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Development of Digital TV in Ireland

1998 report

CDG

1. Digital TV market overview

1.1 Roll out of digital services

The Republic of Ireland benefits from two of the most vibrant media markets in the world – the United States and the UK with large expatriate or ancestral Irish communities in both. There are overlaps in terms of programming, language and media companies. As a result Ireland enjoys a rich and diverse range of programming without much need for language conversion. In relation to the UK, there are broadcasting dependencies in terms of frequency planning, terrestrial overspill and satellite footprints. However, it is also important to recognise Ireland as a market demanding two sets of national programming - firstly, its own and, secondly, that of its larger neighbour. The challenge of digital is to ensure that national Irish broadcasting and programming is not subsumed by its neighbour. The history of television in Ireland demonstrates that the Irish culture is very dynamic and likely to thrive in a multi-channel environment.

1.1.1 Satellite services

Ireland does not support its own dedicated satellite service. Instead, most of the satellite services enjoyed within Ireland are targeted at UK viewers. In this regard, Irish viewers are perceived by commercial broadcasters as essentially a small region of the larger British Isles. Satellite penetration has been lower than the average of countries in the European Union, having a penetration of around 10% in 1998. The penetration rate has been low primarily due to the lack of Irish-interest programming on Astra or Eutelsat. This refers not only to the relative lack of Irish sports on BSkyB but also to fact that the British terrestrial channels are absent. The latter are directly available through terrestrial overspill from Northern Ireland and also from the UK mainland. Such programming is also available on cable and MMDS, both of which have relatively high penetrations for this reason.

This situation for satellite in Ireland is likely to change fundamentally with the launch of BSkyB's digital digital satellite service on October 1st 1998 on Astra 2A. Digital services from BSkyB started to be available within Ireland at the end of 1998. (BSkyB is continuing to transmit its analogue satellite broadcasts via the existing Astra orbital slot at 19.2E.) Apart from the newly launched Channel 5, the main UK terrestrial broadcasters have not offered their services via analogue satellite. The important development for Irish viewers is that much UK terrestrial programming will now become available via digital satellite since international broadcasting rights can be protected through encryption. This is likely to produce an increase in the penetration rate of satellite in Ireland.

Tara Television is and Setanta Television provide Irish programming via satellite and cable especially addressed to overseas audiences. Tara includes a 'best of RTE' segment and has had particular success in the UK in cable areas with significant Irish communities. Setanta is aimed at sports enthusiasts and has targeted pubs and clubs.

1.1.2 Cable services

Ireland is one of the more cabled countries in Europe with over 450,000 cable homes connected out of a national population of just below 1.2 million TV households. Most of the cabled homes are in the urban areas. In the rural areas, with low population density, and the sometimes mountainous terrain, MMDS is offered instead. A basic cable package offered by cable operators will typically comprise around 12 channels of national and re-transmission services. Around 75% of cable homes passed subscribe to a basic package. About 20% subscribers also take at least one premium film or sports channel which are invariably UK-based.

Given that the UK has launched digital television, with the inevitable overspill of digital signals, the Irish television companies needed to act to protect their internal markets. The investment required for digital upgrade is large in comparison with the size of the market and companies involved. The analogue networks vary in technical quality and capacity and much of the cabling is above ground. The cable networks are one-way, thus requiring digitising their headends and an increase the proportion of fibre in their networks in order to offer interactive services.

Digital upgrade costs have been estimated at up to Ecu 750 per household. These considerable costs will need to be matched by increases in revenues which can only come about by a swift development of the telecommunication sector. Accordingly, in the spring of 1998, the Government instructed Telecom Eireann and RTE to sell their stakes in Cablelink. As part of the new ownership commitments the purchaser will be required to upgrade Cablelink's network to a digital system. It is clear that only major international companies will have to resources both to purchase and then upgrade the Cablelink network.

Cablelink is key to the development of cable in Ireland. It is much the largest cable company and represents a higher share of national audience than any other cable company in Europe. There were 360,000 subscribers at the end of 1998 with some 410,000 homes passed, predominantly in Dublin. It is owned 75% by Telecom Eireann and 25% by the state-owned broadcaster RTE. The sale, which is expected to be completed by mid 1999, generated considerable international interest. The purchase price is likely to exceed Ecu 1000 per subscriber.

Cablelink aims to commence digital broadcasts once its networks have been updated under its new ownership possibly during the fourth quarter of 1999. Roll out of digital cable will continue alongside re-engineering of the existing network. Cablelink has currently no ties with UK operators but are influenced by the policies of the European Cable Communications Association (ECCA). One of the potential bidders for Cablelink is NTL which operates the cable network in Northern Ireland and so would provide some impetus for an island-wide digital standard for cable.

The cable operators are more accurately referred to as multi-channel service operators (MSOs) as they usually also offer microwave broadcasting services in the rural areas. However they have encountered serious problems due to the profusion of 'community broadcasting' service operators. These re-transmit programming which is not available from RTE's national terrestrial network, including British programming. Over a hundred of these community operators, most of which are unlicensed, broadcast signals to around 150,000 homes. The community service frequencies are not part of a national frequency plan and would thus slow down the introduction of digital terrestrial and other services. Cable/MMDS penetration is about 70%, but only about 10% where unlicensed operators exist.

The issue is a political one and the community broadcasters have been officially tolerated against the opposition from the MSOs and RTE. The government policy has been to legitimise the community broadcasters by the granting of short-term licences. However, the government also announced in July 1998 that these service providers are on notice that they will have to make way for digital terrestrial as the latter gets rolled out.

1.1.3 Terrestrial services

Ireland currently has four national TV networks – RTE1 (mixed language), Network 2 (mixed language), the recently-launched TV3 (English only) and TnaG (Irish language with English subtitles). Almost half of the population i.e. those close to the Northern Ireland border and the east coast have traditionally been able to directly receive UK services via signal overspill from transmitters located in NI, the west of England or Wales. The most popular non-domestic terrestrial services have been the UK terrestrial channels, BBC1 and UTV (part of the ITV/C3 network), which are also the most popular networks in the UK.

The government announced in July 1998 its intention to launch digital terrestrial television (DTT). The trigger for the announcement was the imminent launch of digital broadcasting in the UK. The decision to introduce DTT in the Republic was not automatic. The government was subjected to considerable pressure from the MSOs and the community broadcasters to retain the existing framework and not to introduce a fourth competitive multi-channel delivery system. However, the government rejected exclusivity and took the view that consumers would benefit from having the choice of different delivery systems. The matter of exclusivity has been the subject of considerable legal and regulatory scrutiny.

RTE led the move to DTT with constructive and influential proposals to the government. RTE, like other public service broadcasters in Europe, was responding to its declining audience share on terrestrial broadcasting. It also operates the national television transmission network and has a natural interest in expanding the role of terrestrial broadcasting. However, it is not clear whether RTE would continue to own the transmission network in the future. RTE has no plans to launch its services via satellite. The move to DTT also presented a solution to the problem of the community broadcasters since the majority would not be able to co-exist after the frequencies are taken for digital.

Six digital multiplexes have been allocated for DTT by the IRTC (Independent Radio and Television Commission) each capable of carrying five programme services. DTT is expected to launch in the first half of 2000. RTE will own a single multiplex. These are likely to include its two main services, RTE1 and Network 2, plus three new channels, which are expected to include a 24 hour news channel and an educational channel. TnaG and TV3 are expected to share a multiplex. A third multiplex is expected to be reserved to broadcast the Northern Ireland versions of UK terrestrial channels. All of these multiplexes are expected to start with around 95% of households. The remaining three multiplexes are to be developed in association with private operators. These are likely to start with around 85% coverage.

Multiplex	*Owner*		*Channels Offered*	
1 RTE	RTE	RTE One	N2	RTE News
		RTE Plus		
2 TV3 /TnaG	TV3 /TnaG	TV3	TnaG	
3 UK Channels	UK Channels	BBC 1 NI	BBC 2 NI	UTV
		Channel 4	Channel 5	
A	Not decided	-		
B	Not decided	-		
C	Not decided	-		

The government has made it clear that the priority is to develop national coverage multiplexes first and subsequently to enable regional multiplexes perhaps by 2005. No decisions have been made regarding the simulcast duration. The government has made it clear that it favours only one multiplex operator for DTT. This makes sense given the need for DTT to compete against the other well established platforms.

Current plans envisage that the multiplexes would comprise a free basic tier with progressively more expensive tiers above including pan-Irish and British channels and pay-TV channels from BskyB.

1.1.4 MMDS

The Republic of Ireland is unique in Europe in its widespread deployment of MMDS networks. This arises from Ireland's position as an island at the western edge of Europe. MMDS is broadcast at a much lower frequency, 2.5GHz, than in other parts of Europe which operate at 40GHZ. The advantage for MMDS in Ireland is that it is not as line-of-sight restricted and is thus successful in the rural areas: about 90% of households within an MMDS transmitter area can receive its services. Typically MMDS networks carry 11 analogue channels. Cable and MMDS license allocations are mutually exclusive within Ireland, with urban areas allocated cable licences and rural areas MMDS licenses.

MMDS coverage in rural Ireland is incomplete.There are currently six MMDS operators who have been assigned use of 30 cells across Ireland. The radius of each cell varies between 10 and 30 kilometres. In addition to the main sites, ‘beam benders’ or MMDS deflectors, are used to augment coverage to unserved areas. A shared microwave link network is used to carry four UK terrestrial channels from an off-air reception point near the border with Northern Ireland to MMDS and cable headends. The MMDS network covers around 325,000 homes with about 90,000 subscribing. The major operators are Cablelink, which operates three MMDS licences in Galway/Mayo, Dublin and Waterford, Cable Management Ireland, Irish Multichannel and Cork Communications Ltd.

The introduction of digital television has presented serious commercial challenges to the MSOs. Firstly, their unique role as rural multi-channel providers is now being challenged by satellite. Secondly, they had previously operated on the basis that they had exclusive rights for terrestrial multi-channel broadcasting within their franchise area. Another challenge confronting the MMDS operators concerns international frequency plans. In 2005 four channels of spectrum currently used for MMDS transmission may have to be cleared to make way for an expansion in mobile satellite services.

Matters were brought to a head when the government needed to issue new licenses to facilitate the Cablelink privatisation because the prevailing cable and MMDS licences did not permit digital transmission. The government, through the Office of the Director of Telecommunications Regulation (ODTR), took the initiative to introduce a new regulatory framework

Through the second half of 1998, a bitter contest between the MSOs and the government ensued which has threatened to go to litigation. The government offered 15 year licences with exclusivity for the first five years. The main privately-owned MSOs, Princes Holdings, Cable Management Ireland, and Noir/Suir opposed the loss of exclusivity. They also raised a number of other concerns of which the absence of a 'return path' within the licence was a major contention since it impacts directly on the ability to offer integrated interactive services.

The policy of the MMDS service providers with respect to digitisation is still evolving. The MSOs have shown interest in participating in any DTT plans both at the level of national multiplexes and also local area licences. Having surrendered their MMDS exclusivity then it may be expected that they would be looked upon favourably when the time came for allocating DTT multiplexes. In any event, the co-operation of the MMDS players would be essential for the successful introduction of DTT in such a small market.

1.2 Details of services

The launch of digital services to the Irish population was contingent on their successful launch in the UK. The shape of digital television in the Republic will be similar to that in the UK. Digital satellite, cable and terrestrial television packages will offer both subscription-based and pay per view programming. Much of the pay programming will derive from BSkyB and other UK-based companies. Similarly, the majority of cable companies receive a significant proportion of their programming through BSkyB, so package provisions by each cable provider usually contain a similar list of channels. It is unlikely that Irish national services will be broadcast directly by satellite until the digital television market is more mature. Digital terrestrial programming is likely to be supplied by on much the same basis as it has under analogue.

A limited number of RTE programmes have been transmitted in analogue widescreen on a trial basis. Increasing 16:9 digital transmissions by UK broadcasters and their level of success should influence levels of Irish uptake of the wide-screen format. The market for widescreen television sets, although still very small at around 1% of the total annual sales of 200,000 TV sets, has grown consistently since 1995.

The main point of difference in terms of service offerings compared to the UK may be in respect of interactive services. It is not clear yet whether and how the BIB satellite-interactive service will be used in the Republic. However, it is usual for the Irish to wait to see how such a leading edge application it develops in the UK. This is one advantage of having a large neighbour which can undertake the market testing.

1.3 Operators and market structure

The television market within Ireland consists of just a few key players. RTE is Ireland's national public service television broadcaster. The organisation owns RTE1 and Network 2 which both have national coverage and currently dominate the (licensed) terrestrial television sector in Ireland. Both channels offer Aertel, a free teletext service. TNaG (Teilifis na Gaelige), a wholly owned subsidiary of RTE, was launched as the third national channel in October 1996 to offer Irish-language programming. A new commercial channel TV3 launched during September 1998 as an all-Ireland proposition. RTE and TnaG can currently be received by 99.5% and 95% of the countries' population respectively.

The most important driver in the take-up of multi-channel television has been the demand for access to UK broadcast services. This has led to a contortion in the west and south of Ireland which were not able to receive overspill broadcasts and so had to rely on re-transmission services.

The table below summarises the current and potential platforms as perceived by the regulator (ODTR 98/20).

Platform	*Content and coverage*	*Use in Ireland*
Analogue terrestrial	RTE 1, Network 2, TnaG and TV 3. Wide-spread coverage. UK overspill in some areas.	Main platform for free-to-air delivery now and for foreseeable future. License fee or advertisement funded. Likely to face increasing competition from digital and/or pay alternatives.
Digital terrestrial television (DTT)	6 multiplexes proposed (roughly equivalent to 30 channels). Good coverage once implemented	Currently not available. Extent of RTE's involvement yet to be decided by government. Packages may, subject to government decisions, include free-to-air programmes.
MMDS	UK, and other pay (e.g. Sky) channels. Regional franchises	Used in a number of rural areas to deliver pay services. MMDS operators claim exclusivity in franchise areas – a claim the Director does not support.
Cable	Irish, UK, and other pay (e.g. Sky) channels. Regional (city based) franchises	Cable is widely used in those urban areas where it is already deployed. Upgrades may be needed if system is to provide certain new services.
Deflectors	UK channels. Local coverage.	Deflectors are currently unlicensed but provide a low cost service to many consumers.
Satellite	Mix of pay channels – currently limited Irish content.	Currently not widely used in Ireland although many satellite services could be received given the correct equipment.
Telephone networks	Individual feeds	Not currently available. Deployment would depend on a number of commercial and regulatory factors.

Having established a suitable regulatory environment, the main policy that the regulator is focussing upon is the successful introduction of DTT. Given that the other platforms are or will be controlled by commercial interests, it is left to the government to find suitable entry arrangements for DTT in Ireland. The small size of the market has led the government to favour a single DTT platform in spite of the potential concerns about lack of competition.

1.4 Technical issues

There is probable that there will be just one digital terrestrial platform using a common approach to encryption. However, with potentially four digital platforms in Ireland it is possible that the conditional access systems may differ by platform. For this reason the regulator has provided for transcontrol whereby a programme redistribution operator can redistribute the digital video service using their own conditional access system. This issue may become important if the Republic chooses a conditional access system for DTT which is different from that in the UK i.e. SECA.

In respect of Conditional Access for DTT, the regulator has directly adopted the European Directive on Television Standards which specifies that either a Multicrypt or a Simulcrypt must be used (ODTR 98/68). The regulator had examined imposing a common interface but, as other countries have discovered, this is not possible under the Treaty of Rome.

The conditional access system to be used for BSkyB's digital satellite service will be provided by Videoguard from NDS (News Data Systems). 'Open TV' API software will be supplied by Thomson Multimedia. BSkyB has ordered digital decoders through Panasonic (Matsushita), Pace, Amstrad and Grundig to address the UK and Irish markets.

The main cable operator Cablelink has to await the privatisation process before it can decide on conditional access and their preferred decoder suppliers. The other cable operators are awaiting the outcome of the bidding process - some have made bids themselves. Consequently no cable decoders have been ordered.

Operator	*CA Technology*	*Interactive Technology*	*Free to air Compatibility*	*16:9 Compatibility*	*Integrated Modem*
BSkyB	Videoguard	Open TV	yes	yes	Yes

1.5 Conclusion

How digital TV impacts on the television market in Ireland:

- ✔ *The development of new services:* The arrival of digital television has meant that there will be more programming services available to consumers. This will be important as traditionally Ireland has suffered from a lack of programming choice due to capacity constraints and its limited internal market. Much of the extra programming will be of UK origin, continuing the pattern set by analogue services.

- ✔ *The continued development of payTV:* The PayTV market has continued to grow over the last decade, led by satellite and multi-channel service providers. The high penetration of cable means that there is scope to develop payTV further into interactive services. The Irish cable operators have yet to announce their programming plans.

- ✔ *International competition:* There is increasing pressure on Irish television producers to maintain their audience share with the advent of even more British and American programming. On the other hand there are more opportunities for Irish programming to be exported especially to the English speaking markets.

- ✔ *The revival of competition between infrastructures:* It is important to note that the Irish market may not be large enough to sustain digital services over all platforms in the long term The drive towards digital has meant that platform providers have had to look carefully at their current offerings and future plans. Digital satellite has been the first platform to see a full launch through BSkyB in the UK. Terrestrial and cable will follow. However, the later the launch of each respective platform the less likely it is to succeed. MMDS is likely to find the greatest challenge since it is unique to Ireland whereas all the other digital platforms are also supported in the UK. The main hope for MMDS is that it digitises first and gains signficant market share before DTT has fully rolled out.

2. Key figures of the Irish market

2.1 Country fundamentals

	1993	1994	1995	1996	1997	1998	1999
Population (millions)	3.6	3.6	3.6	3.6	3.6		
Households (millions)	1.2	1.2	1.2	1.3	1.3		
GDP (in ECU billions)	41.5	45.4	49.2	55.3	63.8		

Source :- OBS, National Accounts

2.2 Equipment

As of 31 of December	1993	1994	1995	1996	1997	1998	1999
TV households (millions)	1.0	1.0	1.0	1.1	1.1		
TV households (% of total households)	*85.3*	*84.3*	*83.6*	*83.4*	*83.8*		
TV Households with 2 TV sets or more (millions)	0.3	0.3	0.3	0.4	0.45		
TV Households with 2 TV sets or more (% of TV Households)	*29.0*	*29.0*	*29.0*	*36.0*	*40.9*		
TV Households with 16:9 Television sets (thousands)	0.0	0.0	0.0	1.0	2.0		
TV Households with 16:9 Television sets (% of TV Households)	*0.0*	*0.0*	*0.0*	*1.0*	*3.0*		
VCR Households (millions)	0.6	0.7	0.7	0.7	0.75		
VCR Households (% of TV Households)	*62*	*65*	*63*	*64*	*68*		
Digital STB Households (millions)	0.0	0.0	0.0	0.0	0.0		
Digital STB Households (% of TV Households)	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*		
Digital TV Households (millions)	0.0	0.0	0.0	0.0	0.0		
Digital TV Households (% of TV households)	*0*	*0*	*0*	*0*	*0*		
Digital Households (millions)	0	0	0	0	0		
Digital Households (% of TV households)	*0*	*0*	*0*	*0*	*0*		

Source :- CCAI, OBS, Screen Digest

2.3 Television market estimates*

Millions ECUs	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Analogue TV Market							
Public funding	81.3	82.7	83.9	91.0	100.3		
Advertising	87.0	97.0	104.0	115.0	124.0		
Subscriptions	73.7	93.6	119.9	141.3	164.2		
Total Analogue TV	242.0	273.3	307.8	347.3	388.5		
Digital TV Market							
Public funding	0.0	0.0	0.0	0.0	0.0		
Advertising	0.0	0.0	0.0	0.0	0.0		
Subscriptions	0.0	0.0	0.0	0.0	0.0		
Total digital TV	0.0	0.0	0.0	0.0	0.0		
TV Market:							
Public funding	81.3	82.7	83.9	91.0	100.3		
Advertising	87.0	97.0	104.0	115.0	124.0		
Subscriptions	73.7	93.6	119.9	141.3	164.2		
Total TV market.	242.0	273.3	307.8	347.3	388.5		

Source :- BBC, Screen Digest, BSkyB

** "**Public funding**" comprise grants and licence fees; "**Advertising**" also includes sponsoring expenditures whereas "**Subscriptions**" cover subscriptions to the basic multi-channel package as well as subscriptions to Premium pay-TV services.*

2.4 Distribution mechanisms

Cable

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Home passed (millions)	0.5	0.5	0.5	0.6	0.5		
of which digital (millions)	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*		
Home passed (% of TV households)	48.8	48.0	48.6	57.1	48.5		
Homes Connected (millions)	*0.4*	*0.4*	*0.5*	*0.5*	*0.4*		
Digital package subscribers (millions)	0.0	0.0	0.0	0.0	0.0		

Source :- RTE, Cablelink, CMI

Satellite

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Satellite households (thousands)	51.0	68.0	81.0	92.0	104.0		
Satellite households (% of TV households)	*4.9*	*6.4*	*7.5*	*8.4*	*9.4*		
Satellite subscribers (thousands)	42.0	60.0	75.0	87.0	98.0		
Satellite subscribers (% of TV households)	4.0	5.7	7.0	8.0	8.9		
of which digital (millions)	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*		

of which digital (% of TV households)	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*		

Source :- OBS, BSkyB

MMDS

	1993	***1994***	***1995***	***1996***	***1997***	***1998***	***1999***
Home passed (thousands)	234.7	250.1	273.8	353.8	380.0		
of which digital (thousands)	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*		
Home passed (% of TV households)							
Homes Connected (thousands)	65.0	77.5	77.9	91.9	102.0		
Digital package subscribers (thousands)	0.0	0.0	0.0	0.0	0.0		

3.

Presentation of the major digital services

3.1 Satellite services

BSkyB

Presentation	
Name	BSkyB
Date of launch	Analogue :- February 1989 Full Digital :- October 1998
Shareholders	News Corporation 39.9%, Pathe 17.0%, Granada 10.8%, Pearson 3.1%

BSkyB is the satellite operator whose digital broadcasts are most widely received within Ireland. BSkyB operates as both satellite channel operator and programme provider, allowing its influence to spread across all sectors of analogue and digital television. BskyB has a far greater audience share in Ireland than in the UK since cable and satellite television is more widespread. The basic programming package of BSkyB's own satellite service was launched under the banner of Sky Multi-Channels in September 1993.

BSkyB undertook a full digital launch on October 1st 1998 in the UK. BSkyB launched digital satellite television in Ireland during December 1998, when digital set-top boxes started to become available within Ireland. The service comprises about 200 channels come, including approximately 150 television channels and 44 audio channels under the banner Sky Music choice. Sky Digital have been discussing inserting local Irish advertising into their channels.

BSkyB has launched Sky Box Office, a near video on demand (NVOD) service including movies, sports and entertainment commencing as frequently as every 15 minutes. Sky Movie Exclusives (SME) has been launched on the Sky Movies Two pay television channel to screen first run movies.

History of subscription

analogue

(thousands)

	1993	1994	1995	1996	1997	1998	1999
Number of subscriptions	42	60	75	87	98		
Of which digital	0	0	0	0	0		

Source : BSkyB / Kagan World Media

Channel line-up

Offer	Price per month (£Sterling)
Analogue Basic service: Sky Multi-Channels (23 thematic channels: children, music, drama, news, comedy etc.)	£11.99 (18.00 ECU)
Sky movie and sports package: Basic package plus two movie and two sports options, excludes pay per view and additional premium channels	£29.99 (45.02 ECU)
Digital Value Package service: minimum of six as yet undisclosed channels	£6.99 (10.49 ECU)
Sky movie and sports package: Basic package plus two movie and two sports options, excludes pay per view and additional premium channels.	£29.99 (45.02 ECU)

Major channel providers

The majority of channels available on BSkyB are owned, or part owned by BSkyB. However, other channel providers available alongside BskyB programming include BBC, Turner Broadcasting, Viacom, Discovery and Flextech. BSkyB has recently been acquiring channels on short-term exclusivity agreements, including Flextech's Living, UKTV's UK Arena and Nickelodeon, BSkyB currently has exclusive rights over 21 such channels. Channels such as QVC are part owned by BSkyB, whilst those including MTV are carried alongside the package. BSkyB is also the largest supplier of programming to the cable industry is also be supplying channels to the terrestrial service ONdigital.

Distribution

BSkyB programming will be distributed over three separate digital platforms. Firstly over its own Sky Digital satellite service. Secondly over each major cable network and is likely to have some programming included within terrestrial television's offering. Satellite coverage via BSkyB is near universal.

Decoder

Name of the decoder	
CA Technology	Videoguard from NDS
API Technology	Open TV
Free TV compatibility	Yes
16:9 compatibility	Yes
Integrated modem	For satellite only.
Internet Access	Via BIB on a walled garden basis
Available for sale/price	£199.99 (300.20 ECUs) /£159.99 (240.16 ECUs) existing subscribers
Available for rent/price	£7.99 per month
CA agreements	Via SSSL subject to requirements of individual broadcasters

3.2 Cable services

Cablelink

Presentation	
Name	Cablelink
Date of launch (digital service)	Q$ 199 proposed
Shareholders	Telecom Eireann 75%, RTE 25%

Cablelink is Ireland's largest cable operator, offering a choice of 17 television and 17 FM audio channels. It claims to have plans to upgrade its 1970's coaxial network to fibre optic as soon as possible. Cablelink has approximately 330,000 subscribers operating in Dublin, Waterford and Galway. Cablelink also broadcasts via three MMDS franchises.

During April 1998, the Irish Government announced that it was to sell the Telecom Eireann stake in Cablelink by tender. Telecom Eirann currently owns 75% of Cablelink, which currently operates profitably. RTE is also to sell its 25% stake. The sale, which is expected to be completed by the middle of 1999, will require the purchaser to upgrade its network to a digital system.

Cablelink has shown three PPV events over its network since March 1996. All three were world championship boxing bouts, where about a quarter of premium subscribers took a PPV option.

History of subscription

(thousands)

	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Number of subscriptions	277.4	291.7	305.3	320.3	330.3		
Of which digital	0	0	0	0	0		

Channel line-up

Offer	**Price per month**
Analogue	(include decoder rental)
Basic tier :- includes RTE1, UTV, TV3, 5 UK terrestrial channels, Sky 1, MTV, Sky News, Nickelodeon, Link Channel, National Geographic Channel plus Eurosport.	-
Sports and Movies package:- containing both sports and movie options listed above.	£25.99 (39.01 ECUs)

Major channel providers

The major channels are provided by RTE, BSkyB, Flextech, BBC and UTV.

Distribution

Cablelink services can be received by over 330,000 customers in Dublin, Waterford and Galway.

Decoder

Cablelink is currently testing a selection of digital decoders and will be making a decision regarding their preferred suppliers in the near future.

3.3 Terrestrial Services

RTE

Presentation	
Name	RTE
Date of launch (digital service)	2000 (Estimated)
Shareholders	Public Service Broadcaster

RTE is Ireland's national television broadcaster, providing broadcast services since 1961. The organisation owns RTE1 and N2 which currently dominate the terrestrial television sector in Ireland. RTE One's broadcasts 24 hours a day and programming is mostly home produced and features news, current affairs, chatshows, comedy and drama. N2 began broadcasting as RTE 2 during November 1978, before relaunching under its current name during 1988. Between the two channels RTE is responsible for over half of all daytime viewing, rising to 60% after 6pm. Both channels offer Aertel, a free teletext service.

TNaG (Teilifis na Gaelige), a wholly owned subsidiary of RTE, was launched as the third national channel in October 1996. RTE has been providing TNaG with an hour of Irish language programming a day, but as the majority of Irish consumers do not want to be entertained in Gaelic, it managed less than 1% market penetration in 1997, although reaching 5% during reruns of classic gaelic sports. TnaG teletext service has been given over entirely to carrying English subtitles for their programmes.

History of subscription

(thousands)

	1993	1994	1995	1996	1997	1998	1999
Number of subscriptions	0	0	0	0	0		
Of which digital	0	0	0	0	0		

Channel line-up

Offer	Price per month
Basic Tier :- includes RTE1, Network 2, TNaG, TV3 plus a free educational service.	Free
Second tier :- Northern Ireland version of the five UK terrestrial channels	£6.00 (Estimated) (9.01 ECUs)

Major channel providers

The major channels are provided by RTE.

Distribution

Analogue terrestrial broadcaster available to 99% of Ireland's population.

Decoder

Free to air analogue terrestrial broadcaster

TV3

Presentation	
Name	TV3
Date of launch (digital service)	N/A
Shareholders	Canwest (45%), ACT Venture Capital (35%), Irish Private Investors (20%)

TV3 finally signed a contract with the IRTC (Independent Radio and Television Commission) at the beginning of September 1998. It was given immediate permission to launch test broadcasts in an analogue format and proceeded with its September launch as scheduled. The main shareholder is a Canadian broadcasting company, Canwest (45%). A group of Irish private investors with other interests in the media sector took another 20%. The final 35% shareholding was taken up by ACT Venture Capital.

The channel has its own multiplex capacity and broadcasts an equal split of European and non-European programming, with 15% sourced in Ireland (rising to 25% in year 5). The target audience is 15-44 year olds and a key objective is to repatriate audience lost to UK satellite and cable channels. It has a year one target of 6% of multi-channel adults and 8% of multi-channel 15-44 year olds. The Channel has secured Irish rights to Ireland's and England's Euro 2000 away games. TV3 does not have a public service remit. It is the only channel which is required in statute to be transmitted by MMDS operators.

As TV3 is the newest broadcaster in the Irish market, it follows that its systems are modern and designed primarily for digital transmission. The channel will have an all digital production and transmssion chain.

History of subscription

(thousands)

	1993	1994	1995	1996	1997	1998	1999
Number of subscriptions	0	0	0	0	0		
Of which digital	0	0	0	0	0		

Channel line-up

Offer	Price per month
TV3	Not known

Major channel providers

TV3.

Distribution

Analogue terrestrial broadcaster available to 90-95% of Ireland's population.

Decoder

Free to air analogue terrestrial broadcaster.