Sequentia

A quarterly magazine on information sources published by the European Audiovisual Observatory

The introduction of digital TV in Europe

Problems of social law in international audiovisual and multimedia productions

July / August / September 1996. Vol. III, No. 8

Digits and divinity

In the beginning there was the sprocket hole, and as simple believers we saw the light projected at twenty-four frames per second. The messages could be carried to all corners of the earth and, until the almighty McLuhan pointed out that the medium was the message, we were content. But no longer. Our divinities now are scattered across a wide divide, from digital disks to Disney dreamlands, from virtual reality to virtually anything.

The technology roller-coaster is getting faster and perhaps more exciting, but also increasingly dangerous. Ignore these developments at your peril, yet be wary of the burnt-finger syndrome.

Rational business thinking says that many of the new gizmos make inescapable common sense conditional access, Video on demand, digital compression, the vast landscape ahead on the superhighway. But should we pause and reflect a little on where this mad media rush is taking us? Are we becoming slaves to technological developments, afraid of accusations of being Luddites?

Digital television is a prime example of the problem. The media world is currently in a swirl of excitement over digital technologies, the advantages of which are indisputable. However, the suffocating effects of overkill are worry enough with 30, 300 or 3 000 extra satellite channels, even if there is a belief that this will benefit the viewer by providing a greater choice (or a dilution of resources to the point where quality programming becomes a distant memory).

There is, however, another aspect of digital technology that is rarely considered, if recognised at all. The popular press has been hailing digital television as "better quality", which is unqualified nonsense. What non-technical journalists have failed to understand is that digital processing merely allows things to be done that could not be done with analogue signals at levels of acceptable quality. But the end result is unlikely to match the standards of quality that analogue can achieve in its straight, broadcast mode.

Digital is trying to get something for nothing; something must go when removing bits of information that make up the complete picture. With some nervousness, not being an engineer, I offered this view when speaking at a recent conference of the British Cinematograph, Sound and Television Society an organisation well-populated with television technicians. It was a great relief when the speaker who followed me a leading Hollywood special effects supervisor immersed in digital technology muttered in my ear as I stepped off the platform "You've stolen my line, I agree completely".

Of course, digital processing is a wonderful enabling process. But like so many current developments, it is important that we do not lose our heads and become besotted with the idea as if nothing else mattered any longer. We must try to preserve a sense of proportion.

Thus interactive television, liberation for the passive viewer. For all its promise, it has yet to become a money-spinner. And after their initial love affair, it is by no means sure that viewers do wish to change their roles as couch potatoes, inactive rather than interactive.

The problem in part, let me confess, is those damned media journalists. And the conference organisers. Guilty. And guilty again. We have our roles, hopefully in keeping the audiovisual business informed, up to date with the latest developments, alive to the things that may affect the fortunes of everyone in the industry. But in our earnestness never to leave a stone unturned in searching for news, information, data, even the views of opinion leaders (for example at conferences), perhaps unwittingly we raise the temperature of expectation, opportunity, even fear.


© D.R.

In the offices of *Screen Digest*, we do have our own squabbles over such issues, with the chairman often trying to be devil's advocate in challenging some of these developments – even in the technologies we daily use as writers on the media. Much as the computer buffs will say that printed matter is ink smeared on dead trees, my own cynical view is that e-mail is unseen messages in dead letter-boxes out of sight, out of mind (personally, as long as I do not need a message as a computer file, I much prefer to have it on a piece of paper that announces its arrival with the whirr of the fax machine).

Tongue in cheek perhaps. But the moral, I hope, is clear. Technology does not solve problems, only facilitates their solution. And often it defines problems for solution when previously we were perfectly happy as we were.

by John Chittock,
Chairman, *Screen Digest*.

Coverphoto: © D.R.

Sequentia • Published by the European Audiovisual Observatory / 76, allée de la Robertsau / F-67000 Strasbourg / Tel. (33) 88 14 44 00 / Fax (33) 88 14 44 19 / e-mail: L.Andersen@obs.c-strasbourg.fr • Editorial Chairman and Publishing Director: Ismo Silvo • Editor: Lone Le Floch-Andersen • Editorial Board: André Lange (*statistics and market information*), Ad van Loon (*legal information*), Lone Le Floch-Andersen (*production, financing and distribution*) and John Hunter (*multimedia and IT*) • Secretariat and co-ordination of translations: Valérie Haessig • Layout: Thierry Courreau • Typesetting: Point à la ligne • Printing: Finkmatt Impression • ISSN 1025-546X • Published quarterly • *Copyright of the European Audiovisual Observatory. Not to be reproduced without the formal authorisation of the EAO.* Subscription rates per calendar year: 200FF (western Europe and non-member countries) / 100 FF (eastern Europe). All prices are tax exempt • URL http://obs.c-strasbourg.fr/sequentiamain.htm • Subscription manager: Anne Boyer, A.Boyer@obs;c-strasbourg.fr.

External contributions for this issue: John Chittock (Chairman, *Screen Digest*), Mr Jean-Luc Renaud (Editor of CD-Info and ATM), Mr Giles Fontaine, Mr Jean Dacié and Ms Laurence Ouzon (IDATE), Mr Arnaud Gerber (European Institute for the Media), Mr Augusto Preta (Italmedia), Ms Marie-Madeleine Krust (consultant, ADAMI, France), Mr Gerrit te Spenke (KPMG Meijburg &Co, Netherlands), Mr Stephan Verhulst (IMPS School of Law, University of Glasgow), Mr Jean-Pierre Lartigue (Vision 1250) and Dr André Lange (Market Information Expert, European Audiovisual Observatory).

We kindly wish to thank: Ms Helga Schmid (European Institute for the Media), Mr Richard Patterson, Mr Peter Todd and Ms Tessa Forbes (British Film Institute), Dr Ismo Kossonen (Special Government Adviser, Ministry of Transport and Communications), Ms Virve Indrén (Minsitry of Education, Finland), Ms Eva Harrie and Ms Ulla Carlson (NORDICOM), Ms Christian Matzen (Scientific Editor, Hans Bredow Institute), Ms Judith Steilnach (ORF), Ms Patricia Hadjisotiriou (Press and Information Office, Ministry of Interior, Cyprus), Mr Farrel Cocaran (RTE and Dublin City University), Mr Jens Cavallin (Swedish Council for Pluralism in the Media), Mr Paul Katzenberger (Max Planck Institute), Mr Ben Keen (Editor, *Screen Digest*), Ms Carla Armez Dizoz (Federal Bureau of Statistics, Switzerland), *Cine and Téléinforme* (Spain), Ms Andrea Schneider (Europäisches Medienrecht Institut, Germany) and Mr Frédérique Pinard (trainee, European Audiovisual Observatory).

The introduction of digital TV in Europe

Digital technology currently operates major changes in the structures, economy and working procedures in the audiovisual sector in Europe and, in particular, in the field of broadcasting.

This issue of *Sequentia* aims to give an overview of the possible effects on various market segments (satellite and terrestrial) of the introduction of digital television. These analyses offer varying views on the subject and represent the opinions of the authors and not necessarily those of the European Audiovisual Observatory.

In addition, we have compiled an extensive overview of the different digital TV projects and packages which are or will be available in the near future. This overveiw is completed by articles on the national situation in member countries such as Italy and the United Kingdom.

The contribution of digital television and its effect on the cable TV industry in Europe, which was planned to appear in this issue will appear in *Sequentia* No. 9 (September / October / November to be published 25 September).

Lone Le Floch-Andersen,
Expert and Editor of *Sequentia*.

Digital terrestrial television

Until recently, the advent of digital television has usually been associated with satellite and cable delivery. With all the talks dominated by the Internet, video-on-demand (VoD) trials and the launch of some forty satellite digital broadcasting ventures world-wide, the days of terrestrial broadcasting appear numbered.

Satellite broadcasters may be first to go digital, but terrestrial broadcasters are no longer far behind. As a matter of fact, projects abound.

National projects

In August 1995, the UK became the first European state to bring forward proposals to introduce digital terrestrial television in the UK from 1997. Initial proposals were set out in the document *Digital Terrestrial Broadcasting - The Government's Proposals.* Following a short consultation period during which the government considered responses from a wide range of interested players, final proposals were published in a draft broadcasting bill in December 1995.

The Swedish government is expected to bring forward proposals for the licensing of digital television services, via satellite and terrestrial mechanisms, in the near future. It has been announced that the fourth national UHF network allocated to Sweden in the 1961 Stockholm Plan will not be used for analogue broadcasting. An official report on the feasibility of digital terrestrial deployment has also been issued in Finland

In France, operational trials of digital terrestrial television will begin in autumn 1996 and the CSA is considering the regulatory framework for digital terrestrial television.

Retevision, the national transmission agency in Spain, is leading a consortium made up of sister organisations in France, the Netherlands and Sweden to study the deployment of digital terrestrial television.

Trials are under way elsewhere as well. The United States took the lead in developing a terrestrial digital broadcast transmission system initially designed for HDTV. This work was conducted under the auspices of the Grand Alliance, which has now decided one standard. The Washington DC, local TV station of the NBC network has just been selected to showcase digital HDTV broadcasts using the new US terrestrial standard.

Australia was waiting on the conclusion of the standardisation process underway in the US and Europe to go ahead with digital terrestrial television. That is a key theme of the first major report on the subject from the Australian Broadcasting Authority, which has spent the past year canvassing the opinions of relevant industry sectors.

For its part, the commercial terrestrial TV network Nippon Television Network (NTV) has recently carried out experimental digital terrestrial transmissions, testing both 525-line progressive scanning and 1125-line interlaced scanning systems. According to a report by the Ministry of Posts and Telecommunications, the deployment of digital terrestrial television broadcasting will be possible between 2000 and 2005.

Digital terrestrial transmission

At first, it seems that satellite delivery of digital television has an overwhelming edge. Satellite is seen as the vector for the new digital technology supporting new interactive services. A deeper examination reveals, however, that terrestrial transmission has powerful assets of its own. It all starts from the fact that analogue terrestrial television licences are highly prized and profitable. Public service and commercial broadcasting giants are all delivered terrestrially in every European country. In economic terms, cable and satellite may be viewed as "overlay" delivery systems.

A way of resolving the dilemma whether to go digital terrestrially or via satellite is to pretend that one is not actually dealing with an "either-or" proposition, but that both transmission means are complementary to each other. It may be true in the short term, but it may not be the case in the long term. Satellite digital broadcasters may be the first to operate beginning 1996-1997, but terrestrial digital TV will eventually be deployed around the years 1998-2002, because of inherent advantages. The question is therefore what will become of satellite broadcasting for advertising-supported and subscription-based services when the 5-year window of opportunity will start to close.

Geographical coverage of TV services

Geographical coverage by cable TV networks, with some exceptions, is in practice limited to about 70% of a typical European country due to terrain limitations, urban/rural market split and economic efficiency criteria. Satellite transmission is in practice limited to about 75% coverage because of "urban clutter" topography, ability to obtain look angles and the increasing tendency of local authorities and residents associations to introduce dish bans in many areas. In marked contrast, the European terrestrial transmitter networks currently provide 99% coverage of a country, with a "meshed" network configuration of main and relay stations. The expensive infrastructures of buildings, masts and consumer antennae are already in place. Unlike cable and satellite reception, terrestrial reception disenfranchises nobody.

So, terrestrial remains the default reception platform in all industrialised countries and, therefore, achieves potential access to all TV households and TV sets via existing aerials. Terrestrial reception capability is integrated within all TV sets: other delivery systems require the installation of reception

dishes, cable networks or expanded domestic distribution equipment to allow reception on second or third TV sets.

London-based Convergent Decisions Group consultants have estimated the cost of digital transition (transmission and reception) in the UK for reaching the universe of TV households, given current infrastructural growth, at $50 thousand million for cable TV, $19 thousand million for satellite DTH and only $4 thousand million for terrestrial broadcasting.

The existing transmission infrastructure for analogue broadcasting can be reused (namely transmission towers) with the addition of digital transmission equipment. Costs of digital transmission are also non-linear so that large sections of the population in most European Union states can be served by relatively few transmitter stations. This cost non-linearity is unique to wireless delivery systems and allows broadcasters and network operators to reach, in the short-term, mass audiences at very low cost. Also, household rooftops can be reused for household reception.

If viewers restrict themselves to free-to-air services, there are no ongoing costs associated with receiving digital services terrestrially (beyond the cost of any licence fee). All other delivery platforms typically require minimum monthly costs to the consumer to receive a package of services, even in the case of "utility financed" cable networks.

Terrestrial is the only delivery platform that can service portable and, ultimately, mobile TV sets. This is of particular importance in allowing reception on second and third TV sets in the home at no additional cost to consumers: cable and satellite platforms deliver services to the main household TV set only.

The main disadvantages associated with terrestrial broadcasting are related to its role as default delivery platform in most European countries. Whilst terrestrial broadcasting is used to deliver universal television services (public service broadcasting and commercial services with universal service obligations), universal coverage must be maintained.

Until the vast majority of consumers (namely, whatever % of total TV households is deemed to constitute "universal" coverage) is able to receive digital signals, either via integrated digital TV sets or set-top boxes, all universal service programming must be simulcast in both analogue and digital formats. The considerable spectrum already being used for analogue terrestrial transmission cannot therefore be swiftly reallocated for digital transmission until a lengthy transition process has been completed. In the medium-term, therefore, the capacity for digital terrestrial will be limited by the availability of additional spectra. Only when consumers have completed a transition path of updating to digital reception equipment can existing terrestrial broadcasting spectra be reused.

Regulation and national governments

Digital terrestrial is also limited in the eyes of commercial broadcasters by the heavy regulation that is required by national governments. Complex arrangements need to be made for the allocation and regulation of spectra – as included in the recent UK Government proposals for digital terrestrial television in the UK. The exploitation of satellite spectra via European satellite transponders is less regulated and more freely accessible to commercial operators.

It is true that, whether it is satellite or terrestrial digital television, viewers will have to purchase a digital decoder. The difference between the two, however, is that satellite TV viewers, having already invested in an analogue set-top decoder, are asked to purchase a second – digital – decoder. Digital terrestrial TV viewers will be buying only one set-top box. The wider technical reach of terrestrial broadcasters will also enable manufacturers to lower the unit price through greater ecomonies of scale more rapidly.

Television economics has a direct bearing on the appropriateness of the means of TV transmission. The survival of satellite TV – and more particularly satellite digital TV – is seen almost exclusively in terms of pay-television. That is by default, rather than design, a recognition that advertisers are not interested in distribution methods such as satellite (or in most countries cable TV) whose technical reach does not encompass the whole universe of TV households.

It is highly likely that subscription-based satellite broadcasters will want to have access to nation-wide terrestrial frequencies as well. One could speculate that, over time, they will turn into terrestrial pay-TV broadcasters on the Canal + model, and with an "in-clear" window which could draw a substantial portion of total revenue from advertising.

Opening the door to local TV

But, in our view, the key asset of terrestrial digital television, with its lower transmission power requirement, efficient spectrum utilisation and considerable cost saving, is that it opens the door to local television.

Local television – so far as it constitutes a fully-fledged industry – does not really exist in Europe. Digital terrestrial TV will create the condition for local TV to exist and prosper by tapping into a virgin territory: the local advertising market. On reaching maturity. This market could account for up to a quarter of total advertising.

The creation of a local TV industry, which only digital terrestrial broadcasting can bring about, will represent another crucial leap forward for European television production: the establishment of a long awaited syndication market. Syndication is largely responsible for the strength of the US programme production industry. Conversely, the inability to recoup production costs through multiple sales has historically been the curse of European producers. The digital transition can potentially change this state of affairs for the better.

by Jean-Luc Renaud,
founder and editor
of ATM and CD-Info.

Jean-Luc Renaud is the founder and Editor-in-Chief of ATM-Advanced Television Markets newsletter and President of the communication consultancy firm Globalcom Limited.

Contact: Jean-Luc Renaud, 113 Newgate Street Village, Hertford, Herts. GB-SG13 8QR Tel. (44) 1707 876 889, Fax (44) 1707 876 880, email: 100776,3046@compuserve.com.

Digital television: actors and strategies

The development of digital technology leads to the elimination of the main bottleneck which has been a characteristic feature of the historical development of television in Europe. The shortage of Hertzian frequencies is in fact the reason why a small number of generalised channels has developed in each country; although cable networks multiply potential supply by ten, their technical capacity has been rapidly overtaken by the very rapid increase in the number of channels up for sale. Even satellite has developed in Europe in a context of relative poverty, not of capacity, but of transcoders located in an attractive orbital position. Here, rarity has been commercial rather than physical.

The obvious consequence of this evolution is the absence of a limit on the number of channels or services theoretically available to the public at large; as a result the "rare resource" of the audiovisual industry is moving towards content and assembly, on the one hand, and towards distribution and the final market, on the other; getting onto the viewer's screen no longer guarantees economic success.

Encrypted or non-encrypted television?

Will one of the two market segments – television financed by advertising or licence fees (non-encrypted television) –, on the one hand, and television by subscription (pay-television), on the other be the privileged vector for digital broadcasting?

Initially, digital television will be almost exclusively introduced in the pay sector of television (except for emissions of general interest, such as the promotion of HDTV, as described below). The main reason for this is the present economic structure of audiovisual markets: the growth prospects for pay-television are currently much higher than those for non-encrypted television; where this is public, its resources are stagnating. In addition, after its explosion during the period 1985-90, the advertising market is now relatively structured; although there is continuous growth, the rate is only about 10%. Pay-television, however, still has considerable potential in many European countries.

Improved definition or more channels?

Digital television makes it possible to release broadcasting capacity which could be used for a range of services; in terms of television services, in particular, this capacity could be allocated to the broadcasting of "low definition" channels (corresponding to the present level of definition of televisions) and/or the broadcasting of "high definition" programmes.

Since the failure in both Europe and Japan of the analogue type of high definition television, it is no longer included in the immediate plans of broadcasters, technical operators or mass electronics industrialists, and public authorities are no longer making it an issue.

It should be noted that if the pay channels decided to gradually introduce high definition television (as one of the services in their packages, but without expecting a specific level of profitability), the non-encrypted channels would have a problem – consumers would feel that the low definition they used was technically outdated.

Which broadcasting network(s)?

The main television broadcasting networks have developed successively, according to complex criteria.

From a technical point of view, these networks are partly in competition with each other, but they also complement each other. Thus the direct broadcast satellite makes it possible at one and the same time to serve both the subscriber, and supply the cable network heads and terrestrial transmitters. Thus broadcasting using microwaves is either a competitor to cabled networks or provides their extension in outer urban areas.

For broadcasters, choosing a single broadcasting vector is now outdated. The development of cabled networks and of direct broadcast satellite have offered the channels solutions to their signal transport problems which are cheaper than traditional terrestrial broadcasting. Total broadcasting capacity has increased, and broadcasters have gradually made use of a range of distribution methods.

We should not, however, neglect areas of competition between broadcasting media. In densely populated areas, in particular, different broadcasting networks could theoretically penetrate the market.

Satellite appears to be the prime vector of digital broadcasting for an operator of a selection of digital pay-channels, although its range is probably not universal, particularly as regards access to shared aerials on blocks of flats.

This means that in urban areas both cabled networks and terrestrial broadcasting have a good case to put forward; the present level of equipment in terms of households which could be cabled pleads, in urban areas, in favour of cable; on the other hand, the supposed compatibility of terrestrial aerials and digital broadcasting limits the cost of reorganising the network. The technical capacities of the two broadcasting modes should of course also be taken into account.

Leaving technical parameters aside, operators must answer two questions:

– Could the 80% of households which could be cabled but are not subscribers be interested in the offer of pay-TV different to what is offered by the cable networks?

– Are new actors attempting to commercialise an offer of pay-TV without having to pass through the commercial intermediary of the cable operator?

Strategic choices

The announced development of digital television appears as a potential confrontation between groups already present

IDATE

IDATE – one of the European Audiovisual Observatory's partners in the market information area – is a study bureau specialising in the telecommunications and audiovisual sectors.

Its audiovisual industries department has devoted a number of studies to the development of digital television, including the project on "Broadband Infrastructures for Digital TV", supported by the ACTS European programme, a comparative analysis of the costs of digital television according to the different broadcasting media, and an analysis of experiments in interactive television.

IDATE has recently published a multi-client study entitled *Digital TV: the Stakes in Europe.* http:www.idate.fr.

Contact:
Gilles Fontaine
Tel. (33) 67 14 44 44
Fax (33) 67 14 44 00
E-mail:
g.fontaine@idate.fr

in the pay-TV segment, and groups of operators of "free" television who perceive the strategic aspect of the market.

What are the fundamental features of pay-TV: both programming and distribution, control of programme rights and control of a portfolio of subscribers. Setting up a distribution network (retailers) and technological skill in control of access are of course also included in the functions of pay-TV operators; but access to the programme and control of the subscriber are the two key factors.

Rights: cinema and sport

The success of the major pay-TV channels has been founded on exclusive access (on the scale of a region and for a limited period) to the rights of "event" programmes. To the fore of these programmes is cinema (15 to 20 major titles each year) and sports coverage (mainly football in the case of Europe).

In the countries of Europe as a whole, it is mainly access to North American films which forms the basis for the construction of an attractive schedule; the input cost for a new arrival on the pay-TV market, whether digital or not, is of course proportional to its ability, on the strength of the number of its subscribers, to acquire cinema films at a high price. In France and the UK, and perhaps already in Germany also, the competitive advantage of operators already present is decisive.

Sport is, in a sense, an even more exclusive sector. Unlike the cinema industry (with about a dozen major producers), for sport there is in fact just one holder of rights per country, for example, the national football federation. Thus football rights, particularly in recent years (in Germany or Italy), command increasing fees. Indeed in Europe, football is experiencing an unstable balance between the federations being tempted to create their own channels (as planned in the Netherlands, and already partly the case in France for pay-per-view) and the European pay-TV channels being tempted to create a new competition gathering together the major European clubs.

As in the cinema industry, football rights are in the hands of the current operators, even if the federations limit the duration of rights conceded in anticipation of increases, and even if the European Commission, in the interests of prohibiting the abuse of a dominant position, were to impose a limit of the same kind.

Which decoder?

The development of pay-TV and the imminence of the arrival of digital channels have hastened the debate on ways of controlling access.

Quite apart from the status of the decoder, it is indeed the ownership of the resources of pay-TV channels which is at the heart of the strategic confrontations. While candidates for entry into the pay-TV market complain that the sector leaders are trying to block their entry into the sector, the sector leaders find the idea of a completely open decoder unacceptable. It would be tantamount to making their main asset their portfolio of subscribers freely available to their competitors.

Consequences for the European programme industry

The capacity for the European industry to compete with the North American companies, whether for broadcasting or production, is a traditional feature in the development of the audiovisual market.

As already indicated, the suppliers of American programmes will attempt to penetrate the different selections of programmes developed in Europe although they would not be able to act as commercial operators; European broadcasting groups are sufficiently solid to negotiate equitable partnerships in this context.

The prospects for the production of programmes are less favourable for the industry in Europe. Indeed, the proportion of the number of channels with an American studio as shareholder will tend to increase and, for the studios, this presence in the capital of the channels will obviously tend to encourage the showing of their own programmes.

Faced with this danger, European regulation is only a relative protection, and the European industrial fabric for programme production seems very weak compared with the American leaders.

by Gilles Fontaine, Jean Dacié and Laurence Ouzon, IDATE.

Situation of retransmission rights (pay-TV) for football in a number of countries

	Rightsholder	Duration
United Kingdom	Sky	Rights held until 1996-97; renegotiation probably limited to 2 years.
Netherlands	Consortium: football federation, Philips, Endemol, ING, etc.	7-year contract signed in 1996.
Greece	FilmNet Greece	5-year contract obtained in 1996.
France	Canal +	Contract until 2000.
Germany	Premiere	Contract until 1998; option until 2002.
Italy	Telepiu	3-year contract obtained in 1996.

Source: IDATE, after New Media Markets.

Observatory continues its services

Three years ago the Observatory was created for a pilot period of three years. As foreseen by the statutes, the operations and services of the Observatory during the pilot period were evaluated in the winter of 1995/1996 by an independent consultant.

Demonstration of its unique value

At its 34th meeting on 13 June in Cracow, the Co-ordinators Committee of Audiovisual Eureka, consisting of the representatives from the 33 member states of the Observatory and the European Commission, decided to continue the mission of the Observatory, as recommended by the external evaluation. In making its decision the co-ordinators' committee pointed out that the future developments of the Observatory should be built on the strengths and expertise acquired during the pilot period.

Emphasis on public service mission

"In future the members of the Observatory will want it to develop as a public service organisation that gives a equal access to information to all actors of the audiovisual industry, both big and small, public and private, eastern and western. As an information provider, the Observatory clearly complements other European initiatives and support programmes in the audiovisual sector" stated Mr Karpinski the current Chairman of the Co-ordinators Committee of Audiovisual Eureka. He emphasised that public funding should continue to form the major share of the financial resources of the Observatory, although there will be additional market revenue as well.

"In particular we are very proud of the well functioning collaboration with our partners and other information providers" remarks Dr. Ismo Silvo, Executive Director of the Observatory."In the last instance, it is the audiovisual professionals who will benefit".

The Observatory will increasingly provide information services on-line via the Internet. It will also continue to produce reference reports on market statistics, legal developments and financing support for audiovisual production and distribution. The future strategy will concentrate on two principle tasks: on pan-European information collection and distribution, and on transparency work facilitating general access to information sources.

The decision of the committee still needs to be approved by the Committee of Ministers of the Council of Europe. The new detailed action plan of the Observatory will be discussed by its Executive Council after the summer break.

Contact:
Ismo Silvo, executive Director.

D.R.

Digital television in Italy

Italy was one of the first countries in Europe to experiment with digital television by satellite. Since November 1995, Eutelsat F2 has been broadcasting the three Telepiù channels which already existed in analogue mode on terrestrial frequencies.

This front-line position is surprising in view of the fact that Italy lags far behind its European partners in developing the new media. The entire audiovisual scene from the 1970's to the mid-1990's has been polarised on the duo of RAI and Fininvest (now Mediaset), based on the development of terrestrial broadcasting and a traditional model of generalist television.

Proof of this is the fact that even today Italy still has one of the lowest levels of penetration of video recorders (approximately 50% of households with televisions), pay television (800 000 subscribers to Telepiù) and satellite (700 000 households equipped with dishes), while cable television is still almost non-existent.

Despite this situation, which can hardly be described as encouraging, one operator – Telepiù – decided to invest massively in the development of new services via satellite, backing digital broadcasting directly, thereby placing it in the forefront of Europe.

Using the satellite Hot Bird 1, Telepiù moved into the operational phase in March last year, increasing the number of channels offered to eight (adding to the three Telepiù channels CNN International, Discovery Channel, MTV Europe and BBC World, and soon TNT Cartoon Network). In practice, however, an unjustified delay in the commercialisation of decoders has ended up extending the time-period for the sale of this service to the public, which at the end of May was estimated at 2 000 subscribers. The main difficulties are connected with the high cost of receiver equipment, particularly the decoder, which costs approximately 1.7 million lire, while the full kit (including dish) costs 2 million lire. This is still too high for the service to be widely taken up; it needs to be kept down to 15 000 lire per month for the basic offer (without Telepiù's two sport and cinema channels) and 55 000 lire per month for the full service. It should be borne in mind that terrestrial pay television costs 37 000 lire per month for a single channel (Telepiù 1 or 2) and 44 500 for the two (here there is of course no basic offer because of the small number of channels available).

The reasons for choosing: seeking the competitive advantage

Despite the difficulties facing the audiovisual scene in Italy and the technical and economic problems connected with the commercialisation and high cost of the decoder, major progress in Telepiù's development of digital technology is fully justified for at least two reasons based on the competitive advantage of the sole national operator of pay television: one is of a European order, and the other more resolutely national.

It should be borne in mind that shareholders in the Telepiù group include some of the most important European names in the development of digital technology. Not only are Kirch (33.6%) and Nethold (32.5%) two of the main operators in the pay television sector in Europe (Premiere, Filmnet); they have also developed a system of conditional access, the D-Box, which is the main competitor in Europe of the other major system, Seca, from Canal + and Bertelsmann. While we await the settling of scores which will begin in the next few months in Germany, where the duel looks set to be particularly close and the outcome uncertain (despite the requirement imposed by the European Union of open access to all operators, provided for in the system), it has to be said that each pay television operator is trying to build up a dominant position in its own area of influence by launching digital services by satellite.

While the Seca Group is trying to strengthen its presence in France (and subsequently in Spain), by launching programme selections managed by Canal +, the D-Box Group is concentrating more on Belgium, the Netherlands and Scandinavia with Filmnet/Multichoice, and in Italy with Telepiù.

The second reason lies in the local repercussions of the strategy. Since 1995, the national audiovisual scene has undergone a number of changes. Two major operators have entered the national arena: Cecchi Gori in generalist television (by buying the national channels TeleMontecarlo and Video Music) and Telecom Italia, through Stream, in the commercialisation of new cabled services (pay television, pay-per-view and video-on-demand).

While for the first of these, despite repeated announcements, there is no real reason at present to foresee the imminent entry of the group in the pay television sector, Stream is already present with an operational video-on-demand service in 1 000 homes between Rome and Milan thanks to the heavy investment by the parent company with the Socrates project for cabling the country using optic fibres. Next September will see the launching of the broadcasting of pay television and pay-per-view services aimed at potential cable users (approximately 300 000 by the end of the year and 2 million by 1998).

With this prospect of increased competition for the new services, Telepiù's strategy, which is in a way inevitable, has therefore been to favour the development of digital technology and digital services by satellite rather than maintain its guaranteed income and strengthen its dominant position in the distribution of analogue pay services using terrestrial frequencies.

Prospects and services

The intention – not yet official but expressed by a number of leaders in the group – is obviously to switch subscribers from the analogue services to the digital service by satellite over the next 18 months.

In terms of offer, the loss leader is unquestionably Telecalcio. For 500 000 lire, this pay-per-view service enables the subscriber to watch live coverage from September of twenty-four matches played by his favourite team in the national football championship. The service includes other differentiated offers (seventeen matches, a single match, etc.) likely to meet the differing demands of the user, who has demonstrated that he is more prepared to pay for football than for the cinema. It should be remembered that Telepiù has spent 200 000 million lire on pay television and pay-per-view rights for national football championship matches for the next three years. This fundamental function of bringing in subscribers should of course be tempered by the necessary protection of the interests of subscribers to pay services who cannot be deprived of watching a recording of the evening's match, which raises problems all along the line in terms of compatibility and balance which must be resolved if increasing the number of subscribers to pay-per-view services is not to mean reducing the number of subscribers to pay television, which nearly all use the analogue mode.

Moreover, if nothing is done at a higher level to find a less expensive way of replacing the current analogue decoders by digital decoders, Telepiù's strategy is more than likely to be a loser.

At present, because of both extremely high costs and the absence of a policy to encourage the replacement of equipment, it is hard to see how a current subscriber to pay television would switch over to digital television by satellite. If the switch is not made, there is a serious risk of lengthening the amount of time necessary for developing new services, postponing reaching break-even point, and ending up in a weak position compared with present competitors (Stream) and potential future competitors (Cecchi Gori, RAI, Olivetti, foreign groups).

Pending verification of the effectiveness of its strategy over the next few months, Telepiù appears to be the sole national operator in a position to foster the development of digital television in Italy. Because it lacks the necessary infrastructures (optic fibre cable) and because of the relative unattractiveness and diversification of its services, Stream is not at present in a position to stand before the Italian consumer as a potential replacement for Telepiù. By making use of coding technology (D-Box) and more attractive products (Telecalcio), its offer is complementary to Telepiù's, rather than a substitute for it.

by Augusto Preta,
Italmedia.

D.R.

Legal steps towards digital TV in the UK

"Digital Television is one of the most exciting new developments taking place in Britain as we move towards the information society. It will bring benefits to consumers through improvements in quality, variety and choice, and open up significant new opportunities, not only for Britain's broadcasting and equipment manufacturing industries, but also for other British companies looking to take advantage of digital services. The government is also committed to encouraging the development of digital so that analogue television spectra, a very valuable source, can be released."[1] Ian Taylor, Minister for Science and Technology, gives us above a summary of all the ingredients in the current perspective of the British Government towards digital TV.

First it explains that all the legal initiatives dealing with digital TV are embedded in a much larger setting, namely, the information society. Second, it expresses the commitment of the government to put in place a regulatory framework to give digital broadcasting an opportunity for an early and successful launch. Third, it puts an emphasis on digital terrestrial broadcasting and conditional-access services.

These three principles have led to a number of proposals by various agencies and government departments relating to digital TV in the UK.

White Paper on Digital Terrestrial Broadcasting

On 10 August 1995, the government published its *White Paper on Digital Terrestrial Broadcasting.*[2] With this legal framework the British Government moved from its stand-off, non-interventionist policy on broadcasting technology to take the initiative on digital broadcasting. To introduce digital terrestrial television services the government is proposing a two-tier licensing structure, separating twelve-year licences for digital frequencies from open ended licences for digital services. Those wishing to own a frequency must obtain a licence from the Independent Television Commission (ITC), and those wishing to broadcast a service must contract first with the frequency provider as well as obtain a separate licence from ITC. To give effect to these proposals the government drafted the broadcasting bill.

The broadcasting bill was announced in the Queen's Speech last autumn and was published in December 1995. National Heritage Secretary Virginia Bottomley claims the proposals will "liberate British broadcasters to be world leaders in the twenty-first century."

The bill is divided into six principal parts of which the first[5] sets up a framework for the introduction of digital terrestrial television based upon the White Paper, discussed above. Initially, it provides for six "multiplexes"; collections of between three and eight digital television channels, according to how much digital bit is used for each service. Together the frequencies will expand capacity to around 20 channels, which looks extremely small against the 500 plus offered by digital satellite and fibre-optics. The most positive news for terrestrial broadcasters (BBC, ITV, Channel 4 and 5) was the guarantee of spaces on the most important multiplexes giving them room to offer extra services as well as simulcast what they broadcast now.

The bill is intended as enabling legislation, so it leaves much of the detail of how it will work in practice to the body which will regulate it: the ITC. Some of the proposed criteria that the ITC will take into account for an award of a multiplex licence are: the area of coverage proposed, the availability of equipment required to receive the service, the financial viability of the applicant and the effect on fair trading. A major topic of debate was the lack of content quality requirements the potential multiplex operators or new programme provides will be expected to meet. The Labour amendments concerning this issue were, however, defeated. The former competitive bidding principle used for Channel 3 is also not to be used.

Since many of the new services are likely to be conditional-access channels, the Department of Trade and Industry (DTI) published in January a new framework for digital pay-TV. It draws back from mandating a common interface that would accommodate different encryption and sub-management systems in the same piece of hardware. Instead, it proposes two separate classes of licences, for encryption and scrambling services, and for subscriber management services. These will combine ease of registration with clear rules to ensure conditional access services are available to all digital broadcasters on a fair, reasonable and non-discriminatory basis. Enforcement will be carried out by the Office of Telecommunications (Oftel), not ITC.

Oftel meanwhile published a submission to the Office of Fair Trading review of the pay-TV market.[3] This review will reassess the position of BSkyB in the market for the supply of programming to pay-TV at the wholesale level; access to encryption; subscriber management; and transponders. Oftel's conclusion is that "the transition to digital and other developments offer the potential for greater competition in the future but without action now that potential may not be realised..., and Sky will continue to retain a substantial degree of market power". Oftel suggests possible remedies at four levels: network access, the rate card, security of supply and other contractual terms and channel packaging.

Now the outcome of the legal framework is almost certain, the three large power blocks of UK television, the BBC, BSkyB and ITV, announced during the month of May the launch of their digital television initiatives. However, no one knows when the final transition to all-digital service will take place and if and how quickly the UK TV viewers will buy the expensive set-top boxes or upgrade to new digital TV. A positive legal framework is an important but not the only guarantee for digital success. Or as Virginia Bottomley notes: "The success of terrestrial digital television will depend on the quality, range and cost of new services. Viewers and listeners will decide for themselves."

by Stephan Verhulst,
University of Glasgow.

The School of Law, University of Glasgow

The School of Law teaches a full-time LLB degree to approximately 200 students in each year with specialisation in a number of honours subjects. It also offers a number of research degrees and supervises doctoral research.
The school's research strategy has chosen three areas for particular support. These areas are medical law and ethics; international law and legal theory; and markets and economic regulation, which includes media and communications law. Members of the school are undertaking work funded by the Economic and Social Research Council on regulating the changing media and are expert consultants to the Council of Europe on media concentration and pluralism; other projects include a feasibility study for putting Scots law on the Internet.
http://www.gla.ac.uk/Acad/Law/.

1. *The Regulation of Conditional Access Services for Digital Television.* Department of Trade and Industry, 11 January 1996, Foreword.(http://dtinfol.dti.gov.uk/cii/).
2. *Digital Terrestrial Broadcasting. The Government's Proposals.* Department of National Heritage. London: HMSO, Cm 2946.
3. Oftel submission to the OFT review of the pay-TV market. Office for Telecommunications, February 1996. (http://www.open.gov.uk/oftel/payt).

A profusion of packages for European television

Digital television is no longer just a project, it is well and truly under way in the United States (especially with the burgeoning success of DirecTV) as well as in Europe. Some television channels were broadcast in digital compression, individually and on a trial basis, as early as 1994. Some broadcasters, such as Multichoice, BSkyB and CanalSatellite, foresaw, in analogue broadcasting, the logical advent of digital technology packages. Drawing up and launching digital packages is the current vogue and the new European stage for digital television became clearer in spring 1996. A whole string of alliances between both public and private competitors sprung up, some unexpected and some best described as stormy. While the scene remains patchy in parts, with a number of new partnerships in perspective, we thought it would be usefull to give as detailed an overview as possible of digital television, as it stood in July 1996.

AT - AUSTRIA

Digital television is still in its study phase in Austria. A trial digital broadcast on the cable network was undertaken in late 1994 by Telekabel, the country's main cable distributor, on the Klangenfurt network. ORF, the Austrian public broadcasting corporation, has joined up with Post und Telefon Austria AG to look into the possibilities of digital technology.

There has so far been no announcement as to the marketing of German digital packages in Austria.

BE - BELGIUM

The introduction of digital television in Belgium has to allow for the high rate of penetration achieved by cable television in the country.

The French and German speaking communities in Belgium

The question of bringing digital television to Belgium's French-speaking community is going ahead amid a somewhat unsettled climate, where existing agreements are coming under fire (restructuring of the CLT, internal crisis over the relationship between the press and the CLT within RTL-TVi, the break-up of the TVB agreements regulating the advertising market between the RTBF, RTL-TVi and Canal +, as well as the announcement of a review of the status and scope of action of the Audiovisual Supervisory Board, etc.).

The various parties involved in the audiovisual sector in the French and German speaking communities have come together under an umbrella association, called "Titan". Apart from the two communities, the association also includes the broadcasters (RTBF, Canal + Belgium, RTL-TVi and the local and community television stations), the main cable companies and RTD, their professional federation, Belgacom, the national telecommunications company, manufacturers (Philips, Alcatel, Gillam, SEE, IBM), the press (Audiopresse), the Mediathèque of the French speaking community of Belgium, as well as university and private research centres.

Titan's plan is to introduce, on an experimental basis, between 4 000 and 10 000 multimedia digital terminals into homes in the two communities.

However, it is quite clear that, behind this consensual project, other strategies are being prepared. Canal +, along with cable companies, is examining the possibilities of bringing the Canal-Satellite digital package onto the French speaking community's cable, in which the Belgian version of Canal + would replace the French version. The RTBF would also be invited to join the Canal + package, which could equally well include a "civil channel" (made up of programming from local and community television stations and news from parliament), which the Executive of the French speaking Community has been looking to start up. The alliance between Canal + and the cable distributors brings up the question of possible access problems for other French-speaking packages (such as those of AB Production or the possible packages of CLT and TF1).

The deregulation of telecommunications and cable-television services in Europe has brought Belgacom, the national telecommunications company, to look at the possibility of competing with cable distribution networks by introducing microwave-broadcast digital television (MMDS).

Flemish community

Negotiations are under way in the Flemish community between Nethold Benelux and the cable companies, to try to set up a joint-venture that would allow Nethold's Dutch package to be broadcast over the Flemish cable. The VT-4 channel (currently broadcasting from London and run by the SBS group) reiterated its desire to take part in Nethold Benelux's Flemish package. Negotiations are being held between VTM and BRTN. Apart from the general-interest channels, Nethold would also offer its three basic channels (FilmNet, Supersport and Hallmark) as well as the American channels (see the chapter below on the Netherlands). The package would also feature near-video-on-demand services. Viewers would have to buy a decoder for 27 000 BEF. Monthly subscriptions would cost around 1 000 BEF.

Besides this, the Scandinavian Broadcasting System group's channel VT-4 has been broadcasting to the Flemish cable networks from London, over the Kopernicus DFS-1 satellite.

CH - SWITZERLAND

SSR - SRG

SSR-SRG, the Swiss public broadcasting corporation, confirmed in April 1996 that it would be broadcasting its 4 terrestrial channels (DSR, TSR, TSI and Schweiz 4 / Suisse 4 / Svissera 4), in the MPEG-2 standard, through the Eutelsat Hot Bird 3 satellite, as from 1 June 1996.

AB Diffusion

In March 1996, the French company AB Diffusion (see below, under France) announced that it intended to buy a repeater on the Eutelsat II satellite to launch a digital package of TV channels in Switzerland. It should be on offer to some 240 000 cabled households in French-speaking Switzerland. An agreement has been signed with Pay-TV, a joint venture of the main French-speaking Swiss cable distributors. The digital signal will be received by the headends, converted into the PAL analogue signal and coded by the Nagravision access control system, itself developed by Canal +.

D.R.

D - GERMANY

Public broadcasting initiatives

Since 31 December 1995, ARD-1 and ZDF have been the first German channels to broadcast in MPEG-2. The uplink to the Astra-1E satellite's repeater 71 comes from the SES station in Betzdorf (Luxembourg), after being converted to analogue signal. ARD and ZDF are currently renting repeaters on the Astra 1F satellite, while awaiting access to digital repeaters on the Astra 1G satellite, the launch of which is scheduled for May 1997.

Deutsche Welle, the international public broadcasting channel, is negotiating the broadcasting of a digital package targeting Asia and the Pacific, through the Asiasat 2 satellite, launched in late 1995. The package could also include other European (RAI, TVE Internacional, MCM, etc.) and Asian (Star TV) channels.

Other channels already broadcasting digitally

RTL Television and VH-1 Germany are already broadcasting in MPEG-2 via the Eutelsat II F1 and Orion 1 satellites, respectively.

Kirchgruppe's DF 1 project

The launch of the DF1 package is due for 28 July 1996. It will be operated by a new company, under the control of the Kirchgruppe DF1 GmbH & Co KG. The digital package will be broadcast through the Astra satellite and can be viewed using a decoder developed by BetaTechnik, a Kirchgruppe company and in association with Nokia and C-Qube, the "d-box".

The DF1 package will include:

– two documentary channels: Leonardo and Discovery Channel Deutschland (resulting from a 50 - 50 joint venture between the Kirchgruppe and Discovery Channel);

– two advertisement-free children's programmes: Junior, for the under-8's and Clubhouse (8-14 years old);

– a cartoon channel (K-toon);

– nine mainstream film channels (Filmpalast, Star Kino, Cine Royal, Cine Thriller, Cine Action, Cine Comedy, Romantic Movies, Western Movies, Heimatkanal);

– four series channels (Krimi & Co, Herz & Co, Comedy & Co and Western & CO);

– two sports channel (DSF plus and DSF Golf);

– a news channel (DF1 Infokanal);

– American channels (MTV, VH-1, NBC and CNBC);

– the thirty radio services from Digital Music Express' American package (DMX);

By year end, there will also be:

– thirty or so theme-based services;

– the Cinedom video-on-demand service.

The basic price will be 20 DEM per month, which will cover a package of fourteen channels, the thirty DMX radio services, the news channel and a programme magazine, as well as "Toni" (Tele-Online-Navigations Instrument), a service to help choose programmes. Subscription to the sports programme will come to 10 DEM per month, while access to a film from the video-on-demand service will cost 6 DEM. The basic cost of the decoder will amount to between 1 100 and 1 300 DEM.

DF1 forecasts some 200 000 subscribers by late 1996, increasing to 700 000 by the end of 1997 and three million by the year 2000. In comparison, the Premiere pay channel currently has a million subscribers.

On 7 April 1996, the Kirchgruppe signed an agreement with the American group, Viacom, involving the broadcasting of MTV-Europe and VH-1 in the DF 1 package, along with segments of Nickelodeon. In return, the Kirchgruppe agreed to offer access to broadcasting rights for Germany for encrypted and unencrypted broadcasting of all Paramount-produced films and TV programmes, as well as a large number of broadcasting rights to other Western European countries. This agreement could also be extended to include the Spanish company, Gestevision Telecinco.

The MMBG project

On 7 March 1996, Bertelsmann, Canal +, Havas and News Corp. announced the setting-up of a joint platform to launch digital television in Germany. The project involved forming a new company. The agreement also allowed for the setting-up of a programme-publishing subsidiary, the role of which would be to produce German versions of CanalSatellite's theme-based channels (Planète, Ciné-Cinéfil, Canal Jimmy) and a "Hunting, Fishing, Nature" channel. The subsidiary was to be split up between Bertelsmann (25%), BSkyB (25%) and Multithématiques (itself held 33% by Générale d'Images, 33% by Canal + and 33% by TCI).

The terminal (Mediabox) sales should be handled by the Multimedia Betriebsgeselschaft (MMBG) consortium, which is 51% held by Deutsche Telekom, 11% by the CLT, 11% by Bertelsmann, 5.5% by Canal +, 5.5% by RTL, 5.5% by ARD, 5.5% by ZDF and 5% by Debis (a subsidiary of the Daimler-Benz group).

In May 1996, a European Commission spokesman announced that the Commission, which had prevented the set-up in 1995 of the MSG Media consortium, between Deutsche Telekom, Bertelsmann and the Kirchgruppe, would not stand in the way of the new venture, inasmuch as it taken heed over the criticisms voiced over the MSG Media question. However, stories began appearing in the press at the beginning of June on Rupert Murdoch's intention to withdraw from the platform. The planned merger between Bertelsmann's audiovisual activities (UFA) and the CLT, announced on 2 April 1996, along with the difficulties the CLT and Canal + were having over the French market were thought to be behind Mr Murdoch's dissatisfaction.

Pro Sieben

In April 1996, Pro Sieben (a company controlled by the Rewe group and by Leo Kirch's son) set up a subsidiary, Pro Sieben Digital, to prepare for the launch into digital television. The company announced it would be using the "d-box", developed by BetaTechnik. They have rented three repeaters on the Astra satellites in preparation for the launch of 16 channels in late 1996. No details have as yet been given, but the package is thought to act as an extension of the Home Order channel (HOT), a near-video-on-demand channel and several news channels.

ES - SPAIN

RTVE

RTVE, the public service broadcasting company, already has the technical equipment needed for digital signal compression, used to distribute the two Mision America channels to Latin America, broadcast by the Hispasat satellite.

Antena 3

Cable Antena, a subsidiary of Antena 3, broadcasts a package of 5 channels in MPEG-2 through the Hispasat 1A satellite. The service has been marketed over the cable networks since January 1996. Marketing of a 20-channel package to Spanish households with individual antennae should begin in late 1996. The package should include pay-per-view and near-video-on-demand services. It is also intended to set up a pay-per-view service showing the matches of the Spanish football championship. Antena 3 has already signed agreements in this respect with a number of independent channels.

Canal + España

Sogecable, a subsidiary of Canal + España, has been using the Astra 1B satellite to market Canal-Satellite, the analogue package, since 1995. The package includes 5 channels : Cinemania (colour films), Cine Classics (black and white films), Documania (Documentaries), Minimax (children's programmes) and Sportmania. These should shortly be joined by a news and a music channel, a channel aimed at young viewers and an extra sports option. The company forecasts 100,000 subscribers by late 1996.

In April 1996, Canal + España announced it was considering launching a digital package for individual antennae for 1997. the package would include 100 channels, including 20 exclusively for the platform, while the others could be the same as those already offered on the cable networks of Cable Vision, the joint subsidiary of Canal + and Telefonica, the national telecommunications company.

Telecinco

In May 1996, Telecinco announced it was setting up a subsidiary for the launch of digital services, but gave no details as to how it

would be broadcast or the type of programme planned.

TV-3

TV-3, the television of the Catalan-speaking community, is preparing a package of 5 digital Catalan channels, with broadcasting to begin in late 1996.

Multicanal / TPS

Multicanal/TPS is a company jointly held by ABC Broadcasting and Cable International, UIH, Grupo Urbina and Multitel. Since 1994, it has been broadcasting in MPEG- 1 a package of 4 theme-based channels for cable : a children's channel (Canal Panda) a Latin-American music channel (H-TV), a film channel (Canal Hollywood) and a travel channel (Odisea). The package is distributed through a hundred or so cable networks in Spain and Portugal. MPEG-1 was replaced by MPEG-2 in Spring 1996.

Televisa

The Mexican communication group, which already broadcasts the Galavision channel to Spain, has announced that it would be using the PanAmSat satellite to distribute an 80-channel digital package, as from the second half of 1996.

Working party on terrestrial digital television

In June 1996, the Direccion General de Telecomunicaciones and Retevision, the public broadcasting corporation, announced the setting-up of a working party to study the penetration of terrestrial digital television in Spain. Channels 66 - 69 in the UHF waveband have already been given over to the future network, which should be broadcasting between 8 and 16 channels. RTVE announced that it was interested in taking part in the working party and the other Spanish channels have followed suit.

FI - FINLAND

FTV

YLE, the public service corporation, announced on 27 June 1996 that it had signed an agreement with Norwegian satellite operator Telenor Satellite Services AS (TSS) to broadcast the FTV channel (which will also include programmes from YLE1, YLE2 and commercial channel MTV 3). The channel will be broadcast to Europe for two years over a Eutelsat satellite and then over a Telenor satellite.

Terrestrial digital television projects

Consultant Jouni Mykkänen's report, made in January 1996 for the Ministry of Transport, recommended prompt action to lay down the basic principles and outline a strategy for the establishment of radio and television digital services. The report suggested drawing up a shortlist of companies which might be interested in digital broadcasting. It also considers that existing broadcasters (YLE and MTV) 3 would need to work together, but that it would also be necessary to speed up the whole process by attributing franchises to new private broadcasters within a fairly short time. The Minister of Transport has already received a number of applications for franchises.

In the discussions following the publication of the Mykkänen report, it became clear that the timetable had erred on the optimistic side. A working party was set up and its conclusions were published in late May 1996.

F - FRANCE

CanalSatellite

Since 1992, CanalSatellite, a subsidiary of Canal + (70%), the Chargeurs group (20%) and the CGE (10%), has been broadcasting a package of ten channels in analogue mode through the Telecom2A and Telecom2B satellites. CanalSatellite had over 320 000 subscribers by spring 1996. CanalSatellite has also started to market a digital package and by mid-June 1996, there had been 60 000 orders for digital terminals. The company forecasts sales of between 150 000 and 200 000 by the end of 1996.

The CanalSatellite basic service costs 98 FRF per month and offers eleven television channels (Canal J, Canal Jimmy, Eurosport France, LCI, la Chaîne Météo (the weather channel), MCM, Monte Carlo TMC, Paris Première, Voyage, C: Direct and Télézoom) and ten radio stations. Five extra options are available:

– cinema option (55 FRF per month) (two film channels, Ciné-Cinéfil and Ciné-Cinémas, each film shown separately three times as well as Ciné-Cinémas' 16/9 version);

– music option (30 FRF per month) (Muzzik - a music channel - and twenty radio stations);

– downloading option (50 FRF per month): the C: Direct channel allows computer programmes to be downloaded;

– pay-per-view service: Kiosque: film and sports programmes (from 29 to 387 FRF per session);

– service Canal +.

TPS

The Télévision par Satellite project (TPS) was first announced on 11 April 1996 and brings together TF1 (25%), France Télévision Entreprises (25%), M6 (20%), the CLT (20%) and the Lyonnaise des Eaux (10%). The five partners signed the statutes on 19 June and drew up a shareholders' agreement. France Télévision's holding, approved on 27 June by the Boards of France 2 and France 3, was eventually lowered to 8%. France Telecom, the public telecommunications corporation, will be taking up a 66.66% holding in France Television Entreprises. This means that its Viaccess decoder will be used by TPS. France-Telecom's decision has also guaranteed TPS' place on a Eutelsat satellite. The project should come on stream in the final quarter of 1996.

Forty channels will be offered. To begin with, the package will feature existing channels (TF1, France 2 and France 3, M6, France Supervision, TV5 and possibly other French-language channels such as RTBF and TSR), news channels (Euronews, LCI) and theme-based channels (the history channel, set up jointly by the INA and France-Télévision, a drama channel also prepared by France-Télévision, a women's channel prepared by M6, Canal Assemblée Nationale (Parliament), TF1's Hyper Kid and Hyper TV channels and the Série Club and RTL channels, controlled by the CLT and the Lyonnaise des Eaux). The other French public broadcasting channels (La Sept/Arte, and La Cinquième), along with the Festival project, could also join the package, but they have also received an offer from CanalSatellite.

The CLT puts the basic subscription price at just under 100 FRF per month.

The CLT forecasts 100,000 subscribers during the first year of operations.

It should also be noted that TF1 has already carried out MPEG-2 broadcasts through the Eutelsat II F1 satellite.

AB Sat

Ripples of surprise ran through the industry in late 1995 with the announcement that production and distribution group AB Production were launching a digital package. Its subsidiary, AB Sat, has been using the Eutelsat II F1 satellite to broadcast the AB Channel 1 channel since 7 December 1995 and five other theme-based channels since 2 April 1996. Marketing should begin in autumn 1996.

GB - UNITED KINGDOM

Satellite digital broadcasting

BSkyB

BSkyB currently offers a package of twenty analogue broadcast channels, for a monthly fee of £10.99: Sky One, Sky News, Sky Soap, Sky Travel, TLC, QVC, The Discovery Channel, Bravo, MTV, VH-1, CMT, The Family Channel, UK Gold, UK Living, TCC, Nickelodeon, EBN, The History Channel, The Sci-Fi Channel, Paramount TV. Also available are the "premium" channels (Sky Movies, The Movie Channel and Sky Sports) and the "premium bonus channels" (Sky Movies Gold, The Disney Channel, Sky Sports 2, Sky Sports Gold). BSkyB already has some four million subscribers. The first pay-per-view sports event (the Tyson-Bruno boxing match), was broadcast on Sky Sports 2 on the night of 16-17 March 1996.

In December 1995, BSkyB and Granada Communications announced they were setting up a new channel in 1996, to be called Granada Sky Broadcasting Ltd., with the aim of producing eight new channels using the Granada and LWT catalogues: Granada Gold Plus (broadcasting notably episodes of *Coronation Street)*, theme-based channels (Health and Beauty, Home and Gardening, Food and Wine, Granada Good Life, Granada Men and Motoring, Granada Talk TV, Granada TV Shopping Guide). The GSkyB package will come as part of the Sky Multi-Channels offer. The main aim of the undertaking is to attract women viewers over to satellite channels by using the Manchester-based group's chain of retail stores (sale and rental of electrical

D.R.

goods). BSkyB itself should also be adding four analogue channels to its package by year-end, using the Astra 1D satellite.

In May 1996, BSkyB announced it had reserved fourteen repeaters on the new ASTRA 2A satellite, in position 28.2° East. Launch is scheduled for spring 1997. Altogether, the packages could offer some 500 channels. BSkyB is planning on launching its digital packages around the end of 1997. Near-video-on-demand services should be included for broadcasting films as well as the likelihood of a pay-per-view in association with the English Premier League (football).

The Parliamentary Channel

The Parliamentary Channel broadcasts parliamentary news in MPEG using the Intelsat 601 satellite.

Discovery Europe

In April 1996, Discovery Europe, the European subsidiary of the American Discovery Communications, announced it was preparing five digital channels, along the same lines as those set up by the parent company. The channels would include a European version of Animal Planet, launched in the States this year, a children's channel and a channel on technology. The channels are due to be launched together on the BSkyB package.

Viacom

On 10 April 1996, the SES announced that it had rented out two digital channels on the Astra 1F satellite (launched the previous day by the Russian Proton rocket) to the American group Viacom. While waiting for them to come on stream, Viacom launched two digital channels on 15 April: MTV Europe and Nickelodeon Germany. The group's other channels should soon be following, in different languages: VH 1, Nick at Nite, The Paramount Channel, The Sci-Fi Channel, Comedy Central, etc.

Viacom is also developing the Gulf DTH project in partnership with Kuwaiti investment company KIPCO, which has been broadcasting the Networks Showtime package (MTV-Europe, VH-1, Nickelodeon, Paramount, TV Land, The Movie Channel, Bloomberg Information TV) from London to the Middle East. The channels' content has been adapted so as not to offend Arab sensibilities. Other channels are planned by the end of the year. The package can be received using the same IRD access control system as the Multichoice package marketed in the Middle East by FilmNet.

Terrestrial digital television projects

The latest broadcasting bill, which should become law this Summer (see Stefaan Verhulst's article), prepares the ground for the launch of digital television and anticipates up to 21 channels. Current terrestrial broadcasters (BBC, ITV, Channel 4 and S4C), as well as Channel 5, which will start up on 1 January 1997, will automatically be granted places on the new networks. Teletext (which currently attracts 16.7 million viewers), has been allocated 3% of the multiplex space given to ITV, Channel 4 and SC4, but has lodged a protest with the Department of National Heritage, claiming that the small allocation it has been given will not allow it to compete properly with the other broadcasters, in particular BBC's Ceefax (thirteen million viewers).

In May 1996, BSkyB confirmed that it was still considering the possibility of taking part in the launch of terrestrial digital television, on top of its investments in satellite broadcasting. It has been looking into joining up with the BBC, Virgin and Granada.

BBC

In early May 1996, the BBC presented *Extending Choice in the Digital Age* and announced it would be launching digital television services around 1998.

The BBC plan is based on the two following projects:

• Terrestrial digital television

– BBC 1 and BBC 2 on widescreen;

– flexible use of the digital bandwidth to provide complimentary BBC 1 and 2 programmes at certain times of the day. For example, when Pride and Prejudice is shown on BBC 1, a theme evening on Jane Austen could be shown on the complimentary channel;

– a news channel combining international, national and regional news, along with live coverage of parliament, etc.;

– development of the potential of digital television for regional news.

• Satellite and cable

– The BBC's terrestrial channels could also be broadcast over cable and satellite, with free access;

– various subscriber theme-based channels (arts, music, education, everyday life, but not sport). These channels would also be broadcast abroad to compliment BBC World and BBC Prime;

– a near-video-on-demand service giving access to the BBC archives.

• Radio

The BBC is a pioneer in digital audio broadcasting (DAB) and currently runs five digital radio stations. New international, national and regional services would also be launched.

The BBC's international channels (BBC World and BBC Prime) should also be broadcast digitally. Free digital versions of BBC 1 and 2 will be broadcast from 1998 onwards.

ITV

Although the broadcasting bill has, right from the start, given them broadcasting space on the future terrestrial broadcasting network, the ITV companies are still dubious about the commercial future of the new system. The KPMG consultancy group, which is acting for several ITV channels, has made a cash-flow projection for the digital services. The most pessimistic forecast shows negative cash-flow until the year 2004, with no chance of breaking even until twelve years after receiving the broadcasting licence. A more optimist forecast (assuming the consumer does not have to pay for the installation of the terminal), shows no positive cash-flow before the year 2002 and a modest 16% internal rate of return (IRR). Without ruling out his company's involvement, Granada Media Group's Chairman, Charles Allen, made known his doubts over whether it was possible to come up with a viable offer in terrestrial digital television that could compete with cable and satellite. He also declared his unease over the real possibility that a government could put an end to analogue broadcasting and finished by expressing his puzzlement over the idea of bringing together the current broadcasting companies (BBC, ITV, Channel 4 and the future Channel 5), so as to put forward a co-ordinated offer. Bruce Gyngell, Managing Director of Yorkshire Tyne-Tees Television, in his talk to the Royal Television Society (19 June 1996) claimed that terrestrial digital television had no future, adding that he thought the straight-jacket effect of the law, coupled with the limited number of niche channels that could viably exist, provided the main obstacles to the development not only of terrestrial but also satellite and cable digital television.

Channel 4

In May 1996, Channel 4 set up an editorial working party to look at which extra channels the company might be able to launch. Channel 4 is probably moving towards simulcast broadcasting of its current output, as well as a pay-television channel.

IE - IRELAND

RTE, the Irish public broadcasting corporation, has drawn up a report on digital television for the Ministry of transport.

BSkyB's digital package will be marketed in Ireland.

IT - ITALY

Telepiù

In March 1996, Telepiù, the pay-television company (currently controlled by the Kirchgruppe and Nethold) began broadcasting a satellite package using the Hot Bird 1 satellite. The package includes the three Telepiù channels, plus CNN International, Discovery Channel, MTV Europe and soon TNT Cartoon. From September onwards, a pay-per-view service featuring Italian league football matches should also be available (see Augusto Preta's article below).

Stream

Stream is held 75% by the STET, the state telecommunications corporation, and 25% by Telecom Italia. It has been supplying an optical-fibre video-on-demand service to a few thousand Italian households since 1995. Films are available for between 1 500 and 5 000 ITL. Stream signed an agreement with producer-distributor Vittorio Cecchi Gori, giving it access to the main Italian film catalogues. The aim is to achieve a

rate of penetration of 40% of wideband network users, in other words, some 25 to 30% of Italian households.

Orbit

Although little known in Europe, the Orbit Satellite Television and Radio Network is the main architect of MPEG-2 digital broadcasting. It is based in a suburb of Rome, from where it broadcasts its package of twenty four television and twenty four radio channels. Orbit is wholly owned by the Mawarid group. The package should be moving in the second half of 1996 from the Intelsat 704 (66° East) satellite over to the Intelsat 703 (57° East) satellite for the Middle East and Intelsat 709 (18° West) satellite for Northern Africa and Europe.

Orbit is considering marketing part of its package in Europe, with its five million Arab households and in America (1.25 million Arab households), via Intelsat 603. The Orbit package offers five TV channels in Arabic (two original channels, two channels from Egypt's ERTT and the Jordan Satellite Channel), nine English-language TV channels (six original channels, plus ESPN-Sports, Discovery Channel and CNN International) and four French-language TV channels (TMC, Planète, Ciné-Cinéfil and Ciné-Cinémas). Other channels, designed for the different broadcasting areas, will make up the rest of the package, once the change of satellites has been completed.

Mediaset

Mediaset came about following the restructuring of Fininvest's business interests and is preparing its stock-market flotation. On 11 June 1996, it published a document for potential investors in which it claimed the company had a head-start in the fledgling Italian satellite television market and that it had reserved a repeater on the Hot Bird II satellite, due to be launched in late 1996 or early 1997. Mediaset is also just completing the digitalisation of the backbone of its terrestrial network.

NL - NETHERLANDS

Nethold / Philips / KPN alliance

In early June 1996, the Philips group, the Dutch telecommunications company KPN and the pay-television group Nethold (controlled by Richemont, the South African group) announced an agreement leading to the launch of a single digital package in summer 1996 for the Dutch and Flemish markets.

Until the agreement, Nethold, on the one side, and Philips and KPN, on the other, had been fighting it out for control of the Dutch pay-TV market: Nethold had its pay channels FilmNet (350 000 subscribers) and SuperSport (250 000 subscribers) as well as the Multichoice package (featuring a number of British and German channels), while Philips and KPN were working together on the TeleSelect pay-per-view project (12 000 subscribers).

The agreement gives Philips and KPN 40% of Nethold Benelux shares, while Nethold will be taking a holding in Philips and KPN. The agreement means Nethold will be able to access the cable networks of Casema (subsidiary of KPN, whose 1.2 million subscribers make up 20% of the Dutch cable market.

The agreement is awaiting approval by the Dutch authorities.

Other channels

The music channel, The Music Factory and the V10 Gold channel, both launched in 1995, are broadcast in MPEG-2 using the Eutelsat II F3 satellite.

NO - NORWAY

Telenor

The Norwegian satellite company, Telenor, which runs the Thor satellite, launched a digital channel in November 1995, containing the two Danish public broadcasting channels, DR-TV and TV2, the Norwegian public channel NRK, and the two Swedish public channels, SVT-1 and SVT-2. They can be received though the Oslo cable networks. Telenor already distributed seventeen analogue channels to the cable networks and to individual antennae, using the Thor, Intelsat 702 and TV Sat satellites. Within the next two or three years, Telenor hopes to be able to offer its digital packages as a free service, to allow households to receive the programmes without a terminal.

Telenor also announced, in December 1995, that it would be increasing its broadcasting capacity with four to six extra repeaters in 1996 and the launch of the Thor II A satellite in Spring 1997. Telenor hopes to become the third European satellite system, behind Astra and Eutelsat, by using the position 1° West.

NRK

In its strategic paper for the years 1996- 2000, the NRK public broadcasting corporation sets out the decisive role it considers it should be playing in the introduction of digital technology in Norway. NRK has joined up with Norwegian Telecom to look into the possibilities of launching digital television services.

PL - POLAND

The regional channel, Wisla TV (which could become the first link of a network of Polish regional channels) broadcasts in MPEG-2 standard over the Eutelsat II F3 satellite.

RU - RUSSIAN FEDERATION

RTR Network

In late 1995, RTR, the Russian public broadcasting corporation, announced it was setting up a joint venture, called RTR network, with a British partner (probably BSkyB), in order to launch a digital package to be broadcast using the Intelsat 604 satellite. A sports and a film channel were due for Spring 1996, to be followed by other theme-based channels (medicine, business, children), to reach a potential audience of 40 million "collective customers" (cable, SMATV) over the ex-Soviet Union.

SE - SWEDEN AND SCANDINAVIA

Terrestrial digital television project

Following consultant Lars Jeding's report *From Mass Media to Multimedia – The Digitalisation of Swedish Television*, the Swedish government announced its intention of backing terrestrial digital television and presented a bill before Parliament on 13 March 1996. The Government's proposal, backed by the three main political parties, allows for the introduction of eight digital channels by late 1998. It plans to terminate analogue services by the year 2008, by which time it is thought about fifty terrestrial digital channels will be available.

Sources of information

Magazines

ATM, Broadcast, Cable and Satellite Europe, Cable and Satellite Express, Cine & Tele Informe, Ecran Total, Le mensuel des nouvelles télévisions, Marketing & Media, Media Nordic News, Medien Bulletin, Millecanali, Screen Digest, TBI, TV World.

Internet servers & sites

Satellite

Internet sites dedicated to current news on satellite TV

- European Satellite Information
http://www.hf-fak.uib.no/smi/ksv/SatFaq.html
- Robert's Satellite TV Page
http://www.nmia.com/~roberts/robert.html
- SAT-NET
http://www.sat-net.com/
- SATCO DX - Satellite Chart
http://www.satcodx.com/
- Satellite Europe
ftp://ftp.ntb.ch/Information/Satellite_Europe/
- Satellite Journal
http://www.nmia.com/~roberts/sji/sj300.html
- Satellitenfrequenzen
http://www-dw.gmd.de/cgi bin/listfolder/english/tv/frequencies/satellites.html
- Télé-Satellite
http://area51.upsu.plym.ac.uk/~sat/telesatellite/
- Télé-Satellite on-line
http://www.TELE-satellit.com/
- The DBS Home Page
http://www.dbsdish.com/
- The Litle BBS
http://www.login.dknet.dk/~husted/

Major satellite operators on internet

- Deutsche Bundespost Telekom
http://www.dtag.de/dtag/telekom_fr.html
- Eutelsat
http://www.eutelsat.org/home.html
- Hispasat
http://www.etsit.upv.es/asig/5º/tel_espa/pract_1/
- Intelsat
http://www.intelsat.int:8080/
- Intersputnik
http://nsn.net/express.html
- SES
http://www.aia.lu/home.html
- Telenor
http://www.telenor.no/
- Tele-X
http://www.ssc.se/ssc/telex.html
- Turksat
http://inter.mfa.gov.tr/grupd/turksat.htm

International or European organisations involved in the introduction of digital TV

- UIT (index)
http://www.itu.ch/special/search.html
- DVB
http://www.ebu.ch/dvb_home.html
- European Radiocommunication Office
http://www.ero.dk/ero/eronew.htm#INTRODUCTION
- European Commission - Directive on advanced television
http://www.cec.lu/en/comm/dg10/avpolicy/d93424.html

Sites dedicated to technical norms and aspects of TV

- Worldwide TV Standard
http://www.ee.surrey.ac.uk/Contrib/WorldTV

Sites dedicated to MPEG

- http://random.chem.psu.edu/mpeg.html
- http://www.crs4.it/~luigi/MPEG/mpegfaq3.html/
- European Commission: Green Paper on the Legal Protection of Encrypted Services in the Internal Market
- http://www.ispo.cec.be/infosoc/legreg/docs/9676en.html

These channels could include new national or foreign channels (especially those from other Scandinavian countries), as well as the existing Swedish channels. The project would need an investment of about 10-20 thousand million SEK (1-2 thousand million ecu) for broadcasting equipment, terminals and new receivers.

Nethold

On 19 April 1996, Nethold announced it would be launching later in the year a digital package aimed at Scandinavian countries. The initial package, broadcast over repeaters 77 and 80 of the Astra 1E satellite, will feature sixteen channels: apart from FilmNet Television's three film channels and sports channel, the following channels will be included: BET on Jazz International, Bloomberg Information TV, Discovery Channel, EBN, Hallmark Entertainment Television, Performance – The Arts Channel, TCC Nordic, Travel, the Weather Channel, NBC's international channels (CNBC, NBC Super Channel, MSNBC and Giga TV). Three channels of the Scandinavian Broadcasting System (SBS) will also be included in the packages marketed on the national markets : Kanal 2 (Denmark), TV Norge (Norway) and Kanal 5 (Sweden). Swedish channel TV4 is currently negotiating with Nethold. PTV, the Finnish pay channel, will also be available on the Finnish digital platform.

Kinnevik

The Kinnevik group, which runs its communications business though a subsidiary called Modern Times Group (MTG), had considered extending its digital channel strategy by joining Nordic Satellite Distribution (NSD), in partnership with Norsk Telecom and Tele Danmark. NSD had taken up practically the whole of the satellite capacity for broadcasting to Scandinavia and had planned to distribute the various Kinnevik channels (TV3, TV1000 & Cinema, TV6, Z-TV and TVG, the tele-shopping channel). However, the European Commission, in its decision of 19 July 1995 (OJEC 2.3.1996), declared that the operation failed to comply with the internal market and European Economic Area regulations governing competition.

In May 1996, MTG drew up an agreement with he Société Européene de Satellites which would allow it to stop broadcasting its channels through the Astra satellites. MTG has not as yet announced any plans for the launch of a digital channel package. Two of the group's channels, TV6 and Z-TV are already broadcast in MPEG-2, using the Tele-X satellite.

In September 1995, the Kinnevik group also announced it would be launching pay-per-view services and had as such decided to quit the Astra platform, to put its channels on the Sirius satellite.

Telia Media and the Alfa project

Telia Media was set up in mid-1995, following the restructuring of Swedish Telecom. It is the focal element of the Alfa project, set up in partnership with the Egmont (DK) and Schibsted (NO) communication groups. Telia Media is also involved in Svensk Kabel's Bio Hemma project, the first European pay-per-view service, launched in June 1994 and which, since May 1996, has been broadcasting four channels to a potential audience of one million subscribers. Bio Hemma had 100 000 subscribers by spring 1996 and should now be moving towards a genuine video-on-demand service. A trial video-on-demand service has been on stream since February 1995 in 400 households. The Svenska server can stock *00 feature-length films, which should go up to 1 000 by the end of 1996.

Telia Media has reserved 6 repeaters on Eutelsat's Hot Bird 2 satellite, which is due to be launched in August 1996. Twenty digital channels should be available by autumn, for subscribers willing to rent a Svensk Kabel terminal.

Compiled by André Lange
Expert,
European Audiovisual
Observatory.

Digital television : composition of packages (channels in project stage are indicaded in italics)

	CanalSatellite	AB Sat	*TPS*	*DF 1*	*Nethold (Scandinavie)*	BSkyB (analogique)
GENERALIST	TMC, Paris Première		*TF1, France 2 France 3, M6, TSR*	*Sat.1, NBC Super Channel*	*Chaînes nationales, NBC SuperChannel*	Sky One
CHILDREN'S	Canal J			*Junior*	*TCC*	TCC, Nickelodeon
	Disney Channel					
SERIES, TV FICTION	Canal Jimmy	AB Channel 1		*Krimi, Herz, Comedy, Western*	*Hatmark Entertainment*	Sky soap, The Family Channel, UK Gold
						The Sci-Fi Channel
SPORTS	Eurosport France			*Deutsches Sportfernsehen*	*Super/Sport*	Sky Sports
	Chaîne hippique					Sky Sports 2, Sky Sports Gold
INFORMATION	LCI		*Euronews*	*DF1 Infokanal*		Sky News
FINANCIAL INFORMATION				*CNBC*	*CNBC, Bloomberg Information, EBN*	EBN
WHEATHER	La Chaîne Météo				*The Weather Channel*	
ROCK MUSIC	MCM	Musique 1		*MTV*		MTV
CLASSICAL MUSIC JAZZ	Muzzik	Musique classique			*BET en Jazz*	
COUNTRY MUSIC						CMT
TRAVEL	*Voyage*	*Evasion*			*Travel*	Sky Travel
COMPUTER, VIDEO GAMES	C :				*MSNBC, Giga TV*	
OLD FILMS	Ciné Cinéfil			*Star Kino, Ciné Royal, Heitmatkanal*		Bravo
CONTEMPORARY FILMS	Ciné-Cinémas	Rires, Polar		*Comedy, Thriller, Action, Western*		The Movie Channel
		Romance, Action/Aventure		*Romantic*		
RECENT FILMS	Canal +				*FilmNet*	Sky Movies
AMERICAN FILMS		*Hollywood Boulevard*				Paramount
EROTIC FILMS		*XXL*				
PAY-PER-VIEW	Kiosque			Cinédom		
ANIMALS		Animaux				
CARTOONS		Cartoons		*K - toon*		
DOCUMENTARIES	*Planète Histoire*	*Encyclopedia*	*Chaîne de l'histoire*	*Discovery Channel Leonardo*	*Discovery Channel*	Discovery Channel, The History Channel
CULTURE	*ARTE (?)*		*ARTE (?)*		*Performance - the Arts Channel*	
AUTOMOBILE		*Automobile*				
NATURE	*In project*	*Chasse, pêche, terroir*				
NOSTALGIA		*Nostalgie*		*VH-1*		VH-1
TELESHOPPING	*In project*					QVC
PARLEMENTARY CHANNEL	*In project*					
EDUCATIONAL CHANNEL	*La Cinquième (?)*		*La Cinquième (?)*			TLC
WIMENS CHANNEL						UK Living
RADIO CHANNELS		30		*30 (DMX)*	*DMX*	

Source : *European Audiovisual Observatory.*

Problems of social law in international audiovisual and multimedia productions

Legal rules and the way they are implemented give rise to specific problems in international social law. These problems occur because the standards defined by international bodies are drawn up with reference to national legislations. However, the latter are characterised by the disparities in their legal and regulatory terms whether in the field of labour relations or the social protection of individuals. Disparities are also due to regional characteristics, to different national economic potential leading to a gap in currency values and, hence, their effect on the level of remuneration and social benefits.

The socio-economic context

The expression audiovisual production includes the sectors of cinematographic production (full-length feature films or shorts) and television production by television channels to cater for their programmes either directly or through independent production companies.

The expression multimedia production means the computer-assisted creation of a product resulting from the combination of digitised sound, visual or text media such as music recordings, photographs, films, cartoons, written or spoken texts, etc.

The concept international productions in the widest sense of the term includes:

– co-productions by companies whose registered office is located in different countries;

– productions for which extraneous factors occur, namely, artists and technicians of different nationalities;

– de-localisation of production with employment of staff in the country of location;

– recourse to a foreign services company to carry out the production part;

– the special case of multimedia productions: remote creation by foreign technicians of a product medium or part of a product medium, etc.

In terms of socio-professional categories, the following may be mentioned :

– the script writer, the adapter of a work, the musical composer, the artistic director, the director;

– the performing artist;

– the director of photography, the sound engineer;

– the cameraman;

– the software designer, the developer, the scanner;

– the computer graphics artist, the media mixer.

The national legal context

Basic principles governing labour relations

The work contract

This contract establishes a link of subordination with the employer. The clauses lay down the level of remuneration, social contributions, the conditions of work, different advantages in nature or in kind, paid holidays.

It may be a non-fixed term work contract which, in principle, confers permanence on the post occupied or a fixed term work contract governed by specific standards.

The contract for providing services

The main criteria which characterise these kinds of labour relations are :

– the worker carries out his work independently of any link of subordination with the commissioning agent;

– he himself is responsible for the practical organisation and financial management of his work;

– his salary is paid gross;

– in principle he alone pays for the social guarantees to which he may be entitled.

Specificity of labour relations of artists and technicians

The audiovisual sector is characterised by production processes whose duration in time is very variable and, because of this, it generates special working conditions which are translated into "part-time" employment as part of fixed-term work contracts. This generally applies to performing artists who do not have employee status, in legal or regulatory terms, except in France and the Netherlands. This is also the case for audiovisual technicians, the exceptions being some of those employed by the national radio and television channels.

In the multimedia sector an analysis of data on labour relations and working conditions has not yet been conducted.

In terms of categories, the scriptwriter, the software designer and the artistic director may be considered as being self-employed professionals. It should be pointed out that the development of data networks will increase recourse to remote working, the technician being connected to a terminal either as an employee or self-employed, thus leading to a change in the organisation of work and to a risk of lowering the standards of social protection.

Economic consequences are also likely to emerge with the increase in delocalisation of production, sub-contracted out by companies in industrialised countries to regions with low salaries (South East Asia, for example).

Social protection systems

In all European countries specific legislation lays down the standards of social protection insuring workers against the social risks they, as well as their family, are likely to face: sickness, maternity, invalidity, occupational accidents, old age, unemployment.

A comparative analysis of the legal and regulatory terms highlights disparities to a greater or lesser degree according to the criteria taken into consideration. Thus the financial contribution by employers and employees is established according to variable rates which affect the amount of remuneration with or without upper limits. The same is true for the conditions for the granting of benefits paid according to justification of periods of work and/or amounts of remuneration received.

In different countries self-employed workers are governed by specific standards. They are responsible for their affiliation to the general scheme they come under. Basically they finance their protection and the risks covered are less extensive than for employees.

The international legal context

The international standards are defined by the International Labour Organisation, the Council of Europe, Unesco, the Treaty of Rome and by bilateral or multilateral agreements concerning social protection.

The ILO has conventions which establish terms for migrant workers (Convention No. 97), the minimum standards for social security (Convention No. 102) or social policy (Convention No. 117).

In 1992, a tripartite meeting was held at the ILO on the employment and working conditions of performing artists.

Association agreements concluded between countries of central and eastern Europe and the European Union

OJEC 31 December 1993, No. L 347 and No. L 348.

OJEC 31 December 1994, No. L 357, No. L 358, No. L 359 and No. L 360.

Additional protocols to European agreements

OJEC 30 December 1995, No. L 317.

European Commission
Directorate General V
Employment, Industrial Relations and Social Affairs
Rue de la Loi 200
B-1049 Brussels

Contact 1: Mr Sergio Piccolo
(in charge of MISEP network)
Tel. (32) 2 295 71 09
Fax (32) 2 296 98 48

Contact 2: Mr Klaus Käding
(in charge of SYSTEM network)
Tel. (32) 2 295 55 74
Fax (32) 2 296 68 48

Contact 3: Mr Yves Chassard
(in charge of MISSOC system)
Tel. (32) 2 299 04 75
Fax (32) 2 299 05 09

Contact 4: Mr Paris
(in charge of the file on the draft directive on the employment abroad of workers supplying a service)
Tel. (32) 2 296 57 65
Fax (32) 2 299 98 99

The fatal téléphone - Directed by Damjan Kozole, produced in 1987.

© Council of Europe.

During the general conference in Belgrade in 1980, Unesco adopted a recommendation on the artist's condition.

The Council of Europe has drawn up different texts in the social field, such as the European Social Charter, the European Convention on the Legal Status of Migrant Workers and the European Social Security Convention.

The fundamental principles underlying these different texts aim at encouraging member states to continue to make an effort in the social field, to ensure:

– the guarantee of equality of treatment in respect of social security between all the nationals of states concerned by the conclusion of bilateral or multilateral agreements;

– that only one legislation is applicable: that of the place of work, even if the person concerned resides in the territory of another state or if the company employing him has its head office in the territory of another state.

The Treaty of Rome and derived EU law

Labour law

As far as labour law is concerned specific terms are defined in Article 48 of the Treaty which stipulates "the abolition of any discrimination based on nationality as regards employment, remuneration and other conditions of work". The situation of workers concerning social legislation is regulated by EU law as soon as there is a move from one country to another for the purposes of employment.

Regulation 1612/68 of 15 October 1968 (OJEC No. L.257 of 19 October 1980) on the freedom of movement of workers within the Union lays down the terms for access and working but says nothing about applicable legislation: legal standards of the country where the work is carried out or legal standards of the place of residence of the worker as defined by the Convention of Rome on the law which is applicable to contractual obligations of 19 June 1980 (OJEC No. L.266 of 9 October 1980).[1]

The text of the convention, in Article 6, states that the work contract is governed by the national legislation chosen by the parties in the work relationship. In the absence of choice, the applicable law is :

– for the worker who is temporarily working abroad, the law of the country where he usually works;

– for the worker who works in several countries the law of the state where the employer is established.

However, Article 7 stipulates that even if a different law has been chosen the employee may not be deprived of the protection guaranteed by the law of the country in which he usually works.

The question arises as to what extent the artist or technician concerned is in a position to negotiate with the producer the choice of the most favourable law applicable.

Movement of employees in the context of free provision of services may lead to a dilution of social rights or even to the distortion of competition. By way of an example: the case of technicians who are employees in a Portuguese services company and who are working temporarily in Germany. Their engagement through a work contract which is governed by Portuguese legislation will mean that their remuneration and social guarantees will be lower than that of German technicians employed to do the same kind of work.[2]

Social Protection

Article 51 of the Treaty of Rome defines equality of social protection of the foreign worker who is a national of a country of the Union with that of national workers. This principle is laid down in detail in Regulation 1408/71 of 14 June 1971 (OJEC No. L 149 of 5 July 1971) concerning the application of social security schemes applicable to employees and self-employed workers and to their families. This text determines that only one legislation is applicable which is that of the country where the worker concerned does his work.

Special situations may occur:

This is the case, for example, of the technician who occasionally works in a country of the Union which is not his own. He remains subject to the legislation of his country as long as he is affiliated there to the general social security scheme. If not, he is subject to the legislation of the country where he works. In the case of the artist, who may be an employee or self-employed, usually working in two or several member states, he is covered by the legislation of his country but must inform the competent services of his situation.

Nationals of third countries

Article 100 C of the Treaty of Maastricht states that the conditions of entry and of access to work of nationals of a third country come within the sole competence of the member states.

In all the European countries national legislation on immigration establishes strict norms, in particular in respect of employment. Given international rules, foreign workers in the host country enjoy equality of treatment with nationals in respect of social legislation. Numerous bilateral and multilateral agreements exist which guarantee reciprocity of social protection measures.

Association agreements were concluded in 1994 and 1995 between the European Union and different countries in central and eastern Europe: Poland, Hungary, Romania, Bulgaria, the Slovak Republic, and the Czech Republic. The provisions stipulate that for workers from these countries who are legally employed in a member state of the Union there shall be no discrimination on the basis of nationality in respect of working conditions, remuneration and social protection in comparison with the nationals of this member state. These terms apply subject to the conditions laid down in these agreements.

Conclusions and suggestions

This brief analysis of the situation of social law applying to artists and technicians employed in international productions in the audiovisual and mutlimedia sectors makes it possible to reach the following conclusions :

– investigations need to be carried out in the multimedia sector into work relations, employment conditions and their consequences for the social guarantees of workers;[3]

– the same absence of information can be seen for the situation of self-employed workers having contracts in the services industry. The migrant worker employed through this type of contract has rights which are made fragile: badly informed and/or for financial reasons, he neglects the procedures which would enable him to enjoy the social guarantees to which he is entitled.

The risk of dilution of social rights may be considerable if this kind of work relationship becomes more widespread;

– For the migrant worker, as for the producer, obtaining information about the legal and regulatory terms in the different countries seems uncertain because of their complexity, their disparity and the difficulties encountered in gaining access to them.

Information systems exist at international level, operated by the International Labour Organisation and the International Association of Social Security (IASS).

Community information

1 - mutual system of information about employment policies: MISEP.

2 - community information system on social protection : MISSOC.

3 - European documentation system on employment : SYSTEM.

The Commission publishes these different systems in the form of written documents and in CD ROM form called Socibas.

Information of the ILO and the IASS

The joint information unit on social security combining the documentation centres of these two bodies has set up several databases, including the description of the national social security schemes in the world.

The information, presented homogeneously for each country, is published in written form and its Internet availability is being prepared.

It would be especially desirable that the content of each criterion taken into consideration should correspond in the comparative tables including the different countries, according to the MISSOC community system. These tables could portray regions such as: western Europe and central and eastern Europe.

The development of digital technologies requires reflection as to the role of the information society and its implications for the individual. In this context it seems important that, especially in the area of social law, the necessary work be done on the harmonisation of the analysis of national and international legal standards and on the simplification of the procedures whereby they can be made available to producers, artists and technicians working in the audiovisual and multimedia sectors.

by Marie Madeleine Krust, (ADAMI – France).

1. Ratified by twelve member states, negotiations with Austria, Finland and Sweden are currently taking place.

2. A draft directive of 1993 states that, in this case, the member states must make sure that the employees concerned are not deprived of working and employment conditions in force in the country where the service is carried out. This directive is still under discussion.

3. The ILO is organising a tripartite symposium at the end of January 1997 on the social problems linked with the "Convergence Multimedia". A draft convention on homeworking will be submitted to the 83rd Session of the International Labour Conference.

International tax issues facing the European audiovisual industry

This article is a summary of a report commissioned from KPMG Meijburg and Co. by the Observatory as part of the preparatory work for the expert workshop on "social, labour and tax law issues", which was held in Strasbourg on 22 april. Opinions expressed in this article are those of the authors and do not necessarily represent those of the European Audiovisual Observatory, its members or the Council of Europe.

The European audiovisual industry faces key tax disadvantages, particularly when compared to the industry in the USA. By necessity, European players in the industry must do business across borders. Due to this cross border activity, the industry is exposed to fiscal obstacles arising due to a lack of consistency in rules, treatment and interpretations between European countries.

Summarised below is an outline of the tax obstacles encountered by the European audiovisual industry and ideas for possible solutions.

Formation of capital

The initial stage of an audiovisual project involves obtaining the funds necessary to finance the project. At this stage, there are several fiscal obstacles which inhibit the raising of funds. KPMG estimates that in order to encourage investment in the European audiovisual industry, such tax obstacles should be reduced or eliminated.

– Cost of capital: Where a corporation is used to finance a project, many European countries levy a capital tax whereas a number of EU countries have abolished this tax. In countries where capital tax is levied, such tax adds to the cost of an audiovisual project. KPMG estimates that to enhance tax neutrality across EU countries, companies active in the audiovisual industry should be exempt from the capital tax.

– Debt to equity restriction: Generally, a business enterprise which involves high risks, such as the audiovisual industry, calls for a relatively high amount of debt. However, according to KPMG, a number of countries within the EU apply measures against so-called thin-capitalisation or base erosion.

Such rules can hinder fund-raising. KPMG suggest that thin-capitalisation or base erosion provisions should not apply to companies involved in the audiovisual industry.

– Interest and dividend withholding taxes: Interest and dividend withholding taxes add an additional obstacle to cross-border financing. These withholding taxes may result in double taxation which is sometimes not eliminated by double tax treaties. Although the EU Parent-Subsidiary Directive already provides for an exemption for dividend withholding tax, one of the key requirements is that a shareholding threshold of at least 25% must be met. The 25% threshold is too high for audiovisual financing, which typically derives funds from wide sources, in part, to spread the risk. Moreover, no harmonisation for interest withholding tax has been achieved. In general, a uniform interest and dividend withholding tax rate would be beneficial in order to remove distortions and tax competition between EU countries. KPMG estimates that overall elimination of interest and dividend withholding taxes for the audiovisual industry would certainly provide a boost to raising funds.

– Limitations on loss carry-overs: Some EU countries have restrictions on how far back or forward losses can be carried over. In addition, some countries restrict corporate loss utilisation where there has been a change in ownership. Such restrictions hamper the attractiveness of audiovisual investments which often involve financial risks. According to KPMG, the elimination of such restrictions for the audiovisual industry is suggested.

– Limitations on loss utilisation within a group: It is generally not possible for a parent company to deduct the losses of a subsidiary located in another EU member state, unless the subsidiary is liquidated. According to KPMG, the ability for a parent company to offset the losses sustained by a foreign subsidiary against its own profits would encourage cross-border financing in the European audiovisual industry.

– Common investment vehicle: The risks involved in financing audiovisual activities are relatively high, while losses incurred by an audiovisual company may not be immediately taken into account by the investor. This situation does not encourage cross-border financing. A possible solution is to establish a common investment vehicle within Europe. Such an entity would combine limited liability with fiscal transparency for investors (similar to the USA "limited liability company" or "S corporation"). This balances the risk with the ability to immediately deduct losses.

– Incentives: Other suggested incentives that would boost investment in the European audiovisual industry include:

– deferral or exemption of tax on audiovisual profits reinvested in the business;

– negative corporate income tax subsidies for audiovisual companies in a loss position;

– allowing trading in loss companies in the audiovisual industry;

– exemption of tax on interest and dividends received from audiovisual industry.

Provisions for so-called "SOFICA's" in France and "Angels" in the UK could provide examples of incentives for the audiovisual industry.

Production

Once the financing is obtained and budgets are approved, the planning and production phase of an audiovisual project begins. There are a number of obstacles faced at this stage.

– Amortisation of production costs: Many EU countries require production expenditures to be capitalised and amortised over a prescribed number of years or amortised to match the revenue stream of the project. Assuming the production company has other sources of income, there may be large cash outlays with no immediate tax benefit. In order to eliminate inconsistencies, the treatment of production costs across EU countries should be uniform. Clearly, according to KPMG, an immediate write-off of expenses for the audiovisual industry is ideal.

– VAT issues: Although the VAT system is substantially harmonised within Europe, there are still some inconsistencies which result in difficulties for the European audiovisual industry. In addition, although most input VAT could potentially be reclaimed, this creates an administrative burden in applying for refunds, particularly when filming activities take place in several countries. Moreover, many European countries do not allow VAT refunds on lodging and meals. KPMG estimates that in order to reduce these difficulties, greater VAT harmonisation is desirable in addition to simplifying the VAT refund process.

– Inconsistent interpretations: Potential double taxation could arise due to inconsistency among European countries with respect

KPMG
Meijburg & Co.

KPMG Meijburg & Co. is one of the leading tax consulting firms in the Netherlands. KPMG Meijburg & Co. has been in business in the Netherlands for more than fifty years, advising on domestic and international tax law. They have twenty-seven offices throughout the Netherlands.

Their experience and expertise extend beyond the Netherlands. KPMG Meijburg & Co. is a member of the world-wide KPMG Group, specialising in accountancy and consultancy. KPMG employs more than 75 000 people in 120 countries, making it one of the foremost companies of its kind in the world. The clients of KPMG Meijburg & Co. have access to the global KPMG resources.

This harmonisation and transparency report is available free of charge from the European Audiovisual Observatory
Tel. (33) 88 14 44 00
Fax (33) 88 14 44 19
E-mail: obs@obs.c-strasbourg.fr

to the interpretations of terms such as "employer", "fixed base", and "artist" and interpretations of artist conduit provisions in double tax treaties. KPMG propose the formulation of uniform and unambiguous terms and interpretations of treaty provisions.

– Tax treatment of personnel: For short-term projects (namely less than six months), artists are generally subject to tax in the country where the activities take place whereas the other personnel are not. However, the procedures for obtaining tax waivers and the requirement to file tax returns vary between European countries. The non-resident taxation of audiovisual personnel, including artists, should be simplified and harmonised within Europe. For example, according to KPMG, a flat withholding tax on net income as a final tax for artists could be implemented, as is the case in the Netherlands.

Distribution and licensing

Further tax obstacles arise at the distribution and licensing phase of an audiovisual project.

– Royalty withholding tax: Where a producer retains the rights to a film and licenses the rights to other parties, the producer generally earns royalty income which may be subject to royalty withholding tax. The adverse consequences of royalty withholding tax may be mitigated by double tax treaties. However, not all treaties contain a 0% withholding rate. Moreover, not all countries are covered by treaties. In addition, double tax relief may arise since the royalty withholding tax is generally imposed on gross royalty income whereas the foreign tax credit may be limited to the resident tax on the net royalty income. In order to mitigate these problems, KPMG estimates that there should be an exemption from withholding on royalties from audiovisual rights.

– Definition of royalty: There could be interpretation differences between European countries as to what constitutes a royalty, particularly in the context of technical service and technical assistance fees. A uniform and unambiguous definition of "royalty" should be formulated for all EU countries.

– VAT on audiovisual products: EU member states impose VAT on audiovisual products (for example, cameras, videotapes, cinema tickets, etc.). In order to boost the European audiovisual industry, KPMG suggests that a goal should be for the audiovisual industry to receive preferential VAT treatment, with reduced or zero VAT rates on audiovisual products sold. This would lower costs to consumers and attract more sales.

by Gerrit te Spenke,
KPMG Meijburg & Co.
The Netherlands.

Sequentia Bibliographical Supplement

Further references to recent books and publications on the audiovisual sector in Europe can be found in the ***Sequentia Bibliographical Supplement*** which has been published as a free supplement to the magazine for paying subscribers since September 1995.

The current ***Sequentia Bibliographical Supplement No. 4,*** can also be consulted free of charge on the European Audiovisual Observatory's internet site, **http://www.obs.c-strasbourg.fr./Sequentia.main.htm**

For a free sample, please contact the editor :
Sequentia
Ms Lone Le Floch-Andersen
European Audiovisual Observatory
76, allée de la Robertsau
F-67000 Strasbourg
Tel. (33) 88 14 44 07
Fax (33) 88 14 44 19
E-mail : L.Andersen@obs.c-strasbourg.fr

Statistical yearbooks (international & European)

Ayre, J. (ed.). *The International Multimedia Yearbook 1995-96.* Fitzroy Dearbon, London, 1996. 955p., ISBN 1-884964-397. £115.

Business Ratio Plus. The Film & TV Industry. ICC Business Publications Ltd, London, 1996. 456p.

Kagan's European Cable/Pay TV Databook 1996: *Exclusive Cable & Pay TV Market Penetration and Revenue Forecasts Through 2005*. Paul Kagan, London, 1996. £335.

Kagans European Television 1996. Country Profiles and Channel Profiles. Paul Kagan, London, 1996. £300.

ITU. *World Telecommunication Development Report: Information Infrastructures and World Telecommunications Indicators.* International Telecommunication Union, Geneva, 1995. 300p., ISBN 92-61-05662-8. 160 CHF.

Television

Baudelot, P. and Eymery, G. *Les satellites et l'audiovisuel. Les techniques de diffusion, le numérique, le pay-per-view, l'interactivité, la réglementation, les chaînes européennes, les programmes, les marchés.* Editions Dixit, Paris, 1996. 320FF.

Griotteray, A. *L'argent de la télévision*. Editions du Rocher, Monaco, 1996. 219p. 98 FF.

Stephan, D. *Rot - Schwartz-Rot: Rundfunkpolitik in Österreich 1945-1955*. Guthmann Peterson, Vienna, 1995. 135p., ISBN 3-900782-23-7.

Law

Bancel-Charensol. L. *La déreglementation des télécommunications dans les grands pays industriels*. Economica, Paris, 1996. 350p. 198 FF.

Bate, S.; Johnson, T., and White. S. *Satellite Communications in Europe: Law and Regulation*. 2nd edition. Financial Times, London, 1996. £135.

Calow, D.; Lee, A., and Williams, A. *Multimedia: Contracts, Rights and Licensing. Special Report*. Financial Times, London, 1996. £125.

Desjonquères, P. *Guide fiscal et social des auteurs*. CEDAT, Paris, 1995. 286p., ISBN 2-86749-012-X. 390 FF.

This list was compiled by Lone Le Floch-Andersen, with the kind assistance of the Deutsche Bobliothek, Blackwells and Medien Perspektiven.

Transparency *and* Harmonisation Work

Better information flows and improved transparency of information have been identified as two of the major problem areas requiring attention in the European audiovisual sector. They have both been major areas of activity of the European Audiovisual Observatory since its foundation. The Observatory acts as a co-ordination centre but does not have any regulatory power. We provide the platform for analysis and the proposals for solutions.

The different publications and services of the Observatory already contribute to the aim of improved transparency. The other part of activity in this field are the workshops on various themes related to statistical, legal and practical information issues. The Observatory summarises the experts' discussions and recommendations aimed at finding appropriate solutions.

The first phase of the Observatory's work towards more transparency and improved information flow will be completed at the end of 1996. The work will result in a series of concrete reports that will be published during the autumn of 1996.

OBSERVATOIRE EUROPÉEN DE L'AUDIOVISUEL
EUROPEAN AUDIOVISUAL OBSERVATORY
EUROPÄISCHE AUDIOVISUELLE INFORMATIONSSTELLE

AVAILABLE REPORTS :

International film and television co-production contracts

The report summarises the results of two working sessions on this topic and reproduces the preparatory study that the Observatory commissioned from the Brussels – based organisation Cerica. It identifies the need for information on legal issues involved in international co-production contracts and makes concrete proposals for practical solutions.

Social and tax law questions in international film,TV and multimedia productions

If the European audiovisual labour market is to operate correctly and the people working within it are to be adequately protected, then access to information on tax and labour law and its unrestricted circulation are essential. Lack of information in this area has already acted as a hinderance on the development of the sector's economic activities. The aim of the report is to make the professionals more aware of the problems in tax and labour law that they are liable to run into when undertaking an international film, TV or multimedia production.

RAP: resources for audiovisual productions in Europe

There is a multitude of financial sources for the production of audiovisual works in the different European countries. The RAP study examines both public funding mechanisms and private sources (private financiers, broadcasters, distributors and sales agents) on a regional, national and international level. The study is carried out in collaboration with the CNC and Eurimages.

TO BE PUBLISHED :

Statistical data on the production and distribution of TV programmes

There are no existing indicators and methodologies that could be considered as the unanimous basis of researcher's work in this field. Indeed, the statistical evaluation of the production and distribution of television programmes is one of the most complex that the Observatory undertakes. The objective of the report is an analysis of the general problems linked to the topic. It discusses the official data collection process and the one undertaken by professional organisations.

Statistical data on the film industry in Europe

The report identifies the main sources and definitions for data on the film industry and discusses the data collection process on relevant topics such as investments and production costs, the number of films produced, theatre admissions, amongst others. The report concludes by raising the question of an evolution of national statistics towards more harmonisation and the recommendations to be formulated in this respect.

Statistical data on video and new media statistics

Three basic questions are addressed in the report: questions related to data on home video hardware and – in the context of an almost total lack of official statistics – questions related to data collection on software and the multimedia market.

Gathering data on domestic audiovisual equipment

Gathering statistical data on a European scale on audiovisual equipment raises a number of methodological problems that are discussed in the report. Particular subjects to the discussions are the number of televisions and VCRs, the equipment to receive channels broadcast by cable and satellite, equipment in new media hardware and interactive television.

Legal information in eastern and central Europe

A general lack of legal information related to production and distribution of audiovisual works can be observed in eastern and central Europe. Little co-ordination and information flow takes place between these countries in the legal field while knowledge of western European legal documents is very widespread. A preliminary study from the NETCOM Institut in Leipzig results in twelve recommendations to improve the situation.

For further information on these reports, please contact : Markus Booms, Marketing, tel. (33) 88.14.44.06; fax (33) 88.14.44.19
E-mail : M.Booms@obs.c-strasbourg-fr