

## Chapter 6 – Television Distribution Service

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## **6. Television distribution service**

This chapter presents the state of the cable TV distribution service (CDS), via satellite (DTH – Direct to Home) and IPTV (Internet protocol television) at the end of 2006. It describes, namely, this service's offer, its usage and user profile, and the evolution occurred during that year.

The Mobile TV service is presented in the chapter concerning mobile services.

### **6.1. Main evolution items in 2006**

- In 2006, the sum new cabled households per operator reached 252 thousand, a figure above the average recorder in the 200-2006 period. The corresponding growth rate reached 6.7 per cent.

Simultaneously, Novis' and AR Telecom's television and video signal distribution services, launched at the end of 2005, entered the market in 2006. These are integrating triple play offers. Novis' offer (Smartv) is based on IPTV, while AR Telecom's offer is based on DVB-T (digital video broadcast - terrestrial). This first service is provided over the public telephone network and the second one, using FWA.

On the other hand, Mobile Telephone Service operators launched the Mobile TV service. (This service's evolution is treated on the chapter concerning the MTS).

The geographical availability of the television distribution service was thus enlarged, and competition in the provision of these services is expected to increase.

- In 2006, the penetration rate of cable television subscribers, in percentage of households, was set on 26 per cent. According to the available data, and taking the

considered countries into account, cable TV penetration in Portugal stands at the middle of the European ranking.

At the end of 2006, there were more than 1.4 million CDS subscribers, 20 thousand more than a year before, which corresponds to a 1.4 per cent growth rate.

The decrease in the growth rate of the number of customers, which happened after 2002 and had a general impact on all regions, may be due to this service's entry into a maturity stage. During the mentioned period, factors such as the development of ADSL as a broadband Internet access means alternative to cable modem, the development of DTH, and the economic state may have influenced this evolution.

The considerable growths recorded in the autonomous regions of the Azores (9.4 per cent) and Madeira (3.5 per cent) were directly influenced by the protocols signed between the General Government, The Regional Governments, ICP-ANACOM and the only television distribution network operator currently operating in each of the autonomous regions.

- Grupo PT's CDS subscriber share reached 75.2 per cent in 2006, 3 per cent less than a year before.
- In 2006, the amount of subscribers to the satellite television distribution service (DTH) reached about 436 thousand, 10.4 per cent more than in 2005. DTH grew more than the cable networks and its geographical distribution partly complements cable distribution services. This service was a low-cost alternative to the installation of cable networks.

According to the most recent data, Portugal was classified in the middle of the European satellite television service penetration ranking, with a 12 per cent penetration.

- As mentioned previously, new distribution services supported on IPTV and DVB-T emerged by the end of 2005. These services' penetration is still very low.

## **6.2. Television distribution service's offer**

The activity of the TV distribution operators is the transmission and re-transmission of data, namely comprising the distribution of television and audio broadcastings, their own or from third parties, codified or not, as well as the provision of addressed services and of data transmission.

Regarding the previous years, there were no changes to the full access regime that characterizes the access to and operation of this activity.

Bellow is a description of the services provided and the entities offering these services in Portugal.

### **6.2.1. CDS**

In general, cable distribution network 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, music, 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” or “selection”, at lower prices.
- Premium or supplementary service – service that offers conditioned access channels and that are subject to the payment of an additional amount, such as Sport TV, movie channels, and Disney Channel among others. Most operators sell channel packages (e.g.: Sport TV + Disney Channel) at lower prices.

- Services offered in areas covered by digital head-ends, further to the installation of a power box, such as:
  - Near video-on-demand – possibility of watching movies on demand, by user request, at given schedules;
  - TV Guide or EPG (electronic program guide);
  - Interactive programming and multi-cam football – access to interactive channels and programmes.

In May 2005, Grupo PT companies started to replace analogue TV boxes by powerbox digital decoders, with their Premium customers. This process had a second stage in September 2005, when started to replace the cards for access to the satellite television distribution services (DTH). This equipment replacement process ended in 2006, after the advertisement that the first semester of 2007 would witness the launch of a new High-Definition powerbox, with new voice features, wireless and the personal video recorder (PVR).

It should also be mentioned that TV Cabo Portugal (CATVP), in a partnership with Microsoft, launched the so-called Interactive Digital Television in June 2001. Further to the installation of a smart box – a digital terminal developed by Octal – customers had the possibility of accessing interactive digital services, similar to those currently available through the Digital TV service, and also access to the Internet service named web TV service. The smart box thus included an Internet card, enabling the provision of this service, although with some limitations: even though it allowed web browsing, it was not possible to access e-mail addresses or make downloads. The end of this offer was announced by CATVP in March 2004. To those that were already customers, CATVP announced that the ending of the service would happen on 1 July 2004.

### **6.2.2. Other TV distribution service access platforms**

Besides cable technology, television reaches consumers through the following platforms:

- Analogue radio-relay television – television broadcasting in Portugal was initially made using this platform. Currently consumers have access to the four open-air signal channels, without further payments, through the two existing networks: Grupo PT's, mostly supporting broadcasting from RTP and SIC, and RETI, belonging to TVI;
- Satellite television (DTH) – operators have been providing, since 1998, a satellite service alternative to cable, for non-cabled areas. 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 paid television services, while the corresponding amount of subscribers has been growing considerably. Currently, the offer for television is identical to cable's. However, interactivity, and thus the Internet service, is not possible.

Considering that this offer is part of the cable TV network operator's portfolio and that it complements this service's offer geographically, this chapter also presents the evolution of DTH.

- IPTV and DVB-T – At the end of 2005, two new television distribution services were launched: SmarTV by Novis (Clix), and TV.NET.TEL by AR Telecom. While the first one is an IPTV offer, the service provided by AR Telecom uses a special technology called Tmax. Tmax is a digital, wireless technology with a high transmission capacity supported on the DVB-T telecommunications standard and on the IP standard. Albeit using different technologies from those used by cable television network operators, these services have similar characteristics to cable television.

It should be mentioned that in June 2007, Grupo PT launched an IPTV commercial offer, only available in specific geographic zones of Lisbon, Porto and Castelo Branco.

Regardless of the relevant market definition that may be done in other scopes, the similarities between these services and the cable TV distribution services justifies the presentation of these services' evolution in this chapter;

- Lastly, one should mention the launch of television distribution offers based on 3G and 3,5G mobile services and on the DVB-H (Digital Video Broadcasting – Handheld) standard. The DVB-H standard is based on DVB-T, and enables the use of interactive services and the access to on demand programmes. The evolution of this type of mobile television offers is analyzed on this report's chapter concerning mobile services.



### **6.2.3. Active operators**

Following we present the list of CDS providers, signalling those that were active by the end of 2006.



**Table 6-1 – CDS providers – 2006**

Name	
Associação de Moradores do Litoral de Almancil*	A
Associação de Moradores da Urbanização Quinta da Boavista*	A
Bragatel — Comp. Televisão por Cabo de Braga, S.A.	A
Cabo TV Açoreana, S.A.	A
Cabo TV Madeirense, S.A.	A
Cabovisão — Sociedade de Televisão por Cabo, S.A.	A
CATVP — TV Cabo Portugal, S.A. <sup>76</sup>	A
Entrónica – Serviços na Área de Telecomunicações, Lda.	A
Pluricanal Leiria — Televisão por Cabo, S.A.	A
Pluricanal Santarém — Televisão por Cabo, S.A.	A
TVTel Grande Porto — Comunicações S.A.	A
<b>Total active</b>	<b>11</b>
<b>Total non active</b>	<b>0</b>
<b>Total</b>	<b>11</b>

Source: ICP-ANACOM

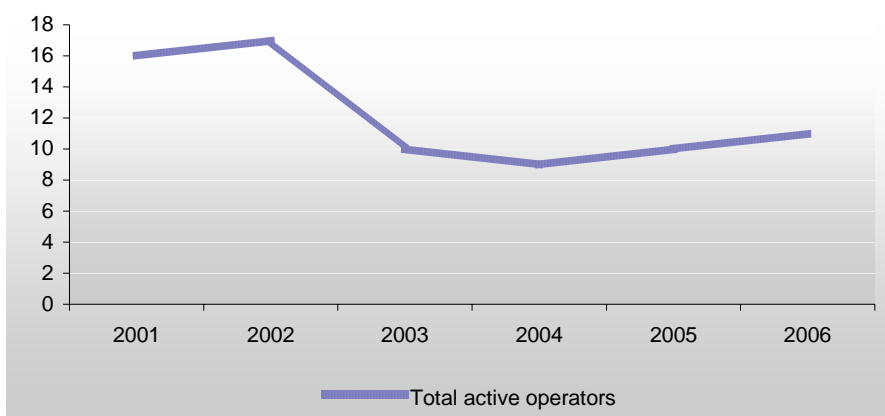
Legend: A – Active; NA – Not Active

\* Cable distribution networks not accessible to the public.

Between 2000 and 2006 there were no major changes in the amount of cable TV distribution networks operators. Indeed, the decrease in the number of active operators occurred in 2002 resulted from the replacement of CATVP regional companies operating in the mainland for one sole company. The increases registered in the recent years are explained by the authorizations granted to residents associations, which networks are small size and are not available to the public.

<sup>76</sup> After October 2005 the full capital of CATVP — TV Cabo Portugal, S.A., previously held by PT – Televisão por Cabo SGPS, S.A., became the property of PT Multimédia – Serviços de Telecomunicações e Multimédia, SGPS, S.A.

**Graph 6-1 – Evolution of the amount of active operators**



Source: ICP-ANACOM

Since cable distribution network operators' authorizations were granted until the end of 2003 by geographic area (municipality), the table below shows the list of entities operating in each region<sup>77</sup>. It should be highlighted, however, that the presence of the operator in certain regions does not imply that they are present in all of those regions municipalities.

**Table 6-2 – Cable distribution network operators authorized to operate, by NUT 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

Source: ICP-ANACOM

<sup>77</sup> Level 2 units of the Nomenclature of Territorial Units (NUTS) for Statistical Purposes, established by Decree-Law no. 244/2002 of 25 November. Under the terms of that diploma, the following 7 NUTS II were established in Portugal: North (Minho-Lima Cávado, Ave, Grande Porto, Tâmega, Entre Douro e Vouga, Douro and Alto-Trás-os-Montes), Centre (Baixo Vouga, Baixo Mondego, Pinhal Litoral, Pinhal Interior Norte, Pinhal Interior Sul, Dão-Lafões, Serra da Estrela, Beira-Interior Norte, Beira Interior Sul, Cova da Beira, Oeste and Médio Tejo), Lisbon (Greater Lisbon and Setúbal Peninsula), Alentejo (Lezíria do Tejo, Alentejo Litoral, Alto Alentejo, Alentejo Central and Baixo Alentejo), Algarve, ARA and ARM.

Grupo PT also offers the service through DTH.

Besides cable TV network operators, and as mentioned previously, the company AR Telecom – Acessos e Redes de Telecomunicações, S.A. is entitled to provide the television signal distribution services since April 2005, and Novis Telecom, S.A. is entitled to provide the television and video signal distribution services since November 2005.

### 6.3. The profile of the television service subscriber

This section characterizes the television subscriber, according to the data of the survey on the use of electronic communications of December 2006<sup>78</sup>.

The television service subscriber mostly resides in the autonomous regions and in more heavily populated urban areas.

**Table 6-3 – Percentage of households subscribing television per geographical location**

North	Centre	Lisbon	Alentejo	Algarve	Azores	Madeira
34.9%	31.0%	64.4%	31.2%	40.3%	70.3%	73.6%

Source: ICP-ANACOM, Survey on the use of electronic communications December 2006

**Table 6-4 – Percentage of households subscribing televisions per habitat size**

Less than 2.000 inhabitants	From 2,000 to 9,999 inhabitants	From 10,000 to 99.999 inhabitants	City of Porto	City of Lisboa
15.8%	33.0%	47.6%	62.7%	64.9%

Source: ICP-ANACOM, Survey on the use of electronic communications December 2006

On the other hand, the higher the socio-economic level of the interviewee, the higher the probability that he/she will have access to a paid television service.

<sup>78</sup> The universe defined for this study included individuals of both genders, aged 15 years old or over, residing in Mainland Portugal and in the Autonomous Regions of Madeira and the Azores. Selection of those interviewed was made by method of gender, age, education and occupation quotas. The sample was stratified by region and habitat. 2,519 interviews were conducted overall. 997 were conducted via mobile phone and 1,522 were made via fixed network. The fieldwork and data handling was performed by MARKTEST between 9 November and 29 December 2006.

**Table 6-5 – Percentage of households subscribing television per socio-economic level**

<b>Class A</b>	<b>Class B</b>	<b>Class C1</b>	<b>Class C2</b>	<b>Class D</b>
75.9%	65.4%	51.0%	36.1%	27.5%

Source: ICP-ANACOM, Survey on the use of electronic communications December 2006

There is also a positive relation between the interviewee's education level and the percentage of households subscribing a television service.

**Table 6-6 – Percentage of households subscribing television per education level**

<b>4th grade</b>	<b>6th grade</b>	<b>9th grade</b>	<b>12th grade</b>	<b>Higher education</b>
26.1%	33.3%	49.8%	49.9%	66.1%

Source: ICP-ANACOM, Survey on the use of electronic communications December 2006

#### **6.4. Barriers to service subscription**

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

In fact, the cable TV distribution 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 show lower income levels. However, there are other television distribution technologies available in these areas.

These factors are the main barriers to the subscription of this service.

## **6.5. The evolution of CDS, DTH and IPTV in 2006**

Bellow are some elements on the evolution of this service in 2006: geographic availability and penetration, service usage level, prices and quality of service.

### **6.5.1. CDS: geographic availability of the service**

Concerning the service's geographical availability, we analyse below the geographical distribution o cabled households and the evolution of cabled household penetration in time.

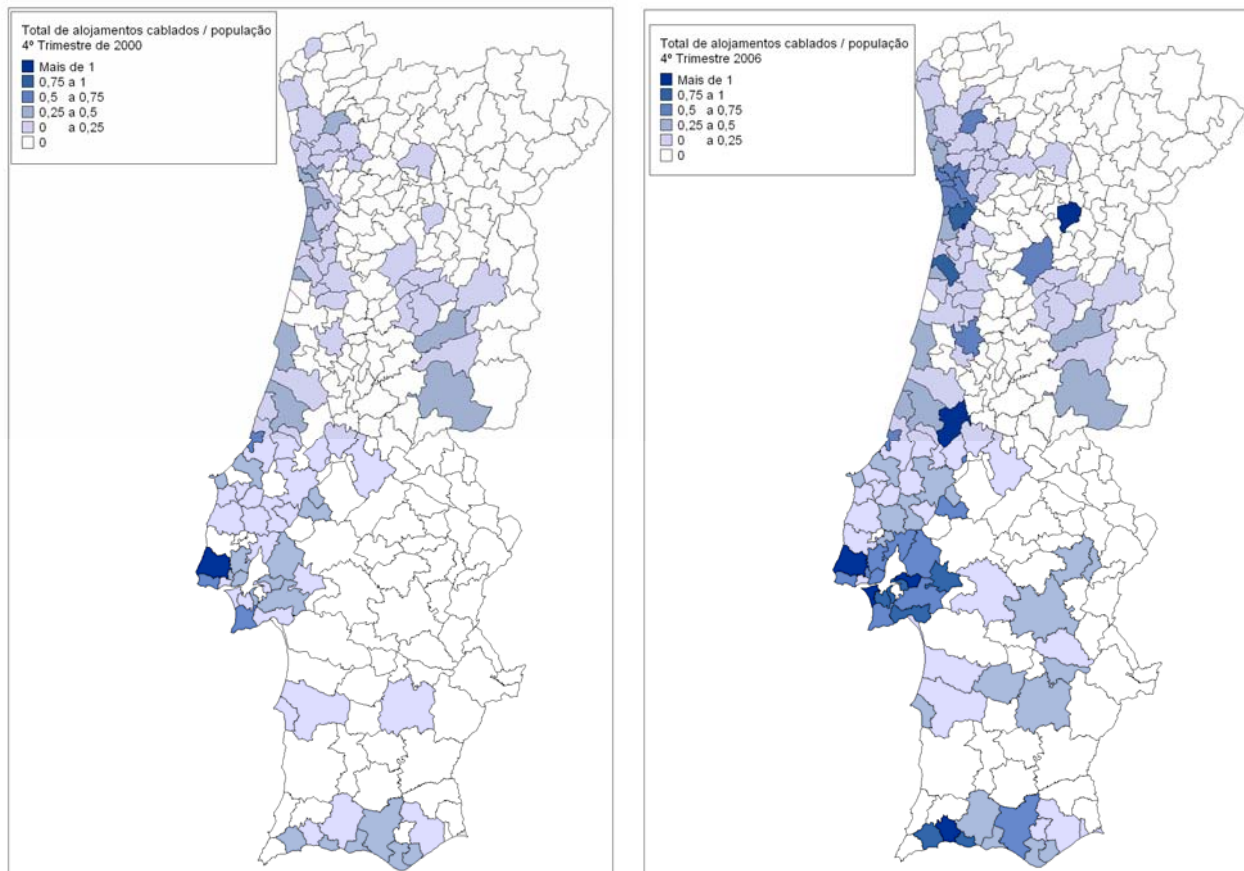
#### **The evolution of cabled households<sup>79</sup>**

The following maps show CDS's geographical availability at the end of 2000 and the end of 2006.

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<sup>79</sup> The offer of the service by more than one operator in the same region implies that a same household may have multiple cabling. This means that when adding all operators' cabled households may result in double counting. This is evident, for example, in the Lisbon region, where the sum of all operators' cabled households is higher than the total amount of households. This fact has become more relevant with the increase of competition between operators.

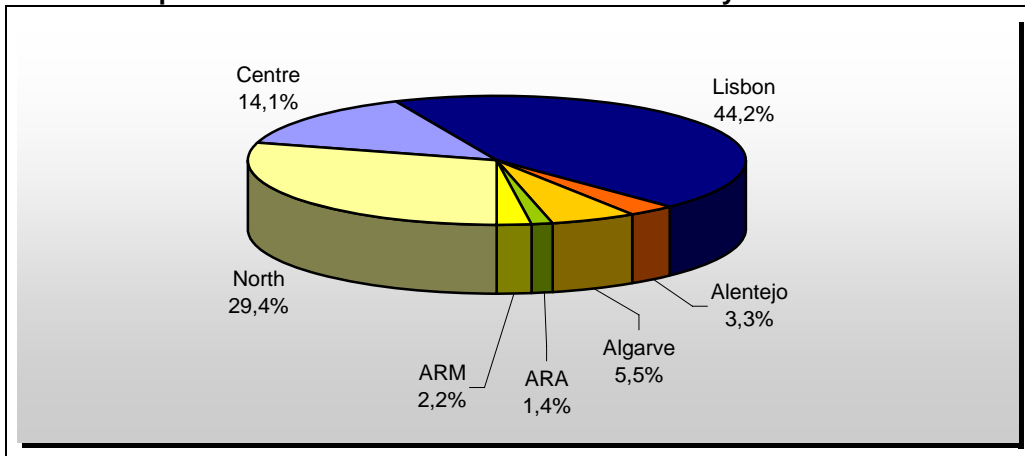
**Graph 6-2 – Geographical distribution of all cabled households**



Source: ICP-ANACOM

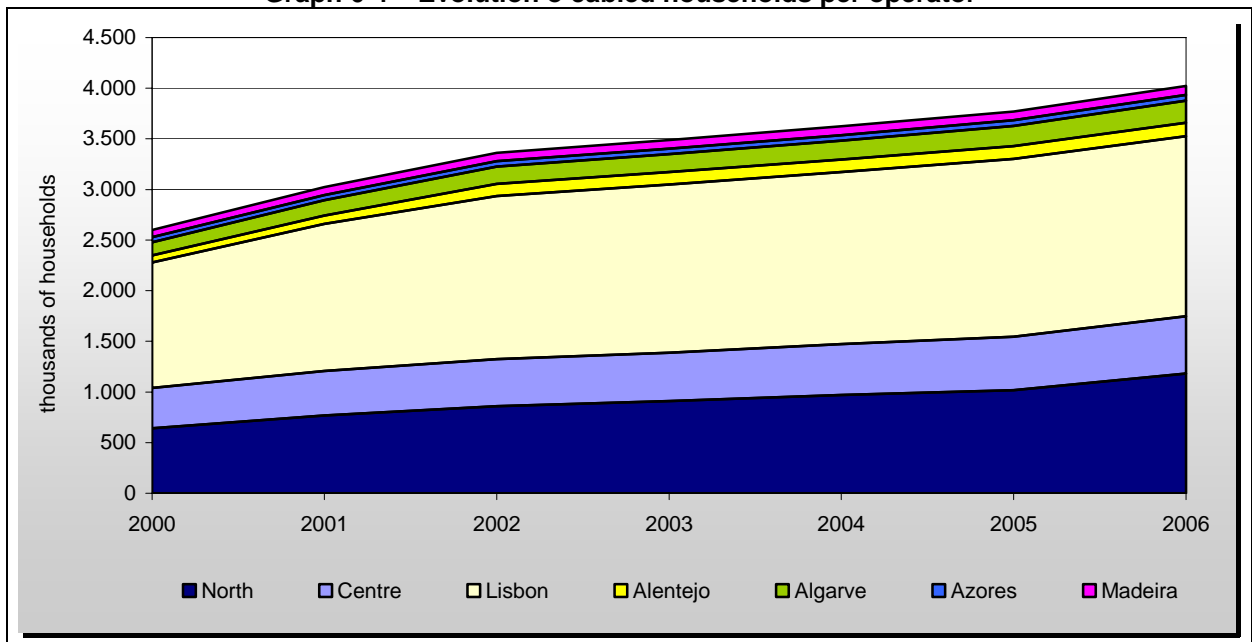
One concludes that cable distribution network operators installed their networks in the most populated areas, name Greater Lisbon, Greater Porto, the Setúbal peninsula, the North littoral and in the Algarve. More recently, there was an increase in the investment in area less heavily populated (North and Algarve), and in areas where cable TV networks had little development previously (Alentejo).

**Graph 6-3 – Distribution of cabled households by NUTS II – 2006**



Source: ICP-ANACOM

**Graph 6-4 – Evolution of cabled households per operator**



Source: ICP-ANACOM

The evolution registered between 2000 and 2006 occurred mainly in areas where the services already existed, or in surrounding areas.

This service's current geographical distribution 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 use of the already installed infrastructures. In this feature, this service's special development is not different from other network industries demanding highly initial investment and with cost structures with a higher rate of fixed costs;
- The inter-relation between the historical operator's strategy and the new operators' strategies. The historical operator started installing its networks in urban areas of a greater size. New operators, on an early stage, started to operate in smaller size urban areas and/pr in municipalities where the historical operator was not yet installed or where its presence was less important. Later, operators started providing services in areas surrounding their initial areas or in less populated areas-, currently there are several areas with more than on operator;
- The emergence and development of DTH as a less expensive alternative to for the provision of a television distribution services in less populated or remote areas.

In 2006, concretely, the sum of new households cabled by the operators was 252 thousand, a figure above that recorded in the 2000-2006 period (237 thousand households). The growth rate of all cabled households reported by the operators reached 6.7 per cent in 2006.



**Table 6-7 – Cabled households**

	2005	2006	2005/2006 var. (%)	2000/2006 average yearly var. (%)	2005/2006 var. (%)
North	1,016,627	1,181,054	16.2%	10.7%	84.4%
Centre	528,166	567,141	7.4%	6.0%	42.1%
Lisbon*	1,757,371	1,777,935	1.2%	6.2%	43.7%
Alentejo	128,024	132,726	3.7%	11.1%	88.3%
Algarve	197,318	219,628	11.3%	9.3%	70.3%
Autonomous Region of the Azores	55,888	55,891	0.0%	1.7%	10.6%
Autonomous Region of Madeira	86,793	87,711	1.1%	2.9%	19.0%
Total	3,770,187	4,022,086	6.7%	7.5%	54.7%

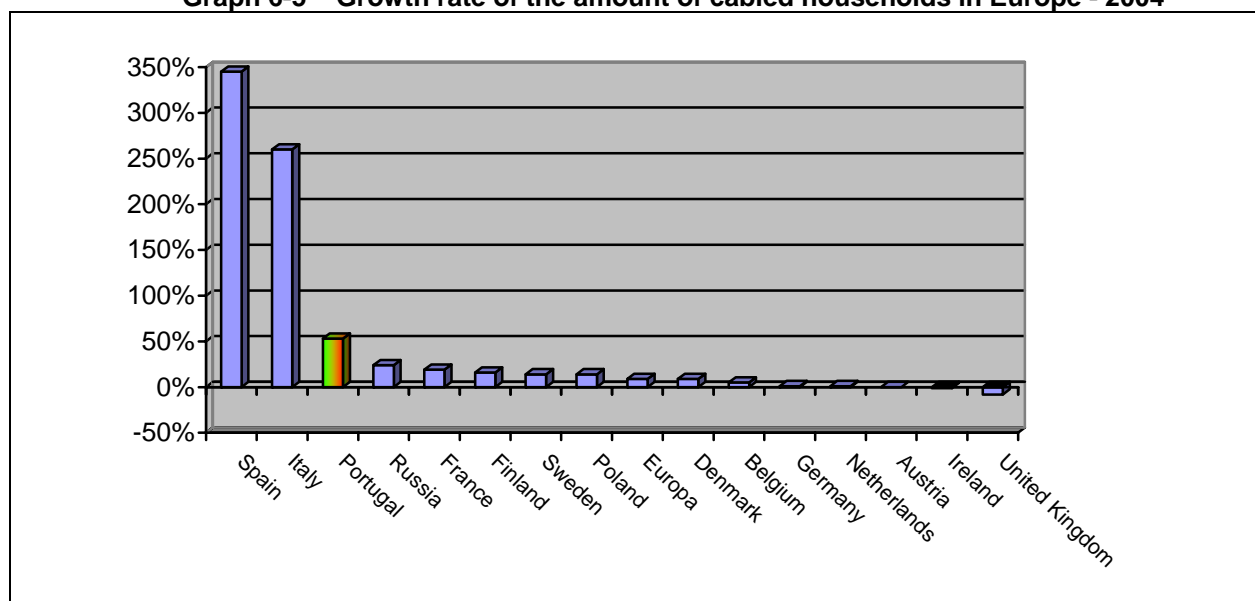
Source: ICP-ANACOM

Unit: 1 household, %

\* The offer of the service by more than one operator in the same region may imply the multiple cabling of the same household. This fact has gained relevance, namely in the Lisbon region.

According to the available data, the investment made by cable TV distribution operators in Portugal was considerably higher than in most European countries.

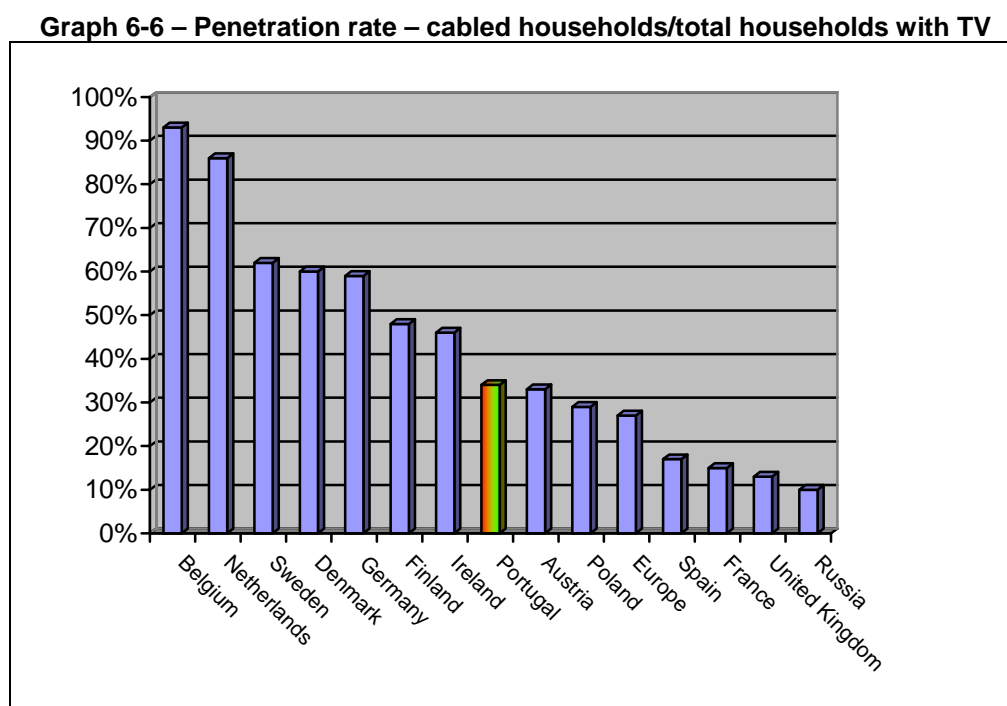
**Graph 6-5 – Growth rate of the amount of cabled households in Europe - 2004**



Source: IDATE

## Cabled household penetration versus total households

According to the available data, Portugal presents a cabled household penetration above the European average<sup>80</sup>.



Source: IDATE.  
Note: 2004 values are IDATE estimates.

It should be reminded that the important differences existing among the several countries under analysis are mainly due to the fact that, in some countries, the cable infrastructure has long been used as the most important means for television signals distribution (as, for example, in Belgium and the Netherlands), while in other countries TV broadcasting was initially radio-broadcasting analogue television, with the installation of cable networks arriving much later.

### 6.5.2. Service's usage level

<sup>80</sup>Cf. IDATE, *World Television Market – 2005*, 16th edition.

Below we present the evolution in the number of subscribers and the corresponding penetration. We also present the evolution in the number of customers of the television distribution service using DTH, IPTV and DVB-T technology.

### CDS evolution: amount of subscribers

At the end of 2006 there in Portugal more than 1.4 million subscribers to the cable television distribution service, 20 thousand more than a year before (a 1.4 per cent growth).

**Table 6-8 – Amount of CDS subscribers**

	2005	2006	Year-on-year variation	Average yearly variation (2000-2006)	Variation (2000-2006)
North	327,636	336,320	2.7%	9.8%	74.8%
Centre	167,996	171,089	1.8%	7.0%	50.2%
Lisbon*	707,391	708,617	0.2%	6.0%	41.9%
Alentejo	38,111	38,976	2.3%	15.5%	137.2%
Algarve	51,360	51,364	0.0%	8.7%	65.4%
Autonomous Region of the Azores	40,047	43,827	9.4%	5.6%	38.5%
Autonomous Region of Madeira	66,073	68,367	3.5%	9.3%	70.4%
<b>Total</b>	<b>1,398,614</b>	<b>1,418,560</b>	<b>1.4%</b>	<b>7.4%</b>	<b>53.4%</b>

Source: ICP-ANACOM

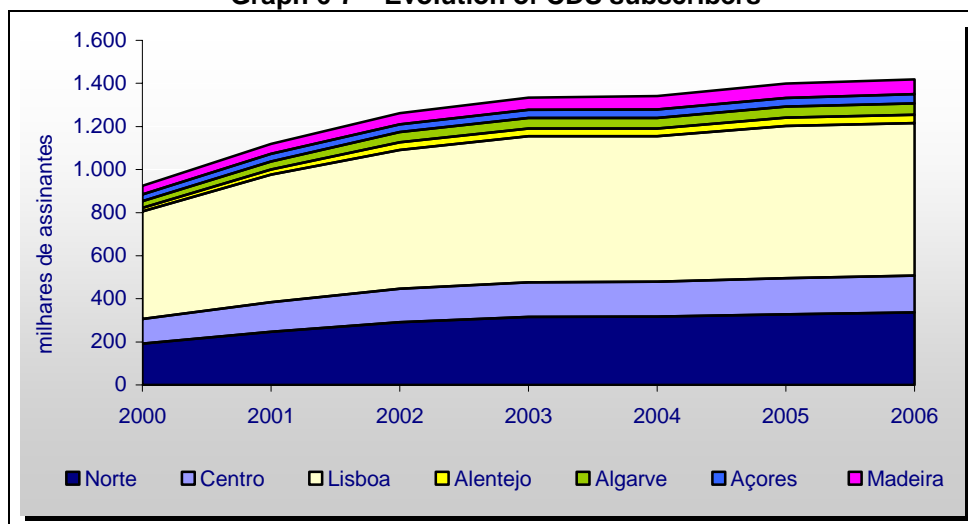
Unit: 1 subscriber, %

The important growths that occurred in the autonomous regions of the Azores (9.4 per cent) and Madeira (3.5 per cent) were directly influenced by the protocols signed between the General Government, The Regional Governments, ICP-ANACOM and the only television distribution network operator currently operating in each of the autonomous regions. The protocol in force in Madeira was signed on 6 August 2004, influencing the number of cable television service subscribers since the fourth quarter of that year. The Azores protocol was signed on 5 November 2006, with the validity of one year, with its effects being reflected during 2006, namely in the increase in the number of cable television service subscribers.

In general, between 2000 and 2006 this service was subscribed by an average of 82 thousand subscribers per year, which corresponds to a 7 per cent yearly growth average rate.

The fast increase in the number of this service’s subscribers is comparable to the evolution corresponding to the first stages of a service’s life cycle. It is considered that the evolution in the number of subscribers must have also been influenced by the launch of new offers – namely of additional channel and in Portuguese, by the continuous offer of new premium channels and premium channels packages -, and by the package offer of voice and broadband Internet access services. The generalized existence of promotional offers reducing, and some times eliminating, service access prices (installations, equipment prices) should also be stressed out. In some cases, these offers can be associated to an increase in competition in those fields where there is more than one operator on the market.

**Graph 6-7 – Evolution of CDS subscribers**

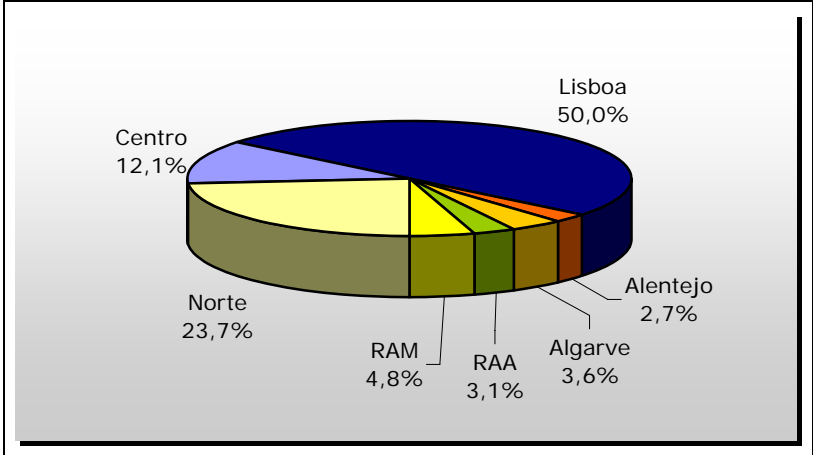


Source: ICP-ANACOM

The decrease of the number of customers’ growth rate, which happened after 2002, and which had a generalized impact on all regions, could be the result of this service entering a maturity stage. During the mentioned period, factors such as the development of ADSL as a means of broadband Internet access alternative to cable modem, the development of the DTH service and the economic status could have influenced this evolution.

Concerning the spatial concentration of cable TV distribution subscribers, Lisbon concentrates 50 per cent of subscribers, followed by the North region (23.7 per cent).

**Graph 6-8 – Distribution of subscribers by NUTS II – 2006**



Source: ICP-ANACOM

**ECDS evolution: Penetration**

In 2006, the penetration rate of cable television subscribers reached 26 per cent of cable households. It should be noted that the penetration's rate negative variation registered in Lisbon and Algarve is not due to a decrease in the amount of subscribers, but to an increase in the number of households. In the period between 2000 and 2006, cable television subscriber penetration versus all Portuguese households grew 6.5 per cent. The same growth trends registered for cabled households still maintain, i.e., there was a slowing down after 2002. Once again highlight goes to growths registered in the Azores and Madeira, (7.9 and 17.2 per cent, respectively), here also due to the impact of the entry into force of the protocol signed with both autonomous regions.

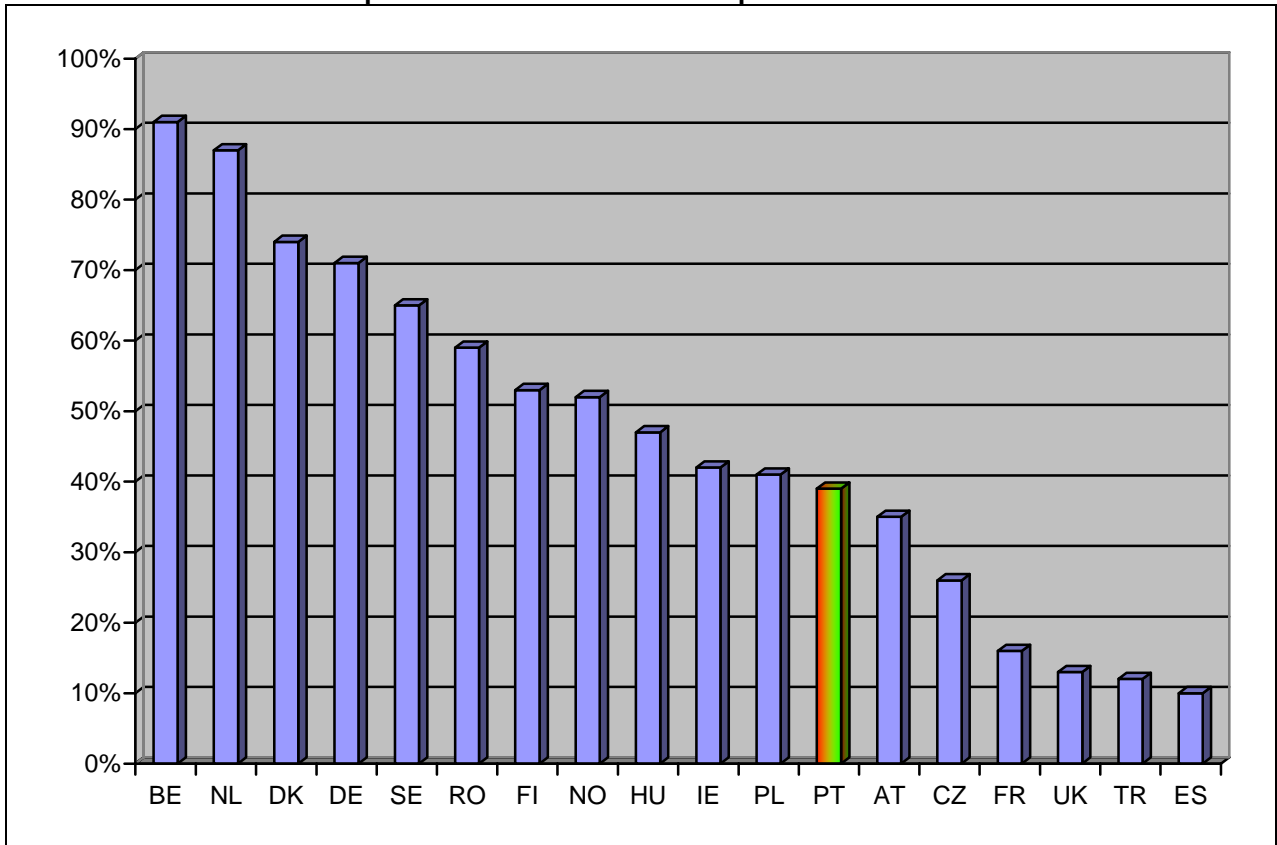
**Table 6-9 – Cable TV subscribers penetration versus total households**

NUTS II	2005	2006	2005/2006 Var. (%)	2000/2006 average Var. (%)	2000/2006 Var. (%)
North	18.5%	18.8%	0.3	1.0	6.1
Centre	12.5%	12.6%	0.1	0.1	0.3
Lisbon	51.7%	51.4%	-0.3	3.5	20.8
Alentejo	8.5%	8.6%	0.1	0.5	3.0
Algarve	16.1%	15.8%	-0.3	0.7	3.9
Autonomous Region of the Azores	40.0%	43.2%	3.2	1.3	7.9
Autonomous Region of Madeira	59.6%	59.9%	0.3	2.9	17.2
Total	25.6%	25.7%	0.1	1.1	6.5

Source: ICP-ANACOM

According to the available data, and taking into account the considered countries, Portugal occupies an average position in the European ranking.

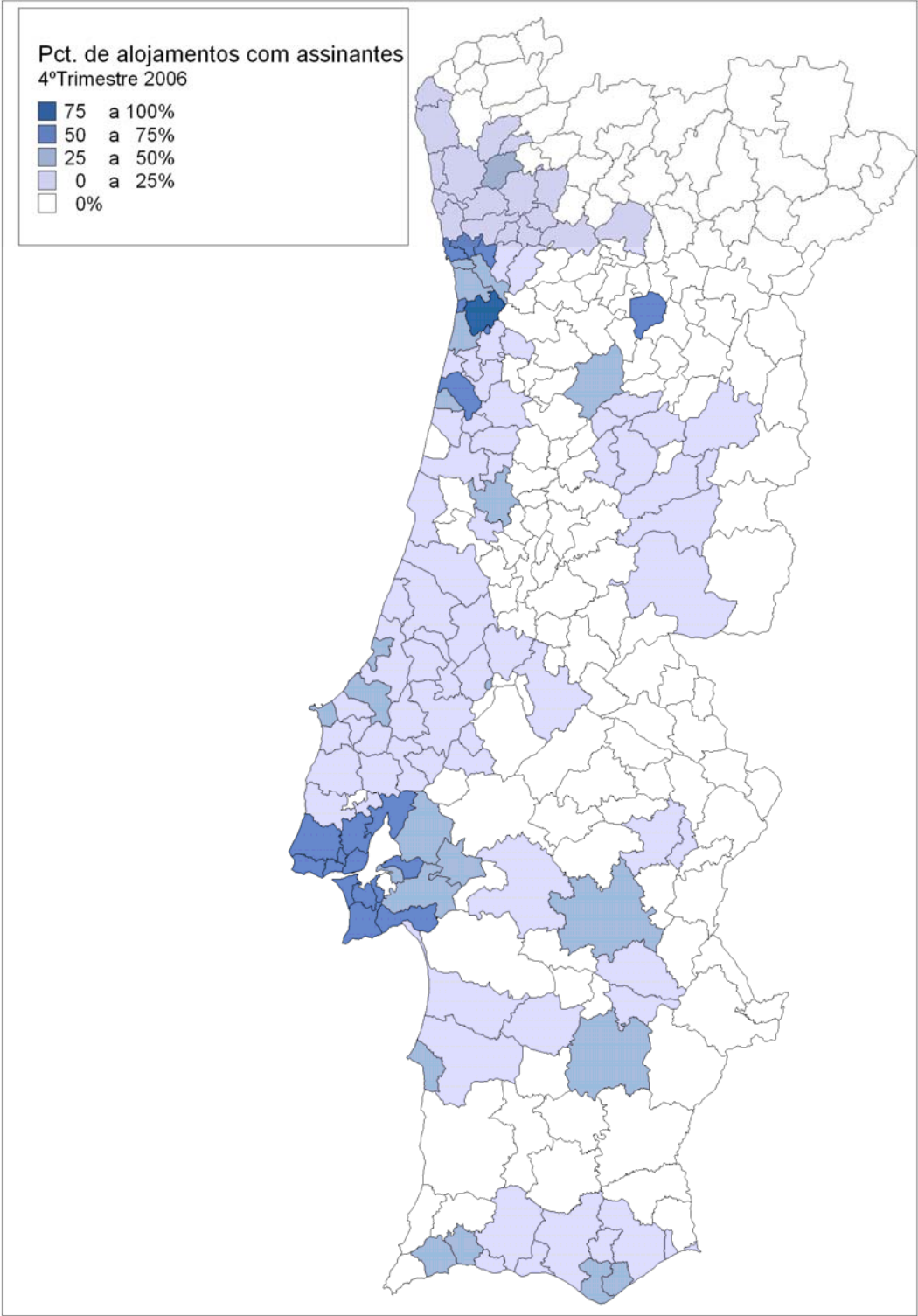
**Graph 6-9 – Cable TV subscriber penetration – 2005**



Source: Informa Telecoms & Media, TV International Sourcebook 2007.

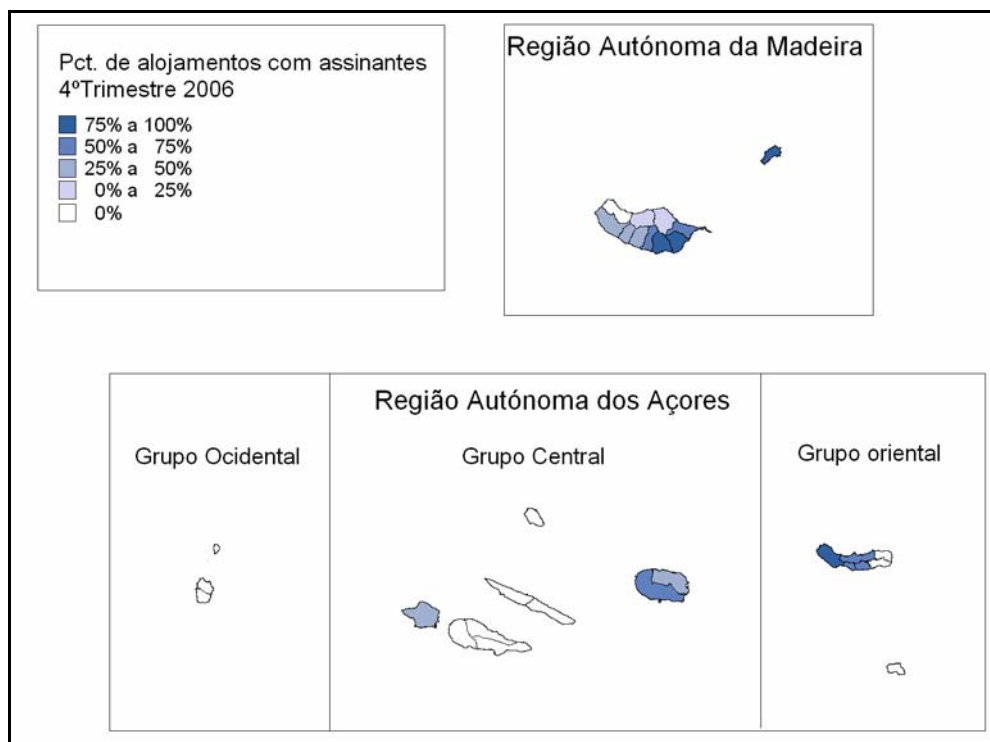
The map below shows this service's subscribers geographical distribution.

**Graph 6-10 – Geographical distribution of cable TV subscribers (Mainland Portugal)**



Source: ICP-ANACOM

**Graph 6-11 – Geographical distribution of cable TV subscribers (Autonomous Regions of the Azores and Madeira)**



Source: ICP-ANACOM

One registers that this service's subscriber penetration present a pattern similar to that of cabled households: this services subscribers are concentrated in the greater urban centres such as Greater Lisbon and Greater Porto, the Setúbal peninsula, littoral North and Algarve, while the autonomous regions also present a considerable number of subscribers, particularly in the main cities.

It is also possible to measure cable TV subscribers' penetration versus all cabled households. In 2006, the number of cable TV subscribers stood for 35 per cent of all cabled households, 1.8 per cent less than the year before. The drop of this indicator is common to the whole country except for the Autonomous Regions, registering considerably high penetration rates, namely in the Azores, with the highest level of penetration growth during this period (6.7 per cent more than the 2005 figures). The reasons for this particular behaviour have already been mentioned previously.



This indicator's global evolution results from the fact that the number of cable households per operator has outgrown the number of customers.

**Table 6-10 – Cable TV subscribers versus cabled households**

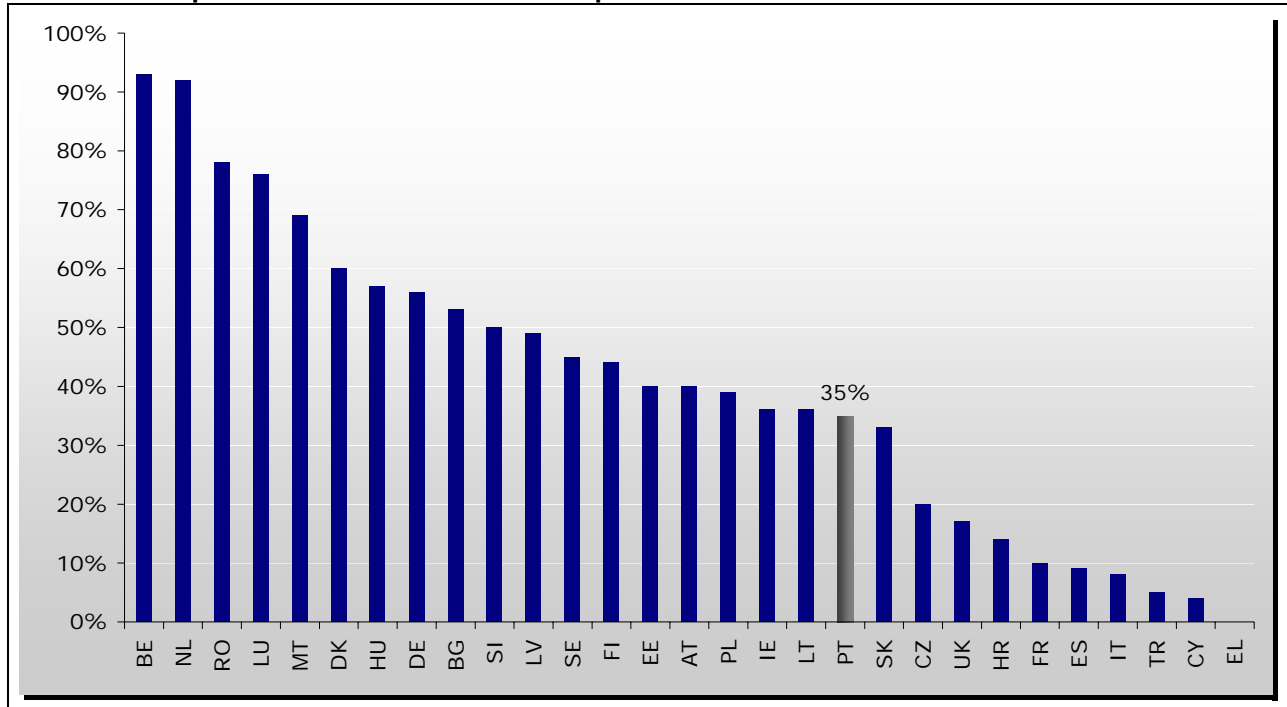
<b>NUTS II</b>	<b>2005</b>	<b>2006</b>	<b>2005/2006 Var. (%)</b>	<b>2000/2006 average Var. (%)</b>	<b>2000/2006 Var. (%)</b>
North	32.2%	28.5%	-3.70	-0.3	-1.5
Centre	31.8%	30.2%	-1.60	0.3	1.7
Lisbon	40.3%	39.9%	-0.40	-0.1	-0.5
Alentejo	29.8%	29.4%	-0.40	1.0	6.1
Algarve	26.0%	23.4%	-2.60	-0.1	-0.7
Autonomous Region of the Azores	71.7%	78.4%	6.70	2.6	15.8
Autonomous Region of Madeira	76.1%	77.9%	1.80	3.9	23.5
<b>Total</b>	<b>37.1%</b>	<b>35.3%</b>	<b>-1.80</b>	<b>-0.1</b>	<b>-0.3</b>

Source: ICP-ANACOM

Apparently operators are investing in the expansion of their networks. This fact will bring consequences, both in the amount of customers and at the completion level, during the next years. This indicator's evolution could also be justified by the lack of commercial dynamics by some operators, by a decrease in the service's demand, or by the emergence of competing services.

On the other hand, paid TV penetration in households with TV is still quite modest when compared with that registered in other countries of Europe.

**Graph 6-12 – Cable TV subscribers penetration rate versus households with TV**



Source: CE, Special Eurobarometer E-communications Household Survey (December 2005/January 2006)

## DTH Service

The DTH service is an important component of the activity of some cable distribution network operator (CATVP, Cabo TV Madeirense and Cabo TV Açoreana).

By the end of 2006 the number of satellite television distribution service subscribers reached around 436 thousand. In 2006 this services registered a 10.4 per cent growth, which translates in to 41 thousand new subscribers.

**Table 6-11 – Amount of DTH subscribers**

	2005	2006	Year-on-year variation	(2001-2006) average yearly variation*	(2001-2006) variation *
North	123.444	141.296	14,5%	15,1%	102%
Centre	125.696	133.108	5,9%	14,2%	94%
Lisbon	37.213	39.985	7,4%	9,8%	60%
Alentejo	48.728	48.153	-1,2%	9,6%	58%
Algarve	19.703	20.454	3,8%	5,0%	28%
Autonomous Region of the Azores	23.047	34.545	49,9%	23,1%	182%
Autonomous Region of Madeira	16.662	18.020	8,2%	60,9%	978%
<b>Total</b>	<b>394.493</b>	<b>435.561</b>	<b>10,4%</b>	<b>14,2%</b>	<b>95%</b>

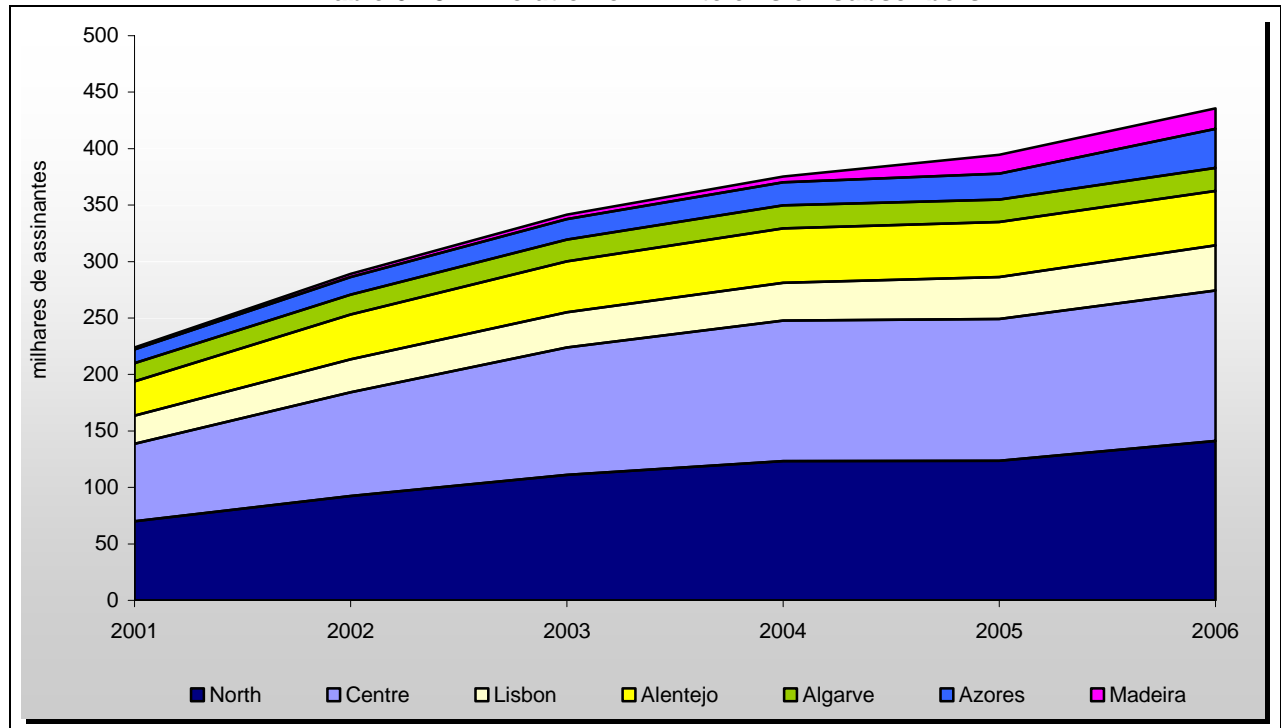
Source: ICP-ANACOM

Unit: 1 subscriber, %

\* Only the last five years (2001-2006) are considered when reckoning the average and accumulated variations, since there are no available figures regarding DTH technology subscribers by region for 2000.

Between 2001 and 2006, the DTH service registered year-on-year growth rates above those registered by the cable television distribution service, and recorded an average of 42,000 new subscribers per year, which corresponds to a 14 per cent annual growth rate.

**Table 6-13 – Evolution of DTH television subscribers**

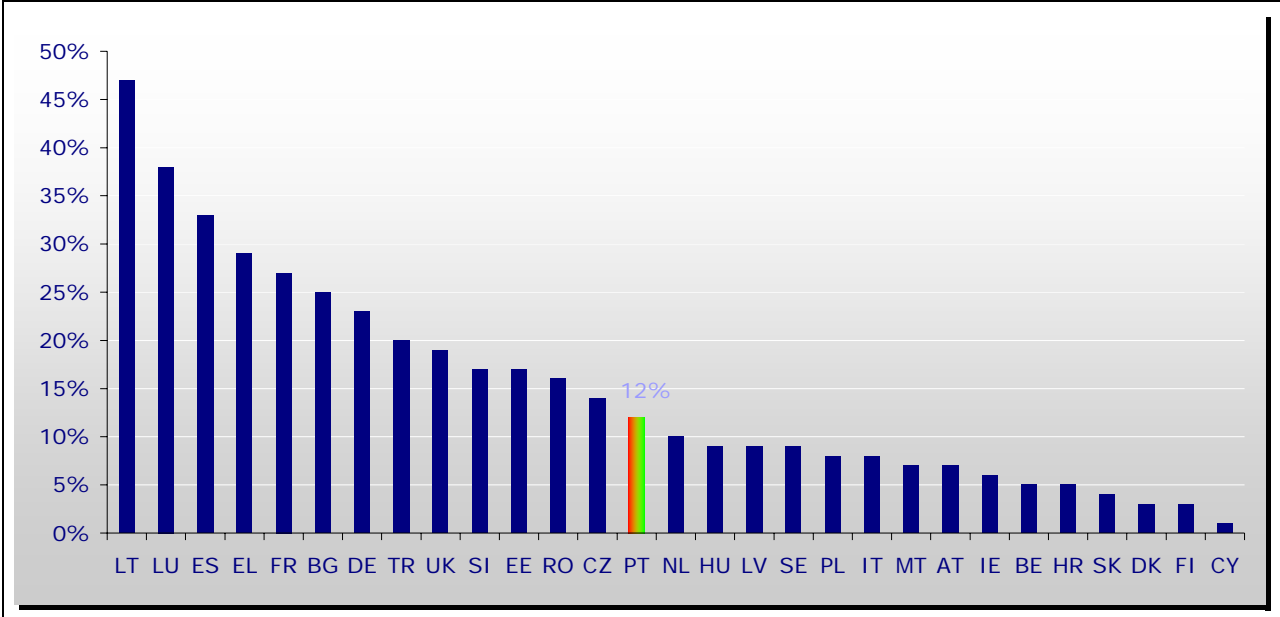


Source: ICP-ANACOM

It should be mentioned that these growth rates are explained by influence of the protocols signed with the autonomous regions, previously mentioned.

According to the most recent data, Portugal stood in the middle of the European ranking regarding satellite television service subscriber penetration, with a penetration of 12 per each 100 households equipped with TV

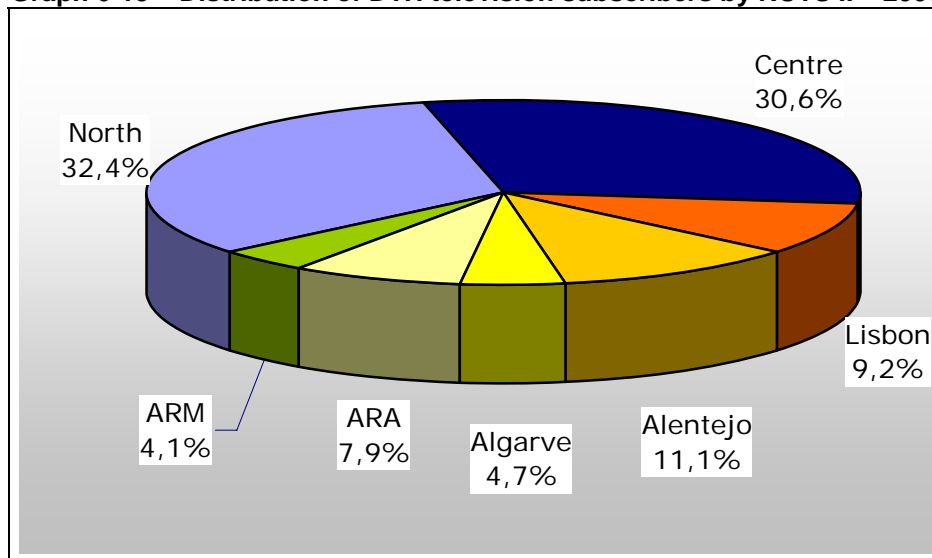
**Graph 6-14 – DTH subscriber penetration versus households with TV - 2005**



Source: European Commission, *Special Eurobarometer E-communications Household Survey (December 2005/January 2006)*

The graph below shows the geographical distribution of DTH technology subscribers at the end of 2006, where the North and Centre regions continue to concentrate the greater percentage of this technology's users.

**Graph 6-15 – Distribution of DTH television subscribers by NUTS II – 2006**



Source: ICP-ANACOM

In relative terms, the presence of DTH is particularly noticed in Alentejo, where DTH stands for 55 per cent of all households with access to paid TV services, in the Centre Region and in the Autonomous Region of the Azores. In the remaining regions the cable television service stands for 70 per cent and 90 per cent. DTH's geographical distribution partly complements cable services.

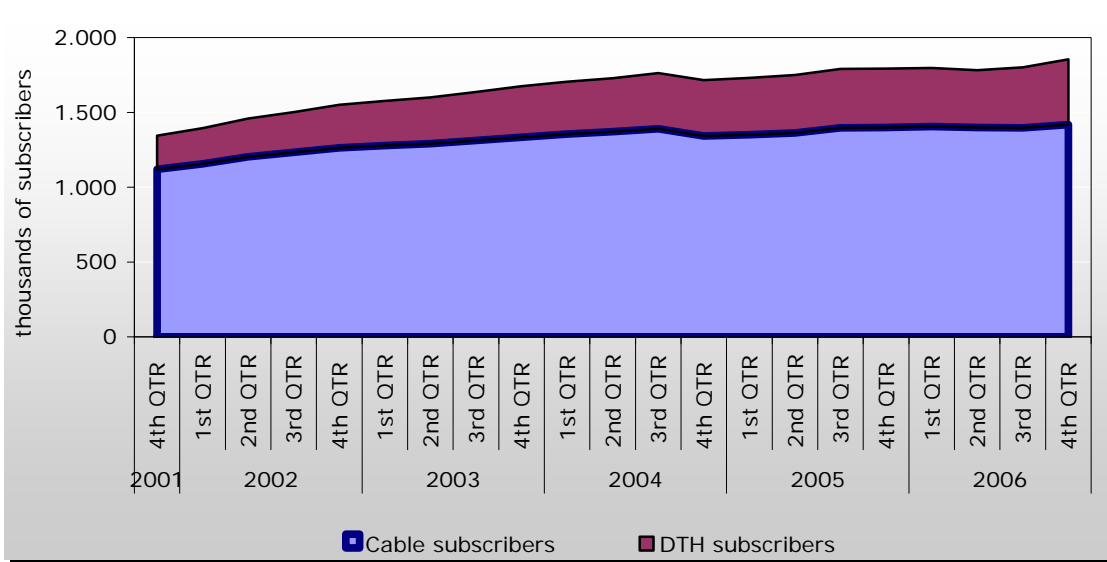
**Table 6-12 – Total distribution of (cable + DTH) subscribers by technology – 2006**

NUTS II	Percentage of television services subscribers	
	Cable	DTH
North	70.4%	29.6%
Centre	56.2%	43.8%
Lisboa	94.7%	5.3%
Alentejo	44.7%	55.3%
Algarve	71.5%	28.5%
Autonomous Region of the Azores	55.9%	44.1%
Autonomous Region of Madeira	79.1%	20.9%
Total	<b>76.5%</b>	<b>23.5%</b>

Source: ICP-ANACOM

In the end of 2006, households subscribing the cable television service represented 77 per cent of the overall figure, leading to the conclusion that cable is the main access technology. However, during the period under review, DTH's growth was faster than the cable networks'.

**Graph 6-16 – Evolution in the total amount of paid TV subscribers by technology**

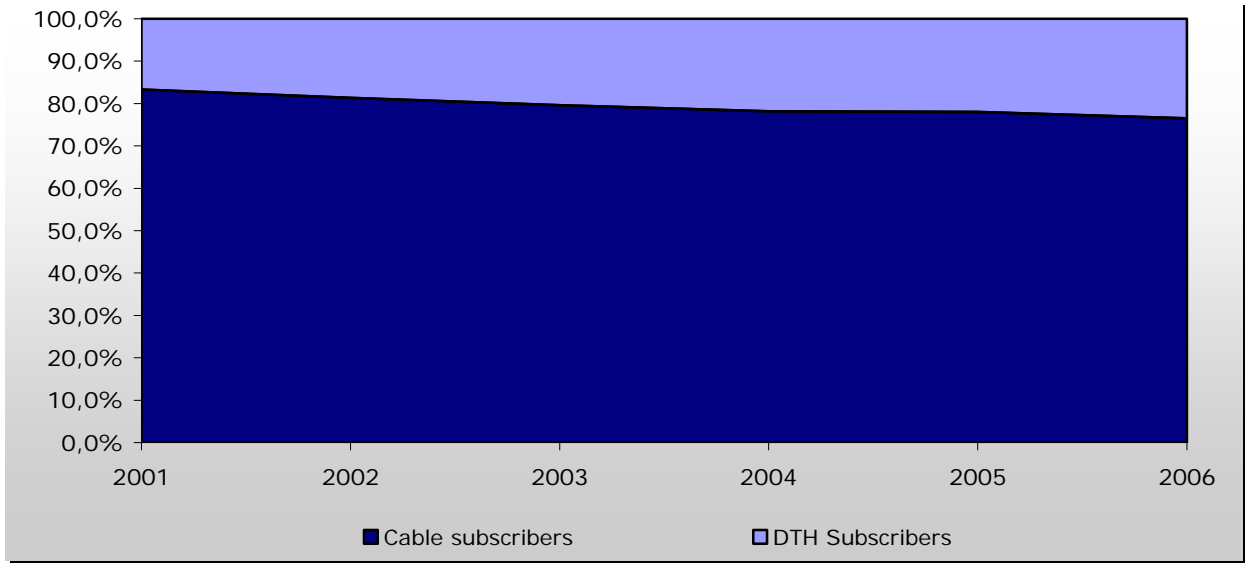


Source: ICP-ANACOM

These phenomena results from the historical operator’s development strategy: this operator has used DTH technology to provide its services in location where geography, population dispersion and/or commercial prospect could not advise the installation of a cable network.

DTH as been slowly gaining market share from cable television.

**Graph 6-17 – Evolution of the percentage of paid TV subscribers by technology**



Source: ICP-ANACOM

### **IPTV and Tmax service**

As mentioned previously, new TV distribution services emerged in 2005 using IPTV and DVB-T.

The following table shows the total amount of subscribers to the television signal distribution offers marketed since 2006 (in 2005 there were only test customers).

**Table 6-13 – Subscribers of new television signal distribution offers – 2006**

	2006
IPTV and similar (Tmax) subscribers	3,292

Source: ICP-ANACOM

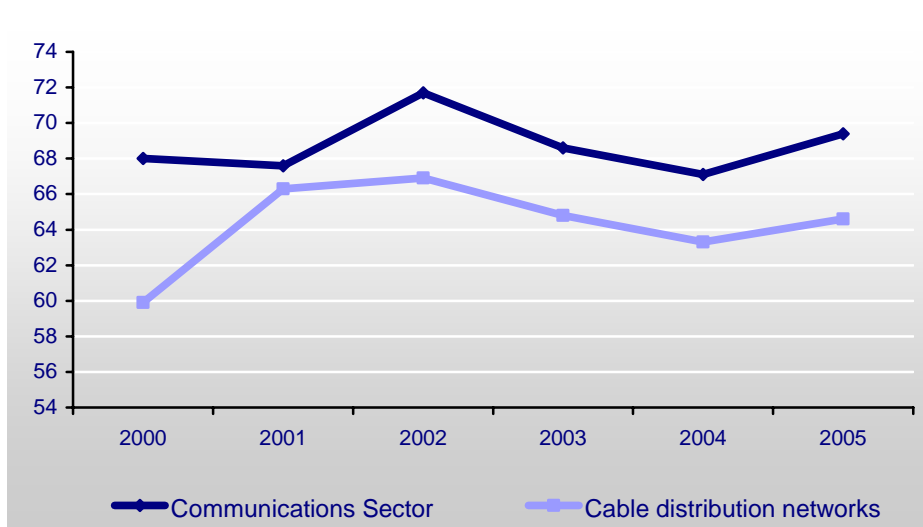
Unit: 1 subscriber

As can be seen, these services' penetration is still very low.

### 6.5.3. Evaluation by consumers

The satisfaction index of the cable television distribution customers has stood about 4 per cent below the communications sector satisfaction index.

**Graph 6-18 – Evolution of the ECSI satisfaction index– Cable networks vs. Communications sector**



Source: ECSI, National customer satisfaction index – 2005<sup>81</sup>

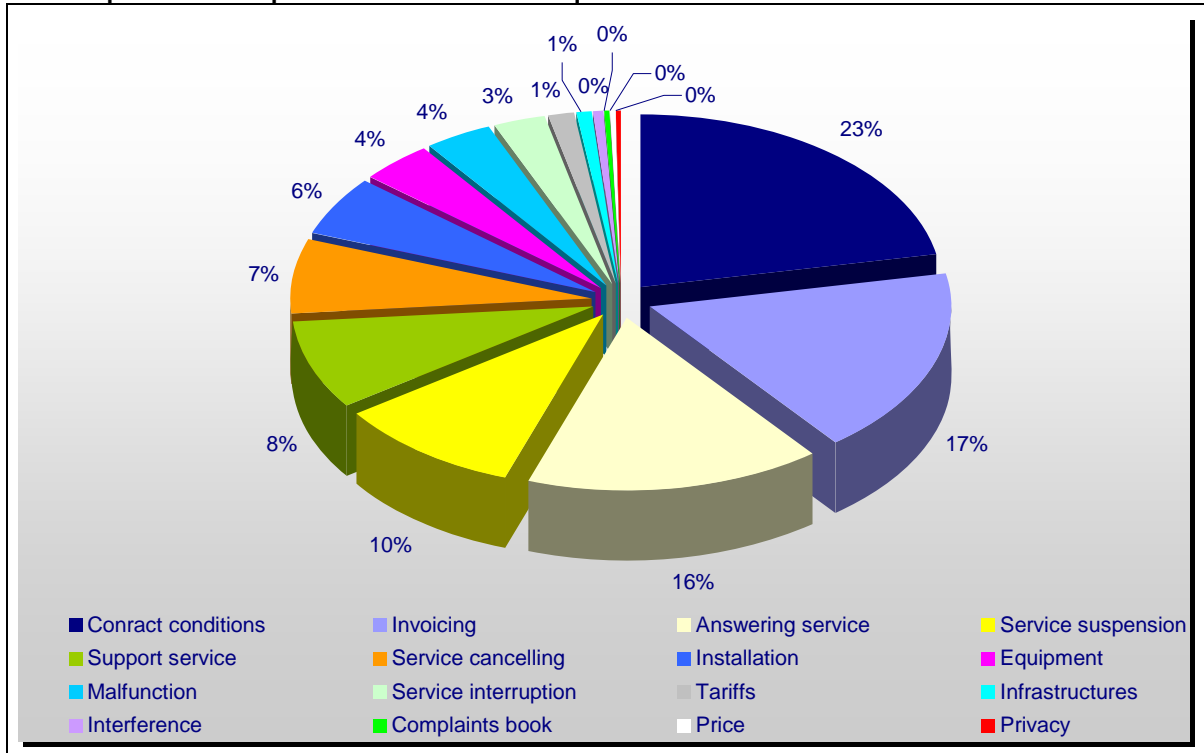
On the other hand, during 2006, ICP ANACOM received 2,995 complaints and information requests concerning the television distribution services and its operators.

Contract condition, invoicing, the public support service and the suspension of the service are the main reasons why the service's users are not satisfied.

<sup>81</sup> For setting up the ECSI index in Portugal, IPQ performed 2550 interviews by studied company (TV Cabo and other cable television operators). PLS methodology was used to estimate the ECS (econometric with simultaneous equations) model and to estimate the indexes on a scale from 0 to 100.



**Graph 6-19 – Complaints and information requests on the television distribution service – 2006**



Source: ICP-ANACOM

#### 6.5.4. Development of the offer's structure

Specifically regarding the cable TV distribution services, on registers that Grupo PT has been losing market shares since 2004. In 2006, Grupo PT's subscribers share decreased 3 per cent.

**Table 6-14 – Grupo PT subscribers share**

2001	2002	2003	2004	2005	2006
82.9%	79.6%	80.7%	79.4%	78.2%	75.2%

Source: ICP-ANACOM