



Office of the Director of
**Telecommunications
Regulation**

Response to the Consultation Delivery of Licensed Programme Services

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1. EXECUTIVE SUMMARY

This paper is the ODTR's response to a consultation process based on the Consultation Paper "*Delivery of Licensed Programme Services*" (ODTR00/51 - July 2000). The Consultation paper followed a proposal by *eircom* to deliver licensed programme services over the telecommunications network. Licensed Programme Services are not currently licensable services under the General or Basic Telecommunications Licences. Before considering whether to review the licensing regimes it was necessary to gauge, inter alia, the level of interest in the provision of programme services over the telecommunications backbone.

The questions the consultation sought views on, included in particular:

- The technical capability of Asymmetric Digital Subscriber Line ("ADSL") to deliver licensed programme services over the telecommunications backbone
- Whether delivery of programme services by such means would interfere with the delivery of traditional voice telephony and other services
- The commercial feasibility of providing programme services via ADSL in a range of regulatory environments.
- The appropriateness of including roll-out conditions in a licence to deliver digital television via ADSL
- The offerings operators propose to make.

Thirteen responses were received from a range of interested parties in Television delivery and public bodies. Two of the responses were from telecommunications operators not currently licensed to provide Licensed Programme Services, one of which, *eircom* indicated an interest in the delivery of TV over ADSL. A major telecommunications equipment manufacturer involved in the Irish market also supported the delivery of Licensed Programme Services over ADSL. The Director considers that while there was not a widespread interest in providing Licensed Programme Services over ADSL, there is sufficient interest to proceed with a more

detailed analysis of the issues involved. This analysis will involve consideration of the following issues raised in the consultation process.

- The results of the ADSL trials currently being conducted by eircom and other licensed operators, in terms of the suitability of the system to carry Licensed Programme Services.
- The capacity of the network's backbone to cope with the extra traffic generated by the provision of services including Licensed Programme Services.
- If and how roll out obligations might apply to ADSL.
- The incumbent's obligations with regard to other licensed operators particularly in relation to the European Regulation on unbundling the local loop¹
- The need to facilitate competition for the benefit of Irish consumers and businesses

The Director appreciates the range of responses received and has considered all the issues raised in preparing this paper.

¹ The Regulation of the European Parliament and of the Council on Unbundled Access to the Local Loop [EC xx 2000/0185].

2. INTRODUCTION

The Director of Telecommunications Regulation and her Office are responsible for the regulation of the Irish telecommunications market and broadcast transmission in accordance with EU and National legislation. The ODTR is the National Regulatory Authority for the purposes of that legislation.

The rapid pace of development in both the Broadcasting and Telecommunications sectors is driving the phenomenon known as convergence, which is continuously blurring the once distinct boundaries between the two industry sectors. As such, companies now, or will soon, possess the technology to allow them to offer bundled services over traditionally distinct broadcast and telecommunications networks.

Such bundles may include television, voice telephony and other telecommunications services. The delivery of these services are now technically possible over platforms such as Hybrid Fibre Co-Ax Cable, MMDS/WLL and ADSL networks. However there is in some cases a gap between what is technically possible and what can be implemented practically

In July 2000, the ODTR launched a consultation paper "Delivery of Licensed Programme Services" (ODTR00/51), which was intended to test the interest/feasibility of such converged services being offered over telecommunications networks.

2.1 Background

The consultation paper sought views on issues such as:

- The technical capability of Asymmetric Digital Subscriber Line ("ADSL") to deliver licensed programme services over the telecommunications backbone
- Whether delivery of programme services by such means would interfere with the delivery of traditional voice telephony and other services

- The commercial feasibility of providing programme services via ADSL in a range of regulatory environments.
- The appropriateness of including roll-out conditions in a licence to deliver digital television via ADSL
- The offerings operators propose to make.

2.1.1 Respondents

Eleven organisations and two individuals responded in writing to the consultation document, as listed below:

- Alcatel
- Competition Authority
- Department of Enterprise, Trade and Employment
- Eircom
- Esat
- Filmmakers Ireland
- Forfas
- Future TV
- Irish Multichannel
- Dr Michael Barrett
- NTL
- Peter Branagan
- TV3

The Director wishes thanks to everyone who contributed to the consultation. With the exception of material marked as confidential, the written comments of respondents are available for inspection at the ODTR's office in Dublin.

3 LEGISLATIVE BACKGROUND

This distinction drawn between telecommunications which has its own legislation dating back into the eighteenth century and broadcasting which has its origins in the Wireless Telegraphy Act, 1926 (the "1926 Act") and in the development of technology over time, remains a feature of both the legislative and regulatory landscape. This is because different circumstances obtained in both sectors at the time of legislative update in 1998 and 1999. The Commission of the European Communities has recently presented a proposal for a Directive on a common regulatory framework² aiming towards a simpler, technology neutral regime for electronic communications networks and services as a whole. The implementation of this proposal is likely to require fundamental changes to the regulation and licensing of television service delivery in Ireland, most notably the redundancy of traditional distinctions between telecommunications and broadcast transmission.

The cable and MMDS licences issued under the Wireless Telegraphy (Programme Services Distribution) Regulations (SI. No. 73 of 1999), grant limited exclusivity to the licensee for the delivery of Licensed Programme Services over Cable/MMDS or any equivalent system, until April 2004. The General and Basic Telecommunications Licences do not authorise licensees to deliver Licensed Programme Services.

4. FORMAT OF THIS DOCUMENT

This document presents the outcome of the consultation. Specifically, this document:

- Outlines the issues addressed by the response to the consultation document;
- Summarises the views provided by the respondents;
- Presents the Director's proposals for a way forward on the issues arising in, and from, the consultation.

² Proposal for a Directive of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services presented by the Commission on 12th July 2000. See http://europa.eu.int/comm/information_society/policy/framework/index_en.htm

Each section of the report is divided into three parts:

- A summary of the questions together with the supporting text.
- A summary of the responses to the question.
- The Directors conclusion/and brief analysis and planned next steps.

Before going into the detail of the questions and the responses, the Director wishes to draw attention to some general comments made on the consultation by the Competition Authority, the Department of Enterprise, Trade and Employment. Both organisations believed that, before delivery of Licensed Programme Services over ADSL would be considered, ‘full’ unbundling of the local loop should be practically implemented. A summary of some general points made by these two bodies and others is presented in the Annex.

5. THE TECHNICAL CAPABILITY OF ADSL

The proposal to deliver Licensed Programme Services over the telecommunications backbone is largely dependent on ADSL technology, hence the consultation paper and the responses concentrated on this technology.

5.1 Consultation Issues: Technical Aspects

Questions 1,2 and 3 addressed the technical capability of ADSL to deliver quality digital television.

- Q1 The technical capability of ADSL to deliver digital television services?
- Q2 The quality, in terms of picture quality and reliability that the respondents believe is appropriate to offer customers?
- Q3 The nature of digital television services would be delivered by ADSL i.e. how many channels, what level of interactivity and what level of Internet service would respondents consider ADSL capable of delivering?

5.2 Views of the Respondents

Respondents expressed diverse opinions as to the technical capability of ADSL to deliver television services. Only three respondents, including a telecommunications operator and equipment provider, contended that, ADSL can deliver digital television at least as good, in terms of sound and picture quality, as is currently available by analogue transmission. One respondent was of the opinion that the picture quality of ADSL DTV would be as good as digital television delivered by any other means including cable and MMDS. Four respondents including *eircom* expressed confidence in the ability of ADSL to deliver up to 100 channels, along with several other services by digital means. Two respondents said that it was not possible to objectively assess Digital Television picture quality. Some respondents, a mixture of telecommunications and cable operators, were very cautious about the capabilities of ADSL. Some contended that ADSL was more appropriate for the delivery of high speed internet access, Video on Demand and other forms of interactive TV, rather than multi-channel viewing. Local loop length was seen as a considerable limitation to the technical capabilities of ADSL in delivering high bandwidth services such as television programme services on a universal basis.

5.3 The Position of the Director

The ODTR has carried out some investigations into the effectiveness of ADSL technology. The view of the Office is that given the current state of development of ADSL networks, it is uncertain whether an ADSL network would be able to offer a service technically equivalent to Digital Cable in terms of picture quality. However, it is expected that in the future the picture quality of the services offered may improve when the MPEG 4 compression scheme has an accepted standard for video streaming.

The degree of quality is not equally critical for all services, for example video on demand is a service which competes directly in the home rental video market. Accordingly a lower quality 'VHS' grade picture may be entirely appropriate. Similarly, in relation to interactive television, it is the interactive nature of the service rather than the sound and visual quality, which is likely to be the selling point.

The Director is also cognisant of the effect that loop age and length will have on the capacity of the network to support the product available to the consumer over ADSL

and feels that little detail was given in the responses as to how operators could overcome such limitations. As a result of this the Director believes that more consideration and discussion is required on these issues.

5.4 Consultation issues: Capacity and Backbone Integrity

Question 5 asked about:

- The capacity of the PSTN backbone to cope with the transmission of digital television, including licensed programme services by ADSL? Also whether it is likely that supplying such services would have an adverse effect on the quality of other services, either traditional voice telephony, or data transmission?

5.5 Views of the Respondents

There appeared to be a general consensus that, with good planning, interference with traditional voice telephony services could be avoided. Most respondents agreed that dedicated backbone capacity would have to be allocated to such a service and that at the moment such capacity is not available on the backbone network. A minimum dedicated capacity of at least one STM1 (155Mbps) would have to be dedicated to the delivery of Licensed Programme Services.

5.6 The Position of the Director

Whilst it is not the Director's intention to predetermine, or set limits in the regulatory regime, on the possibilities and capabilities of new technologies such as ADSL, the integrity of the PSTN backbone is vital. Trials need to be conducted to assess the increased load that the delivery of Television services over an ADSL network would place on backbone capacity. These trials would need to demonstrate that the system has the capacity to deliver television services without compromising the delivery of existing telecommunications services, before the regulatory regime could be adapted for that purpose. Some respondents pointed out that ADSL is already being used to deliver television services in the United Kingdom. However it is important to assess the capacity of the backbone network in Ireland in order to know what ADSL can feasibly deliver here.

6. COMMERCIAL VIABILITY

6.1 Consultation Issues: General Viability

In questions 4, 6, 13, 14 and 15 Respondents were asked for their views on;

- Q4 Whether they saw digital television services delivered over ADSL as a commercially viable product for the retail market?
- Q6 Whether they believed that ADSL would be an appropriate platform to provide 'Licensed Programme Services' as envisaged by the current television transmission regime? If your answer is yes, please explain why?
- Q13 What conditions would you envisage in regard to roll-out and what kind of programming/other services would you consider providing?
- Q14 The minimum 'take up' for viability of an offering?
- Q15 The level of fee respondents proposed to charge?

6.2 Views of the respondents

It is apparent from the responses that there is at present some but not widespread interest in delivering licensed programme services over the PSTN via ADSL. The contention was that the commercial viability of doing so is dependent upon a number of contingencies. Four respondents saw the need for high penetration rates in high-density urban areas. They also emphasised the importance of "exploiting economies of scale" in order to maximise the commercial viability of such an undertaking and that they did not consider rural coverage a viable proposition. Those who were interested in ADSL felt that there should be no restrictions on the services they could deliver over ADSL. No respondents suggested any fee structure and the views on the minimum number of subscribers necessary for a viable product ranged between 50,000 to 250,000.

6.3 Position of the Director

ADSL as a Licensed Programme Services delivery platform requires a large capital investment and consequently the capture of a large customer base. The Director is not convinced that the delivery of Licensed Programme Services is essential to the

viability of ADSL as a whole. While the Director prefers to let the market decide on the delivery of specific services, she would need to be more convinced as to the benefits of a regime for the delivery of Licensed Programme Services over ADSL.

6.4 Consultation Issues: Viability of Locations Served

Questions 7, 8, 9, 10, 11 and 12 asked

- Q7 Do you believe that ADSL would be an appropriate platform to provide digital television, including ‘licensed programme services’, in circumstances where the Director withdraws exclusivity from a Cable or MMDS operator who is in default of their licence obligations?
- Q8 Do you believe that digital television, including Licensed Programme Services, delivered via ADSL would provide for quick roll-out of digital services, should the Director determine that Cable /MMDS operators are in default of their licences, and consequently withdraw their licence obligations?
- Q9 Whether there is a case for establishing a licensing regime for ADSL in non-cabled areas?
- Q10 Whether operators would be interested in providing an ADSL based television service in MMDS franchises areas only?
- Q11 Whether telecommunications operators would consider preparing for the provision of licensed programme services in either of the circumstances outlined above and what their major decision points would be?
- Q12 Are there any other issues that you believe should be taken into consideration?

6.5 Views of Respondents

eircom suggested that a rapid roll-out was needed firstly in areas with high population density. Deployment in rural areas was generally seen as less viable, due to the smaller population served by each switch and because of limitations associated with the length of local loop. Hence, there was no support for the delivery of Licensed Programme Services via ADSL in non-cabled areas only. In expressing this opinion respondents did not appear to consider the commercial viability of deployment in large towns falling outside areas licensed for the provision of cable television. It would appear, therefore, that proponents of ADSL are mainly interested in providing services only in Dublin.

There was little support for the proposition that ADSL might provide licensed programme services on a default basis. *eircom* was particularly opposed to using ADSL as a 'stop gap' or 'plan B' to supplement Cable and MMDS. It reasoned that ADSL will take time and investment to deploy, that such an ad hoc approach would not be conducive to investment and would therefore be disadvantageous both to operators and consumers.

Supporters of ADSL indicated a strong preference for letting the market provide incentives for roll-out. One respondent a telecommunications operator said that it was unnecessary to have roll-out obligations in relation to cable networks, as cable companies needed no incentive other than exclusivity to invest in their networks. Cable operators pointed to their more onerous obligations especially in terms of network roll-out.

6.6 Position of the Director

The Director notes the response in relation to areas where a Cable/MMDS operator may fail to deliver full services under the licences. The Cable MMDS regime was developed to provide for near national coverage of Digital Television services in competition with DTT. It does not appear that the proponents of ADSL have taken sufficient note to date of that framework.

The Director noted the responses in respect of defaults and considers that this aspect deserves further consideration. She noted that no respondents expressed any interest in providing service to many of the large non cabled rural towns and feels that this subject is worthy of further consideration. The Director believes that the expounded restrictions on local loop length are not valid reasons to exclude such towns from any proposed ADSL network.

7. REGULATORY ISSUES

7.1 Consultation Issues :Regulatory Matters

A number of responses to questions 6 ,7,8 and 9 raised regulatory issues.

7.2 Views of the Respondents

Three broad issues were raised by the respondents;

- The lack of symmetry between the telecommunications and the Cable/MMDS licensing regimes.
- The need for access to the local loop, via full copper unbundling.
- The scope of cable exclusivity.

7.2.1 Regulatory symmetry

Four respondents were concerned to highlight the inappropriateness of the perceived asymmetry between the cable and telecommunications licensing regimes. It was contended that as cable operators were permitted to offer bundled services including telecommunications services to their customers, telecommunications operators should be authorised to deliver licensed programme services over the PSTN. One respondent argued that it was necessary to authorise the delivery of licensed programme services over the PSTN to provide further choice and competition in the television service delivery market. One respondent commented that telecommunications operators delivering licensed programme services should be subject to "must carry" obligations

7.2.2 Unbundling the Local Loop

Six respondents expressed concern about allowing the delivery of licensed programme services over the fixed line network before all licensed operators have non-discriminatory access to the local loop. There was a concern that to do so would allow *eircom* a 'first mover' advantage in terms of bundling voice telephony, Internet access and digital television services, before other operators are in a position to compete. It was a widely held view that full copper unbundling and the co-operation of *eircom* in regard co-location, fault handling and line maintenance would be necessary to allow other operators to compete in the provision of fixed line broadband services.

7.2.3 Scope of Cable Exclusivity

Cable television operators believed that the delivery of licensed programme services by telecommunications licensees over the PSTN in cable franchise areas prior to April 2004, would constitute a breach of cable exclusivity. The telecommunications network, they argued, would essentially become a "wired broadcast relay system", that is, a cable equivalent system. Conversely *eircom* was equally sure that delivery of programme services via ADSL in cable franchise areas would not amount to a breach of cable exclusivity as the switched telecommunications network would not be operating as a cable equivalent system.

7.3 Position of the Director

It is apparent from the responses to the consultation paper that most respondents to this section want a 'level playing field' between the Cable and MMDS licenses and any proposed licensing scheme for ADSL. However despite converging means of service delivery and a proposed new regulatory regime to address these changes, different circumstances pertain, in Ireland, to cable networks and switched telecommunications networks at present. Further analysis is required to ascertain how full regulatory symmetry could be achieved, given the extensive roll out obligations imposed on cable operators and the improbability, initially at least, of ADSL being deployed to rural areas.

The Director is cognisant of the fact that in relation to unbundling the local loop, the majority of the respondents have emphasised that full copper unbundling and non-discriminatory access ought to be a pre-requisite to changing the telecommunications licensing regime to allow the delivery of licensed programme services. As ADSL technology is still being developed and tested it is unlikely that the network could be upgraded sufficiently for the delivery of a full range of services via ADSL prior to new entrants becoming entitled to request access to the local loop. The Director directed *eircom* in 1999 not to introduce any service for its retail arm that would not also be available to its competitors. In the interests of competition and establishing a 'level playing field' it would be appropriate for new entrants and 'other licensed operators' to be able to offer their services at the same time as the incumbent operator.

7.4 Consultation Issues: Other Services

As indicated in the consultation paper it is not possible to be completely definitive about the services that may be delivered under a telecommunications licence, in addition to Internet access and interactive services such as Video on Demand.

Question 16 asked;

Are there other services that respondents are currently considering offering that they wish to have included in a non-exhaustive list of telecommunications services?

7.5 Views of the Respondents

Whilst some respondents felt it was premature to commit to offerings others indicated that services such as time-shifted TV, local TV, interactive educational services, music services, high speed internet, health information services, e-business, e-government, e-mail, interactive TV and Video on Demand would be offered over the network.

7.6 Position of the Director

As many respondents pointed out, regulatory certainty is a necessary condition to encourage investment and develop a service. The regulatory regime is clear in many respects. The Director notes that while some respondents were willing to indicate the type of services they saw as being appropriate to ADSL, others felt it was premature to commit to offerings at this stage. Of the list raised by respondents some, such as e-mail, interactive services and Video on Demand are telecomms services. It is difficult to see how time shifted TV or Local TV would not come within the definition of Licensed Programme Services.

8. CONCLUSIONS

- As a result of the consultation the Director considers that there is enough interest in the delivery of Licensed Programme Services over ADSL and Telecommunications networks in general to conduct a detailed examination on how and whether this may be achieved.

- This report will examine the following issues;
 - The results of the ADSL trials current being conducted by *eircom*, with the involvement of other licensed operators
 - The capacity of the network to cope with the extra traffic generated by the provision of programme services and other services.
 - The incumbent's obligations with regard to other licensed operators particularly in relation to the European Regulation on unbundling the local loop.
 - The need to facilitate competition for the benefit of Irish consumers and businesses

In the interests of competition the Director feels it is important that a level playing field be established before any such licences are introduced.

The Director is also minded that any new licensing scheme should take into account the new proposals from the EU commission regarding the licensing of electronic communications services.

Annex

Summary of responses, which did not directly deal with the questions in the consultation paper:

- **The Competition Authority**
 - Expressed a concern that *eircom* would be able to consolidate upon its current dominance (even when the local loop is unbundled) by offering bundled services. It is interesting to note that *eircom*, in its response, indicated that it would be providing differentiated bundled services.
 - The Competition Authority pointed to the UK experience with BskyB and raised concerns such as excessive pricing of telephony services and leverage of market power into other areas. It recommended that consideration be given to withholding the licence to distribute Licensed Programme Services until the local loop is unbundled and requiring *eircom* and cable companies to provide accounting information so that it can be determined whether companies are engaging in anti-competitive practices.

- **Department of Enterprise Trade and employment**
 - Expressed support for measure, which would increase choice and lower costs of accessing Licensed Programme Services. It believes that content/cost rather than content per se will be the unique selling point for operators.

- **Filmmakers Ireland**
 - Was concerned with ensuring the best environment for development and delivery of high quality content in the communications industry. It stressed the need for a flexible regulatory regime and a regulator with adequate competition powers to *prevent* anti-competitive practices. It is against a regime, which would allow operators to restrict viewers access to content. Telecommunications operators providing Licensed Programme Services should be subject to "must carry" obligations.

- **Dr Michael Barret**

- Believes that the most expedient means to deal with Licensed Programme Services via ADSL would be an exemption under the Wireless Telegraphy Act, 1926.
- And that section 3A of the Broadcasting Authority Amendment Act 1976 prohibits the provision and distribution of 'local programme matter' without a licence is broad enough to cover Internet Broadcasting. He points out that this has not been enforced.