# II.7 Cable television distribution service (CDS)

This chapter contains the state of the CDS at the end of 2005, as well as its evolution between 2000 and 2005.

## II.7.1 Main items of CDS's evolution in 2005

- The development of the cable distribution networks reached a maturity phase. The growth rate of the amount of cabled households reached 4.2 per cent in 2005, a figure corresponding to about 151,000 cabled households. After the high growth rates recorded in the beginning of the decade, the service is already available in the more heavily populated areas. Investments in the last 5 year period have privileged the areas that were already cabled, those close to these ones, and some urban of the country's inland areas.
- At the end of 2005 there were about 1.4 million subscribers to the CDS, 57,000 more subscribers than in the previous year, a 4.3 per cent growth rate. Again, there is a slowing down in growth vis-à-vis the beginning of the decade. The development of alternative networks for television access must have conditioned the increase in the number of subscribers to this service.
- Grupo PT's subscriber share reached 78.2 per cent in 2005. After a considerable fall between 2000 and 2002, the group's subscriber share stabilized around 79 per cent.
- In 2005 the number of subscribers to the satellite television distribution service rose to 394,000. The satellite television distribution service (DTH direct to home) had registered in 2005 a year-to-date growth of 5.1 per cent, which, in absolute terms, stands for 19,000 new subscribers. DTH's growth was stronger than that of cable networks and its geographical distribution partly complements the cable distribution services. This service is a low cost alternative to the installations of cable networks.
- At the end of 2005, two offers were launched based on IPTV. Although they
  use other technologies than those used by cable television networks
  operators, these services have similar features to cable television. On the

other hand, new offers were already announced for television distribution using the DVB-T (digital video broadcast-terrestrial) telecommunications standard, and the DVB-H (digital video broadcasting-handheld) technology. Thus, there is a forecasted increase of competition in this sector.

## II.7.2 CDS's offer

The activity of the cable distribution network operators is to install and operate cable distribution networks<sup>88</sup> for the transmission and re-transmission of information, namely comprising the distribution of television and audio broadcastings, their own or from third parties, codified or not, as well as the provision of services of addressed nature and of data transmission. These entities may also rent their network's transmission capacity for the provision, by third parties, of public use telecommunications services.

This chapter deals specifically with the CDS, with corresponding sections of this report dealing with the addressed communications services using cable networks, namely the telephone and Internet access services<sup>89</sup>.

In 2005, vis-à-vis the previous years, no changes were made to the full accessibility regime that characterized the access to and the operation of this activity. The already existing cable distribution network operators continued to pursue their activities in the scope of the established legal framework and their authorizations<sup>50</sup>, granted by geographical zone (which correspond to the limits of one or more municipalities, except in the case with non-profit organizations, which area may be smaller).

The services provided and the entities offering these services in Portugal are described below.

## II.7.2.1 CDS

In general, the cable distribution networks operators provide similar television services:

- Basic service package with an average of 50 channels, including the four national open channels, generalist channels, entertainment, information, documentary, movies, for children, history, health channels, etc.. This service implies the payment of an installation price and a monthly fee. Some operators provide packages with a lower number of channels, named mini-basic, at lower prices.
- Premium/supplementary service this service offers conditioned access
  channels that are subject to the payment of an additional amount, such as
  Sport TV, movie channels, and Disney Channel, among others, needing the
  installation of a channels' sign decoder (set-top-box). Most operators sell
  channel packages (for example: Sport TV + Disney Channel) at lower prices.
- Digital TV service offered in areas covered by digital head-ends providing, further to the installation of a power box (replaces TV box), the access to the new digital services, namely:
- Near video-on-demand possibility of watching movies by demand, depending on the provided titles and schedules;
- TV Guide (EPG electronic program guide) information on the channels' programming during the next seven days;
- Journal current news;
- Interactive programming and multi-camera football access to interactive channels and programs;
- Commerce and banking presentation of several products/services, including characteristics and prices.

It should be mentioned that Cabo Portugal (CATVP) launched in June 2001, in partnership with Microsoft, the so-called Interactive Digital Television. Further to the installation of a *smart box*, a digital terminal developed by Octal TV, clients had the possibility of accessing interactive digital services, similar to the ones currently provided using the Digital TV service, and also the access to the Internet service named *web TV* service. Thus the smart box included an Internet card that made it possible to provide this service although with some limitations. Even though it allowed website browsing, it was not possible to access e-mail addresses or make

downloads. This offer's termination was announced by CATVP in March 2004. To those that were already customers, CATVP formally announced that the ending of the service would occur on 1 July 2004.

Besides cable technology, television reaches consumers based on the following platforms:

- Analogue hertz Ian television television broadcasting in Portugal was initially
  made with this platform. Currently consumers have access to the four *free-to-air* channels, without further payments. There are two networks, PT's, mostly
  supporting broadcastings from RTP and SIC, and RETI, which belongs to TVI.
- Satellite television (DTH) as an alternative to cable and for non-cabled areas, cable television operators have been providing, since 1998, a satellite service. In order to have this service, the customer needs a satellite dish, a receiver/decoder and an access card. This offer enlarged the geographical coverage of the paid television services, while the corresponding number of subscribers has been growing considerably. Currently the commercial offer of television is identical to that of cable. However, interactivity, and thus the Internet service, is not possible.

# II.7.2.2 New commercial offers

At the end of 2005, two new offers of TV distribution services were launched. Although they use different technologies from those used by the cable television networks operators, these services have characteristics that are similar to cable television. The following table describes these offers' main conditions:

Table 88 - New offers

	SmarTV (Clix/Novis)	TV.Net.Tel (AR Telecom)
Technology	ADSL2+ Almost unlimited bandwidth (>20Mb) that makes it possible to support several services, namely, telephone, television and Internet. Video transmission is done over copper wire.	Digital Tmax® Network Supports integrated television, Internet and fixed telephone, with digital transmission of the signal (high sound and image quality, without interference or noise), via FWA wireless technology. Depends on the roll-out of a new network of building-to-building

		telecommunications.
Equipment	- TV Box - Modem router ADSL2+ - optional: wireless modem router ADSL2+	- Set-top-box (STB) receiver - Multimedia modem (MTA) - Base telephone with cord - Optional: equipment to install a wireless network connecting several domestic equipment (computer, telephone, TV, etc.)
Service	Digital television + home video + broadband Internet + fixed telephone	Digital television + broadband Internet + fixed telephone
Digital television	Television over ADSL including the main national and international channels, allowing for the customizations of the channels' package (via optional channels)	Channels selected by criteria of national and international audience and thematic diversity.
(Home video) *	Interactive service for choosing, renting and watching movies. Service paid depending on the movie.	
ADSL Internet	Clix ADSL service with the current characteristics and prices.	High performance broadband (HPB) service, with high symmetry and low latency.
Fixed telephone	Without subscription fee.	Without subscription fee (lard plan)
Additional services	Home video Possibility of choosing, renting and immediately watching movies on the TV set and with all the features of a DVD. Variable price depending on the movie.	Videoconference Possibility of communication (video and voice) with others through the television device/set.
Extra features	Electronic program guide (EPG) Feature for seeing the transmission schedule of the several channels' contents.	
Packages	- SmarTV Light (15 channels + 10 optional ones) - SmarTV Total (35 fixed channels + 5 optional ones) - SmarTV Mix (40 optional channels)	- Light (10 channels), 2Mb pay-per-use - Light (10 channels), 2Mb always-on - Light (10 channels), 5Mb always-on - Plus (27 channels), 2Mb pay-per-use - Plus (27 channels), 2Mb always-on
Base prices (packages)**	(40 optional channels)  SmarTV Light Installation: €70 Activation: €49.90 Monthly fee: €14.90 Equipment (monthly fee): €2.50  SmarTV Total Installation: €70 Activation: €49.90 Monthly fee: €21.40 Equipment (monthly fee): €2.50  SmarTV Mix Installation: €70 Activation: €49.90 Monthly fee: €22.90 Equipment (monthly fee): €2.50	- Plus (27 channels), 5MB always-on  Light (10 channels), 2Mb pay-per-use Installation: free Activation: €25 Monthly fee: €10 Minimum call consumption: €5 Equipment (annual fee): €30  Light (10 channels), 2Mb always-on Installation: free Activation: €25 Monthly fee: €20 Minimum call consumption: €5 Equipment (annual fee): €30  Light (10 channels), 5Mb always-on Installation: free Activation: €25 Monthly fee: €35 Minimum call consumption: €5 Equipment (annual fee): €30  Plus (27 channels), 2Mb pay-per-use Installation: free Activation: €25 Monthly fee: €22 Minimum call consumption: €5 Equipment (annual fee): €30

	Plus (27 channels), 2Mb always-on Installation: free Activation: free Monthly fee: €35 Minimum call consumption: €5 Equipment (annual fee): €30
	Plus (27 channels), 5MB always-on Installation: free Activation: free Monthly fee: €50 Minimum call consumption: €10 Equipment (annual fee): €30

Source: <a href="http://smartv.clix.pt">http://smartv.clix.pt</a> and <a href="http://www.artelecom.pt">http://www.artelecom.pt</a>.

While the Novis service is an IPTV offer, the service provided by AR Telecom uses its own technology, named Tmax. Tmax is a digital, wireless and with a high transmission capacity technology that is based on the DVB-T telecommunications standard and on the IP standard. Until the end of June 2006, the company expects to provide this service in Lisbon and Porto.

Lastly, it should be mentioned that new television distribution offers have already been publicized based on the 3rd generation mobile services and on the DVB-H (Digital Video Broadcasting – Handheld) standard. The DVB-H standard is based on DVB-T, and makes it possible to use interactive services and to have programs on demand.

## II.7.2.3 Active operators

Below is the list of entities providing CDS, with reference to those that were active in the beginning of 2005, those that remained active at the end of that year, and the market entries and exits occurred during that period.

Table 89 - CDS providers 2005

Name	At the beginning	Entries	Exits	At the end
Associação de Moradores do Litoral de Almancil*	Α			А

Novis/Clix offer's home video service is considered a multiple play component because that is how the offer is publicized and marketed. In fact, however, this is an additional service//feature, similar to the videoconference feature included in AR Telecom's offer, which, by itself, does not seem to change a *triple play* offer into a *multiple play* offer.

Does not include optional services / features / equipment; or extra services / features / calls / Internet traffic blocks / Internet capacity or speed; or launch promotions.

Associação de Moradores da Urbanização Quinta da Boavista*	NA			NA
Bragatel — Comp. Televisão por Cabo de Braga, S.A.	Α			Α
Cabo TV Açoreana, S.A.	Α			Α
Cabo TV Madeirense, S.A.	Α			Α
Cabovisão — Sociedade de Televisão por Cabo, S.A.	Α			Α
CATVP — TV Cabo Portugal, S.A. <sup>91</sup>	Α			Α
Entrónica – Serviços na Área de Telecomunicações, Lda.	NA			Α
Pluricanal Leiria — Televisão por Cabo, S.A.	Α			Α
Pluricanal Santarém — Televisão por Cabo, S.A.	А			А
TVTel Grande Porto — Comunicações S.A.	Α			А
Total activas	9	-	-	10
Total of non active	2	-	-	1
Global total	11	-	-	11

Legend: A - Active; NA - Not Active

Note 1: The company AR Telecom – Acessos e Redes de Telecomunicações, S.A. started the commercial offer of the television signal distribution services to which it is entitled since April 2005.

Note 2: Novis Telecom, S.A. is entitled to provide the television and video signal distribution service since November 2005.

Since the authorizations of the cable distribution network operators were granted by geographical area (municipality) until the end of 2003, the following table shows the list of entities operating in each region<sup>92</sup>. It should be stressed that the fact that the operators are operating in certain regions does not imply that they are present in every municipality of those regions.

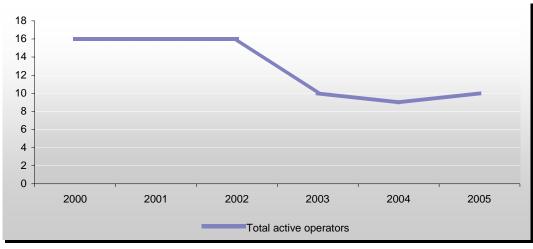
<sup>\*</sup> Cable distribution networks not accessible to the public.

Table 90 - Cable distribution network operators authorized to operate, by NUTS II

NUTS II	Active operators			
North	Bragatel, Cabovisão, CATVP, TVTEL			
Centre	CATVP, Cabovisão, Puricanal Leiria, Pluricanal Santarém			
Lisbon	Cabovisão, CATVP			
Alentejo	Cabovisão, CATVP, Pluricanal Santarém			
Algarve	Associação de Moradores do Litoral de Almancil, Cabovisão, Associação de Moradores da Urbanização Quinta da Boavista, CATVP			
Autonomous Region of Madeira	Cabo TV Madeirense			
Autonomous Region of the Azores	Cabo TV Açoreana			

Between 2000 and 2005, no important changes were registered on the number of operators in these markets. In fact, the reduction of the number of active operators that occurred in 2002 resulted from the replacement of CATVP's regional companies that operated in the Mainland by one sole company. The accruals recorded in more recent years are explained by the authorizations granted to residents' associations, which networks are of small size and not available to the public.

Graph 104 - Evolution of the number of active operators



Source: ICP-ANACOM

# II.7.3 The profile of the cable television user

The following sections characterize the cable television user, according to the Survey on the consumption of broadband 2005.

# II.7.3.1 The profile of the cable television user

The cable distribution user mostly resides in the autonomous regions and in the more heavily populated urban areas.

Table 91 - Percentage of homes with CDS by geographical location

North	Centre	Lisbon	Alentejo	Algarve	Azores	Madeira
47.2%	42.4%	67.9%	44.0%	47.7%	70.8%	80.2%

Source: Survey on the consumption of broadband in Portugal, 2005

Table 92 – Percentage of homes with CDS by habitat size

Less than 2,000 inhabitants	Between 2,000 and 9,999 inhabitants	and 9,999 and 99,999	
36.9%	50.8%	68.5%	74.3%

Source: Survey on the consumption of broadband in Portugal, 2005

On the other hand, the highest the interviewee's socio-economic level, the highest the probability that they have access to the CDS.

Table 93 – Rate of homes with access to the CDS by social-economic level

Classes A e B	Class C1	Class C2	Class D
68.7%	63.7%	51.4%	41.4%

Source: Survey on the consumption of broadband in Portugal, 2005

There is also a positive correlation between the interviewee's education level and the percentage of homes with CDS.

Table 94 – Percentage of homes with access to CDS by education level

Primary	12th grade	Higher
45.9%	57.6%	66.0%

Source: Survey on the consumption of broadband in Portugal, 2005

# II.7.3.2 Barriers to service subscription

Geographical location and income level are the main barriers to subscribing the service.

In fact, the service is available in the urban areas of Lisbon, Porto, Algarve, littoral North and the autonomous regions. In the remaining regions, namely in the country's inland, there are no cable distribution networks available. These regions also have lower income levels.

These factors are the main barriers to the subscription of this service. However, there are other cable distribution technologies available in these areas.

#### II.7.4 The evolution of CDS in 2005

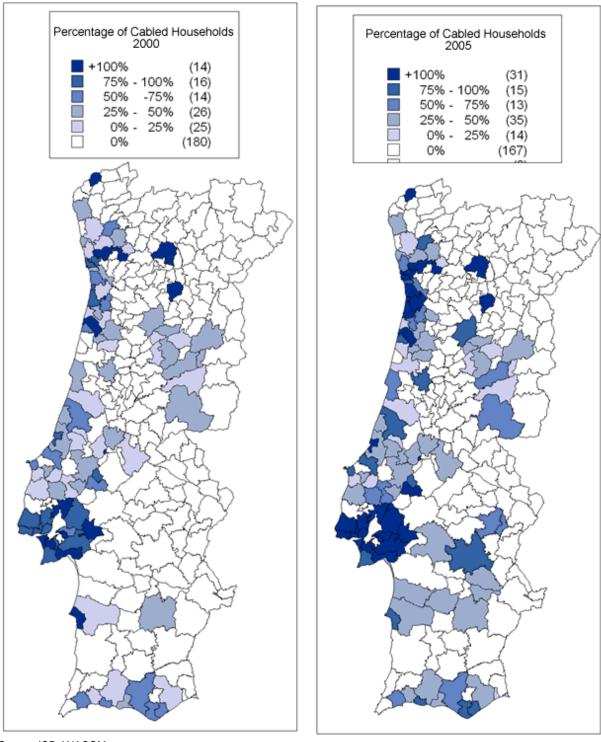
Below are a ser of elements on the evolution of the CDS in 2005: geographical availability and penetration, service's usage level, prices and quality of service.

## II.7.4.1 Geographical availability of the service (cabled households)

Below is the geographical distribution of cabled households and the evolution of cable household penetration in time.

## II.7.4.1.1 Evolution of cabled households

The maps below show the CDS's geographical availability in two different moments: the end of 2000 and the end of 2005.



Graph 105 - Geographical distribution of cabled households

The graphs above show that cable distribution network operators installed their networks in the most populated areas, namely in Greater Lisbon, Greater Porto, in the Setúbal peninsula, in the North coast and in the Algarve.

The evolution between 2000 and 2005 occurred mainly in areas where the service already existed or in surrounding areas.

The Autonomous Regions of Madeira and the Azores also have a very important number of cabled households.

Centre
14%
48%
North
27%
ARM
ARA
5%
1%

Graph 106 - Distribution of cabled households by NUTS II - 2005

Source: ICP-ANACOM

The following table supports the conclusions stated above:

Table 95 - Cable households

	2000	2001	2002	2003	2004	2005
North	640,572	768,769	860,514	909,163	970,301	1,016,627
Centre	399,222	438,007	463,671	478,942	501,291	528,166
Lisbon <sup>*</sup>	1,237,157	1,454,240	1,611,412	1,661,194	1,701,300	1,757,371
Alentejo	70,503	83,304	118,695	122,067	123,632	128,024
Algarve	128,931	149,388	172,169	177,487	184,748	196,946
Autonomous Regions of the Azores	50,532	52,690	53,243	54,227	55,403	55,888
Autonomous Regions of Madeira	73,714	77,436	81,036	84,792	86,943	91,570
Total	2,600,631	3,023,834	3,360,740	3,487,872	3,623,618	3,774,592

Source: ICP-ANACOM

In this period, an average of 235,000 houseolds was cabled per year, which corresponds to an average yearly growth rate of 8 per cent. The growth rate of the

The provision of the service by more than one operator in the same region may imply multiple cabling of the same household. This fact has been gaining importance, namely in the Lisbon area, leading to figures above 100 per cent for this indicator.

number of cabled households reached 4.2 per cent in 2005, about 151,000 new cabled households.

The current geographical distribution of this service is explained by the following factors:

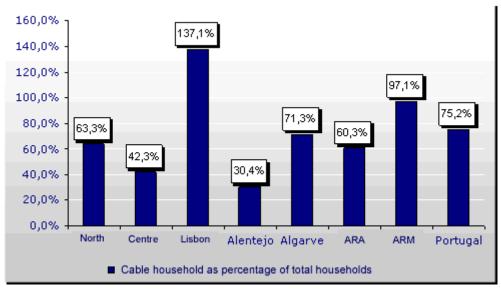
- This business' economy favours the installation of networks in more populated areas and with a much higher economic level, and the intensive exploitation of the already installed infrastructures. Regarding the latter, this service's spatial development is not different from other network industries demanding high initial investments and with cost structures with a high rate of costs;
- The inter-relation between the incumbent operator's strategy and the strategies of the new operators. The incumbent operator started the installation of its networks in urban areas of greater dimension. The new operators, on a first phase, started to operate in smaller size urban areas and/or in municipalities where the incumbent operator was not yet installed or where its presence was less significant. Later, the operators started providing services is surrounding areas of those where they became installed and in less populated areas, and currently there are several areas with more than one operator;
- The emergence and development of the DTH service as a more economic alternative to the provision of a television distribution service in less populated or remote areas.

Regarding the slowing down in the growth of cabled house holds, this is due to the following factors:

- Service saturation in the most populated geographical zones;
- A strategy that favours revenue increase from the operation of the already installed infrastructure against the spatial development on the network, as shown in the following sections;
- The slowing down in the number of subscribers;
- The emergence and commercial success of replacements for this service, namely DTH.

# II.7.4.1.2 Cabled household penetration versus total households

Cabled households stood for about 75.2 per cent of all Portuguese households, 3 per cent more than in the previous year.



Graph 107 - Percentage of cable households by NUTS II - 2005

Source: ICP-ANACOM

Note: The provision of the service by more than one operator in the same region may imply multiple cabling of the same household. This fact has been gaining importance, namely in the Lisbon area, leading to figures above 100 per cent for this indicator.

Between 2000 and 2005, the service penetration, measured in terms of cabled households, grew about 23 per cent. After the high growths recorded at the beginning of the period, this service's penetration growth slowed down to about 2 to 4 per cent/year since 2003.

Regarding the regional distribution of this growth, the most important increases were registered in the Lisbon, Algarve and North regions. It should be mentioned that in some cases this growth results from the entry of new operators in previously cabled areas. This is, for example, the situation of most municipalities of the Setúbal peninsula, of some municipalities of Greater Porto, most of the municipalities of the region between rivers Douro and Vouga and the municipalities of Braga, Lagoa and Portimão.

Table 96 – Cabled household penetration versus total households

NUTS II	2000	2001	2002	2003	2004	2005
North	39.9%	47.9%	53.6%	56.6%	60.4%	63.3%
Centre	32.0%	35.1%	37.1%	38.4%	40.2%	42.3%
Lisbon*	96.5%	113.4%	125.7%	129.6%	132.7%	137.1%
Alentejo	16.8%	19.8%	28.2%	29.0%	29.4%	30.4%
Algarve	46.7%	54.1%	62.4%	64.3%	66.9%	71.3%
Autonomous Regions of the Azores	54.6%	56.9%	57.5%	58.5%	59.8%	60.3%
Autonomous Regions of Madeira	78.2%	82.1%	86.0%	89.9%	92.2%	97.1%
Total	51.8%	60.2%	67.0%	69.5%	72.2%	75.2%

The main reasons for this indicator's recent evolution are the same that justify the evolution of cabled households.

These factors had impact on the investment in network infrastructure and affected this indicator's evolution.

250.000 - 200.000 - 150.000 - 50.000 - 50.000 - 2001 2002 2003 2004

**Graph 108 – Investment in cable distribution networks** 

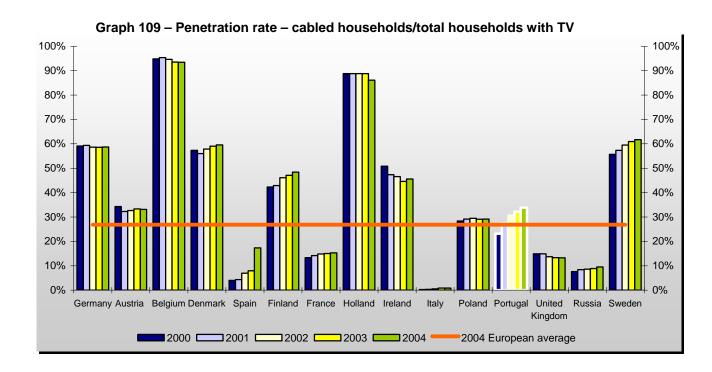
Source: ICP-ANACOM

According to the statistical data of Institut de l'Audiovisuel et des Télécommunications en Europe (IDATE)<sup>53</sup>, Portugal has a cabled household penetration rate above the Europe average. Regarding the growth in the number of cabled households, Portugal had the third highest average annual growth rate among the considered countries.

It should be remembered that the considerable differences among the several considered countries is mainly due to the fact that in some countries the cable

The provision of the service by more than one operator in the same region may imply multiple cabling of the same household. This fact has been gaining importance, namely in the Lisbon area, leading to figures above 100 per cent for this indicator.

infrastructure has been used since very early as the main medium for distributing television channels (e.g. in Belgium and Holland, where television reception was, already in 1995, mostly done via cable), while in other countries television broadcasting was initially made with analogue hertzian television, with the installation of cable networks only occurring much later.



Source: IDATE.

Note: Figures for 2004 are estimated by IDATE.

# II.7.4.2 Service's usage level (subscribers)

Below are the number of subscribers and their penetration, and the number of television distribution service customers using the DTH technology.

#### II.7.4.2.1 Evolution of the number of subscribers

At the end of 2005 there were about 1.4 million subscribers to the cable television distribution service, 57,000 more than in the previous year.

Table 97 - Number of CDS subscribers

Subscribers	2000	2001	2002	2003	2004	2005
North	192,367	246,581	291,281	314,911	317,728	327,636
Centre	113,888	137,218	155,652	161,764	161,211	167,996
Lisbon*	499,391	592,939	644,387	678,338	675,943	707,391
Alentejo	16,429	22,827	35,159	35,111	36,327	38,111
Algarve	31,053	38,401	47,549	49,245	48,826	50,988
Autonomous Region of the Azores	31,635	35,483	36,680	37,881	38,751	40,047
Autonomous Region of Madeira	40,127	45,893	51,156	56,461	62,365	66,073
Total	924,890	1,119,342	1,261,864	1,333,711	1,341,151	1,398,242

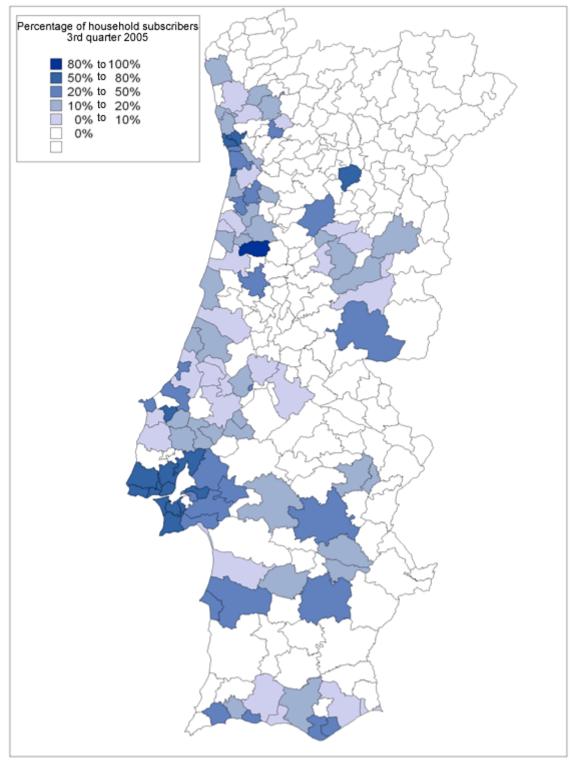
Source: ICP-ANACOM

Between 2000 and 2005, an average of about 95,000 subscribers per year subscribed to this service, which corresponds to an annual average growth rate of 9 per cent. The subscribers' growth rate in that year was of 4.3 per cent.

The greatest relative growths occurred in Alentejo, North, Algarve and Madeira.

Regarding the geographical distribution of the subscribers to this service, its pattern is similar to the one registered in cabled households: subscribers are concentrated in the Greater Lisbon, Greater Porto, Setúbal Peninsula, North coast and in the Algarve. The Autonomous Regions of Madeira and the Azores also have a considerable number of subscribers.

The provision of the service by more than one operator in the same region may imply multiple cabling of the same household. This fact has been gaining importance, namely in the Lisbon area, leading to figures above 100 per cent for this indicator.



**Graph 110 – Geographical distribution of subscribers** 

Currently, Lisbon has about 50.6 per cent of subscribers, while subscribers in the North stand for about 23.4 per cent of the overall figure.

Centre 12,0%

North 23,4%

ARM ARA Algarve 4,7% 2,9% 3,6%

Graph 111 - Distribution of subscribers by NUTS II - 2005

Table 98 - Distribution of subscribers by NUTS II - 2005

rable de Blourbandi di danderino de by rici di 2000							
NUTS II	2000	2001	2002	2003	2004	2005	
North	20.8%	22.0%	23.1%	23.6%	23.7%	23.4%	
Centre	12.3%	12.3%	12.3%	12.1%	12.0%	12.0%	
Lisbon <sup>*</sup>	54.0%	53.0%	51.1%	50.9%	50.4%	50.6%	
Alentejo	1.8%	2.0%	2.8%	2.6%	2.7%	2.7%	
Algarve	3.4%	3.4%	3.8%	3.7%	3.6%	3.6%	
Autonomous Regions of the Azores	3.4%	3.2%	2.9%	2.8%	2.9%	2.9%	
Autonomous Regions of Madeira	4.3%	4.1%	4.1%	4.2%	4.7%	4.7%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: ICP-ANACOM

The fast increase in the number of subscribers to this service is compatible with the evolution of the first phases of a service's life cycle. It is considered that the number of subscribers has been equally influenced by the following factors:

- Launch of new offers namely, additional channels and in Portuguese, and the successive offer of new *premium* channels and *premium* channel packages – fostering the interest of new subscribers and making it possible to increase revenues by subscribers;
- The package offer of broadband Internet access and voice services have contributed to the increase of new clients;
- The generalized existence of promotional offers that reduced, and in some cases eliminated, prices for service access (installations, prices of terminal

equipment) should also be noted. In some cases, these offers were made further to competition increase in areas with more than one operator.

The decrease in the growth rate of the number of customers, which occurred after 2002, globally affecting all regions, may be due to:

- The economic period. Some operators reported an increase in customers' debts that may indicate the existence of financial difficulties and, thus, a lower possibility to consume this type of services;
- The development of the DTH service;
- The development of ADSL accesses as an Internet broadband access alternative to cable modem;
- Possibly, due to the entry of this service into a maturity stage. The launch of new offers may change this situation.

The highest growth rates occurred outside the areas of initial implementation of the cable television distribution networks, although it is in those more populated areas that the service is more widespread. These facts are explained by the operators' investment strategies described in the section concerning cabled households.

# II.7.4.2.2 Service penetration in terms of subscribers

The subscriber penetration rate, as a percentage of the whole populations, reached 13.3 per cent in 2005.

Table 99 - TV cable subscriber penetration vs. population

NUTS II	2000	2001	2002	2003	2004	2005
North	5.3%	6.7%	7.9%	8.5%	8.5%	8.8%
Centre	4.9%	5.9%	6.6%	6.8%	6.8%	7.1%
Lisbon	18.9%	22.3%	24.2%	24.8%	24.5%	25.6%
Alentejo	2.1%	2.9%	4.5%	4.6%	4.7%	5.0%
Algarve	7.9%	9.7%	12.0%	12.1%	11.9%	12.4%
Autonomous Region of the Azores	13.2%	14.7%	15.2%	15.8%	16.1%	16.6%
Autonomous Region of Madeira	16.5%	18.8%	20.9%	23.2%	25.5%	27.0%
Total	9.0%	10.8%	12.2%	12.7%	12.7%	13.3%

Between 2000 and 2005, the subscribers' penetration rate in regards to the whole population grew 4.3 per cent, with highlight to the growth registered in the Lisbon area and in the Autonomous Regions of Madeira. During this period the same growth trends were also registered, *i.e.*, a slowing down was registered from 2002 on.

In 2005, the cable television subscribers' penetration rate, reckoned as a percentage of Portuguese households, stood at 28 per cent.

80,0% 70,1% 70,0% 55,2% 60,0% 50,0% 43,2% 40,0% 27,9% 30,0% 20,4% 18,5% 13,5% 20,0% 10,0% 0,0% North Centre Lisbon Alentejo Algarve ARA ARM Portugal. Subscribers as % of total households

Graph 112 - Penetration of the number of subscribers in terms of total households

Source: ICP-ANACOM

In the period between 2000 and 2005, the penetration of cable television subscribers versus all Portuguese households increased 9.5 per cent, again with highlight to the growths registered in Lisbon and in the Autonomous Region of Madeira. During this period, the previously registered growth trends occurred.

Table 100 - Cable TV subscriber penetration vs. total households

NUTS II	2000	2001	2002	2003	2004	2005
North	12.0%	15.4%	18.1%	19.6%	19.8%	20.4%
Centre	9.1%	11.0%	12.5%	13.0%	12.9%	13.5%
Lisbon	39.0%	46.3%	50.3%	52.9%	52.7%	55.2%
Alentejo	3.9%	5.4%	8.4%	8.3%	8.6%	9.1%
Algarve	11.2%	13.9%	17.2%	17.8%	17.7%	18.5%
Autonomous Region of the Azores	34.2%	38.3%	39.6%	40.9%	41.8%	43.2%
Autonomous Region of Madeira	42.6%	48.7%	54.3%	59.9%	66.2%	70.1%
Total	18.4%	22.3%	25.1%	26.6%	26.7%	27.9%

Source: ICP-ANACOM

Versus cabled households, subscribers' penetration reached 37 per cent in 2005. An effort to maximize profits from the installed infrastructure in the autonomous regions and in Alentejo is apparent. The autonomous regions reach very high penetration and Madeira, in particular, recorded the highest penetration growth during this period.

Table 101 - Cable TV subscribers vs. cabled households

NUTS II	2000	2001	2002	2003	2004	2005
North	30.0%	32.1%	33.8%	34.6%	32.7%	32.2%
Centre	28.5%	31.3%	33.6%	33.8%	32.2%	31.8%
Lisbon	40.4%	40.8%	40.0%	40.8%	39.7%	40.3%
Alentejo	23.3%	27.4%	29.6%	28.8%	29.4%	29.8%
Algarve	24.1%	25.7%	27.6%	27.7%	26.4%	25.9%
Autonomous Region of the Azores	62.6%	67.3%	68.9%	69.9%	69.9%	71.7%
Autonomous Region of Madeira	54.4%	59.3%	63.1%	66.6%	71.7%	72.2%
Total	35.6%	37.0%	37.5%	38.2%	37.0%	37.0%

Source: ICP-ANACOM

The global evolution globally of these three sets of indicators is explained by the previously mentioned factors. However, the specific factors that explain the growth registered in the Autonomous Region of Madeira during the last two years should be mentioned.

On 6 August 2004 a Protocol was established between the Republic's Government, the Regional Government of Madeira, ICP-ANACOM and Cabo TV Madeirense, S.A., with the purpose of guaranteeing the conditions for the citizens of the Autonomous Region of Madeira to access the open-to-air channels available on the Mainland, namely RTP1, RTP2, SIC and TVI. The access is provided via the cable network or the satellite platform operated by Cabo TV Madeirense. The above mentioned protocol was responsible for the recent evolution of the penetration that occurred in Madeira.

## II.7.4.2.3 DTH Service

It should be underlined that the aforementioned data concerning subscribers of the cable distribution service do not include the subscribers of the already mentioned DTH (satellite) television distribution service. However, the number of DTH customers is relevant for a better understanding of paid television, since the DTH service is an important component of the activity of some operators of cable distribution networks (CATVP, Cabo TV Madeirense, Cabo TV Açoreana).

In this sense, the graph bellow shows the evolution of the number of subscribers to this technology between 2000 and 2005.

ō Subscribers of DTH technology

Graph 113 - DTH TV subscribers' annual evolution

At the end of 2005, the number of subscribers to the satellite television distribution service reached 394,000. In 2005 this service registered a 5.1 per cent growth, which in absolute terms means 19,000 new subscribers. Between 2000 and 2005, the DTH service grew at higher rates than those of the cable distribution service.

It should be mentioned that the growth rates in Madeira are also explained by the previously mentioned protocol.

Table 102 - Number of DTH subscribers

NUTS II	2000	2001	2002	2003	2004	2005
North	n.a.	69,947	92,530	111,116	123,306	123,444
Centre	n.a.	68,569	91,686	112,683	124,568	125,696
Lisbon	n.a.	25,006	29,338	31,167	33,345	37,213
Alentejo	n.a.	30,400	39,481	45,126	48,200	48,728
Algarve	n.a.	15,990	17,522	19,338	20,243	19,703
Autonomous Region of the Azores	n.a.	12,243	15,836	18,086	20,450	23,047
Autonomous Region of Madeira	n.a.	1,671	2,604	3,949	5,179	16,662
Total	131,545	223,826	288,997	341,465	375,291	394,493

Source: ICP-ANACOM

The figures concerning the geographical distribution of DTH technology subscribers kept practically unchanged in 2005. The North and Centre regions concentrated the highest share of this technology's users.

North
31,3%

ARM
4,2%

ARA
5,8%

Algarve
5,0%

Centre
31,9%

Lisbon
9,4%

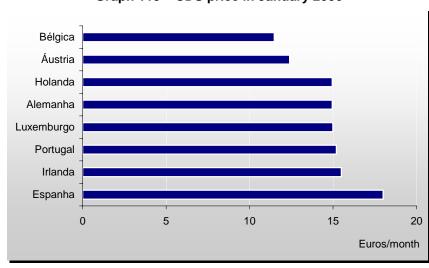
Alentejo
12,4%

Graph 114 - Distribution of DTH TV subscribers by NUTS II - 2005

As can be seen, during this period the growth of DTH was faster than that of the cable networks and its geographical distribution partly complements the cable services.

## II.7.4.3 Prices

As can be seen on the following table, the prices of the cable distribution service in Portugal are slightly higher than the average values of the considered countries. It should be mentioned that the sample of considered countries has a small size, due to constraints in collecting comparable data.



Graph 115 - CDS price in January 2006

Source: Operators' websites.

# **II.7.4.4 Competition development**

After a considerable fall between 2000 and 2002 (about 8 per cent) Grupo PT's subscribers share reached, in 2005, the figure of 78.2 per cent.

Table 103 - Grupo PT's subscriber share

2000	2001	2002	2003	2004	2005
87.4%	82.9%	79.6%	80.7%	79.4%	78.2%

Source: ICP-ANACOM