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Association Européenne des Télévisions Régionales
European Association of Regional Televisions

European Benchmarking

Public Service Broadcasters in the Digital Era

May 2002

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Foreword

Executive Summary

- The environment in which public service broadcasters operate has changed considerably in recent years with the proliferation of private operators (both television channels and alternative broadcast media) and the decline in the advertising market brought about by the economic slowdown.
- The market share of all public service broadcasters has been eroded, with the exception of France. However market share is now stabilising.
- While the environment for public service broadcasters has become much more difficult and challenging, their role and remit remains largely unchanged. However, the public service broadcasting remit is being challenged across Europe in the context of digital television.
- Broadcasters are working towards the EU target of analogue termination scheduled between 2005 – 2015.
- All public service broadcasters are planning to simulcast existing channels and most are planning to launch new channels.
- Smaller public service broadcasters have not yet launched a digital bouquet. (E.g. Ireland, Belgium, Denmark, Norway)
- Broadcasters' strategies are changing and evolving as the market changes. The BBC and SVT have revised their strategies significantly since entering the digital arena.
- Commercial broadcasters across Europe are critical of public service broadcasters launching competing niche channels.
- News, Education and Youth channels are amongst the most popular of those launched or planned
- Public service broadcasters are seeking additional funding in order to launch new digital services and often forming strategic partnerships.
- The audience share technique of measuring quality and success of broadcasts is being questioned in favour of a technique based on reach.
- Potential audience ratings for digital channels are presently extremely low and the days of a public service broadcaster achieving a 30% market share for one channel are no longer achievable in the digital arena.
- The most popular method of receiving digital television is satellite as digital cable is in its infancy and DTT is only operating in four countries (UK, Sweden, Spain, Finland).
- Most public service broadcasters offer their digital service on more than one platform.

- CIRCOM wishes to thank all the stations that participated in the CIRCOM survey the results of which are included in Section 8 of this report. The respondents were:

  Bayerischer Rundfunk (BR), BBC East (Norwich), CT, CT Ostrava, ERT Thessaloniki, France3, HRT, MTV Miskolc, MTV Pécs, MTV Szeged, NRK Oppland, NRK Troms, ORF - Studio Carinthia, ORF Upper Austrian, PBS TVM, RAI, RTE Cork, RTV SHQIPTAR, RTV-Noord, RTV-Slovenia, Slovak Television Banska, Tele-Radio Moldova, TG4, TV Catalunya, TV2 Bornholm, TV2 EAST, TV2 Fyn, TV2 Midt-Vest, TV2 Nord, TV2 Syd

Introduction

At the end of 2001, it is estimated that 38 million homes worldwide had access to interactive digital television services, up from 20 million in 2000. Western Europe accounts for 62% of the audience, North America 18%, Asia-Pacific 10% and Latin America 1%. 74% of viewers use a satellite-based service, 21% cable and 5% terrestrial.[1] The most advanced market in the world is the UK, where 36% of homes had interactive digital television by the end of 2001. All the UK's major digital platforms, satellite, cable and terrestrial, offer a wide range of interactive services such as interactive sports coverage, t-commerce, games, email and walled garden Internet. Other leading European markets include Ireland (18% TV Households), Italy (10.5%) Spain (15%) and France (14%). Television operators in Europe are looking for new ways to compete in the emerging digital market. European governments have committed themselves to analogue termination, which is scheduled between 2005 and 2015.

This document presents an overview of the current state of digital TV within the European broadcasting industry with particular emphasis on the role of public service broadcasters across Europe. Section 1 examines the changing nature of public service broadcasting in the digital era. There are many questions being asked as to what role public service broadcasters should play in the new arena, notably whether they should compete for audience with new commercial channels, or fill in the gaps with less populist programming with a strict public service focus.

Section 2 contains a number of graphical illustrations with regard to digital penetration across Europe and the number of digital channels launched or planned. The countries examined are Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Portugal, Spain, Sweden and the UK. This section also illustrates the annual turnover of the public service broadcasters across Europe. The main finding being, that those with lower turnover are slower at launching new digital channels. The majority of European Public Service Broadcasters with a higher annual turnover are in the process of launching new digital channels.

Section 3 outlines information on digital channels that are being launched by public service broadcasters across Europe. It shows that News, Education, Youth and Parliamentary channels are amongst the most popular of these new channels and looks at some of these channels in more detail, particularly focusing on the justifications for their launch and national competition.

Section 4 of the report investigates the current strategies of the European Public Service Broadcasters by examining the strategies behind the channels they have introduced. Some public service broadcasters have chosen to expand internationally whilst others are focused on the domestic market. Many public service broadcasters have restructured their organisations to accommodate digital channels and there have been calls for standardisation of receivers to allow an open market to develop. European regulation has meant that transmission systems have been deregulated involving selling off the transmission networks owned by public service broadcasters. Some channels have been launched because the public service broadcaster holds large quantities of archive material. There is also an observation of why some the public service broadcasters have adopted, or been forced to adopt, *'wait and see'* attitudes. The report also reflects on some of the criticisms public service broadcasters, notably the BBC, have received from national media and public commentators on their launch into the digital arena.

Section 5 examines the financial implications of running digital channels in the respective countries and digital funding arrangements available to each of the stations. Section 6 explores the reach and ratings of European digital channels and shows that the potential audience ratings for digital channels are presently extremely low and the days of a public service broadcaster achieving a 30% market share for one channel are no longer achievable in the digital arena.

Section 7 offers an overview of some of the major European platforms and Section 8 concludes with an individual country overview, which provides a brief synopsis on the current situation within Europe regarding Digital TV together with a breakdown of new digital channels operated by public service broadcasters. Section 8 also includes the results of the recent CIRCOM survey, which illustrates the situation of specific CIRCOM members.

[1] Source: Screen Digest

Section 1: Public Service Broadcasting

> *'For all Public Service Broadcasters, digital technology has the key advantage of allowing an explosion of supply. However, new and costly transmission systems are needed. Also, free to air television will see much fiercer competition, as many more channels battle for viewers' attention and advertising revenues. This could threaten the viability of the advertising funded elements of the present public service broadcasting regime which might lead to a reduction in the number of services available free at the point of use/or the quality of the services they provide'.*[2]

Should the technical possibilities of digitisation be taken advantage of, then the future of public service broadcasting must first be integrated into a broader discourse on questions of the role and function of public television in the information age. The new digital transmission techniques will bring with them a renewed fragmentation of the audience, weakening the operators' success strategy of quota optimisation by means of full service programming. This process further tends to reduce expected advertising revenues, and thereby increases the cost pressures on programme makers and investments in new projects even further. In both analogue markets, where public networks have now been confronted with private foreign competition, and in digital markets, where there is competition for commercially attractive programme content, the budgetary pressure on public service broadcasters will increase if effective counter-strategies against these developments are not followed.

As a result, digitisation may step up competition in the programme, advertising and viewer markets. It is assumed, for example, that in the future public service broadcasters will face increased competition from digital pay TV services in the fields of advertising and programme rights, with the result that its advertising volume will shrink and the costs of programme rights will rise disproportionately. As a result, public service broadcasters will have to adjust to these developments and many have advanced into niche programming in order to compete with the new services on offer. In doing so, it is essential that these services do not lose their public service characteristics, based on the ideas of geographical, programme and audience universality. This holds the undesirable possibility of undermining public support, which forms the basis of many public service broadcasters' principle funding source, the licence fee. These challenges among others will have to be considered in the future move to digital TV, and are resultantly being considered across Europe at present.

In the UK there has been much debate regarding the role of public service broadcasting in the digital era. Tessa Jowell, Minister for Culture, gave her perception in a speech to the Royal Television Society conference in September 2001. Independent Television Commission research has shown that viewers do not trust market forces alone, to deliver quality television. Tessa Jowell offered a definition of public service broadcasting for the digital era:

"Public service broadcasting allows for non-commercial motivations. It can ensure independence and impartiality, not merely in news but across a wide range of programming. It must seek to educate – in general programming as well as in specialist educational output. It must be universal and inclusive. It can sustain robust production capacity here, when the market might find it cheaper to buy programming from abroad. It can be high quality. It can innovate, and perhaps most of all, it can challenge the audience and extend its taste and knowledge, as well as deliver the familiar and tested."[3]

Ms Jowell perceives the licence fee as part of the "nation's venture capital for creativity". She maintains that the struggle for ratings should not be a public service broadcaster's only guiding principle and that the test should be as much audience reach as much as audience share, therefore compulsive competition with commercial services should never be the scheduling principle.

In response Deirdre Hutton, NCC chairman, said: "The government approved the licence fee increase, and only then asked how the BBC might allocate it. Consumers need a better context for important decisions of this sort. A clearer vision of public service broadcasting, on both analogue and digital, is now essential."[4]

In a meeting in Lisbon on 30 January 2001, Javier González Ferrari, director general of Radiotelevisión Española (RTVE), Marc Tessier, president of France Télévision, Roberto Zaccaria, president of Radiotelevisone Italiana (RAI), and João Carlos Silva, president of Radiotelevisão Portuguesa (RTP) met to

[2] Collins & Murroni 1996, p.44
[3] Financial Times, Jowell- TV's public service future – 18th September 2001
[4] The Guardian, Hutton, D., September 17, 2001

discuss these issues. The presidents agreed that, to fulfil their public service broadcasting remit in a multimedia environment, they must:

- Be guaranteed sufficient reliable resources from the various funding systems organised by the national legislators, which are to be confirmed by EU legislation as stated in the Amsterdam Protocol, and defined in multi-annual plans or statements of commitment which include obligations of efficiency, transparency and quality.
- Be given the ability and the resources to acquire, either individually or through various forms of co-operation, all categories of broadcasting rights, including major sports events and feature films, and to produce all types of programmes, underlining their joint interest in making quality programmes in terms of content, production and format.
- Be major players in developing new services, including on-line services, by offering their programmes on all available technical platforms, both analogue and digital, and in all formats (general interest channels, theme channels, multimedia services, teletext, and other services broadcast or distributed point to point, interactive, on demand, or with conditional access). These activities, insofar as they fulfil the public service remit, may be carried out directly or through subsidiaries, which are largely public entities.
- Conduct studies into all ways of improving circulation of European public service channels and productions in order to ensure cultural exchanges, which respect the principle of diversity.

The presidents state that only strong public service broadcasters are able to restrict horizontal and vertical concentrations of commercial operators in the broadcasting and multimedia sectors and guarantee respect for human dignity and fundamental human rights. To this end, they consider it necessary:

- To ensure that every citizen has equal access to the various content services;
- To reduce the digital divide which bears the risk of creating two classes of citizens;
- To allow plurality in the development of democracy;
- To ensure consistency and social cohesion in each individual State and in the European Union as a whole;
- To guarantee cultural and linguistic diversity in each country, in Europe and throughout the world, while at the same time establishing closer relations between the Mediterranean countries;
- To create the right conditions for new European citizenship in the future information society;
- To provide an alternative to the concentration currently taking place in the European broadcasting sector.[5]

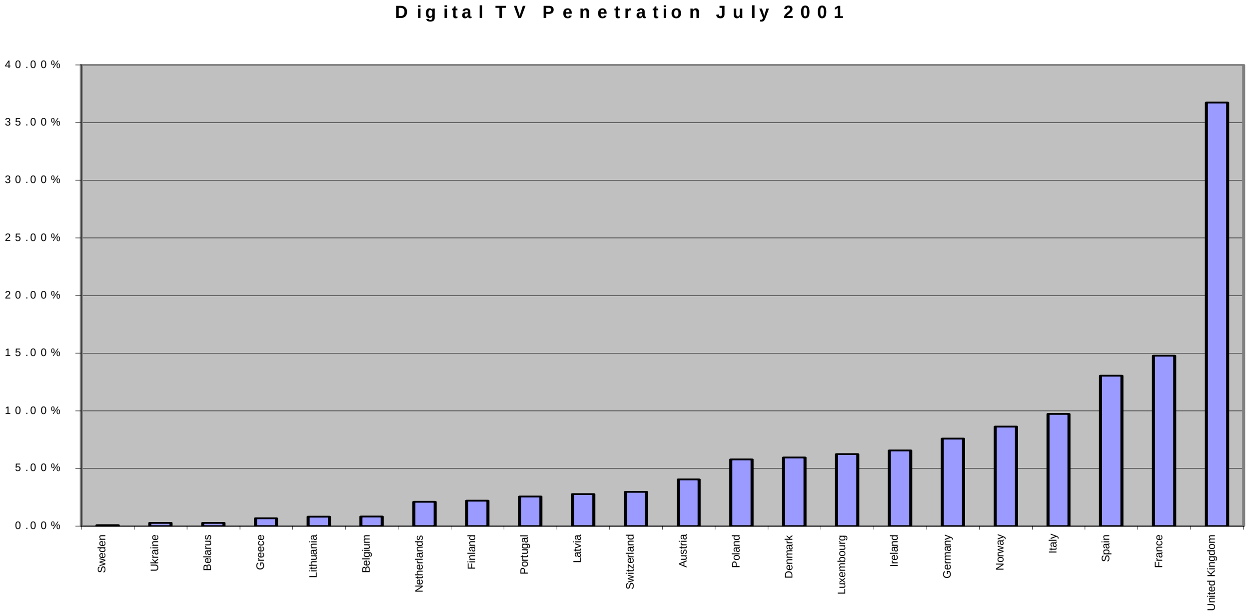
Regional policy and regional production was an early and central part of the development of television across Europe. Digital technology has increased the range of channels available to such an extent that public service broadcasting is becoming increasingly associated with regionally based programming. The EBU perceives this as central to the role of public service broadcasting in the digital era.

> *"Audiences are more fragmented as channels and media proliferate, highlighting the importance of community cohesion and regional relations as a continuing mission for public service broadcasting. We must define who and what we are in this context of multiple identities and contradictory values."*

EBU Yearbook 2001

[5] http://www.ebu.ch/press_news_0101.html

Section 2: European Overview

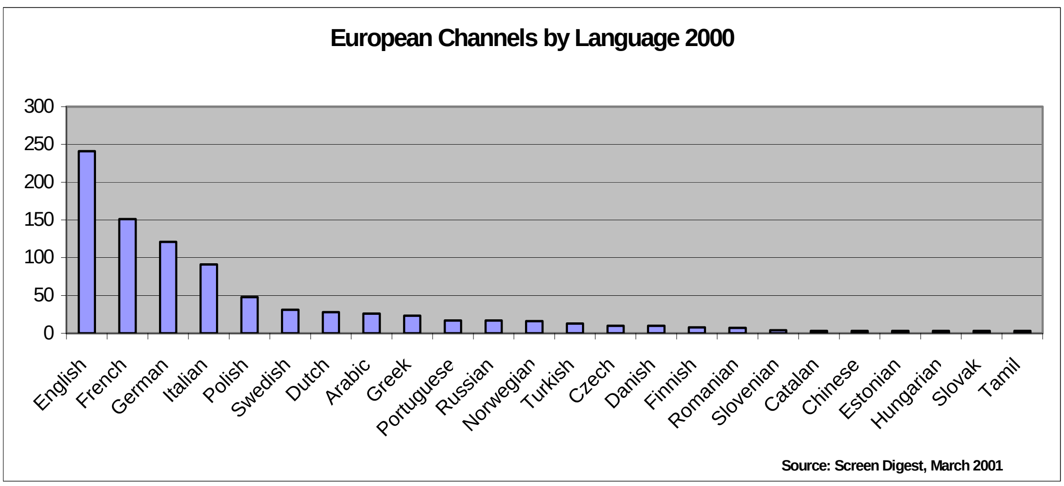


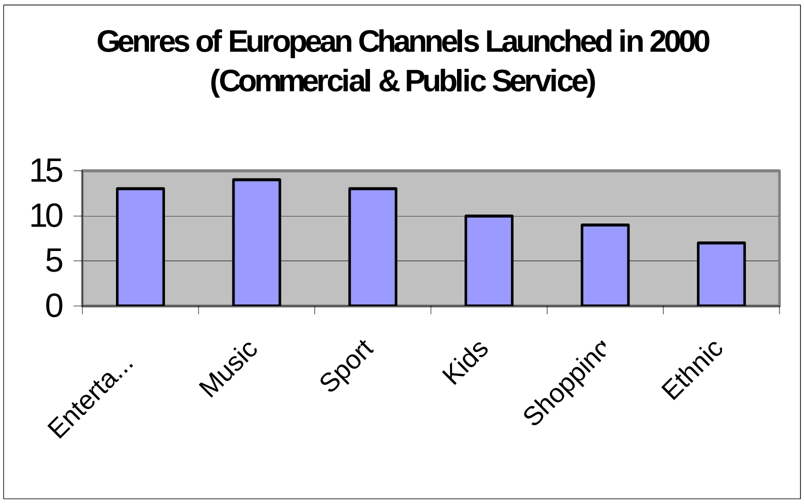
Source: Astra 2001, Provided by EBU

The above figures include all platforms and were published in June 2001. These have been subject to growth over the past year. Ireland, which had 6.56% of Irish TV households subscribing in June 2001, now has over 18% of TV households subscribing to the BSkyB satellite platform.

A report published by Screen Digest in March 2001, found that Europeans already have 1,013 satellite and cable channels, with a growth rate since 1996 of more than 100 channels per year. In 2000, 133 new channels were launched. The UK, the most advanced digital market, saw the launch of 48 new channels. This growth has been stimulated by the increasing popularity of pay-TV platforms, such as Sky Digital. The Screen Digest Report suggests that increased specialisation is the main aim of the new thematic channels.

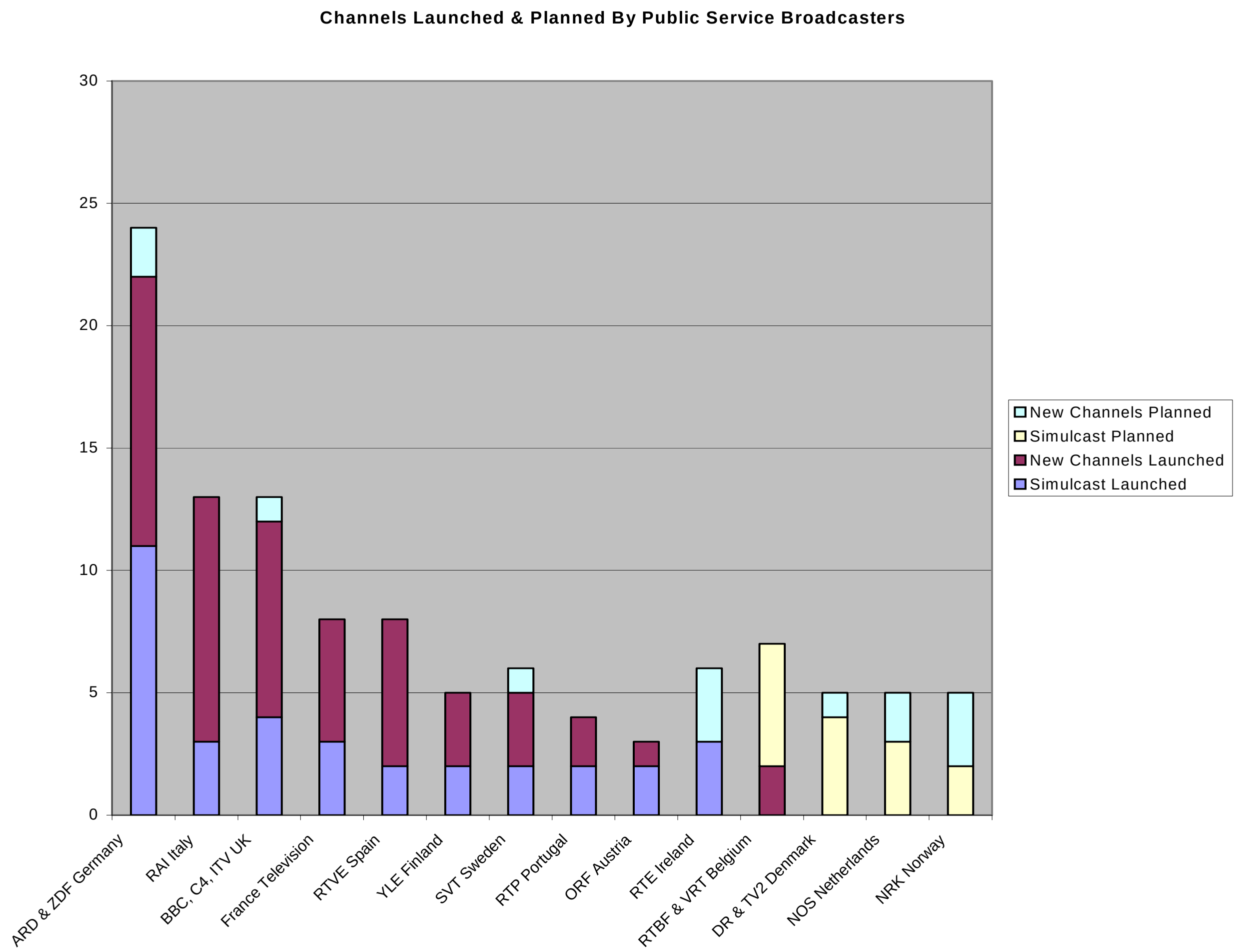
- Movie and Sports channels are still being launched and are becoming more focused on specific areas.
- There has also been a drift away from pan-regional channels into regional, for example German speaking territories, or country specific channels, although the brand is promoted on a pan-European basis. For example, channels such as CNBC are establishing language-specific regional partnerships to extend their audience. CNN have 22 different regionally based channels in 2002.
- The Discovery Channel, Fox Kids and the Cartoon Network are all examples of this type of channel. The most successful of the channels are broadcast on a number of platforms, rather than being platform specific.
- A trend, which the report predicts, is that we will see more regional channels extending their reach internationally, due to lower carriage costs. In the UK a large number of Asian channels are available, and this will migrate across Europe, especially to those countries with large ethnic minorities.





Source: Screen Digest, March 2001

European Public Service Broadcasters
Below shows the number of digital channels planned or launched by public service broadcasters in UK, Spain, France, Ireland, Italy, Sweden, Germany, Portugal, Austria, Belgium, Netherlands, Greece these countries.



Source: PSB Websites and Contacts

If the graph above is compared to the graph below showing the annual turnover of European public service broadcasters, it is evident that the progress into digital correlates with the annual turnover of public service broadcasters. Those with a high annual turnover have made more progress with new digital channels than those with lower annual turnover.

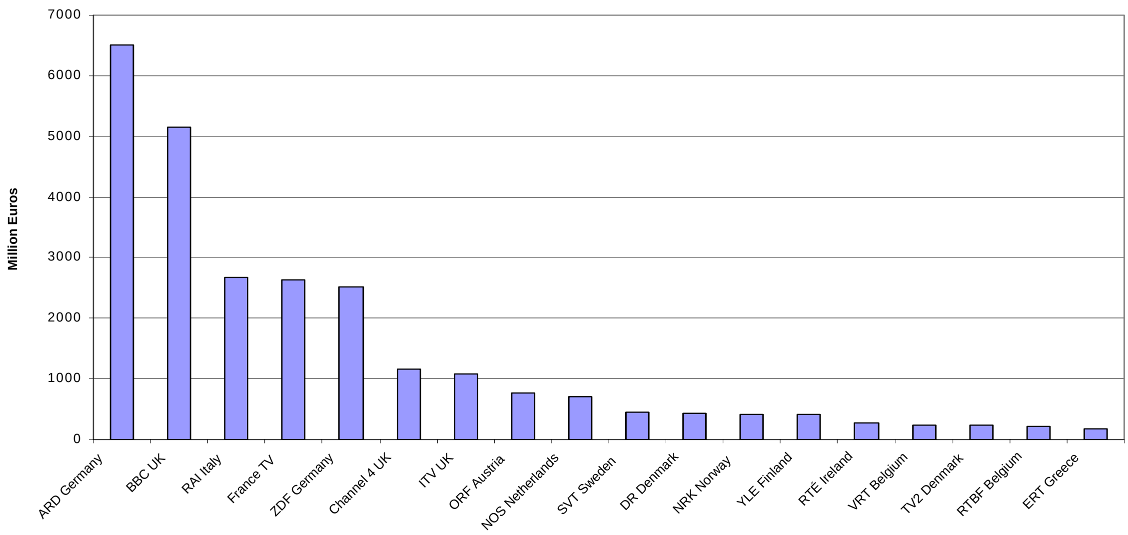
RTBF and VRT based in Belgium, like the Netherlands have low digital penetration due to the very high (90 – 95%) penetration of analogue cable. Both RTBF and VRT have launched satellite channels aimed at the international market.

TV2 in Denmark also plan to simulcast their two existing channels on digital platforms. This is also the stance of DR, Denmark's second public service broadcaster who have a higher annual turnover than RTÉ and runs two television channels. The geographic location and size of Denmark mean that in the initial stages of DTT only the four existing channels will be broadcast on this platform. This is due to frequency over-spill from the surrounding territories.

ERT in Greece are not planning to launch any additional channels although they do intend to simulcast the existing channels on digital platforms.[6]

YLE has recently launched new digital channels but the current penetration of DTT receivers is just 0.05% of TV households. NRK also intends to launch new channels on the DTT platform but the launch date is unknown due to problems with the establishment of the DTT company and delays in negotiations for additional government funding.

Annual Turnover of European Public Service Broadcasters



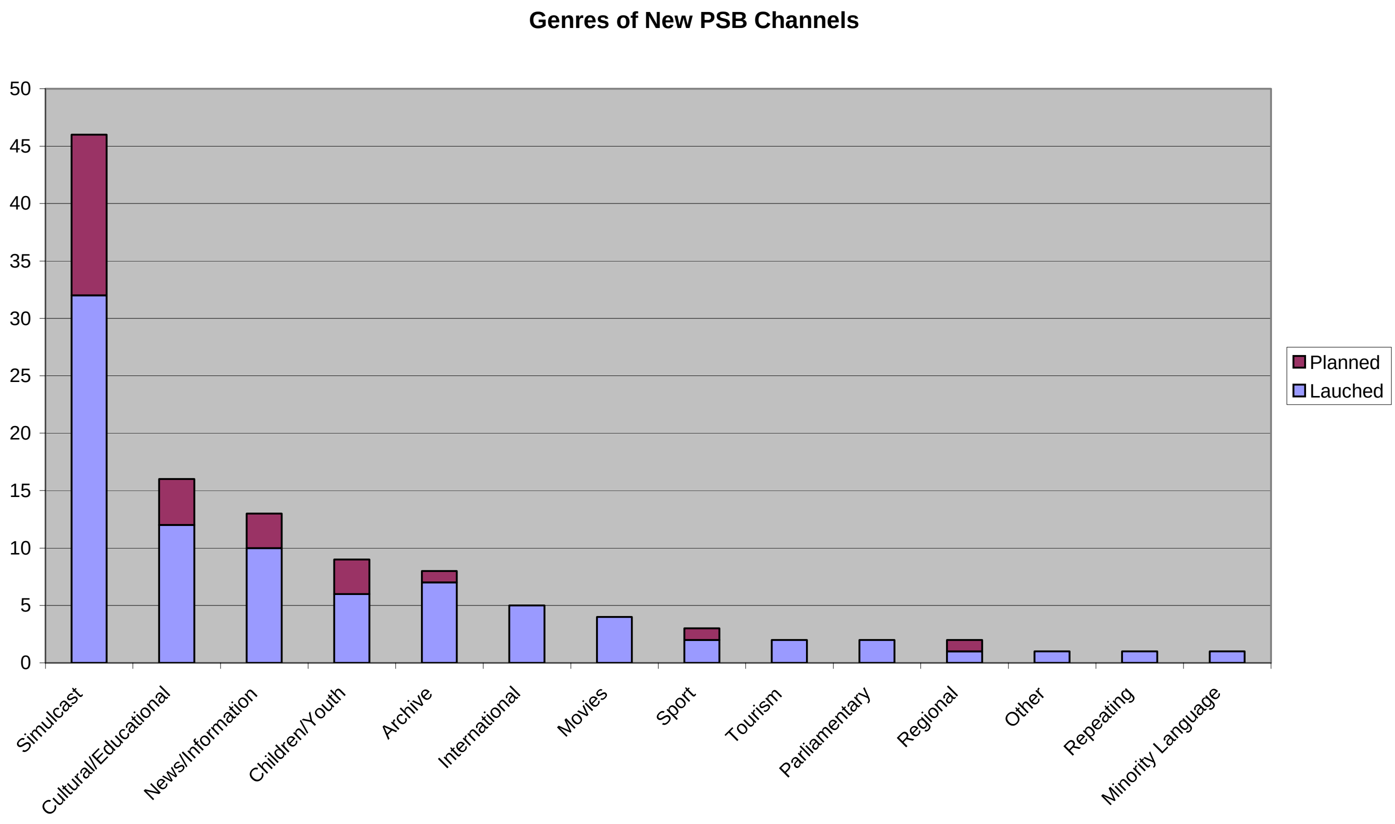
Source: EBU

[6] Email Correspondence – Constantine Tsakiris, Director General of Technical Services, ERT

Section 3: Digital Channels

'The key to the future of television is to stop thinking about television as television. TV benefits most from thinking of it in terms of bits….Today's TV sets lets you control brightness, volume, and channel. Tomorrows will allow you to vary sex, violence, and political learning… All of a sudden, TV becomes a random access medium, more like a book or newspaper, browsable and changeable, no longer dependent on time or day, or the time required for delivery.' *Birt, 1999 p.2*

This section focuses on the genre of digital channels and investigates the justifications for their launch as well as looking at the competition faced nationally. Further to this, it provides an analysis of News, Education, Youth and Parliamentary channels launched across Europe.



The graph above illustrates the genre of European public service broadcasters' digital channels. Here follows a breakdown of niche channels that have been launched by public service broadcasters across Europe focusing on News, Education/Culture, Youth and Parliamentary channels.

1. News Channels:

Finland YLE24: The national launch of YLE24 was August 27th 2001. The justification used for its launch was as follows, "We believe there's a big demand for news services, …At the moment many people push the Teletext button to find out if the Earth is still moving. But in the future they will be able to watch news shows at any time of the day or night."[7]

France: France Télévision launched "Regions", a regional news channel at the end of 2001. There are already national news channels operating in France - TF1, which had a public service remit in the past, launched the main 24-hour news channel – LCI. Another commercial news channel i-télévision is also operating in France.

[7] TVnewsweb interview with Mika Lavonen (head of YLE24).

Germany: Eins Extra (24-hour news – ARD). Eins Extra draws on the regional coverage available from the ARD regions. In Germany there are other 24-Hour news channels in addition to Eins Extra. N24 is operated by Prosieben and focuses on economic and political affairs. N-TV is operated by Time Warner, CNN, Handelsblatt and Nixdorf, and operates a rolling news service.

Germany: ZDF Info (Public Information Channel) has a schedule, which includes a whole range of informative programming. It includes economic information, such as explaining the single currency, stock markets and programmes focusing on e-business, holiday advice, health information, election campaigns, cultural information, environment and science and technology.

Italy: RAI24, News editor, Giacomo Mazzone, told TVnewsweb, "The reaction we're getting from young people is very positive. They like the way we present the news which is a bit like Bloomberg's multi-screen. Older people though find it a bit confusing."[8] At launch there were only 600,000 people with receiving dishes in Italy. This represents just over 3% of Italy's TV households. The funding for RAI24 is 60% Licence and 40% Advertising. A second 24-hour news station is operating in Italy. Launched in 2001 Ventiquattrore.tv, a financial news channel, is run by Il Sole 24 Ore, Italy's leading financial newspaper and is free to air.

Norway: NRK24 is still in the planning stage and its launch is postponed until 2002 at the earliest. This is due to disagreements with Telenor with regards to the DTT network in Norway. There are also delays in gaining additional government funding. NRK are also investigating the launch of a news channel using broadband Internet technology.

Spain: Canal 24 Horas is operated by RTVE and reaches hundreds of millions of Hispanics globally (49 European countries and 24 American countries). Canal 24 Horas, has been pioneering in using digital technology, particularly the AVID NEWS system, that gives greater agility in the information since it allows to the journalist to organise the reception, assembly and transmission of news content. Also operating in Spain is CNN+, a Spanish language version of CNN.

Sweden: When SVT's 24-hour digital news channel launched in March 1999 in Sweden only 500 people had bought the set-top box needed to receive the terrestrial signal. Even digital cable viewers numbered only 50,000 and those with digital satellite totalled 100,000. Whichever figure you take, the audience was small. SVT24 is not there simply to provide a news service to a few insomniacs; it is the powerhouse for news programmes on SVT's main channels, SVT1 and SVT2. SVT24's newsroom has taken over responsibility for Breakfast TV and lunchtime news. The launch of this new service has acted as a catalyst for change within the SVT news operation.

UK: BBC News 24 "The role of BBC News 24 is still challenged by some commercial news providers. The BBC believes it is essential in the multi-channel age for the national broadcaster to offer everyone in the United Kingdom a dedicated, valued and well-used news service on television. It was heartening therefore to see News 24 coming into its own this year. It measures up in quality against any BBC Service. BBC One now readily hands over to News 24 when big stories break, and the two channels have combined forces to deliver a single enhanced breakfast programme. The average weekly reach of News 24 (excluding the breakfast programme shared with BBC One) rose to 8.4 million in March 2001 compared to 5.8 million in March 2000. This growth should accelerate as more people convert to digital." *BBC Annual Report 2000 – 2001*

UK: ITN News: "The News Channel is really driving the technology forward here at ITN. The Channel's mission statement is news wherever you want it, and that's what we are constantly working towards. At the moment, this is phase one, the technology's improving all the time." *Steve Roy, Development producer ITN*[9]

[8] News editor, Giacomo Mazzone, interview with TVnewsweb
[9] ITN Website

2. Education Channels:

Finland: YLE Teema (culture, education & science). This channel operates in partnership with Finland's universities and other cultural and educational institutions. "YLE's television channels have for decades been offering viewers high-standard programmes on the themes of culture, science and education. Now, with the new dedicated channel and the increased transmission time we offer our viewers a diversity of programmes dealing with these three fields."[10]

France: Histoire (France Television's history channel) this is a documentary-based channel broadcast on satellite and cable.

Germany: ZDF-doku (documentary) this is a documentary-based channel that draws on ZDF's achive material. It costs little to run due to the lack of programme rights and production fees.

Germany: IQ-TV is an educational TV channel proposed by SWR (part of the ARD broadcasting pool). The channel is yet to launch and the platform is undecided. SWR have used partnerships with various organisations in planning the channel such as Siemens, Publishers, Sony, Ernst Klett, SAP and Taunus Film GmbH. They plan to focus on economics, university, training and general education and science programming. In all four areas of programming there will be additional programmes available on payment of subscription charge.

The justification for IQTV is as follows:
"Knowledge became a raw material and part of production during the last century. The digitisation of information technology will also revolutionise knowledge transfer: Television and interconnected computers will enable training and gaining of qualifications to be available everywhere. With the introduction of digital television to Germany these possibilities will multiply. Thereby the supply of programs previously inconceivable due to high cost and capacity bottlenecks can now become realisable."

Translated SWR Website – Press Release 1998

Italy: RAI launched RAI Education on satellite in 1997. The channel broadcasts 24 hours a day. Mosaico is a video on demand service whereby teachers can request material using the Internet and RAI then add it to the satellite channel. RAI are also engaged in other VOD experiments in schools – School Direct.[11] In competition to RAI, Stream offer a language learning channel as part of its digital bouquet. A separate interactive channel to test what is learned supports this channel.

Spain: Hispavision (documentary) operates 24 hours a day and is broadcast via satellite platforms.

UK: BBC Knowledge: "The BBC is seeking the best deal for licence payers by investing in the digital future. BBC KNOWLEDGE will offer new ways to take your interests further, get involved with and be entertained by its shows. What's more it's all funded within the licence fee." [12] BBC Knowledge recently re-launched as BBC4 this channel will become more like radio three and radio four, featuring cultural and arts programming, initially running for 4 – 5 hours a day.

3. Youth / Children's Channels:

Germany: Kinderkanal, cartoon based, operates with no commercials. It purchases 90% of its programmes.

Italy: RAI2, is an analogue channel that is focused on children's programming. The public service broadcaster has also launched RAI Ragazzi for satellite platforms.

Norway: A children/youth channel is in planning stage, will be launched on the DTT platform in 2002 earliest

UK: BBC Choice, CBBC and CBeebies. On Thursday 13th September 2001 an announcement was made on the proposed relaunch of BBC Choice, "The BBC still has not made the case for BBC Three, the station for 16 to 34-year-olds," said Mrs Jowell on Thursday. "It was not clear that its proposals were truly distinctive in an already crowded market, so I have asked the corporation to rethink its plans in this area."[13] The BBC intend to make a new proposal in coming months. The two channels the BBC proposed for younger children have been launched, CBeebies is aimed at pre-school children and CBBC is aimed at older children, both offer interactive features.

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[10] Mr Mika Ojamies – YLE Press Office 2001 – email correspondence
[11] www.lifelonglearning.dfee.gov.uk/conference/b1-cl.htm
[12] http://www.bbc.co.uk/knowledge/home/whoweare.shtml
[13] http://news.bbc.co.uk/hi/english/entertainment/tv_and_radio/newsid_1539000/1539842.stm

UK: E4 launched at the beginning of 2001. It has achieved some positive publicity through its interactive coverage of "Big Brother". Generally it shows reruns of shows previously shown on Channel 4 and US series like "Sex in the City", "Friends" etc.

4. <u>Parliamentary:</u>

Germany: Phoenix shows parliamentary debates, special events and some documentaries.

UK: Parliament operates seven days a week, covering live Parliamentary debates and select and standing committee meetings, plus activity within the European Parliament, without commentary. The channel is completely independent of its live transmission of parliamentary debates and will not cause existing programming to change. The BBC Parliament channel service was provided at first on analogue cable, but has gradually been expanded to include digital platforms.

France: La Chaine Parlementaire (LCP) launched in 2000, is transmitted free to air from the Astra and Hot Bird satellites, and contains interviews and panel discussions featuring members of parliament as well as the transmission of debates. It has an annual budget of over 50 million francs (E7.6 million). A second channel, LCP-Senat, has a similar profile but covers the workings of the Senate (the French upper house) and has a similar budget, and shares the frequency with LCP. [14]

[14] Advanced Television, 9th Nov 2001 "Calls to end Parliament channel"

Section 4: Strategies of European Public Service Broadcasters

Many public service broadcasters have changed their strategies over recent years in response to the evolving market. The BBC was restructured by Director-General John Birt, then again restructured by the following Director-General, Greg Dyke, both with the aim of accommodating the move to digital transmissions. BBC News 24 was launched in 1997 and then re-launched in a new format in 1999. BBC Knowledge has been be repositioned as BBC 4 and the focus is to change to bring it more into line with the output of Radio 3 and Radio 4, cultural and arts programming. The BBC has launched two new channels for children and is still awaiting approval on its channel for the youth audience.

ITV in the UK intended to focus on the DTT platform of which Carlton and Granada are the main shareholders. They intended to compete with the satellite platform of BSkyB, however with declining audience share the ITV channels are now available on BSkyB and the ITV digital DTT platform is currently in serious financial difficulties and looking for a buyer.

SVT in Sweden originally planned to launch a news channel and five regional channels. The news channel launched in 1999 and in 2000 it was decided that there would be two regional channels as five was to be too expensive and would strain resources. Recently SVT's Director General announced her intention to change the strategy again to incorporate a new bouquet of channels including children's, cultural and archive channels.[15] An archive based channel, SVT Extra was launched at the beginning of 2002.[16]

ORF in Austria intended to launch a complete bouquet of seven channels. This was put on hold due to a reorganisation of the management structure, ORF is to become a foundation.

Commercial channels such as BSkyB's "Tech.tv", Sainsbury's and Carlton's "Taste" and Adam Faith's "Money Channel" are being scrapped as they are not proving commercially viable. This is creating an unease amongst those planning to launch digital channels and is forcing all broadcasters to re-examine their strategies.

1. <u>New channels aimed at International Market</u>

Austria: Austria has so far launched just one new digital channel – TW1- a tourism and weather channel aimed at the German market, set up in partnership with Sitour (travel company). Their terrestrial channels are available on the ZDF Digital bouquet.

Benelux: Belgium/Netherlands: NOS and VRT have jointly launched BVN digital channel in partnership with Radio Netherlands – this channel is aimed at Dutch speakers abroad. Mr Hans Dewildt of BVN stated that the channel operates at low cost (€8 m p.a.) due to the use of material already shown on NOS and VRT. It operates with 10 staff and a further 35 staff work on the daily magazine programme produced specifically for BVN by Radio Netherlands International (20% original production). The programs are broadcast via satellite and can be received throughout Europe, North and South America, Aruba and the Netherlands Antilles. They show six hours of programming each day and repeat the same six hours twice to encompass the various time zones of the globe.

Finland: TV Finland is a satellite channel, currently distributed via analogue satellite. It shows material produced by YLE for TV1, TV2 and FST as well as the material of the commercial broadcaster MTV3. It provides general programming for both children and adults and uses Finnish, Swedish and English language.

Spain: TVE Internacional is aimed at the Spanish community in America. It is the highest rating European channel in Latin America. This is how RTVE Director General and Chief Executive Officer Pio Cabanillas perceives the situation,

> "RTVE is expanding internationally, and, as with most Spanish companies these days, Latin America is an important market. Already, its TVE Internacional satellite channel and its Canal 24 Horas round-the-clock all news station reach more than 11 million homes in the region. "We've accomplished this in just 13 months, starting from scratch," the President says. "Just recently we overhauled TVE Internacional and now we're going to add new services to both our television and radio outlets,

[15] Advanced Television, 20/9/01, "Radical change advocated at SVT"
[16] Advanced Television, 16/01/02, "New digital channel from SVT"

including some regional programming from Catalan and Basque television." The broadcaster is also discussing a deal with US educational institutions and government officials to provide RTVE programming for American universities, especially in California. "I've always argued that RTVE is like a Spanish embassy abroad. We have to show people what we're like and give them a taste of our dynamic culture. I believe that what we've accomplished over the past year has been a giant step towards that goal." [17]

Portugal: Launched RTP International on digital satellite for Portuguese speakers world-wide.

Ireland: Tara, RTE's international channel went into liquidation at the beginning of 2002, due to low audience figures.

2. New channels focused on domestic market

Nordic Region: YLE Finland launched 3 new digital channels on 27th August 2001. Their aim is to achieve: "An information society in which YLE is a key producer of content for digital services was approved as the company's future vision. YLE's mission is to produce information society services for all homes on equal terms… The new services should complement the existing services which will subsequently go digital."[18]

Germany: ZDF "The main goal of the digital bouquet is today to participate in future digital development and to have occupied possibilities."[19]

UK: BBC Director General, John Birt expressed the reason why the BBC should enter the digital arena in 1993, "That ubiquitous soft drink world of jeans, trainers and the baseball cap will advance inexorably. We cannot halt the advance with barriers or quotas. Nor should we. One of the glories of the modern world is being exposed to the best of other cultures. Rather, the drive of public policy should be to sustain individual national cultures. There is no more effective way of doing that than by encouraging a flourishing public service sector in each EU member country."[20]

Sweden: Establishment of regional digital services. SVT in Sweden did not face problems with disparate platform API's as Scandinavia has adopted MHP as the standard and the service was launched only on DTT. They did face other problems with the delivery of their regional TV channels the first of which launched in 1999. These problems are outlined in the paper "Regional Digital Television in SVT",[21] and are summarised below:

- The decision to launch the regional channels was made quickly and there was not sufficient time spent in planning the services to ensure that they were ideal in content and in technical detail.
- The set top boxes available were rudimentary and did not facilitate sufficient interactivity and were also too expensive. Coupled with this the coverage of the regions was not absolute therefore the service could not be watched by many viewers. To counteract this, the new material was also broadcast on SVT2's regional opt outs on the analogue service.
- The finances for the launch and operation of the regional services were too low.
- The digital infrastructure needed to be put in place. It was perceived that technical solutions needed to benefit programming. A digital outside broadcast vehicle was the first priority of SVT Syd. This vehicle was equipped with cameras, editing equipment and a satellite transmitter that fed the studio directly. The five regional newsrooms were rebuilt, ensuring that each was digital and identical, with Avid news-cutters. This structure was developed around a central server, a complete programming control room.
- Changes were also needed for human resources. Multi-skilling was instigated, for example reporters were encouraged to self-edit. A less hierarchical structure was brought in to speed the decision making process. New job roles were created.
- Once the infrastructure was in place content development began. The low numbers of viewers expected and the low budget given to the project inhibited this process. It was decided that the SVT Syd region should be a test-bed from which the rest of the station would learn new digital techniques. At the time the viewers in the region were used to getting a few regional news bulletins each day, therefore new formats and programming were developed. It was decided that five hours of new material should be produced each week and that these should be broadcast to the analogue audience on TV2's frequency at designated times three times a week. The SVT Syd regional channel now broadcasts 24 hours a day rotating new material and archive material.

[17] http://www.global-review.com/on-line/Spain/rep/Rtve.htm
[18] YLE Digital Vision – Annual Report 2000
[19] Email from Mr Viktor Berger ZDF
[20] BBC Press release: 6/4/98 – BBC D-G warns of a knowledge underclass
[21] www.digitag.org/home/events/paris/Presentations/Sommerstein.pdf

- SVT Syd used some of their resources to build their own website and a special news service. They also have a digital text service.

3. Internal Reform strategies

YLE Finland: Reformed structures and procedures so that it would be in a position to produce programmes of high calibre for digital platforms. These reforms entailed:

- Strict line organisation to be networked
- Transfer of resources from administration to production
- Increased purchase and out-source of services
- Concentrated programming in genre-specific competence centres – producing programmes for several channels
- TV production services single entity
- Upkeep and development of technical systems and processes at company level – ensuring compatibility and economy
- The balancing of the group's result by the end of 2003 was the economic target
- During 2000 channel management and employees were assigned to the culture and education channel and YLE 24 – productions prepared. Autumn 2000 YLE 24 began weekend news broadcasts shown on TV2
- Market research carried out in youth and digital areas
- 2000 – YLE sold 49% of Digita Oy's shares (transmission) to Telediffussion de France for €141m. YLE must sell the rest of its shares over the coming years. Money from this to be allocated to digitalisation of radio and television.
- Reforms will bring savings of €43m

YLE Annual Report 2000

Austria: "To sum up, with a background of sharpened competition in digital content, the broad reaching technical opportunities and their underlying economic considerations (market penetration through technology push) have been the motivating forces behind the ORF's attempt to turn the public "culture carrier" ORF into a modern multimedia organisation." *From ORF Website*

Sweden: SVT 24 newsroom also acts as newsroom for SVT1 and SVT2. It was announced by the new director general, Christina Jutterstrom, in September 2001, that she advocated radical restructuring of SVT's organisation and channel structure. She recommends a model where most resources are focused on one national service for "a broad majority", focusing on news and entertainment. To complement this main channel she recommends a number of themed channels, children, culture documentaries and one based on SVT's archives. Guldkanalen (Gold Channel) had been considered some years previously but was shelved when the partner, Telia, withdrew for financial reasons. Christina Jutterstrom wants to see SVT take a faster pace into the digital future and to see Sweden the first country in Europe to switch off analogue transmissions.[22]

UK: BBC – In 1996, with John Birt as Director General, the BBC was restructured to accommodate digital development. The new organisation structure had six major business units, BBC Broadcast, BBC Production, BBC News, BBC Worldwide, BBC Resources and the Corporate Centre to provide key strategic services to the BBC as a whole [23] Some believe that cultural malaise stemmed from this decision to split the broadcasting and production divisions. That meant that heads of creative departments became managers, desperate to sell as many of their products to the channel controllers as they could, with far less regard for quality.

On July 10th 2000, Greg Dyke made further changes. The key announcements included, the introduction of four genre commissioners in *Television*, the creation of three major programme departments in *Factual and Learning*: Documentaries and Investigations; Leisure and Factual Entertainment and Specialist Factual, *Factual and Learning* and *BBC News* will together establish a department to produce dedicated business programmes and *News* will also appoint a Business Editor In *Drama, Entertainment and Children's*, and finally Alan Yentob would have responsibility for talent management across the BBC. The drama and entertainment HQs were absorbed into a more streamlined divisional headquarters with the emphasis on creative leadership and innovation with the creation of a new innovation unit, Fictionlab. Radio was renamed *Radio and Music*, reflecting the importance of its two key areas and ensuring music as a speciality was represented on the BBC's Executive Board for the first time. TV classical music and the live events team joined the Proms team to create a new cross media department. The BBC Orchestras and Singers now

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[22] Advanced Television, 20/9/01, "Radical change advocated at SVT"
[23] BBC Press Release: 7/6/96, BBC gears up to deliver digital dividend

come under the Controller of Radio 3. The professional services divisions - *Finance, Property and Business Affair; Strategy; Public Policy; Marketing and Communications; Human Resources and Internal Communications* - account for up to 70% of the savings. [24]

The BBC are currently preparing to relaunch their digital channels and got the go ahead for all but one of the proposed channels from Culture Minister Tessa Jowell on 13th September 2001. There will be entertainment, drama and factual programmes on BBC1, slightly more serious and innovative programming on BBC2, music and comedy aimed at a youth audience on BBC3, it is this channel which has not got approval, and arts and cultural programming on BBC4. Combined with two children's services, one for pre-school children and another for their older counterparts, plus BBC News 24, the aim is to provide a channel to suit everyone.

Structural reorganisation can be costly, for example in July 2001, a shake up at BBC Resources' was brought into public view when it emerged that despite spending £10m plus on a restructure with the resulting loss of 147 jobs, it made a loss of £11.5m.[25]

4. Archive Strategies:

Germany: ZDF have launched three new digital channels as part of the ZDF.vision package. Two of these are done at very low cost as they draw on their archives. Theatre-kanal draws on the existing archive of theatre productions gathered over many years. ZDF-doku has a similar strategy. Andrea Windisch, who co-ordinates ZDF.doku at ZDF's multimedia department, told *DOCtv* that, "We don't plan to order the production of material from independent producers or obtain rights to screen their existing programmes," she explained, again giving cost-savings as the reason. This means that ZDF.doku is run with almost no programme rights costs. "I don't see that situation changing in the mid-term." *Doc TV Issue 32 July 2000*[26]

Spain: RTVE have launched Nostalgia channel, Classico (classical music) and Hispavision (documentary channel) all drawing on archive material.

UK: ITV, UK have released ITV2 which draws on their archives

UK: BBC, sell their archives to UKTV for the UK Play, UK Style and UK Drama channels and also to Discovery as a commercial enterprise. From these sales they make € 77.6 m p.a.

5. Technology Strategies:

Scandanavia: NorDig reached an agreement on March 6, 2001, on a successive transition to a common and open standard. TV companies and content producers will develop and produce their services in a common system, very much in the same way that HTML works for the Internet. The members of NorDig have reached an agreement to use DVB-MHP (Digital Video Broadcasting-Multimedia Home Platform). The agreement follows the European aims for a standardisation within digital TV. The work within NorDig is based upon accepted European and international standards. The agreement of March 6 means that the NorDig members are committed to making the transition to DVB-MHP at the latest in 2005. As from the end of 2001 all NorDig members will recommend the market to support only set top boxes that meet the specifications of NorDig I. And from the end of 2002 they will only offer their customers boxes that operate interactive services via DVB-MHP.

Since the start NorDig has been working on specifying the demands of different aspects to be met by digital set top boxes. These demands are now linked to the plan for the transition to DVB-MHP. The aim is to brand boxes that live up to the right standard with a NorDig logo. The NorDig members are the most important TV and telecommunications companies and operators in the Nordic countries - Sweden, Norway, Finland, Denmark and Iceland. They agree that the transition to DVB-MHP will stimulate the market for digital TV, not the least the development of added services, as well as the convergence of the Internet and digital television. Choosing an open solution is a break through for Nordic co-operation and a clear signal to the rest of the world, says Arne Wessberg, head of the NorDig board, director general of YLE but also president of EBU. – *'I am convinced that this will stimulate the development of digital TV in all our countries. I hope that all Nordic households soon will be able to use the digital interactivity offered to them.'*

[24] BBC Press Release: 10/7/00, BBC unveils new structures and savings
[25] Broadcast, 13/7/01, Shooting Blanks
[26] http://www.docos.com/news/Previous%20Issues/DOC%20TV%20Features/32%20German%20Factual%20Market.html

Germany: there have been demands for open standards for set top boxes allowing a single box to be used for a variety of platforms.

UK: The BBC called for open standards for set top boxes in 1996[27]

Ireland: In August 2001, RTÉ asked the telecoms regulator to make broadcasting, satellite and cable companies adopt common technical standards to enable consumers to access a wider range of content. The proposals, which are opposed by most cable and satellite firms, include the adoption of a single set-top box that would enable consumers to change television programme suppliers more easily.

6. Transmission Strategies:

UK: ITV Digital – ITV's main shareholders Carlton and Granada have an interest in promoting this platform. This has effected their digital strategy, especially through their reluctance to be broadcast on Sky digital. ITV's channels have been carried on the Sky satellite platform since December 2001.

Finland: YLE also attain transmission fees from their DTT network. In 2000 YLE sold 49% of Digita Oy's shares (transmission) to Telediffussion de France for € 141m. YLE must sell the rest of its shares over the coming years. Money from this was to be allocated to digitalisation of radio and television.[28]

Norway: Delays in the launch of DTT were caused by problems in NRK and Telenor agreement. These delays mean that NRK's digital channels are on hold for the time being. These issues look like being resolved and NRK and Telenor are also investigating the delivery of television service using broadband Internet technology.

7. Shared Channel and Repeating Channel Strategy:

Many broadcasters use this cost cutting strategy. Discovery, Cartoon Network, National Geographic and many other broadcasters offer a second channel with the same content but an hour later. Many channels use the same material more than once a day or repeat the same programmes later in the week – offering a "second chance" for viewers to see programmes they might have missed. Some examples from public service broadcasters in Europe are:

Germany: Kinderkanal and Arte (ZDF & ARD) share a single channel for transmission, alternating broadcast times. In Germany this strategy is also reversed by ARD who have two channels Das Erste (Main General analogue channel) also broadcast another channel Eins MuXx with AM and PM reversed.

BVN, the channel operated by NOS, VRT and Radio Netherlands International for Dutch speakers abroad, operate a cycle of programmes repeating every six hours.

8. "Wait and see" attitude:

Benelux: RTBF Belgium, NOS Netherlands, 95% of population connected to analogue cable, new digital channels not envisaged in the foreseeable future, however both Belgium PSBs have launched satellite channels, BVN (VRT and NOS) and RTBF-sat, aimed at the international market. NOS are also planning to launch a news channel and an arts channel.

Norway: Issues over government funding. The government has restricted them from any commercial or interactive revenue but delay in guaranteeing additional licence fee or public funding. There are also disputes with Telenor with regards to the set up of digital terrestrial transmission

Austria: Currently being transformed into a "foundation" all decisions regarding future channels will be made after the process is completed and new management is in place.[29]

[27] BBC Press Release: 27/11/96: BBC calls for tighter regulation to guarantee open access and common set-top standards
[28] YLE Annual Report 2000
[29] Email correspondence with Dr Mike Diwald, ORF

9. Criticisms:

Germany: Commercial competitors have criticised the ARD/ZDF move, saying they would misuse TV licence fees for digital offerings without any additional value.

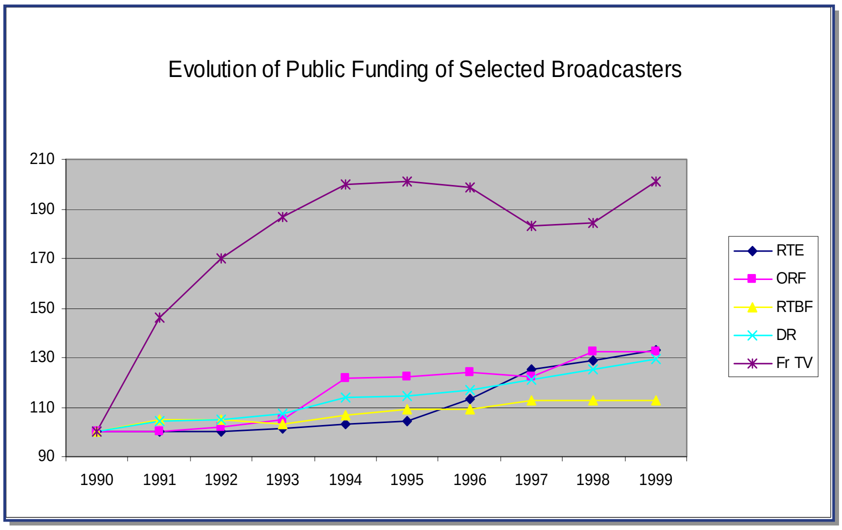
Sweden: SVT received criticism for launching SVT 24 when very few people had access to Digital services.

UK: The BBC's public service remit is being questioned as they move to digital transmission. Why support a publicly funded broadcasting organisation in the 21st century when the private sector can provide a near-infinite range of information and entertainment using digital technology? Critics of John Birt say he invested too much in new digital developments, leaving too little for the established television and radio networks. The issue has been made politically sensitive because of the proposal, currently being considered by the Government, that viewers with digital television should pay a supplementary licence fee to help pay for the BBC digital services. (Jan 2001)[30] In the recent decision to relaunch BBC Choice it was to be more expensive than the BBC Knowledge investment, "The investment is disproportionately commercial with very little public service. All they are doing is spending to compete with Sky One and E4. It's very galling for commercial channels to have this subsidised product trying to drive them out of the market." *Steve Morrison, Granada (Aug 2001)* [31]*.* In September 2001 Tessa Jowell asked the BBC to rethink their plan for BBC 3 as "It was not clear that its proposals were truly distinctive in an already crowded market, so I have asked the corporation to rethink its plans in this area." [32]

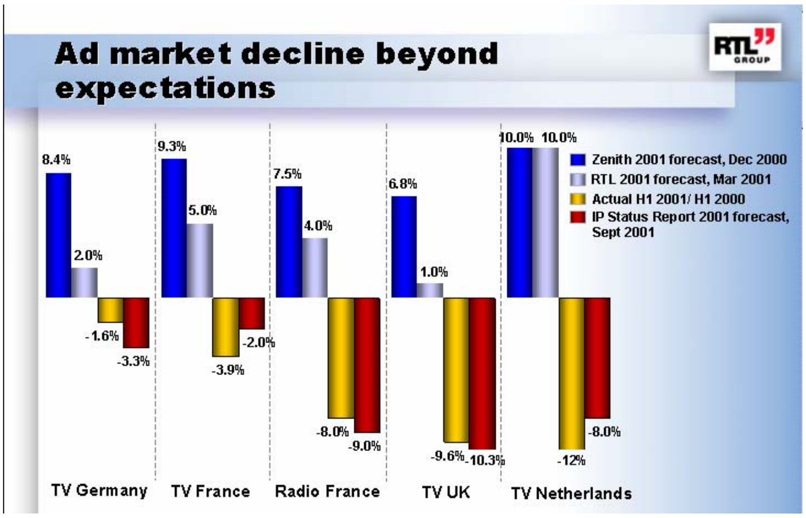
[30] http://news.bbc.co.uk/hi/english/uk/newsid_622000/622189.stm
[31] "Granada chief attacks Choice revamp" Guardian, 27th August 2001
[32] http://news.bbc.co.uk/hi/english/entertainment/tv_and_radio/newsid_1539000/1539842.stm

Section 5: Financial Information

Funding:



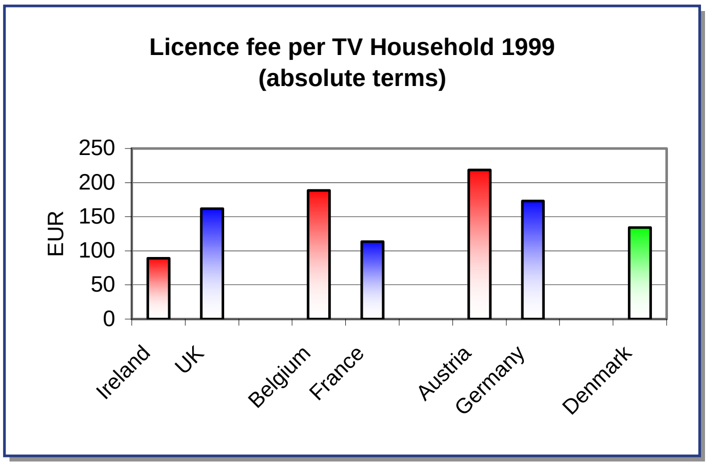
Public funding includes revenues derived from licence fees and more generally received from public money (government grants, subsidies, etc). Public funding revenues of selected PSBs, except RTBF and France Television, increased at a rate of approximately 3% per annum, which is slightly above the rate of inflation (between 1991 and 1999).[33]

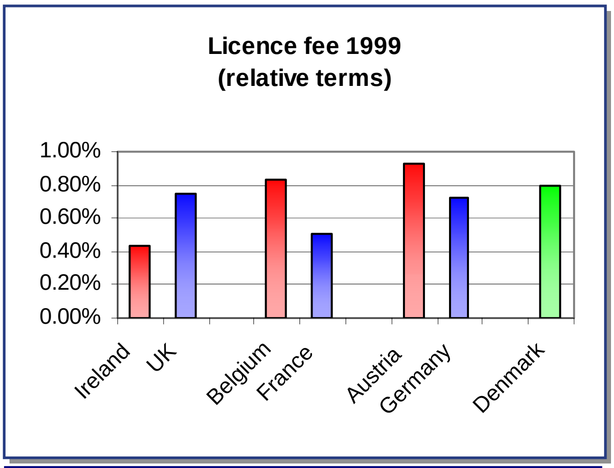


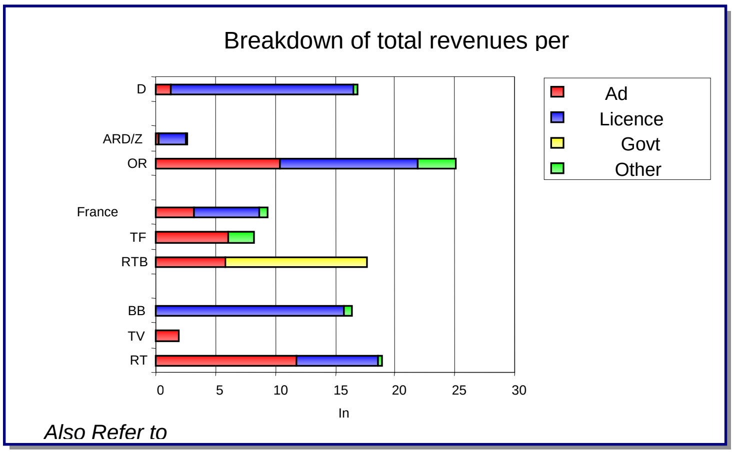
Advertising is a key source of revenue for the commercial media sector in general, including television broadcasters. The short-term outlook for the advertising industry is negative, as advertising is very cyclical and heavily dependent on the state of the economy. Advertising is a cash cost of doing business, and is perhaps the easiest element in the cost base to vary if expectations change. Broadcasters that depend heavily on advertising face difficult times ahead. In the current environment, broadcasters that can rely on public funding or subscriptions are in a stronger position by virtue of having a non-cyclical revenue base.[34]

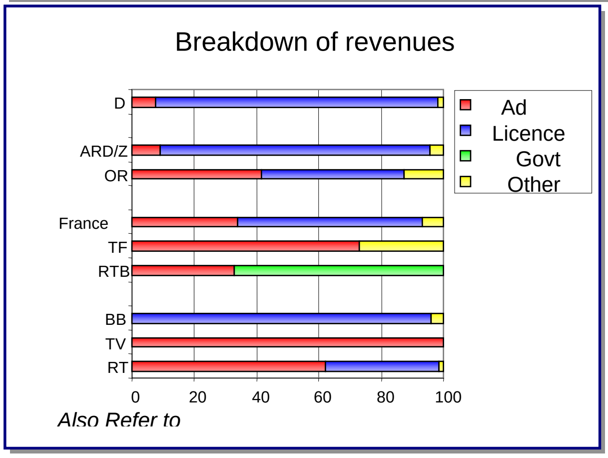
[33] Deloitte Analysis 2002
[34] Deloitte Analysis 2002

Licence Fee Comparison:

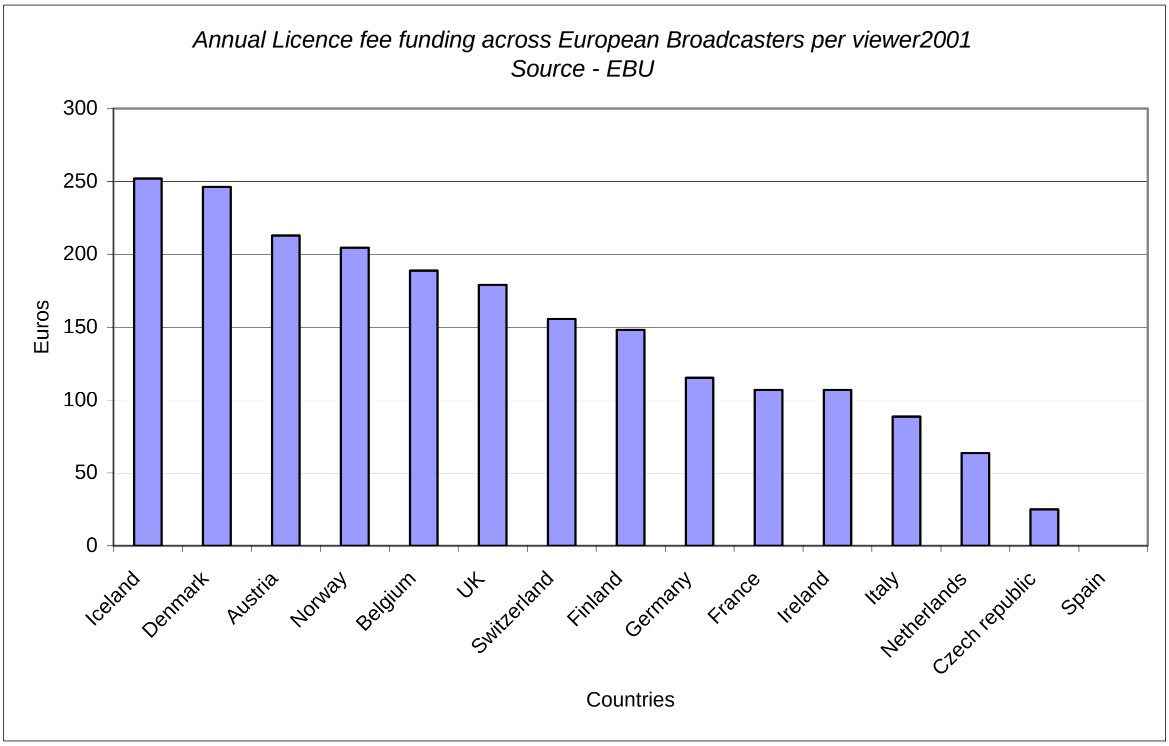








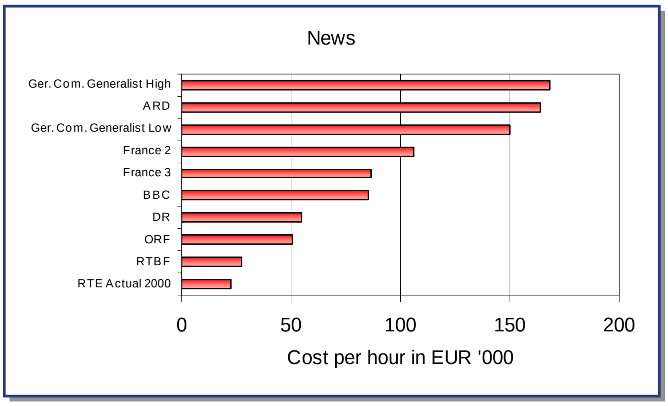
Source Deloitte Analysis 2002

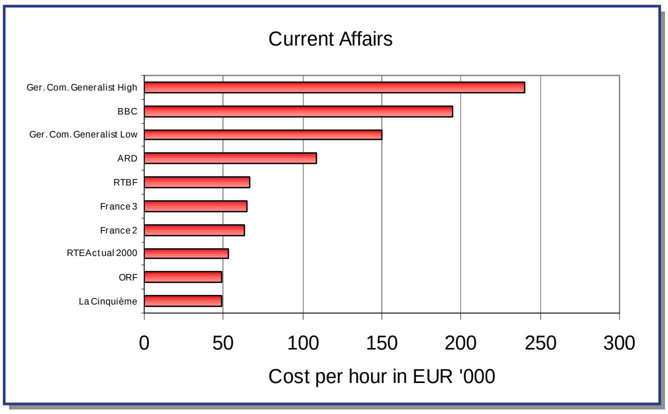


Production Costs:

News & Current Affairs

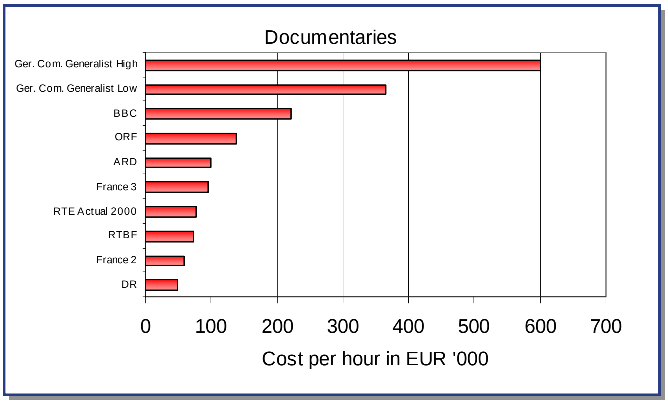
News production costs are more expensive in larger countries than in smaller countries. Larger PSBs usually produce the entirety of the daily news in-house and employ teams of correspondents over the world. In the case of the smaller PSBs, they tend to rely to a large extent on agreements with larger networks, news agencies and EBU news exchange. Current Affairs covers a wide range of programmes from a three person debate to a high quality report from abroad. Obviously, the production costs will also be influenced by programme quality. Current affairs are more expensive in larger countries than in smaller countries. This is mainly due to the larger budgets available to the bigger broadcasters but also because they tend to achieve a greater degree of global coverage. Private channels' current affairs programmes are more closely aligned to the entertainment genre in the context of the general PSB's definition of Current Affairs. This explains why they are relatively more expensive. [35]

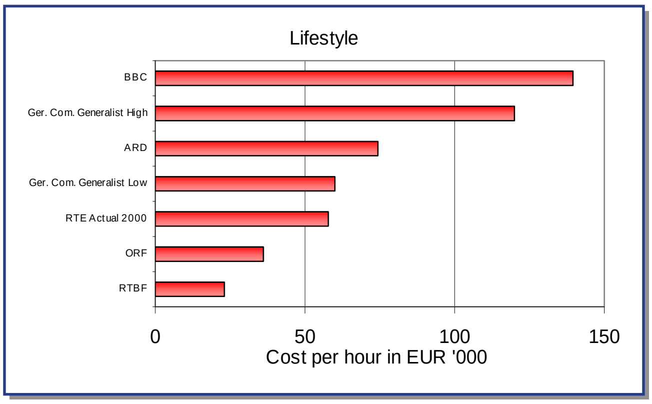




Documentaries and Lifestyle

Documentaries are mostly produced in larger countries where there are high budgets for international productions. Broadcasters in smaller countries generally have smaller production budgets and therefore they tend to concentrate on locally based content, if they produce any documentaries at all. Smaller stations tend to acquire existing documentaries from right holders. Lifestyle programmes are a popular genre. Each station, public or private, includes local lifestyle programming and covers local events. Lifestyle programmes are partly financed by sponsoring, bill-boarding and merchandising.[36]



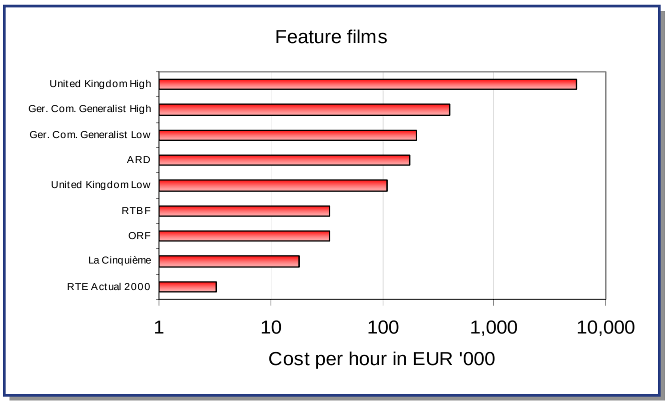


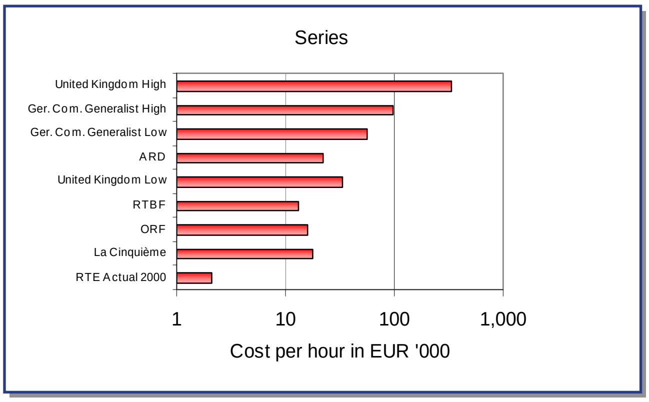
Drama and Soaps:

Drama productions are not frequently produced in small countries, except for special co-productions (for instances TATORT police drama at ORF). RTBF does not produce any dramas or soaps except some co-productions from time to time. Neither RTBF nor ORF produce daily soaps. Soaps are very popular with commercial broadcasters in all countries and are generally included in the programme offering of public stations in larger countries.

[35] Deloitte Analysis 2002
[36] Deloitte Analysis 2002

Acquisition Costs:





The cost per hour in the above charts are represented on a logarithmic scale. Acquisition costs are highly dependent on the size of the audience and the competitive environment in a given market. In most countries, films and series are purchased in packages or output deals (for example containing blockbusters (A-movie), a number of average movies (B-movies) and possibly series). Therefore, it is difficult to benchmark price ranges.[37]

Digital Funding

Annual cost of new channels:				
Country	**PSB**	**Channel**	**Hours**	**Annual Cost**
News/information Channels				
Germany	ZDF	ZDF-info	24	€ 8.5 m
Sweden	SVT	SVT24	24	€ 7.5 m
UK	BBC	BBC News 24	24	€ 78 m
International channels				
Benelux	NOS/VRT	BVN	6	€ 8 m
Ireland	RTÉ	TARA[38]	15	€ 3 m
Cultural / Education Channels				
France	France TV	Mezzo	14	€ 26 m
Germany	ZDF	Theatrekanal	7	€ 8.5 m
Germany	ZDF	ZDF-doku	7	€ 8.5 m
UK	BBC	BBC Knowledge	18	€ 30 m
Youth Channels				
UK	BBC	BBC Choice	8	€ 73 m
Parliament Channels				
UK	BBC	BBC Parliament		€ 5.4 m

Partnerships:

Austria: TW1 channel is operated as a partnership between ORF and a travel company Sitour.

Benelux: BVN channel is operated as a partnership between Dutch NOS, Belgian VRT and Radio Netherlands International

Germany: Phoenix, Kinderkanal and Arte are operated by ARD and ZDF. Arte is also part funded by France Télévision. IQTV draws upon alliances between SWR (part of ARD) and Siemens, publishers, Sony, Ernst Klett, SAP and Taunus Film GmbH.

Portugal: SporTV is operated as a partnership between RTP, TV Cabo and sports rights holder Olivedesportos.

[37] Deloitte Analysis 2002
[38] Tara was liquidated in March 2002

Additional Government Funding:

Sweden: The Swedish government have guaranteed SVT an additional € 7.5m for the first three years of digital transmissions.

Norway: NRK are pushing the Norwegian government to give them additional funding.

Licence Fee Increase:

UK: The government gave the BBC a STG£3 licence fee increase in 2000 to help subsidise their new digital channels. The UK licence increased from € 166 to € 171. In 2001 there was a further licence fee increase of STG£5 bringing it up to € 179. The UK government also allowed for further increases of 1.5% above inflation in subsequent years.

Germany: In 2001 the German Government passed a licence fee increase of 11% to support additional services to be offered on digital platforms. This effectively meant that ARD's share of licence fee income soared from €455m to €4.7bn, whilst ZDF's share increased from €184m to €1.5bn.[39]

Sale of Transmission Network:

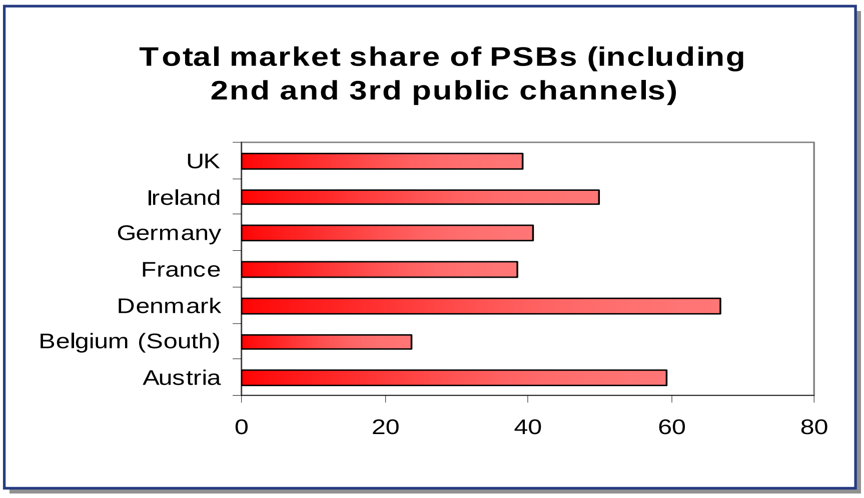
Finland: YLE sold 51% of their terrestrial transmission network to Telediffusion de France in 2000. They have to sell off their remaining shares in coming years and the money is being spent on digitalisation.

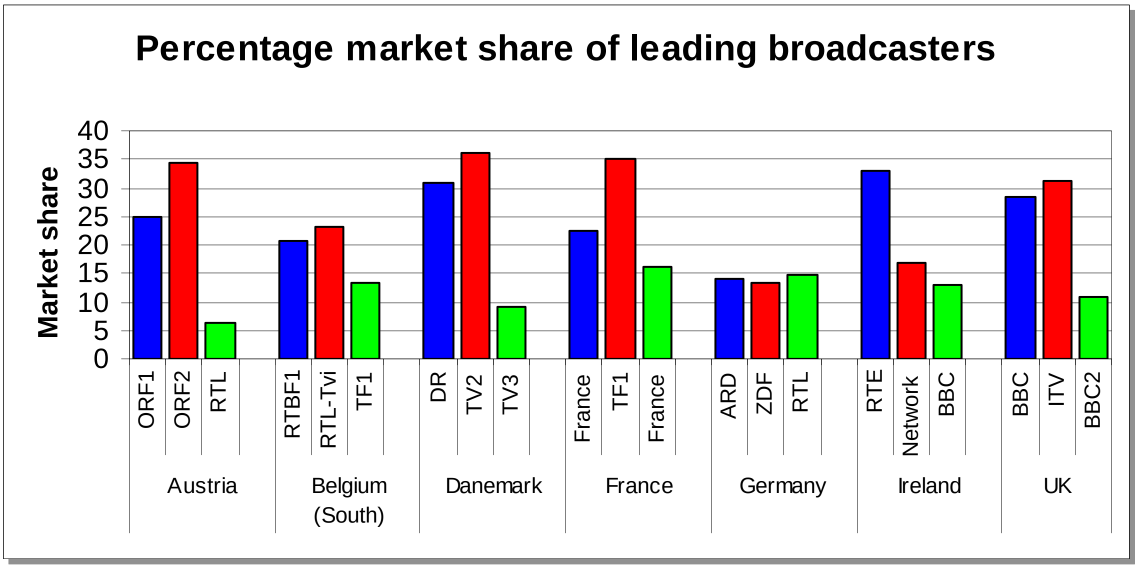
Leasing of equipment:
Sweden: SVT kept the capital cost of digitalising SVT24 low by leasing their equipment.

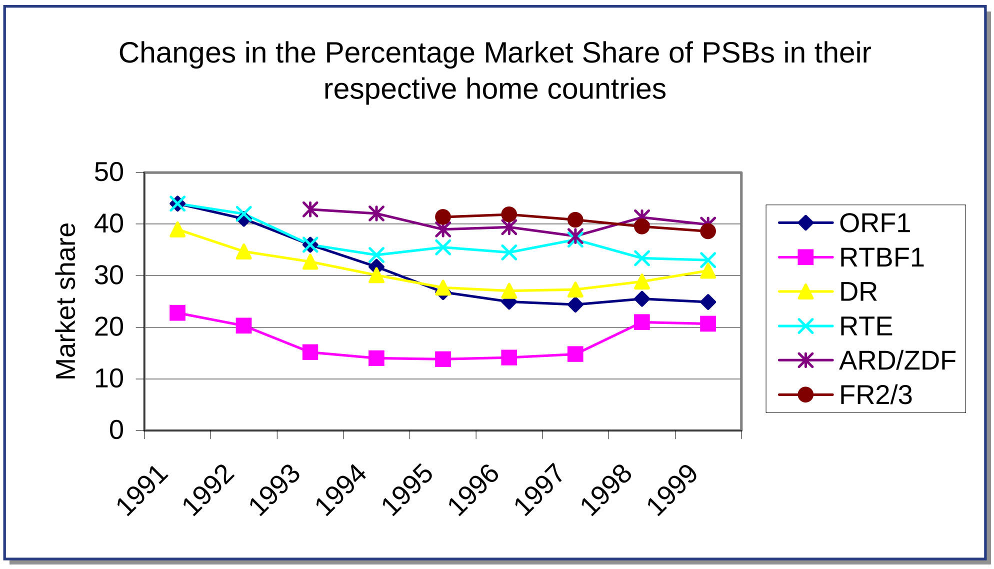
[39] Financial Times, 9th April 2002, "The great German television drama"

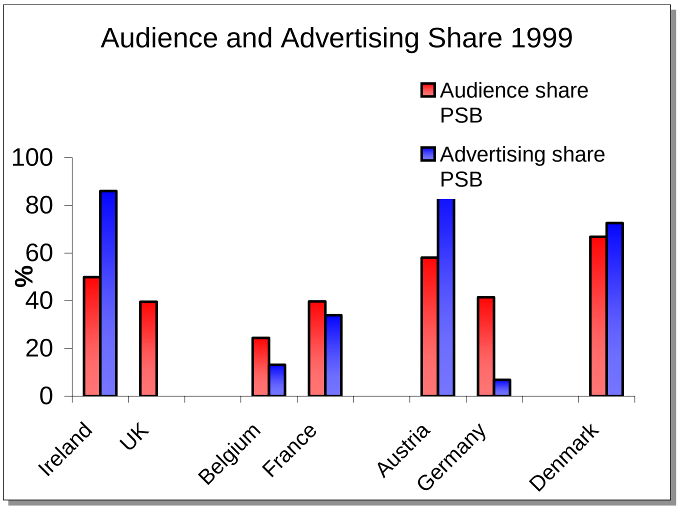
Section 6: Reach and Ratings

The following graphs taken from Deloitte and Touche's benchmarking analysis (2002) illustrate that public service broadcasters' respective audience share decreased with the arrival of new entrants. However their share is now stabilising. The majority of public service broadcasters have remained strong in their respective home markets. The market share of public service broadcasters ranges from 23.7% to 59.3%.









There is no direct link between audience share and advertising share in smaller countries like Ireland, Belgium and Austria. This is no indication that Public Service Broadcasters originating in larger countries explicitly compete for the advertising revenues in smaller countries where they broadcast; however, broadcast spill-over and the impact on advertising revenue for the smaller broadcaster cannot be measured.[40]

Reach of European Digital Channels, 2001

Country	PSB	Channel	Reach - % of TV Households (National)
		News Channels	
Germany	ZDF	ZDF-info box	7.6%
UK	BBC	BBCNews 24	36%
Finland	YLE	YLE 24	2.21%
Sweden	SVT	SVT24	9%
UK	ITN	ITN News Channel	36%
		Cultural/Education Channels	
Germany	ZDF	ZDF-doku	7.6 %
Finland	YLE	YLE Teema	2.21%
Finland	YLE	YLE FST	2.21%
UK	BBC	BBC Knowledge	36%
		Youth Channels	
UK	BBC	Choice	36%
UK	Channel 4	E4	36%
		Other Channels	
Austria	ORF	TW1	4.3 million (Austria and Germany)
UK	Channel 4	Film 4	36%

Ratings of Digital Channels

Digital channels are achieving low ratings especially when compared to those of the pre-multichannel era. Ratings as a technique of monitoring the success of broadcasters is being questioned:

> "Numbers now seem to be the only universal measure for excellence that we have: how many, how much how often. We're losing sight of the innate value of programmes in our fixation on the success that everyone can understand."[41]

In a recent article in the Financial Times Guy Abrahams, director of strategy of Carat, media planning and buying agency made a number of worthwhile observations. He was discussing the BBC specifically but the viewpoint is valid for all licence funded public service broadcasters.

- If a public service broadcaster provides the "quality" being demanded of it, it will never be able to deliver the additional audience share to match the commercial opposition.
- A public service broadcaster should be "something to all of the people, some of the time"
- Audience share is the wrong measuring system.

[40] Deloitte analysis, 2002
[41] Broadcast Magazine, The Ratings Obsession, 31st August 2001

- Basing performance on audience share means that someone who watches television for five hours a day is valued more than someone discerning who watches just one hour.
- Public service broadcasters should be evaluated on the basis of its average daily of weekly reach among the licence-paying public.
- Measuring viewing of ten minutes or more should eliminate channel surfing.
- The reach of both homes and individuals should be measured.[42]

E4, operated by Channel 4 in the UK, has begun using the low ratings of digital channels as a marketing tool. An advert aired on E4 on 18th September 2001, states that, "You are watching E4, this is a digital channel and that means no-one watches, that means we can get away with saying…"

In France Euronews is the fourth most watched channel and rates higher than national news channels. It is watched by 35.6% of French viewers with access to cable and satellite[43].

In Germany ZDF "have no official ratings for the digital bouquet and the channels. But … the viewers are minimal."[44]

YLE, "It is almost impossible to say anything about ratings, because there are so few receivers available yet. According to what I know, the amount of receivers is less than 1000."[45]

Belgian Eurosport 21 has a rating of 2% on analogue cable.

The following table shows recently released estimates of UK channel ratings. It only shows those channels with more than 0.1% audience share. The absence of BBC Knowledge and ITN News 24 suggests that these channels achieve an audience share of less than 0.1%. **It should be noted that none of these UK channels has secured an audience share greater than 0.7% even for those with analogue multichannel availability.**

Channel	Rating
News	
BBC News 24	0.2
Sky News	0.3
Educational	
Animal Planet	0.1
Discovery	0.3
History Channel	0.2
National Geographic	0.1
Youth	
BBC Choice	0.4
E4	0.2
Kiss TV	0.1
MTV	0.3
MTV Base	0.1
MTV Extra	0.1
UK Play	0.1
Children	
Boomerang	0.2
Cartoon Network	0.7
Disney Channel	0.4
Disney Playhouse	0.1
Fox Kids Network	0.2
Nickelodeon	0.7
Nick Jr	0.2

Channel	Rating
Archive	
Granada Plus	0.3
Challenge TV	0.3
ITV2	0.1
Paramount Channel	0.2
Lifestyle	
Granada Men and Motors	0.1
Discovery Home and Leisure	0.2
Granada Breeze	0.1
Living	0.5
UK Horizons	0.1
UK Style	0.3
Sport	
Eurosport	0.3

Ratings information from **"Television Audience Share Figures"** Published by the Independent Television Commission, 2nd August 2001.

NOTES:

1. Only Channels with 0.1 or higher included
2. Figures only apply to British Islands
3. Where channels broadcast in both analogue and digital this shows consolidated figure
4. Where same channel broadcast at two different times the figures are consolidated

42 Financial Times, Success is within reach, 4th September 2001
43 http://www.advanced-television.com/pages/pagesb/newsarchive/3-10%20sep.html#EuroNews
44 Email From Mr V Berger, ZDF
45 Email from Mika Ojamies, YLE

Section 7: Platforms

Decoder Standards
Scandinavia and Germany have attempted to use standardised technology in digital set top boxes in order to ensure interoperability between platforms. This will mean that consumers changing operator will not need to change the set top box that they are using, however at this time there are no set top boxes that work across platforms as the frequencies used on each platform differ. Without interoperability for broadcasters, platform neutrality is neither complete nor assured, the services offered will differ across platforms. Recent European legislation, voted through on 12th December 2001, encourages the standardisation of decoders. However, it does not require that existing digital platforms move over to this standard.[46] Although MHP is becoming recognised as the standard for Europe, very few countries have achieved standardisation between platforms, for example, in the UK there are three different standards in operation. BSkyB uses Open TV as their API. ITVdigital uses MHEG-5, whilst NTL and Telewest use Liberate. TV Cabo in Portugal and UPC in the Netherlands use Microsoft's DTV technology.

Interoperability
The BBC outlines problems concerning interoperability in the paper "Delivering Digital Television to Multiple Platforms",[47] summarised below.

- The number of different technologies operating in the UK have complicated the delivery of the BBC's regional services, since there is a perceived need for BBC services to be carried on all available platforms, demanding a horizontally integrated system. All the signal origination processes must be capable of interfacing to a number of disparate platforms. One of the key differences between the platforms is the form of EPG and the delivery of the programme information. There is also a need to ensure that the quality of the analogue service is not diminished, therefore the digital services must be sourced from the existing analogue service.
- The BBC's regional services are further complicated through the existence of both national and regional variants and appropriate information about the schedules needs to be generated and delivered. There are further complications with regards to programme rights issues, for example Scottish football can only be shown in Scotland, therefore Conditional Access systems needed to be developed, despite these services being "free to air".
- For DTT services a number of DVB networks are created that correspond to the highest level of regionality for any of the terrestrial multiplexes for a given location, guaranteeing that the boundary of a BBC terrestrial service will always consist of network boundaries. The Service Insertion Point (SI) is fed by the Central SI Collator and is inserted into each transport stream before being distributed to the transmitters. As for the majority of the time the services carry Network programming, various sustaining and clean feeds must be provided to allow the regions to opt out when regional variations are active. The Central Collator allows SI to be cross-carried by all multiplexes, which is a mandatory requirement of the UK regulator. There is a second SI located at the TV centre, providing the satellite up-link. Within the National variations in the UK completely separate schedules are maintained, whilst the English regional variations are constrained by the network programme boundaries. The English regional variations are simpler to achieve on DTT and Cable platforms, but the first phase of their launch on digital satellite began in January 2002.
- Due to the high standards required and the last minute schedule changes the BBC produce EPG information directly. The BBC developed an in-house system, Schedule Interface for Digital television (SID), to allow the production of an EPG schedule from a raw transmission schedule. SID also manages the delivery of the EPG schedules to the third party and BBC internal systems, as well as managing the delivery of now/next changes using information derived from automated play-out systems. SID involves a Windows 95/NT application with automated features and a spell check facility. This Windows application interacts with a custom designed Oracle 8 database running under a Unix operating system. EPG branding issues will make common authoring in the future more costly to achieve. Currently schedule changes can be reflected on the EPG within 10 minutes. There is no industry standard interchange format for the publishing of EPG information.
- The now/next derivation is a further complication. Most platforms provide an automated mechanism to trigger now/next changes in real time. SID monitors the play-out of services, reconciles the events against the database and sends triggers over the TCP/IP links to each platform. Automation systems so far have not been able to support multiple different now/next interfaces.

[46] Inside Digital TV, 23rd January 2001, "A second attempt to explain EU legislation on MHP"
[47] http://www.bbc.co.uk/rd/pubs/papers/pdffiles/ibc99pl.pdf

- There are also divergence between platforms for interactive services. The BBC services need to be similar across platforms and maintain a synergy with other interactive services such as BBC1. The divergence between the platforms has resulted in the BBC's interactive services being formatted differently across platforms and offering different services.

BBC Problems on Digital Satellite

Despite the use of these technologies to ensure availability of regional services, not all of the BBC's regional services are available on digital satellite. In fact, ITV has been the first of the British terrestrial broadcasters to transmit all its regional services on this platform. For example, until January 2002, when the BBC's regional news programmes were transmitted on analogue, digital viewers saw "UK Today"; a programme made in London that included a compilation of items produced by the BBC's regional news teams.[48] **Only on 28th January 2002 were the first BBC English regional news programmes launched on digital satellite, these were for the five largest English Regions covering 70% of the population**. The service is accessed through BBCi allowing viewers to select any of these five programmes using the same technology as the interactive Wimbledon coverage in 2000. The full regional service is planned for Q3 2002.[49]

Satellite Digital Platforms:

General

Dec 2001: Satellite operator Eutelsat conducted an international study of cable and satellite homes in 2001. Some 122 million homes in 38 countries throughout Europe, the Middle East and North Africa were found to be equipped for cable or satellite reception, representing 41 per cent of total TV households surveyed for 2001, compared with 38 percent in 2000. Cable's 58 per cent penetration made it the market leader with some 70.2 million homes connected. Satellite reception rose to 18 per cent between 2000 and 2001, and accounted for 54.3 million households. Analogue reception accounted for 79 per cent of the total market, down just 0.7 per cent between 2000 and 2001.

In the digital market, cable accounted for 19 percent, or 3.9 million subs, while satellite had 81 per cent of the digital market, some 17.7 million subs. Western European TV homes saw 53 per cent cable or satellite reception, North Africa and the Middle East saw 35 per cent, while in Eastern Europe the figure was 27 per cent.[50]

BSkyB (UK and Ireland's satellite platform):

- Oct 2001: The world's first interactive football television betting game was launched by Sky Sports in the UK, amid warnings that it could lead to an increase in gambling addiction.[51]
- Oct 2001: Sky publish their annual report BSkyB made a loss of £514m in 2000, largely from the cost of giving away set-top boxes to digital subscribers.[52]
- Nov 2001: Sky News is still loss making,[53] since its launch in February 1989.
- Nov 2001: Sky launch Irish version of its subscriber magazine[54]
- Nov 2001: Satellite firm BSkyB is expected to announce the appointment of TV3 executive, Mr Mark Deering, as head of its Irish operation within the next few weeks.[55]
- Feb 2002: BSkyB already boasts Irish commercial revenue in the region of €8.5m.[56]
- April 2002: Irish Terrestrial Channels, RTE1, Network 2, TV3 and TG4, are added to Irish satellite package. BSkyB have 193,000 subscribers in Ireland, 18% of TV Households. BSkyB have 5.5million subscribers in the UK.

Premiere (Germany):

- April 2002: Kirch, the main operator of the Premiere satellite service, declared itself bankrupt.

Canal Satellite (France, Italy, Poland, Scandinavia):

- Despite the huge number of subscribers Canal+'s satellite platform is loss making and has been involved in a number of mergers over 2001 in an attempt to increase profitability.

[48] Guardian, 17/09/01, "ITV to put all regional shows on digital satellite"
[49] BBC News Release, 10/01/02, "English regions launch first phase of digital news service"
[50] Advanced Television, 30th Nov 2001, "Satellite wins 80% of digital TV"
[51] Guardian, 19th Oct 2001, "Sky launches play-as-you-view interactive football gamble"
[52] Guardian, 1st Oct 2001, "BSkyB chief £8m richer while share price halves"
[53] Financial Times, 6th Nov 2001, "BSkyB seeks Channel 5 news link"
[54] Irish times, 1st Nov 2001, "Magazine goes for Celtic twist to appeal to Irish"
[55] Irish Times, 28th Nov 2001, "BSkyB to announce TV3 executive appointment"
[56] http://www.marketing.ie/feb_02/article_c.htm

- May 2001: Canal+'s Telepiu merged with Stream, a rival loss-making platform owned by Rupert Murdoch and Telecom Italia.[57]
- June 2001: Vivendi Universal, the Paris-based media conglomerate took over Canal+ in 2000. Vivendi is to shed more than 6 per cent of the workforce of Canal+.[58]
- In August 2001 UPC agreed to merge its Polish DTH Satellite service with that of Canal+ in Poland, gaining 25% of the new company.[59]
- Jan 2002: Canal Satellite launched a new service allowing users to send text messages (SMS) to mobile phones using a virtual keyboard on their television. This service was developed in collaboration with Vivazzi.[60]

Eutelsat (Europe-wide):
July 2001 after years of being run as an intergovernmental organisation, Eutelsat, which owns and manages 19 geostationary communications satellites, formally became a private company, allowing Eutelsat to compete more aggressively with its competitors, including Societe Europeenne des Satellites (SES). Eutelsat satellites already relay television, internet and other telecommunications signals to Europe, Africa, large parts of Asia and, via undersea cables, to the US. According to the company, 56 per cent of its capacity is used to transmit television with another 40 per cent making up high-speed "internet from the sky" service. To muscle in on the UK market, Eutelsat went live in April on a new satellite called Eurobird, that is positioned at 28.5 degrees East - close enough to serve existing SkyDigital subscribers, while also giving other broadcasters direct access to SkyDigital's set-top boxes. Chief executive, Berretta, believes he has the killer application: microchannels or "streamcasting". At a broadcasting conference in Bologna in April, Eutelsat unveiled Open-Sky, a video streaming service that can transmit around 50 video channels using MPEG-4 compression. Berretta says the cost of leasing a transponder for an MPEG-4 streaming service would be around 15 times cheaper than for a standard transponder, thus opening up the market for a new generation of very small-scale broadcasters.[61]

SES (Europe-wide):
Its 11-strong satellite fleet is the largest in the European private sector, and it covers much of the Asian and Latin American regions through stakes in other groups.[62]

<u>Cable Digital Platforms:</u>

NTL (UK and Ireland) / Telewest (UK):
NTL and Telewest (25% owned by Liberty) are the two major UK cable providers. The companies, which have heavy debt burdens, are increasingly merging aspects of their business. In November 2001, they announced they would be stepping up joint buying of television programming and hardware. The moves towards merger follow the creation of a joint-venture interactive television unit and a shared marketing campaign for high-speed Internet services.[63] NTL and Telewest have also launched a joint interactive strategy. The two are to develop a common set of broadband standards for broadcasters and producers to use in order to pave the way for new interactive services to be launched on cable. Part of the strategy includes providing broadcasters with tools to exploit cable's greater bandwidth advantage over other digital platforms.[64] The two jointly own the pay-per-view service Front Row.[65]

UPC (Netherlands, Poland):
UPC's cable networks pass 10.8 million homes, delivering basic cable television services to 7.2 million subscribers. In addition, UPC had 448,000 Internet subscribers, 421,000 telephony subscribers as well as 42,000 digital subscribers. Next to these cable-based services, UPC's DTH (Direct To Home - satellite) operations in Central Europe deliver television services to 486,000 subscribers. [66]

In October 2001 UPC announced the closure of two channels. Sport1 will close by the end of the year. It is also expected to shut Innergy, an alternative lifestyle channel. The channels are among the eight that UPC produces and are a key part of a package of television, video and Internet applications. [67]

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[57] Financial Times, 14th June 2001, "Canal Plus to axe 200 jobs"
[58] Financial Times, 14th June 2001, "Canal Plus to axe 200 jobs"
[59] http://www.shareholder.com/upc/news/upc081001_1.pdf
[60] Inside Digital TV, 14th Jan 2002
[61] Financial Times, 30th July 2001, Another star in the sky"
[62] Financial Times, 28th March 2001, "SES satellite deal held up"
[63] Financial Times; 16th Nov 2001, "Telewest and NTL aim for operational merger"
[64] Broadcast, 9th Nov 2001, "Cable giants launch interactive strategy"
[65] Irish Independent, 10th August 2001, "NTL holds merger talks with Telewest"
[66] http://www.upccorp.com/corporate/frames.htm?1#null
[67] Financial Times 24th Oct 2001 "UPC channel closures raise target fears"

In December 2001, UPC announced it was discontinuing the deployment of Miscrosoft TV. More than a year since the launch of its digital service, UPC provides only basic programming elements without any interactive functions, such as email, to just 50,000 customers. Microsoft's relationship with UPC dates from January 1999 when the US company paid $300m for a 7.8 per cent stake - since diluted to 6.3 per cent and now worth just €14m - and announced a collaboration on internet and digital systems.[68] In November 2001, TV Cabo, a Portuguese cable group, said it too had experienced "teething troubles" with its Microsoft-powered digital television service, although it remained confident in the platform.[69]

Deutsche Telekom (Germany)
Liberty agreed in September 2001 to acquire six regional cable companies from Deutsche Telekom, covering 12 of Germany's 16 Lander. The deal, which would make it Germany's biggest cable operator with 20m customers, is conditional on cartel office approval. RTL is understood to be concerned that Liberty might split its future offering into "basic" and "premium" packages, each subject to a different fee. Such segregation, made easier by Liberty's move to a digital network, would diminish the value to advertisers of those channels included only in certain packages. As Liberty builds its content portfolio, RTL fears it might also become able to lock out rivals altogether. [70]

Liberty (UK, Ireland)
This US cable company have a 20% stake in Newscorp, a 25% stake in Telewest and, in November 2001, are in the process of negotiating a deal with Deutsche Telekom.

<u>Digital Terrestrial Transmission Platforms:</u>

ITV Digital (UK):
ITV Digital, the UK DTT platform, has serious economic problems, caused in part by giving away set top boxes to compete with BSkyB. Having already invested more than €1302m in ITV Digital, Carlton and Granada have said it will take at least another €489m before it breaks even.[71]

Nov 2001: Announced that the BBC is in advanced talks with ITV on a plan that would secure the future of the troubled ITV Digital pay-TV business and ensure free access to the BBC's channels in the digital age. The "digital coalition" plan involves the UK's free-to-air broadcasters pooling digital terrestrial broadcast and transmission operations and developing a set-top box to deliver free multichannel digital television. Users would buy the set-top box for roughly £100 in the high street and would then be able to receive up to 20 channels free of charge. This contrasts with ITV Digital's marketing policy, under which a set-top box is provided free, but users pay varying monthly fees, depending on how many premium channels they subscribe to.[72]

In May 2002, ITV Digital took its premium channels off the air. The transmission company is to be sold.[73]

Teracom (Sweden):
The Swedish DTT platform had 100,000 subscribers in April 2002 and was recently very close to bankruptcy.[74]

Quiero (Spain)
Spanish digital TV platform Quiero TV is considering a joint takeover offer from French construction to media group Bouygues and US satellite operator Echostar. Spanish holding company Auna has had its 49 per cent controlling stake in Quiero up for sale for some months. Auna's main associates (Spanish electricity companies Endesa and Union Fenosa, Italian telecoms company Telecom Italia and Spanish bank Santander Central Hispano) had set a deadline of December 15th 2001 to find a buyer for the financially troubled Quiero before moving to liquidation.[75] In April 2002, Quiero TV, Spain's only experiment with terrestrial digital pay television, has been closed down, with estimated losses of Euros 600m (Dollars 539m).[76]

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[68] Financial Times, 3rd Dec 2001, "UPC drops Microsoft for digital TV"
[69] Financial Times, 3rd Dec 2001, "UPC drops Microsoft for digital TV"
[70] Financial Times, 22nd Nov 2001, "RTL raises concerns over Liberty deal"
[71] Financial Times, 7th Nov 2001, "BBC and ITV in talks over free digital TV deal"
[72] Financial Times, 7th Nov 2001, "BBC and ITV in talks over free digital TV deal"
[73] Finacial Times, 1st May 2002, "Digital venture ends in blackout"
[74] Advanced Television, 5th April 2002, "SVT seeks free DTT boxes"
[75] Advanced Television, 30th Nov 2001, "Quiero considers takeover bid"
[76] Finacial Times, 26th April 2002, "Quiero TV closed as the competition bites"

ADSL / Broadband Television Services

Kingston Interactive (UK)

Kingston Interactive operates in Hull in the UK offering a broadband VOD service. The ADSL service operates using the standard copper telephone cables. The VOD service allows TV viewers to call up programmes at any time and to play, pause, fast forward and rewind. Hull City Council still owns 42% of the company, and it is lauded as a great success in the region. Kingston Interactive intends to roll out its services nationally. Moreover, Kingston is left with one of the strongest balance sheets in a sector plagued by funding gaps. This is thanks to its incumbent operation in Hull, a £250m funding facility and the prudent decision not to follow the acquisition-led overseas expansion of its rivals.[77]

Telenor/NRK (Norway)

Telenor announced the launch of trial broadcasting over the Internet of full-screen television services, in partnership with Norway's public service broadcaster, NRK. In November 2001 Telenor/NRK have begun test transmissions over Telenor's ADSL network to its customers. The main feature will be NRK's daily news flagship Dagsrevyen, the Daily News revue. The new partnership also plans to focus on developing services, based on IP telephony, in the near future. New technology, particularly broadband, has made full screen video transmission via IP a reality. On Monday (5/11/01) Telenor held a press launch of moving images transmitted over a 1.5 Mbps ADSL line. The next step is to let a selected number of Telenor customers try the system. "We intend to develop services, both useful and exciting, which soon will be ready for us to commercialise and offer our customers," comments Berit Svensen, Telenor Head of Technology. Svein Prestvik, Head of NRK's Future Technology Division, NRK Futurum, sees the new deal with Telenor as, "An important step towards our target to ensure that in the future we retain the position we already hold today, Norway's leading multi-media producer."[78]

[77] Financial Times, 24th October 2001, "Still engaged in growth process"
[78] Advanced Television, 9th Nov 2001, "Telenor/NRK launch ADSL"

Section 8: Country by Country Overview

Albania			
Population:	**TV Households:**	**% Digital:**	**GDP per Capita:**
3.5 million	630,000	-	€ 3312
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
RTVSH	-	Advertising, Government Funding, Other (Leasing Airtime & Rentals)	RTVSH
Other Channels:	**Additional Information**		
STVSH	Simulcast on satellite for a few hours a day		

Response to CIRCOM Survey:

Regional Station	RTV SHQIPTAR		
Contact Details	Mira Shutherigi Blushi, Director of International Relations Tel: +355 4 230842 Email:		
Operate TV Channel	Y	Annual Budget	€ 6.4 m
% Licence Fee	0%	% Advertising	26%
% Government funding	52.5%	% Other Funding	21.5%
Other Funding Source	leasing airtime & facilities		
Employees	1030	Households in Region	630,000
Output			
Hours of Regional TV Weekly	0	Hours of National TV Weekly	119 — 13 % of which is News
Hours of Regional Radio Weekly	0	Hours of National Radio Weekly	266 — 16% of which is News

Most Popular TV Programmes	Genre	Rating
1. Telebingo	Entertainment	90%
2. People & Destinies	Soap Opera	95%
3. Window	Social & Political talkshow	80%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	Y	Digital Satellite	Y

Digital Technology	
New Technologies	Digital Radio Planned Digital Teletext
Website	No Website
Digital Strategy	Treated as a standalone project with no impact on funding for existing productions
Digital funding	Received funding from National government for transition to digital Received EU funding (Stability pact) for transition to digital
Digital Training	Engineering & technical staff trained at / by ZDF Germany

Suggestions for CIRCOM:
Assist RTSH in establishing Online Technology and have its own regular website. Help Train economists, marketing people and engineering and technical staff.

Austria			
Population:	**TV Households:**	**% Digital:**	**GDP per Capita:**
8.1 million	3.1 million	4.06%	€ 13,884
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
ORF	€769 m	Licence Fee & Advertising	ORF1 – General ORF2 – Youth

Digital Channels:	**Additional Information**
TW1	Tourism and weather broadcast via satellite (ZDF.vision) partnership with Sitour. Technical cost €726,728 per annum
ORF1	Simulcast on ZDF.vision
ORF2	Simulcast on ZDF.vision
Digital Bouquet	Originally proposed – but launch not confirmed

General: Austria is the only western European country that does not (yet) have a private national broadcaster. The biggest private broadcaster is ATV, the former Vienna city Channel (WIEN 1), which reaches about 1m homes (30% market penetration) via cable and satellite. The daily advertising time minutage for ORF increased from 35 minutes to 45 minutes on the 1st January 2001. Viewers have to pay SCH 3,008 (EUR 218) by way of a licence fee each year. About 35% of the total licence fee collected is consumed by taxes and administrative fees, leaving SCH 4.9 billion (EUR 356 million) for ORF. ORF is currently being transformed into a foundation with a new management structure. Until this new structure is in place future digital plans are uncertain. There was an intention of launching a complete bouquet of seven channels.

DTT: In planning Stage, limited technical DTT trials have been launched. The objective is to grant one terrestrial licence to a private operator.

Cable: Following on from its terrestrial policy, the Austrian government has sought to limit cable's influence by franchising as many as 250 cable operators all with small geographical areas. There is little coherence in the packages or marketing, making it hard for international services to target the territory. There are 1 million analogue cable subscribers. Austria has a high percentage of cable and analogue satellite penetration i.e. 75.9%.

Satellite: German DF1 launched digital package in Austria in 1996.

Competitors: German channels RTL and Sat 1 have dedicated Austrian services but these only pull in around 6% and 4% respectively. Through terrestrial spill, satellite and cable carriage they reach about 70% of the Austrian audience. Several German channels from both the Kirch group and the RTL Group have advertising windows in Austria. However, ORF1, ORF2 (encoded) and TW1 are included in the German ZDF.vision digital bouquet. The ORF channels' market share is 50%-60%, while the most successful German channel has only a 6% share of the Austrian market.

CIRCOM SURVEY RESPONSES:

Regional Station	ORF - Studio Carinthia				
Contact Details	Dr Wilhelm Mitsche Regional Director Tel: +43 463 5330 29211 Email: willy.mitsche@orf.at				
Operate TV Channel	N		Annual Budget	14.5	
% Licence Fee	67%		% Advertising	20.5%	
% Government funding	0.5%		% Other Funding	12%	
Employees	190		Households in Region	150,000	
Output					
Hours of Regional TV Weekly	5	20 % of which is News	Hours of National TV Weekly	0.25	100 % of which is News
Hours of Regional Radio Weekly	168	5 % of which is News	Hours of National Radio Weekly	0.5	100% of which is News

Most Popular TV Programmes	Genre	Rating
1. Radio Carinthia	music / information	44%
2. Carinthia Today	information	86%
3. Treffpunkt	talkshow	40%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	Y	Analogue Satellite	Y	Digital Satellite	Y

Digital Technology	
Website Address	www.kaernten.orf.at
It is the 4th most visited website locally	
Digital funding	Received No Extra Funding for the transition to digital
Digital Training	Seminars for editors and technicians
Suggestions for CIRCOM:	
Support in establishing planned co-operation between TV companies in Carinthia, Slovenia and Friuli (Italy) in order to reduce hostility and prejudices still existing in these neighbouring regions.	

Regional Station	ORF Upper Austrian				
Contact Details	Mag. Klaus Huber, Editor Cultural Affairs Tel: +43-732-6900-24253 Email: klaus.huber@orf.at				
Operate TV Channel	Y		Annual Budget	14	
% Licence Fee	50%		% Advertising	50%	
Employees	130		Households in Region	480,000	
Output					
Hours of Regional TV Weekly	3	70 % of which is News	Hours of National TV Weekly	0.5	100 % of which is News
Hours of Regional Radio Weekly	288	5 % of which is News	Hours of National Radio Weekly	3	10% of which is News

Most Popular TV Programmes	Genre	Rating
1. Upper Austria Today	News	-
2. Ins Land einischaun	Regional culture	-
3. Osterreichbild	documentary	-

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology	
New Technologies	Digital radio planned Analogue Teletext
Website Address	www.linz.orf.at
It is the 2nd most visited website locally	
Digital Strategy	Migration of Existing Operations, involving new practices
Digital funding	No Extra Funding for the transition to digital
Digital Training	Internal training

Belgium			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
10.2 million	4.26 million	0.94%	€ 24,163
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
RTBF	€223 m	Advertising, Sponsorship, Public Funding	RTBF1 RTBF2 Eurosport 21
Digital Channels:	**Additional Information:**		
RTBF1	Planning Simulcast		
RTBF2	Planning Simulcast		
Eurosport 21	Planning Simulcast – partnership with Eurosport France		
RTBF-sat	General satellite channel launched in Dec 2001		
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
VRT	€243	Advertising, Sponsorship, Public Funding	VRT Canvas
Digital Channels:	**Additional information**		
BVN	Dutch language aimed at Dutch speakers abroad – broadcast via satellite. Costs €8 m per annum. BVN is run in partnership with NOS and Radio Netherlands International. The Flemish community are trying to promote a local thematic channel but so far there has been no commitment to its launch.		
VRT	Planning Simulcast		
Canvas	Planning Simulcast		
Partnerships	RTBF Eurosport 21 is operated in partnership with Eurosport France. RTBF also contributes programming to Euronews and Arte.		

General: Belgium has two major languages; French is spoken in the Wallonia South region and Flemish is spoken (Dutch) in the Flanders North region. The Flanders region represents about two-thirds of the population. Each region has a separate TV market that is administered by its own government. The Walloon public-service broadcaster, RTBF, has two channels La 1 and La 2. RTBF broadcasts a diverse output of programmes comprising series, documentaries, sports, information, entertainment and educational programmes. Over 80% if its line-up is of European origin and 50% is in-house. La 1 had an audience share (in terms of the total national Belgium audience) of approximately 21.5% in 2000. The two regional governments collect licence fees of approximately €175 but only half is allocated to the public channels, with the remainder going to cultural support schemes.

Cable: Belgium's digital television development is hampered by the high penetration of Analogue cable. 90% of homes are passed by cable. The high cost of converting Analogue to Digital cable is slowing down the transition. The main incentive for the consumer to subscribe to Digital Television is the number of available channels, homes with Analogue cable already have multichannel and hence there is less incentive to move to Digital.

Satellite: Satellite television is operating in French Belgium, Canal+ has 180,000 subscribers, a 12.5% take-up rate, but has hit upon cable operator resistance to its plans to launch a digital bouquet. Canal+ adapt their analogue offering to the Belgian Market.

Competitors: The main competitor to RTBF is RTL-TVI, which was launched in 1987. RTL-TVI is 66% owned by media giant CLT-Ufa (RTL Group) and 34% by Audiopresse (association of newspapers publishers). RTL-TVI is leader in terms of audience and advertising share, 23.3% and 24.6% respectively. AB3, a subsidiary of AB Productions, a French production company began operating on the 6th October 2001. The objective of AB3 is to become a generalist broadcaster targeting at the 15-44 age bracket. The 3 main French generalist broadcasters TF1, France 2 and France 3, are available in southern Belgium and draw a combined 33% market share. Among these, TF1 regularly achieves a 14% share of the audience, followed by France 2 (9%) and France 3 (7%). The French community's government has talked of plans to impose a new levy on TV advertising for all broadcasters with an average audience share higher than 10%.[79]

[79] http://www.365broadcast.com/resources/country_files/belgium.shtml

Croatia			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
4.3 million	1.47 million	1.4%	€ 6607
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
HRT	€162 m	Licence Fee, Advertising	HTV 1 HTV 2 HTV 3
Digital Channels:	**Additional Information:**		
HTV 1	Simulcast on digital satellite		
HTV 2	Simulcast on digital satellite		
HTV 3	Simulcast on digital satellite		

CIRCOM SURVEY RESPONSES:

Regional Station	HRT		
Contact Details	Kresimir Macan, Head of PR Tel: +385 1 634 3186 Email: kresimir.macan@hrt.hr		
Operate TV Channel	Y	Annual Budget	162
% Licence Fee	60%	% Advertising	35%
% Government funding	0%	% Other Funding	5%
Other Funding Source	satellite lease revenues		
Employees	3450	Households in Region	1,474,298

Output					
Hours of Regional TV Weekly	2.5	100 % of which is News	Hours of National TV Weekly	30	70 % of which is News
Hours of Regional Radio Weekly	126	20 % of which is News	Hours of National Radio Weekly	28	50% of which is News

Most Popular TV Programmes	Genre	Rating
1. Croatia Today	News	20%
2. More (The See)	Magazine	18%
3. Panorama	News	15%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	N	Analogue Satellite	N	Digital Satellite	Y

Digital Technology		
New Technologies	Digital Radio is planned Digital Teletext is in operation	
Website	www.hrt.hr	
	It is the 5th most visited website locally	Offers video and audio streaming
Digital funding	No Extra Funding for the transition to digital	
Funding Source	Internal reallocation of budgets	
Digital Strategy	Involving a major organisational review and restructure	
Digital Training	Internal on site training and education in own classrooms	

Suggestions for CIRCOM
Exchange digital experience, costs & mistakes Opportunities for regional broadcasters in news Digital Terrestrial bouquets.

Czech Republic			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
10.2 m	3.3 m	0	€14,490
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
CT	€154.2 m	61% Licence Fee, 39% advertising & commercial	CT1 CT2
Digital Channels:	**Additional Information:**		
CT1	Simulcast on Digital Satellite		
CT2	Simulcast on Digital Satellite		
CT3	Planned for phased launch 2003		
CT4	Planned for phased launch 2003		

General: Czech TV has been practising digital satellite broadcasting (DVB-S) since 1997. This broadcasting enables the distribution of its channels to terrestrial receivers in the Czech Republic and the main station of cable operators, but individual viewers also receive it. As far as terrestrial receivers and cable networks are concerned there is also another one - secundar distribution analogue (PAL 625/50).

Since 2000 there is pilot digital terrestrial broadcasting DVB-T practising in the area of Prague and Central Bohemia in two multiplexes. Regarding to the fact that it is a pilot broadcasting and massive official sale of receivers or set of top boxes on domestic market has not started, the number of receivers DVB-T is low.

It is intended that the launch of regular (MHP) DTT broadcasting should begin in 2003. This will gradually contain four public service channels (CT1, CT2, CT3 a CT4), further multiplexes will contain private broadcasters.[80]

Response to CIRCOM Survey:

Regional Station	Czech Television (CT)										
Contact Details	Mrs Andrea Savane, Head of International Relations Tel: +420 26113 4153 Email: andrea.savane@czech-tv.cz										
Operate TV Channel	Y			Annual Budget	€ 154.2 m (2002)						
% Licence Fee	61%			% Advertising	26%						
% Government funding	0%			% Other Funding	12.3%						
Other Funding Source	Programme production, teletext broadcasting, teleshopping, sale of services and merchandising										
Employees	2,879			Households in Region	3,326,280						
Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	Y
Digital Technology											
New Technologies	Mobile / ISDN / Home Editing			Self Editing							
Website	www.czech-tv.cz										
	Offers video streaming										
Digital Strategy	Migration of existing operations, e.g. involving new practices in TV commissioning										
Digital funding	No Extra Funding for the transition to digital										
Digital Training	lectures										

Regional Station	CT Ostrava				
Contact Details	Vladimir Stvrtna, Producer Tel: +420 69 6201273 Email: vladimir.stvrtna@czech-tv.cz				
Operate TV Channel	N		Annual Budget	€ 8 m	
% Licence Fee	61%		% Advertising	26%	
% Government funding	0%		% Other Funding	12.3%	
Other Funding Source	production, teletext, teleshopping, merchandsing				
Employees	210		Households in Region	400,000	
Output					
Hours of Regional TV Weekly	2	100 % of which is News	Hours of National TV Weekly	6	20 % of which is News

[80] Information provided by Andrea Savane, Czech TV

<table>
<tr><td colspan="4">Most Popular TV Programmes</td><td colspan="4">Genre</td><td colspan="4">Rating</td></tr>
<tr><td colspan="4">1. Do not hesitate and shoot</td><td colspan="4">Entertainment</td><td colspan="4">20%</td></tr>
<tr><td colspan="4">2. Early Deaths</td><td colspan="4">Documentary</td><td colspan="4">15%</td></tr>
<tr><td colspan="4">3. Klekanice – A Spectre</td><td colspan="4">Investigative</td><td colspan="4">10%</td></tr>
<tr><td colspan="12">Carriage</td></tr>
<tr><td>Analogue Terrestrial</td><td>Y</td><td colspan="2">Digital Terrestrial</td><td>N</td><td>Analogue Cable</td><td>N</td><td>Digital Cable</td><td>N</td><td>Analogue Satellite</td><td>N</td><td>Digital Satellite Y</td></tr>
<tr><td colspan="12">Digital Technology</td></tr>
<tr><td colspan="3" rowspan="2">Website</td><td colspan="9">www.czech-tv.cz/ostrava</td></tr>
<tr><td colspan="9">It is the most popular website locally</td></tr>
</table>

Denmark			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
5.28 million	2.34 million	5.96%	€ 33,296
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
DR	-	Licence Fee	DR DR2 (satellite)
Digital Channels	**Additional information:**		
DR	Planning Simulcast		
DR2 (satellite)	Planning Simulcast		
PSB:	**Annual Turnover**	**Funding**	**Analogue Channels:**
TV2	-	25% Licence Fee, 75% Advertising	TV2 Zulu (satellite)
Digital Channels:	**Additional information:**		
TV2	Planning Simulcast		
Zulu	Zulu is only available on satellite platforms and is accessible by 65% of the population.		
TV2Nord Digital	Planning launch of new regional channel Q3/Q4 2002		

General: Denmark is a relatively small country with about 75% of its 2.4 million households connected to cable or satellite. Denmarks Radio transferred much of its public service programming to its satellite channel DR2, facilitating more mainstream programming for its terrestrial DR1 channel. Denmarks Radio has a self-imposed limit that at least 60% of its broadcasting service is allocated to Danish or Scandinavian programmes. More than half of DR's programming is produced in-house. According to Danish law, in general, programmes may not be interrupted by advertising. Commercial breaks are authorised only in between individual programmes. Danish Radio is not allowed to carry advertising at all. The licence fee in Denmark is circa DKK 1000 (EUR 134) per household per year. DR receives about DKK 1.5 billion (€200 million) in licence fee revenues. This corresponds to about 83% of total revenues. 17% of licence fee revenue goes towards TV2 (this is mostly financed through advertising revenue).

Sportskanalen, sports channel is operated by TeleDanmark in partnership with DR and TV2 broadcast on analogue cable. DR2 is only available on satellite platforms and is accessible by 65% of the population.

It has been suggested that there is a possibility that TV2 may be turned into a commercial entity.

DTT: Denmark is at the pilot stage with DTT. DR and TV2 are jointly responsible for the trials. Due to the small size of Denmark it must share frequencies with neighbouring countries allowing only four Danish channels to be broadcast.

Satellite: Canal Digital has been available in Denmark since 1998. The major analogue satellite provider is Viasat.

Cable: Tele Danmark launched a digital cable service in 1998, promising email, e-commerce and interactive services. They have 801,000 (34% TVHH) subscribers including both analogue and digital transmissions.

Danish Responses to CIRCOM Survey:

Regional Station	TV2 Nord		
Contact Details	Bent Bjørn, Managing Director Tel: +4596969696 Email: bebj@tv2nord.dk		
Operate TV Channel	Y	Annual Budget	€ 6 - 7 m
% Licence Fee	80%	% Advertising	20%
Employees	65	Households in Region	220,000
Output			
Hours of Regional TV Weekly	4.5 — 70 % of which is News	Hours of National TV Weekly	various

Most Popular TV Programmes	Genre	Rating
1. News	News	20%
2. Animal-journal	vets and zoos	20%
3. Gardenprogramme	Gardening	20%

Carriage

Analogue Terrestrial	Y	Digital Terrestrial	Y	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology

New Technologies	Mobile / ISDN / Home Editing Self Editing
Website	http://www.tv2nord.dk
Digital Strategy	Involving a major organisational review and restructure
Digital funding	Received National Government Funding Internal reallocation of Budgets Private Investors

Suggestions for CIRCOM:

First of all: When I am writing about digital television/DVB-T/MHP I am talking about a project going on air in august 2002 as a pilot project running until end of 2004. 2000 households are getting STB for 5-6 months and then 2000 new households are getting the equipment and so on. We have found a STB in MHP standard and we hope that we also get a STB with a 100 GB hard disk, DVD-player, browser to be tested in the last part of 2002. We are developing MHP-applications and have some examples of programmes with a simple form of interactivity.

I think Circom should try to make a group of regional stations working with digital television (MHP-standard) and maybe together try to speed up developing applications or program concepts that can be used/copied in others regions.

Regional Station	TV2 Syd		
Contact Details	Tim Johnson, Managing Director Tel: +45 76303132 Email: tijo@tvsyd.dk		
Operate TV Channel	Y	Annual Budget	
% Licence Fee	25%	% Advertising	75%
Employees	70	Households in Region	350000
Output			
Hours of Regional TV Weekly	15 — 100 % of which is News	Hours of National TV Weekly	0

Most Popular TV Programmes	Genre	Rating
1. News		%
2. Sport		%
3. Features		%

Carriage

Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology

New Technologies	Clip Art transfer of packages Self-Editing
Website	www.tv2syd.dk Offers video streaming
Digital Strategy	Migration of existing operations, but involving a major organisational review and restructure
Digital funding	Used money from the national network to fund transition to digital

Digital Training	Yes
Suggestions for CIRCOM:	
Developing common interactive projects, Sharing results, Special workshop at conference making it possible to view / discuss ongoing projects with relevant people	

Regional Station	TV2 Bornholm										
Contact Details	Jan Jørgensen, Managing Director Tel: +45 56 93 42 00 Email: jajo@tv2bornholm.dk										
Operate TV Channel	N					Annual Budget			€ 5.2 m		
% Licence Fee	15%					% Advertising			85%		
Employees	56					Households in Region			25,000		
Output											
Hours of Regional TV Weekly	4	100 % of which is News				Hours of National TV Weekly	0				
Most Popular TV Programmes				Genre				Rating			
1. News				News				36%			
Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N
Digital Technology											
New Technologies	Mobile / ISDN / Home Editing Self Editing										
Website	www.tv2bornholm.dk					1.5 million page impressions a month					
	It is the most popular website locally					Offers Video Streaming					
Digital Strategy	Migration of Existing Operations, e.g. involving new practices in TV commissioning										
Digital funding	Received National Government Funding Internal reallocation of Budgets										
Digital Training	Run training courses										

Regional Station	TV2 Fyn										
Contact Details	Ove Mulvad, Managing Director Tel: +45 63 15 60 00 Email: ovmu@tv2fyn.dk										
Operate TV Channel	Y					Annual Budget			€ 6 m		
% Licence Fee	80%					% Advertising			20%		
Employees	60					Households in Region			100,000		
Output											
Hours of Regional TV Weekly	4	75 % of which is News				Hours of National TV Weekly	0				
Most Popular TV Programmes				Genre				Rating			
1. News				News				%			
Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	0	Analogue Cable	0	Digital Cable	0	Analogue Satellite	0	Digital Satellite	0
Digital Technology											
New Technologies	Analogue Teletext										
Website	www.tv2fyn.dk										
	It is the most popular website locally					Offers Video streaming					
Digital Strategy	Involving a major organisational review and restructure										
Digital funding	Received National government funding for the transition to digital										
Digital Training	Various different courses										

Regional Station	TV2 EAST				
Contact Details	Vagn Petersen, CEO Tel: 00 45 55365656 Email: vap@tv2east.dk				
Operate TV Channel	Y		Annual Budget		€ 7 m
% Licence Fee	25%		% Advertising		75%
Employees	60		Households in Region		200,000
Output					
Hours of Regional TV Weekly	4.5	100 % of which is News	Hours of National TV Weekly	0	

Most Popular TV Programmes	Genre	Rating
1. 19:30 Regional News	News	17%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology		
New Technologies	Self-editing	
Website	www.tv2east.dk	
	210,000 Page Impressions a month	Offers video streaming
Digital Strategy	Involving a major organisational review and restructure	
Digital funding	Received National Government funding for the transition to digital	
Digital Training	Yes	

Regional Station	TV2 Midt-Vest		
Contact Details	Ivar Brændgaard, Manager Tel: +45 96 12 12 12 Email: ivbr@tvmidtvest.dk		
Operate TV Channel	N	Annual Budget	€ 7.6 m
Employees	-	Households in Region	206000

Output					
Hours of Regional TV Weekly	8	50 % of which is News	Hours of National TV Weekly	0	

Most Popular TV Programmes	Genre	Rating
1. TV/Midt-Vest	News	22%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology		
New Technologies	Analogue Teletext	
Website	www.tvmistvest.dk	
	50,000 page impressions a month	Offers video streaming
Digital Strategy	Migration of existing operations, e.g. involving new practices in TV commissioning	
Digital funding	Received funding from National Government for transition to digital	
Digital Training	No	

Finland			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
5.15 million	2.16 million	2.21%	€ 24,162
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
YLE	€361 m	Licence Fee, Public/Private funding, transmission fees	YLE TV1 YLE TV2
Digital Channels:	**Additional Information:**		
YLE TV1	Simulcast		
YLE TV2	Simulcast		
YLE24	24 Hour News launched August 2001		
YLE FST	Swedish language launched August 2001		
YLE Teema	Educational channel launched August 2001		

General: YLE launched its new digital services nationally on 27th August 2001 on the DTT platform. The new services could be viewed by just 0.05% TVHH.

DTT: It is intended that 70% of the Finnish population will be able to receive the new services by the end of 2001. YLE sold 49% of the transmission network to Telediffussion de France in 2000 for €141 million. It was this that funded their digital services.[81] Native Nokia have an interest in operating mobile data services fusing DTT and hand held devices using MHP receivers.

Cable: Digital cable transmissions have not yet been introduced in Finland. 38% of households subscribe to analogue cable services.

Satellite: Canal Digital launched its digital service in 1997.

France			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
58.9 million	23.5 million	14.79%	€ 23,976
PSB:	**Annual Turnover**	**Funding:**	**Analogue Channels:**
France Télévision	€2639m	Licence Fee, Advertising, Public Funding	FR2 FR3 La Cinquieme
Digital Channels:	**Additional information:**		
FR2	Simulcast		
FR3	Simulcast		
La Cinquieme	Simulcast		
Festival	Movie Channel – thematic channel		
Mezzo	National Information – thematic channel		
Histoire	History channel – thematic channel		
Regions	Regional News – thematic channel		
EuroNews	News Channel – operates with co-operation of other broadcasters		
TV5 Monde	International channel - Broadcast in US & Latin America		

General: France 2 and France 3 had their advertising revenue reduced in 2000 and this reduction in funding reimbursed through public spending. La cinquième has experimented with VOD via satellite, which is downloaded to PC.

DTT: In planning stage, due to launch Q4 2002. The penetration should be 60 – 80% of France at launch. Analogue switch off is not envisaged until 2010-2015.

Satellite: Digital services launched in 1996 by Canal Satellite. It has over 11.5 million subscribers across Europe, with 5.9 million subscribers in France of which 1.3 million are digital. TPS is operated by terrestrial

[81] YLE Press Release: 23.03.2001

operator France Telecom and Lyonnaise Câble and with 615,000 subscribers it represents one third of French digital satellite television subscriptions in France. AB Sat is a third satellite television service operated by an independent television company, AB Production. AB Sat has just 15 employees and less than 15,000 subscribers, therefore it is repositioning itself as a “content provider”. TPS and France Telecom have both introduced some interactive services, such as choosing the view for a particular event.

Cable: 7.1 million French homes are passed by cable, with 2.6 million subscribers cable is a major player in France. There are three major players, France Telecom Câble, with 750,000 subscribers has a 29% market share, Lyonnaise Câble accounting for 26% and NC Numéricâble with 24% of cable subscriptions. Digital television is offered throughout the infrastructure of these three players however the number of subscribers is far below that of satellite numbering less than 300,000. UPC are now in the cable market in France with 500,000 subscribers. The only interactive service offered by French cable companies is the EPG.

Competition: There are approximately 70 French speaking thematic channels in France, 5 of which are French versions of foreign TV channels (Bloomberg TV, Cartoon Network, TNT, Fox Kids). La Chaine Parlementaire (LCP) was launched in 2000 by the French Parliament. It is transmitted free to air from the Astra and Hot Bird satellites, and contains interviews and panel discussions featuring members of parliament as well as the transmission of debates. It has an annual budget of over 50 million francs (€7.6 million). A second channel, LCP-Senat, has a similar profile but covers the workings of the Senate (the French upper house) and has a similar budget, and shares the frequency with LCP. [82]

Regional Station	France3		
Contact Details	Jean-Marie BELIN, Directeur de la coopération internationale et des affaires extérieures Tel: +33 1 56228831 Email: belin@exchange.france3.fr		
Operate TV Channel	Y	Annual Budget	€1040 million
% Licence Fee	64.6%	% Advertising	27.2%
% Government funding	0%	% Other Funding	8.2%
Employees	4400	Households in Region	23.5 million
Output			
Hours of Regional TV Weekly	207	Hours of National TV Weekly	135
Carriage			
Analogue Terrestrial	Y	Digital Terrestrial	N
Analogue Cable	Y	Digital Cable	N
Analogue Satellite	Y	Digital Satellite	N
Digital Technology			
New Technologies	Analogue Teletext		
Digital Training	Yes		

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[82] Advanced Television 9th Nov 2001, “Calls to end Parliament channel”

Germany			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
82.6 million	36.3 million	7.6%	€ 23,715
PSB:	**Annual Turnover:**	**Funding**	**Analogue Channels:**
ZDF	€2520 m	Licence Fee & Limited Advertising (20 mins daily)	ZDF
Digital Channels:	Additional Information:		
ZDF	Simulcast		
ZDF.info	Public information		
ZDF.doku	Documentary channel		
Theatrekanal	Theatre channel		
ZDF 2	In planning at present – will feature archive material		
PSB:	**Annual Turnover:**	**Funding**	**Analogue Channels:**
ARD	€6500 m	Licence Fee & Limited Advertising (20 mins daily)	Das Erste 9 Regional channels
Digital Channels:	**Additional Information:**		
Das Erste	simulcast		
9 Regional channels	simulcast		
Eins Extra	News		
Online Kanal	Website TV		
Eins MuXx	Das Erste am pm reversed		
Eins Festival	Archive material		
IQ-TV	Educational channel (planned by SWR)		
ARD & ZDF Partnership Digital Channels			
Phoenix	Parliamentary		
Kinderkanal	Children		
Arte	Cultural		
3sat	Factual/cultural		

General: Germany is slower to change to digital television for a number of reasons. There are a large number of free to air channels. The German government has been supporting the dual system of broadcasting, public service and commercial. There is a complex licencing system; only limited players have capacity to launch digital services – primarily Kirch Group and Bertelsmann.

In 2001 ARD and ZDF were awarded a licence fee increase of 11% to support additional services to be offered on digital platforms. This meant that ARD's share of licence fee income soared from €455m to €4.7bn, whilst ZDF's share also increased from €184m to €1.5bn.[83]

Satellite: Digital television has been offered on this platform since 1998 by DF1 who have 110,000 subscribers and Premier Digital with 80,000 subscribers. The main shareholder in Premier is Kirch, which declared itself bankrupt in April 2002. ZDF and ARD also offer their digital bouquet via satellite.

Cable: Deutsche Telekom is the main player in the German cable market. They have 18 million subscribers but these are mostly analogue. Deutsche Telekom is behind in its plans to upgrade to digital and may have to sell off its network due to deregulation of the industry. In Nov 2001 RTL disputed the purchase of six of Deutsche Telekom's regional cable networks by US cable operator, Liberty.[84]

DTT: In planning stage, the overcrowded analogue spectrum is hampering DTT tests, launch date should be in 2003. The German government intends to switch off analogue signals in 2010.

[83] Financial Times, 9th April 2002, "The great German television drama"
[84] Financial Times, 22nd Nov 2001, "RTL raises concerns over Liberty deal"

Response to CIRCOM survey:

Regional Station	Bayerischer Rundfunk (BR)		
Contact Details	Jochen Kölsh, Head International Relations Tel: +49 8938066786 Email: internationalrelations@brnet.de		
Operate TV Channel	Y	Annual Budget	€ 791 m (2001)
% Licence Fee	84%	% Advertising	3%
% Government funding	0%	% Other Funding	13%
Other Funding Source	interests, co-productions		
Employees	3,300	Households in Region	12,200,000
Output			
Hours of Regional TV Weekly	152 — 38.9 % of which is News on BFS	Hours of National TV Weekly	30 — 19.2 % of which is News on ARD
Hours of Regional Radio Weekly	898 — 34.7 % of which is News on HF	Hours of National Radio Weekly	0

Most Popular TV Programmes	Genre	Rating
1. Auf Dem Nockherberg	-	15%
2. Fastnacht in Franken	-	14%
3. Von Wegen Dolce Vita	-	11%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	Y	Analogue Satellite	Y	Digital Satellite	Y

Digital Technology		
New Technologies	Mobile / ISDN / Home Editing Some Self Editing Digital Radio on Air	Analogue Teletext Digital Teletext
Website	www.br-online.de Offers Audio & Video streaming	
Digital Strategy	Migration of existing operations, e.g. involving new practises in TV commissioning	
Digital funding	Received a licence fee increase Also involved internal reallocation of budgets	

Greece			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
10.6 million	2.97 million	0.02%	€19,162
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
ERT	€207 m	87.9% licence fee, 3.3% Public Funding, 8.8% Advertising	ERT1 ERT2 ERT3

Response to CIRCOM Survey:

Regional Station	ERT Thessaloniki		
Contact Details	Lefty Kongalides, Head of International relations Tel: 30310 299610 Email: pr@ert3.gr		
Operate TV Channel	N	Annual Budget	€ 19.3 m
% Licence Fee	87.7%	% Advertising	9.11%
% Government funding	0.46%	% Other Funding	2.73%
Employees	543	Households in Region	0
Output			
Hours of Regional TV Weekly	0	Hours of National TV Weekly	83 — 44 % of which is News
Hours of Regional Radio Weekly	0	Hours of National Radio Weekly	65 — 41.6% of which is News

Most Popular TV Programmes	Genre	Rating
1. Idisis	News	11%
2. Alithina Senaria	Current Affairs	8.5%
3. Athlitica	Sport	8%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology		
New Technologies	Clip Art Transfer of Packages Analogue Teletext	Digital Radio on Air
Website	www.ert3.gr	
	It is not in the top six websites	Offers Audio streaming
Digital Strategy	Migration of Existing Operations, e.g. involving new practices in TV commissioning	
Digital funding	No Extra Funding for the transition to digital	
Suggestions for CIRCOM:		
Training programs Information on new technology Exchanges of programmes		

Hungary

Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
10.2 million	3.8 million	0	€3,852
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
MTV	-	Licence Fee & Advertising	MTV1
Digital channels:	None		

General: Hungary has one of the highest “eyeball-hours” ratings in Europe.[85] Duna TV is a government owned satellite channel that is primarily aimed at Ex-pats but reaches 50% of Hungarians. Hungary's Prime Minister Viktor Orban recently suggested that it could be merged with MTV, while Jozsef Hamori, the minister for culture, has also mooted the idea of launching a new cultural channel. [86]

Competition: MTV has been affected by the emergence of two commercial terrestrial broadcasters, TV2 and RTL Klub. MTV1 has managed to maintain a rating of 18% despite this and multichannel competition[87] The growth of cable and satellite services in the country has been buoyed by the presence of well known movie brands such as HBO which entered Hungary early in the decade, collectively, they account for over 10% of total viewing. As a result, more niche services are being launched. The Hungarian Football League (MLSZ), which currently transmits programming on Zenit TV (a microwave service available in Budapest), has launched its own sports channel. In late 1998, the ORTT awarded Sziv TV a national satellite broadcasting license. The former state owned channel, which is now 75% controlled by US-backed Hungarian Broadcasting Corp, reaches both DTH and cable subscribers, in around 39% of the country¹s television households. Sziv, which concentrates on local programming, joins another 75% HBC channel, Msat, as a satellite delivered service. Msat has built its market through programming and distribution agreements in the territory with Viacom backed channels, MTV and Nickelodeon. As with programming, the cable operator market is increasingly becoming dominated by overseas interests. The largest MSO is Kabelkom, which is backed by Time Warner and UPC. While there are moves to license more operators, the underlying trend is to build a more coherent production industry. With strict limits on the amount of local production TV2 and RTL Klub must carry - the latter has already been fined for failing to comply - ORTT has agreed to fund the cost of production of local programming produced by HBC, for its free-to-air Msat TV service.

Satellite: Fast take up of DVB-S services 30% in three years[88]. UPC Direct is the main satellite service provider.[89]

Cable: 1995 Media act led to substantial cable building.[90]

DTT: Pilots already taking place in Budapest – planned launch date – 2004. This will use DVB-MHP standard. International frequency planning has begun, but it is a huge task as seven neighbours border

[85] http://www.dtg.org.uk/reference/dtt_world/dtt_hungary.htm
[86] http://www.365broadcast.com
[87] http://www.365broadcast.com
[88] http://www.dtg.org.uk/reference/dtt_world/dtt_hungary.htm
[89] http://www.upccorp.com/corporate/siteserver/Otherdocuments/products_distribution.htm
[90] http://www.365broadcast.com

Hungary[91]. Gyorgy Agoston of MTV said the ten million population of Hungary speak "a beautiful but unique language," and the opportunities presented by DTT for a greatly increased choice of home produced programmes "will help to protect and develop our unique cultural heritage."

Regional Station	MTV Szeged		
Contact Details	Ja'nos Jurkovics, Studio Leader Tel: +36 62 480574 Email: jurkovics@mtv.hu		
Operate TV Channel	N	Annual Budget	€ 1.01 m
% Licence Fee	99%	% Advertising	1%
Employees	41	Households in Region	800,000
Output			
Hours of Regional TV Weekly	3.5 75 % of which is News	Hours of National TV Weekly	1.5 0 % of which is News

Most Popular TV Programmes	Genre	Rating
1. Hirado	News	3%
2. Kvartett	Magazine	2%
3. Europa Galeria	Magazine	1.5%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology		
Website	www.mtv.hu/szeged	
	115 page impressions a month	Audio / video streaming
Digital funding	No Extra Funding for the transition to digital	
Digital Training	No	
Suggestions for CIRCOM:		
It is very difficult to give a suggestion, because at our station there has not been any improvement for ten years. We are lucky to have analogue techicians at least, but of course we are dreaming of moving forward		

Regional Station	MTV Miskolc		
Contact Details	Ivan Demcsik, Technical Manager Tel: +36 46 504 373 Email: mtvmiskolc@chello.hu		
Operate TV Channel	N	Annual Budget	-
% Government funding	100%	% Other Funding	0%
Employees	35	Households in Region	700,000
Output			
Hours of Regional TV Weekly	3.5 100 % of which is News	Hours of National TV Weekly	0

Most Popular TV Programmes	Genre	Rating
1. Regionalis Hiradis	News	%
2. Regionalis Magazin	Magazine	%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology	
New Technologies	Analogue Teletext
Website	www.mtvmiskolc.hu
	5 page impressions a month
Digital Strategy	Involving a major organisational review and restructure
Digital funding	No Extra Funding for the transition to digital
Digital Training	No

Regional Station	MTV Pécs		
Contact Details	Vilmus Velicovics, Station Manger Tel: +36 72 225894 Email: mtvpecs@freemail.hu		
Operate TV Channel	N	Annual Budget	-
Employees	90	Households in Region	70,000

[91] http://www.dtg.org.uk/reference/dtt_world/dtt_hungary.htm

Output											
Hours of Regional TV Weekly	5	50 % of which is News				Hours of National TV Weekly	0				
Most Popular TV Programmes				Genre				Rating			
1. Regional News								-%			
2. German Minority Programmes								-%			
3. Croatian Minority Programmes								-%			
Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N
Digital Technology											
New Technologies	Analogue Teletext										
Website	Don't have website										
Digital Strategy	Treated as standalone project without impact on funds for existing production										
Digital funding	No Extra Funding for the transition to digital										
Digital Training	No										

Ireland			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
3.6 million	1.13 million	12.5%	€ 16,962
PSB	**Annual Turnover**	**Funding**	**Analogue channels**
RTE	€ 263.6 m	25% licence, 75% Commercial	RTE 1 Network 2 TG4
Digital Channels	**Additional Information:**		
RTE 1	Simulcast on Digital Satellite		
Network 2	Simulcast on Digital Satellite		
TG4	Simulcast on Digital Satellite		
Ireland Today	Planning: 24 Hour News/ Information		
Eolas	Planning: Educational		
Zap	Planning: Youth		

General: RTE launched its analogue channels on the Sky, digital satellite platform on 23rd April 2002. The planned digital channels are delayed due to a major structural reform, taking place in 2002, the new structure has not yet been announced, but has been brought about through RTE's financial difficulties. The three main terrestrial channels in Ireland are RTÉ1, Network 2 and TV3. These three channels cover the entire range of target groups: RTÉ1, an older audience; Network 2, children and young people; and TV3, the 15-44 year old age group. Almost 45% of RTÉ's programming consists of local production. Since the Broadcasting Act, 2001, RTÉ is required to spend IR£20m in the domestic independent sector. This is to be increased in accordance with the Consumer Price Index (CPI) on an annual basis. In 2001, this represented actual expenditure of approximately IR£24 million.

DTT: The sale of RTE's transmission network and the establishment of an Irish multiplex operator has not yet been finalised.

Cable: There are two players in the Irish cable market, NTL and Chorus (main shareholder is Liberty). NTL have 375,000 Irish subscribers and Chorus have 250,000. So far only 25,000 of these subscribers have digital cable.

Satellite: BskyB entered the Irish market in 2001 and now have 193,000 digital satellite subscribers, 18% of TV households.

Responses to CIRCOM Survey:

Regional Station	RTE Cork		
Contact Details	Gerry Reynolds, Controller Digital channels Tel: +353 21 4805841 Email: digitaltv@rte.ie		
Operate TV Channel	N	Annual Budget	€ 3.5 m
% Licence Fee	25%	% Advertising	75%
% Government funding	0%	% Other Funding	0%

Employees	60	Households in Region	0

Output

Hours of Regional TV Weekly	1	100% News	Hours of National TV Weekly	3.5	50 % of which is News
Hours of Regional Radio Weekly	0		Hours of National Radio Weekly	5.5	50% of which is News

Most Popular TV Programmes	Genre	Rating
1. Nationwide	Information	9%
2. Home From Home	Music	9%
3. Out of the Blue	Feature:fishing,sailing,watersport etc.	5%

Carriage

Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	N	Analogue Satellite	N	Digital Satellite	Y

Digital Technology

New Technologies	Mobile / ISDN / Home Editing Clip Art Transfer of packages Self-editing	Digital radio planned Analogue teletext Digital teletext
Website	www.rte.ie	6 million page impressions a month
	It is the 6th most visited website locally	Audio & video streaming
Digital Strategy	Involving a major organisational review and restructure	
Funding Source	Proposed transmission network sale and licence fee review 2003	
Digital Training	video journalism, avid	

Regional Station	(RTE) TG4		
Contact Details	Prionsias Ni Ghraine, Commissioning Editor Tel: +353 91 505050 Email: proinsias.ni.ghrainne@tg4.ie		
Operate TV Channel	Y	Annual Budget	€ 20 m
% Licence Fee	0%	% Advertising	15%
% Government funding	85%	% Other Funding	0%
Employees	70	Households in Region	1,200,000

Output

Hours of Regional TV Weekly	0	0 % of which is News	Hours of National TV Weekly	45	15 % of which is News

Most Popular TV Programmes	Genre	Rating
1. GAA Beo	Sport	15%
2. Geantrai	Music	3%
3. Ros na Run	Drama/Soap	3%

Carriage

Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	N	Analogue Satellite	N	Digital Satellite	Y

Digital Technology

New Technologies	Mobile / ISDN / Home Editing Clip Art Transfer of Packages Self Editing	Digital Teletext Analogue Teletext
Website	www.tg4.ie	
Digital Strategy	Migration of existing operations	

Italy			
Population:	TVHH:	% Digital:	GDP per Capita:
57.6 million	20.1 million	11.4%	€ 20,074
PSB:	Annual Turnover	Funding:	Analogue Channels:
RAI	€2678 m	50% Licence, 50% Commercial	RAI1 - cultural RAI2 – children RAI3 – educational
Digital Channels:	**Additional Information:**		
RAI1	Simulcast on digital satellite		
RAI2	Simulcast on digital satellite		
RAI3	Simulcast on digital satellite		
RAI24	24 hr News – digital satellite		
RAI Education	Educational Channel, broadcast on Satellite, launched 1997		
RAI Sport Sat	Sport – broadcast on Satellite		
Album	Culture / Tourism - Satellite Bouquet		
Art	Cultural - Satellite Bouquet		
Cinema	Cinema - Satellite Bouquet		
Fiction	Drama - Satellite Bouquet		
Gambero Rosso	Food and drink - Satellite Bouquet		
Ragazzi	Children - Satellite Bouquet		
Show	Popular Entertainment - Satellite Bouquet		
RAI International	International channel for Italian speakers abroad – broadcast via satellite		

General: 1997 RAI began simulcast of its three main channels via digital satellite. Legislation passed in 2001 commits Italy to a 2006 analogue switch off. RAI offer VOD via the Internet. RAI are experimenting with the provision of Education using digital television in innovative new ways.[92]

Satellite: Digital satellite broadcasts began in 1996 launched by two operators Telepui (subsidiary of Canal+) and Stream. Telepui holds the rights to the major football games and is therefore the major player with 700,000 analogue subscribers and 600,000 digital subscribers.

Cable: Before 1996 Italy had no cable network. Telecom Italia has been developing the network and Stream has been utilising this platform securing less than 100,000 subscribers. Until 1997 Stream was a subsidiary of Telecom Italia.

DTT: In pilot stage with test transmissions being carried out by RAI, Mediaset, and Tele+.

Competition: Silvio Berlusconi's Mediaset is the main competitor to RAI

Response to CIRCOM survey:

Regional Station	RAI		
Contact Details	Giacomo Mazzone, Head of International Relations Tel: +39 06 36864406 Email: g.mazzone@rai.it		
Operate TV Channel	Y	Annual Budget	€ 2,678 m
% Licence Fee	50%	% Advertising	44%
% Government funding	6%	% Other Funding	0%
Employees	10,500	Households in Region	60,000,000
Output			
Hours of Regional TV Weekly	131 88 % of which is News	Hours of National TV Weekly	266 41 % of which is News
Hours of Regional Radio Weekly	295 39 % of which is News	Hours of National Radio Weekly	475 37% of which is News

Most Popular TV Programmes	Genre	Rating
1. La vita e Bella	Movie	54%
2. Formula 1	Sport	62%
3. Sanremo Festival	Entertainment	52%

[92] www.lifelonglearning.dfee.gov.uk/conference/b1-cl.htm

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	Y	Digital Satellite	Y

Digital Technology		
New Technologies	Clip Art transfer of packages Self Editing	Digital radio in test transmission stage Analogue Teletext
Website	www.rai.it	40 – 50 million page impressions a month
	It is in the top two news Websites	Offers audio & video streaming
Digital Strategy	Migration of existing operations, e.g. involving new practices in TV commissioning	
Digital funding	No Extra Funding for the transition to digital	
Digital Training	Journalists and Technicians for the all news channel. Technicians at radio production dept.	

Malta			
Population:	**TV Households:**	**% Digital:**	**GDP per Capita:**
4 million	140,000	-	€15,785
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
PBS	5.4	Licence Fee, Advertising	TVM

Response to CIRCOM survey:

Regional Station	PBS TVM		
Contact Details	Louis Gatt, Corporate Affairs Executive Tel: +356 22 913230 Email: lgatt@pbs.com.mt		
Operate TV Channel	Y	Annual Budget	€ 5.4 m
% Licence Fee	63%	% Advertising	33%
% Government funding	0%	% Other Funding	4%
Employees	189	Households in Region	140,000

Output					
Hours of Regional TV Weekly	0	Hours of National TV Weekly	120	15.5 % of which is News
Hours of Regional Radio Weekly	0	Hours of National Radio Weekly	119	20% of which is News

Most Popular TV Programmes	Genre	Rating
1. Familja Wanda	Phone In	9%
2. Jumboid	Breakfast	8%
3. Nigu Ghal Punt	discussion	6%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology	
New Technologies	Digital Teletext
Website	www.pbs.com.mt
	It is the most popular website locally
Digital Strategy	Treated as standalone project without impact on funds available for existing production
Digital funding	No Extra Funding for the transition to digital
Digital Training	None

Moldova			
Population:	**TV Households:**	**% Digital:**	**GDP per Capita:**
4.4 million	-	-	€2760
PSB:	**Annual Budget:**	**Funding:**	**Analogue Channels:**
Tele-Radio Moldova	€2,658	Advertising, Government Funding	TVM

Response to CIRCOM survey:

Regional Station	Tele-Radio Moldova		
Contact Details	Stella Tabirtsa, Specialist Tel: +373 2 739194 Email: stabirtsa@yahoo.com		
Operate TV Channel	N	Annual Budget	€ 2658 m
% Licence Fee	0%	% Advertising	19%
% Government funding	76%	% Other Funding	5%
Other Funding Source	Co-productions		
Employees	1300	Households in Region	-

Output					
Hours of Regional TV Weekly	0		Hours of National TV Weekly	56	26 % of which is News
Hours of Regional Radio Weekly	0		Hours of National Radio Weekly	217	28% of which is News

Most Popular TV Programmes	Genre	Rating
1. Mesager (Romanian)	News	85%
2. Bastina	Current Affairs	59%
3. Echipe 5	Talk Show Youth	33%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology	
New Technologies	-
Website	No website
Digital Strategy	-
Digital funding	No Extra Funding for the transition to digital
Digital Training	No

The Netherlands			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
15.4 million	6.6 million	8.77%	€ 24,062
PSB:	**Annual Turnover**	**Funding**	**Analogue Channels**
NOS	€ 700 m	Licence Fee & Advertising	Nederland 1 Nederland 2 Nederland 3

Digital Channels:	**Additional Information:**
BVN	Launched - Dutch speakers abroad (In Partnership with VRT Belgium) satellite
NOS 1	Planning Simulcast
NOS 2	Planning Simulcast
NOS 3	Planning Simulcast
News	In planning stage
Arts	In planning stage

General: As well as developing two new channels for digital platforms, NOS are developing their Internet services and tying them in with other organisations in the Netherlands.[93]

Satellite: Canal+ offers the only digital satellite service currently available

[93] Hilver Summary, December 2001

Cable: Many cable operators in the Netherlands, planning to upgrade to digital but hampered by cost. Also analogue cable offers approximately 30 channels therefore there is little incentive for subscribers to upgrade.

The Netherlands has the highest number of broadband connections in Europe.[94]

DTT: The Digitenne consortium has begun DTT test transmissions in some areas with national rollout scheduled for 2004.[95]

Competitors: Multichannel services are available in 90% of Dutch homes therefore there is a proliferation of Niche channels. Foreign channels such as Cartoon Network, Eurosport, and National Geographic have launched Dutch language versions.

Response to CIRCOM Survey:

Regional Station	RTV-Noord		
Contact Details	Roel Dijkhuis, Managing Director / Editor Tel: +31 503199999 Email: directie@rtv-nord.nl		
Operate TV Channel	Y	Annual Budget	€ 9 m
% Licence Fee	75%	% Advertising	25%
% Government funding	0%	% Other Funding	0%
Employees	100	Households in Region	200,000

Output					
Hours of Regional TV Weekly	7	0.5 % of which is News	Hours of National TV Weekly	0	0 % of which is News
Hours of Regional Radio Weekly	24	50 % of which is News	Hours of National Radio Weekly	0	0 % of which is News

Most Popular TV Programmes	Genre	Rating
1. News	News	40%
2. Weather	weather	35%
3. Sport	Sport	30%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology		
New Technologies	Analogue Teletext	
Website	www.rtv.noord.nl	
	It is the most popular website locally	Offers Audio streaming
Digital Strategy	Involving a major organisational review and restructure (New Building)	
Digital funding	No Extra Funding for the transition to digital, so far	
Digital Training	To support the completion of a new building for digital production	

Suggestions for CIRCOM:
Exchange of ideas between stations

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[94] Inside Digital TV, 1st May 2002, “Cable dominates Dutch digital landscape”
[95] Inside Digital TV, 1st May 2002, “Cable dominates Dutch digital landscape”

Norway			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
4.4 million	1.8 million	20%	€ 35,216
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
NRK	-	Licence Fee	NRK1 (General) NRK2 (Youth)

Digital Channels:	**Additional Information:**
NRK1	Planning simulcast
NRK2	Planning simulcast
NRK24	News channel in planning stage
Urban Lifestyle	Culture channel in planning stage
Children	Children's channel in planning stage

General: NRK has requested the help of the Norwegian government to help fund the transition to digital services. This has not yet been granted and NRKs plans for DTT are on hold. In the interim NRK has begun experimenting with TV delivery via broadband Internet.

Satellite: Canal Digital is the main satellite operator in Norway in partnership with Telenor. It is the most popular method of digital transmission with 20% of the TV households subscribing. Canal Digital, the Norwegian DTH operator, now fully controlled by Norway's expansion-hungry telco, Telenor, is launching the Swedish interactive shopping service eTV in Norway. The launch is accompanied by a major marketing campaign as 'the first real interactive Tv service, a preview of television of the future.' The Norwegian trade press perceives that 'interactive television now taking a major leap forward,' declaring 'full screen, high quality video and interactivity is now presented in a way, never done before.'[96]

DTT: DTT is planned for launch in 2002.

Cable: Norkabel (UPC owns 70%) is the main cable network with 315,000 connected households.

Telenor: Dec 2001: Telenor affiliates are behind the first interactive project in Norway as the country works hard to catch up with its Nordic neighbours - Sweden, Denmark and Finland have all run various interactive trials on their leading TV stations. Now Zonavi - the interactive division of leading telco Telenor - formed last year is announcing its first 'beta' interactivity project.[97] Telenor and NRK are also involved in ADSL trials.

Regional Station	NRK Oppland		
Contact Details	Brynjulf Handgaard, Former Head of NRK Oppland Tel: 4761287200 / 479005296 Email: Brynjulf.Handgaard@nrk.no		
Operate TV Channel	N	Annual Budget	€ 3 m
% Licence Fee	100%	% Advertising	0%
Employees	47	Households in Region	200,000

Output					
Hours of Regional TV Weekly	2	100 % of which is News	Hours of National TV Weekly	0.25	70 % of which is News
Hours of Regional Radio Weekly	27	50 % of which is News	Hours of National Radio Weekly	0.17	100% of which is News

Most Popular TV Programmes	Genre	Rating
1. NRK Ostnytt	News	24%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	Y	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology		
New Technologies	Self-Editing Digital radio Planned	Analogue Teletext
Website	www.nrk.no/oppland	
	15,000 page impressions a month	Offers audio & video streaming
Digital Strategy	Involving a major organisational review & restructure	
Digital funding	No Extra Funding for the transition to digital	
Digital Training	No	

[96] Advanced Television, 2nd Nov 2001, "eTV launches in Norway"
[97] Advanced Television, 30th Nov 2001, "Norway sees first iTV project"

Regional Station	NRK Troms		
Contact Details	Jan Ditlev Hansen, Managing Director / Chief Editor Tel: +47 91711196 Email: janditlev@nrk.no		
Operate TV Channel	N	Annual Budget	€ 3.5 m
% Licence Fee	90%	% Advertising	0%
% Government funding	0%	% Other Funding	10%
Employees	45	Households in Region	250,000

Output

Hours of Regional TV Weekly	2	100 % of which is News	Hours of National TV Weekly	0.25	100 % of which is News
Hours of Regional Radio Weekly	29	35 % of which is News	Hours of National Radio Weekly	0.25	100% of which is News

Most Popular TV Programmes	Genre	Rating
1. Nordnytt 1840	News	25%
2. Nordnytt 2055	News	20%

Carriage

Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology

New Technologies	Clip art transfer of packages Self-editing	Interactive content part of commissioning Analogue Teletext
Website	www.nrk.no/troms	180 page impressions a month
	It is the 2nd most visited website locally	Offers audio & video streaming
Digital Strategy	Involving a major organisational review and restructure	
Digital funding	No Extra Funding for the transition to digital	
Digital Training	No	

Poland

Population:	TVHH:	% Digital:	GDP per Capita:
33.6 million	12.3 million	-	€9383
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels**
TVP	-	-	TVP

Satellite: UPC Direct, satellite service operates in Poland. Canal+ Group, the TV & Film division of Vivendi Universal, and United Pan-Europe Communications N.V. (UPC) signed definitive agreements in August 2001 to merge their respective Polish satellite TV platforms Cyfra+ and Wizja TV as well as the Canal+ Polska premium channel, to form a common Polish digital TV platform. Canal+ will own 75% and UPC will own the remaining 25%. From day one, the new satellite platform will have a base of more than 700,000 subscribers.

Portugal

Population:	TVHH:	% Digital:	GDP per Capita:
9.9 million	2.9 million	3%	€ 8,267
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels**
RTP	-	Public Funding, sponsorship, advertising	RTP1 RTP2

Digital Channels:	Additional Information:
RTP1	Simulcast
RTP2	Simulcast
SporTV	Partnership with sports rights holder
RTP Internacional	International channel aimed at Portuguese speakers overseas

General: Viewing levels in Portugal are the lowest in Europe.

Satellite: 1998 TV Cabo launched satellite digital services. Aimed to cover areas not covered by the cable network. This decision was sparked through the need to grant equal access rights to citizens wherever they were geographically, especially due to the move of football rights to Pay-TV operators

Cable: TV Cabo have been using Microsoft software more for their newly launched digital services. RTP have been working in conjunction with TV Cabo interactiva to develop their own EPG and additional interactive services.

DTT: DTT is in the planning stage.

Slovakia			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
5.4 million	1.85 million	-	€11259
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels**
Slovak Television	-	Licence Fee, Advertising, government Funding	STV1 STV2

Response to CIRCOM survey:

Regional Station	Slovak Television Studio Banska										
Contact Details	Marta Gajdosikova, Director of TV Studio Tel: +421484122469 Email: gajdosikova@stvbb.sk										
Operate TV Channel	N			Annual Budget			€ 1.2 m				
% Licence Fee	60%			% Advertising			20%				
% Government funding	20%			% Other Funding			0%				
Employees	107			Households in Region			700,000				
Output											
Hours of Regional TV Weekly	1	100 % of which is News		Hours of National TV Weekly	14	50 % of which is News					
Most Popular TV Programmes		Genre				Rating					
1. Regional Daily		News				25%					
2. Teleweekend		tourist magazine				8%					
3. Starlet		Music / Entertainment				11%					
Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N
Digital Technology											
Website	www.stv.sk										
Suggestions for CIRCOM											
Financial support of co-production projects Exchanging reporters and journalists in order to produce documentaries within CIRCOM members Supporting education in the application of digital technologies to technical staff											

Slovenia			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
1.93 million	637,000	-	€13,246
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels**
RTV	-	Licence Fee, Advertising	RTV1 RTV2

Response to CIRCOM Survey:

Regional Station	RTV Televizija Maribor		
Contact Details	Zoran Medved, Editor in Chief Tel: +386 2499125 Email: zoran.medved@rtvslo.si		
Operate TV Channel	N	Annual Budget	€ 0.65 m
% Licence Fee	98%	% Advertising	2%
% Government funding	0%	% Other Funding	0%
Employees	32	Households in Region	120000

Output					
Hours of Regional TV Weekly	14	10 % of which is News	Hours of National TV Weekly	2	60 % of which is News

Most Popular TV Programmes	Genre	Rating
1. Na vrtu	lifestyle	8.5%
2. Ljudje in zemlja	current affairs & education	10.5%
3. O zivalih in ljudeh	education, lifestyle	8.4%

Carriage											
Analogue Terrestrial	Y	Digital Terrestrial	N	Analogue Cable	N	Digital Cable	N	Analogue Satellite	N	Digital Satellite	N

Digital Technology	
New Technologies	Mobile / ISDN / Home Editing
Website	www.rtvslo.si
Digital Strategy	Treated as stand alone project, without impact on funds allocated to existing production
Digital funding	No Extra Funding for the transition to digital
Digital Training	None

Spain

Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
39.3 million	11.8 million	25.8%	€ 13,631
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
RTVE	-	Public funding, sponsorship & advertising	TVE 1 – General TVE 2 - General

Digital Channels:	**Additional Information:**
TVE 1	Simulcast
TVE 2	Simulcast
Canal 24 Horas	News – satellite bouquet
Cine Paraiso	Movies – satellite bouquet
Canal Nostalgia	Archive Material – satellite bouquet
Hispavision	Documentary Channel – satellite bouquet
Classico	Cultural – satellite bouquet
TVE Internacional	Aimed at Spanish speakers overseas – mainly Americas – satellite

General: RTVE had its licence fee abolished in 1990. Some question to viability of competing cable, satellite and DTT availability in Spain. Telefonica is the largest telecom operator in the Spanish speaking world, with 50% share of the market. Legislation stipulates that digital operators should make the first digital broadcasts in April next year and analogue channels in June. The managing director of Spanish TV group Net TV has said channels already broadcasting in analogue are not interested in investing in digital broadcasting. Demands were made that the deadline for all broadcasts to be made exclusively in digital in Spain be put forward to 2007.[98]

Satellite: 1997 Canal Satellite and ViaDigital (backed by Telefonica) began transmitting digital television in Spain. Satellite is the most popular digital platform. There have been ongoing disputes between the two companies. ViaDigital used to be part owned by RTVE but the 17% share was sold to Telefonica in 1998, RTVE is now purely a content provider. There are persistent rumours that Canal Satellite and ViaDigital will merge.

Cable: There are three main players; Telefonica, Cableuropa, Telecom Italia Group (Electric Utilities). The development of the networks is delayed due to construction difficulties and planning permissions.

DTT: DTT roll out began in 1999 intend to cover 90% of the population by 2009. It is operated by Onda Digital. RTVE have two digital channels on DTT. Analogue termination is planned for 2012. Spanish TV group Veo TV's Andres Tejero Sala, says the introduction of digital TV in Spain will cost €8.894 billion and urges all parties in the TV/radio sector to contribute financially. But representatives of analogue channels and digital concession holders describe the future of digital TV in Spain as uncertain. Legislation stipulates that digital operators should make the first digital broadcasts in April next year and analogue channels in June. The managing director of Spanish TV group Net TV has said channels already broadcasting in analogue are

[98] http://www.advanced-television.com/pages/pagesb/newsarchive/17-24%20sept.html#Friday

not interested in investing in digital broadcasting. Demands were made that the deadline for all broadcasts to be made exclusively in digital in Spain be put forward to 2007.

Competition: More than 50 new thematic channels have been launched in Spain for the satellite platform. There are 200 independent TV / thematic TV / production companies in Spain. Some foreign channels are adapted to the Spanish language for example the recently launched CNN+

<table>
<tr><td colspan="3">Regional Station</td><td colspan="9">TV Catalunya</td></tr>
<tr><td colspan="3">Contact Details</td><td colspan="9">Sylvia Halm, International Relations
Tel: +34 93 499 9589 Email: shalm.d@tvcatalunya.com</td></tr>
<tr><td colspan="3">Operate TV Channel</td><td colspan="3">Y</td><td colspan="3">Annual Budget</td><td colspan="3">€ 233 m</td></tr>
<tr><td colspan="3">% Licence Fee</td><td colspan="3">0%</td><td colspan="3">% Advertising</td><td colspan="3">69.62%</td></tr>
<tr><td colspan="3">% Government funding</td><td colspan="3">9.57%</td><td colspan="3">% Other Funding</td><td colspan="3">20.81%</td></tr>
<tr><td colspan="3">Other Funding Source</td><td colspan="9">Loan</td></tr>
<tr><td colspan="3">Employees</td><td colspan="3">1654</td><td colspan="3">Households in Region</td><td colspan="3">2,177,000</td></tr>
<tr><td colspan="12">Output</td></tr>
<tr><td colspan="2">Hours of Regional TV Weekly</td><td>275</td><td colspan="3">9.5 % of which is News</td><td colspan="4">Hours of National TV Weekly</td><td colspan="2">0</td></tr>
<tr><td colspan="2">Hours of Regional Radio Weekly</td><td>169</td><td colspan="3">18 % of which is News</td><td colspan="4">Hours of National Radio Weekly</td><td colspan="2">0</td></tr>
<tr><td colspan="4">Most Popular TV Programmes</td><td colspan="4">Genre</td><td colspan="4">Rating</td></tr>
<tr><td colspan="4">1. Football</td><td colspan="4">Sport</td><td colspan="4">64.8%</td></tr>
<tr><td colspan="4">2. Plats Bruts</td><td colspan="4">Sitcom</td><td colspan="4">43.2%</td></tr>
<tr><td colspan="4">3. Dinamata</td><td colspan="4">Sitcom</td><td colspan="4">41.6%</td></tr>
<tr><td colspan="12">Carriage</td></tr>
<tr><td>Analogue Terrestrial</td><td>Y</td><td>Digital Terrestrial</td><td>Y</td><td>Analogue Cable</td><td>N</td><td>Digital Cable</td><td>N</td><td>Analogue Satellite</td><td>N</td><td>Digital Satellite</td><td>Y</td></tr>
<tr><td colspan="12">Digital Technology</td></tr>
<tr><td colspan="3">New Technologies</td><td colspan="9">Digital Radio – on Air
Digital teletext
Analogue Teletext</td></tr>
<tr><td colspan="3" rowspan="2">Website</td><td colspan="5">www.tvcatalunya.com</td><td colspan="4">6,000,000 page impressions a month</td></tr>
<tr><td colspan="5">It is the most popular website locally</td><td colspan="4">Offers audio & video streaming</td></tr>
<tr><td colspan="3">Digital Strategy</td><td colspan="9">Involving a major organisational review and restructure</td></tr>
<tr><td colspan="3">Digital funding</td><td colspan="9">Received additional funding from Regional Authority to fund transition to digital</td></tr>
<tr><td colspan="3">Digital Training</td><td colspan="9">Involved in major digitalization programme, with a budget of €18m of which a proportion will be assigned to training</td></tr>
<tr><td colspan="12">Suggestions for CIRCOM:</td></tr>
<tr><td colspan="12">TV Catalunya is a pioneer in adopting new technologies. Currently involved in commercialising their services. TVC's digitalization project began in 2001 with a 3 year duration includes digital archives.</td></tr>
</table>

<table>
<tr><th colspan="4">Sweden</th></tr>
<tr><th>Population:</th><th>TVHH:</th><th>% Digital:</th><th>GDP per Capita:</th></tr>
<tr><td>8.9 million</td><td>4 million</td><td>17%</td><td>€ 25,593</td></tr>
<tr><th>PSB:</th><th>Annual Turnover:</th><th>Funding:</th><th>Analogue Channels:</th></tr>
<tr><td>SVT</td><td>€381 m</td><td>Licence Fee and Some Sponsorship</td><td>SVT1 (General)
SVT2 (General)</td></tr>
<tr><th>Digital channels:</th><th colspan="3">Additional Information:</th></tr>
<tr><td>SVT1</td><td colspan="3">Simulcast</td></tr>
<tr><td>SVT2</td><td colspan="3">Simulcast</td></tr>
<tr><td>SVT24</td><td colspan="3">24 Hour News - DTT</td></tr>
<tr><td>SVT Extra</td><td colspan="3">Archive Material - DTT</td></tr>
<tr><td>TV Syd</td><td colspan="3">Regional Channel - DTT</td></tr>
<tr><td>Children/youth channel</td><td colspan="3">In planning</td></tr>
</table>

General: On launch of SVT24, in 1999, there were very few people with digital television in Sweden, and SVT were criticised for launching when they did. Justification was that it allowed SVT to make the News production more efficient. SVT produces 50% of its programming regionally. Additional government funding of €7.5 million a year for the first three years. In September 2001, SVT's new Director General, Cristina Jutterstroem announced her intention to change SVT's digital plans to incorporate one general channel, and a number of theme channels for children, culture, documentaries and an archive channel. SVT or the Swedish government does not yet officially back these plans.[99] SVT Extra was launched at the end of 2001.

DTT: Broadcasts commenced in 1999, content was primarily SVT's three channels and Canal+. Mid 2000 DTT penetration covered 50% of population, by June 2002 it should cover 98% of the population. All services granted licences had to be in operation by September 2000. In April 2002 there are 100,000 households using this platform.

Cable: Digital cable was begun in 1997 by Telia, however Telia is to be privatised and the network is to be sold. Telia have 1.3 million households who subscribe to cable services of these just 100,000 subscribe to digital services.

Satellite: Canal satellite began digital transmissions in Sweden in 1998. Viasat has been offering digital from 2000 onwards. Between them they have 500,000 digital subscribers.

Competitors: Modern Times Group are a commercial competitor to SVT. They are linked with the Viasat service. In Dec 2001, they announced the launch of a new channel "Explorer" an educational channel – funded by Sponsors, not advertising.[100] In Sweden, eTV, is already a well-established player. Devised and developed by Cell Networks - eTV grew out of the 'new economy' Internet consultants, established in the late Nineties, and part of the media hype balloon. The channel was an early pioneer in the Swedish DTT project, originally and officially launched in April of 1999. Technical problems resulted in eTV not joining the DTT project until late in the autumn of that year. Recently eTV management has publicly voiced its scepticism over the future of Swedish DTT. To date only some 100,000 subscribers have been recruited. Consequently eTV appears to be aiming at other means of distribution, such as DTH (Canal Digital) and digital cable. So far eTV is offering e-shopping of CDs, videos, some travel services and weather reports. The introduction of news services has been planned for quite some time. (eTV recently launched in Norway via satellite).[101] November 2001, Discovery was given an official licence to join the Swedish DTT project, along with Eurosport, MTV, Animal Planet, Nickelodeon/ VH1 and CNN, the latter in a joint venture with Sweden's TV4, and already on the air.[102]

United Kingdom			
Population:	**TVHH:**	**% Digital:**	**GDP per Capita:**
59.1 million	23.9 million	36 %	€ 24,011
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels**
BBC	€5156 m	Licence Fee, some commercial	BBC1 BBC2
Digital Channels:	**Additional Information:**		
BBC1	Simulcast		
BBC2	Simulcast		
BBC News 24	24 Hour news		
BBC Parliament	Parliamentary Channel		
BBC4	Re-launch of BBC Knowledge – cultural / arts programming		
BBC Choice	Planning re-launch as BBC3 – commercial broadcasters opposed		
CBeebies	Pre-school channel		
CBBC	School Age channel		
PSB:	**Annual turnover:**	**Funding:**	**Analogue Channels:**
Channel 4	€1164 m	Advertising	Channel 4
Digital Channels:	**Additional Information:**		
Channel 4	Simulcast		
Film 4	Movie channel - subscription		
E4	Youth Channel		
PSB:	**Annual Turnover:**	**Funding:**	**Analogue Channels:**
ITV	€1085 m	Advertising	ITV
Digital Channels:	**Additional Information:**		
ITV	Simulcast		
ITV2	Mainly archive material		

[99] Advanced Television, 21st Sept 2001, "Radical change advocated at SVT"
[100] Advanced Television, 30th Nov 2001, "MTG wildlife service launched"
[101] Advanced Television, 2nd Nov 2001, "eTV launches in Norway"
[102] Advanced Television, 30th Nov 2001, "MTG wildlife service launched"

ITV Sport	Planned

General: BBC have relaunched their digital services and offer BBC1, BBC2, BBC4 (arts & cultural), BBC News 24, and two additional children's channels (one for pre-school CBeebies and a second for older children CBBC). The proposed Youth service BBC3 is the only service left to launch. The delay is due to the fact that this service is not perceived to be sufficiently distinct from existing commercial youth channels.

In September 2001 ITV digital announced their intention to launch their channels on satellite. ITV2 was launched on the DTT platform in 1998 and is viewed in 2.2 million homes. Although it is archive based and offers repeats of current programming on the main ITV channel they do commission some original programming. The ITN news Channel is not strictly an ITV service. ITN is the news supplier for the ITV network.

DTT: ITVdigital (Ex-ONdigital) launched DTT in the UK in 1998. They now have 1.2 million subscribers. Currently ITV digital is having serious financial difficulties and pay-TV services have been discontinued.

Satellite: BSkyB has 5.7 million digital subscribers in both the UK and Ireland making satellite the leading method for receiving digital television. With a nearly 20 per cent stake in News Corporation, Liberty has an interest in British Sky Broadcasting, the satellite broadcaster controlled by Mr Murdoch.

Cable: NTL and Telewest are the main companies offering digital television services in the UK they have approximately 1 million subscribers between them. Liberty, the US cable company owns a 25 per cent stake in Telewest. [103]

ADSL: Kingston Communications based in Hull offer VOD television services via ADSL. Home Choice offers a similar service via ADSL in London.

Response to CIRCOM survey:

<table>
<tr><td colspan="4">Regional Station</td><td colspan="8">BBC East (Norwich)</td></tr>
<tr><td colspan="4">Contact Details</td><td colspan="8">David Holdsworth, Regional Head
Tel: +44 1603 284301 Email: david.holdsworth@bbc.co.uk</td></tr>
<tr><td colspan="4">Operate TV Channel</td><td colspan="2">N</td><td colspan="4">Annual Budget</td><td colspan="2">€ 7 m</td></tr>
<tr><td colspan="4">% Licence Fee</td><td colspan="2">100%</td><td colspan="4">% Advertising</td><td colspan="2">0%</td></tr>
<tr><td colspan="4">Employees</td><td colspan="2">130</td><td colspan="4">Households in Region</td><td colspan="2">4,500,000</td></tr>
<tr><td colspan="12">Output</td></tr>
<tr><td colspan="3">Hours of Regional TV Weekly</td><td>5</td><td colspan="2">98 % of which is News</td><td colspan="3">Hours of National TV Weekly</td><td>0</td><td colspan="2"></td></tr>
<tr><td colspan="4">Most Popular TV Programmes</td><td colspan="4">Genre</td><td colspan="4">Rating</td></tr>
<tr><td colspan="4">1. Look East</td><td colspan="4">News</td><td colspan="4">35%</td></tr>
<tr><td colspan="12">Carriage</td></tr>
<tr><td>Analogue Terrestrial</td><td>Y</td><td>Digital Terrestrial</td><td>N</td><td>Analogue Cable</td><td>Y</td><td>Digital Cable</td><td>N</td><td>Analogue Satellite</td><td>N</td><td>Digital Satellite</td><td>N</td></tr>
<tr><td colspan="12">Digital Technology</td></tr>
<tr><td colspan="4">New Technologies</td><td colspan="8">Self Editing
Digital radio Planned
Analogue teletext</td></tr>
<tr><td colspan="4" rowspan="2">Website</td><td colspan="8">www.bbc.co.uk</td></tr>
<tr><td colspan="4">It is the most popular website in the UK</td><td colspan="4">Offers Audio & Video streaming</td></tr>
<tr><td colspan="4">Digital Strategy</td><td colspan="8">Involving a major organisational review and restructure</td></tr>
<tr><td colspan="4">Digital funding</td><td colspan="8">Licence Fee increase</td></tr>
</table>

[103] Fnancial Times, 16th Nov 2001, "Quiet Malone confirms interest in Kirch PayTV"