based on a healthy competitive market, stability in the regulatory and political environment and a growing economy, we believe the following five years will exhibit growth of 3.4% per annum.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 0.8%	Average growth rate of 3.4%

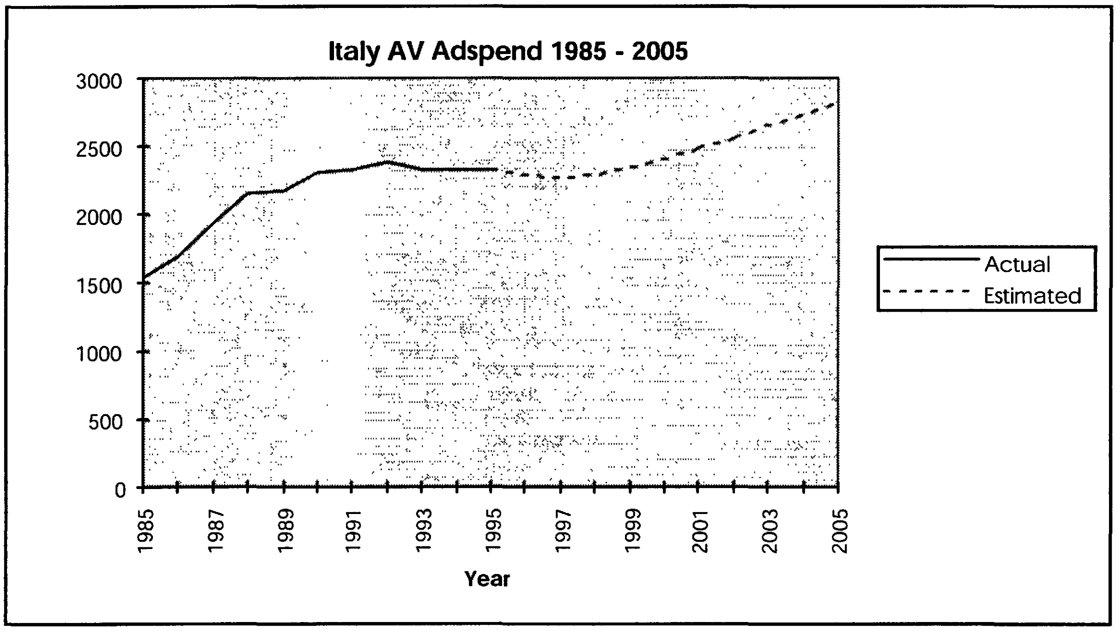


Exhibit 4.7.3: Italy AV Adspend

Consumer AV Expenditure

General Consumer AV Expenditure Indicators

Consumer AV expenditure as % of GDP: 0.11%
Average consumer expenditure / year as % of GDP 1990 - 1995: 0.09%

GDP / capita: ECU 13,726 million (1990: ECU 13,779 million)

Average daily hours TV viewing: 3.58

TV Households: 21,176,800

VCR Penetration: 51.9% (1990 - 24.6%)
Average growth / year of VCR penetration for period 1990 - 1995: 6.46%

Cable Penetration: n/a
Average growth / year of cable penetration for period 1990 - 1995: n/a

Satellite Penetration: 2.3% (1994 - 0.3%)
Average growth / year of satellite penetration for period 1990 - 1995: n/a

Cinema Box Office

Indicators

Gross revenues: ECU 372.0 million (1990: 364.0)

Average annual cinema admissions per head in 1995 was 1.6
Level of average annual admissions relative to EU average: 6% below EU average of 1.7
Growth of average annual cinema admissions for period 1990 - 1995: 0%

Average ticket prices in 1995 was ECU 5.5 (L 8388)
Average ticket price level relative to EU average: 12% above EU average of ECU 4.9
Average ticket price in 1994 was: L8388

Multiplex screens as proportion of total screens: 0.7%
Level of multiplex screens as proportion of total screens relative to EU average: 16.7% below EU average of 17.4%
Growth of multiplex screens as proportion of total screens period 1990 - 1995: -0.2%

Country Specific Details

Discussion of market structures

The cinema market in Italy is very fragmented and under-developed. There are very few multiplexes. However, this will certainly change. Laws restricting new cinema developments have been modified, allowing for further 100 screens to be opened throughout the country. Some of the big players who have announced plans are United Cinemas International, Warner Bros. and Village Roadshow. More approvals are expected.

The Cecchi Gori Group continue to revamp several old cinema sites into mini and multiplex cinemas throughout Italy.

Likely impact of new media
Pay TV is not expected to significantly impact the cinema box office revenues.

Conclusion

The box office revenues for first half of 1996 are up 7% on same period 1995. The planned development of the multiplex build throughout Italy will encourage more cinema - viewers and on this basis we expect the market to grow 2 - 3% in real terms for the next five years.

On the basis of a slow down in the multiplex build, we expect the market to grow constant in real terms for the remaining five years.

	1st 5 years	**2nd 5 years**
base	Average growth rates of 2.5%	Average growth rates of 0%

Video Rental

Indicators

Total video rental expenditure: ECU 90.3 million (1990: ECU 123.9 million)

Average rental transactions per VCR home: 3.6
Level of average rental transactions per VCR home relative to EU average: 50% below EU average 7.3

Average spend per video household: ECU 8.56
Level of average spend per video household relative to EU average: 56% below EU average ECU 19

VCR homes per rental outlet: 4963 (1990 - 1283)
Growth of VCR homes per rental outlet 1990 - 1995: + 187%

General Country details

Discussion of market structure:

It is thought that the video rental industry in Italy has suffered a premature decline. The main driver for this decline is the 'bundling of videos' with magazine purchases for a very low price of L 1000. However, this practice may go into decline as there is a lack of choice. As a consequence of this 'bundling', the number of video rental outlets continues to decline.

A major advertising campaign by the video industry will be launched in 1997 to encourage people to rent videos from video clubs. Industry is confident that with marketing and promotional offers, people will return to video clubs and video rental.

The penetration of VCRs is expected to grow at 3-4% over the next 4 years
Likely impact of other media
We do not believe DVD to make an immediate impact in Italy.

Conclusion:

The developing VCR market, and the promotional / marketing efforts of the industry may help to slow the decline of the video market for the next 2-3 years. However, in the medium term, we believe the video rental market will decline at a rate of 1-2% for the remaining 8 years.

	1st 5 years	2nd 5 years
base	Average negative growth rates of 1-2%	Average negative growth rates of 1-2%

Video sell-through (including DVD)

Indicators

Total video sell-through expenditure: ECU 202.7 million (1990: ECU 122.3 million)

Average video purchase transactions per VCR home: 2.3 (1991- 1.8)
Level of average video purchase transactions per VCR home relative to EU average: almost same as EU average 2.4

Average video purchase price: ECU 11.3 (L 17280)
Level of average video purchase price per VCR home relative to EU average: 20% below EU average ECU 14.3
Average video purchase price per VCR home 1994: ECU 10.2

Average spend per VCR household: ECU 19.2 (1991 - ECU 26.7)
Level of average spend per video household relative to EU average: 40% below EU average ECU 32.3

General Country Specific Details

Discussion of market structure:

The number of video rental outlets continues to increase. There was an increase of 500 in 1994 to total 4000 outlets in 1995. The development of the Kiosk and supermarket distribution chain is responsible for this growth. In addition, the Blockbuster video chain aims to double the no. of stores in Italy by end of '96 from 20 to 40.

The Kiosk market started in September 1995, and has grown at a phenomenal rate. In 1995, 1 million videos were sold per week via the kiosk. People purchased video cassettes with magazines in Kiosks for a minimal sum of L1000. The corresponding sum in the traditional market is L32,000.
However, this market may be on the decline as people are not interested in purchasing a video every week; they are getting tired of the lack of choice and do not have sufficient physical storage space in their homes. There are now 0.5m videos sold per week.

The supermarket distribution chain is gradually growing. Italy has one of the highest number of chains (10+ retail outlets) in Europe.

The Italian video sell-through average price is the lowest in Europe as a result of the kiosk market. After a drop of 10.5% in 1994, prices were a further 10% down in 1995.

American commercial movies and European films will continue to feed the market

Likely impact from competing media
We do not expect DVD to make a significant impact on the sell-through market.

Conclusions:

The video sell through market is expected to grow gradually.
The continuing development of the distribution market together with very inexpensive video prices will, in our belief, enable the market to grow at current rates for the next five years.

The market is likely to continue at current rates for the following five years as a new level of maturity in the market place is achieved.

	1st 5 years	2nd 5 years
base	Average growth rates of 4-4.5%	Average growth rates of 4-4.5%

Pay TV

Indicators

Total pay TV expenditure: ECU 174.5 million (1991: ECU 5.9 million)

Cable TV connected HH: n/a
Growth / year of cable TV connections 1992-1995: n/a

DTH connected HH: 2.3%
Growth / year of DTH connected HH 1994 - 1995: 1.3%

Number of years since pay TV introduction: 5

General Country Specific Details

Premium Services

Discussion of market structure

Italy has the lowest penetration of non-terrestrial delivery in Western Europe. Because of this it has the largest potential for growth, although demand for multi-channel services is limited by the large number of terrestrial services.
Telepiu is the pay -TV service in Italy and has 750000 analogueue terrestrial subscribers after 4 years. The service grew rapidly in the first two years but slipped back rapidly in the last two years to give an average growth per year of 80%. The service begun terrestrially but must complete the move to non-terrestrial distribution by the end of 1997. In the past, the development of pay TV in Italy has been inhibited by problems with rights to premium content. Telepiu has had short-lead times on films over terrestrial broadcast and sports events have often been simultaneously broadcast on several channels. Although Fininvest, a key Italian rights

holder, is the founder shareholder, this company appears committed to developing the terrestrial channels.

Digital satellite television was launched by Telepiu, the Nethold/Kirch - backed venture, in August 1996 and it is estimated that there are 8000 digital subscribers to the service. They aim for 100000 subscribers by the end of 1996, 200000 by August 1997, and doubling in figures to the year 2000.

The North of Italy, Milan, Turin, Genoa represent a promising strategy for a suitable package of services, especially foreign - language programming.

Likely impact of new media

Discussion of issues in switch to digital pay - TV.

Because of the relatively small subscriber base on the terrestrial pay TV system, we do not believe it to impact significantly on the growth of digital subscription.

Conclusions:

Given the new digital bouquet and the elimination of the initial content problems that plagued Telepiu, we believe that the current growth of pay -TV will continue for the next 10 years.

	1st 5 years	**2nd 5 years**
base	Average growth rate of 13-14%	Average growth rate of 9-10%

Transactional Services

The digital satellite offering from Telepiu includes a pay-per-view soccer service which is estimated to be in demand.

Telecom Italia is not permitted to offer broadcast services at present, just narrow cast services such as VOD. In March '96, Stet's multimedia unit, Stream SpA, announced that it was to offer Telepiu programming on a pay-per-view basis over cable. In preparation for this Telepiu has purchased the encrypted rights to Italian first and second division soccer matches for the next three years.

Although there is no precedent in Italy for the level of demand for these types of services, we assume as in other European markets, that as a critical number of premium service subscribers is attained, the market for transactional services will grow proportionally.

	1st 5 years	**2nd 5 years**
base	Market to grow to ECU 50.6 million by year 2000	Average growth rate of 17-18%

Multimedia: Off-line

MM off-line expenditure: ECU 17.5 million (1991: ECU 13.1 million)

MPC Model

Indicators

MPC Penetration: 2.7%
MPC penetration 1994: 0.8%
Growth / year of MPC penetration for period 1993-1995: 0.9%

Average no. of CD-ROM purchases per MPC HH: 1.7 (1992: 1.1)

Average purchase price of CD ROM ECU 54.9 (1992: ECU 93.1)

CD Consoles Model

Indicators

CD Console Installed base: 130,000 (1994: 61,000)

General Country Specific Details

Market discussion

The relatively rapid uptake of MPCs is the main driver for positioning Italy as the fourth largest interactive entertainment market in Europe. There are currently 1 million MPCs in Italy. In 1995 there were 600 thousand MPCs in Italy. Market is expected to grow by approximately 50% in 1997 and 30-40% in subsequent years. MPC prices are decreasing but are still higher than EU average.

Sony have developed an effective software distribution operation in Italy which is responsible for the success of Playstation in Italy.

The Italian CD-ROM market is being held back by a lack of Italian-language titles on offer. In 1995, titles in Italian accounted for just 9% of total sales. However, the trend during 1996 is expected to develop the market to include more Italian-language edutainment, boosted by mainstream publishers. An increasing emphasis on both localisation of imported titles into Italian and particularly local publishing, is expected to boost the overall market.

Another factor that has been holding back the Italian CD-ROM market is the pricing structure of discs. At prices of around L100,000 each, they are the highest priced in Europe.

It is estimated that approximately 18-20% of CD-ROMs are accounted for by arts/ culture, which is very encouraging for Italy considering the wealth and richness of art.

The Italian retail environment is considered to be the most fragmented in Europe, with very few chains and little centralised buying. Street kiosks are a traditional retail outlet and it is estimated that in 1994 they accounted for 40% of all ales of video games and CD-ROMs. CD-ROMs that are sold through kiosks tend to be much cheaper than the average price and are often of poorer quality.

The packaged MM market has doubled in revenues between 1995 and 1996. This made up primarily between CD-ROMs and CD consoles, with latter accounting for about 10% of the market.

According to Mondadori, the market is expected to grow 50-80% in 1998 and in the following years is expected to grow at about 30-40%.

The above growth figures are dependent on;

- Rationalisation of distribution problem;

- Growth of Installed base

- Pricing of MM packaged products decreasing rapidly and approaching European norm.

Conclusion

The Italian market is seriously hampered by availability of original titles, high prices of CD-ROMs and a struggling distribution structure. However, all of these problems are being addressed by the market place and on the basis that they are overcome, together with a growing installed base of MPCs, we believe the market will grow at current rates for the next 5 years.

As the market continues to develop and producers / distributors consolidate their operations, we believe the market will grow at a slightly lower rate for the second five years.

	1st 5 years	2nd 5 years
base	Average growth rate of 26%	Average growth rate of 16-17%

Multimedia: On-line

Indicators

PC Path:

MPC Penetration as % of Households: 2.7%
Modem Penetration as % of Households:n/a
Internet hosts / 100 Inhabitants: 0.21
Growth / year of Internet hosts 1994 - 1996: 100%
ISDN lines as % of main lines: 0.27

TV Path:

Multi-channel Penetration of TV HH: 2.3%

General Country Specific details

Broadband Infrastructure rollout:

Italy has effectively no cable industry as yet, although there are several developments. A trial digital cable TV service has started in Rome with 1000 decoders. By the end of 1997, Telecom Italia expect to have 170,000 subscribers out of 2 million homes passed. It plans to have 5.5 million homes passed with a broadband network by year 2000.

General discussion:

The current level of Internet hosts / 100 inhabitants is relatively low but the market is growing rapidly at rates of 100% per year.

There are four - main problems suppressing the market;

- Very few Internet providers. One recently went into liquidation and was absorbed by Telecom Italia. Telecom Italia is now the only major operator.

- Connectivity - pricing is not competitive and is therefore very expensive

- Cost of telecommunications - utilisation charge is very expensive - highest in Europe

- No good quality local content services for Italian Market

On the other side, the low penetration of cable and satellite means that the PC is by far the most important potential platform for on-line services. Prospects for growth are good.

Conclusion:

If the price of telecommunications decreases and Italian publishers and service providers offer local content, the on-line MM market can be expected to grow at current rates for the next 10 years.

	1st 5 years	2nd 5 years
base	Market to grow to ECU 62.4 million by year 2000	Average growth rate of 70-80%

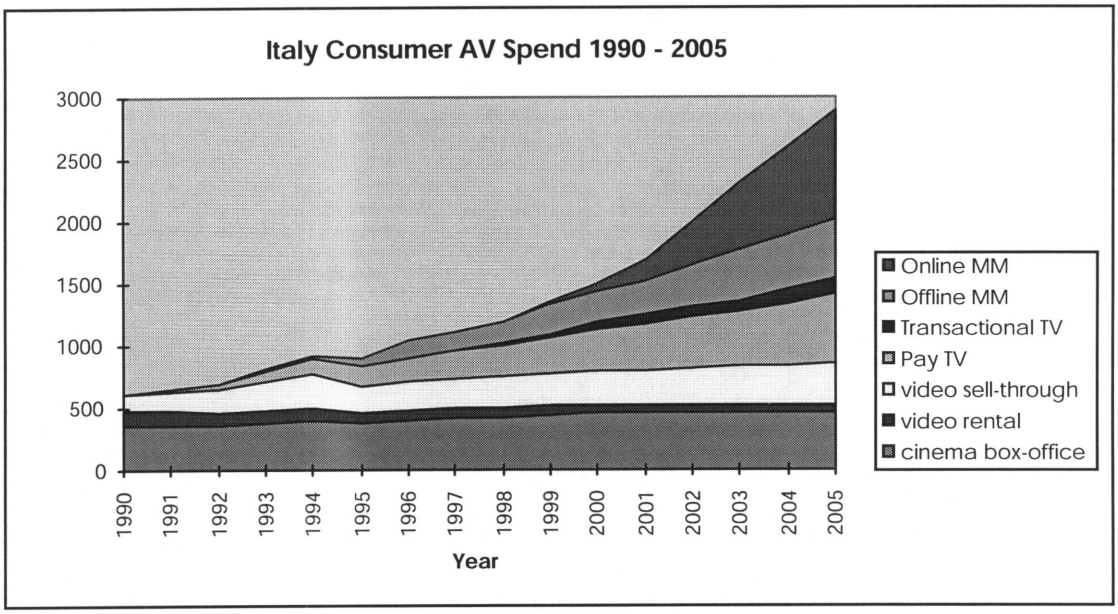


Exhibit 4.7.4: Italy Consumer AV Spend

Chapter 5 Content Providers: Drivers and Inhibitors

This chapter outlines the key drivers and inhibitors that influence the proportion of revenues that flow to the European content providers and concludes with the likely development of the markets over the 10 year period. We begin by outlining the methodology used to extract the data for each market segment.

The chapter is structured as follows;

- 5.1 Methodology
- 5.2 Key Drivers and Inhibitors

5.1 Methodology:

This section describes how the distributor / supplier EU share of revenues have been calculated - the methodology used to extract the figures for each market sector.
Our analysis of revenues accrued at the end of the value chain has been undertaken at what could be termed the 'distributor' level. There are several reasons why this is the case:

- In the scope of this study, the 'distributor' level and what may loosely be termed the 'producer' level are often the same entity. In the free TV sector for example (which as has been shown is by far the largest element in the European industry revenues), the overwhelming proportion (in value terms) of European content is produced by the broadcasters themselves, who in several senses also act as 'distributors'. The same is true of the significant film companies in Europe: the likes of Gaumont and Polygram.

- The term 'producer level' is actually rather diffuse, because the concept of a producer is not well defined. Not only do different countries apply the term in different ways, but there is a huge variation within each country. Sometimes a producer is broadcaster participating in a project, sometimes it is a financier who has loaned money, sometimes a sales agent. Far from have even a broad definition, the term 'producer' is actually a matter for contractual agreement between parties involved in a particular project. Analysing industry revenues at the 'producer level' would involve unravelling the financial returns on a film by film basis, a task which is well beyond the scope of this report, and in any case would be methodologically impossible..

- In many cases, the company which actually produces the film (rather than the contractual producer if different) actually only exists for the purposes of producing a single film. The economics of film production are such that a reasonably large number of films need to be produced each year in order to make the hit that sustains the company. This level of production is rarely sustained by companies that are anyway vertically integrated producer/distributors, like those mentioned above, and the Hollywood studios.

In order to compare like with like across a range of audio-visual industries--some of which vary enormously from each other, and others which are rather complexly intertwined--and in order to analyse a concept which has meaning, it is necessary to bypass 'producer level revenues' in the study. Instead we focus on the level above producer in the value chain, which we have notionally called distributor level, but which might more properly be called the 'level at which rights are held'. This not only adds a meaningful point of reference to the cross-industry analysis, but also focuses in on the point at which 'value' is generated and accumulated in the audio-visual industry.

Free TV

Supplier revenues refer to the expenditure of broadcasters on in-house programme production (by definition European) plus commissioning/acquisition from outside companies that are European. Screen Digest has made estimates based on numerous published and non-published information.

Cinema

Distributor revenues refer to the theatrical distributors' share of the gross cinema box office. It was calculated according to known industry terms of trade in each country, and checked against confidential information from distribution companies. The EU share was calculated from data provided to Screen Digest by national agencies that collect the box office returns of each film.

Video

Distributor revenues refer to the gross revenues received by content owners from selling tapes (and discs) to rental dealers and to retail stores. Screen Digest collects and analyses this data from each national video distributor association. For the rental business, the EU share is derived from corresponding theatrical data, while for the sell-through business it is derived from Screen Digest estimates (based on confidential sources).

Pay TV

Distributor revenues refer to the gross revenues received by film/programme suppliers from selling transmission rights to pay TV operators in each territory. Screen Digest has estimated this data on the basis of various confidential industry sources. The EU share has been calculated on the assumption that the pay TV schedules closely follow the theatrical market (both being based on films).

Packaged Multimedia

Supplier revenues refer to the gross revenues received by publishers/content-owners from selling discs/cartridges to retailers. Screen Digest estimates are based on known industry terms of trade, with EU share estimates calculated from an analysis of chart (sales) data according to title country of origin.

5.2 Key Drivers and Inhibitors

5.2.1 Free-to-air-TV

Channels obtain programming in one of two ways: either they own rights as a result of their involvement and investment in the original production, or they acquire rights to broadcast programming that has already been made and whose development has been funded by others. In the former case the programming can be produced in-house, co-produced with others, or commissioned from independent or dependent producers.

Changing nature of demand for content

TV programmes comprise a range of genre; TV drama and domestic films at one end of the market and a range of soaps, quizzes, chat shows, imported programming and lifestyle programmes at the other end. In the future, there will be a continuing need to produce high quality programming to attract large audiences, especially during peak hours. This is important to justify high advertising prices or licence fee revenue.
Traditionally, Europe is very good at producing high cost, high production value programmes and there is no reason to expect that this will not continue in the future. Consequently, the EU share of revenues is quite high.

Increased pressure on programme budgets

The changing nature of the broadcasting market is likely to place significant cost-cutting pressures on non-peak programme schedules

- Competitive pressures brought about by increasing number of channels and leading to smaller audience share per channel may decrease revenues with consequent decrease in programme budget.
- General resistance in many European countries to increases in the licence fee may lead to pressures on programme budgets, with the possible consequence of increased reliance on imported programmes which may be of lower quality. In addition, the growing pressure on programme budgets means we have to look at exploring opportunities in the lower cost programming such as exploiting catalogues in terms of recycling or repurposing.

If broadcasters continue to provide programming at the top end of the market, they will need to provide more low cost programming at the bottom end to fill their programming schedules. in addition, demand for low-cost content will be further stimulated by the growth in new niche programme services. However there remains a danger that, if there is a shift to low cost production then the least expensive alternative is to purchase low cost product from the US or Australia. This is what European content providers must guard against.

One of the possibilities is to apply new programming models to the digital channels so as to change to the traditional 'windows' in the economic cycle. For instance, in the UK TV drama is a key strength but instead of big event drama initially screened on free-to-air TV, offer TV drama to pay TV channels first followed by video. This offers the possibility of maximising revenues for the EU producer.

Life cycle of product to favour European content providers

There is a typical economic cycle for new broadcasters in terms of demand for content;

- Launch Phase: Initially, the broadcaster's programming consists of low cost imported programmes and recycling of domestic catalogues

- Break-even Phase: There is a clear domination of foreign content, in most countries, with the exception of France which has a large domestic catalogue

- Growth Phase: As the broadcasters market grows and matures, there is a move towards more commissioned product from the indigenous sector.

For example, RTL initially relied heavily on US imported product from the US to launch its channel in 1984. However, as advertising revenues and market share increased, scheduling shifted towards commissioned and in-house productions. RTL now have a larger domestic programme budget that ZDF.

New channels to offer increased opportunities

The proliferation of new channels, both analogueue and digital, may be a 'double edged sword' for the content provider. On the one hand it may lead to increased demand for content whilst on the other hand the increased start - up costs may impact existing programme budgets. This may in particular have an input for European programme budgets as channels look towards low cost repeats, imports and re-purposed content. In the short term, it may be difficult to justify significant investment in new content.

- Owners with existing libraries of rights will be at an advantage in launching new channels and many of the services under development are planned by library holders, who will also benefit from a wider market for their material.
- Despite the high likelihood of recycling or programming, new content will also be developed, albeit at a lower cost per hour than the current standard. Production efficiency is growing as a result of new technologies. This offers particular exciting opportunities for the creative, content industry that is willing to embrace new technologies.

One of the central issues is whether the introduction of new broadcasters content budgets compensates for the decreasing production budgets of traditional broadcasters? In our view, the market will indeed compensate and expand with the introduction of new channels.

Thematic channels take off

General entertainment television is rapidly reaching maturity in Europe, though some major launches, such as the United Kingdom's Channel 5, have still to occur. Finland and Ireland will also have major new channels during 1997. There is, however, more activity in the thematic market as channels use the established multichannel environment to target niche audiences. Greater channel choice has created greater programme demand. Thematic channels offer increasing opportunities for European producers who offer attractive, quality programming tailored to the specific country.

What we can expect given the proliferation of free-to-air channels and more important, the growth of pay TV, is significant escalation of costs for scarce resources such as talent and rights to content such as key films and sports events. Indeed, it is increasingly difficult for the single European producer to support the costs of a film as at one extreme 20-30 financing deals may need to be integrated to raise the necessary funds to finance the production.

National regulation

For the independent producers, there are new opportunities arising from the increased amount of production being commissioned by broadcasters. This is an evolutionary process since the commissioning of programmes by broadcasters has been gradually growing for some years.

- The process has been accelerated where broadcasters have been required by government to commission a minimum proportion of air-time from the independent sector rather than produce programmes "in-house". The requirement is also made obligatory by the 1989 TV Without Frontiers Directive (article 5) which requires Member States to reserve 10% of either their creative atrium or of their programming budget for independent productions. This directive also specifies that more than 50% of content should be of European origin, 'where practicable'.

- In some countries there is a political commitment to promote their national culture via the public broadcaster, thereby developing opportunities for the producer. There are also national regulations where some channels must meet revenue - based quotas to invest in production, as well as quotas based on scheduling. For example, TF1 in France must re-invest at least 15% of its advertising income in French-language productions and a further 3% turnover in co-production of French cinematic films.

The following indicators that underline the position of the industry;

- Total programme budget
- European programme budget

5.2.2 Cinema:

The entertainment feature film or "movie" is at the heart of the cinema and indeed, the overall audio-visual market. It provides a significant contribution to broadcast television in all its various means of delivery including cable and satellite. It is the driving force for the video rental market and a substantial part of the video sales market. In effect, it represents the "core" of entertainment content upon and around which other types of content such as sport, music, soap operas and comedy are hung. This situation is true for all broadcasters including terrestrial and satellite broadcasters, cable television and is central for any development of video on demand. The nature of movie content for the cinema audience is not expected to change in the future.
Hollywood dominates the box office revenues in this sector with European film industry typically meeting niche demands in domestic markets, with the occasional market hit. However, we expect a number of emerging market developments to increase the opportunity of capturing a greater share of revenues in the future.

The two main drivers of the cinema sector that are important from the perspective of generating revenues that flow to the European industry are i) the Multiplex development and ii) the National and European Support Schemes.

The existence of a developed exhibition structure is advantageous to the EU film producer as it offers greater opportunities to deliver the film to the audience.

There is also some recent evidence of greater audience attraction for national products. In Germany - where local films have performed consistently well over the past six months - 34% of cinema tickets sold during June 1996 were for German films. The proportion of admissions accounted for by German films during the first six months of 1996 is 19.6, over three times the figure for the whole of 1996. Historical precedent suggests this attraction is often cyclical and could easily go into decline. Key consideration for future revenues will be the ability of

European producers to maintain this recent level of market share by continuing to produce films which audiences want to see.

Multiplex cinemas offer increased opportunity to screen domestic product

The recent increases in overall revenues have followed the establishment and expansion of multiplex cinemas in many EU countries. The multiplex development is instrumental in the development of the EU content industry as it provides additional capacity to screen nationally produced content, which otherwise, may not make it to the screen. Such capacity today means that there are greater opportunities for producers to screen their programmes than in the past. This, in turn, means more opportunities to generate additional revenues for the European content industry. By the end of 1997, it is estimated that 57% of all screens in the UK and 47% in Ireland will be housed in multiplex screens. No other country in Europe, with the possible exception of Luxembourg, has yet reached the 45% - 50% level and in this respect they can be characterised as 'emerging markets'. Other countries need to develop their exhibition structure to achieve this target level. This will offer increasing opportunities to screen national product.
Contrary, to popular belief, the growth of multiplexes (largely US-owned) in Europe has not resulted in erosion of market shares for films indigenous to Europe. This is illustrated in Germany and France recently, where local films have performed very well in 1996. Expansion of these multiplex cinemas is forecast to continue for next five years.

Support schemes are vital

The National Government and European support schemes play a significant role in underpinning the European film industry. They provide a vital financial contribution to the start-up costs of production and are an influential factor in convincing venture capitalists in providing commercial funding. Also, special state arrangements, such as tax concessions, can be effective drivers in encouraging the film production industry. Ireland has been particularly successful in this regard.

The strengths of the EU film industry to attract a greater share of the EU cinema market illustrated with reference to;

- Number of EU produced films annually
- Market share of EU produced films,
- Multiplex screens as a proportion of total screens
- No. of film distribution companies
- EU share of box office revenue

The bottom line for the EU producers is that attractive products will have more opportunities to reach consumers through multiplicity of screens and thus enhance EU distributor revenues. The key question is not simply economic or about new technology, it is about original creative content.

5.2.3 Video Rental

Rental industry is hit film driven

The video rental industry is highly dependent on the cinema industry; the popular cinema screened films six months ago are the videos which are rented most frequently now. Since, the rental industry is mostly film driven, and most popular films are produced in the US, most revenues flow back to US content right holders. Although there are always exceptions, the

European proportion of revenues flowing to the rental industry, is to a large extent, driven by the success of the European produced films in the box office.

Against this background, lays a rental industry forecast to slowly decline throughout Europe.

Consolidation of distribution structure continues

The video rental market is in EU countries substantially controlled by six major distributors of which Polygram is the only European company. The rest are US owned. The tendency of these major chains is to rationalise distribution into a small number of larger outlets (the average financial turnover for each outlet in the EU increased by 11.5% in 1995).

The strength of the European video rental industry is evident with reference to the following indicators;

- EU share of box office revenue
- EU share of video rental revenue

It is expected that EU revenue in 1996 will increase as a " knock-on" effect from a particularly good year in 1995 from European films at the box-office. In the longer term, the flow of revenues to European industry, will be reflected in the general decline of the rental industry.

5.2.4 Video Sell-through:

EU revenues driven by non-film sector

The percentage of distributor revenue accruing to European content interests is generally higher than those revenues accruing from video rentals. The reason is that video sell-through offers both feature films and a range of other content including TV programming, children's entertainment and other non fiction titles many of which are produced in Europe. An important measure of this is the proportion of sales accounted for by film. Generally, the lower this figure, the greater the opportunity for EU content providers as they have a strong advantage of producing niche programmes.

The state of development of the distribution structure is also important as a mature structure offers a wide choice of titles and enforces competitive pricing.

As in the cinema sector, the number of new titles released is important, as the greater the number of titles that are released, the greater the maturity of the market and therefore, the more opportunities for content providers.

There remain substantial possibilities for building the video as a "gift", given the general fall in unit sales prices in 1995. While many "gifts" will be feature films, a substantial part of the market are "edutaintment" videos lead by children's videos and comedies. Over the next 10 years, much will depend on the creativity of non-feature film video producers to come up with products which will make attractive video "gifts'. In addition, owners of large programme archives can expect to gain from further exploitation of their titles.

The health of the European video sell-through industry can be judged with reference to the following indicators;

- EU share of video sell-through revenue
- No. of new titles released

- Market share by genre

5.2.5 Pay-Television:

Premium Services

Content is of central importance when establishing new television channels and maintaining the market shares of existing services. As more channels enter the European marketplace, certain types of content will be in particular demand. Premium content is that which is most highly valued by viewers, and is therefore the content that they are most prepared to pay for. This, more than increased choice, has been the determining factor encouraging subscriptions to pay -TV.

Sport and US films dominate

Sports and films are two key formats, with the major revenues flowing back to the sport organisations and the Hollywood majors, respectively. Companies and groupings aiming to establish strong market positions in European pay-television have been competing to secure film and sports rights with the result that the price of rights to such programmes have been bid up considerably. This can be seen in the recent succession of deals by Kirch to secure sports rights and access to Hollywood film in the German market. The benefit to the audio-visual producer from this type of content is minimal.

Children's programming is a major part of any successful subscription package and is a key differenciator. There is also a paying audience for sexually explicit programming. European producers already contribute to these categories.

Demand for domestic content to grow as market matures

In the longer term, the increased diversity of channels will lead to competition for viewers attention. Initial reliance on recycled US feature films will change in the light of competition for existing products. Service providers will have to provide new attractive product and this may lead to enhanced use of national products. Much will depend on the initiative of national producers to grasp opportunities, but we expect that European content providers will gain growing revenues from the pay TV sector in the future.

Transactional Services

The limited capacity of existing analogueue transmission systems has meant that, to date, there has been little development of transactional TV services in Europe. The small number of PPV offerings there have been have been confined largely to one-off premium live sporting events, usually boxing. The return to European content providers from such activity is therefore currently negligible.

New digital satellite bouquets poised to expand the market

The transition to digital overcomes many of the technical problems of the analogueue environment and is widely expected to lead to an increase in the supply of transactional TV services in Europe. NVOD and PPV are already being marketed as the key differentiators of digital satellite bouquets from the existing analogueue cable and satellite alternatives.

Initial transactional TV offerings over digital satellite systems, though considerably expanded from those available in analogueue, appear likely to remain predominantly premium live sport and blockbuster film driven. Here again, the opportunities for European content providers look fairly limited with returns closely linked to performance at the box office.

But European AV content provider revenues will take longer to grow

Where the European content provider industry can be expected to capitalise is in the longer-term as pay TV operators expand the range of transactional TV offerings on the back of initial digital TV success. The greater choice offered by NVOD and PPV systems will present new market opportunities for Europe's film and television producers, though the degree of success will remain driven by the ability of the industry to produce programming which will appeal to a large enough audience in order to justify a transactional TV slot.

The advent of full VOD present perhaps an even greater opportunity to the European content provider industry. VOD systems could eventually offer an almost unlimited choice of programming titles, realising the potential for a truly on-demand AV environment.

The strength of the European pay TV share of the market can be viewed with reference to the following indicators;

- EU pay TV programme budget
- Years since pay TV was introduced
- No. of pay TV subscribers
- No. of pay TV operators

5.2.6 Multimedia:

As the audio-visual value chain is developing at a different pace for multimedia off-line and multimedia on-line markets, we have decided to treat them separately in our treatment to extract the flow of revenues to the content providers.

Multimedia Off-line:

It is necessary to recognise that, for the purpose of this study, there are at least two separate multimedia markets:

(i) the games market with both conventional distribution through CD-ROM and also through on-line and Internet routes (on-line gaming).

(ii) the edutainment market, generally accessed through CD-ROM distribution which will gradually shift over time to on-line and Internet routes.

The multimedia games and edutainment markets will undergo substantial change during the next five years. This change will be lead by games and edutainment programmes which bring into play "real" motion picture rather than relying on graphics and animation. The games market will become dominated in the next five years by motion picture interests.

While the market consists of a number of sub-markets, Europe appears well positioned to meet demand of many of the key market opportunities.

Multi-platform strategies

Multi-platform publishing is already the norm and many publishers have been used to releasing titles on as many as eight or nine different formats. However, as the older platforms fade away, the number of viable ones remaining has reduced. Moreover, as titles become increasingly sophisticated, only the most advanced consoles are capable of doing them justice. Conversions to platforms lower down the technological scale invariably involve performance compromises, but nevertheless, may still be worthwhile economically.

There has been a strong industry consensus that only two next-generation console formats will ultimately survive alongside the MPC. Given this, the choice of which platform to back becomes an even more critical one. No one wants to back a dead horse.
Many publishers placed their first next-generation bets on the 3DO format, although few placed very big bets and most hedged. Whilst a large number of companies initially released 3DO product, by far the majority of these were also made available on other platforms; very few committed to titles exclusively for 3DO.
Perhaps in part because of the dearth of exclusive software support, 3DO sales have, in the main, disappointed publishers and, in its current form, 3DO is widely seen as a dead format.

Saturn and Playstation get the nod

There has been a strong industry consensus that only two next-generation console formats will ultimately survive alongside the MPC. Most publishers have put their main bets on the Sega Saturn and Sony Playstation, usually alongside the MPC.
Initial software sales for both Saturn and Playstation systems have been strong. At 3-4:1, the early ratio of discs purchased per installed machine has been as high, if not higher, than that achieved during the launch phase of Sega and Nintendo's 16-bit consoles. For publishers, it is already possible to ship over 100,000 units of a single Playstation title across Europe, a sales level equivalent to a strong CD-ROM games release.

The big question now is whether the growth of this 32-bit CD-based market can be sustained. A key influence on this will be the introduction strategies of rival new systems. Whereas previous console market phases (4-bit, 8-bit, 16-bit) had time to achieve a level of stability and maturity, the smooth growth of the 32-bit life cycle is already threatened by the prospect of 64-bit machine launches.

Royalties reduce profits

On the up-side for those supporting CD-based formats is the fact that the inventory risks posed by minimum orders for cartridges imposed by Nintendo and Sega (as well as independent ROM cartridge makers) do not apply to CD manufacture. The down-side is that just like the 8- and 16-bit cartridge eras, publishers must still pay royalty fees for using the proprietary technology. These range from $6 per CD for 3DO, around £7-£8 per CD for Playstation, and a little higher for Saturn. These can eat severely into publisher profit margins and certainly push up retail prices.

- It is not yet clear what the publishing model will be for Nintendo's N64 system, but, being a cartridge-based format, it is bound to involve much heavier up-front costs. The physical cost of an N64 cartridge alone is likely to be 2-3 times that of a CD. It could also mark a return to the `old' cartridge publishing system whereby publishers have to raise letters of credit to Nintendo three months ahead of release and then wait 60 days after release for retailers and distributors to pay for stock.

- Another looming issue with the new consoles is that of distribution and competition for limited retail shelf space. During the 8- and 16-bit cartridge phases of the industry, Nintendo and Sega, through their licensing procedures, were able to exert controls over third party software release patterns. It was thus possible to ensure that two directly competitive games (eg, two soccer-based titles) were not released simultaneously. By contrast, Sega and Sony (as well as 3DO) have been so keen to sign up as many third party publishers as possible that it has been impossible to direct the flow of releases. Consequently, there is a growing danger, just as with the CD-ROM market, that there could be too much product for the size of the retail channel at any point in time. It will be up to each individual publisher to fight to ensure that they obtain sufficient retail exposure.

The realities of CD-ROM

Along with the established multimedia companies that have turned to the MPC market during the current 16-bit downturn, many newcomers are also attempting to become CD-ROM publishers.
The number of new CD-ROM releases and number of new CD-ROM publishers is increasing all the time. TFPL reports that the number of European CD-ROM publishers increased from 547 in 1994 to 793 in 1995. Unfortunately, this number of would-be industry participants is completely out of proportion to the early stage of the market.

The sales of games and edutainment will have to be substantial to meet increased investment in costs of production. This implies a greater proportion of revenue than hitherto accruing to the producer. The means of achieving may be through direct sales utilising the Internet and other means of direct selling.
Consideration of projected supplier revenue needs to take into account the nature of rights in multimedia and the various rights holders. The creation of a multimedia product carries with it the creation of a copyright which may be composed of a number of parts and may involve a number of rights holders.
For example, rights in an "edutainment" programme will involve rights in the design and structure of the programme; the content of the programme, may involve separate rights from still photographs and video material. Still photographs and video material may be bought in from other rights holders for specific uses. In the case of a game, the concept and design may involve one set of rights and where the game is allied to a motion picture, a separate set of rights are involved.
Holders of rights in potentially valuable assets such as motion pictures or unique material of specific institutions or personalities will ensure that the granting of a licence for a specific multimedia application will be drawn tightly and will not enable publishers to extend the use of the material to unforeseen situations which occur as the result of developing technology.
The costs of creating interactive multimedia programmes which have reasonable substance and depth are substantial. Games programmes without substantial motion picture content can cost around 250 kECU and with motion picture could easily top 500-750 kECU in real terms. While edutainment programmes may be of a lower order of costs much will depend on the quantity and quality of the content assets, how and where they are obtained.

Bundling important but retail leaps

While bundling deals constitute a secure revenue stream for publishers, the price per unit paid by PC manufacturers is very low and is getting lower. Manufacturers were paying as much as $5.00 per unit less for bundled CDs in 1994 than they were in 1993. On average, the larger publishers were getting $4.80-$7.00 a disc from bundling in 1994, depending on the software category, while smaller publishers were getting, on average, less than $1.00 a disc.

The real story of the last two years has been the growth of retail channels to generate a genuine retail market. We estimate that European retail sales of CD-ROMs grew by over 300 per cent from $194m in 1994 to $797m in 1995. The volume of sales grew by far more (4.6 fold) from

2.8m to nearly 13m, which indicates the kind of downwards pressure that has been applied to retail prices.

Localisation is critical

A key interim opportunity for the content industry in most European countries is the localisation of imported titles. This is especially true in non-English speaking countries. As the supply of locally produced titles becomes available, the level of imported titles and therefore, localisation required, may be expected to decrease.

Too many titles, too little shelf space

- One of the biggest problems facing the market is the sheer quantity of low quality titles being released. On average, US stores stocked just over 250 CD-ROM titles in 1995, but European retail channels are far less well developed. There were around 1,200 CD-ROM consumer titles made available in Europe in 1994, but just 400 are thought to have made it into stores. Although European retail channels for CD-ROM expanded significantly in 1995, so did the quantity of product searching for exposure.

- In order to secure retail space it has become increasingly necessary to spend significant sums of up to ECU 0.5 million on marketing. Clearly, it is hard for smaller companies to compete with these kind of budgets.

- The consequence is that there are huge disparities in the industry between those who are successful and those who are not. According to Dataquest, just five companies, Microsoft, Electronic Arts, Broderbund, Mindscape and Interplay, accounted for 60 per cent of all unbundled global multimedia CD-ROM shipments in 1994. Assuming these five publishers were responsible between them for handling 250 titles (of their own and, in some cases, on behalf of several other publishers), they were on average able to ship 44,800 units of each title, generating revenue of just over $1.4m per title. In many cases, even this level of revenue may not be sufficient to break even on development investments, especially given escalating marketing budgets and distribution costs.

- However, there is some evidence in Europe that the situation is improving to give more publishers a share of the action. In the UK in 1994, the top 10 publishers accounted for 68 per cent of all CD unit sales (CD-ROM, CD-i, 3DO, Mega CD, Playstation, Saturn), but by 1995 this proportion had fallen to 61 per cent. Likewise, while in 1994 the top 40 titles accounted for more than 60 per cent of all CD-ROM sales in the UK, in 1995 the top 40 accounted for only 37 per cent.

- The situation is made worse by the downward pressure on retail prices that has been felt throughout Europe. In the UK, price cuts across leading CD-ROMs began in earnest in November 1995 led by Virgin, Our Price and Woolworths, which in turn has forced publishers to lower their recommended retail prices. Whilst UK prices in early 1995 were commonly in the £35-£40 range, a more usual price point now is £29.99. After deducting the costs of replication, packaging and distribution, a typical independent publisher might expect to get £11 back from that £29.99 retail price.

- Whilst MPC owners are buying such a low number of software titles a year, it is inevitable that sales success will be highly concentrated amongst a few hit titles. Globally, a handful of titles can sell over 500,000 units in a year and a few approach the million mark on a cumulative basis. Virgin's The Seventh Guest, for example, has sold close to 700,000 at retail plus another 700,000 through bundling deals. This all stands in stark contrast to the volumes that historically have been possible in the cartridge video game market. Even in the declining 16-bit sector, Nintendo was able to ship over 7m copies of Rare's Donkey Kong Country.

- Within Europe, the sales story is broadly similar to that at the global level. A small number of `AAA' CD-ROM games are able to sell over 150,000 units across all of Europe, however there is a sharp drop off and little in between the 100,000-plus `super sellers' and games in the 30,000-60,000 range that can still be considered good `A' title performers. For edutainment titles, sales levels in Europe are very much lower. Only an exceptional `AAA' edutainment title can hope to sell over 60,000 units across Europe and 15,000 is a creditable performance.

- As the installed base of different platforms across Europe rise, so the volume of potential software sales will also grow. One `rule-of-thumb' is that top hit titles sell to a maximum of 10 per cent of the installed base (although much higher during the initial launch). Thus, with the European in-home installed base of MPCs now having broken through the 7m mark, it should be possible before too long for out and out blockbuster CD-ROMs to ship numbers in excess of 700,000.

- Certainly, the 1996 European sales potential for CD-ROMs should be 15-20 per cent above 1995 and by the end of the year AAA titles will likely be selling over 300,000 units. However, unless the average quantity of software purchases a year by MPC owners can be pushed up higher than current levels, there remains the likelihood that sales will remain highly concentrated amongst the top hits.

The strength of the European multimedia off-line industry can be witnessed with reference to the following indicators;

- Sales by genre
- No. of CD ROM publishers
- EU share of cartridge video game revenue
- EU share of CD -Console revenue
- EU share of multimedia CD ROM revenue

The future growth and financial success of packaged multimedia will be determined by the quality and attractiveness of the programmes. Developing technology will enable programmes of increasing complexity to be delivered which in turn will require increasing levels of visual asset.

Such a situation will favour those multimedia organisations which already own and have ready access to existing assets. A notable example is the financial success of Dorling Kindersley Ltd, a UK publisher who has created its own multimedia publishing arm and utilises visual and other assets created for conventional books and now adapted for multimedia use. In a similar way the BBC have set up a multimedia unit which will have access (albeit with some internal accounting mechanism) to BBC visual assets.

At the present time the market lacks stability since prices of programmes are being forced down while, as indicated above, costs are rising. A number of major publishers have withdrawn from the market until they can see the future more clearly. The consequence has been some severe staff reductions in producing companies.

The key point is that, as future sales are driven by content, implies opportunities for the audio-visual content industry to continue to do well out of off-line multimedia.

Improved sales will depend on the development of improved content of multimedia programmes with more highly interactive structures.

Multimedia On-line:

The on-line multimedia market is now only beginning to appear. It is still subject to many uncertainties, not least consumer acceptance and take-up rates.

As in the off-line sector, content is likely to be a key driver, but issues of rights and indeed the business model for Internet remains most unclear with many issues such as IPR remaining uncertain.

It is likely that the on-line market will grow as various sub-markets, which will inevitably imply opportunities for European content producers.
The advent of new digital technologies will stimulate growth of the use of interactive multimedia through on-line public information kiosks, providing SME multimedia producers with substantial additional markets. Additional services such as home banking and home shopping will provide new markets for the content industry.

On-line may also present a way of cutting out the distributor, so perhaps suggesting that content providers can look forward to receiving an increasing share of multimedia expenditures.

Chapter 6 Projection of Content Provider Revenues

Following on from the projections of the aggregate audio-visual revenues in Chapter 4, in this chapter we identify the proportion of these revenues that flow to the European content providers. This is achieved by applying a similar methodology to that used in calculating the aggregate revenues. The most probable scenario of the developments that may influence the European flow of revenues for each sector and each of the seven Member States is presented. Together with an analysis of the historical data, each section is concluded with a projection of the associated EU share of revenues.

The chapter is structured as follows:

- 6.1 Germany
- 6.2 Denmark
- 6.3 Spain
- 6.4 France
- 6.5 Great Britain
- 6.6 Ireland
- 6.7 Italy

6.1 Germany (DE)

Free-to-air - TV

Indicators:

Total programme budget (ECU million): 3099 (1991: 2512)
European programme budget (ECU million): 3017 (1991: 2448)

Market Discussion:

During the mid-1980s, the commercial channels' early schedules mainly comprised cheap US imports. Audience success added to the coffers making the programme budgets of the top channels higher than the public services. The commercial channels now show home-produced American - style programming to attract viewers. This reliance on domestic fare places top personalities in high demand. The European share of revenues has been increasing steadily since 1991, with a slight decrease in 1995.
The slump in the public channels' fortunes is aggravated by a freeze in programme budgets. Commercial competition forced programme prices up and led to ad revenue declines at the unprepared ZDF. As a result, ZDF's 1995 programme budget was cut by approximately 20%. In order to increase its value for programme output, it has increased its co-production to over 14% of its schedule.

ARD's main objective is to mix regional programming with popular films and series for a diverse audience. ARD lost viewers in 1994 despite introducing a range of new programs designed to appeal to a younger audience. News and current affairs are the mainstay of ARD, with an average 38.4% devoted to these genres. In -house and commissioned productions made up 80% of ARD's total programming hours in 1995. ZDF and ARD are planning to launch two new channels; one for children's programming and one for documentaries. It is believed that this will benefit the production industry.

Kabel 1 appeals to children and adults alike, due to its line-up of cartoons, children's programs and family series. Domestic productions include a live interactive game show, Hugo, running in direct competition with RTL 2's successful Bravo TV. US imports, however, account for more than half the schedule.
Pro Sieben, broadcasting around the clock, relies heavily on films but also offers a mixture of US-style soaps and talk shows. Reliance on US programs, mainly from Kirch's extensive library, is fading as more than DM400 from the DM 1 billion programme budget in 1996 is designated for home productions. Half the domestic budget is allocated to series and TV movies.

At the launch in 1984, RTL began a policy of concentrating on low cost imported programming, primarily from the US. With increased ad revenues, scheduling shifted towards in-house and domestic productions. By 1993, RTL's market share was higher than the public broadcasters ARD and ZDF for the first time. RTL's programme structure has an American style schedule with a morning news show, soaps, afternoon chat shows and prime time movies.
RTL signed a DM 240 million deal with Warner Bros, following the expiry of Warner's exclusive deal with Kirch, thereby gaining access to 500 hours of TV programs and 46 movies. Despite this and other deals, RTL has decreased its imported programs in the quest for quality scheduling, leaving more money for in-house and commissioned productions. The channel has reduced its reliance on acquisitions, from 70% of the 1990 schedule to 18% by 1995. The channel attracts high ratings through its commissioned and own produced programs. Top home grown programs include entertainment shows.

RTL 2 relies more heavily on imported programs. However, an increasing proportion of the programme budget (DM 375 million in 1996), one third is consumed on domestic productions, up 20% on its 1995 allocation.

Sat 1 began broadcasting around the clock in 1993, by scheduling two weekly night talk shows to attract the important younger audience and filling the rest with repeats and US sitcoms. It aims to become Germany's most watched channel in 1997. Today, its reliance on US imports and repeats predominantly from the Kirch library, appears to be waning. The majority of the prime time schedule is German.
TV movies have emerged as the latest production trend in Germany. Financed by private and public networks, Germany's 150 studios and freelance companies will produce more than 200 commissioned TV movies in 1996, with production costs adding up to DM2.4 million.

Conclusion:

The maturity and open competitiveness of the German commercial market is reaping benefits to the local and European production industry as programme schedules make a definite shift towards reliance on domestic product, either from in-house or commissioned sectors. Across all commercial broadcasters, the domestic product, and in particular, American style programmes, are increasingly attracting viewers
While the public broadcasters come under increasing pressure, the reduction in programme budget from ZDF (although only temporary) is more than compensated by the buoyancy of the commercial broadcasters and the launch of two new channels from ARD. We believe the market will exhibit unprecedented growth over the next ten years.

Cinema:

Indicators:

no. of films produced annually: 70 (1992: 63)

Multiplex screens as proportion of total screens: 6.5% (1992: 2.9%)

number of film distribution companies: 58

EU share of box office revenue (ECU million): 29.9 (1991: 47.5)

Indigenous Films' share of national home market: 6.3%
Average indigenous Films' share of national home market 1990 - 1995: 9.4%

Market discussion:

The EU share of box office revenues has been decreasing since 1991 with the notable exception of 1994. However, there are signs that this is on the upturn at the moment.
The number of films produced for cinema release has been consistent in Germany for a number of years. More recently, there has been an increase of approximately 10% in 1995 and the astounding success rate of national product in the box office in 1996 paves the way for a healthy environment for further film investment. The recent box-office success for German comedy films funded by private sector finance have produced a resurgence of revenue for local production . The proportion of cinema admissions for German films in the first six months of 1996 is 19.6% and in June reached 34 %.

The increasing multiplex build is also providing more opportunity to screen German product than previously. Currently at 6.5%, an additional 100 multiplex screens were to be constructed in 1996 and a further 70 already planned for 1997. This development is planned to continue for the next five years.
A new German film funding agency may be set up in 1996 for the continued funding by commercial broadcasters. This would provide an independent project fund supporting larger budget films. It will also allow funds to be diverted to regional film funds.

Outside their home market, German films on the whole do not perform very well in Europe. German films' non-domestic European gross has hovered around the $30m mark. German films have tended to do better in Southern European countries such as Italy, Spain and Greece than in culturally and linguistically closer markets such as the Netherlands. On average, German films account for approximately 2.5% share of EU market revenues for the period 1993-1995.

Conclusion:

In general, German films perform relatively well in local cinemas. However, the success achieved in the box office of domestic product during 1996 is record breaking and with the increasing multiplex build, a healthy environment for continued success is in the making. In conclusion, we believe the market will provide sustained growth of EU share of revenues for the next ten years.

Video Rental

Indicators

EU share of box office revenue (ECU million): 29.9 (1992: 35.6)
EU share of video rental revenue (ECU million): 10.6 (1992: 24)

Market Discussion:

The EU share of video rental has been declining since 1991 with the exception of 1994, reflecting perhaps, the trend in EU share of cinema box office revenues.

However, a very significant 34% of cinema tickets sold in Germany during June 1996 were for locally produced films. Overall, local films took 20% of admissions for the first half of 1996 compared with yearly averages of 10% this decade. This should aid local producers revenues returning from video rentals in the next 2 years.

The initial figures reflect a slight upturn for the video rental industry in 1996 and this should translate to a slightly healthier picture for European share of revenues for the year also.

Conclusion:

As seen from the figures the rental industry is in decline and although, a revival in the popularity of nationally produced content may slow this decline, the revenues flowing back to the producer will decline over the next 10 years.

Video Sell-through

Indicators

EU share of video sell-through revenue (ECU million): 110.3 (1991: 119)

No. of new titles released: 2000 (1994: 2000)

Market share by genre (%)	1993	1995
Feature Films	43	44

Market Discussion:

Although the sell-through market continues to grow this has not always materialised in growth of the EU share of revenues. This is in part due to the 15% reduction in the video sell-through price during the last two years. However, given that the sell-through price is now at the EU average, we may assume some stability in the market place. Enabling this is a constant number of distribution outlets.

In addition, the market has now developed to a allow a reasonable split between film and non film categories, thereby providing opportunities for Germany product and, indeed is supplying a steady stream of new titles.

Conclusion:

On the basis of no new market developments that would encourage growth in EU revenues over and above their current levels, we believe EU share of revenues will continue at current levels for the next 10 years.

Pay Television:

Indicators:

EU pay TV programme budget ECU million: 4.6 (1993: 2.9)

Year since pay TV introduced: 5

Pay TV subscribers: 1.2 million

Number of pay TV operators: 2

Market Developments:

Many of Premiere's subscription problems come from stiff competition from the free-to-air channels, which screen 1,400 movies annually. The split of Premiere's transmission hours by programme type is Movies (70%), Sport 10% and Documentaries (5%). The channel operates on a 12 to 18 month window after theatrical release of movies.

In 1996, Kirch paid a reported $1 billion for an output deal with Columbia TriStar and $800 million for a pay TV rights output deal with Warner Brothers. It also clinched a 10-year film and TV rights output deal with Hollywood major Paramount, owned by Viacom. The deal also gave DF1 the broadcasting rights to Viacom properties MTV, VH-1 and the children's channel Nickeldon. Likewise Kirch also struck a channel deal with NBC Super Channel and CNBC for DF1, and joined the Swiss Sporis-owned marketing firm ISL as part of a $2.2 billion winning bid for the rights to the 2002 and 2006 World Cup soccer competitions. All these deals seriously deprive the EU content industry of potential revenues , but do encourage take up of pay TV in general and should eventually, translate into a greater demand for European product, as the market matures.

Most of Germany's theme and special interest channels are struggling. SuperRTL had a share of 1.1% in 1995 but aspires to over 2% in 1996. It is aimed specifically at children, screening Disney animation classics and German youth series via the Astra transponder to eight million households. DSF had a share of 1.3% in 1995 while music channel Viva, Germany's answer to MTV, had a market share of 2.3% last year, overtaking the real MTV's share 1.2%. It expounds German youth culture and domestic music videos. New channel launches in 1995 included TM3, a woman's - oriented theme channel. Ratings are not available since the channel lacked technical reach. The channel has an annual budget of DM84 million. These theme channels, although struggling to suit niche programming to a specific sector of the audience, will in the long term overcome these problems and lead to increased opportunities for EU industry.

Conclusion:

Although the pay TV sector at the moment provides almost negligible revenues flowing to the EU industry, this may change in the long term. The launch of DF1 will at first rely on sport and US content to attract audience share. However, we believe that in the longer term, especially in order to maintain their share, more national and European content will be scheduled. In addition, as most thematic channels are only in the start-up phase we do not expect significant revenues flowing to the EU suppliers. Therefore, although initially EU share of revenues will be small, we believe they will grow more significantly, especially in the second five year term.

Multimedia Market:

Indicators:

Sales by genre: Games: 95%

CD-ROM and CD MM Publishers: 102

EU share of video cartridge game revenue ECU million: 13.3 (1992: 30.4.)
EU Share of CD-Console revenue ECU million: 6.3 (1992: 0.1)
EU Share of multimedia CD-ROM revenue ECU million: 59.1 (1992: 0.6)

Market Discussion:

The German distribution structure is fragmented. Centralised buying tends not to be a feature of the German retail market, so distributors / publishers have to deal with most national retail chains on a store by store basis. Department store chains (16% market share) like Karstadt and Metro Group are of particular importance to the German market. Germany lacks specialist software chains although it does have strong computer store outlets (26% market share) for CD-ROM, with Vobis and Escom leading the way. Germany also tends to be without general media stores like FNAC or Virgin . In fact, these two retail groups did try to establish operations there but found high costs and restrictive trading hours not compatible with their norm. There is a large and disparate sector of independent retailers in Germany, many of whom are serviced by specialist wholesalers who deal with particular requirements like the right to return unsold stock. Independents account for approximately 20% of the distribution market.
As elsewhere in Europe, the German book channels (1% market share) have been slow to take up CD-ROM - but there is evidence that this is beginning to change. It is estimated that 30% of the country's 500 independent book stores are now selling CD-ROMs.

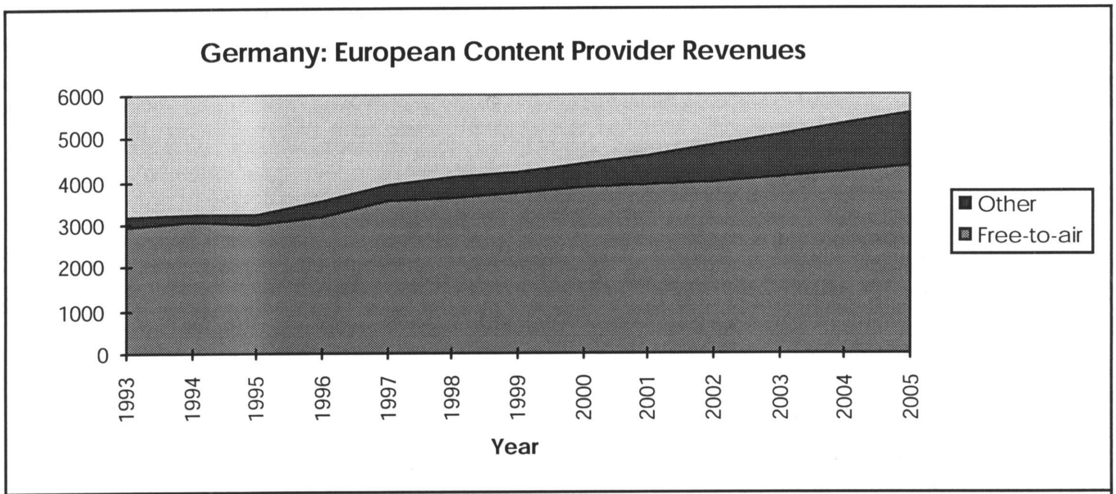
Germany has a strong indigenous base of interactive entertainment software developers. In part, this has grown from a legacy of predominantly supporting the Amiga computer format. Many of the strongest German software developers are part of the giant Funsoft group.

Localisation of titles into German language is vital to achieve good sales and the number of German-language CD-ROMs (both localised and German-originals) is growing dramatically, increasing from 750 in 1994 to 1500 in 1995. This expansion is putting an increasing strain on the availability of shelf space.

Conclusion:

The developing distribution structures, strong supply of indigenous software developers and the indigenous localisation industry will ensure the continued growth of EU share of revenues.

Summary



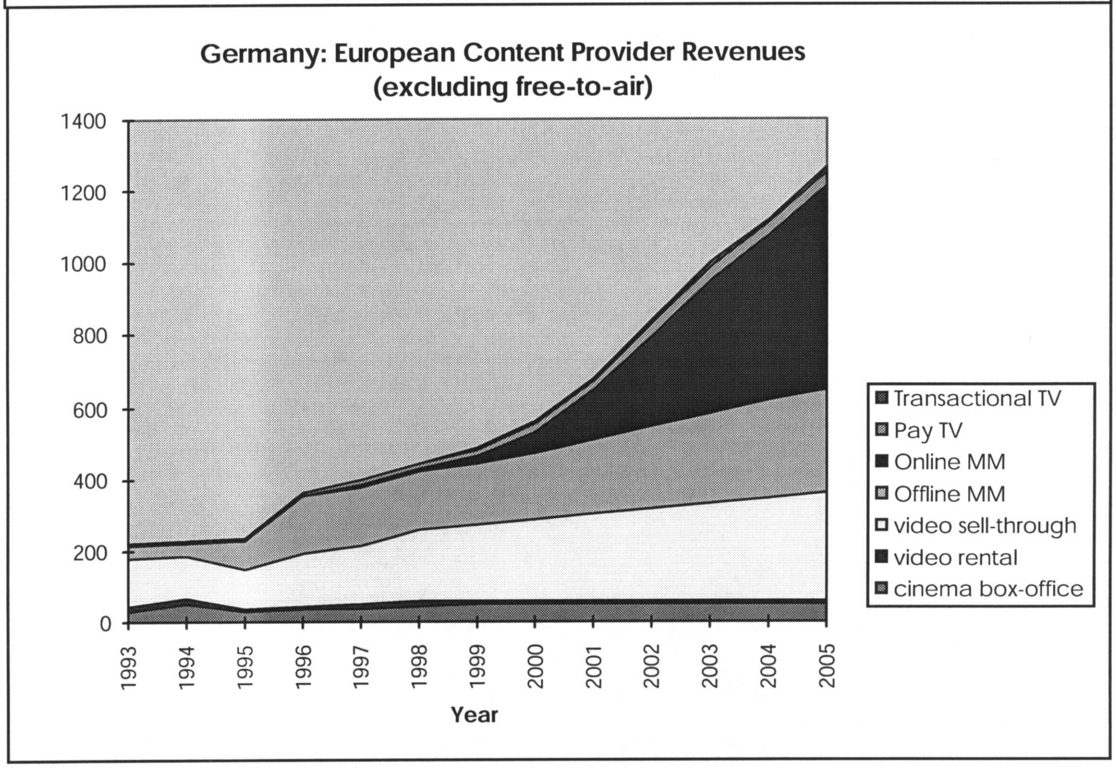


Exhibit 6.1: European Content Provider Revenues: Germany

Exhibit 6.1 shows how free-to-air television is projected to remain by far and away the most significant revenue source for European content providers in the German AV market over the period to 2005. Other AV sectors are slowly growing in importance, but by 2005 still account for less than 25% of the total industry revenues.

The breakdown revenue sources other than free-to-air is provided in Exhibit 6.1. As can be seen, online multimedia represents the major growth sector, with the video sell-through and offline multimedia markets also being significant. European content providers can expect to capture a growing share of pay TV and transactional TV revenues, though such revenues will represent only a small proportion of the total, reflecting in part the continuing strength of free-to-air television in Germany.

Direct consumer AV expenditures are expected to continue to grow in importance, up from 26.6% of total expenditures in 1995 to 40.6% in 2005. Much of this growth is in areas where the European content provider industry is strong, such that Europe's share of total revenues is expected to more than double from 10.2% in 1995 to 21.2% in 2005.

6.2 Denmark (DK)

Free-to-air - TV

Indicators:

Total programme budget (ECU million): 198.9 (1992: 161.8)
European programme budget (ECU million): 175 (1992: 135.5)

Market Discussion:

Danish channels must include at least 50% Danish or Scandinavian programming in their schedules. Satellite channel TV3, unaffected by these rules, relies heavily on US soaps, games shows and sports programming, acquiring 60% of its schedule.
DR restructured in 1993 to free up cash for programming, splitting radio and television services. Since 1992, DR's programme budgets are triple TV2's, despite its lower audience share. DR principally offers drama and cultural programming, while TV2 offers more populist fare. Acquired drama series makes up 37% of TV2's schedule. All news, current affairs and sports programs are produced in-house; the remainder is commissioned from independent producers or acquired. DR is obliged to invest DKr 25 million annually in local film production.

DR is to launch a new satellite-delivered service in September 1996 and the new channel will draw programming from existing departments which are expected to increase product output by 25%.
Following an all-out efficiency audit and strategy appraisal by the McKinsey group of DR, access programming, interactivity and additional programming were identified as future activities to increase competitiveness of the broadcaster.
So called cable born programming - produced by telcos or their affiliates is to be allowed, thereby enabling Danish telco Tele Danmark as a significant player in the TV industry. This should produce additional programming opportunities for the EU industry.
New Danish legislation appears to favour local broadcasters. In addition to allowing networking, a plethora of support measures are enshrined into the law, spanning training, marketing, interactivity and production support. This should help to foster domestic production which will reap the benefits in the short - medium term.

Conclusion:

Since streamlining its administration costs, DR has increased its programme budgets by 9.5% approximately, since 1994 and this is expected to continue to increase, as recommended by the McKinsey report, as part of its competitiveness programme. This together with the supply of domestic product to its new satellite delivered channel, and the opportunities for the supply of domestic product in the cable networks through Tele Danmark, will ensure continued growth prospects for the EU share of revenues.

Cinema

Indicators:

no. of films produced annually: 13 (1992: 9)

Multiplex screens as proportion of total screens: 16.6% (1992: 12.3%)

number of film distribution companies: 28

EU share of box office revenue (ECU million): 2.1 (1992: 4.2)

Indigenous Films' share of national home market: 8.3%
Average indigenous Films' share of national home market 1990 - 1995: 10.8%

Market Discussion:

Danish industry produces a consistent 11-12 films per year over the past five years. Correspondingly, the film production investment has been consistent at Dkr 123 million approximately.

Indigenous film companies have been using their strengths through vertical integration at the local level. Nordisk, which currently has 43 multiplex screens out of a possible 50 (the remainder owned by Warner-Metronome), is vertically integrated with distribution and production activities. This is a key reason why the US exhibition majors have a minority interest in Denmark. Consequently, it is expected that the further development of the exhibition structure will be slow.

Conclusion:

As there are no plans to increase the number of films and as the multiplex exhibition structure continues to develop slowly, thereby providing limited opportunities to screen local product, we believe the EU share of the market will continue at current levels.

Video Rental

Indicators

EU share of box office revenue (ECU million): 2.1 (1992: 4.2)
EU share of video rental revenue (ECU million): 1.9 (1992: 4.3)

Market Discussion:

The video industry is well developed and achieved relatively stable performance in the last few years but as in other countries, is following the performance of local product in the box office. Consequently, the EU share of revenues is following the performance at the box office.

Conclusion:

We expect current levels to continue.

Video Sell-through

Indicators

EU share of video sell-through revenue (ECU million): 23.2 (1992: 11.8)
No. of new titles released: 1000

Market share by genre (%)	1993	1995
Feature Films	66	51.5

Market Discussion:

The increasing number of non-film releases continues to benefit the sector as it is now relatively well developed in a European context approaching the 50% level of the non-film market share of sell-through product. This provides a sound opportunity for production of non-film titles and producers should also profit from the continuously developing distribution structure, that is pervading all levels of retail.

Conclusion:

The EU share of revenues is likely to continue following the increasing number of new non-film releases and further development of the distribution structure.

Pay TV:

Indicators:

EU pay TV programme budget (ECU million): 0.3 (1994: 0.3)

Year since pay TV introduced: 11

Pay TV subscribers: 80,000

Number of pay TV operators: 1

Market Developments:

A host of new digital services from Multichoice is expected to benefit the EU share of the market. In particular, a movies on demand service is expected in 1997 which should provide an additional source of revenues on existing EU product. As in other countries, the launch of sports channel from broadcaster DR will not directly benefit the industry but will help to grow the penetration of pay TV.

Conclusion:

Current EU share levels can be expected to increase and grow at a faster rate as new digital services are launched.

Multimedia

Sales by genre: not known

CD-ROM and CD MM Publishers: 8

EU share of cartridge video game revenue ECU million: 0.4 (1992: 0.6)
EU Share of CD-Console revenue ECU million: 0.4 (1992: 0.0)
EU Share of multimedia CD-ROM revenue ECU million: 3.8 (1992: 0.0)

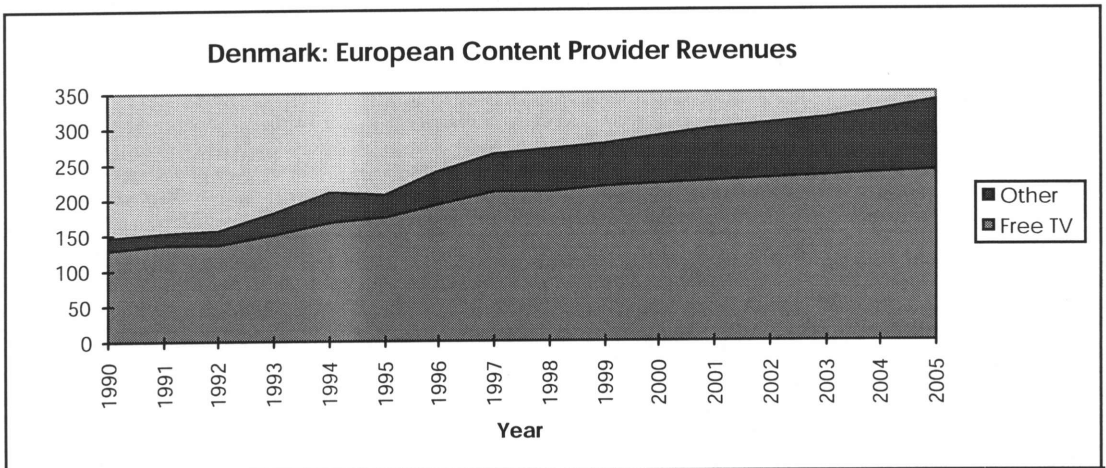
Market Developments

The Danish multimedia market is benefitting form an extremely high penetration of MPCs. This expanding market is being supplied with an increasing volume of original titles and large existing localised product. Although Danish paople have a very good command of the English language, they nevertheless, have a preference for Danish speaking titles, and more specifically, Danish cultural titles. The multimedia production industry is being aided by three major support schemes, administered by the Government, to encourage and stimulate the availability of original titles and the consumer market. The distribution structure continues to develop through an expanding hypermarket retail outlets and the unusuallly high involvement of the bookstore chains, relative to other European countries.

Conclusion:

The continuing availability of original titles, aided by various support schemes, and the expanding shelf space to distribute danish product, should ensure continued growth of European share of revenues.

Summary:



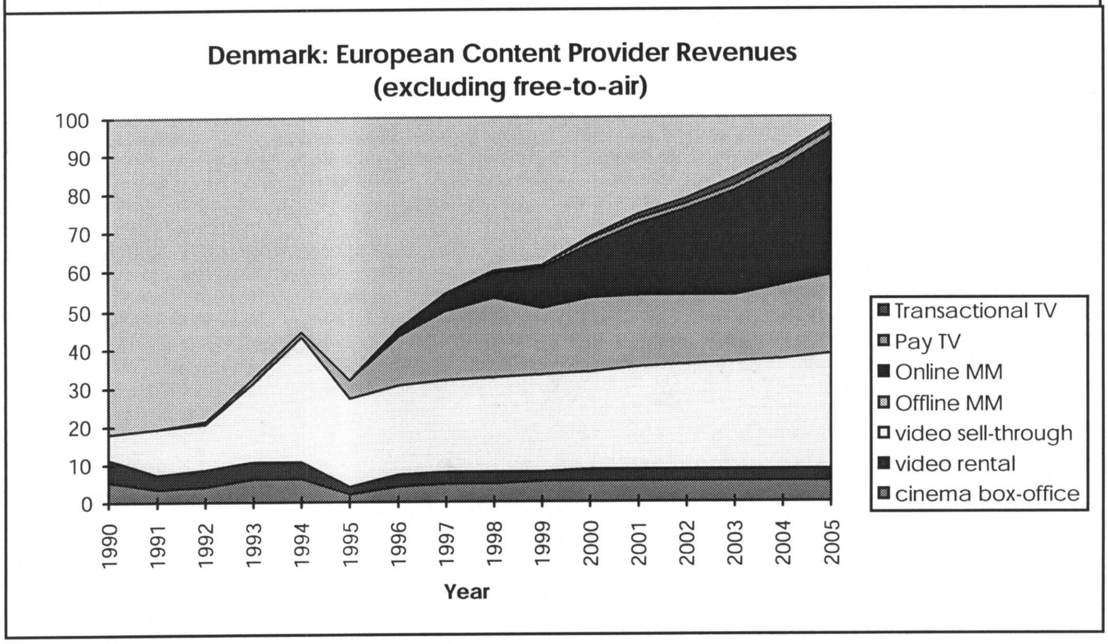


Exhibit 6.2: European Content Provider Revenues: Denmark

Exhibit 6.2 shows how free-to-air television is expected to remain the single most important revenue source for European content providers in Denmark. Other AV sectors are, however, projected to grow in importance, accounting for nearly 30% of industry revenues by 2005.

The detailed breakdown of revenue sources other than free-to-air television is provided in Exhibit 6.2. This shows how online multimedia represents the major growth sector for European content providers, with offline multimedia revenues also being significant. The particular importance of the multimedia sector is explained by the penetration of MPCs and Internet access which are currently higher in Denmark than the study average. Video sell-through also remains an important revenue source for European content providers.

Direct consumer AV expenditures are expected to continue to grow in importance, up from 29.7% of total expenditures in 1995 to 42.5% in 2005. Much of this growth is in areas where the

European content provider industry is strong, such that Europe's share of total revenues is expected to increase from 14.1% in 1995 to 19.9% in 2005.

6.3 Spain (ES)

Free-to-air - TV

Indicators:

Total programme budget (ECU million): 944.8 (1992: 1170)
European programme budget (ECU million): 792.5 (1992: 981)

Market Discussion:

Prime time schedules are dominated by local fare, with most US imports pushed to the afternoons. All the channels must include a domestic minimum of 15%, with at least 40% of the schedule coming from the EU. Spanish-language programming, which can include Latin America, must contribute at least 55% of the total.

Antena 3, broadcasting around-the-clock, specifically targets young, urban audiences in the higher income brackets. Moving from an original emphasis on news and current affairs, the current schedule focuses on movies and series and uses top personalities to host variety and talk shows. Domestic sitcoms and game shows attract high audiences. Antena 3 spent 45% of its programme budget on in-house productions. The channel commissioned three locally produced TV movies at a cost of Pta 60million each and hopes to offer 12 domestically produced TV movies annually. Antena 3, plans cable channels once appropriate legislation is in place. The channel's movie production arm made one of Spain's highest-grossing movies in 1994 and is the only Spanish broadcaster to own a theatrical sales and distribution operation, Aurum Films.

RTVE celebrates its 40th anniversary in 1996 amid a wholesale restructuring to reduce its massive debt. Its 1996 revenues are likely to be half its expenditure and despite its prolonged efficiency drive, the broadcaster is not able to compete for advertising revenues with its commercial counterparts. Government attempts to reduce the public budget deficit are dictating the pace of events and this is likely to continue for the next few years, at a minimum.
RTVE is considered a populist programmer. The current split of 50% output being from in-house productions is to be increased in 1996. The programme budget increased for the first time since 1990. RTVE undertook a major production by dramatising the nineteenth century Leopoldo Alas Clarin novel. Other projects include versions of US sitcoms and a substantial co-produced mini-series. FAPAE, the Federation of Spanish Producers, and the Official Credit Institute extended a line of credit of Pta 2 billion to RTVE in 1995. The credit will finance 40 Spanish films over four years, substantially increasing RTVE's European output, which must equal 50% of total output.

Conclusion:

As the public broadcaster continues the efficiency drive and rationalisation programme in order to reduce its debt, the programme budget has been increased in an effort to attract audience share. This will benefit the in-house and commission production sectors. In addition, the FAPAE injection of credit for the production of Spanish films will increase the EU proportion of revenues.

The general improvement of the financial state of private generalist stations Telecinco and Antena 3 should also contribute to growing the programme budgets and in particular the aim to produce 12 Spanish films locally on an annual basis and the pending new cable channels in the medium term, should ensure a more healthy EU reward in the medium term.

In conclusion, we believe the EU proportion of revenues will be sustained at current rates for the next two to three years and will grow at a modest rate for the remainder of the ten year term.

Cinema

Indicators:

no. of films produced annually: 59 (1992: 52)

Multiplex screens as proportion of total screens: 7.6% (1992: 4%)

number of film distribution companies: 191

EU share of box office revenue (ECU million): 47 (1992: 32.2)

Indigenous Films' share of national home market: 12.2%
Average indigenous Films' share of national home market 1990 - 1995: 9.7%

Market Discussion:

The number of feature films produced during the last three years is consistent at approximately 55 per year. However, this is likely to increase in 1996 as RTVE has increased the level of feature film production for 1996 to 45 films compared with 37 in 1995

The level of film production investment has increased dramatically from pta 7000 million in 1994 to 13,800 million in 1995.

Revenues from Spanish cinemas increased marginally in 1995 but local films increased their share of the market to 12.2%.

The growth of multiplexes is expected to increase to approximately 11% in 1996.

Conclusion:

On the basis of the increased investment in film production and the development of the exhibition structure, we believe EU share of revenues will continue to grow as experienced in the last three years.

Video Rental

Indicators

EU share of box office revenue (ECU million): 47 (1992: 32.2)
EU share of video rental revenue (ECU million): 8.2 (1992: 12.5)

Market Discussion:

The EU share of revenues has been declining since 1988, although may have stabilised recently. The market for video rental is highly developed. Increased share of EU revenues will broadly reflect the success at the box office.

Conclusion:

We expect the EU share of revenues to continue for the next five years and to decline in the second five years reflecting the overall general decline in the rental industry.

Video Sell-through

Indicators

EU share of video sell-through revenue (ECU million): 16.6 (1992: 60.9)
No. of new titles released: 557 (1994: 612)

Market share by genre (%)	1993	1995
Feature Films	70	not known

Market Discussion:

The Spanish sell-through releases in the non-feature film genre are significantly less than other European countries. The industry was in decline prior to 1993 but has being growing, though slowly, since that time. In this respect, the video sell-through industry is still developing.

Conclusion:

Based on the modest growth since the decline of the early 1990s, we expect the current European share of revenues to continue

Pay TV:

Indicators:

EU pay TV programme budgets (ECU million): 12.7 (1993: 5.1)

Year since pay TV introduced: 6

Pay TV subscribers: 969,600

Number of pay TV operators: 1

Market Developments:

Pay -TV is a rapidly growing market in Spain and is currently the centre of several digital channel launches.
Canal+ Espana follows the same programming strategy that proved so successful in France, targeting a young affluent audience with movies, sports and events. Movies and sports are especially popular, helping the channel draw audiences of 40% in subscriber homes. In 1994, 56% of films shown on Canal+ Espana were of US origin and only 42.8% were European. The channel will shift towards showing more locally independent films and has links with production house Sogetel through shareholder Prisa. Canal+ Espana and Sogetel have a three year production agreement with domestic producer Andres Gomez through his company Lola Films to produce between eight and 10 films annually with a total budget of Pta 3 billion.
In a move that further reflects Canal+ Espana's commitment to the Spanish film industry, the channel increased its control in Prisa film distribution subsidiary Sogepaq in July 1995. The pay network acquired Cinepaq, the film library company that holds a 33% stake in Sogepaq. Canal+

Espana also plans to increase its television co-productions, especially animation and documentaries.
The presence of shareholder, Canal Plus Espana, with extensive library of rights, will ensure the growth of pay TV revenues flowing to EU industry.

Following the breakdown in negotiations with US company DirecTV, Sogecable in conjunction with Canal+ Espana, is to proceed independently with its own 20-channel satellite launch in January 1997. It has also announced a three year contract with Philips to supply decoders.

In a separate development, Telefonica has signed deals with a number of broadcasters to launch a 40-channel common platform in March 1997. Public broadcaster RTVE (17% share), private network Antena 3 (17%), several regional networks (14%), as well as Mexican operator Groupo Televisa (17%) have taken up Telefonica's (35%) offer to invest in the platform.

Conclusion:

The continued growth in Canal+ Espana pay TV package with its increasing reliance on EU product paves the way for prosperous returns to the EU industry. This growth is to spurred on even further with the two digital launches in 1997 which will draw heavily on European content. We expect EU share of revenues to continue to grow over the next 10 years.

Multimedia:

Sales by genre: Games: 80%

CD-ROM and CD MM Publishers: 19

EU share of video cartridge game revenue ECU million: 6.1 (1992: 13.6)
EU Share of CD-Console revenue ECU million: 2.4 (1992: 0.0)
EU Share of multimedia CD-ROM revenue ECU million: 5.5 (1992: 0.2)

Market Developments

Most of the distribution business in Spain has traditionally been bundled by general sales agents who handle all kinds of different products. However, there are a number of well established specialised wholesalers/distributors.
There are 6-9 key retail accounts in Spain, with the chain El Corte Ingles being the most important. The street kiosks and newsagents are proving successful distribution channels for purchasing CD-ROMs in Spain. However, the problem for the publisher is that the sell-though price is significantly lower, thus depriving them of scarce revenues.

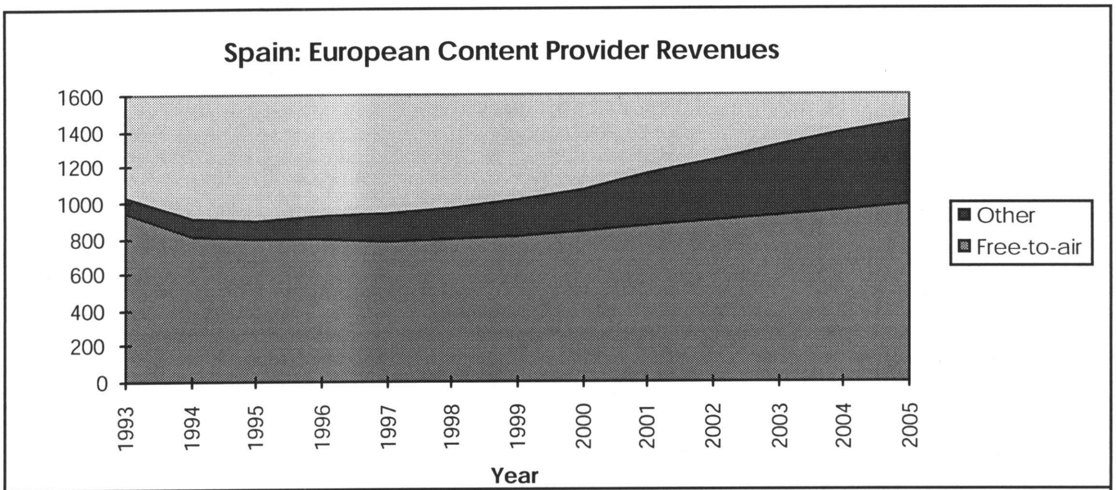
Spain does not have a strong track record in development for the games or edutainment multimedia sectors. However, it does have a rich tradition of print publishing and many of those companies have formed multimedia divisions. For example, Zeta Multimedia, established in 1995 and part of the Zeta group, one of Spain's largest publisher and investor in Antena 3 television channel, republishes localised versions of Discovery Channel Multimedia and Dorling Kindersley titles.

The Spanish market for non-games is particularly strong. Art and culture titles are estimated to account for 15-18% of sales. However, there is a significant opportunity for attractive CD-ROM titles published in Spanish. Localisation into Spanish is vital.

Conclusion:

The market is in a transition phase where the comparatively low penetration of MPCs does not encourage sufficient supply of original or localised titles and the costs of developing original titles or localising costs may not be recovered. The EU share of revenues will grow faster as some of these problems are overcome.

Summary:



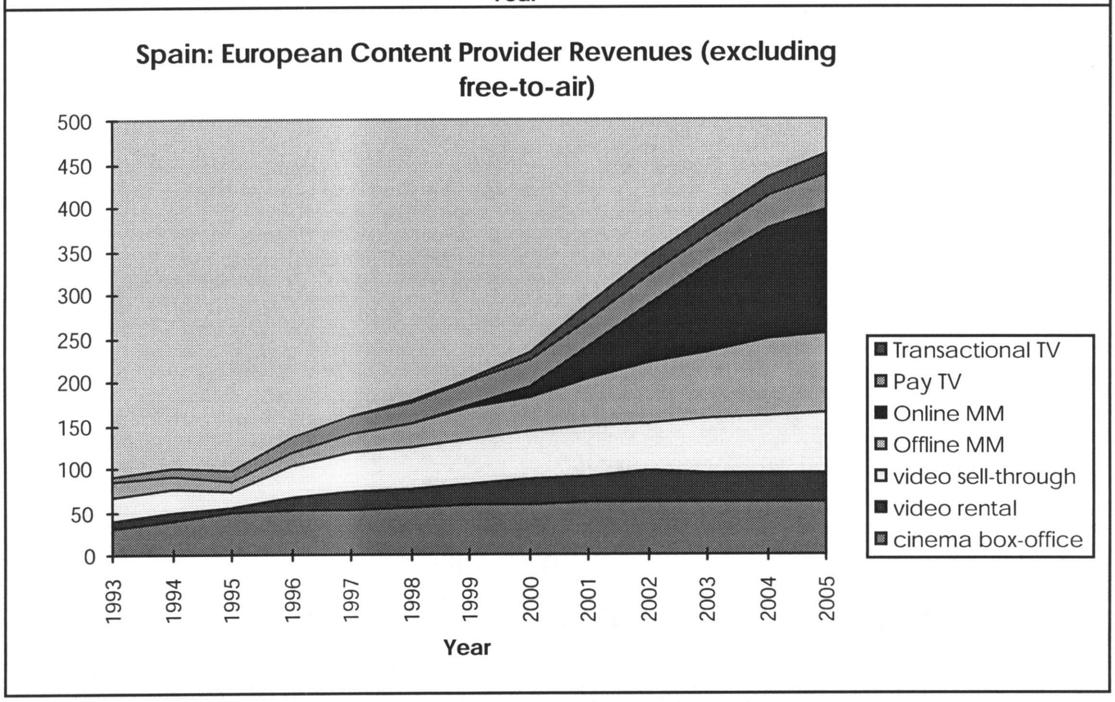


Exhibit 6.3: European Content Provider Revenues: Spain

The continuing importance of free-to-air television as the major revenue source for European content providers in Spain is shown in Exhibit 6.3. Other AV sectors are expected to grow in importance, but by 2005 still account for just 32% of total industry revenues.

The detailed breakdown of revenue sources other than free-to-air television is provided in Exhibit 6.3. This shows online multimedia as the major growth sector, with offline multimedia, video sell-through and the cinema box office remaining significant.

Direct consumer AV expenditures are already more important in Spain than the study average, reflecting in part the absence of a central licence fee. Their importance is expected to grow still further over the projection period such that their share of total AV expenditures increases from 42.4% in 1995 to 61.1% in 2005. European content provider's share of this growing market is expected to climb from 10% in 1995 to just over 18% in 2005.

6.4 France (FR)

Free-to-air - TV

Indicators:

Total programme budget: not known
European programme budget ECU million: 687 (1991: 956)

Market Discussion:

The government is eager to preserve French culture and insists that at least 40% of programs must be French and 60% of the total must be European. Channels, except Canal+, cannot screen more than 192 films each year, of which only 104 may be aired in prime time.

TF1, broadcasting around the clock, concentrates on fiction programming (41% of programme type transmitted), music / entertainment (14.6%) and magazine shows (12.3%). Movies represent 3.3%. The channel must devote 15% of net revenues to French-language commissions and can only produce half its non- news related programs in-house. TF1 invests heavily in local productions, spending FFr 176 million on 14 features in 1994. The channel accounted for 89 of the top 100 programs in 1994. Most watched programs are all French productions. However, recent comedy series schedules had serious flaws and had to be removed following disappointing audience shares.

France 2 split of transmission time according to programme type is Music and entertainment 21.5%, Drama/Fiction 21%, Information 19%, Documentaries 17.9% and Movies 3.9%. France 2 increased its output of domestic drama in 1995, including the series L'Instit. US drama remains less popular than domestic fare. The channel is experiencing success with broadcasts of French mini-series. The channel also increased youth output by screening programme series from the US and Australia. The channel is also strong on sports, with rights to cycling's Tour de France and rugby. Foreign programs usually only screen in afternoon slots and are not considered prime time fare. Stability after years of financial difficulties allows the channel to increase its programme investment.

France 3 offers complementary programming to sister channel France 2. The channel dropped its emphasis on news and current affairs in 1994 by introducing an equal mix of children's/youth and drama programming. The move paid off with audience share increasing from 11% in 1990 to 19% in 1996. Children's programming has increased significantly. The channel finances 48% of all French animation. France Television signed an agreement with the French Independent Producers association, UPSA, to increase investment in domestic productions from 15% to 17% of revenues.
France Television has launched fiction channel France Téléfilms and history channel La Chaine de l'Histoire.
However, in 1996, the French Government decided to freeze a licence fee increase for 1997 with the consequence that production budgets of public broadcasters will be constrained.

A reorganisation of France's international television services is being mooted in order to reduce the government's financial contributions. Indeed, a significant part of French TV's best programming is broadcast over the world by three different channels. Foreign sales of French television programming increased by 5.3 % in 1995 compared with 1994.

Conclusion:

The popularity of domestic fare in the schedules of France Television is likely to continue and indeed the proportion of domestic investment will increase, despite constraints on the programme budget arising from a freeze on licence fee increase during 1997. Sustaining the proportion of EU product is the launch of new channels by France Television. Allied to this is the continuing prosperity of TF1 which continues to invest heavily in local productions in a bid to sustain current audience share.
In conclusion, we believe the EU share of revenues will grow moderately, though constrained by public finance constraints.

Cinema

Indicators:

no. of films produced annually: 141 (1992: 155)

Multiplex screens as proportion of total screens: 13.8% (1992: 11.1%)

number of film distribution companies: 155

EU share of box office revenue (ECU million): 133.7 (1992: 109.8)

Indigenous Films' share of national home market: 35.4%
Average indigenous Films' share of national home market 1990 - 1995: 33.6%

Market Discussion:

The French film industry outputs an average 140 films per year, which makes it the most prolific film making nation in the EU.

French films do admirably well in the EU with an average 10.4% share of total revenues for the period 1993-1995. Indeed, this share increased to 11.7% in 1995.

Not only do French films do very well in the EU, but they also perform exceedingly well in their domestic market with an average share of 33% for the period 1990 - 1995. Indeed, the latest statistics from France show that a staggering 68% of box office revenues during May 1996 were taken by home-produced films. This trend may be sustained following the record breaking number of French film productions since 1993 during 1996. A total of 127 films began shooting between January and September, with a further 12 expected to start in October and four in November.

A possible inhibitor to further growth in the domestic independent film production may be the amendments to the tax-break laws to limit the amount of funds which can be "sheltered". About 30% of independent production investment is sheltered.

The French multiplex exhibition structure is still under-developed in an European context. The proportion of multiplex screens is set to increase to 18.4% over the next 2 years. The fact that all three exhibition majors in France (Gaumont, Pathe and UGC) are vertically integrated with distribution and production activities, is a key reason why the exhibition of the US majors skipped France when they hopped from the UK en route to the continent and ensures a greater share of EU revenues been retained.

Conclusion:

The strong success rate of French film production and increasing multiplex build should help to overcome recent proposed amendments to taxable financial contributions that have helped the industry flourish. On the main, we expect the EU share of revenues to continue.

Video Rental

Indicators

EU share of box office revenue (ECU million): 133.7 (1992: 109)
EU share of video rental revenue (ECU million): 23.9 (1992: 23.4)

Market Discussion:

The video rental market in France is well developed and is not expected to grow in real terms. However, the strong success in the box office has lifted the EU share of revenues in the rental sector, which have historically being very respectable. In addition, there has been an effective doubling of new titles in 1995.

Conclusion:

On the basis of the continuing success at the box office of EU product and the increased volume of new titles, we believe that the EU share of revenues will continue the current trend.

Video Sell-through

Indicators:

EU share of video sell-through revenue (ECU million): 205.2 (1992: 304.5)

No. of new titles released: 1000 (1994: 1000)

Market share by genre (%)	1993	1995
Feature Films	44	43

Market Discussion:

The video sell-through industry is booming in France. However, the most recent figures for sales of videos show that US titles generated 85% of total distributor revenue with 18 of top 20 titles of US origin.

Video sales in France are dominated by the hypermarkets with sales of some 40-60%. Value of sales has risen by 16% in 1996 compared with 1995.

The market has developed to a respectable 55% - 45% split between non-film and film type, respectively. The children's category represents 41% of video sales.

Video producers with "cultural "agenda" receive subsidies resulting from 2% levy on distributors revenues allowing the production of a number of video programmes which might not otherwise be produced. Discussions are in hand about widening this scheme.

Conclusion:

The continuing supply of new titles in the non-film sector and the encouragement of further development of the 'culture' genre video sector will ensure continued growth of the EU share of revenues.

Pay TV:

Indicators:

EU pay TV programme budget ECU million: 67.8 (1994: 43.4)

Year since pay TV introduced: 12

Pay TV subscribers: 4 million

Number of pay TV operators: 1

Market Developments:

Canal +'s success is due to a heady mixture of top movies and major sports coverage. In 1994, the split of transmission hours by programme type was; Films 44.2%, Sports 8.6%, TV Movies 8.2%, Talk Shows 9.1% and children's 8.2%.
Since January 1995, Canal+'s annual film maximum has risen from 364 to 416 movies, with a maximum eight transmissions per fortnight. As part of the requirement in Canal+'s licence renewal, the channel must gradually increase its budgets for French fiction from 1.8% of total budget in 1994 to 4.5% in 1999.
Canal+ buys on a film-by-film basis from all the major studios. In 1995, the operator acquired a library of 300 films, mostly US stock from Panavision, 1000 hours of TV programs and 450 feature films from De Laurentis Entertainment. They are also in negotiations with French major UGC for the purchase of its library, UGC-Droits Audiovisuels. In accordance with French law, at least 40% of programs must be produced in France and at least 60% of the total must come from EU countries.
Sports are also a draw, with the channel owning the rights to 38 live domestic league soccer games per season. Their sports budget has doubled Canal+ screens unscrambled programs for four hours daily.

Canal Plus launched its digital TV package in April 1996 and has 160,000 subscribers already, which is ahead of their end of 1996 target of 100,000 subscribers. Increasing number of highly targeted channels are launching in France. Seasons, channel dedicated to hunting, shooting, and natural history, launched on 1 November 1996 on CanalSatellite. Most of budget will be spent on acquisitions though there will also be a co-production of 10 series, expected in 1997. Demand for such programming in France was proved in early 1990s when TF1 achieved sales of over 800000 units for similiarly-themed videocassette series.
Spectacle, home shopping channel concentrating on cultural products, was launched in November, also on CanalSatellite. Schedule comprises 15-minute modules promoting products connected with aspects of arts, sport and multimedia. Channel, which has a budget of FFr 25million for first year, aims to generate FFr 18 -20 million annually

Canal Plus also has interests in film and television programme production through Ellipse Programme and Le Studio Canal+, which is active in France and has co-produced content in the US. It has started to distribute this programming on video. In November 1995, the company announced a television programming joint venture with TCI of the US and Compagnie Generale des Eaux. The partners are creating new channels such as Voilà, an English - language channel about European culture and fashion, targeted at the US market.

Canal Soleil, a general entertainment channel, aimed at viewers over 50, will be launched in May 1997.

Anxious not to let CanalPlus dominate the digital TV market, the remaining main players formed a competing digital alliance called TPS, set to launch as a satellite and cable package by Christmas 1996. TPS has signed exclusive agreements with Paramount and MGM worth Ffr80m-Fr100m and FFr 70m annually, enabling it to break Canal Plus's monopoly on first run movies. The deal with Paramount gives TPS and TCM Droit Audiovisuels - a joint venture between TF1, M6 and CLT-exclusive rights to the studio's output, plus access to library material and some Viacom -Paramount channels. TPS has also agreed exclusive deal with public terrestrial channels France 2 and France 3, whose parent company, France Television is eight percent shareholder in TPS. Other proposed pay services include bouquets of key European channels, Mediterranean channels and English-language channels. TPS also plans interactive services, including programming guide, home shopping and weather, and PPV films and sporting events.

Another digital package is being mooted by French production company AB Productions, consisting of a large number of thematic channels.

Conclusion:

The opportunities for European product in the French pay TV sector were never so great. The continued success of pay TV in France and the flurry of new channel launches in new digital services including thematic channels will ensure continued growth of revenues flowing to European industry. Whilst sports PPV will be a major driver in attracting subscribers, movies in which the French industry own the rights, will enable the industry to prosper. In parallel, major opportunities exist for the French producers in the provision of content for thematic channels and home shopping. In conclusion, we believe this sector will exhibit continued growth over the next 10 years.

Multimedia:

Sales by genre: Games: 61%

CD-ROM and CD MM Publishers: 80

EU share of video cartridge game revenue ECU million: 17.6 (1992: 44.8)
EU share of CD-Console revenue ECU million: 8.9 (1992: 2.5)
EU share of multimedia CD-ROM revenue ECU million: 17.3 (1992: 0.6)

Market Developments

The French retail channels for CD-ROM are highly concentrated, with 80-90% of sales accounted for by eight retail groups. The number of CD-ROM retail outlets in France increased from 1700 in 1994 to 2600 in 1995.
Super/hypermarket chains are increasingly moving into CD-ROM retailing, having been responsible for 65- 70% of video games cartridges sales.

Despite the highly concentrated character of the French retail environment, distribution is complicated by the fact that very little buying is done centrally. Large retail groups may agree to 'list' products, but it is often up to each individual store manager to make the ultimate stocking decisions. French retailer margins are generally lower and publisher margins higher than in other countries.

As in other markets, the French distribution sector has been going through a shake-out and restructuring. An ambitious CD-ROM distributor called Euro-CD (with exclusive deals with companies like Montparnasse Multimedia and Arborescence) collapsed in November 1994, probably as a result of being too early into the CD-ROM market. A major wholesaler / distributor, Innelec could not survive in 1995. In general terms, there has been a shift away from general wholesaling towards exclusive deals (like the UK). An example is the shift of emphasis of the Ubi Soft group from its Guillemot International wholesale distribution business to concentrate on its own development, publishing and affiliate label distribution through Ubi Soft.

France is world renowned for innovative and talented games developers. However, they have generally been held back by a lack of ready investment capital. Without the levels of finance routinely available to US and UK developers, it is difficult to compete internationally. Consequently, many of the most outstanding French-produced games have been financed by non-French publishers.

The number of French CD-ROM releases increased from 400 in 1994 to 1400 in 1995.

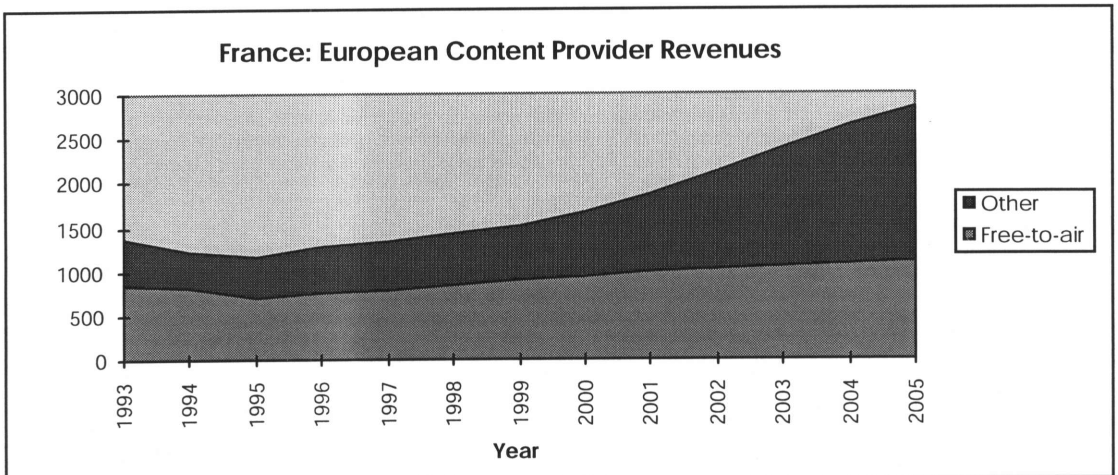
A distinctive feature of the French market is the importance of non-games sector. it is estimated that 18-22% of all sales are accounted for by art / culture titles, the second biggest market sector after games (61%). Edutainment accounts for 12% of sales.

For most CD-ROM importers, localisation into French is vital. To illustrate this, Broderbund's blockbuster CD-ROM Myst sold only 6000 copies in its original format, while the French version has sold over 20,000 units.
The relatively small size of the French-speaking market makes the economics of French-language edutainment difficult. However, the outstanding success of Le Louvre demonstrates that it is by no means impossible for the product.

Conclusion:

The EU share of revenues from this rapidly developing sector is expected to prosper in the next 10 years. The increasing supply of local titles together with a distribution structure that favours publishers will encourage growth of EU revenues. As the industry overcomes some of its capital investment problems, indigenous industry will benefit greatly.

Summary:



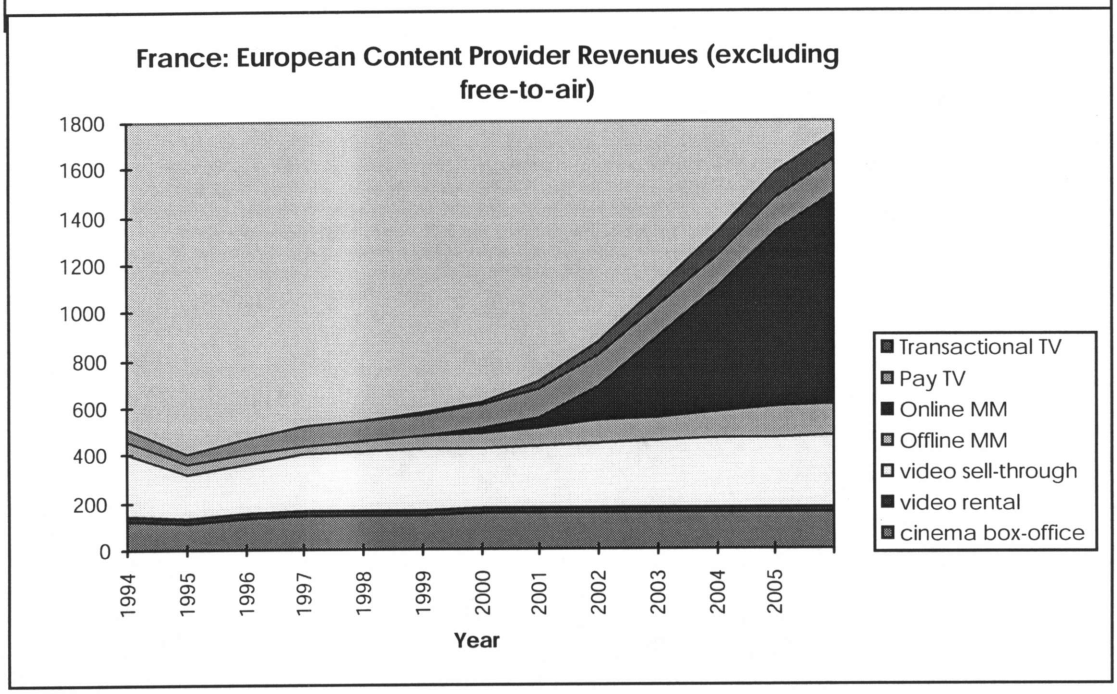


Exhibit 6.4: European Content Provider Revenues: France

Free-to-air television is currently a less significant revenue source for European content providers in France than in any of the other countries of our study. In 1995, it accounted for 59% of total industry revenues, a figure which is expected to fall by 2005 to just 38% as other revenue sources continue to grow in importance (Exhibit 6.4).

Exhibit 6.4 shows the detailed breakdown of revenues sources other than free-to-air television. This shows the growing importance of online multimedia as a new revenue source for European content providers. Video sell-though is expected to remain an important though stable revenue source. The share of revenues captured by European content providers from the pay and transactional TV markets is expected to grow, though such revenues will continue to represent only a small fraction of the total.

Direct consumer AV expenditures are already more important in France than the study average, accounting for 44.5% of total AV expenditures in 1995. Their importance is expected to grow still further over the projection period such that by 2005 this figure has increased to 52.9%. This is good news for European content providers who can expect their share of these revenues to grow from 16.5% in 1995 to 28% in 2005.

6.5 Great Britain (GB)

Free-to-air - TV

Indicators:

Total programme budget: not known
European programme budget ECU million: 1711 (1992: 1643.8)

Market Discussion:

The 1990 Broadcasting Act created further competition by demanding that independent productions make up at least 25% of the non-news related programs on the terrestrial channels. The majority of programs on all channels must also be of European origin. The ITV channels are obliged to produce or commission 65% of material, with Channel 5 achieving this level by 2003.

The BBC prides itself on its own productions; 71% of prime time programs across its two channels were home produced in 1995, with 26% of the total coming from independent productions. Substantial re-organisation of production resources within BBC and ITV companies leading to extensive commissioning of product has resulted in a strong independent production sector in the UK which is also able to capitalise on its pivotal position in setting up co-productions with other European broadcasters.
BBC plans to launch 8 satellite digital channels in conjunction with Telecommunication Inc's UK subsidiary, Flextech, are now in hand and will provide additional sources of revenue for a wide range of existing BBC programming. Four commercial television digital multiplex licences are being created. Each multiplex will carry six channels. These channels are due to be operational in conjunction with 2 multiplexes to be operated by BBC and Channel 4 by mid-1998. All terrestrial broadcasters will have digital capacity. This will undoubtedly benefit both the national and EU industry.
ITV faces more competition as multi-channel services, such as BSkyB, erode audience shares. Further rivalry is on the horizon with Channel 5 and digital terrestrial transmissions. Advertisers and agencies, balking at falling audiences, demand action from ITV, including an increase in programme budgets. A big increase in programme budgets is expected in 1997 to counter Channel 5.
ITV wants to continue making high-quality programs but make them for less money. One suggestion to achieve this is paying producers 75% of the programme costs for a single showing, in return the producers would be free to re-sell the programme at a much earlier date. The network currently pays for an expensive five-year option, this is often unnecessary as most programs are shown only once.
The introduction of Channel 5 in 1997 which is planned to provide coverage to some 70% of the country will provide additional opportunities for European programming in the years ahead. The new service with access to Thames's studios and Australian producer Grundy, will spend £110 million annually on programs. Channel 5 also has a deal with the BBC for archive programming.

Both Granada and Carlton added new businesses to their ITV licences in 1996. In October, Granada launched Granada Sky Broadcasting - consisting of one talk and general entertainment service and another channel divided up into strands on shopping, food, health gardening. As well as drawing on Granada's library, the new channels will feature a large amount of original programming which has, so far been in short supply on satellite TV.

Conclusion:

The increased savings resulting from the efficiency drive and re-organisation of BBC will result in greater programme budgets and will further enhance in-house and independent sector production. Also, the increased competition arising from additional channels such as Channel 5 and expected launch of DTT will not only provide additional opportunities to the EU sector but will also have the effect of increasing output of EU product on the existing channels as they defend their audience shares. The extensive library of rights by the UK broadcasters will ensure a significant proportion of programs to be screened on the new channels will come be of European origin and one would not expect the usual reliance of imported product to exist in this case.
Underpinned by a vigorous independent production sector providing necessary injections of creative content and the increased activity in the launch of new channels and specific interest programmes, the EU industry will benefit from sustained growth of revenues over the next ten years.

Cinema

Indicators:

no. of films produced annually: 76 (1992: 42)

Multiplex screens as proportion of total screens 45.4% (1992: 41.1%)

number of film distribution companies: 47

EU share of box office revenue (ECU million): 10.4 (1992: 5.8)

Indigenous Films' share of national home market: 8.8%
Average indigenous Films' share of national home market 1990 - 1995: 5.68%

Market Discussion:

Traditionally, UK film production has suffered from lack of national investment relying on US investment with the consequence that revenue flows often return to the US rather than supporting new local production.

Increased investment from broadcasters (eg BBC and Channel 4) needing to stockpile assets against increasing competition for rights as channels multiply, together with proposed investment funding from the National Lottery, may finally produce levels of UK investment resulting in an increased level of production, leading to a larger share of distributor revenues remaining in UK during the next 5-10 years
The number of films produced in the UK has been steadily climbing over the past three years. Production of feature films in the UK has traditionally been divided between those productions which are wholly US funded but are made in the UK because of lower costs and those produced by UK producer companies. Often the latter are also financed by US money.
Latterly there have been increasing levels of investment by television interests (for instance six of the ITV companies are investing £100 million over next five years in feature film production). The proposed investment by the National Lottery will enable the setting up of a small number of "franchised" production companies. It is hoped that this scheme will overcome traditional problems of under investment with consequential lack of continuity.

The film production investment continues to grow from approximately £132 million in 1993 to £309 million in 1995.

UK films do reasonably well in Europe with an average share of 5.2% of total revenues for the period 1993-1995. Surprisingly, UK films made more money in France than they did in the UK for all three years 1993, 1994 and 1995.

In the domestic market, UK films have a consistent market share of 8.5% during the last two years. The UK has a highly developed exhibition structure with 47% of screens been multiplexed and further growth is envisaged.

Only about 10% of income for feature film producers emanates from the cinema. The rest is from television, from the video rental and video sell-through markets and from pay-television. Producers hope to see, in the longer term, increased revenue from VOD and NVOD with the expectation that a greater share of this revenue will accrue directly to them because of the nature of these technologies.

Conclusion:

The UK film industry continues to prosper and is being targeted for special funding by Lottery funds. The economic prospects for the creatively successful film producer are set to continue to improve gradually over the next 5-10 years whether or not VOD or NVOD come on stream. Should these technologies come on stream earlier the prospects for growth will be enhanced.

Video Rental

Indicators

EU share of box office revenue (ECU million): 10.4 (1992: 5.8)
EU share of video rental revenue (ECU million): 6.1 (1992: 5.1)

Market Discussion:

The market for video rental is very well established. Although the rental industry continues to consistently decline since 1991, the flow of revenues to EU industry, with the exception of 1994, appears to have stabilised, reflecting in general the trend in EU share of cinema box-office revenues.

Conclusion:

It is thought that the continued efforts to open up additional distribution channels, including automated video rental kiosks, and continued success at the box office may slow the overall decline and at best sustain the EU share of revenues for the next 5 years. In the following five years, decline of EU revenues is inevitable.

Video Sales

Indicators

EU share of video sell-through revenue (ECU million):230.9 (1992: 295.7)
No. of new titles released: 4000 (1994: 3522)

Market share by genre (%)	1993	1995
Feature Films	30	40

Market Discussion:

The sell-through market is set to continue its prosperity.
The increased amount of product released in 1995, the aggressive marketing techniques adopted by the major distributors and an impressive drop in video piracy are the main reasons for dramatic increase in the EU share of revenues in 1995. Feature film video sales increased 40% over 1994. In addition, an increasing amount of product was released straight to video last year.

Conclusion:

On the basis of the above developments, we believe the EU share of revenues will continue to grow over the next 10 years.

Pay TV:

Indicators:

EU pay TV programme budget (ECU million): 18.2 (1993: 4.2)

Year since pay TV introduced: 7

Pay TV subscribers: 3 million

Number of pay TV operators: 1

Market Developments:

BSkyB has £1.58 billion committed to movie and sports rights under contracts extending for 15 years from June 1995. The premium services, movies and sports, attract the most interest to potential subscribers. The two premium film channels, The Movie Channel and Sky Movies, have long term contracts with all the major studios until the next century. BSkyB has UK TV premier rights to 97 of the 1994 US top 100 box office movies. Several deals are in operation with European suppliers, and BSkyB claims to be Britain's largest film financier, having spent £13 million in 1994.
General entertainment channel, Sky One, co-financed 1000 hours of programs in 1994/1995 with ZDF, Antena 3 and other European producers. The channel also revamped its children's schedule in the face of mounting competition from Disney, offering 10 hours of original children's programming at the weekend.
BSkyB continued to be the dominant supplier of programming to the 5.5 million homes equipped to receive satellite TV. The company extended its deal with soccer's English Premier League for a further four years, paying $1billion from the 1997/98 season. It also signed a controversial deal with the English Rugby Union, worth $131 million over five years. These exclusive sports deals will not benefit EU content industry directly.

First UK experiment in PPV sports by BSkyB was seen in 600,000 homes and 2,000 clubs (or 14.4% of all BSkyB subscribers). In addition, a more recent PPV sports event was also a resounding success. However, none of these PPV events contribute anything directly to the flow of revenues to EU industry. In a surprise statement from BSkyB, it has stated that 'there are no imminent decisions and no surprise announcements in the pipeline' for PPV Premier soccer. They have however, secured exclusive PPV movie rights from Twentieth Century-Fox, its corporate sister, to be exploited in the future.

In a separate development, UK cable industry is seeking to tie up exclusive PPV deals with movie studios in US. Operators have indicated they would rather pay more for PPV rights direct than secure them indirectly through carriage of BSkyB service.

Conclusion:

BSkyB is following the typical economic cycle of content by supplying an increasing proportion of European content rather than the almost total reliance on US imported product, as evident in the initial years of the service. This trend is indicating the maturity and success of the UK pay TV market. In particular, the increasing production and supply of UK and co-produced European product will enable continued growth of the EU share of revenues. Although the resounding success of sports and US owned movies drives BSkyB and therefore contributes very little to the EU industry, they do serve to develop an audience with a critical mass. In the longer term, we do believe this will lead to more European programming opportunities that will suit other sectors of the TV audience.

Multimedia

Sales by genre: Games: 80%

CD-ROM and CD MM Publishers: 206

EU share of video cartridge game ECU million: 16.1 (1992: 4.1)
EU Share of CD-Console revenue ECU million: 8.9 (1992: 0.7)
EU Share of multimedia CD-ROM revenue ECU million: 26.3 (1992: 0.2)

Market Developments

During most of its history, distribution in the UK console and computer games business has been dominated by relatively small, specialist wholesalers. With most retailers unwilling or unable to devote the necessary resources and expertise to games publishing, these wholesalers performed the vital role of selecting titles and making key decisions about stock volumes. Retailers would be able to take stock from a choice of wholesalers, but were able to avoid having to separately negotiate with 50 or more individual publishers.

However, as the market has developed and moved into the CD era, retailers generally have themselves become more sophisticated about their purchasing - particularly with the increasing importance of specialist software stores. At the same time, the proliferation of software releases and consequent intense battle for shelf space has resulted in larger publishers demanding more individual attention and support for their products. The net result is a shift closer to the video distribution model in which the larger publishers primarily use one exclusive distributor to physically move their stock out to the trade and use their own sales teams to deal directly with the key retail accounts, leaving independents to be handled by the exclusive distributor/wholesaler.
A consequence of this is likely to be the steadily increasing importance of mainstream entertainment product physical distributors like Polygram, Warner Music, BMG etc.
Another consequence is a squeeze on the traditional wholesaler-distributors, with companies like Leisuresoft and Greyhound experiencing difficult times.

There are estimated to be a total of around 4000 retail outlets for video games and CD-ROM, of which 3600 belong to chains and 400 are independents. Book store channels in UK have so far been disappointing for CD-ROM distribution. They usually demand unusually tough terms of trade (50% margins and 'sale or return' ordering). There is a growing overlap between retail channels for mainstream entertainment products (music and video) with interactive software.

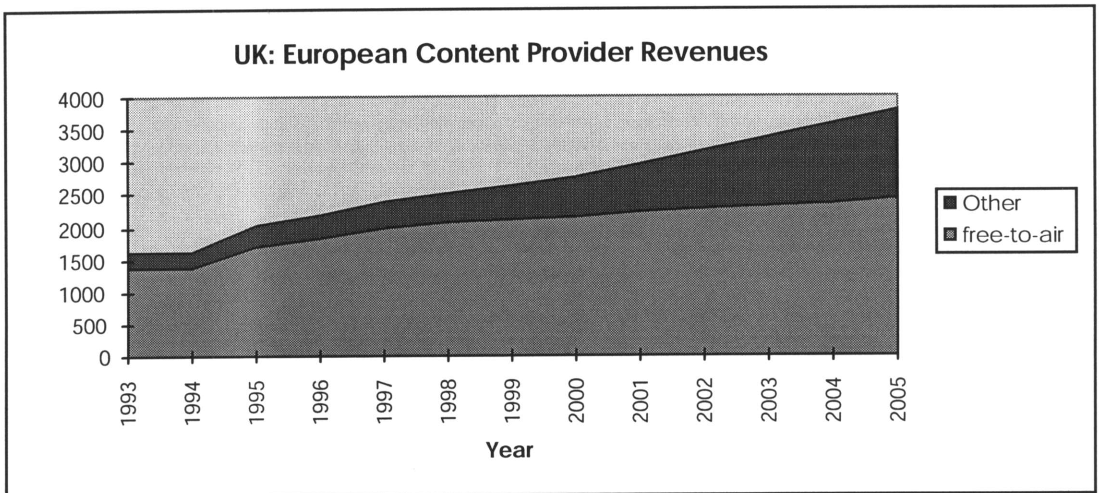
The UK has the richest base of developers and publishers in Europe. There is a strong tradition of leading edge game development, as well as a long history of non-game multimedia creation stemming in part from origins in video disc-based interactive video.

Edutainment or non-games titles now account for around 20% of PC/CD-ROM software sales in UK. Total CD-ROM market has grown by 341% over 12 months to June 1966 and now accounts for 47% (up from 16% in June 1995) of all interactive software sales. Of the 2,360 CD-ROM titles now listed, over 40% are non-games. Three companies account for 66% of all sales in both reference and education sectors. The extensive practice of bundling, whilst decreasing, continues to deprive developers of necessary income.

Conclusion:

Before revenue flows to producers reach a sensible level it will be necessary for the technology to stabilise, for the practice of bundling to be substantially reduced and for improved marketing to generate better levels of actual sales. The strong indigenous base of multimedia producers and the developing distribution structures will ensure a continued generation of EU share of revenues for the next 10 years.

Summary:



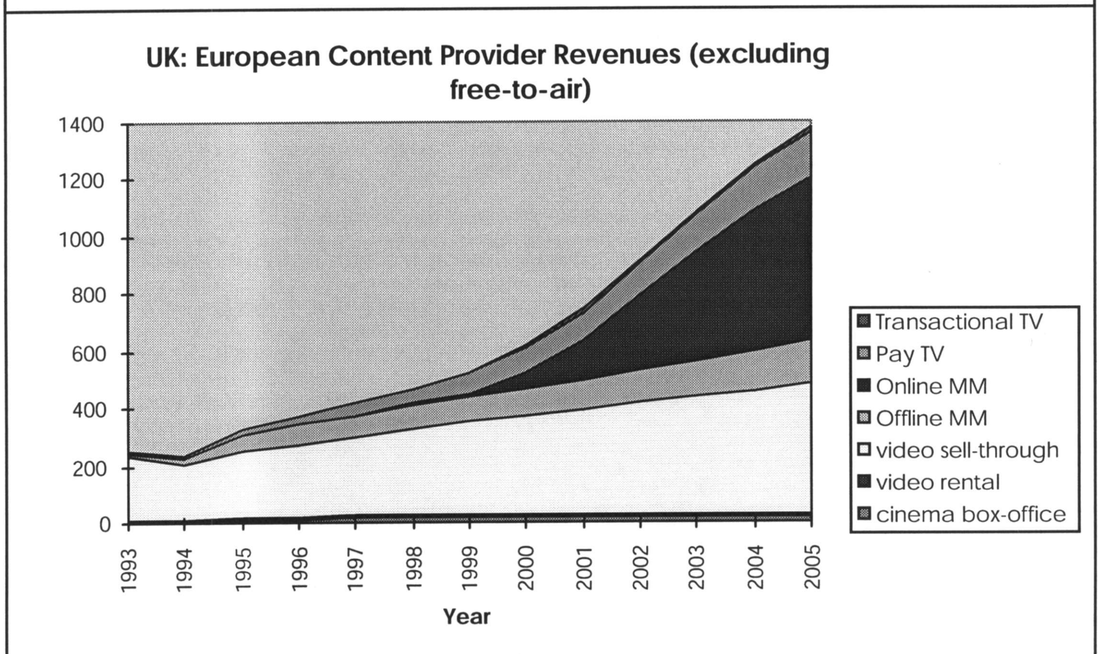


Exhibit 6.5: European Content Provider Revenues: GB

The continuing importance of free-to-air television as the major revenue source for European content providers in GB is shown in Exhibit 6.5. Other AV sectors are expected to grow in importance, and by 2005 account for 36% of total industry revenues.

The detailed breakdown of revenue sources other than free-to-air television is provided in Exhibit 6.5. This shows online multimedia as the major growth sector, with offline multimedia, video sell-through and pay TV all significant.

Direct consumer AV expenditures are expected to grow significantly in importance over the period, such that their share of total AV expenditures increases from 34.5 in 1995, to 49.0% in 2005. European content providers are expected to increase their share of this growing market from 10.5% in 1995 to 19% in 2005.

6.6 Ireland (IE)

Free-to-air - TV

Indicators:

Total programme budget (ECU million): 105.1 (1992: 91.1)
European programme budget (ECU million): 93.5 (1992: 77.4)

Market Discussion:

Ireland's TV market is seeing new channels coming on air, complementing the two RTE services. Telefis na Gaeilge (TnaG), an Irish language terrestrial service, obtains one third of its output from RTE, free of charge and re-voices many European programs into Irish. The channel broadcasts three hours of live programming each night.
The station has been a boon for independent TV production commissioned in Ireland. Even before going on air, it had commissioned £9 million worth of programs from Irish independent production companies. During the day time, the channel will be developed for distance learning and specialised viewer interests. The estimated demand for TV programming commissions in 1997 is £ 7 million

The next big development for Irish TV will be in TV3, the new terrestrial channel being launched for the Republic as direct competition for RTE. This will present an abundance of opportunity for production companies in Ireland. It is estimated that the demand for TV programming will be £2 million a year.

RTE 1 predominantly screens general entertainment programming, while Network 2 specializes in sports and children's programs. RTE's domestic slant in the scheduling keeps the broadcaster at the top of the ratings , with a combined share of 60% in 1995. In 1995, independent producers received ECU 8 million from RTE. By 1998, about 20% of all RTE's programming sourced in Ireland must be obtained from independent production companies. Local production is increasingly important to all broadcasters, with BBC Northern Ireland taking advantage of the tax break, Section 35, by producing programs in the South.

Conclusion:

The continuing growth in the European proportion is secured with the programme budget requirements for domestic product following the launch of new channel TnaG and the 1997 launch of TV3. Furthermore, the continuing increase in the in the RTE programme budget for product sourced from independent production companies ensures a healthy future for the EU producers.
We believe that the EU share will continue to grow over the next ten years.

Cinema

Indicators:

no. of films produced annually: 22 (1992: 4)

Multiplex screens as proportion of total screens: 38.4% (1992: 25.6%)

number of film distribution companies: 10

EU share of box office revenue (ECU million): 1.1 (1992: 0.5)

Indigenous Films' share of national home market: 8%
Average indigenous Films' share of national home market 1990 - 1993: 5.3%

Market Discussion:

The number of films produced in Ireland has consistently grown since 1992, when the Government introduced a special policy and aids to benefit the film industry. This has in the main worked and as a consequence, film production investment has increased from £ 50 million in 1993 to £ 75 million in 1995. In Ireland, feature film production benefits from generous tax benefits.

The high proportion of screens that are multiplexes is set to increase in the next few years to approximately 44%. This represents a relatively mature developed state of the exhibition structure.

Although the share of EU box office revenues is minuscule, recent 'hit' movies is expected to dramatically improve this position in 1996 and 1997.

Conclusion:

Based on recent domestic film success, an increasing number of multiplex cinemas and expanding film industry, the EU share of revenues is set to be maintained and to rise.

Video Rental

Indicators:

EU share of box office revenue (ECU million): 1.1 (1995: 0.5)
EU share of video rental revenue (ECU million): 1.4 (1992: 0.7)

Market Discussion:

Although the rental industry is buoyant in Ireland, the share of EU revenues is minimal, though growing. The thriving film industry in Ireland by local producers and recent success in the box office should improve the proportion of revenues to local producers considerably in the near future.

Conclusion:

The EU share of revenues is expected to grow at current rates over the next ten years.

Video sell-through:

Indicators

EU share of video sell-through revenue (ECU million): 7.5 (1992: 11.1)
No. of new titles released: 581 (1994: 261)

Market share by genre (%)	1993	1995
Feature Films	40	30

Market Discussion:

The Irish market is one of the most developed in the sell-through sector in that it has attained a split of approximately 70% for non-film type titles, as opposed to the EU norm of 50%. In addition, there is a dramatic number of new titles available with an effective doubling between 1994 and 1995.

Conclusion:

Based on the continued development of a supply of new titles in the niche, non-film sector, the continued growth of EU share of revenues is expected.

Pay TV:

Indicators:

EU pay TV programme budget ECU million: 0.2 (1993: 0.03)

Year since pay TV introduced: 4

Pay TV subscribers: 52,500

Number of pay TV operators: 1

Market Developments:

Pay TV services in Ireland are provided by BSkyB and most revenues resulting from programming return to them in the UK

Pay TV may be launched by the state broadcaster in five years time. It is likely that there will be benefits arising from this to the European content industry.

Conclusion:

The EU share of revenues is expected to continue to grow at the current rate in the first five years and at a higher growth rate in the second five years.

Multimedia:

Sales by genre: Games: 80%

CD-ROM and CD MM Publishers: not known

EU share of video cartridge game revenue ECU million: 1.3 (1992: 3.1)
EU Share of CD-Console revenue ECU million: 0.6 (1992: 0.0)
EU Share of multimedia CD-ROM revenue ECU million: 0.8 (1992: 0.0)

Market Developments

Ireland has a strong indigenous localisation industry within the software industry which is strategically being developed to capitalise on localisation opportunities in the multimedia sector.

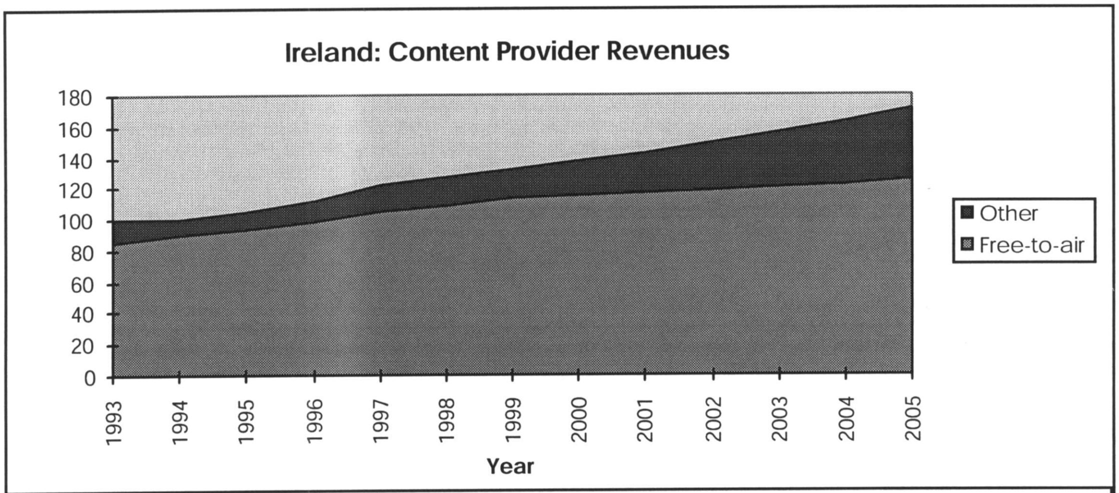
It is estimated [7] that 41% of the software industry is currently engaged in some way in the content industry in 1995.
The Government is in the process of formulating a policy on how to encourage the development of the multimedia content industry in Ireland.

Conclusion:

As in the software business, we believe the market will continue prosper and the flow of revenues to EU industry will continue at the current rate for the next 5 years. In the second five years, we believe the market will grow at a higher rate as the industry benefits from National measures to develop it.

Summary:

[7] Content Industry in Ireland, X Communications, 1996



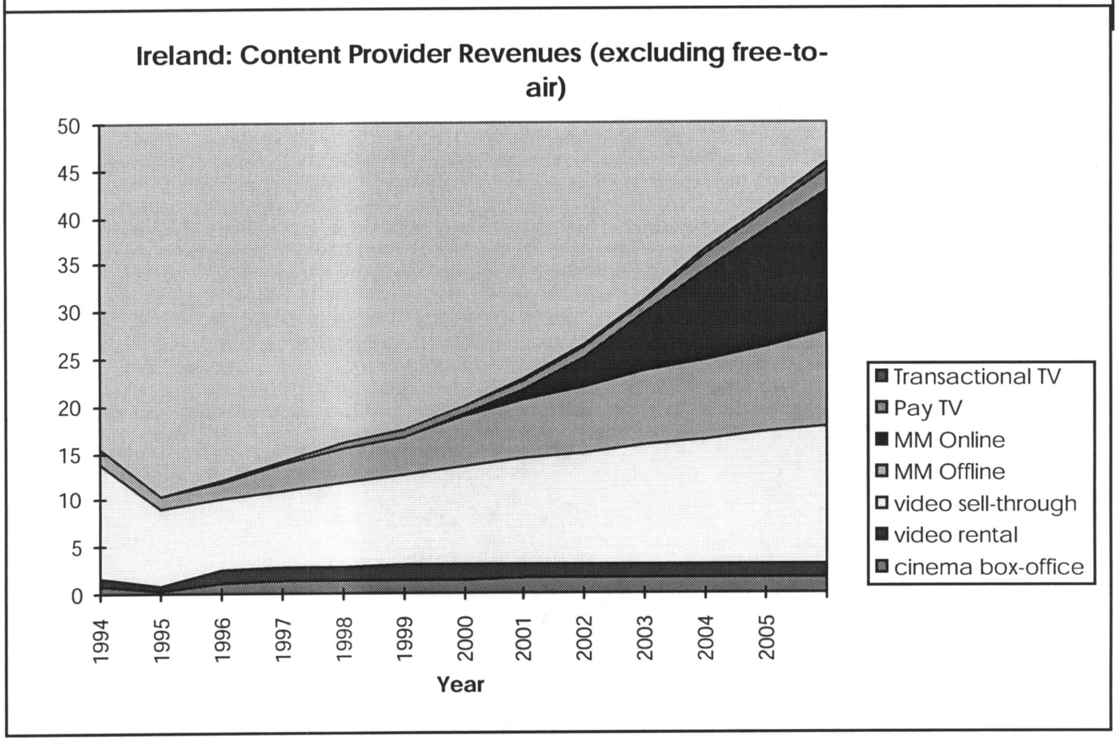


Exhibit 6.6: European Content Provider Revenues: Ireland

Exhibit 6.6 shows the continued strength of free-to-air television as the major revenue source for European content providers in Ireland. Other AV sectors are growing in importance, but by 2005 still account for only 27% of total industry revenues.

Exhibit 6.6 provides a detailed breakdown of AV revenues sources excluding free-to-air TV. The major growth sector is online multimedia, with offline multimedia and video sell-through also representing significant revenue sources.

Direct consumer AV expenditures share of total AV expenditures is already higher in Ireland than the study average at 44.2% in 1995 (reflecting in part the strength of the video rental sector). Their share of revenues is expected to grow still further to 53.9% by 2005, with the main growth coming in sectors other than video rental. This is good news for European content providers who can expect their share of these revenues to nearly double from just under 9% in 1995 to over 17% in 2005.

6.7 Italy (IT)

Free-to-air - TV

Indicators:

Total programme budget ECU million: 1196 (1993: 1322)
European programme budget ECU million: 1069 (1993: 1175)

Market Discussion:

With audience shares so close, RAI and Mediaset main channels can be paired off into broadly similar categories. RAI 1 provides general entertainment, RAI 2 caters for the youth market and RAI 3 concentrates on regional and innovative programming. Financial stability and increasing audiences brought a flurry of activity at RAI, with an aggressive production and scheduling plan. Program budgets rose by 10% in 1995 to increase in-house productions. The broadcaster aims to decrease airtime devoted to acquisitions from 69% to 60%, while increasing in-house productions from 36% of the schedule in 1995 to 53% in 1996. RAI increased its investment in drama by 66% in 1996. The broadcaster will move into children's programming as well as major new co-production agreements. The ever-popular Italian variety show still rules the airwaves, and is also seeing international success. RAI's distribution arm, SACIS, is compiling a catalogue of shows that can be easily formatted and sold, to cash in on such success. Including news programs, more than 75% of RAI's output is domestic.

US acquisitions constitute one-third of Mediaset's output, though the company is increasing domestic productions, especially movies with top Italian directors in 1995 and 1996.

Both RAI and its competitor Mediaset, secure programming rights as a main priority and strength in their strategy for control.

As Italian production has slipped to a low ebb, new legislation is being passed to develop the industry;

- State broadcaster RAI will have to invest 20% of its licence fee into European production (equivalent to L480 bn a year).
- Private broadcaster Mediaset will be forced to invest 30% of its resources into production (equivalent to L200 bn a year)

In 1996, RAI's production budget is L 238 bn and Mediaset's budget is L 100 bn.

While the country contemplates the future of its established broadcasters, Italy's renowned film producer Vittorio Cecchi Gori, began to manoeuvre his company into the TV business. He has set a target audience share of 4-4.5% by providing a network of regional programming. This will provide additional opportunities for the Italian production industry.

Conclusion:

The continuing growth in domestic productions of both RAI and Mediaset are good signs for the recovery of the EU programme budgets. However, more dramatic, is the implications of new government legislation which will effectively double the domestic production budgets of both broadcasters from 1997 onwards. Furthermore, activities of the Cecchi Gori group will also benefit the Italian production industry. In conclusion, we believe the European proportion of revenues are in for a period of sustained economic growth over the next ten years.

Cinema

Indicators:

no. of films produced annually: 75 (1992: 127)

Multiplex screens as proportion of total screens: 0.7% (1992: 0.8%)

number of film distribution companies: 64

EU share of box office revenue ECU million: 91.8 (1992: 78.5)

Indigenous Films' share of national home market: 23.7%
Average indigenous Films' share of national home market 1990 - 1995: 22.6%

Market Discussion:

The number of films produced in Italy have been consistently decreasing since 1993. Correspondingly, the film production investment has decreased from L361,327.0 in 1993 to L237,000.0 in 1995.

Draft legislation spearheaded by Italy's deputy Prime Minister proposes to;

- boost Italian film production through tax breaks to boost production of the arts in general and cinema in particular, to open the door for a sustainable private sector funded film industry

- agree with multiplex operators to establish quotas bringing back 'compulsory programming' for Italian films, that was abolished two years ago

- improved efficiency assist planning and construction of multiplexes

- open up the cinema market, especially in main cities, to reduce above European average cinema ticket prices.

Italian films have consistently maintained a substantial share of the national market at around 22.6% for the period 1990-1995. .However, they have not sustained their earnings consistently well, elsewhere in Europe, varying between 4.1% share of EU total revenues in 1994 to 0.3% in 1995. Italy's best domestic markets are Switzerland - parts of which are Italian speaking and Greece.

Until recently the building in Italy of multiplex cinemas was impeded by planning and licensing restrictions, which have now been lifted. Assuming a development pattern analogueous to other EU countries, the number of screens and opportunities to show national product may enhance EU share of revenues.

Conclusion:

The environment for developing the EU industry has not being very positive in recent years. However, we believe with the political commitment given to develop the film production industry, the development of multiplexes and the market place will enable a re-birth of the Italian industry. Encouraging this growth is a substantial Italian audience who are attracted to local films.

Video Rental

Indicators

EU share of box office revenue ECU million: 91.8 (1992: 78.5)
EU share of video rental revenue ECU million: 25.8 (1992: 28.4)

Market Discussion:

The rental industry has been forced into premature decline in Italy because of the widespread practice of selling videos through the kiosk market at a nominal charge and a decline in Italian film production that has hit the box office.

However, the industry is confident that with a major promotion and advertising campaign in 1997 and a range of quality product, the decline may be halted, at least initially. Indeed, the number of new titles released has increased from 300 in 1994 to 320 in 1995. The rental industry should also benefit from the expected increase in the number of Italian films being screened in the forthcoming years.

Conclusion:

We expect the rental industry to make a comeback and halt the decline temporarily as a result of a wide number of measures. Consequently, we expect the EU share of revenues to grow marginally. Nevertheless, the decline in the EU share is inevitable in the latter part of the 10 years, following the overall video rental trend.

Video Sell-through

Indicators

EU share of video sell-through revenue (ECU million): 53.6 (1993: 142.7)
No. of new titles released: 650 (1994: 500)

Market share by genre (%)	1993	1995
Feature Films	51	35

Market Discussion:

The EU share of revenues slipped dramatically from ECU 142 million in 1992 to ECU 28 million in 1993, and remained at that level until 1994. The premature decline is thought to be driven by the kiosk market which sells the videos at a very low price with magazines. As a result, the revenues flowing back to the EU industry are negligible.

However, in 1995 the EU share of revenues increased to ECU 53.6 million. In that year, there was a dramatic increase in the number of titles released and a shift in sell through from feature films to animation.

Conclusion:

It is thought that by offering sell-through product that differentiates itself sufficiently from the kiosk market, this may enable continued growth of EU share of revenues in the next 10 years.

Pay TV:

Indicators:

EU pay TV programme budgets ECU million: 12.8 (1993: 4.7)

Year since pay TV introduced: 6

Pay TV subscribers: 850,000

Number of pay TV operators: 1

Market Developments:

Pay TV has been slow to develop in Italy. With so many free-to-air channels screening movies, Italians are reluctant to pay for TV. The terrestrial movie channel launched in June 1991, followed by a sports service Telepiu 2, in October 1991. Telepiu 1 has exclusive deals with Columbia TriStar, UIP and Warner Bros. Half the movies screened must be European and 25% Italian.

Telepiu's DStv venture earmarked for September '96 for its PPV and NVOD launch, offers soccer as the main prime content for attracting subscribers. The 40 channel service will have seven programme providers, including three Telepiu channels, MTV, CNNI, and Discovery. As Fininvest is a shareholder in Telepiu, with a substantial library of rights, it is felt they will be one of the main benefactor of royalties as the market grows.

As the Government deliberate over the future of the existing broadcasters, one possibility being raised as a consequence of compliance with the government's proposals is that RAI may be free to launch satellite and cable delivered pay TV channels.

Conclusion:

It is thought that the prospects for EU share of revenues resulting from pay TV in Italy look promising as both RAI and Mediaset have very substantial library of rights in European content, which will be distributed through Pay TV.

MM in Italy

Sales by genre: Games: 15%

CD-ROM and CD MM Publishers: 44

EU share of video cartridge game revenue ECU million: 2.8 (1992: 4.3)
EU Share of CD-Console revenue ECU million: 0.1 (1992: 0.2)

EU Share of multimedia CD-ROM revenue ECU million: 0.4 (1992: 0.5)

Market Developments

The Italian retail environment is considered to be the most fragmented in Europe, with very few chains and little centralised buying. The preponderance of independent retailers means than wholesalers have a key role in getting product out to the trade. Consequently, there is a complex distribution structure, with different layers of wholesalers and sub-distributors. Much of the selling to the trade is done by independent agents who work on commission and handle products from a variety of different publishers.

The complexities of the Italian market have inhibited most international publishers from setting up their own distribution operations. Computer stores account for 55% of Italian CD-ROM sales by outlets, with bookshops accounting for 16%, with the balance split almost equally between kiosks and direct mail.

Edutainment accounts for a massive 47% of CD-ROMs sold, followed by arts / culture 20%, games 15% and porn 18%.

The total CD-ROM market has undoubtedly been held back by a lack of Italian-language titles on offer. However, there is a broadening of the CD-ROM market to include more Italian-language edutainment, boosted by arrival of mainstream publishers. This represents an important opportunity for the Italian industry as there will be an increasing emphasis on both localisation of imported titles into Italian and particularly local publishing, to boost the market.

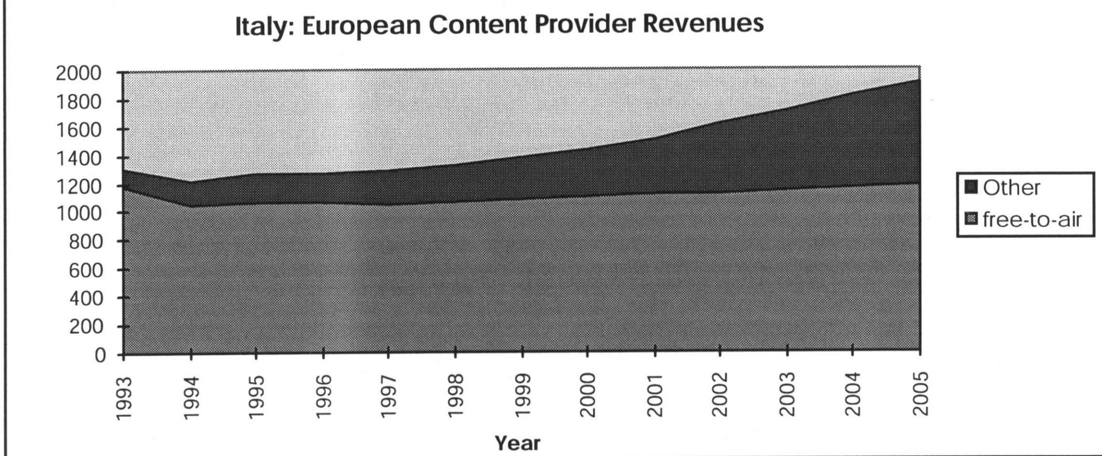
Italy has a small number of generally under-financed games developers. Many of these will likely find it difficult meeting the escalating performance targets of the MPC and new games consoles.

The edutainment CD-ROM development sector is generally much better financed, with several major Italian print publishers like RCS Editori, Arnoldo Mondadori Editore, and De Agostini moving in alongside television groups and Olivetti. However, there are expected to be an increasing number of deals done with foreign publishers to localise titles into Italian.

Conclusion:

The continuing availability of Italian titles and development of a more organised distribution structure should ensure increased growth in the EU share of revenues.

Summary:



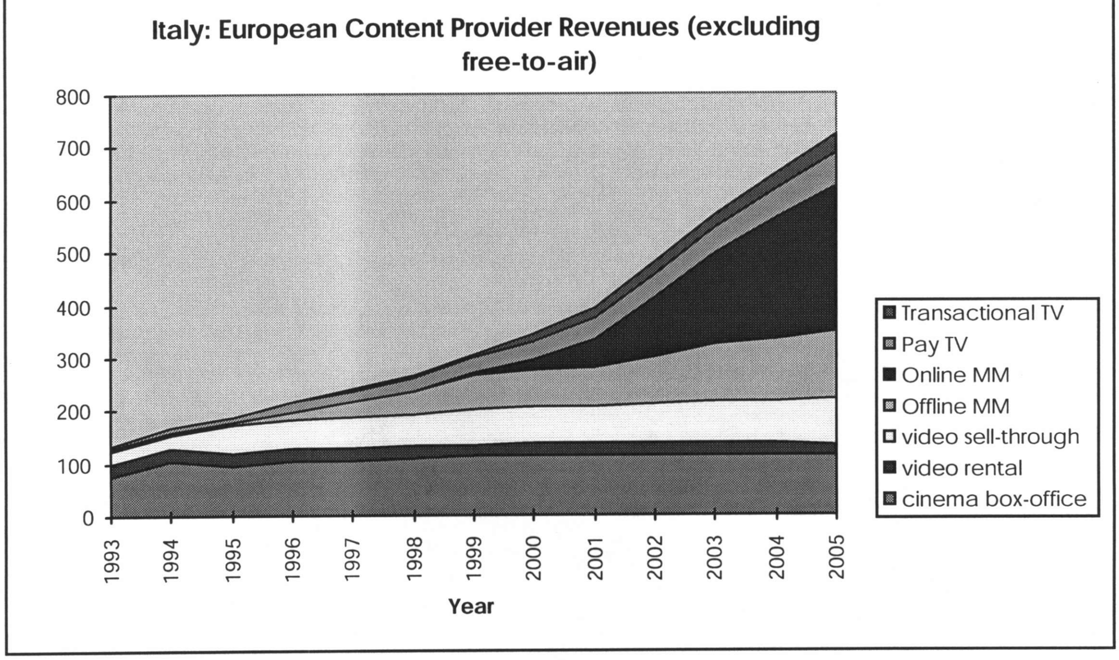


Exhibit 6.7: European Content Provider Revenues: Italy

Exhibit 6.7 shows the continued strength of free-to-air television as the major revenue source for European content providers in Ireland. Other AV sectors are growing in importance, but by 2005 still account for only 27% of total industry revenues.

Exhibit 6.7 provides a detailed breakdown of AV revenues sources excluding free-to-air TV. The major growth sector is online multimedia, with offline multimedia and video sell-through also representing significant revenue sources.

Direct consumer AV expenditures share of total AV expenditures is already higher in Ireland than the study average at 44.2% in 1995 (reflecting in part the strength of the video rental sector). Their share of revenues is expected to grow still further to 53.9% by 2005, with the main growth coming in sectors other than video rental. This is good news for European content providers who can expect their share of these revenues to nearly double from just under 9% in 1995 to over 17% in 2005.

Chapter 7 Implications for Content Providers

Following on from Chapter 6, this chapter analyses the different audio-visual markets to identify how Europe can exploit these projected revenues and in particular, identify the type of content that is likely to be produced. The types of business models / relationships necessary to succeed are then advocated based on the strengths and weaknesses of the European content providers in the various markets. Finally, we present the key findings of the study.

The chapter is structured as follows:

- 7.1 Market Analysis
- 7.2 Conclusions

7.1 Market Analysis

7.1.1 *Free-to-air broadcasting*

In terms of sources of finance, we expect total television advertising expenditures to continue to increase in line with general economic growth, while licence fee revenues will remain broadly flat in real-terms due to growing pressures on the level of the licence fee across Europe. At the same time, the increasing number of channels and the continuing fragmentation of audiences - trends accelerated by the transition to digital and the growing strength of the pay TV sector - will mean that individual broadcaster's share of revenues will be squeezed.

In the new competitive environment, the range and quality of programming output will of course remain central key to gaining and maintaining competitive advantage. In this sense, the short-term impact on programme budgets is likely to be small, with any downwards pressure further mitigated by the realisation of efficiency savings in non-production related activities. However, there will be internal competition for the budgets made available by such savings. Over the longer-term, it appears likely that individual broadcaster's programme budgets will however decline, though the total sector spend on programming will increase in line with the growth in industry revenues.

Domestic content dominates

Domestically produced product dominates the free-to-air sector, accounting for on average 80% or more of total broadcaster's programme budgets and dominating the audience ratings. Much of Europe's domestic television output has traditionally been provided by large vertically integrated broadcasters, though the imposition of independent programme quotas, combined with the growing need to achieve cost savings and to produce new and innovative programming content and formats, has led to the emergence of a developing independent TV production sector in most countries.

Content providers need to meet changing demands

In addition, we expect to see a shift in the nature of demand for programming. Free-to-air broadcasters will continue to look towards achieving high audience figures in peak hours, either to justify a continuation of the licence fee in the case of the public broadcasters or to maximise advertising revenues in the case of the commercial broadcasters. At the top-end of the market there will therefore be a continued demand for high quality, high production value product in the shape of domestic films, dramas, popular star talent entertainment shows and top sporting events. Indeed, there is likely to be significant cost inflation in such areas as the rights to premium films and sporting events and of talent is bid ever upwards. These developments will in turn result in an inevitable squeeze on programme expenditures outside of peak hours if budgets are to be balanced and schedules to be filled. This will lead to a growing demand for lower cost programming in the shape of soaps, dramas, quizzes, and so-called life-style TV (cooking, holiday, motoring and other leisure pursuits).

The major casualty of such developments would appear to be the provision of programming in the middle range of the market as demand polarises towards a large amount of low cost programming, coupled with a limited amount of high cost product.

In terms of market opportunities, Europe has traditionally been strong in providing high cost, high quality product, much of it being produced by the large vertically integrated public broadcasters and we expect this strength to continue to be exploited.

In addition, the emergence of transactional based on-demand services, will represent additional revenue earning opportunities through the careful management of release windows over the different delivery media. The key to commercial success here will be the access to rich sources of programmes archives - an area in which the existing major European broadcasters appear to be well placed, combined with the skills and ingenuity to repackage and refresh content in new and exciting ways.

Repurposing and Repackaging

Finding sufficient amounts of affordable, yet compelling content to satisfy the growing development of niche programme channels and of transactional based services will also present new opportunities for European producers. Some of this capacity will be filled by repurposed existing content and programming. Repurposing of existing content involves repackaging existing footage and perhaps combining it with an element of new content in order to create refreshed product. This technique can be applied creatively, to develop an extended in-depth version of a programme alongside a standard one, using, for example, previously unused footage. The extended version would be useful for a niche channel for viewers looking for a more in-depth treatment of the subject matter.

An increasing number of new launches concern thematic channels targeting particular population segments and interest groups. Companies that have launched thematic channels include consumer magazine publishers such as Bauer, and newspaper groups, such as Mirror Group, as well as existing AV participants, for example, content owners and broadcasters such as Disney and Granada. Thematic channels have been successful to date because they do not compete directly against the strong national channels for advertising. European content owners with extensive catalogues of rights are particularly poised to benefit from the increased European share of revenues from these new channel offerings.

Most niche channels will be advertising-supported, although they may be incorporated in bouquets with other specialist services. This would allow programme providers to make a modest charge for a selection of channels that individually might not support a subscription fee. Some of the European digital satellite bouquets, such as Television Par Satellite, already comprise a number of newly created narrow-interest programming strands alongside the more familiar attractions of, say, CNN International or Eurosport.

Meanwhile, UK cable operators are beginning to break down their overall offerings into small sets of channels in differing combinations to allow subscribers greater freedom to pick and choose, but on the assumption that those who refuse to buy a single large premium tier may buy several smaller ones--and perhaps end up spending just as much.

The advertising business has yet to come to terms with the possibility of targetting precise market segments via television, although specialist advertising in the print sector is highly developed and it should be quite simple to transfer the knowledge and skills to television campaigns. New styles of advertising may emerge for these channels, midway between the brief spot commercials, aimed buckshot-fashion at huge audiences, and the infomercial which pretends to be in a programme format. The inventiveness of advertising agencies, especially in countries like the UK, will be stimulated by these new opportunities.

7.1.2 *Pay TV*

The rapid growth of pay TV services across most of Europe has meant that pay TV subscriptions are now the fastest growing source of AV revenues. To date, European AV producers have captured only a little of this success, with premium services being dominated by films and sports with the revenues largely flowing back to the Hollywood majors and to sporting organisations respectively. At the same time, basic general entertainment services have tended to be dominated by low-cost invariably US originated programming, with little or nothing in the way of newly commissioned European product.

Mature market will benefit European providers

There is some evidence to suggest, however, that as pay TV broadcasters develop and mature, they will increasingly look towards investment in domestically produced content in order to expand the range and quality of programme schedules, to achieve higher ratings and to attract new viewers. In the UK, for example, BSkyB is now a major investor in the UK film industry and through its general entertainment channel Sky 1 is beginning to commission UK produced programming. In France, Canal+ has acquired a library of over 1000 hours of TV programs and 450 feature films from De Laurentis Entertainment. They are also in negotiations with French major UGC for the purchase of its library, UGC-Droits Audiovisuels.

Transactional services such as NVOD and PPV, will make heavy use of linear movies, television programming and sporting events. The increased capacity of digital systems will generate new markets for European product over such media. In addition, these new services will also stimulate the creation of new linear-narrative content, much of it with a narrower target audience than is common for much of today's terrestrial broadcast programming -something at which European producers generally excel, as evidenced by their record of success in the special interest video market.

Synergy in development

Synergy in development and programming can be exploited through the launch of local derivations of successful channel formulas, such as Kinnevik's extension of ZTV (youth) and TV6 (women's) across Scandinavia and Viacom's launch of versions of the Sci-Fi Channel and VH-1 in Europe. A parallel can be drawn with the special-interest magazines market, where publishers have been successful in launching versions of their titles in different countries or dominating a particular niche segment by launching a variety of different titles that cater for it.

Additional revenue generating streams can be exploited through intelligent scheduling of release windows over the different delivery media.

New business relationships

Perhaps the bigger challenge lies in being able to produce lower cost product while at the same time maintaining programme quality. This may in part require a redrawing of relationships between broadcaster and programme producer - the commissioning of longer production runs, for example, would allow the often significant programme start-up costs to be shared over a greater volume of output. In addition, producers will increasingly need to look towards maximising revenues over other existing and new media opportunities such as video sell-through and multimedia. In some cases this will require a change in the manner in which programme rights are allocated. It will also call for new working practices and marketing strategies, with the more systematic exploitation of programme rights across different delivery media and across different markets and for the development of cross promotional activities to supplement traditional broadcasting revenues. There is also likely to be increased emphasis on co-financing arrangements, both within countries and internationally, that help spread the costs of larger budgets.

7.1.3 Cinema

The demise of the cinema market has often been forecast yet despite the proliferation of the means of access for users to 'movies', European cinema admissions have actually been rising over the past number of years after a long period of decline and indeed in 1996 are estimated to have exceeded 750 million.

The cinema industry is predominately hit driven, and is dominated by US product. The type of content which is popular tends to be rather cyclical, with a particular genre say science fiction or a particular star being in vogue, while the next perhaps action dramas or a different star.

European film's share of the box office tends to vary considerably year-on-year. 1995 and 1996 have proven to be good years with interest in European films enjoying a resurgence in all countries. This may partly be a function of the cyclical taste that we described above and the question still remains whether EU producers can capitalise on this recent success. In many respects, the environment looks promising. For example the growth in the number of multiplex cinemas provides more screens allowing the showing of a greater range of titles at any one time. All the same, the key to commercial success remains the production of compelling content that is popular and attracts audience.

The development of support measures which are market focused and are designed to generate the appropriate incentives for producers to produce content that the public want to watch rather than that which will simply attract public subsidy will be an important facilitator here.

Film production also relies on access to the necessary funds to produce the product in the first place, and on significant marketing expenditures with which to promote the product upon completion. In both respects, there are benefits to being large and in this regard the small and fragmented European film industry appears at some disadvantage to its larger, and typically vertically integrated US counterpart.

Product for culturally and linguistically fragmented Europe

On the one hand, this might suggest a need for the rationalisation of the European film industry in order to realise economies of marketing and finance. On the other hand, there are important structural differences in terms of the relative size and diversity of the US and European markets which help to explain the persistence of very different forms of organisational structure across the two sides of the Atlantic. Europe is culturally and linguistically fragmented and arguably the

European film industry's greatest opportunities lie in the ability to create product to meet this diverse demand. In this respect, perhaps what is required is not more concentration but rather mechanisms to allow more ready access to investment finance and methods for facilitating / co-ordinating marketing activities. The growth in international co-productions within Europe represents one further way of sharing the costs of investment and marketing across a number of national markets.

Maximise revenue potential

In addition, the new market developments offer new revenue earning potential for the European film industry. In particular, the transition to digital will facilitate the move towards more thematic and transactional based services and broadcasters will be looking towards filling this capacity with new, differentiated product. Europe needs to look at how to exploit revenue potential from existing and new media sources from TV through to multimedia through the manipulation of release windows over different delivery media and the exploitation of cross-promotional synergy such as the development of interactive games based on the original film production and of film related merchandising.

Such opportunities might, for example, be realised through the creation of horizontally integrated media giants such as Bertlesmann and Finnivest active across the range of media markets and exploiting the synergy's over each. There will remain, however, a market for new innovative product and smaller companies will also be able to realise cross media opportunities through the creation of joint ventures and the sale of rights.

7.1.4 Video Market

The rental market follows closely the sales pattern of films in the cinema. So in this sense, EU content providers' fortunes in the rental store are linked to those in the box office. In contrast, non-film product accounts for a growing proportion of the video sell through market and it is here that EU producers have had more success in gaining sales revenues.

The video rental market is in the long term expected to decline in the wake of new market developments such as NVOD and VOD, which can been seen as direct substitutes for rental. In contrast, the video sell through market continues to expand and in most countries exceeds the size of the rental market. We expect growth in this sector to continue with the advent of developments such as DVD helping to further strengthen the market. This will present EU content providers with their greatest opportunity given their relative strengths in the production of non-film product.

Non-film genre offers greatest opportunity

Feature-film reissues, children's programmes and music videos make up the three classic types that lead the video sell-through market. Sales generally concentrate on a handful of top sellers. The breakdown of national markets according to genre, shows the increase in several European markets of the 'non-film' video: reissue of TV series, sports, documentaries, training programmes and comedies. These are areas for which consumer demand is largely for domestically originated product and it is through the exploitation of such market opportunities that European producers can most benefit. Once again, it will be companies with large catalogue libraries that will be best placed to capture these new revenue generating opportunities. But there will always be important opportunities for smaller companies with good, innovative creative ideas - and there always appears to be a steady stream of these (witness the success of UK video companies who have created series like 'The Lovers Guide' and 'Police Stop!').

7.1.5 Multimedia

Of all the AV market segments, multimedia remains the least developed, but perhaps offers the greatest long-term opportunities for European content producers to develop new sources of revenue. Already the market for off-line MM products is starting to grow strongly - and in 1996 actually exceeded the video rental business in value terms for the first time. By way of contrast, on-line MM revenues are, for the present, marginal with a combination of low penetration rates, limited bandwidth/access speed capabilities and concerns over the security of networks and the protection of intellectual property rights limiting its relevance to mass market AV applications. This may soon change with the advent of developments such as high speed cable modem access, satellite based delivery systems and the creation of new encryption and electronic cash payment systems. By 2005, we project that on-line MM revenues will represent one of the largest categories of direct consumer AV expenditures in many cases coming close to, or sometimes exceeding, pay TV revenues.

Drawing out the implications of these developments for AV producers and for European content producers in particular is difficult. The relevant variables for issues as central as consumer demand for different product genre, the model for the treatment of property rights and the business relationships between the different levels of the value chain are only now beginning to emerge for off-line MM and have yet to become at all clear for on-line MM. Nonetheless, it is possible to make some general comments upon the nature of market developments and upon the appropriate positioning strategies for European firms to exploit the new opportunities.

Turning first to the issue of consumer demand, the problem of determining commercial content is difficult to define since a great deal of apparent sales success has been on the back of evolving and changing technology which has sold well and required software, almost any software. In recent months software sales have faltered with the realisation that "killer" ideas and applications are few. In relation to on-line services, in general, content is most attractive to consumers when it is local. The development of the Internet has shown the importance of local content in stimulating uptake.

Content is king ...but distribution is important too

In particular, the multimedia market will become increasingly dominated by a relatively small number of large companies that are able to both generate a steady stream of compelling products and develop extensive pan-European distribution networks to get them to consumers. Content and distribution, as in other media sectors, are the twin keys to long-term success. One without the other is not sufficient.

Sales 'muscle'

Across Europe, the multimedia distribution business will need to be developed and injected with considerable investment to bring it to a level comparable to music and video. In general terms, the games industry is moving towards a hybrid of music and video industry `hits driven' distribution models, with some companies operating integrated physical distribution services, others leaving physical dissemination to third parties, and exclusive distribution contracts generally becoming common. Parts of the edutainment sector are closer to the highly fragmented book publishing model.

However, one the critical ingredients for success is a dedicated and well-financed sales and marketing force that expert in the peculiarities of each European market and supported by sophisticated administration and technical support facilities. This, coupled with a steady flow of `must-have' product, will give sufficient `muscle' to secure retail shelf space in the over-crowded marketplace. After all, in the current state of industry development, if it is not on the shelf it cannot sell.

Rationalisation

As a result of the above, a number of smaller multimedia distributors and wholesalers have already gone out of business and more will do so. Some will be absorbed by larger companies and others will shift emphasis to become specialist wholesalers or even publishers. All these possibilities are already happening.

Retail goes mainstream

These trends will be accentuated by the current expansion under way in the retail channel for multimedia software, particularly CD-ROM. The more that mainstream entertainment product retailers take up multimedia products and become important to overall market share, the greater will be the power of those distribution companies which already supply them with leading music and video products.

Media giants market entry difficult

However, almost without exception, the large diversified media groups (Hollywood, music and electronics majors) which have entered the multimedia market have found it far more difficult than they expected. The peculiar nature of the video games business, with its long lead times, unstable technology, demanding consumers, and obsessive culture, has been particularly hard for them to understand. Some of these media majors have invested heavily in a distribution pipe line, but have not secured sources of quality product to fill it. Others have poured money into development, but are still waiting for a flow of hit titles.

Power to the developers

For a limited period, the balance of power in the industry has shifted towards the best multimedia developers (particularly game developers) with strong track records of success. Only a limited number of creative houses have the ability to produce `great gameplay', a vital ingredient of market success. Many of these teams (and there a good number in Europe) have already been acquired by larger developers and more especially by the big publisher-distributors, and that acquisition trend will continue. Many of those top developers that are not wholly or partly variety of distribution agreements that will increasingly resemble film industry `output deals'. After this acquisition frenzy, which is well under way, the balance of power will shift firmly back to those who control distribution.

Many will go to the wall

Whilst there will always be opportunities for genuine new talent to achieve success, large numbers of under-funded developers and publishers without credible track records behind them will go out of business over the next three years. For the most part, in order to sustain a viable development and/or publishing business in the multimedia market, it will be necessary to access significant levels of capital investment and be assured of good international distribution.

Escalating costs

This process will be accentuated by the rapidly escalating costs of production. As consumer hardware gets more and more sophisticated, the equipment necessary to produce state-of-the-art multimedia experiences, along with the skilled staff required to get the best out of it, gets increasingly expensive. Across all CD-ROM programs (edutainment and games), development budgets now average more than $400,000 and are still climbing. Costs for state-of-the-art games suitable for release on next-generation CD consoles start at $800,000 and can easily exceed $5m. Clearly, this is not a business for those without big pockets.

The quality gap

Just as in the film and video business, it is possible to make low budget titles that are profitable, but only when they have effective distribution arrangements. However, as the performance of the multimedia hardware platforms improves, the money spent on development will increasingly be evident in the finished software. The result of this will be a widening contrast, clearly apparent to consumers, between the well-financed top quality titles and the rest. This will tend to amplify the market dominance of `must-have' blockbuster titles.

Local and global product

The games business has parallels with both the film and music industries to the extent that it is a global marketplace. However, unlike the music business where local artists generally have a high market share, the examples of regional video game success stories are the exception rather than the rule. As with Hollywood, most of the global hit games come out of the established big studios, but in this case the established studios are in Japan and the UK as well as the US. Nevertheless, games developed in other countries can be picked up by major publishers and made into global hits.

While the biggest selling edutainment titles will also be `global product' (albeit localised where necessary), there will be growing scope for good performing regional titles. This is heightened by the strong regional variations in consumer demand, with, for example, local art/ culture titles performing well in some countries and appallingly in others.

Multi-platform necessities

The high costs of production will continue to make a multi-platform development strategy a critical component of the business's economics, at least for games. This requirement will be heightened by the likely fragmentation of the multimedia hardware platform installed base and the swift transition from 32-bit to 64-bit systems.

Language localisation is critical

The European market is fragmented by language and culture; those publishers who are serious about success across Europe must incorporate provision for local language versions of products early in their title development plans. This is another significant expense and those not prepared to invest to do quality conversions themselves should enter into licensing or co-publishing deals with local publishers.

Developing new business relationships

In the way that they are forced to put together financing deals, smaller European developers are increasingly finding themselves in a situation not dissimilar to that faced by independent film producers. For those who can interest larger publishers in their title, the basic choice is between accepting a relatively large upfront payment (hopefully enough to cover development costs and

give some profit margin) and little or no royalties from sales, or raising the development finance independently and getting a larger share of the publishing profit from sales.
Just as in the film industry, developers are increasingly putting together complex deals with a string of different publishers in each territory in order to raise the development budget. It is likely that film finance techniques, like completion guarantees, will be introduced to allow developers to raise money independently and thus negotiate more lucrative deals with publishers.

Maximising revenues

In the longer term, new means will have to be found to maximise the asset value of multimedia software rights. While a few blockbuster game titles have an extended shelf life (that can be extended through budget re-releasing strategies), most have a very limited retail life of no more than three months to generate revenues. Unlike other media, most games have virtually zero library asset value because the fast-moving technology cycles make them redundant. The situation is somewhat different for edutainment titles, many of which can have an `evergreen' character. However, even these are subject to technological shifts (eg, with quality digital video increasingly becoming a requirement) and many (eg, encyclopaedias) require annual updating of content.

- One way that the value of multimedia rights will be extended is through the development of networks, both TV- and PC-based. These will take a number of forms. There will be networks that essentially provide an alternative means of software distribution; for a one-off or regular subscription, software can be down-loaded to the home PC or console for use later (the model pioneered by The Sega Channel).

- Another variation is to have multimedia software available on a central server and usable only on an on-line basis while connected to the server. For games software, of particular importance will be the third variation of networking which actually connects players together so they can compete against each other. `Networkable' versions of games are already becoming a key area of focus for the most advanced developers.

The development of networks may eventually offer more direct means of distribution to smaller developers allowing them to become their own publisher and cut out the `middle man'. However, unlike many commentators, we believe that the rapid growth of networks will not quickly kill off the potential of multimedia software as retail commodities; both `networked' and `packaged' forms will continue to co-exist.

Synergy with other media

An additional means of maximising the value of multimedia software that we believe will become increasingly prevalent is to integrate its development much closer into the production of related media products. Rather than just independently spinning off game versions of movie properties, it will be necessary to link and jointly plan their creative processes much more thoroughly. As the costs of developing the most ambitious multimedia software escalates, we believe that its viability can be improved by producing associated linear versions in parallel that will be suitable for cinema, TV and video exploitation. The creation of linear programmes alongside the interactive ones, ensures that there will be related products with lasting library asset value. Clearly, this again, is another factor which will favour the larger diversified multi-media groups.

7.2 Conclusions

The economic prospects for the European audio-visual content industry set out in this report is one of opportunity and growth. The new communication technologies reviewed in this study, offer for the most part, only limited assistance to the creative process of audio-visual manufacture. They do, however, lay the foundation for strong growth in audio-visual expenditures and this presents a growing market opportunity for European content providers.

- ***Content Provider Revenues to Grow***

The market for audio-visual content across the seven countries analysed in this study is projected to grow in real terms from ECU 31,847.7 million in 1995 to ECU 53,871.1 million in 2005, representing an effective increase of 69%. The European content provider revenues grow from ECU 8911 million in 1995 to ECU 16,117 million in 2005.

- ***Free TV Remains Driving Force of European AV Content Industry***

Free TV remains the engine room for the European audio-visual industry. Whilst it remains important, the headline figures hide a shift in the demand for different types of programming such that the market tends to polarize through a limited amount of high cost product, combined with a growing demand for low cost product to fill the non-peak hours and new niche programme services.

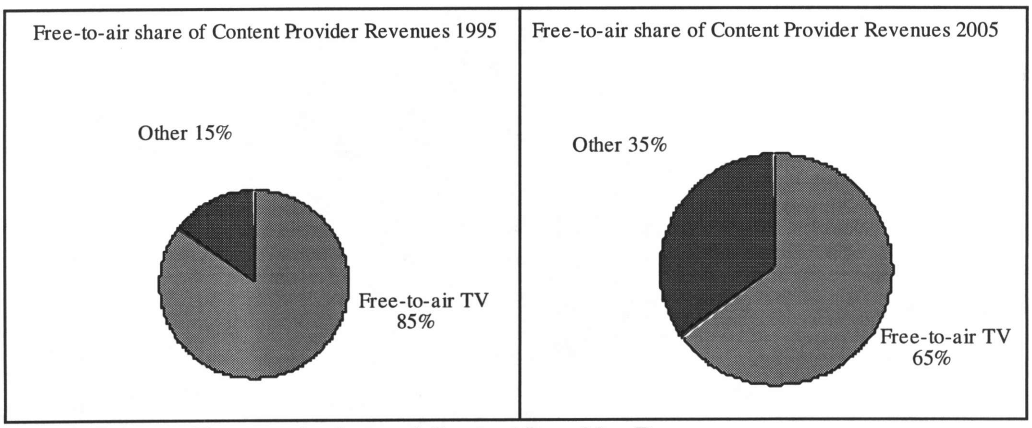


Exhibit 7.1: Free-to-air share of Content Provider Revenues

- ***European Share of Consumer AV Expenditures to Increase***

More significantly and possibly the most fundamental key finding of this study is that, as the audio-visual market expands, the European content providers will have the potential to benefit substantially more as they capture a greater share of the revenues. Advertising and the licence fee will remain as important sources of AV finance and will continue to underpin the free-to-air TV sector. At the same time, we expect there to be strong growth in direct consumer expenditures on AV product. This is an area in which Europe has traditionally performed less well, with pay TV and video rental dominated by US product. In light of projected market developments, however, we expect European content providers to capture a growing share of this expanding revenue source. This is in part because of the new emphasis by pay TV operators on domestic content as they seek to become mass market players. It is also due to the expected strong growth of multimedia, an area which European content providers are already performing well, and one in which demand for locally originated product is expected to be high.

Exhibit 7.2 shows the European content provider share (excluding free-to-air) of the aggregate consumer expenditures revenues increasing from an average of 13% in 1995 to 21% of the market in 2005.

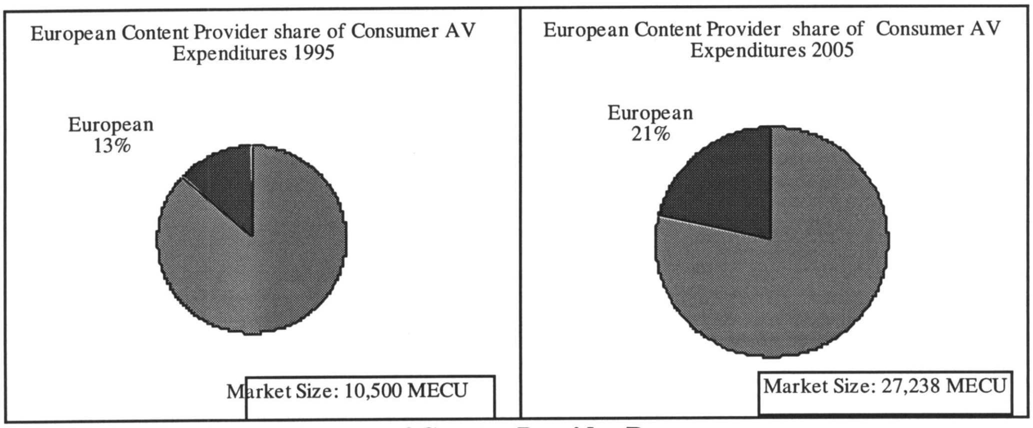


Exhibit 7.2: European Share of Content Provider Revenues

In addition to the growth of free TV, we expect to see significant growth in multimedia where European content providers are already establishing a strong production base (Exhibit 7.3).

In video sell through, the growing importance of non-film products presents new market opportunities for European content providers.

In pay TV, which although at present is dominated by largely American films and live sporting events, we expect to see increased investment in European originated product as pay TV operators seek to expand the range and diversity of their programme offerings.

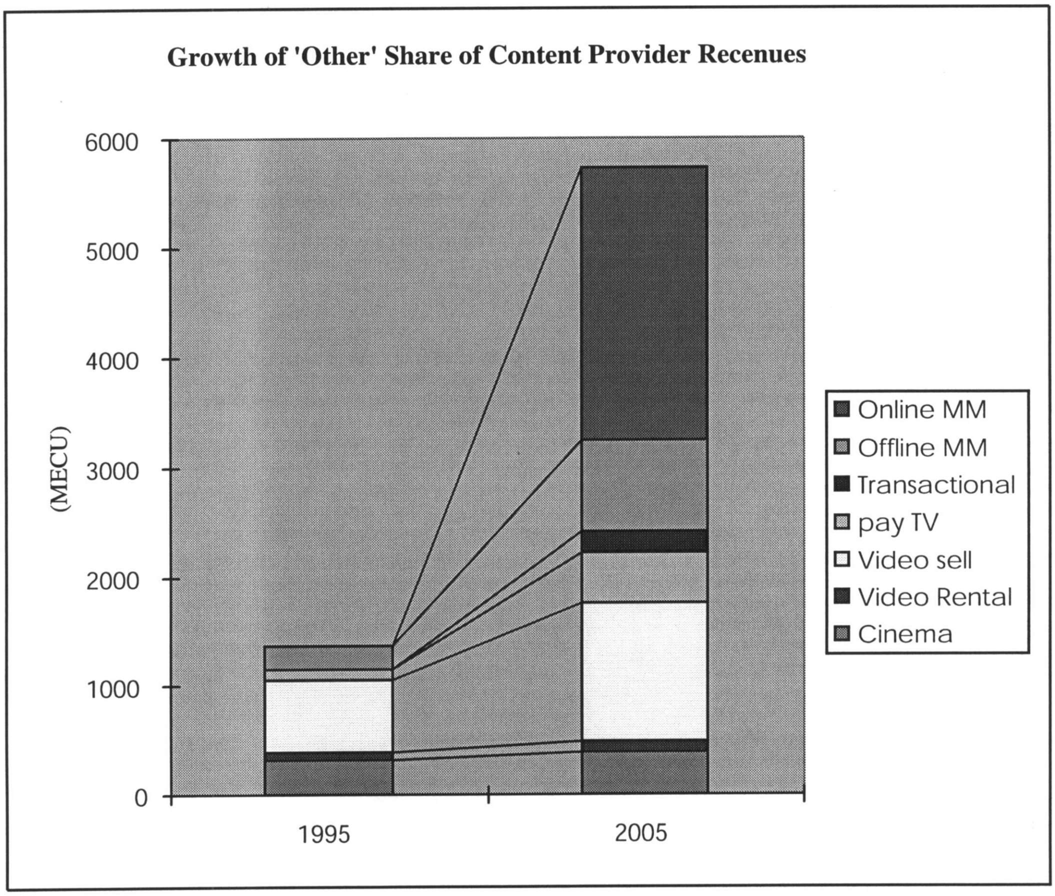


Exhibit 7.3: Growth of 'Other' share of European Content Provider Revenues

- ***The Scene is set for Expansion of the AV Content Industry, but some changes are necessary***

The changing pattern of demand for European product will disrupt existing market structures and the European content industry will need to be able to react to these new demands if the full benefits of the new media age are to be realized.

Among the key challenges to be faced are the following;

- ♦ the growing importance of marketing and brand awareness.

  In an environment of ever increasing choice, the most successful product will be that which manages to differentiate itself from the mass of offerings, in order to generate a large financial return. In this respect, access to funds both for initial production and for subsequent marketing efforts, will become increasingly important across all the audio-visual sectors. This can already be witnessed, for example, by the growing promotional budgets which accompany film releases and by the increasing amount of resource allocated by broadcasters to promotional purposes. In both cases, larger companies may have significant advantages.

While a number of large European media companies already exist across a number of sectors;

Polygram, in film and video sectors
Canal Plus / Nethold and Kirch in pay TV
CLT / UFA, Endemol and Chrysalis in free TV
Bertelsmann, Funsoft and Philips Media in off-line multimedia
AOL / Bertelsmann in on-line multimedia

we expect the pressure for further industry consolidation to continue.

- Smaller companies need to achieve economies of scale

  Smaller companies will continue to play a significant role in that they will remain major contributors to the innovative process, though they will find it increasingly necessary to form relationships with larger companies if they are to survive and prosper. In particular, it will be important to realise economies of scale especially in distribution which will increasingly become Europe-wide.

- Need to sell product internationally

  The increased fragmentation of the audio-visual markets is likely to mean that the financial return available to producers in any one national market is likely to diminish over time. It will there, become important to sell product across national boundaries. In order to do this successfully, companies will need to reconcile the tension between producing content with local domestic appeal and making it sell internationally. In this regard, we expect the trend towards increased international co-productions to continue. In addition, we expect increased moves towards the sale of programme formats across national boundaries.

- Need to sell product and maximise rights in new media

At the same time, digitalisation will enable a new range of market opportunities, not least, the emergence of transactional TV and off-line and on-line multimedia markets. The selling of product across different delivery media will therefore become an important element of a content provider's competitive strategy. In this regard, the process of content creation will require a co-ordinated approach to the issue of the exploitation of rights across the delivery media from the very outset.
In addition, the exploitation of programme archives will present new and important revenue earning potential for the content creation industry. The key to success here will be the abilities to refresh and repackage content in new and exciting ways.