



Commission for
Communications Regulation

General

Data collection by ComReg

**Background paper presented at the ITU's World
Telecommunications ICT Indicators Meeting, Geneva,
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An Coimisiún um Rialáil Cumarsáide

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1 Introduction

The Commission for Communications Regulation (ComReg) is the statutory body responsible for the regulation of the electronic communications sector (telecommunications, radiocommunications and broadcasting transmission) and the postal sector

ComReg was formed in December 2002 to replace the Office of the Director of Telecommunications Regulation (ODTR) which was established in 1997. This transition marked a move towards a regulatory model of a 3-person commission in December 2002 and the adoption of the European Commission's new regulatory framework for communications in July 2003.

ComReg collects a considerable amount of data on the Irish electronic communications sector. This paper discusses both the primary and secondary data collected by ComReg, the manner in which data is analysed and disseminated and the challenges of data collection and interpretation.

2 Quarterly Review data collection

2.1 Overview of data collection in ComReg

Data collection on behalf of ComReg is coordinated and led by the Market Development division.

Market Development is responsible for developing and maintaining an understanding of the status and potential development of the communications sector in Ireland. Identifying and gathering relevant information to enable ComReg to forecast any new developments and future trends is a core activity of this Division. Market Development is also responsible for issuing Market Information updates and liaises regularly with international telecommunication bodies such as the OECD and the ITU on market data.

ComReg's predecessor, the ODTR, began to collect primary data on the Irish telecommunications market in 1999.

Prior to this date, data was collected primarily by the national statistics office- the Central Statistics Office (CSO)- and the ministry responsible for policy in the area of telecommunications, the Department of Communications, Marine and National Resources. In addition the incumbent telecommunications operator, eircom (formerly Telecom Eireann) collected primary data on its subscribers, quality of service etc. which in turn was provided to bodies such as the OECD.

2.2 Quarterly Market Review

In December 1999, exactly 12 months after the Irish telecommunications market was liberalised, the ODTR published its first market review.¹

2000 saw the launch of the ODTR's Quarterly Review, a publication issued every three months containing statistical analysis of the Irish telecommunications market.

There were some difficulties initially with this process. A combined questionnaire was initially sent to all operators including mobile and cable companies. As the fixed line section grew more detailed and extensive, it was decided that a specific mobile questionnaire be issued to the mobile operators and a combined questionnaire to the fixed and cable companies.

Responses to the questionnaires were initially low as operators were reluctant to respond, due to concerns regarding confidentiality and the manner in which data submitted would be used by the ODTR.

The ODTR worked with the industry to establish guidelines for handling commercially-sensitive information.

There are still some issues with data collection however as some of the operators' internal systems are not always capable of extracting the data requested.

¹ Liberalisation in the Irish Telecommunications Market – one year on (ODTR document 99/71) available at <http://www.comreg.ie/fileupload/publications/odtr9971.pdf>

The process has become more automated by means of:

- Building relationships with the operators and the people directly involved in collecting the information. Both the ODTR and ComReg have met operators who have queries regarding the questionnaire, and a timetable is sent to the operators at the beginning of the year outlining date on which the questionnaire is to be issued and returned as well as the date on which the quarterly report is due to be published.

A database was established in 2000 using Microsoft Access with links to data in Microsoft Excel to enable trend analysis and accuracy checks and also to facilitate the efficient extraction of various key indicators.

While this has helped the process, various checks still take place between ComReg and the operators once the data is submitted.

The operators have a month to complete the questionnaire and ComReg has 3-4 weeks to carry out the data analysis before some of the data is published. (The period of time for analysis is dependent on how soon after the due date the questionnaire is submitted).

The submissions are analyzed and queries are then sent back to the operators regarding the data to explain any variances and to ensure accuracy. This requires daily correspondence between ComReg and the operators before we are satisfied with the data.

2.3 Issues with Quarterly Review data collection

2.3.1 Accuracy

ComReg can never be sure of 100% accuracy as responses from operators are not audited in any fashion for reliability and accuracy. This is an issue ComReg intends to examine going forward.

2.3.2 Double-counting

Other inaccuracies can occur where there is “double counting”. This is particularly evident in certain segments such as Internet subscribers (in many cases subscribers can have more than one Internet account, with one or several ISPs) and leased line circuits. Due to these concerns, certain data is not made publicly available by ComReg.

2.3.3 Publicly available data

Not all of the data collected is published.. ComReg must take account of a number of considerations in deciding what data is to be made publicly available:

- (1) The number of operators in the market – e.g. the cable market has only 2 main operators; therefore a lot of cable data is not published for confidentiality reasons.
- (2) National legislation– ComReg is subject to the Freedom of Information Act which provides the requester with an automatic right to request

access to information not found in the public domain. The implication of this is that we are required to provide information requested unless it is deemed to be commercially sensitive.

- (3) Accuracy of the data – if ComReg is not confident that the data is accurate then it will not be made public.

This publication has continued to be published 4 times a year by the ODTR and its successor ComReg and is currently being reviewed. The report is one of the most popular documents published by ComReg, based on the number of hits generated on our web site and the media coverage each report receives. ComReg intends to issue a public consultation in early 2005 seeking input from the industry and the general public on future data collection and analysis of the Irish market

3 Market Analysis data collection

The new regulatory framework for electronic communications networks and services was transposed into Irish Law on 25th July 2003. The Framework requires ComReg to carry out a market review, which entails examination of the competitive environment of electronic communications networks, through the process of market definition and market analysis.

In the past 2 years ComReg has analysed a number of markets based on markets defined by the European Commission in its Recommendation on Relevant Markets. ComReg can consider additional relevant markets – so-called Article 7 Markets- but in practice has not done so to date.

The process of data collection for market analysis began with a workshop with the main telecommunications companies or operators in January 2003. Questionnaires were then sent out to operators in February 2003:

- Fixed operators received one questionnaire
- Mobile operators received one questionnaire
- Broadcasting operators: 7 questionnaires were sent to the various operators - cable, satellite, deflector, radio etc

Operators were given 6 weeks to respond

Information was requested for half 1 and half 2 from 1999 until 2003.

CFO² sign off was requested on all submissions for the purpose of quality assurance.

ComReg has not decided how often it intends collecting this data going forward.

There have been further data requests since the original submissions have been analysed.

Ongoing clarification of data – particularly on the fixed market analysis. Many operators experienced difficulties with disaggregating certain sets of data while some had problems with providing historical data. As a result of experiences learned from this exercise the fixed questionnaire will be amended going forward.

² CFO = Chief Financial Officer

4 Additional data collection

ComReg also commissions end-user surveys on a regular basis to supplement and complement our primary data collection. Both residential and business consumers are surveyed on their access, usage and attitudes to communications service such as fixed voice service, narrowband and broadband internet access, mobile voice and data and postal services.

These surveys are published in full on our web site with accompanying analysis by ComReg.

In 2004 ComReg commissioned the following studies among others:

- Residential telephone survey on consumer attitudes to telecoms services (March 2004)
- Quarterly residential face-to-face survey on consumer access to and use of internet services (March, June, September and December 2004)
- Telephone survey of small and medium enterprises and large corporate companies access to and use of datacommunications services (June 2004)
- Telephone survey of small and medium enterprises on their attitudes to the Irish telecoms market (December 2004)
- Telephone survey of residential consumer usage of PayTV services (June 2004)
- Focus group research on residential consumers attitudes to PayTV (June 2004)

Data collection by ComReg/ Background paper presented at the
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Appendix A – Sample quarterly market review questionnaires

**Private & Confidential**

Quarterly Report
Questionnaire to Mobile Operators
For the three month period 01/07/2004-30/09/2004

Please return the filled-in form by **Friday 12th November 2004**, to the following address:

Commission for Communications Regulation
 Block DEF,
 Abbey Court,
 Irish Life Centre,
 Lower Abbey Street,
 Dublin 1.
 (Ireland)

For information

Please direct any queries you may have to:

Contents

- Operator Details
- Mobile Services

**Operator Details:**

Licensee:	
Address:	
Telephone:	
Fax:	
Web-site:	
Contact Person:	
Email address:	

Company Information

No. of employees¹	001	
Number of Base Transceiver Stations - 2G		
Number of Base Transceiver Stations - 3G		

Services Offered:	003	

¹ No. of full time employees directly attributable to the telecom sector as at 30/09/2004

² For the 12 month period to 30/09/2004

Mobile Services

1 Prepaid Subscribers

	2G	3G	Total
Number of subscribers at start of period ¹			
Number of new subscribers during period			
Number of subscribers disconnected			
Total Number of prepaid subscribers	0	0	0

2 Contract Subscribers

	2G	3G	Total
Number of new subscribers at start of period			
Number of new subscribers this period			
Number of subscribers disconnected this period			
Total Number of contract subscribers	0	0	0

	Prepaid	Contract	Total
Churn Rate ²			

3 Number of Mins (Prepaid & Contract)

Number of minutes to Fixed Lines		000s mins.
Number of minutes to same mobile network		000s mins.
Number of minutes to other mobile network		000s mins.
Number of outgoing international minutes		000s mins.
Number of minutes whilst roaming abroad		000s mins.
Number of minutes - other mobile services (e.g. data services - incl. voicemail, DQ, call completion, etc.)		000s mins.
Total Number of Minutes	0	000s mins.

4 SMS (Prepaid & Contract)

Number of SMS messages	
SMS revenues	000s euro
Number of Premium SMS messages	
Premium SMS revenues (euro 000s)	000s euro

5 Mobile Telephony Revenues (Prepaid & Contract)

Gross Handset sales		000s euro
Connection, rental and other charges		000s euro
Domestic traffic revenues		000s euro
International Roaming revenues ³		000s euro
Premium Rate Services		000s euro
Other mobile services (e.g. data services - incl. voicemail, DQ, call completion, etc.)		000s euro
Total Revenue	0	000s euro

	Prepaid	Contract	Total
Average Revenue Per User (ARPU) ⁴			

6 Interconnect Traffic

	To / from Domestic Operators (000s mins)				To / from International Operators (000s mins)			
	Peak	Off-Peak	Weekend	Total	Peak	Off-Peak	Weekend	Total
Terminating voice traffic				0				0
Terminating SMS traffic				0				0

7 Interconnect Revenues (euro 000s)

	To / from Domestic Operators (€000s)				To / from International Operators (€000s)			
	Peak	Off-Peak	Weekend	Total	Peak	Off-Peak	Weekend	Total
Terminating Voice Traffic Revenues				0				0
Outpayments to other operators for voice traffic				0				0
Terminating SMS Traffic Revenues				0				0
Outpayments to other operators for SMS traffic				0				0
Net Revenues - Interconnect	0	0	0	0	0	0	0	0

	Fixed Operator	Mobile Operator
Number of Interconnection Agreements		

8 Coverage

	2G	3G
Population		
Geographic		

¹ The term 'subscribers' refers to active subscribers - i.e. those who have made a call on the network within the previous 3 months.

² Churn is calculated by expressing the sum of disconnections for the preceding twelve months as a percentage of the weighted average number of customers for the same period.

³ International roaming revenues include revenues from foreign roamers making calls on the operator's own network in Ireland, as well as any revenues gained from own network subscribers roaming on foreign networks abroad.

⁴ Average revenue per user (ARPU) is calculated by dividing the total service revenue from sales to customers for the preceding twelve months by the weighted average number of customers for the same period.

Total service revenue includes voice revenue, data revenue, interconnection revenue and roaming revenue.

Quarterly Report
Questionnaire to Fixed Operators
For the three month period 01/07/2004-30/09/2004

Please return the filled-in form by **Friday 12th November 2004**, to the following address:

Commission for Communications Regulation
Block DEF,
Abbey Court,
Irish Life Centre,
Lower Abbey Street,
Dublin 1.
(Ireland)


or send by email to

For information

Please direct any queries you may have to:

Contents

- Operator Details
- Section A: Fixed Networks - Subscriptions & Access
- Section B: Fixed Networks - Voice Services
- Section C: Broadband / Internet Subscriptions
- Section D: Leased Lines / Data Services
- Section E: Broadcasting & Satellite Transmission Services

[illegible]

Section A: Fixed Networks - Subscriptions & Access

A1

Direct Access

1. PSTN Services

		Wholesale		Business		Residential
Number of subscribers	A1		A2		A3	
Number of access lines	A4		A5		A6	
Number of access csdfasdf	A7		A8		A9	

2. ISDN Services

Basic ISDN Services (2B+D)

		Wholesale		Business		Residential
Number of subscribers	A10		A11		A12	
Number of access lines	A13		A14		A15	
Number of access channels	A16		A17		A18	

Fractional ISDN Services

		Wholesale		Business		Residential
Number of subscribers	A19		A20		A21	
Number of access lines	A22		A23		A24	
Number of access channels	A25		A26		A27	

Primary ISDN Services (30B+D)

		Wholesale		Business		Residential
Number of subscribers	A28		A29		A30	
Number of access lines	A31		A32		A33	
Number of access channels	A34		A35		A36	

A2

Indirect Access - PSTN Services

1. Carrier Pre-Selection

		Wholesale		Business		Residential
Number of CPS Subscribers	A37		A38		A39	
Of whom take:	A40		A41		A42	
- All Calls	A43		A44		A45	
- National Calls	A46		A47		A48	
- International Calls	A49		A50		A51	

		Wholesale		Business		Residential
Number of CLIs	A52		A53		A54	
Of whom take:	A55		A56		A57	
- All Calls	A58		A59		A60	
- National Calls	A61		A62		A63	
- International Calls	A64		A65		A66	

		Wholesale		Business		Residential
Number of CPS Lines	A67		A68		A69	
Of whom take:	A70		A71		A72	
- All Calls	A73		A74		A75	
- National Calls	A76		A77		A78	
- International Calls	A79		A80		A81	

2. Other forms of indirect access - Carrier access & carrier selection

		Wholesale		Business		Residential
Number of indirect access subscribers ³	A82		A83		A84	
Number of indirect access lines	A85		A86		A87	
Number of indirect access channels	A88		A89		A90	

A3

Payphones

		Total
Number of public payphones ⁴	A91	

³ The term 'subscribers' refers to active subscribers i.e. those who have made a call on the network within the previous 3 months

⁴ Public terminals installed in private places should also be included (e.g. schools, restaurants, etc)

Section B: Fixed Networks - Voice Services

B1 Fixed Telephony - Retail Traffic (000s minutes)

		Wholesale ⁵	Business	Residential
Number of local minutes	B1	B2	B3	
Number of national long distance minutes ⁶	B4	B5	B6	
Number of international outgoing minutes	B7	B8	B9	
Number of minutes to mobiles (includes N. Ireland)	B10	B11	B12	
Number of dial-up Internet minutes ^{7a}	B13	B14	B15	
Number of payphone minutes	B16	B17	B18	
Other Minutes				
- Premium rate services	B19	B20	B21	
- Voicemail				
- Operator services	B22	B23	B24	
- freephone	B25	B26	B27	
- local	B28	B29	B30	
- callsave	B31	B32	B33	
- VPN minutes	B34	B35	B36	
- Other minutes (please specify)	B37	B38	B39	
Total Number of Minutes	B40	0.0	B41	0.0

B2 Interconnection and Other Traffic (000s minutes)

	(000s Minutes)
Call Termination - Interconnect Mins from Fixed Line Operators ⁸	B43
Call Termination - Interconnect Mins from Mobile Operators	B44
Transit Minutes	B45
International Access ⁹	B46
Ancillary Services ¹⁰	B47
Other Interconnect Traffic ¹¹	B48
Traffic passed to mobile operators	B49
Traffic passed to fixed operators	B50

B3 Fixed Telephony - Retail Revenues (000s euro)

	Wholesale 3		Business		Residential	
Retail revenues - local calls	B51		B52		B53	
Retail revenues - national long distance calls 4	B54		B55		B56	
Retail revenues - international outgoing calls	B57		B58		B59	
Retail revenues - calls to mobiles (includes N. Ireland)	B60		B61		B62	
Revenues from dial-up Internet traffic 7a	B63		B64		B65	
Retail revenues - payphone calls	B66		B67		B68	
Revenues from Other Minutes						
- Revenues from premium rate services	B69		B70		B71	
- Revenues from voicemail						
- Revenues from operator services	B72		B73		B74	
- Revenues from freephone	B75		B76		B77	
- Revenues from local	B78		B79		B80	
- Revenues from callsave	B81		B82		B83	
- Revenues from VPN traffic	B84		B85		B86	
- Other minutes (please specify)	B87		B88		B89	
Total retail revenues - all traffic	B90	0.0	B91	0.0	B92	0.0
Installation, connection, rental and other charges 12	B93		B94		B95	
Total Retail Revenues	B96	0.0	B97	0.0	B98	0.0

B4 Interconnection and Other Revenues (000s euro)

	(000s euro)
National Call Termination - Interconnect Revenues from Fixed Line Operators ⁸	B99
Call Termination - Interconnect Revenues from Mobile Operators	B100
Transit Revenues	B101
International Access Revenues ⁹	B102
Revenues from Ancillary Services ¹⁰	B103
Other Interconnect Revenues ¹¹	B104
Outpayments for Interconnection services to mobile operators	B105
Outpayments for Interconnection services to fixed operators	B106

NB: For Local, national and international mins/calls include simple voice calls only (including ISDN).

⁵ Wholesale here refers to minutes/revenues for resale, or any other wholesale arrangement that may be customers of the licensee

⁶ If no distinction is made between local and national calls, please enter figure for all domestic calls in 'national long distance calls' row. This category also includes calls to Northern Ireland.

^{7a} This refers to all retail calls that can be distinguished as Internet traffic

^{7b} This refers to all revenues from calls that can be distinguished as internet traffic except revenues from subscription services

⁸ This includes call termination revenues for primary, tandem, short and long double tandem traffic.

⁹ Includes Minutes/Gross Revenues (e.g. int'l settlement revenues, interconnection revenues, etc.) from the transit and termination of incoming international traffic.

¹⁰ This includes access to IN services (e.g. freephone, premium rate services, Internet and directory enquiries). If other services are included please specify.

¹¹ Includes call origination traffic. If other services are included, please specify.

¹² Included revenues from ISDN and private payphone lines

Section C: Broadband / Internet Subscriptions**C1 FRIACO / Dial-up Internet Subscriptions**

		Wholesale		Business		Residential
Number of dial-up Internet subscribers with no monthly subscription (i.e 1890, 1892, local calls) ¹³	C1			C2		C3
Number of dial-up Internet subscribers with a monthly subscribers - excl. FRIACO (i.e. 1891) ¹⁴	C4			C5		C6
Number of FRIACO Internet subscribers (i.e. 1893)	C7			C8		C9
Number of other Internet subscribers (e.g. leased line internet subscribers)						
Total Number of dial-up Internet Subscribers	C10	0		C11	0	C12
Revenues from dial-up Internet monthly subscriptions - excl. FRIACO (€000s) ¹⁵	C13			C14		C15
Revenues from FRIACO Internet subscriptions (€000s) ¹⁵	C16			C17		C18
Revenues from other Internet subscribers						
Number of ports	C19					
Number of wireline public points of access to the Internet (e.g. Kiosks, etc...)	C20					

C2 Broadband Subscribers ¹⁶**xDSL - LLU (OLOs entry only)**

			Business		Residential
Number of Full LLU lines installed			C21		C22
Number of Shared LLU lines installed			C23		C24

xDSL (eircom entry only)

		Full LLU		Shared LLU		Bitstream		Simple Resale
Number of agreements	C25			C26		C27		C28
Number of LLU Lines ordered, but not yet installed	C29			C30				

xDSL - Bitstream/Simple Resale

		Wholesale		Business		Residential
Number of Bitstream Lines	C31			C32		C33
Number of Simple Resale Lines	C34			C35		C36

SDSL

		Wholesale		Business		Residential
Number of SDSL subscribers	C37			C38		C39
Number of SDSL lines	C40			C41		C42

WLL / Fixed Wireless Access

			Broadband ¹⁶		Narrowband
Number of FWA subscribers			C43		C44
Number of FWA base stations	C45				

Fibre to the Premises (FTTx)

		Wholesale		Business		Residential
Number of Fibre (FTTx) connections	C46			C47		C48

Satellite / Free Space Optics

		Wholesale		Broadband ¹⁶		Narrowband
Number of satellite subscribers	C49			C50		C51
Number of free space optic links	C52			C53		C54

WLANs

Do you provide WLAN services to customers?	C55	
If so:		
Number of access points	C56	
Estimated number of terminals connected to each access point	C57	
Number of subscribers	C58	

¹³ This is the estimated number of dial-up Internet subscribers who are on 'pay-as-you-go' subscriptions.

¹⁴ This is the number of customers who subscribe to a dial-up Internet package which involves paying a reduced local call per minute charge plus a monthly subscription (e.g 1891 subscribers).

¹⁵ These revenue figures should relate to subscription revenues only. All dial-up Internet traffic revenues should be captured under cells B60-B62 'Revenues from dial-up Internet traffic'.

¹⁶ Broadband access is defined as speeds of 144kbit/s or greater.

Section D: Leased Lines and Data Services

D1

Leased Lines ¹⁷

National Leased Lines

National Leased Lines	Wholesale				Retail ¹⁸	
	No. of Connections	Revenues (€000s)		No. of Connections	Revenues (€000s)	
Analogue circuits	D1	D2	D3	D4		
64k - 128k (inclusive)	D5	D6	D7	D8		
192k - 512k (inclusive)	D9	D10	D11	D12		
576k - 1024k (inclusive)	D13	D14	D15	D16		
1088k - 1984k (inclusive)	D17	D18	D19	D20		
2 Mbps	D21	D22	D23	D24		
8 Mbps	D25	D26	D27	D28		
34 Mbps	D29	D30	D31	D32		
45 Mbps	D33	D34	D35	D36		
155 Mbps (STM-1)	D37	D38	D39	D40		
Above STM-1	D41	D42	D43	D44		
Total	D45	0	D46	0	D47	0

International Leased Lines

International Leased Lines	Wholesale				Retail ¹⁸	
	No. of Connections	Revenues (€000s)		No. of Connections	Revenues (€000s)	
Analogue circuits	D49	D50	D51	D52		
64k - 128k (inclusive)	D53	D54	D55	D56		
192k - 512k (inclusive)	D57	D58	D59	D60		
576k - 1024k (inclusive)	D61	D62	D63	D64		
1088k - 1984k (inclusive)	D65	D66	D67	D68		
2 Mbps	D69	D70	D71	D72		
8 Mbps	D73	D74	D75	D76		
34 Mbps	D77	D78	D79	D80		
45 Mbps	D81	D82	D83	D84		
155 Mbps (STM-1)	D85	D86	D87	D88		
Above STM-1	D89	D90	D91	D92		
Total	D93	0	D94	0	0	

D2

Web-Hosting & Co-location Services

Web - Hosting Services

Do you provide customers with web-hosting services?	D97	
If so:		
Do you provide dedicated web-hosting services to customers?	D98	
Do you provide virtual web-hosting services to customers?	D99	

How many square feet of dedicated web-hosting space do you provide?	D100	
How many square feet of virtual web-hosting space do you provide?	D101	

Revenues from web-hosting services (€000s)	D102	euro 000s
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Co-location services

Do you provide customers with co-location services?	D103	
If so:		
How many square feet of co-location space do you provide?	D104	

Revenues from co-location services (€000s)	D105	euro 000s
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D3

Other Data Revenues

Switched Data Revenues (€000s)

Packet Switch services revenue	D106	euro 000s
Frame relay revenue	D107	euro 000s
ATM revenues	D108	euro 000s
VPN revenues (excl. VPN traffic revenues)	D109	euro 000s
Other IP Switching revenues	D110	euro 000s

Total	D111	0	euro 000s
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Other services revenue (€000s)

Revenues from sale and maintenance of CPE	D112	euro 000s
Revenues from directory publications	D113	euro 000s
Other revenues (please specify)	D114	euro 000s

Total	D115	0	euro 000s
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¹⁸ This section does not include interconnect circuits

¹⁹ Please include revenues from the original sale or rental by the network operator and any other revenues from the reselling of leased lines as part of any value-added packages

Section E: Broadcasting & Satellite Transmission Services

E1	Cable/MMDS subscriber services - Analogue			
		Business		Residential
	No. of subscribers to Basic television service	E1	E2	
	No. of subscribers to Premium service	E3	E4	
	No. of subscribers to other services	E5	E6	
E2	Cable/MMDS subscriber services - Digital			
		Business		Residential
	No. of subscribers to Basic television service	E7	E8	
	No. of subscribers to Premium service	E9	E10	
	No. of subscribers to other services	E11	E12	
E3	Connections			
		Broadband		Narrowband
	Total number of cable modems	E13	E14	
	Total number of system outlets	E15		
	Number of new connections to system during the period	E16		
	Number of disconnections to system during the period	E17		
	Number of re-connections to system during the period	E18		
	Total number of households passed	E19		
	Number of households passed - digital	E20		
E4	Cable/MMDS Revenues (€000s)			
	Connection, rental and other charges	E21		000s euro
	Basic Usage Revenues	E22		000s euro
	Premium Usage Revenues	E23		000s euro
	Interactive TV Revenues	E24		000s euro
	Set-top box Revenues	E25		000s euro
	Total Cable/MMDS services Revenues	E26	0.0	000s euro
E5	Satellite Services			
	Number of subscribers in Ireland (e.g. Satellite News Gathering services, VSAT, etc...)	E27		
	Revenues generated in Ireland	E28		000s euro

²⁰ Broadband access is defined as speeds of 144kbit/s or greater.