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Development of Digital TV in Europe

Finland / 1999

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1 Digital TV market overview

1.1 Roll-out of digital services

The following timetable outlines the milestones in the digital TV domain in Finland:

- ✓ 31.12.1995, first report from the Ministry of Transport and Communications: ”The Strategy for Broadcasting - Radio and Television 2010”
- ✓ 15.4.1996, 2nd report from the Ministry: ”The Digitalization of Broadcasting in Finland”
- ✓ 8.5.1996, The principal decision by the Government of Finland on digitalization of broadcasting in Finland
- ✓ 10.2.1997, Digital TV Expert Group of the Ministry was appointed
- ✓ 15.7.1997, “TV Finland” the first Finnish digital TV channel is launched via satellite. It uses the DVB-S system.
- ✓ 25.9.1997, first DVB-T (8k) - test transmissions using the YLE’s transmitter in Espoo Kivenlahti
- ✓ 15.5.1998, 3rd report from the Ministry by its Digital TV Expert Group
- ✓ 16.6.1998, Digital TV Forum Finland established
- ✓ October 1998, Canal Digital launches digital services, including 19 Pay-Per-View channels and an EPG, to the Finnish market.
- ✓ 16.12.1998, The Ministry declared the licences for digital television operations open for applications
- ✓ 23.6.1999, The licences for digital TV services in the first three multiplex-blocks in terrestrial networks were granted.

1.1.1 Satellite digital services

The penetration of direct satellite reception is not high in Finland. Approximately 100.000 households (4.3% of the Finnish TV households) are considered satellite households, and only 80.000 households are estimated to subscribe to a satellite TV service. They subscribe to the premium pay-TV services, Canal+ from Canal Digital (owned by the C+ group and Telenor, the national telecom company of Norway) and to its competitor TV1000 (owned by AB Kinnevik and Time Warner/HBO) from VIASAT.

As it can be seen from the timetable above, Canal Digital started its satellite digital TV service provision in autumn 1998[1].

[1] Canal Digital started digital transmission in the autumn 1997 with a test phase until the summer 1998. During the summer 1998 Canal Digital started transmitting their current digital services, but the subscription service and provision of program cards, etc., began only in the autumn 1998.

The market for digital TV at the end of 1998 was limited to the very few digital subscribers of Canal Digital (3000). It has not been possible to obtain information about the number of subscribers of Canal Digital's digital services in 1999, but according to Canal Digital there has been progress in the number of subscribers.

"TV Finland", the first Finnish digital satellite TV channel in Finland, provides programmes that are derived from those of TV1, TV2 (public TV channels), and MTV3 (commercial TV channel) is available in Canal Digital's general offer in other Nordic countries.

Like in other Nordic countries, VIASAT remains analogue.

1.1.2 Cable digital services

No digital cable services are available in Finland.

There are about 1,2 millions cable TV households (home passed) in Finland and over 1 million of these households subscribe to one or more services. Cable TV in Finland is provided by several small and big SMATVs. The main actors in cable TV in Finland are the "Finnet group"[2], HTV (Helsinki Television Ltd) and Sonera (Telecom Finland).

The following three main barriers to digitalization of the cable TV networks have been reported from actors in the sector:

- ✓ The costs associated with digitalization,
- ✓ The level of development and unavailability of set-top-box standards, specially for two way communication with return path within the cable network,
- ✓ The lack of "digital surplus"[3] – reported by some actors.
- ✓ In the following the technological development of HTV cable TV and Sonera cable TV are described in some details.

HTV cable TV is owned by Helsinki Media Company Oy, which since the beginning of 1999 is part of the Sanoma-WSOY Oy, the biggest media company in the Nordic countries and publisher of, e.g., the biggest newspaper in Scandinavia, Helsingin Sanomat. Today over 200,000 households in Helsinki, Espoo, Vantaa and Kauniainen subscribe to one or more of HTV's cable TV services. Apart from TV services, HTV provides Internet service to their cable subscribers. Currently HTV is converting the network to a duplex (two-way) network; this work started up in 1997. According to HTV "It is estimated that the entire network will be duplex by the year 2000. Then all households linked to HTV's cable network will be able to use not only the comprehensive programme services but also the rapid information network services via HTV's cable".

HTV has already been testing digital TV broadcasting in their cable-TV network. For the commercial deployment, however, they are looking for technical standards and equipment to develop further. According to a HTV representative: "We would like to have a standardized digital set-top-box, which can handle also interactive services using cable TV network as a return channel".

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[2] Finnet group, represents several telephone companies, some of these companies also provide cable TV services.

[3] Added value in digital comparing to analogue services

Sonera cable TV (Sonera Ltd. is the former Telecom Finland) has about 137 000 connected subscribers in its more than 50 networks. According to Sonera the technological development in the cable TV networks in Finland is going towards upgrading the networks to a two-way, duplex network. Due to the small size of the networks, Sonera's plans for digitalization are closely tied to the introduction of digital terrestrial services, which are expected to start by the end of year 2000. Currently, only about 10% of all Sonera's networks are upgraded for two-way operations, but preparations for further renovation are taken place.

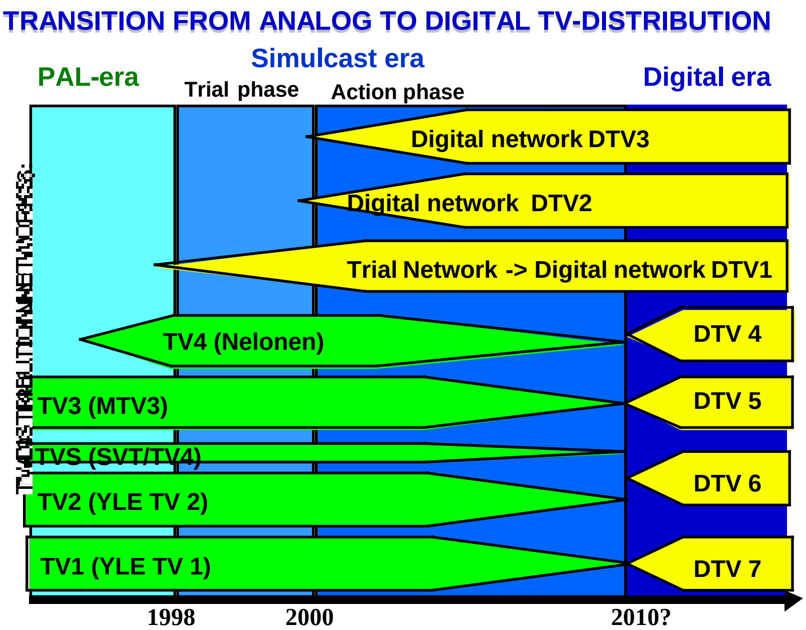
Sonera sees, however, the cable Internet services as a more important service to cable TV customers than the new digital TV programming. The barrier for digitalization is primarily the high costs of upgrading the networks to a two-way facility, and the cable Internet services are seen as a better revenue source than the digital TV programs. Another difficulty is the negotiation position vis-à-vis the programme providers because of the rather small Finnish market.

1.1.3 Situation of MMDS

MMDS is non- existent in Finland.

1.1.4 Situation of terrestrial digital television

The following diagram from Digital TV Forum Finland[4] shows the transition from analogue, through a simulcast period, to the digital era. The licences for the first 3 Multiplex blocks have been granted.



[4] The Digital TV Forum Finland is an open organization for co-operation on digital television established on 16th June 1998. By 21st April 1999 altogether 114 different bodies, interested in developing digital television in Finland, have joined the Forum.)

The intention is that the first multiplex shall reach 50% of the population by summer 2000 and that three multiplexes will be operational by the end of year 2000. When the simulcast period ends there will be 7 digital multiplexes in Finland, if the government decides to use all the current analogue frequencies for digital TV.

Licences for digital TV

In December 1998 the Ministry of Transport and Communication invited interested parties to apply for licences for digital television operations and in February 1999, by the end of the application period, the Ministry had received 27 applications. Licences for digital television operation have been granted for three multiplexes (see the following) and the goal is that digital terrestrial broadcasting is launched in autumn 2000 during the Sydney Olympic Games.

Among the applicants were the present commercial television broadcasters Helsinki Media Company and MTV3, but also new entrants to the television scene (see the figure below) such as Canal +, Modern Times Group MTG, Societe des Transmission Sportives (SETS) and Eurosport. Finnish telecom operators Sonera and Helsinki Telephone Company have also submitted applications. Furthermore 12 national companies applied for regional services.

One of the criteria for the allocation of capacity was that no single actor should gain full control over a multiplex, except YLE (Finnish Broadcasting Company). YLE did not have to apply for a licence as it operates under a special law and is entitled to digital air capacity in its own right.

Some of the actors interested in DTTV in Finland

- **THE SANOMA-WSOY-CAMP:**
  - Nelonen D (simulcast)
  - Film Channel (HMC pay-TV)
  - Sport Channel (HMC pay-TV)
  - News Channel (Sanoma - regional: Capitol Area)
  - Alfa-TV(WSOY partly pay-TV)

- **TELEOPERATORS:**
  - Helsinki Telephone Co.
  - Sonera

- **FOREIGN PLAYERS**:
  - Eurosport (pay-TV)
  - Canal + (pay-TV)
  - MTG (pay-TV)
  - SETS

- **THE ALMA-CAMP**:
  - MTV3D (simulcast)
  - MTV Plus (partly pay-TV)
  - MTV Sport (partly pay-TV)
  - City-TV – regional: all of Finland

- **OTHER DOMESTIC PLAYERS:**
  - Magazine – (Yhtyneet Kuvalehdet, partly pay-TV)
  - A4 Broadcasting
  - Hyvän Sanoman Radio
  - Saraxa/MoonTV
  - Wellnet
  - Aluetelevisioyhtiö ATV/Deljet – regional
  - Skycom – regional: Capitol, Pirkanmaa
  - Pal-Visio – regional: Satakunta
  - Alue-tv Netvisio – reg.: Päijät-Häme
  - Turun Kaapelitelevisio – reg.: Turku
  - Sisä-Suomen Kuvapäät– regional

The licence assignment is completed

On the 23rd of June 1999, the licences for operation of digital TV services were assigned. The licence period is 10 years from 1st of September 2000 to 31st of August 2010. The services in the three multiplexes (named MUX A, MUX B and MUX C in the figure) are depicted in the following table.

	National Licences granted (except MUXA)[5]	*Regional Licecses granted*
MUX A	YLE (TV1 & TV2), YLE24 (24 hours news channel), a fourth channel (FST) that probably will be in Swedish and a fifth service YLE Plus with cultural and educational profile.	
MUX B	MTV Oy (digital version of MTV3), Suomen Urheilutelevisio (Sports channel), Wellnet Oy (The service will cover health issues)	City-TV Oy Helsinki, City-TV Oy Pirkanmaa, City-TV Oy Suomi, City-TV Oy Turku
MUX C	Oy Ruutunelonen Ab (a digital version of Channel Four Finland), Helsinki Media Company Oy (Film channel), Werner Soderstrom Oy (Education channel), Deuterium Oy (the name will be changed to Canal+ Finland Oy)	

The holders of national licenses are obliged to cover 70% of the population with their digital services no later than by the end of 2001 and it is the intention of the government to stop analogue terrestrial transmission by 2006.

Digita ltd – responsible for developing the digital terrestrial broadcasting network

The transmission part of the terrestrial broadcasting network was until 1st January 1999 an integrated part of the activities of YLE, the Finnish public broadcasting company. The network not only served YLE (with the two channels YLE 1 and YLE 2) but also the two national private TV companies MTV AB (with the channel MTV 3 Finland) and Ruutunelonen AB (with Channel 4). From this date the transmission part of the network has been separated into a subsidiary of YLE named Digita Ltd. Digita is now the operator and owner of the terrestrial broadcasting network and it will be in charge of the implementation of the digital network. The plan is that Digita bases the implementation of the digital terrestrial broadcasting network on the existing network.

[5] MUX A is allocated to YLE who did not need to apply for licences.

1.1.5 Market development

Digital TV services are in very initial phase in Finland. The market value (turnover) at the end of 1998 can be estimated to only 100.000 Euro, which is a negligible part of TV market in Finland. As mentioned, Canal Digital Finland claims that there has been progress in the number of subscribers during 1999, but it has not been possible to get information on the level of this progress.

Cable TV networks have no official digitalization plans, whereas the granting of licences for terrestrial TV is a major but still initial step for this form of distribution.

Name of the service	*Ownership*	*Date of launch*	*No. of subscribers (Thousands)*
Canal Digital	Canal+ & Telenor	Autumn 1998	No information (3.000 at the end of 1998)

The number and variety of services in the terrestrial network in Finland makes the terrestrial network a viable competitor to cable and satellite networks in the TV service provision. Penetration of satellite TV has been modest and cable TV providers have not yet started digitalization of their networks. The digital terrestrial network with minimum 12 services will in this situation have a great impact on market development and probably slow down the development of satellite and cable networks.

Two important issues for development of satellite and cable networks in Finland connected to the geography of the country are:

- ✓ The reception of satellite transmission gets harder the further north you go from the equator - the wider dish you need and the elevation angle becomes lower making harder to reach the transmissions
- ✓ Only a half of the population is living in urban areas where it is economically feasible to connect to cable-TV networks.

1.1.6 Barriers to competition or market development

It is difficult to identify specific Finnish barriers to competition with no actual competition on the digital TV market, as the only actor so far is Canal Digital. But as mentioned it is possible that the strong advance of digital terrestrial TV in the Finnish circumstances with a weak development of the other digital distribution forms will slow down the infrastructure-competition.

1.2 Details of services

1.2.1 Number and type of services

In the following table the digital and analogue services available in Canal Digital Finland are listed.

Service Type	*Service including in CD 's digital line up*	*Service including in CD 's analogue line up*
Finnish Public Service	-	-
Finnish commercial services	Nelonen	-
Foreign commercial services	Adult Channel, Animal Planet, Cartoon Network, CNBC, CNN International, Discovery Channel, Eurosport, Fox Kids, M2, MTV, Nickelodeon, Sky News, TCC Nordic, TNT Classic, Travel, VH-1	Animal Planet, Cartoon Network, CNBC, CNN International, Discovery Channel, Eurosport, Sky News, TCC Nordic, TNT
Foreign premium pay TV	CANAL+, CANAL+KULTA, CANAL+SININEN & Eurotica	CANAL+
Foreign Public Service	DR1, DR2, NRK International, BBC Prime	BBC Prime
Interactive	Kiosk (22 NVOD), EPG	-
Others	digital music channels (20 services)	-

The table shows that several of the services only are available in digital form making the digital line up more attractive. A very new service in the digital line-up is a service from Canal+ called, Canal+ Sininen, that is only available in digital form and according to Canal Digital it plans to transmit some films in 16:9 format.

The vast majority of the services are foreign services with the commercial service Nelonen as the only Finnish services available in Canal Digital's digital line-up. The concept used in Nelonen is known from, e.g., the Danish TV-Danmark with low budget American series and films and to some extent self-production.

Apart from the numerous regular TV services, that only are available in digital form, there are other innovative services in Canal Digital's digital line up:

- ✓ "Kiosk", with 22 Near Video On Demand (NVOD) services.
- ✓ EPG, the Electronic Programme Guide.
- ✓ Music channels - 20 music channels are available.

As a new service, Canal Digital provides– as in Sweden and Denmark- "Formula 1 race from 7 camera angles", where seven NVOD channels are dedicated to showing the race from different angles.

Furthermore, HTV and Sonera cable TV provide Internet access, outlined shortly in the following.

Internet via Cable TV

Internet access via HTV's Cable TV: Currently 100.000 households have the possibility to use Internet through the cable network. The number will increase to 200.000 during next year, when all of the network will be upgraded to be a duplex network. The users pay a monthly subscription fee for unlimited use of the service. The prices for the services are as follows:

Start up cost, including Network card	680 FIM (117 Euro)
Subscription, including modem rental	245 FIM (42 Euro), per month

Internet access via Sonera's Cable TV: The service is only available in the part of the network that has been upgraded to a duplex network. Sonera also charges only a monthly subscription fee and the users have unlimited access to the services.

Start cost, including Network card	500 FIM (86 Euro)
Subscription, including modem rental	250 FIM (43 Euro), per month

1.2.2 Details of the DTV offers

In the following table Canal Digital's digital services are outlined. The prices indicated are from August 1999. Canal digital offers rental services for set top boxes and according to Canal Digital, half of their subscribers use this service.

Name of the service	*Short describtion*	*Price (August 1999)*
Canal Local	The commercial channel Nelonen	Free
Canal Entertain	A mixture of different programmes from Cartoon Network to Adult Channel	99 FIM (17 Euro)
Canal+	Canal+ , Canal+ GUL and Canal+ Sininen	141 FIM (24 Euro)
Canal Select	Erotica, NRK international (Norwegian public service), DR1 (Danish public service) and DR2 (Danish public servcie)	49-90 FIM (8- 15 Euro), depending on the service choices
Kiosk	NVOD, regular movies	30 FIM (5 Euro) per film
Kiosk	NVOD, Formel 1 from 7 angles	43 FIM (7 Euro) for one show, and 490 FIM (84 Euro) for all shows in a session

The digital set-top-box costs about 4000 FIM (690 Euro) in the Finnish market. If the rental service is used, the price is 69 FIM (12 Euro) per month. Subscription to any of these Canal Digital services involves additionally a start up cost of 295 FIM (51 Euro).

1.3 Operators and market structure

1.3.1 Concentration of the pay-TV market

Several cable TV networks and two satellite networks supply the pay TV market. Digital pay TV services are only represented by the insignificant market share of Canal Digital.
Canal+ has received a licence for transmission in the terrestrial network and will therefore have an attractive competitive position being available in both the digital terrestrial and the digital satellite market.

1.3.2 Agreements between satellite operators, cable operators and DTT operators

Digital TV is only available via satellite in Finland and Canal Digital is the only service provider on the satellite network. No technical/access agreement has been identified between Canal Digital and Digita (the operator of the terrestrial network) or the cable network operators.

1.3.3 Vertical integration

YLE is one of the main content providers of digital terrestrial TV in Finland and an YLE subsidiary, Digita, will be in charge of implementation and maintenance of the digital terrestrial network, indicating a clear vertical ownership of content and infrastructure provision.

Like in other Nordic countries, Canal+ as content provider and owner of Canal Digital may be seen as illustrating a case of vertical integration.

1.4 Technical issues

1.4.1 Decoder issues

Set top boxes from Philips and Nokia are used for Canal Digital's services. Information about the boxes is depicted in the following table. The Philips box is Canal Digital's preferred set top box and it is the box that is used in their rental service.

Set Top Boxes

Name	*Provider*	*CA*	*API*	*Free to air compatibility*	*16:9 compatibility*	*Integrated Modem*
MediaMaster, S	NOKIA	Embedded Viaccess (+ DVB CI)	Open TV	Yes	Yes	Yes
Philips	Philips	Conax	Media Highway	Yes	Yes	Yes

For the terrestrial market the Steering Committee of the Digital TV Forum Finland recommends that the Application Programme Interface (API) to be used in Finland shall meet the specifications of the Digital Video Broadcasting (DVB) Multimedia Home Platform (MHP) and that the profile option shall be Interactive Broadcast.

According to the Steering Committee "with this API solution it would be possible to offer to television viewers new services with added digital value like Super Text-TV and interactive services using the return channel". The specification of the DVB MHP API is expected to be ready by the summer 1999.

If the DVB MHP API - software is not commercially available in time to meet the Finnish goal to launch digital television broadcasts in autumn 2000 during the Sydney Olympic Games, Digital TV Forum Finland suggests that only DVB Service Information (SI) shall be used in the start up phase.

According to the Steering Committee of the Forum, the hardware/ the receivers for terrestrial network shall meet the NorDig II recommendations. This makes it possible to update the receivers later by downloading the DVB MHP API software when available. This solution opens access to even the advanced digital TV services with the downloaded API without change of the receiver hardware. This approach is taken in order to avoid the temporary use of any legacy or proprietary API systems or any systems not defined in DVB standards. For television viewers it would be inconvenient and expensive to switch from these temporary solutions to the permanent DVB MHP API.

1.4.2 Widescreen (16:9)

The table below shows the development in 16:9 TV sets. The Association of Electronic Wholesalers estimates that during year 2000 around 10.000 16:9 sets will be sold.

YLE uses the possibility for introduction of 16:9 in terrestrial digital TV as an argument for its superiority compared to analogue TV. Transmission in 16:9 format does not play a dominant role in the marketing of digital TV. YLE does, however, find the 16:9 format important in marketing of digital TV, especially in the high-end market. The number of 16:9 TV sets on the market is still modest. The new Canal+ service, Canal+ Sininen, has announced that they will transmit some movies in 16:9 format.

16:9 TV sets (Thousand sets)

	1994	*1995*	*1996*	*1997*	*1998*	*May 1999*
16:9	0	0	0	0.4	3	8

Source: Elektronikan Tukkukauppiaat ry (association of electronic wholesalers)

1.4.3 Portable reception

There is no information on planning the terrestrial networks for portable reception.

1.5 Conclusion

Digital TV is only available in Finland on the satellite network. The service has been further developed during 1999, but the number of subscribers is still very modest, about 3000 at the end of 1998. New services like Canal+ Sininen have been added to the digital line-up and a new innovative service, “Formula 1 from different angles” has been provided.

Digital cable TV is not available in Finland. The upgrading of the networks to two-way (duplex) operation is the dominant technological advance that is taking place at the moment in the Finnish cable TV. Several small and bigger cable TV networks compose Cable TV in Finland. This points, according to the actors in the cable TV market, to the cost for upgrading, lack of clarity regarding technical standards and lack of “digital surplus” as specific barriers to development of digital cable TV.

The first three multiplex blocks are licensed for terrestrial digital TV and the time schedule for development of terrestrial network is decided. The multiplexes will be operational by the end of year 2000 and the intention of the government is to have a simulcast period until 2006.

Digital TV market is negligible compared to the total TV market in Finland and the access issues are not so complicated yet as there is only one service provider.

The number - minimum 12 - and the variety of the services - consisting of public service, advertising and premium pay TV channels - in the digital terrestrial network makes it an important actor in the Finnish digital TV market. The development of digital TV market in Finland will be very much influenced by the development in digital terrestrial network, but with a very weak satellite and no digital cable market the future development trends are not too clear at the moment.

2 Key figures for the Finnish market[6]

2.1 Country fundamentals

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Population (millions)		5.099	5.117	5.132	5.147	5.160	
Households (millions)		2.260	2.290	2.310	2.330	2.350	
GDP (billion Euro)		84.000	98.000	101.000	107.000	113.000	

2.2 Equipment

As of 31 of December	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
TV households (millions)		2.160	2.200	2.250	2.290	2.310	
TV households (% of total households)		95.6%	96.1%	97.4%	98.3%	98.3%	
TV households with 2 TV sets or more (millions)		0.830	0.870	0.920	0.980	1.000	
TV households with 2 TV sets or more (% of TV households)		38.4%	39.5%	40.9%	42.8%	43.3%	
TV households with 16:9 Television sets (millions)		0.000	0.000	0.000	0.000	0.003	
TV households with 16:9 Television sets (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.1%	
VCR households (millions)		1.320	1.390	1.460	1.530	1.640	
VCR households (% of TV households)		61.1%	63.2%	64.9%	66.8%	71.0%	
Digital STB households (millions)		0.000	0.000	0.000	0.000	0.003	
Digital STB households (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.1%	
IDTV households (millions)		0.000	0.000	0.000	0.000	0.000	
Digital TV households (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.0%	
Digital households (millions)		0.000	0.000	0.000	0.000	0.003	
Digital households (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.1%	

[6] Until 1998 all amounts are in ECU

2.3 Access to DTV

Cable

	1993	1994	1995	1996	1997	1998	1999
Home passed (millions)		1.300	1.300	1.200	1.200	1.200	
of which digital (millions)		0.000	0.000	0.000	0.000	0.000	
Home passed (% of TV households)		60.2%	59.1%	53.3%	52.4%	51.9%	
of which digital (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.0%	
Analogue Basic subscribers (millions)		0.892	0.924	0.976	1.025	1.07	
Digital package subscribers (millions)		0.000	0.000	0.000	0.000	0.000	
Analogue Basic subscribers (% of TV households)		41.3%	42.0%	43.4%	44.8%	46.3%	
Digital package subscribers (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.0%	

Satellite

	1993	1994	1995	1996	1997	1998	1999
Satellite households (millions)		0.050	0.063	0.074	0.089	0.100	
Satellite households (% of TV households)		2.3%	2.9%	3,3%	3.9%	4.3%	
Satellite subscribers (millions)		0.040	0.050	0.059	0.071	0.080	
Satellite subscribers (% of TV households)		1.9%	2.3%	2.6%	3.1%	3,5%	
of which digital (millions)		0.000	0.000	0.000	0.000	0.003	
of which digital (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.1%	

Terrestrial TV

	1993	1994	1995	1996	1997	1998	1999
Analogue Pay-TV services							
Pay-TV subscribers (millions)		0.000	0.000	0.000	0.000	0.000	
Pay-TV subscribers (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.0%	-
***Digital TV services**							
Homes covered (millions)		0.000	0.000	0.000	0.000	0.000	
Homes covered (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.0%	-
IDTV households (millions)		0.000	0.000	0.000	0.000	0.000	
IDTV households (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.0%	-
Pay-TV households (millions)		0.000	0.000	0.000	0.000	0.000	
Pay-TV households (% of TV households)		0.0%	0.0%	0.0%	0.0%	0.0%	-

2.4 Television market estimates*

Millions Euros	1993	1994	1995	1996	1997	1998	1999
Analogue TV Market							
Public funding		236.500	261.300	266.300	265.300	261.100	
Advertising		126.800	161.600	161.000	184.500	199.500	
Subscription		62.080	70.586	72.560	80.575	86.348	
Total analogue TV		425.380	493.486	499.860	530.375	546.948	
Digital TV Market							
Public funding		0.000	0.000	0.000	0.000	0.000	
Advertising		0.000	0.000	0.000	0.000	0.000	
Subscription		0.000	0.000	0.000	0.000	0.100	
Total digital TV		0.000	0.000	0.000	0.000	0.100	
TV Market							
Public funding		236.500	261.300	266.300	265.300	261.100	
Advertising		126.800	161.600	161.000	184.500	199.500	
Subscription		62.080	70.586	72.560	80.575	86.448	
Total analogue TV		425.380	493.486	499.860	530.375	547.048	

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