



Office of the Director of
**Telecommunications
Regulation**

**The Future of TV Transmission in Ireland
The Way Forward**

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Executive Summary

Broadcasting in Ireland can claim many successes but the transmission industry is not yet in an appropriate form to meet in full the needs of users in the 21st century. Indeed, there are a number of structural problems that will require careful but swift attention as well as a number of outstanding legal issues that, unless resolved, will prevent the industry from realising its potential.

Ireland has recently decided to bring forward the date of liberalisation of the telecommunications market and so the context in which broadcasting services will be provided in Ireland is now different. The Director of Telecommunications Regulation (the “Director”) has responsibility for broadcasting transmission and this paper looks at these issues in the context of recent developments.

This summary highlights a number of concerns that are discussed in more detail in the full paper. It briefly summarises the current state of the industry before identifying a number of areas where decisions need to be taken. It presents a framework for moving the industry forward into a more assured regulatory regime. There are, nevertheless, further issues requiring attention. This document is not intended to cover everything and further work will be necessary in a number of areas.

Broadcasting in Ireland

Irish consumers currently receive television programmes from analogue television, MMDS and cable as well as from unlicensed deflectors. Digital television transmission would transform the range of television services and provide varying levels of new services which would enable consumers to join the information society. The Director wishes to establish an appropriate regulatory regime to facilitate this development.

The table below sets out the current and potential platforms and briefly indicates how they might be used.

Platform	Content and coverage	Use in Ireland
Analogue terrestrial	RTE 1, Network 2, TnaG and TV 3 soon. 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. Comments on future role are made below.
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 (see main report). Comments on future role are made below.
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. Comments on future role are made below.
Deflectors	UK channels. Local coverage.	Deflectors are currently unlicensed but provide a low cost service to many consumers. Additional comments on future role are made below.
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.

All the organisations will need to invest if they are to have a future within the new digital economy and if users are to gain from the information society. The industry already faces many market uncertainties, in both supply and demand. A clear regulatory framework that takes account of commercial realities is therefore a key requirement. This paper does not address all issues. However, it is intended to frame the debate going forward.

Legal Position

There are a number of unresolved legal issues which are outlined in the main report and which directly impact the Director's work. The Director believes that if these

issues remain unresolved the disputes would impede the development of the industry. She is keen to resolve these issues, if necessary through legal proceedings, but recognises that protracted litigation could be a long process during which time the industry may be prevented from achieving its development goals. Furthermore, the Director believes that there are significant benefits available to be shared between the key organisations and hopes that those involved will find a quick solution to the issues involved. With such a clean starting sheet, the industry will more easily be able to move on and invest with certainty.

Key findings

Below are listed some of the key findings.

- **Competition:** the Director wishes all consumers to be able to choose between appropriate platforms. Exclusivity is not justified.
- **DTT:** The Director will reserve spectrum for the introduction of DTT. The Government needs to determine the participation of RTE in DTT. The next stage will be to seek expressions of interest.
- **MMDS and Cable:** The Director invites MMDS and Cable companies to submit business plans to her which she will review and against which she will consider awarding new or modified licences on appropriate terms including, for example, duration. The licences would be designed to provide for consumer protection in terms of roll out, quality of service, etc., and for a period of stability to meet digital development needs and will replace existing licences
- **Deflectors:** The paper indicates that the Director is not satisfied of the long-term appropriateness of deflectors as a means of rebroadcasting on which reliance can be placed. She is nevertheless aware of their current market position. She is minded to provide for the short-term licensing of deflector operations subject to considerations outlined in the main paper.

Longer term issues in relation to the structure of the market, in particular the point at which it may be appropriate to allow others to enter the market, will be the subject of further economic evaluation.

1. Introduction

1.1.1 Ireland is a confident, exciting country, with a vibrant, multifaceted culture and is happy to share it with the world. We have enhanced our traditional reputation for excellence in literature and theatre and achieved world renown in music ranging from the Chieftains to U2. Ireland has also become a centre and a source of inspiration for the film industry, drawing on Irish roots such as the Butcher Boy and Michael Collins. There are many other areas of achievement of which Ireland can be justifiably proud, not least that of RTE which, faced with strong competition from UK services from the very beginning, has developed a range of excellent programming.

1.1.2 This dynamism must be reflected in the arrangements for broadcasting¹ transmission for the future.

1.1.3 We are on the brink of a revolution in broadcasting driven by digital technology developments for the transmission of services. This will accelerate convergence with other telecommunications services. On 22 May, the Minister for Public Enterprise Mrs. Mary O'Rourke, T.D., announced the early end to the derogation on the provision of voice telephony, to give Ireland the chance to benefit from competition and to catch up on international telecommunications developments without which key economic development initiatives could falter. Broadcast infrastructure can form a very useful part of Ireland's effort to catch up and get ahead in telecommunications.

1.1.4 The central element in the broadcasting transmission revolution is digitalisation. This allows a significant increase in the number of programme services and opens up the possibility of providing a number of other services. Such services include near video on demand, home banking, home shopping, interactive and other services². The provision of telephony, using broadcasting infra-structure is also possible using both wired and wireless technology. In a small country needing to catch up in telecommunications, we can harness this multi-service capability,

¹ In this paper broadcasting refers to television and related information delivered over the different transmission platforms, namely: cable, MMDS and the national free-to-air networks.

² Two way services will require the availability of a suitable return path.

restrained only by considerations of spectrum availability and the need to ensure effective competition.

1.2 Role of Director of Telecommunications Regulation

1.2.1 The 1996 Act³ which established the ODTR provided for the regulation of all transmission platforms by the Director. Responsibility for licences granted for the operation of cable, MMDS and the national television transmission network was transferred to the Director by virtue of the Act. Such licences may be amended or fresh licences issued. The Director may make new regulations for licensing, subject to the consent of the Minister of Public Enterprise, who may also insert public service requirements.

1.2.2 This paper sets out the Director's approach to the future regulatory regime for broadcasting as an aspect of her overall approach to regulation in the context of new opportunities for consumers and operators. It is not intended to provide answers to all the issues which will need to be addressed during the coming months but rather sets out the key principles framing the initial way forward. Consideration of a possible role by non-broadcasting organisations in the provision of television services is not discussed in this document and will be examined at a later date. While the Director has some responsibilities in respect of programme content, such matters are outside the scope of this paper.

1.3 Objectives of the Director

1.3.1 To understand the general principles that guide the regulation of liberalised services and licensing, it is a necessary first step to recognise that the ultimate objectives of regulation in a liberalised market is to create an environment where competition may flourish, licensees earn sufficient returns to make necessary investments and consumers are protected from the consequences of anti-competitive practices. In providing for the introduction of a new regulatory environment, a

³ Telecommunications (Miscellaneous Provisions) Act, 1996

primary concern of the Director is to minimise inconvenience to the consumer while facilitating the longer term development of the telecommunications sector.

1.3.2 In developing her position in relation to broadcasting transmission platforms, the Director attributes foremost consideration to the following:

- Universal provision of free-to-air national television services;
- Universal access to re-transmission of the main UK television services;
- Efficient use of the radio spectrum;
- Promotion of consumer interests through the:
 - facilitation of consumer choice between broadcast transmission platforms;
 - competitive development of quality communications infrastructure and services;
 - promotion of low cost access to information/interactive services;
- Fair competition in the market;
- Interoperability of equipment and related services;
- Transparency of regulation;
- Transparency of commercial practice.

2. Background

2.1.1 Ireland's economic growth is highly dependent on multinational/global corporations and on high technology sectors which have a very high reliance on advanced communications. A critical central theme of Ireland's industrial strategy is the growth of internationally traded services such as software development, call centres and financial services. The speed of development in communications technology is so rapid that a country which does not make a major continuous effort to stay ahead will rapidly fall behind in international competitiveness terms. A leading edge, competitive communications infrastructure can be developed only in an open, competitive environment.

2.1.2 High levels of involvement in media production and interactive services (for example, the internet) are needed to contribute to the skill base for business development in Ireland so that we can take our share of the ever growing communications sector, estimated to be expanding by over 7% a year internationally. Furthermore, as outlined in the reports of the Information Society Steering Committee, failure to develop infrastructure to the home could mean that Ireland would lose out on the enhanced opportunities for personal contact, for access to competitive financial services and sales, for interactive education, and for rapid information retrieval, which are among the many opportunities which are currently availed of by a limited number of Irish consumers.

2.1.3 The need for Ireland to have the most advanced competitive telecommunications systems was discussed in detail in recent reports from Forfas, IBEC and the National Competitiveness Council and underlined by the decision of the Government to end the derogation on the provision of voice telephony early.

2.1.4 The implementation of digital technology is a key building block in the development of transmission platforms for facilitating the convergence of broadcasting and telecommunications services generally. While the Irish telecoms backbone is substantially digitalised at over 80% of the total by 1997, the current television transmission platforms are not licensed for and have not generally been upgraded to digital standard.

2.2 Current Licensing framework

2.2.1 This section outlines the current licensing framework for the broadcasting sector. However, given technological and market developments resulting in the convergence of services provided over all transmission platforms, it is important to view the current broadcasting platforms in terms of their role in the broader context, as well as their capability to deliver television programmes.

2.2.2 Currently in Ireland, there are three regulated non-satellite transmission platforms for receiving television signals - cable, MMDS and terrestrial (free-to-air). Appendix 1 contains a list of cable licences in place while Appendix 2 shows the position in relation to MMDS.

2.2.3 Demand for access to UK television services has been the primary driver in the take up of multi-channel television services for several decades. Cable systems have fulfilled this demand in the major urban areas to date. Licences have been issued to cable companies since 1974 and cable currently supplies services to approximately 450,000 households. In order to meet the demand for multi-channel television services on a national basis, the Government provided for the introduction in the early 1990s of MMDS to complement the existing cable networks and services have been availed of by approximately 90,000 subscribers.

2.2.4 It would not be appropriate for the Director to express any views on ongoing enquiries into the circumstances in which any particular broadcasting licence or licences might have been granted in the past. Making findings in respect of such circumstances or deciding what should be done as a consequence of any such findings are not matters which fall within the Director's responsibility.

2.2.5 Prior to the introduction of MMDS in the early 1990s, the demand in rural areas for UK services led to the development of unlicensed deflectors in some areas, operating in the UHF broadcasting bands. Many of these systems are still in operation and it is estimated that they currently provide a television service to approximately 100,000 to 150,000 households. MMDS operators claim that their networks generally have not been developed as fully as they might because of unfair competition from unlicensed deflector operators.

2.3 NERA/Smith Report

2.3.1 In order to provide information on future options for broadcasting transmission in the context of the development of digital technology, the Director, in August 1997, commissioned a report from National Economic Research Associates (NERA) and Smith System Engineering (Smith). The report focused on the spectrum management and economic issues pertaining to such transmission and particular emphasis was given to Digital Terrestrial Television. Following publication of the report by the Director on 13 March 1998, a substantial range of comments were received by the end of the consultation period on 21 April 1998. The Director's view of the framework for the future as set out in this paper takes appropriate account of the report by NERA/Smith and the comments received thereon.

2.4 Comments Received

2.4.1 The Director received comments from a wide range of sources including operators of cable and MMDS systems, operators of deflector systems, television broadcasters, those involved in the technical side of the industry, public representatives and private individuals. Comments were invited on a confidential basis. Accordingly individual contributions are not identified in this document. However, an indication of the degree of interest in this sector and the diversity of opinions is represented by the following examples.

- A general consensus was that digital television should be introduced but there was disagreement on how and when it should be implemented.
- The importance of the development of cable as a digital transmission platform, while requiring a substantial investment in order to exploit its full potential, was underlined by the comments received.
- Some commentators viewed DTT as enhancing consumer choice and providing new value added services while others saw it as providing a limited range of services and less choice for consumers compared with cable and MMDS.
- Whether MMDS could economically or technically deliver universal service was subject to diametrically opposed views.

- Deflectors were seen by some as community based initiatives but were seen by others as hindering the introduction of DTT and the development of MMDS.
- The exclusivity of franchises was challenged by some whereas other commentators saw it as being a pre-requisite to the development of the required infrastructure (in particular, in the case of MMDS).
- There were many views on the best use of the limited UHF spectrum, both in the short and longer terms. These included the continued development of the national analogue television network, its use by deflectors and the introduction of DTT.
- Many comments were received on the technical parameters which should be applied to the platforms and in particular the approach to Conditional Access Systems (CAS).
- Comments were also received as to how and when the technical aspects should be regulated and implemented.

Some of the issues raised by the above comments are addressed later in this document, while the remainder will be further considered by the Director as and when decisions on such issues are required.

2.4.2 Questions were also raised in relation to the validity of the financial analysis and models used by the consultants for the different transmission platforms. The Director recognises that any analysis of the future of these platforms must be based on assumptions and referred several aspects of the comments back to NERA/Smith. Having examined the comments Nera/Smith further clarified their basis for making some of their assumptions. For example, they excluded Set Top Box (STB) costs from operator costs because they assumed that operators would pass on the costs of STBs to consumers and included them as a direct cost to the consumer. NERA/Smith confirmed capital costs were based on upgrade costs to digital delivery not on a greenfield site basis. It was also confirmed that other reports and research to which comments referred had been examined. The Director is satisfied that the analysis carried out by NERA/Smith was as thorough as possible at this stage.

2.5 Initial Decisions Required

2.5.1 If Ireland is to benefit from the possibilities which the use of digital technology offers, fundamental decisions are required at an early stage to allow for necessary planning and a smooth introduction. The first step is to decide which transmission platforms should be licensed for digital services taking cognisance of available spectrum. The role of RTE and the other national broadcasters needs to be addressed. The issues that require specific regulation, and those that may be left to domestic and EU competition law, need to be identified. The revised Television Without Frontiers Directive, with regard to the licensing of domestic service providers and to the regulation of content needs to be implemented.

3. Future Arrangements for Broadcasting Transmission

3.1 Impact of Digital Technology

3.1.1 Digital technology effectively increases the capacity that can be provided over broadcasting platforms leading to a vast expansion in the number of television and other services. Such other services include near video on demand, home shopping and banking, games, interactive and other multimedia services⁴. CD quality sound and enhanced picture quality can also be provided. Digital television technology is based upon the technical specifications produced by the Digital Video Broadcasting (DVB) group and formally standardised by the European Telecommunications Standards Institute (ETSI). These specifications apply over all broadcasting transmission platforms.

3.1.2 Plans are advanced in many countries for the introduction of digital broadcasting services. Some digital satellite services have already been successfully initiated in the US and Europe: in Sweden a strong degree of interest for DTT was indicated by the more than 50 applications for eight DTT licences. In the UK, in addition to digital cable, both DTT and digital satellite services are scheduled to be launched in 1998. UK digital signals will therefore be available in at least part of Ireland before the end of this year. It is anticipated that television services in most countries will fully migrate from analogue to digital within the next twenty years.

3.2 Potential Demand for Digital Services

3.2.1⁵ Ireland is the most vibrant and rapidly growing economy in Europe, with predicted average annual GDP growth rates of at least 5% up to 2005. The level of television ownership in Ireland is estimated to exceed 98% of households, with 36% having more than one set. Irish households' television viewing hours are just above the EU average and over 50% of television households currently subscribe to pay television. Both advertising and subscriptions have exhibited significant growth rates

⁴ Two way services will require the availability of a suitable return path.

in real terms over the last 5 years at 8.4% and 7.6% per annum respectively, and are projected to continue to grow strongly over the next 5 years (5% and 10% respectively, in real terms).

3.2.2 VCR penetration at 70% is higher than the average for Europe. According to 1996 data, video expenditure as a proportion of GDP in Ireland was the second highest in Europe and audio-visual expenditure as a proportion of leisure expenditure was also the highest of all EU Member States. While the degree of substitutability is uncertain, these indicators demonstrate the strength of demand for audio-visual services and the potential demand for new services such as video on demand. Such factors, together with the strong economic growth projections are indicative of the potential for future positive developments in the audio-visual sector.

3.2.3 The increase in the numbers of programme channels will lead to a consequent demand for a larger amount of content and this should create opportunities for increased production of Irish audio-visual material. Such increases in demand are likely to enhance the growth opportunities of the sector, leading to increased revenue and employment prospects over the long term. It is important that the regulatory framework does not inhibit the development of independent broadcasting.

3.2.4 The current level of demand for retransmission of television programme services demonstrates that there should be opportunities for growth in the provision of these services in the future given the possibilities which digital technology offers. The provision of services using digital technology would provide opportunities for investors in the various platforms, with success depending on the services on offer, pricing and marketing strategies. NERA/Smith examined the basic financial viability of all broadcasting platforms in a digital environment and, based on the assumptions made, concluded that all could be profitable. It is recognised that their financial analysis is particularly sensitive to assumptions concerning the timing of the launch of the various services and the relative costs of basic services. A number of comments were received regarding projections of the relative financial performance of each delivery platform. As has been stated, the Director referred these comments back to

⁵ Sources: Zenith Media, "Television in Europe to 2007", Eurostat, EAO Statistical Yearbook, Screen Digest, KPMG

NERA/Smith for their further examination and she has received detailed analysis and comment from the consultants to support the basis of their financial analysis (See section 2.4.2).

3.3 Review of Legal Issues

3.3.1 The Government decided in 1988 that it would license MMDS for the delivery of retransmission services in non-urban areas. Based on certain assurances that may have been given, licensed MMDS operators believe that they have exclusive rights over retransmission systems within their licensed areas. Such assurances have to be considered in the context of the decision of the High Court in the *Carrigaline Case*, that, inter alia, the decision on exclusivity had been based on grounds which were not legally justified and so ineffective. The Director notes that other operators' claims to the same rights appear to be based upon the same decision as to exclusivity. Independently of that, any such assurances may also be invalidated by provisions of the Treaty of Rome.

3.3.2 A number of licensed operators also claim the benefit of assurances that the operators are generally entitled to renewals of their current licences. The Director has been advised that to the extent that any assurance may have been given which fettered the discretion which she is given and must exercise under the relevant statutes, such assurance would also be ineffective.

3.3.3 The Director considers that it is not necessary or in the public interest to restrict the right to supply retransmission services to the current licensees. The Director also considers that it would not be in the public interest or in the interest of fair competition that these licences be renewed for the reasons apparently claimed and she is strongly minded not to renew them on that account. She will on the other hand welcome and give sympathetic consideration to submissions from such operators as to why on other grounds fresh licences should be granted to them within the context of the licensing proposals outlined below and submissions as to what obligations might be contained in new licences.

3.4 Spectrum Issues

3.4.1 Having considered the issues and materials discussed above the Director has decided to plan for and reserve spectrum for digital terrestrial television. In view of the pivotal role of RTE, the views of the Government in relation to participation by national broadcasters need now to be ascertained. The next stage would be to elicit expressions of interest from other parties who might be interested in applying for DTT licences or interested in the provision of television and/or other telecommunications services via a DTT platform. On the basis of the response definitive decisions could then be made on introducing DTT.

3.4.2 The ODTR considers that there is sufficient spectrum available to allow the operation of digital MMDS although detailed frequency planning would be required.

3.4.3 While spectrum management is a consideration in licensing cable operations, this primarily relates to potential interference from cable leakage rather than the reservation of spectrum for exclusive use by cable operators.

3.4.4 Accordingly the ODTR does not believe that there are any significant spectrum related obstacles to licensing DTT, digital MMDS and digital cable.

3.4.5 The Smith/NERA report also examined the issue of deflectors and indicated that there will be spectrum available for some additional stations in some locations following the roll-out of TnaG and TV3 in full. In this regard the report concurred with the findings of the consultants nominated by the European Broadcasting Union who examined the issue of deflectors from a technical point of view in the context of the *Carrigaline Case*. Both consultants highlighted, however, that the availability of spectrum for deflectors would be further limited with the launch of DTT. The Director wishes to put deflector groups on notice that the amount of available spectrum is diminishing due to the further development of national analogue services and would be severely reduced by DTT .

3.4.6 Reference was made in the response to the consultation to regional digital multiplexes, but the first priority must be to roll-out the national DTT services. A review of the UHF broadcasting bands will be published at regular intervals

indicating current and planned usage. It would not be possible to accommodate regional/local multiplexes for some 3 to 5 years.

3.5 Deflectors

3.5.1 Deflector operators provide a service to some 100,000 to 150,000 people at present. The ODTR would wish to avoid market disruption. Subject to resolving the matters referred to in Section 3.3, and unless convinced (which she is not at present) that universal access to multichannel television services would be undermined by the continuing activities of deflectors, the Director is minded to provide for licensing deflector operations. This would need to be done by way of short term licences, or licences revocable with a short period of notice, where development of national platforms required additional spectrum capacity. Regulations necessary for the licensing of deflectors would be subject to Ministerial consent.

3.5.2 The Director believes that the cost of the necessary licensing system should, in principle, be borne by those wishing to operate the system. In this context the Director considers it would be appropriate to require such licensees to provide security for costs which might be incurred by her in moving to terminate deflector operations where this became necessary in circumstances such as those described.

3.5.3 DTT would operate in the same frequency bands as the existing analogue services. The ODTR will plan the initial DTT services taking account of the national services. It believes that the accommodation of deflectors must not compromise the development of DTT services and consequently would not take account of such systems in planning.

3.5.4 The Director believes that limitations of deflector systems which include inability to provide universal service, a limited range of services and no guarantee of quality, would make it inappropriate to rely on such systems in an advanced telecommunications sector for Ireland. The development of competing digital platforms and services, the expense of converting to digital and the requirement of spectrum by DTT does not augur well for the longer term viability of deflector operations. The Director would encourage discussions between existing licensees and deflector operators which could result in arrangements to the benefit of consumers.

The ODTR is also conscious of the fact that deflector operators have assets, in particular sites and masts which (subject to planning permissions and safety standards) could be used for other purposes. Such use would be subject to private arrangements, but it should be noted that licensed activities may not take place on any facility still being used for unlicensed activities.

3.5.5 The Director received comments suggesting irregularities in the royalty, tax and planning situations of deflector operators and recognises that regularisation, if necessary, would impose additional costs on the parties in question. Nothing in any licence issued by the Director would absolve the licensee from the requirement to obtain whatever additional consents, permissions, authorisations or licences may be necessary for the exercise of the rights conferred by that licence.

3.6 Transition to Digital

3.6.1 During the period of the transition to digital some programme services will be simulcast in both analogue and digital formats. This will lead to an extensive demand on available spectrum resources. A period of simulcasting is necessary to afford time to consumers to make individual choices in relation to the timing of their own switch to digital technology.

3.6.2 A decision on the length of time during which simulcasting will take place will not be made at this stage. Such a decision can only be based on Irish market conditions but it is understood that a period of between 10 and 15 years following the introduction of DTT has been indicated as likely in the UK. Following the ending of analogue services, spectrum will be then available which could be used to facilitate additional services. The choices in relation to the use of this spectrum will be made at an appropriate time, giving due consideration to consumer interests and technological developments.

4. Digital terrestrial television

4.1 Facilitation of DTT

4.1.1 Digital technology will permit many services to be transmitted over the same bandwidth used by a conventional television channel. A television channel can be thought of as accommodating a stream of information known as a multiplex which may contain a number of television programme channels and additional data services.

4.1.2 Preliminary planning work indicates that it will be possible to assign spectrum for six DTT multiplexes to operate in the UHF broadcasting bands. While the number of services which these multiplexes will be able to provide will depend on various technical parameters it is likely that up to 30 programme services in addition to some data services could be provided. As stated earlier, it may be possible to allocate some spectrum for use by local/regional multiplexes at a future date. This should be done by a competitive process.

4.1.3 As part of the decision on the introduction of a DTT service, it will be necessary to specify the manner in which the award of DTT licences will be organised. Several differing approaches have been taken in other jurisdictions. NERA/Smith suggested that two multiplexes be reserved for national broadcasters with the remaining four multiplexes being offered as a single bundle to one commercial operator. This would allow both indigenous broadcasting and competition between transmission platforms to be accommodated. It is for the Government to decide whether RTE, TnaG and TV3 should have the opportunity of taking up this option. If the Government so decides, consideration needs to be given to the costs of simulcasting and whether the broadcasters will have sufficient content to fully utilise multiplex capacity.

4.1.4 It is likely that the existing RTE network would form the basis of the network for DTT transmission. The development of an alternative nationwide network is likely to be impractical in the context of a universal rapid roll out of service and on cost grounds. Depending on the terms of its involvement, questions of separation of functions and accounting or complete separation may arise for RTE. Comments were

received on this subject most of which supported the idea of the separation for the provider of the transmission network for DTT.

4.1.5 The Director considers that the potential benefits from awarding all (remaining) multiplexes to one operator would outweigh possible competition concerns within the DTT platform.

5. Future Regulation of Television Broadcasting Platforms

5.1.1 The ODTR believes that the creation of a regulatory framework which enables consumers to have greater choice in the method by which they may receive TV services and additional services will provide a basis for the emergence of genuine competition between the various platforms. Such a competitive environment can lead to improvements in the quality of service, the development of additional services and lower costs to consumers.

5.2 Current Licence Arrangements

5.2.1 The existing licences held by cable and MMDS operators do not permit the carriage of digital television services. The Director is strongly minded to authorise such services only on the basis that the principle of competition is accepted. In view of the fact that new licence terms are required for the introduction of digital technology and the need to update terms generally in the light of current conditions, the Director believes that a new regulatory framework is required.

5.2.2 The current cable regulations contain a provision enabling the Director to revoke cable licences on giving two years notice and she is strongly minded to use this provision. The MMDS licences run out in the period 2001-2004. In order to provide certainty in the longer term, the Director will propose new licences in the next few months to replace the existing ones for both cable and MMDS.

5.2.3 Given the present state of development of the television (and also telephony) transmission services in Ireland, and the spectrum requirements of non-cable television delivery, the Director considers it appropriate in the first instance to give the current MMDS and cable licensees the opportunity to present business cases for new or amended licences in their franchise areas which will be prepared as outlined below. The Director will set out a framework for the submission of business cases. These will be evaluated and if acceptable would lead to the provision of new licences reflecting the commercial and service realities of television transmission into the 21st century.

5.3 Future Licensing Arrangements

5.3.1 The Director intends to frame licences to address a number of issues including:

- **services to be provided** - the services which an operator may provide on a platform will be specified in the licence. Such services would only be broadcast related, as alternative legislation exists for telecommunications services. Other requirements relating to the use of wireless telegraphy equipment for the provision of telecommunications services will have to be examined separately.
- **significant market power** - special conditions to ensure fair competition will apply;
- **roll out of services** - licences may include requirements in regard to network roll-out. Some of these may be based on business plans submitted;
- **obligations to furnish information to the Director** - it will be a condition of licences that licensees supply certain information to the ODTR, e.g. numbers of subscribers and service levels;
- **technical standards** - licences will require that the appropriate technical standards are adopted by service providers and that interoperability is pursued, in order to reduce consumer costs and uncertainty. The licensing regime will ensure that third party access to essential bottleneck facilities (CAS, API, navigation software, transmission capacity, etc.) is provided on fair, reasonable and non-discriminatory terms;
- **licence duration** - licence periods will be set so as to provide a balance between the need for infrastructure investment and the need for a return on that investment;
- **licence fees** - licensees will be required to pay fees, which will be calculated on a common basis;
- **breach of licence terms** - in the event of failure by a licensee to observe the conditions of the licence the Director will impose a range of sanctions proportionate to the nature of the breach involved ranging from tiered subscriber refunds to ultimately the revocation of the licence.

5.4 Conditional Access

5.4.1 There are concerns related to third party access to key bottleneck facilities. In the light of rapidly changing technology it is a difficult process to anticipate necessary detailed regulation to ensure that the terms of third party access are fair and reasonable. Accordingly, the Director will seek to intervene only where the market fails to fully address the problem. In a digital environment consumers will initially need a digital Set Top Box (STB) which will act in a similar fashion to existing decoders. Access to services will be controlled by a Conditional Access System (CAS) which is the hardware/software which restricts access to those consumers who have an entitlement to the relevant services. Viewers will need a method of locating the services that they wish to watch.

5.4.2 The guiding principle of the ODTR would be to prevent barriers to consumer choice. Some comments were received in relation to issues such as CAS and Electronic Programme Guides (EPGs) varying from suggestions that a common Irish EPG should be specified to assertions that platform operators should be permitted to select their own CAS.

5.5 Consumer protection

5.5.1 Provisions in relation to consumer protection to be included in the regulatory regime will deal differently with consumer protection in a de facto monopoly situation than if there is competition between platforms. However, as the cost and inconvenience of changing between delivery platforms may inhibit mobility, the ODTR will frame licences to include measures to protect the rights of consumers and the implications for licensees in the event of failure to uphold those rights. In the first instance, the ODTR will require each licensee to provide individual customers with a clear statement of the contract terms so as to inform customers of their rights. Licensees will also be required to have proper procedures in place for the resolution of customer complaints.

5.5.2 An independent complaints commissioner should be established to ensure redress of consumer complaints. The commissioner would draw to the attention of the Director any cases of systematic failure to fulfil the licence terms. The Director would

then take action. Licensees must also measure customer satisfaction in a format to be agreed with the Director who will publish such statistics in periodical reviews of the performance of the service providers.

This is not a legal document; the Director is not bound by this document and may amend it from time to time. This document is without prejudice to the legal position or the rights and duties of the Director to regulate the market generally.

APPENDIX 1

Cable Licences

Company	Licensed Area	Licence originally granted with effect from
Cable Management Ireland Ltd. (CMI) 70 Capel Street Dublin 1	Arklow	6-Oct.-75
	Ashbourne	1-Feb.-79
	Athlone	1-May-81
	Ballina	4-Mar-85
	Buncrana	1-Jan-85
	Carlow	1-Jul.-79
	Castlebar	1-Sep.-92
	Celbridge	6-Oct.-75
	Clonard Estate, Dundrum	14-Dec.-81
	Donegal	13-Jun.-86
	Enniscorthy	1-Dec.-76
	Greystones	16-Jan-79
	Kildare	1-Jan-87
	Malahide	1-Jun.-74
	Maynooth	1-Jun.-88
	Mullingar	1-Oct.-78
	Naas	13-Aug.-81
	Navan	17-Nov.-83
	Newbridge	3-Feb.-86
	New Ross	1-Dec.-76
Portlaoise	1-Jan-84	
Sligo	1-Jul.-78	
Swords	16-Mar-82	
Tullamore	25-May-84	
Tullow	1-Jan-87	
Wicklow	1-Aug.-85	
Cablelink Ltd. 10 Pembroke Place Ballsbridge Dublin 4	Dublin	28-May-86
	Waterford	8-Jul.-75
	Galway	27-May-86
McGahon & O'Neill Castletown Road Dundalk Co. Louth	Dundalk (part)	6-Oct.-75

Emmet Electrical Ltd. The Crescent Boyle Co. Roscommon	Boyle	1-Aug.-74
Casey TV Rentals Ltd. P.O. Box 5 Youghal Road Dungarvan Co Waterford	Dungarvan	1-Jul.-79
Cork Communications Ltd.* Abbey Court House Georges Quay Cork	Cork City Carrigaline Cappoquin, Tallow	11-Feb.-82 21-Mar-85 & 1-Oct.-83
Berney Crossan Main Street Longford	Longford	1-Mar-82
Independent Wireless Cable Ltd.* Corporate House Mungret Street Limerick	Athy Portarlinton Limerick City Nenagh Ennis Shannon	1-Jan-85 1-Jan-85 25-May-83 12-Aug.-85 1-Jun.-88 2-Jul.-86
Bagenalstown Community TV C/o Ms. Catrina Murphy Royal Oak Road Bagenalstown Co. Carlow	Bagenalstown	1-Oct.-83
Orlynn Park Amenities c/o Mr. Christy Byrne 38 Orlynn Park Lusk Co. Dublin	Orlynn Park	1-Sep.-84

Suir Nore Relays Ltd. 50/51 Upper John Street Kilkenny	Cashel Clonmel Kilkenny Thurles	1-May-87 12-Aug.-85 1-Dec.-84 1-Jan-90
Golden Cablevision 50/51 Upper John Street Kilkenny	Tipperary	1-Jan-87
Tara Cove Holidays C/o Mr. Louis Amerlynck 147 Sutton Park Dublin 13	Tara Cove Ballymoney Co. Wexford.	1-Jan-87
Clane Cables Systems Prosperous Road Clane Co. Kildare	Clane	1-Sep.-87
Smyths Audio & Video Systems 60 Main Street Cavan	Cavan	1-Jul.-74

*Trading as Irish Multichannel

APPENDIX 2
MMDS LICENSEES

Licensee	Counties (Approx.)	Licence Granted (Year)	Cells
Cablelink Limited, 10 Pembroke Place, Ballsbridge, Dublin 4	Dublin	1-Mar 1992	Cell 16
Cablelink Galway Ltd, Odeon House, 7 Eyre Square, Galway	Galway & Mayo	1 -Apr-1991	Cells 4,5 & 13
Cablelink Waterford Limited, 30A Michael Street, Waterford	Waterford	1-Mar-1994	Cell 27
Cable Management Ireland Ltd, 70 Capel Street, Dublin 1.	Donegal & Sligo	1-Mar-1992	Cells 1, 2, 3 & 6
Cork Communications Ltd.* , Abbey Court House, George's Quay, Cork	Cork & West Waterford	1-Dec-1991	Cells 25, 26, 28, & 29
Horizon TV Distribution Limited*, Corporate House, Mungret Street, Limerick	Kerry, Clare & Limerick	1-Apr-1991	Cells 18, 19, & 24
	Roscommon, Longford, Laois (part), Offaly, Westmeath & Kildare	1-Apr-1991	Cells 10, 11, 14, & 15
Independent Wireless Cable Limited/East Coast Multichannel*, Corporate House, Mungret Street, Limerick	Wicklow & Wexford	1-Jan-1992	Cells 17, 22 & 23
	Cavan, Louth, Monaghan & Meath	1-Apr-1991	Cells 7, 8, 9 & 12
MMDS Television Limited, 50/51 Upper John Street, Kilkenny	Tipperary, Kilkenny, Carlow & Laois (part)	1-Jun-1991	Cells 20 & 21

*Trading as Irish Multichannel