

European Broadband Cable 2007



screendigest



Cable Europe

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European overview

Methodological notes

The data in this yearbook was collected with the collaboration of the European Cable Communications Association using a comprehensive survey sent to in-country cable trade bodies and leading commercial cable companies. Numerous interviews were also carried out with senior trade association staff and cable company executives in each country profiled. Other standard research resources were also used.

Definitions used in this report

ARPU: ARPU is an acronym for Average Revenue per Unit (or User) and is equivalent to the average revenue generated by each subscriber in a given period (usually monthly or yearly).

Basic television: the lowest level of service available for which the customer has to pay a monthly fee.

Cable Internet Access: access to Internet services over the cable wire (as opposed to a telephone wire).

Double-play: Double play describes a cable company offering two separate services (nearly always television plus Internet), or a customer taking two services from their cable operator.

DTH: Direct To Home (Satellite) television services. In order to create consistency between the countries covered in this report subscriber numbers are counted as total (free and pay television).

DTT: Digital Terrestrial Television

DSL: Digital Subscriber Line. A technology that allows on-demand television, broadcast services and high-speed Internet to be

offered over a standard copper telephone infrastructure. The system works by splitting digital information into manageable packets and then reconstructing the packets into a usable signal at the point of reception.

ADSL: Asymmetric Digital Subscriber Line, currently the most common form of xDSL technology

Extended basic television: channels or packages of channels which would in the past have been packaged in the basic tier but which have been split off and are now offered as an add-on to the basic service. Extended basic services are often themed mini-groupings of channels, thus in situations where a small and large basic option are offered, the larger basic would not be considered to be an extended basic package. Instead, both would be considered basic.

Homes passed: Homes passed is the number of homes passed by the physical infrastructure controlled by a given cable company. It represents the number of potential customers to a cable service or the number of homes that could take the cable services if they chose to do so.

IPTV: Internet Protocol Television IPTV is the delivery over a broadband network of television content using Internet protocol within a 'walled garden' network. IPTV has been widely used by telecoms operators to offer TV over their ADSL networks. IPTV can also be used by cable companies both within their own network infrastructure and as a means of expanding their service reach outside their areas of operation over unbundled third-party DSL networks.

On-demand TV

On-demand television is the delivery of TV content on request. Content is usually selected from a menu of available material and viewed one or more times within a period of time. There are a number of related terms and acronyms associated with this form of television as follows:

PPV: Stands for pay-per-view and refers to the business model used for on-demand television, where a charge is made for each piece of content viewed.

nVOD: Stands for near Video-on-Demand and refers to an on-demand television system in which multiple channels are used to show the same piece of content at staggered start times. The gap between each available viewing time is a factor of the number of channels dedicated to the service and the amount of content on offer, but would commonly be 15 minutes or half an hour. nVOD systems are used by satellite pay television operators like BSkyB which lack a broadband back-channel allowing true Video-on-Demand and by cable companies that have yet to fully upgrade their networks.

VOD: Stands for Video-on-Demand (sometimes for clarity referred to as true Video-on-Demand) is an on-demand television system in which content is stored on a server and streamed in real time to the viewer. VOD systems allow the customer to start viewing the content at any time as well as to pause and rewind the content.

Premium television: single or packaged of high-value channels that contain premium content and command a high customer subscriber fee. Examples would include Canal Plus, TV1000, Sky Movies.

PVR: A Personal Video Recorder (commonly known in the US as a DVR or Digital Video Recorder) is a type of set-top box that contains a hard disc onto which content can be recorded and stored. The PVR gives the end user VOD-like functionality and can also be combined with an nVOD service to give local access to content that is sold on a PPV basis. They have proved popular with satellite operators unable to offer VOD, but PVRs are also being rolled out by operators that have true VOD services because of the added viewing benefits that they bring (like capacity to pause and rewind 'live' TV).

Quad-play: Quad-play, is the addition by a triple-play cable operator of a fourth service. Quad-play is epitomised by the recent strategy of Virgin Media which has brought mobile services within its customer proposition through the acquisition of Virgin Mobile.

RGUs: A RGU or subscription represents an individual service contract and thus a single subscriber can represent several RGUs/subscriptions (for example one each for TV, telephone and Internet). One RGU represents one service contract.

Regions:

Benelux: The three countries that make up the Benelux region of Europe are: Belgium, the Netherlands and Luxembourg.

Scandinavia and Nordic: Scandinavia refers to the three Nordic countries of Sweden, Norway and Denmark, while the term Nordic also includes Finland.

Western Europe: The Western European countries covered in this report and the Western Europe totals include the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Central and Eastern Europe: The Central and Eastern European countries covered in this report and Central and Eastern European totals include the following countries: Czech Republic, Estonia, Hungary, Poland, Romania, Slovenia.

Europe: The Europe total is based on a sum of the countries included in Western Europe and Central and Eastern Europe as specified above.

Data conventions:

-- means not applicable

: means no data available

Thanks to:

Screen Digest and Cable Europe would like to thank all of the cable industry executives and staff who helped in the compilation of this book.

Finland

Key data

Licensing body/regulator	Ministry of Transport and Communications (regulator)
Duration of cable licence	no licence
Licence fee	no licence
VAT/Sales Tax (%)	22
Local Loop Capacity (Mhz)	300-860
Proportion of network capable two-way (%)	75
Proportion of network upgraded in last 12 months (%)	From 400 MHZ-606MHZ
Number of cable operators	30
Year of first cable launch	1975
Cable services offered	Television, digital television, cable telephony, cable Internet

Market overview

Cable services are a long established feature of Finland's TV landscape, with the first networks having been constructed in 1973. Although now received in over 50 per cent of TV homes, they face on-going competition from the DTH platforms Viasat and Canal Digital, a DTT operation that recently introduced a pay-TV option and a growing number of IPTV services.

- While there are currently around 30 cable operators in Finland, the market remains dominated by only a handful of players headed by Welho, formerly known as HTV. Wholly owned by SWelcome, a subsidiary of the Sanoma electronic media division SanomaWSOY, it traces its roots back to the early 1970s and was the first company in Europe to offer pay-TV services in 1978. It also introduced satellite channels on its network four years later.
- Welho has been offering broadband Internet access since 2000 and digital TV since 2001. It became a triple play company in 2005 and has more recently introduced HD to its programme offer.
- The other main cable grouping is comprised of four operators – 3KTV (Finnet), TTV (Elisa), Turku Cable and VLP (Vaasa Telephone Company) – that together account for around 60 per cent of cable connections in Finland. They have also operated commercial interactive MHP services in 2004.
- The incumbent telco Elisa launched an ADSL-delivered TV and VoD service in November 2006. A joint venture with Canal Digital, Viihdekaista includes a choice of six programme packages costing from €10 a month.
- IPTV services were introduced in Finland by Alands Datakommunikation (Alcom), a telco serving the Aland Islands, and are now offered by several companies. They include Helsinki-based Maxisat, which began developing its offer in 2000.
- DTT services are highly developed in Finland, having been launched on the same date in 2001 as digital cable. They are distributed by Digita, which is backed by TDF and the country's principal transmission company.
- A new DTT pay-TV service named PlusTV made its debut in November 2006. Operated by Digi TV Plus, it is funded by Baker Capital to the tune of €38 million, with other investors including the Nordic Venture capitalists Provider Venture Partners.
- Digita and Digi TV Plus have reached an agreement under which PlusTV's programmes will be distributed on a new mobile TV network. Employing DVB-H technology, this was due to make its debut in the Helsinki, Turku and Oulu regions, which encompass around 25 per cent of the population, in December 2006. Its coverage should rise to 40 per cent of the population by the end of 2007.
- The transition from analogue to digital broadcasting is well under way in Finland and due to be completed in August 2007.

Market size

- As of the end of 2006 there were nearly 1.3m connected cable homes in Finland.
- Finland's largest cable operator Welho claimed 305,000 cable TV and 58,000 digital TV subscribers in the Helsinki area at the end of 2006.
- The first two multiplexes of Digita's DTT service cover 99.9 per cent of the population living in continental Finland, while the third reaches between 78-85.4 per cent. Its fifth multiplex is allocated to the new DTT pay-TV service PlusTV, which on its debut reached 59 per cent of the population.
- The incumbent telco Elisa had over 300,000 ADSL subscribers at end 2006. Its new triple play service Viihdekaista should be available to over a million homes by the summer of 2007.
- Maxisat's IPTV service Maxinetti Multi can be received in over 400,000 households in the Helsinki area.

Range of services

- All the leading cable operators now offer digital TV and broadband Internet access. However, Welho is one of the few triple play companies, having introduced VoIP in March 2005. It also now offers Canal Plus HD as part of its Canal Plus Total package.
- Maxisat offers over 40 TV channels of IPTV, VoD, VoIP and Internet access at speeds of 8Mbps and 24Mbps employing both ADSL and ADSL2+ technology.
- PlusTV launched with just MTV3 MAX and the children's channel Subtv junior, both of which are owned by the commercial station MTV. At least eight more local and international services, including Discovery Channel and Eurosport, are likely to be added in 2007.
- Alcom's programme offer consists of two packages consisting of 14 and 34 channels. As of the beginning of 2007 its subscribers have also been able to receive a Canal Plus package.

Technology

- Welho has opted for Ortikon's IPTV middleware solution to produce TV and additional services on its broadband network.
- Ortikon also provides its IPTV middleware system to the cable operator

Finnet, while Teleste provides it with an advanced IP headend solution.

- Finnet is part of a consortium that also includes TTV, Turku Cable and VLP that employs an MHP platform produced by Ortikon. Ortikon's other clients in Finland include the DTT platform operator Digita.
- Welho subscribers can receive Canal Plus HD with Handan CV-500 HD set-top boxes, which support both MPEG-2 and MPEG-4 formats.
- The DTT pay-TV service PlusTV employs condition access supplied by Telenor's Conax.
- Alcom has deployed Paradyne's GrandSLAM 4200IP throughout its network for the delivery of data, VoD and IPTV over DSL services.
- The triple-play IPTV service offered by Maxisat multicasts in MPEG-2, employing Kreatel set-top boxes and a conditional access system supplied by Latens. It also uses a proprietary middleware system named Maxicaster.
- Maxisat has, in addition, opted for the Ruckus Wireless smart Wi-Fi system to distribute voice, video and data in subscribers' homes.

Competition

- Although the DTH platforms Viasat and Canal Digital do not enjoy the same degree of success in Finland as in other parts of Scandinavia, the cable industry faces growing competition from both the IPTV and DTT sectors.
- IPTV services are well established in Finland and offered by several companies. They include Maxisat and Alcom, as well as Finnet, which launched its offer in 2006.
- Significantly, the DTH platforms has now started to work with companies offering IPTV services. The deal between Canal Digital and the incumbent telco Elisa announced in November 2006 could be the first of many.
- DTT at first had little impact in Finland, with a free-to-air service that made its debut in 2000 attracting few viewers. Since being transformed into a paid-for service in 2004, however, it has gone from strength to strength and its attractiveness will have been further enhanced by the PlusTV package.

Regulation

The process of overhauling Finland's communications legislation got under way in earnest in 2000 and was undertaken in two stages. The first and most important, which took place in 2000/2001, saw the amendment of the Telecommunications Act (1997), while the second, in 2001/2002, produced a completely new piece of legislation known as the Communications Market Act. Since then, the government has focused on the formulation of a National Broadband Strategy designed to make the country a European leader in the use of broadband services.

- The Telecommunications Act helped paved the way for the success currently being enjoyed by Digita's DTT platform by dividing licences for DTT into those for network and programming. It also halved fees for analogue TV channels and withdrew them for digital terrestrial TV channels for the 10-year duration of their licences.
- The Communications Market Act meanwhile gave the Communications Regulatory Authority, formerly known as the Telecommunications Administration Centre, the authority to grant programme licences to digital TV operations.
- Cable operators are required to notify the Communications Regulatory Authority of any channels they retransmit and obtain licences for those they broadcast. Must-carry status is afforded to YLE, national commercial stations and all its channels.
- Cable operators who have a significant market share and do not meet their obligations risked being fined anything between €1,000 to €1m.
- The government opened a tender for TV and radio broadcasting in digital TV networks in February 2006. The analogue switch off date has since been fixed as August 2007.
- The National Broadband Strategy was unveiled in Q1 2005 and promotes the introduction of VoIP and Internet multimedia. It also sets an ambitious broadband target of 90 per cent of all Internet connections by the end of 2007.
- The Communications Regulatory Authority will start to issue programme broadcast licences for Finland's new mobile TV network in 2007. The awards will be made in accordance with the Act on Television and Radio Operations, also due to come into effect in 2007.
- Licences will only be required for the provision of radio and TV programming, but not such interactive services as games, on the new mobile TV network.

Cable prospects

Finland's cable industry faces a difficult situation as the country moves to full digital broadcasting in August 2007. Having operated for many years with little if any competition, it now has to contend with rapidly expanding IPTV and DTT sectors, as well as old rivals the DTH platforms Viasat and Canal Digital.

- The leading cable operator Welho appears well prepared for the challenges that lie ahead. A well-established triple-play company, it has recently begun to offer its subscribers HDTV programming. It is, in addition, preparing to launch an IPTV platform over its own broadband network.
- 3KTV (Finnet), TTV (Elisa), Turku Cable and VLP (Vaasa Telephone Company) are also refusing to take the prospect of more competition lying down and an MHP platform that provides interactive services.
- However, competition from both IPTV and DTT is likely to intensify. The deal that the incumbent telco Elisa has signed with Canal Digital is significant in that it is the first of its kind between an IPTV provider and DTH platform. More are likely to follow in the near future.
- Finland's DTT offer will also start to look increasingly attractive as the country moves towards analogue switch off. The TVPlus pay-TV service will shortly be enhanced by the addition of up to eight more channels, all of which were awarded DTT licences in late 2006.
- Cable also faces an additional problem with the original plan for an August 2007 analogue switch off date (co-ordinated with the terrestrial analogue switch-off). although the deadline has now been extended, as of February 2007 only 50 per cent of homes had purchased a digital receiver, which they will require to watch services from the public broadcaster YLE. Under the terms of current legislation, cable operators are themselves prohibited from down-converting YLE's signals to analogue.

Finland: Cable operators - subscribers

Company	Total TV subscribers 000s	Digital TV subscribers 000s	Internet subscribers 000s	Telephony subscribers 000s	Total RGUs 000s	Unique cable homes 000s
Welho (HTV)	305	58	86	1	392	311
Sonera	176	42	21	0	197	179
Tampereen Tietoverkko	104	42	13	0	117	108
Turun Kaapelitelevisio	94	40	4	0	98	97
Oulu TV	68	9	0	0	68	68
Others	527	148	65	0	592	538
Total	1,274	339	188	1	1,463	1,301

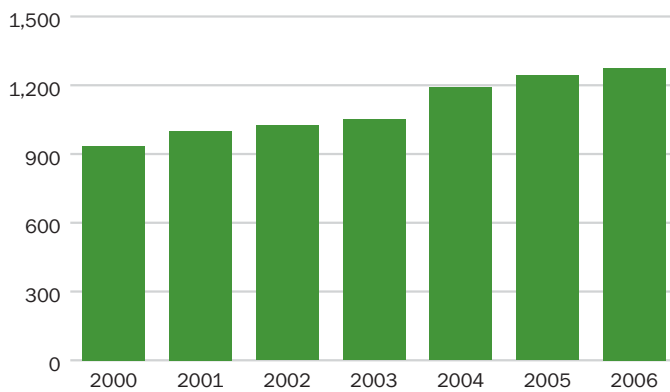
Source: Screen Digest

Finland: Cable operators - service launch dates

Company	digital TV launch date	Internet launch date	telephony launch date	VOD launch date
Welho (HTV)	September 2001	2000	2005	2007
Sonera	2004	2001	-	-
Tampereen Tietoverkko	April 2002	2001	-	-
Turun Kaapelitelevisio	2003	2006	-	2007
Oulu TV	2001	-	-	-

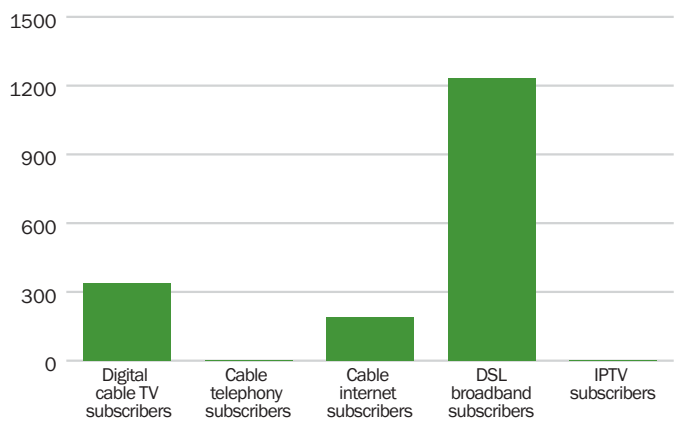
Source: Screen Digest

Finland: Total cable television subscribers (000s)



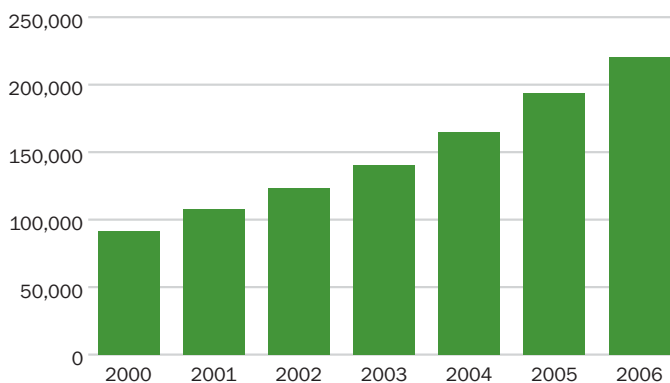
Source: Screen Digest

Finland: Subscribers to advanced cable services 2006 (000s)



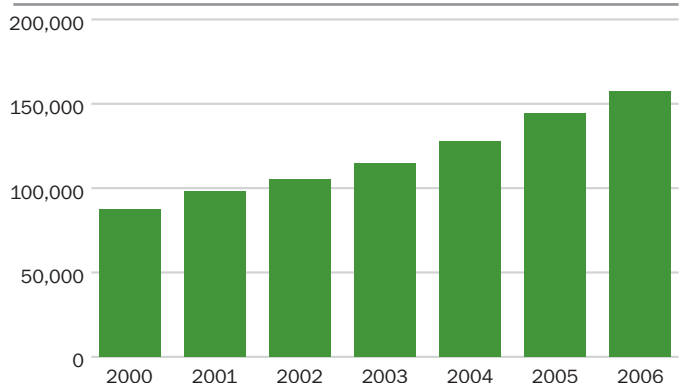
Source: Screen Digest

Finland: Annual total cable revenue (€000s)



Source: Screen Digest

Finland: Annual total cable television revenue (€000s)



Source: Screen Digest

Finland: Cable operators - market shares

Company	Cable TV market share %	Cable Internet market share %	Cable telephony market share %	total cable homes market share %
Welho (HTV)	23.94	45.64	100.00	23.91
Sonera	13.81	11.30	0.00	13.79
Tampereen Tietoverkko	8.16	6.83	0.00	8.28
Turun Kaapelitelevisio	7.38	1.99	0.00	7.44
Oulu TV	5.34	0.00	0.00	5.24
Others	41.36	34.24	0.00	41.34
Total	100	100	100	100.00

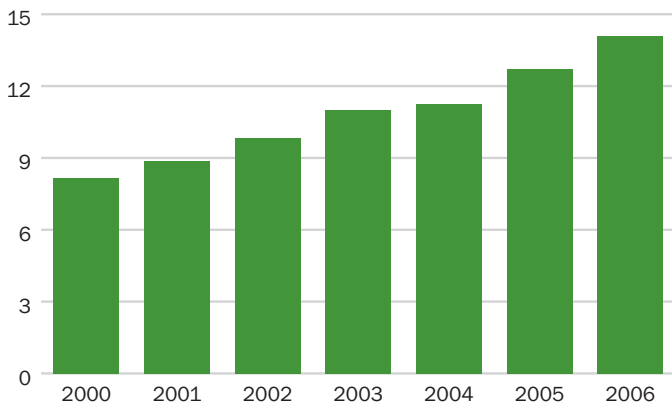
Source: Screen Digest

Finland: Cable operators - technology

Company	set-top box suppliers	digital middleware	conditional access
Welho (HTV)	Galaxis, Handan, Humax, Xsat	-	Conax
Sonera	-	-	-
Tampereen Tietoverkko	Humax	-	Conax
Turun Kaapelitelevisio	Force, Humax	-	Conax
Oulu TV	Galaxis, Nokia, Humax	-	Conax

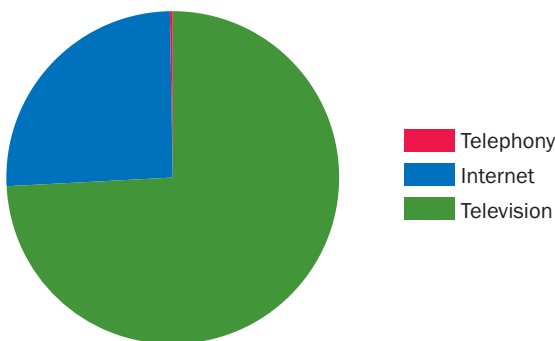
Source: Screen Digest

Finland: Average monthly revenue per subscriber (€)



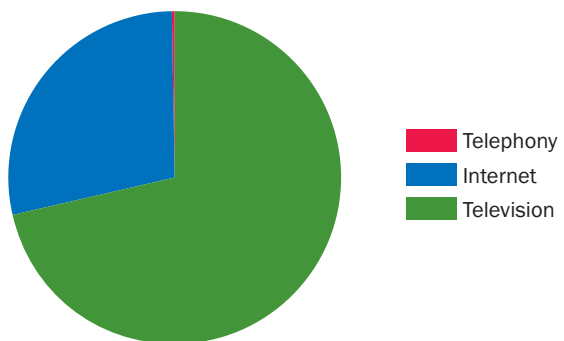
Source: Screen Digest

Finland: Revenue contribution by service (2005)



Source: Screen Digest

Finland: Revenue contribution by service (2006)



Source: Screen Digest

Finland

		2000	2001	2002	2003	2004	2005	2006
Country data								
TV households	000s	2,239	2,239	2,252	2,260	2,269	2,276	2,297
Cable operators	no	40	40	40	35	33	30	30
Cable homes passed	000s	1,500	1,550	1,600	1,700	1,750	1,800	1,840
Unique cable homes	000s	936	1,007	1,046	1,063	1,217	1,269	1,301
TV HH passed by cable	%	66.99	69.22	71.04	75.23	77.14	79.09	80.11
Market size								
Analogue cable TV subscribers	000s	935	995	1,016	1,030	1,068	1,015	935
Digital cable TV subscribers	000s	0	5	9	20	124	227	339
Wireless cable TV subscribers	000s	0	0	0	0	0	0	0
Total cable TV subscribers	000s	935	1,000	1,025	1,050	1,191	1,242	1,274
Cable Internet subscribers	000s	13	31	55	73	112	147	188
Cable telephony subscribers	000s	0	0	0	0	0	0	1
Total cable RGUs	000s	948	1,031	1,080	1,122	1,303	1,390	1,463
Penetration homes passed								
Analogue cable TV penetration homes passed	%	62.33	64.19	63.50	60.57	61.00	56.40	50.83
Digital cable TV penetration homes passed	%	0.00	0.32	0.56	1.18	7.06	12.62	18.42
Wireless cable TV penetration homes passed	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total cable TV penetration homes passed	%	62.33	64.52	64.06	61.74	68.06	69.02	69.25
Cable Internet penetration homes passed	%	0.87	1.97	3.44	4.28	6.42	8.17	10.24
Cable telephony penetration homes passed	%	0.00	0.00	0.00	0.00	0.00	0.01	0.04
Cable penetration homes passed	%	62.33	64.52	64.06	61.74	68.06	69.02	69.25
Penetration of TV HH								
Analogue cable TV penetration TV HH	%	41.76	44.44	45.11	45.56	47.05	44.61	40.72
Digital cable TV penetration TV HH	%	0.00	0.22	0.40	0.89	5.44	9.99	14.75
Wireless cable TV penetration TV HH	%							
Total cable TV penetration TV HH	%	41.76	44.66	45.51	46.45	52.50	54.59	55.47
Cable Internet penetration TV HH	%	0.58	1.36	2.44	3.22	4.95	6.46	8.20
Cable telephony penetration TV HH	%	0.00	0.00	0.00	0.00	0.00	0.01	0.03
Other platforms								
DSL broadband subscribers	000s	10	61	227	406	659	1,019	1,233
IPTV subscribers	000s	0	0	0	0	1	2	4
Free DTH subscribers	000s	140	135	137	133	131	124	120
Pay DTH subscribers	000s	23	51	56	60	58	70	84
Total DTH subscribers	000s	163	186	193	193	189	194	203

Finland (continued)

		2000	2001	2002	2003	2004	2005	2006
Revenue								
Annual basic TV revenue	local 000s							
Annual basic TV revenue	€000	61,056	66,697	70,861	76,539	84,397	94,540	98,388
Annual extended basic TV revenue	local 000s							
Annual extended basic TV revenue	€000	7,369	9,340	10,364	11,136	12,746	16,754	20,493
Annual premium TV revenue	local 000s							
Annual premium TV revenue	€000	18,982	21,794	23,982	26,941	30,194	31,933	37,213
total annual a la carte revenue	local 000s							
total annual a la carte revenue	€000	0	11	30	65	328	822	1,359
Annual total cable revenue (TV)	local 000s							
Annual total cable revenue (TV)	€000	87,407	97,841	105,237	114,681	127,665	144,048	157,454
Annual total cable revenue (Internet)	local 000s							
Annual total cable revenue (Internet)	€000	4,249	9,614	18,167	26,003	36,847	49,493	62,668
Annual total cable revenue (telephony)	local 000s							
Annual total cable revenue (telephony)	€000	0	0	0	0	0	23	114
Annual total cable revenue	local 000s							
Annual total cable revenue	€000	91,656	107,455	123,404	140,684	164,512	193,564	220,236
Average monthly revenue per subscriber (television)	local							
Average monthly revenue per subscriber (television)	€	7.79	8.15	8.56	9.10	8.93	9.66	10.30
Average monthly revenue per subscriber (Internet)	local							
Average monthly revenue per subscriber (Internet)	€	27.24	26.27	27.53	29.77	27.32	28.05	27.71
Average monthly revenue per subscriber (telephony)	local							
Average monthly revenue per subscriber (telephony)	€	0.00	0.00	0.00	0.00	0.00	9.50	11.88
Total average monthly revenue per subscriber	local							
Total average monthly revenue per subscriber	€	8.16	8.89	9.83	11.02	11.26	12.71	14.11
Revenue contribution by service								
Television	%	95.36	91.05	85.28	81.52	77.60	74.42	71.49
Internet	%	4.64	8.95	14.72	18.48	22.40	25.57	28.46
Telephony	%	0.00	0.00	0.00	0.00	0.00	0.01	0.05
Total	%	100	100	100	100	100	100	100

Source: Screen Digest