• 5. Subscription television service

This chapter details the evolution of the subscription television service during 2009 and in previous years.

The subscription television service includes television distribution services using cable distribution networks, satellite distribution networks (Domestic satellite reception (DTH)), the public switched telephone network, over optical fibre networks and over radio frequencies [FWA]¹¹⁵. The Mobile TV service is addressed in the chapter concerning mobile services, since it is currently considered a unicast service.

5.1. Main aspects of the evolution in 2009

- The number of subscription TV customers continued to grow, totalling 2.5 million in 2009, corresponding to 66 customers for every 100 families. Revenues from the subscription television service have grown at a fast rate and, taking only separable revenues of the service into account, have increased around 12 % over the year.
- Conducting an analysis by type of technology, new services based on television over Internet protocol (IPTV), and similar, were those reported with the most growth in absolute terms 178 thousand new customers. FTTH, as a technology which has begun to receive operator investment in recent times and which still has a small customer base, has been reported with a growth rate in excess of 100 %, corresponding to 29 thousand new customers. Meanwhile, DTH grew by 10 % in 2009. The Cable television Distribution Service (CDS) reported another year of negative growth.
- Grupo ZON/TV Cabo continued to be the main subscription television service operator, with a 64.4 % share of subscribers. In addition to Grupo ZON/TV Cabo, there were two other operators with significant market shares: PTC (23 %) and Cabovisão (10.2 %). In the last year, only PTC, Sonaecom and Vodafone reported an increase in their share of customers of the service.

 Meanwhile, the number of bundled offers sold in conjunction with the fixed / mobile broadband Internet Access Service and/or with the voice telephone service increased. These strategies enable the service's providers to reduce customer churn (operator switching) and leverage revenues per subscriber.

5.2. Subscription television service offer

The activity of provider of subscription TV distribution services consists of the transmission and re-transmission of information, namely comprising the distribution of television and audio broadcasting content, either their own or from third parties, encrypted or unencrypted.

5.2.1. Subscription television services and platforms

Subscription television was introduced in Portugal with the development of cable distribution networks. The first licensing was granted in 1994 on a regional and local basis.

Currently, the subscription television service reaches consumers through the following platforms:

- CATV hybrid optical fibre and cable networks that distribute the TV signal received at the head end through the cells that make up the local access networks, each one connected to a few hundred households. In recent times, the cable operators have modernised these networks, investing in an upgrade of the network to the DOCSIS 3.0 standard and bringing optical fibre infrastructure closer to the users. As such, they are able to offer services which require greater bandwidth, such as high definition TV (HDTV) and other types of interactive services.
- Satellite television (DTH) since 1998, subscription television operators have been providing a satellite service as an alternative to cable. In order to receive this service, customers need to have a satellite dish, a receiver / decoder and an access card. This offer broadened the geographic coverage of subscription television services, and the corresponding number of

subscribers has been growing considerably. Currently, the commercial offer for television is identical to the cable offer. However, interactivity is not possible. As a complement to its IPTV offer, PTC also launched a DTH offer in 2008,

- IPTV and the digital terrestrial television broadcasting system (DVB-T) - at the end of 2005, two new television distribution services offers were launched: "SmarTV" from Novis (Clix, currently Optimus), and "TV.NET.TEL" by AR Telecom. Whereas the first offer is based on IPTV, the service provided by AR Telecom uses its own technology, called Tmax. Tmax is a digital, wireless technology with a high transmission capacity supported on the DVB-T telecommunications standard and on the DVB-T and IP standards. In June 2007, Grupo PT also launched a commercial IPTV offer and Vodafone launched the same service in September 2009.
- FTTH: in 2007, TVTEL (currently part of ZON/TV Cabo) began construction of an optical fibre network to provide the subscription television service in certain Lisbon suburbs. In 2008, Sonaecom made an investment in optical fibre networks, limited to certain zones of greater Lisbon and Porto. During 2009, PTC launched its "Meo fibre" service.
- 3rd Generation mobile networks television distribution offers are also available using 3G and 3.5G mobile services. However, this service is provided in unicast mode. As such, in the present report, the evolution of this type of offer of mobile television is analysed in the chapter on mobile services.
- Finally, in February 2008, at the same time as the tender was held for the digital terrestrial television (DTT) open channel platform, a public tender was launched for granting rights of use of frequencies

for the digital terrestrial broadcasting service for subscription television. This licence was won by PTC; however in December 2009 PTC requested that the administrative acts by which the license was issued be revoked. This process is currently pending decision by ICP-ANACOM subsequent to the necessary period of public consultation.

5.2.2. Geographic availability of the service

In terms of the service's geographic availability, satellite TV offers enable access to the service in almost the entire country.

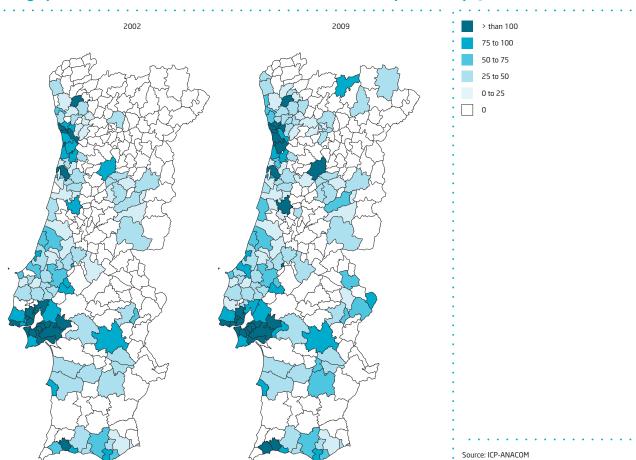
In the case of the IPTV service provided over the switched telephone network, it will be potentially available in all locations with fixed network, as long as there are no restrictions regarding the technical conditions of the local loop and the available bandwidth. Currently, customers of this service are reported in 280 of the country's 308 municipalities.

As at the end of 2009, optical fibre offers are only available in 29 municipalities in the country, mostly in greater Lisbon and greater Porto. The geographic coverage of the cable TV networks is analyzed below.

Evolution in number of households cabled by cable TV service¹¹⁶

The following maps illustrate the geographic availability of the CDS at two different instances: end of 2002 and end of 2009.

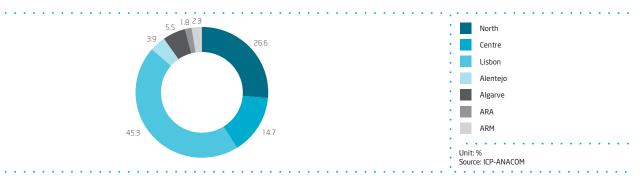
¹¹⁶ The offering of the service by more than one operator in the same region implies that one household may have multiple cabling. This means that adding all operators' cabled households may result in duplicate counting. This is apparent, for example, in the Lisbon region, where the sum of all operators' cabled households is higher than the total amount of households. This fact has become more relevant with the increase of competition between operators. It is estimated that duplicate counting affects a maximum of 12 % of cabled households.



Geographic distribution of the sum of cabled households for all operators¹¹⁵ | Figure 8

It is concluded that cable distribution network operators deployed their networks in the most populated areas, particularly in greater Lisbon, greater Porto, the Setúbal península, the Northern coastline and the Algarve. More recently, an increase in investment has been seen in less heavily populated areas (North and Algarve), and in areas where cable TV networks had little development previously (Alentejo).

Over 70 % of cabled households are concentrated in the Lisbon and the North Regions.



Distribution of the sum of cabled households per each operator and NUTS II - 2009 | Graph 151

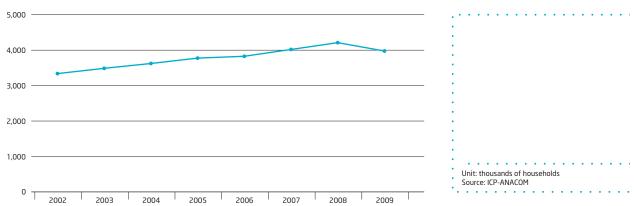
In 2009, the sum of households cabled by the operators fell by 221 thousand over the previous year, due to corrections made by Grupo ZON/TV Cabo (which following its acquisition of Bragatel, Pluricanal Leiria, Pluricanal Santarém and TVTEL eliminated duplicated households from its data). The growth rate in all cabled households reported by each operator was, on average, 1.4 % over the last five years.

2008	2009	Var.(%) 2008/2009	Average annual var. (%) 2005/2009	Accumulated variation (%) 2005/2009	
1,305,871	1,059,862	-18.8 %	1.1 %	1.1 %	
587,872	584,230	-0.6 %	2.6 %	2.6 %	
1,792,122	1,814,508	1.2 %	0.8 %	0.8 %	
161,504	154,970	-4.0 %	4.9 %	4.9 %	
213,321	219,439	2.9 %	1.8 %	1.8 %	
66,026	72,692	10.1 %	6.8 %	6.8 %	
90,696	90,696	0.0 %	1.1 %	1.1 %	
4,217,412	3,996,397	-5.2 %	1.4 %	1.4 %	
	1,305,871 587,872 1,792,122 161,504 213,321 66,026 90,696	1,305,871 1,059,862 587,872 584,230 1,792,122 1,814,508 161,504 154,970 213,321 219,439 66,026 72,692 90,696 90,696	2008 2009 2008/2009 1,305,871 1,059,862 -18.8 % 587,872 584,230 -0.6 % 1,792,122 1,814,508 1.2 % 161,504 154,970 -4.0 % 213,321 219,439 2.9 % 66,026 72,692 10.1 % 90,696 90,696 0.0 %	2008 2009 Var.(%) 2008/2009 annual var. (%) 2005/2009 1,305,871 1,059,862 -18.8 % 1.1 % 587,872 584,230 -0.6 % 2.6 % 1,792,122 1,814,508 1.2 % 0.8 % 161,504 154,970 -4.0 % 4.9 % 213,321 219,439 2.9 % 1.8 % 90,696 90,696 0.0 % 1.1 %	

Sum of cabled households per operator¹¹⁶ | Table 142

Unit: 1 household, % Source: ICP-ANACOM

In 2009, the sum of cabled households for all operators totalled practically 4 million, with the service available in 164 of the country's 308 municipalities.



Evolution of the sum of cabled households per operator | Graph 152

This service's current geographic distribution may be explained by the following reasons:

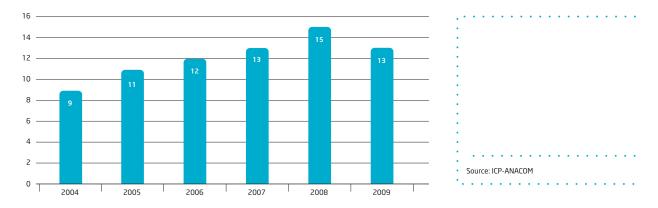
- The underlying economics of the business favour the deployment of networks in heavier populated areas and areas with a higher level of economic development, and the intensive use of infrastructure that has already been deployed. In this aspect, this spatial development of the service is not different from the development of other network industries, demanding a high level of initial investment and comprising cost structures with higher rates of fixed costs (a large part irrecoverable).
- The chronological development of networks was marked by the first deployment of networks by the incumbent operator in larger urban areas, followed by the remaining operators, which, at an early stage, deployed in municipalities where the incumbent operator was not already deployed or had a less significant presence. Later, operators began providing

services in areas surrounding the areas of their initial deployment or in less populated areas, and currently there are several areas with more than one operator.

 The emergence and development of DTH as a less expensive alternative for the provision of a television distribution service in less populated or remote areas.

5.2.3. Active operators

At the end of 2009, there were 13 active television distribution service operators, two fewer than at the end of 2008. This results from the acquisition of TVTEL, Bragatel and the Pluricanais companies by ZON/TV CABO, offset by the entry of two new operators, including Vodafone.



Evolution in the number of active operators | Graph 153

Of these 13 active providers, nine were cable TV operators, three fewer than in 2008, as a result of the concentration operations detailed above.

Between 2000 and 2007, no major changes were seen in the number of cable TV distribution network operators. In fact, there was a decrease in the number of active operators in 2002 which, however, resulted from the concentration of the regional companies of CATVP operating in the mainland into one single company. The increases registered in recent years are explained by the authorizations granted to resident associations with small networks which are not available to the public, or to operators with small-sized networks.

A list of Cable TV Distribution Service (CDS) providers is given below.

Cable TV distribution service providers - 2009 | Table 143

Name	Status
Associação de Moradores do Litoral de Almancil*	A
Associação de Moradores da Urbanização Quinta da Boavista*	Α
Cabovisão – Sociedade de Televisão por Cabo, S. A.	Α
Entrónica - Serviços na Área de Telecomunicações, Lda.	Α
STV - Sociedade de Telecomunicações do Vale do Sousa, S. A.	Α
UNITELDATA – Telecomunicações, S. A.	A
ZON TV Cabo Açoreana, S. A. (Grupo ZON)	Α
ZON TV Cabo Madeirense, S. A. (Grupo ZON)	Α
ZON TV Cabo Portugal, S. A ¹¹⁷	A
Total active	9
Total non-active	0
Overall total	9

Source: ICP-ANACOM Key: A - Active; NA - Non-Active

* Cable distribution networks not available to the public.

Since the authorizations granted to cable distribution network operators were, until the end of 2003, granted by geographic area (municipality), the table below shows the list of entities operating in each region¹¹⁸. It should be

highlighted, however, that the presence of the operators in certain regions does not imply that they are present in all of the regions' municipalities.

 ¹¹⁷ As from October 2005, the entire capital of CATVP – TV Cabo Portugal, S.A., previous belonging to PT - Televisão por Cabo SGPS, S.A., came to be held by PT Multimédia - Serviços de Telecomunicações e Multimédia, SGPS, S.A.
 118 Level 2 units of the Nomenclature of Territorial Units for Statistics (NUTS), established by the Decree-Law No. 244/2002 of 25 November. Under the terms of this diploma,

¹¹⁸ Level 2 units of the Nomenclature of Territorial Units for Statistics (NUTS), established by the Decree-Law No. 244/2002 of 25 November. Under the terms of this diploma, the following 7 NUTS II were established in Portugal: North (Minho-Lima Cavado, Ave, Grande Porto, Tamega, Entre Douro e Vouga, Douro and Alto-Tras-os-Montes), Centre (Baixo Vouga, Baixo Mondego, Pinhal Litoral, Pinhal Interior Norte, Pinhal Interior Sul, Dao-Lafoes, Serra da Estrela, Beira-Interior Norte, Beira Interior Sul, Cova da beira, Oeste and Medio Tejo), Lisbon (Greater Lisbon and Peninsula de Setubal), Alentejo (LezIria do Tejo, Alentejo Litoral, Alto Alentejo, Central and Baixo Alentejo), Algarve, ARA and ARM.

NUTS II	Active operators
North	Cabovisão, Grupo ZON, STV, Uniteldata
Centre	Cabovisão, Grupo ZON, Entrónica
Lisbon	Cabovisão, Grupo ZON
Alentejo	Cabovisão, Grupo ZON
Algarve	Associação de Moradores do Litoral de Almancil, Associação de Moradores da Urbanização Quinta da Boavista, Cabovisão, Grupo ZON
Autonomous Region of Madeira	ZON Madeirense
Autonomous Region of Azores	ZON Açoreana
Source: ICP-ANACOM	

Cable distribution network operators authorized to operate, by NUTS II | Table 144

The table below shows the companies providing subscription television service using DTH.

Television distribution service providers using DTH - 2009 | Table 145

Name	Status
PT Comunicações, S. A.	A
ZON TV Cabo Açoreana, S. A. (Grupo ZON)	Α
ZON TV Cabo Madeirense, S. A. (Grupo ZON)	A
ZON TV Cabo Portugal, S. A	A
Total active	4
Total non-active	0
Overall total	4

Source: ICP-ANACOM Key: A - Active; NA - Non-Active

In 2009, this service had four active providers, one fewer than in 2008, due to ZON/ TV Cabo Portugal's acquisition of TVTEL.

With respect to operators with FTTH offers, in addition to TVTEL (meanwhile acquired by ZON/TV Cabo), Sonaecom

launched a television offer at the end of 2008, currently only available in Lisbon, Porto and Setúbal. In the 2nd quarter of 2009, PTC launched a TV offer based on optical fibre, available as part of a bundle or as a stand-alone product.

Name	Status
PT Comunicações, S. A.	A
SONAECOM – Serviços de Comunicações, S. A. ⁽¹⁾	A
ZON TV Cabo Portugal, S. A	A
Total active	3
Total non-active	0
Overall total	3
Source: ICP-ANACOM	

Television distribution service providers using optical fibre - FTTH - 2009 | Table 146

Key: A - Active; NA - Non-Active

(1) Following the Novis/Optimus merger, Novis Telecom, S.A. changed its name to SONAECOM - Serviços de Comunicações, S.A.

As mentioned above, in addition to the operators of TV cable networks, DTH and FTTH, the company AR Telecom - Acessos e Redes de Telecomunicações, S.A. has been authorised to provide the television signal distribution service since April 2005; the products of this operator are based on FWA. Meanwhile Sonaecom has been authorised to provide the television and video signal distribution service since November 2005, providing an IPTV offer. Following the spin-off of PT Multimédia (ZON/TV Cabo), PTC launched an IPTV service as part of a triple-play offer in July 2007.

Finally, in 3rd quarter 2009, Vodafone commenced the offer of an IPTV service, providing it to double or triple play customers in 107 municipalities.

Television distribution service providers - other platforms - 2009 | Table 147

Name	Status
AR Telecom - Acessos e Redes de Telecomunicações, S. A. (1)	Α
IPTV Telecom - Telecomunicações, Lda.	NA
PT Comunicações, S. A. (2)	Α
SONAECOM - Serviços de Comunicações, S. A. (2) (3)	Α
VODAFONE PORTUGAL – Comunicações Pessoais, S. A. (2)	Α
Total active	4
Total non-active	1
Overall total	5
Source: ICP-ANACOM	

Source: ICP-ANACOM Key: A - Active; NA - Non-Active

(1) AR Telecom provides digital television using TMAX technology.
 (2) Sonaecom, PTC and Vodafone provides digital television using ADSL.
 (3) Following the Novis/Optimus merger, Novis Telecom, S.A. changed its name to SONAECOM - Serviços de Comunicações, S.A.

5.2.4. The offer structure

Grupo ZON/TV Cabo continues to be the main subscription TV operator with a 64.4 % share of subscribers, 18.5 % points less than in 2005.

Besides Grupo ZON/TV Cabo, there are two operators with significant share: PT Comunicações (23 %) and Cabovisão (10.2 %).

In the last year, only Sonaecom and Vodafone increased their shares of customers.

Shares of subscription television subscribers | Table 148

2008	2009	Var. (p.p.) 2008/2009	Average annual var. (p.p.) 2005/2009	Accumulated var. (p.p.) 2005/2009
72.3 %	64.4 %	-7.9	-4.6	-18.5
60.5 %	57.9 %	-2.7	-4.2	-17.0
3.8 %	3.1 %	-0.7	-0.1	-0.4
4.0 %	3.5 %	-0.5	-0.3	-1.1
2.8 %	-	-	-	-
0.5 %	-	-	-	-
0.4 %	-	-	-	-
0.3 %	-	-	-	-
13.6 %	23.0 %	9.3	-	-
12.4 %	10.2 %	-2.2	-1.0	-4.2
0.5 %	1.0 %	0.4	0.2	1.0
1.0 %	0.9 %	0.0	0.2	0.9
-	0.3 %	0.3	-	-
0.1 %	0.1 %	0.0	-0.3	-1.3
	72.3 % 60.5 % 3.8 % 4.0 % 2.8 % 0.5 % 0.4 % 0.3 % 13.6 % 12.4 % 0.5 % 1.0 %	72.3 % 64.4 % 60.5 % 57.9 % 3.8 % 3.1 % 4.0 % 3.5 % 2.8 % - 0.5 % - 0.4 % - 0.3 % - 13.6 % 23.0 % 12.4 % 10.2 % 0.5 % 1.0 % 0.3 % -	2008 2009 2008/2009 72.3 % 64.4 % -7.9 60.5 % 57.9 % -2.7 3.8 % 3.1 % -0.7 4.0 % 3.5 % -0.5 2.8 % - - 0.5 % - - 0.4 % - - 0.3 % - - 13.6 % 23.0 % 9.3 12.4 % 10.2 % -2.2 0.5 % 1.0 % 0.4 1.0 % 0.9 % 0.0 - 0.3 % -	2008 2009 2008/2009 (p.p.) 2005/2009 72.3 % 64.4 % -7.9 -4.6 60.5 % 57.9 % -2.7 -4.2 3.8 % 3.1 % -0.7 -0.1 4.0 % 3.5 % -0.5 -0.3 2.8 % - - - 0.5 % - - - 0.4 % - - - 0.4 % - - - 13.6 % 23.0 % 9.3 - 12.4 % 10.2 % -2.2 -1.0 0.5 % 1.0 % 0.4 0.2 1.0 % 0.9 % 0.0 0.2

Source: ICP-ANACOM

Referring specifically to the cable TV distribution service, it can be seen that the % of Grupo ZON/TV Cabo subscribers

continued to increase, reaching 82 %, up 1.4 % points over the previous year.

	2005	2006	2007	2008	2009
Grupo ZON/TV Cabo ¹²⁰	78.2 %	75.1 %	74.0 %	80.6 %	82.0 %
ZON Multimédia	70.6 %	67.2 %	66.2 %	67.4 %	74.3 %
ZON Açores	2.9 %	3.1 %	3.1 %	3.1 %	3.1 %
ZON TV Cabo Madeirense	4.7 %	4.8 %	4.7 %	4.8 %	4.6 %
TVTEL	-	-	-	3.4 %	-
Bragatel		-	-	0.8 %	-
Pluricanal Leiria	-	-	-	0.6 %	-
Pluricanal Santarém		-	-	0.5 %	-
Cabovisão	18.5 %	19.6 %	20.1 %	19.3 %	17.8 %
TVTEL	1.5 %	3.0 %	3.7 %	-	-
Other alternative providers	1.9 %	2.2 %	2.2 %	0.2 %	0.2 %
			·		

Distribution of subscription television subscribers by operator | Table 149

Source: ICP-ANACOM

In the case of DTH, which represents around 26 % of all subscription TV subscribers, ZON/TV Cabo Group was the sole provider of the service until 2007, when TVTEL (acquired in the meantime by that group) started to operate.

In 2008, PTC started to provide this service and grew its share by 11 % points in 2009 to reach 31.9 %.

Distribution of DTH television subscribers by operator | Table 150

	2005	2006	2007	2008	2009
Grupo ZON/TV Cabo ¹²⁰	100.0 %	100.0 %	99.0 %	79.1 %	68.1 %
ZON Multimédia	89.9 %	87.9 %	85.8 %	66.5 %	59.6 %
ZON Açores	5.8 %	7.9 %	9.2 %	6.9 %	5.2 %
ZON TV Cabo Madeirense	4.2 %	4.1 %	4.0 %	3.5 %	3.2 %
TVTEL	-	-	-	2.2 %	-
РТС	-		-	20.9 %	31.9 %
TVTEL		-	1.0 %	-	-

Source: ICP-ANACOM

In terms of the optical fibre service, PTC already has a share of around 70 % of subscribers, overtaking Sonaecom. The distribution of FTTH TV subscribers has seen a great deal of volatility – three leaders in three years. It is noted that there are still only around 30 thousand customers (1.2 % of STVS customers).

Distribution of FTTH television subscribers by operator | Table 151

	2007	2008	2009
РТС	-	-	69.2 %
TVTEL	100.0 %	46.7 %	-
ZON/TV Cabo Portugal	-	-	1.1 %
SONAECOM	-	53.3 %	29.7 %

Source: ICP-ANACOM

Meanwhile, the weight of the remaining TV subscription distribution platforms reached 16 % at the end of 2009, with PTC having a weight of 88 %. It is noted that Vodafone

already has 2 % of the customers of this type of subscription TV offer.

Distribution of television subscribers on other platforms by operator | Table 152

	2005	2006	2007	2008	2009
AR TELECOM	38.2 %	61.3 %	29.5 %	9.7 %	5.9 %
РТС	-	-	50.9 %	85.0 %	88.2 %
SONAECOM	61.8 %	38.7 %	19.6 %	5.2 %	4.0 %
VODAFONE	-	-	-	-	1.9 %

Source: ICP-ANACOM

5.2.5. Commercial offers in Portugal during 2009

In general, subscription television service operators provide:

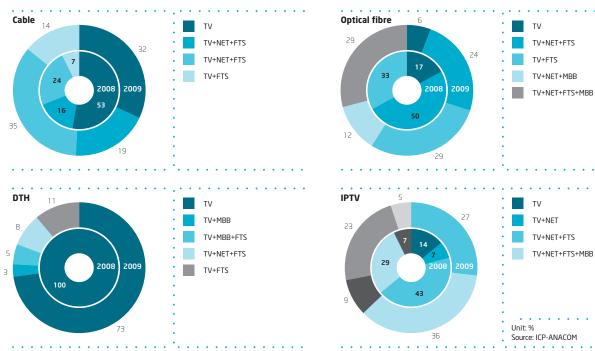
- television channel packages comprising several dozen channels, including the four national open channels, the regional channels RTP Açores and RTP Madeira, generalist channels, entertainment, information, documentary, movies, channels for children, history, music, health channels, etc.;
- "Premium" or "supplementary" services, comprising restricted access channels dedicated to certain types of content such as sport, film, series, children's programmes, adult programmes, etc., requiring the payment of an additional charge.
- Near video-on-demand ability to watch movies on demand, upon user request, at given schedules;
- High definition channels (HD);
- TV Guide or electronic programming guide (EPG);

- Interactive programming and multi-camera football access to interactive channels and programming;
- Video-on-demand / home video immediate film rental upon user request with option to pause, fast forward or rewind as user sees fit;
- Rental and sale of set-top boxes with incorporated digital video recorder (DVR) - enabling programme recording, pausing and resumption of programmes when required;
- Possibility of viewing programmes already shown and which were not recorded, including in high definition (catch up TV services);
- Remote recording of TV programmes using mobile phone or any other Internet access device;
- Access to PC to view photographs and listen to music files.

This service requires the payment of an installation fee and monthly charge.

There are currently over 140 commercial subscription TV offers, of which 46 % are cable TV offers, 26 % are DTH, 12 % are optical fibre and 16 % comprising other technologies.

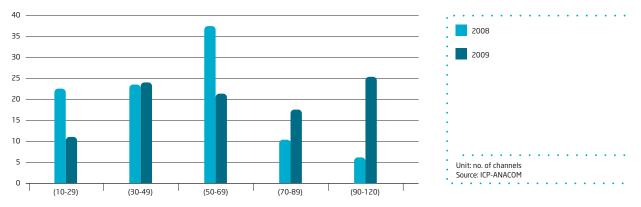
Meanwhile, there was an increase in the number of offers sold as part of a bundle together with the mobile / fixed broadband service and/or the voice telephone service, rising from 45 % to 65 % of the total.



Type of offer per technology | Graph 154

There was also an expansion in the combinations of offers in bundles within each type of technology – the number of services per package is growing. Especially in the case of DTH, offers are becoming available which include Internet and telephone, provided over DSL lines or mobile technologies. These offers always include a minimum of 10 channels, and may reach up to 120 in the case of larger packages. The most common offer now includes 100 channels, double the number of the previous year. In general, there was an increase in offers with over 70 channels between 2008 and 2009.

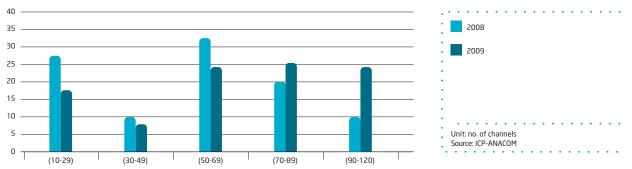
Presently, more than 80 $\%\,$ of the offers are available in digital format.



Distribution of the number of offers in terms of number of channels provided | Graph 155

The offers of the main service providers have, on average, a larger number of channels: 50 % of the offers provide over 70 channels.





Prices of the basic service (i.e. without equipment or activation / installation fees or additional or premium services), taking into account promotions with a duration of one year or more, vary between 7.49 euros (month average in first year of subscription) and 249.90 euros, including voice and Internet services. This range reflects, not only the quantity of the channels available, but also the download and upload speed of the Internet service, the type of technology and also the packages of included voice minutes. It is noted that in the comparison made here, offers were included with identical TV services, but with different voice packages or Internet speeds. For example, the 249.90 euros offer is a triple-play offer which includes the same number of TV channels as other triple-play offers of the same provider but

with download and upload speeds of 1 Gbps (the cheapest offer is priced at 39.90 euros, with a maximum speed of 10 Mbps.),

In general, stand-alone offers have a narrower price range, with the exception of satellite offers, which have various packages including premium channels – this causes the greater price range. The offers which include the Internet Access Service, as a rule, have a greater price range according to the different download and upload speeds and to the volume of traffic included in the offer. The average price of all offers included in this comparison is reported at 36.50 euros.

	Minimum price	Average price	Maximum price	
Cable	10€	38€	100 €	
stand-alone	10€	23€	30 €	
TV+NET	25€	44 €	62€	
TV+NET+FTS	25€	52€	100 €	
TV+FTS	18€	30 €	44 €	
DTH	7€	25 €	47 €	
stand-alone	7€	24€	38€	
TV+MBB	37 €	37 €	37 €	
TV+NET+FTS	42 €	44 €	45 €	
TV+FTS	12€	14€	15€	
TV+FTS+MBB	33€	40 €	47 €	
FTTH	29€	57 €	250 €	
stand-alone	29€	29€	29€	
TV+NET+MBB	40 €	47 €	55€	
TV+NET+FTS	40 €	101€	250€	
TV+NET+FTS+MBB	40 €	51€	65€	
TV+FTS	30 €	37€	50€	
IPTV	10 €	34 €	60 €	
TV+NET+MBB	40 €	40 €	40 €	
TV+NET+FTS	10€	26€	47 €	
TV+NET+FTS+MBB	19€	42€	60 €	
TV+FTS	31 €	33€	35 €	
TV+FTS+MBB	16€	32 €	50€	
Total	7€	36 €	250 €	

Prices of the television service per technology and type of package | Table 153

Unit: euros Source: Websites of service providers

If only the offers of the main service providers, Grupo ZON and PTC, are considered, the width of the price range is maintained but the average total price is slightly lower (35 euros). In an analysis by technology, it is found that the average price of the main providers is below the average price of all providers when it comes to cable, but higher for optical fibre and IPTV.

5.3. Profile of the subscription television service subscriber and level of usage in 2009

The following section makes a characterisation of the subscription television user, according to data from the *Inquérito ao Consumo das Comunicações Electrónicas* (Electronic Communications Consumer Survey) of December 2009¹²¹.

5.3.1. Profile of the subscription television service subscribers

The existence of subscription TV in the home is statistically correlated with NUTSII region (Cramer V coefficient of 0.252). The service's rate of penetration is highest in the autonomous regions and in Lisbon.

Households subscribing to paid television by NUTS II region | Table 154

Region	Dec. 2009
North	40.8
Centre	48.4
Lisbon	69.0
Alentejo	40.2 *
Algarve	45.7 *
A.R. Madeira	75.8 *
A.R. Azores	75.0 *

Unit: %

Source: ICP-ANACOM, Inquérito ao Consumo das Comunicações Electrónicas (Electronic Communications Consumer Survey), December 2009 Base: Family households according to NUTSII region.

Note 1: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a significance level of 95 %. The following key is used: (#) Coefficient of variation greater than or equal to 25 % (unreliable estimate)

(*) Coefficient of variation greater than or equal to 10 % and less than 25 % (acceptable estimate)

(no symbol) Coefficient of variation less than 10 % (reliable estimate)

Note 2: The proportions highlighted in blue indicate those that are significantly different (column) in accordance with the test of two samples for proportions. Higher proportions are highlighted in light blue and lower proportions in dark blue.

Likewise, and in accordance with the population density of the Portuguese territory, the service is statistically correlated with the population size of the area of residence (Cramer V coefficient of 0.237). It is concluded that, as a result, penetration of the service is higher in areas of greater population density.

¹²¹ The universe is composed of individuals of 15 years or more who reside in private housing units located in Mainland Portugal or in the Autonomous Regions (Azores and Madeira). The sample is representative at the level of NUTS II (with sampling errors not exceeding 5.5 percentage points for the smaller regions - Alentejo, Algarve, A.R. Azores and A.R. Madeira and not exceeding 4.5 for the others) having been composed of 3,106 interviews. Households were selected by means of proportional stratified random sampling according to the crossing of the NUTS II Region variables and the size of the household. Within each household one individual was selected by means of sampling by quotas guaranteeing the marginal totals of the sex, age class, level of education and employment status variables, according to the General Population Census (2001) of INE - Instituto Nacional de Estatística (Statistics Portugal). Information compilation was performed using CAPI - Computer Assisted Personal Interviewing between 6 November and 20 December 2009. The results regarding the Mobile Telephone Service are based on the universe of the individuals and present a maximum margin of error of less than 2, p., (with a degree of reliability of 95 %). The results regarding the Fixed Telephone Service, internet Service and paid Television Service are based on the universe.

Households subscribing to paid television by population of area| Table 155

	Dec. 2009
Less than 2,000 inhabitants	39.4
2,000 to 4,999 inhabitants	54.5 *
5,000 to 9,999 inhabitants	55.4 *
10,000 to 99,999 inhabitants	62.8
100,000 and more inhabitants	69.0

Unit: %

Source: ICP-ANACOM, Inquérito ao Consumo das Comunicações Electrónicas (Electronic Communications Consumer Survey), December 2009 Base: Family households according to population size of the area of residence

Note 1: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a significance level of 95 %. The following key is used:

(#) Coefficient of variation greater than or equal to 25 % (unreliable estimate)
(*) Coefficient of variation greater than or equal to 10 % and less than 25 % (acceptable estimate)
(no symbol) Coefficient of variation less than 10 % (reliable estimate)

Note 2: The proportions highlighted in blue indicate those that are significantly different (column) in accordance with the test of two samples for proportions. Higher proportions are highlighted in light blue and lower proportions in dark blue.

Meanwhile, the service is statistically correlated with the social class of the family household (Cramer V coefficient of

0. 249). The higher the respondent's social class, the more likely they are to have the subscription television service.

Households subscribing to paid television by social class | Table 156

Social class	Dec. 2009
A/B	75.5
C	64.0
D	43.9
E	43.1 *

Unit: %

Source: ICP-ANACOM, Inquérito ao Consumo das Comunicações Electrónicas (Electronic Communications Consumer Survey), December 2009 Base: Family households according to social class.

Note 1: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a significance level of 95 %. The following key is used:

(#) Coefficient of variation greater than or equal to 25 % (unreliable estimate)
(*) Coefficient of variation greater than or equal to 10 % and less than 25 % (acceptable estimate)

(no symbol) Coefficient of variation less than 10 % (reliable estimate)

Note 2: The proportions highlighted in blue indicate those that are significantly different (column) in accordance with the test of two samples for proportions. Higher proportions are highlighted in light blue and lower proportions in dark blue. Note 3: Social class is determined according to the level of education and profession of the highest paid individual in the household. Social class A is the highest and social class E is

the lowest.

This survey also found statistical correlation between family size (i.e. the number of individuals making up the household) and existence of the service (Cramer V coefficient of 0.209);

The larger the number of individuals, the more likely they are to have the subscription television service.

Households subscribing to paid television by family size | Table 157

Family size	Dec. 2009
1 individual	32.6 *
2 individuals	47.9
3 individuals	57.8
4 or more individuals	62.1

Unit: %

Source: ICP-ANACOM, Inquérito ao Consumo das Comunicações Electrónicas (Electronic Communications Consumer Survey), December 2009 Base: Family households according to family size.

Note 1: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a significance level of 95 %. The following key is used: (#) Coefficient of variation greater than or equal to 25 % (unreliable estimate)

(n) contraction of variation greater than or equal to 10% and less than 25% (acceptable estimate) (no symbol) Coefficient of variation less than 10% (reliable estimate) Note 2: The proportions highlighted in blue indicate those that are significantly different (column) in accordance with the test of two samples for proportions. Higher proportions are highlighted in light blue and lower proportions in dark blue.

There is likewise a degree of positive correlation between the respondent's level of education and the % of households with the subscription television service (Cramer V coefficient of 0.297).

Households subscribing to paid television by level of education | Table 158

Level of education	Dec. 2009
Higher education	72.0
Secondary education	70.0
Brd stage primary	63.6
2nd stage primary	51.4
1st stage primary or lower	35.9

Unit: %

Source: ICP-ANACOM, Inquérito ao Consumo das Comunicações Electrónicas (Electronic Communications Consumer Survey), December 2009

Base: Family households according to respondent's level of education.

Note 1: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a significance level of 95 %. The following key is used:

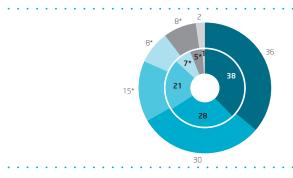
(#) Coefficient of variation greater than or equal to 25 % (unreliable estimate) (*) Coefficient of variation greater than or equal to 10 % and less than 25 % (acceptable estimate)

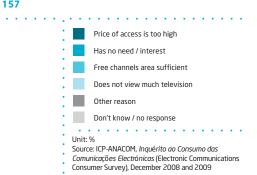
no symbol) Coefficient of variation less than 10 % (reliable estimate) Note 2: The proportions highlighted in blue indicate those that are significantly different (column) in accordance with the test of two samples for proportions. Higher proportions are highlighted in light blue and lower proportions in dark blue.

5.3.2. Barriers to service subscription

Looking at the main reasons cited for not having paid television, 36 % of respondents continued to consider the

Reasons for not subscribing to the paid television service | Graph 157





Base: Family households without access to subscription television service.

Note 1: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a significance level of 95 %. The following key is used: (#) Coefficient of variation greater than or equal to 25 % (unreliable estimate)

(*) Coefficient of variation greater than or equal to 10 % and less than 25 % (acceptable estimate) (no symbol) Coefficient of variation less than 10 % (reliable estimate)

5.3.3. Service's usage level

The evolution reported in the number of subscribers to the subscription television service is detailed below according to the various means of access and respective penetration.

Subscription television service's usage level: an integrated perspective

The number of subscription TV customers reached 2.5 million in 2009, increasing 10.6 % over the previous year.

Number of subscription TV subscribers | Table 159

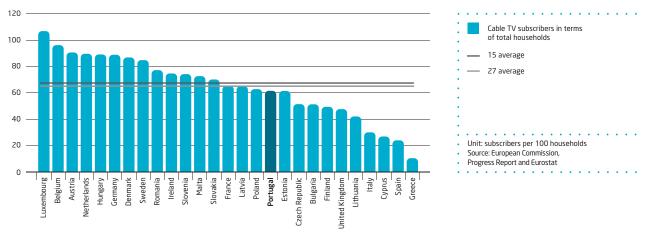
	2008	2009	Var. (%) 2008/2009	Var. (%) annual average 2005/2009	Accumulated variation (%) 2005/2009
Cable	1,474,596	1,452,030	-1.5 %	0.9 %	3.7 %
DTH	586,389	644,597	9.9 %	13.1 %	63.4 %
FTTH	1,696	31,058	>100 %	-	-
Other platforms	222,847	400,734	79.8 %	-	-
Total	2,285,528	2,528,419	10.6 %	8.9 %	40.9 %
Unit: 1 subscriber %					

Unit: 1 subscriber, % Source: ICP-ANACOM

service to be too expensive and 30 % cited a lack of interest or need.

The service's penetration is reported at 45 per 100 classic family households. However, considering that the number of classic family households reported by INE (Statistics Portugal) includes first homes and second or holiday homes, it s also relevant to calculate penetration based on the number of classic family households reported by Eurostat, which results in an STVS penetration rate of 66 per 100 families.

In comparison with other countries of the EU, paid TV penetration in Portugal is slightly below average.

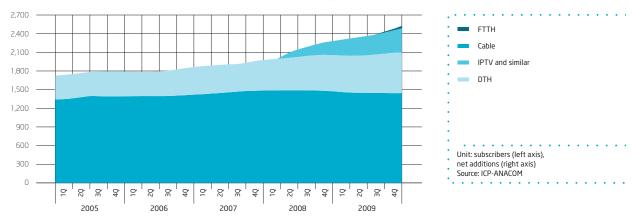


Comparison of penetration of subscribers to subscription TV in terms of households - 2009 | Graph 158

Note: The values reported for Bulgaria do not include IPTV. In the case of Bulgaria, In the case of Ireland and Sweden data was obtained from the respective national statistics offices.

In 2009, the new services based on IPTV and similar services saw the greatest growth in absolute terms – 178 thousand new customers. FTTH was the platform reported with the highest rate of growth (in excess of 100 %), although starting from a very low client base. DTH grew by 10 % in 2009 and 63.4 % since 2005, reflecting the operators' focus on this platform. CDS reported a second consecutive annual decline.

At the end of 2009, households subscribing to the cable television service represented 57 % of all users of the subscription television service, with cable remaining the predominant technology. However, and as noted above, the growth of FTTH, of IPTV and similar technologies and of DTH, was faster than the growth reported in cable networks. At the end of 2009, DTH represented around 26 % of all the service's customers and IPTV and similar platforms represented around 16 %. FTTH offers accounted for subscriptions from 1.2 % of households.



Evolution in subscription TV subscribers by technology | Graph 159

In relative terms, DTH is mainly present in the Azores, in the Centre and in Alentejo, where it represents the majority. In the North, Lisbon and Madeira regions, cable television represents more than 50 % of the total. It is also noted that in the Alentejo and Algarve, one in four subscribers who subscribe to the service make use of IPTV and similar technologies.

Distribution of all subscribers per NUTS II region and technology - 2009 | Table 160

Cable	DTH	FTTH	Others
53.8	31.2	1.4	13.6
39.3	43.8	0.6	16.2
74.3	7.9	1.9	15.9
29.2	42.2	0.0	28.6
48.4	26.7	0.0	24.8
44.9	45.2	0.1	9.8
67.7	24.6	0.9	6.8
57.4	25.5	1.2	15.8
	53.8 39.3 74.3 29.2 48.4 44.9 67.7	53.8 31.2 39.3 43.8 74.3 7.9 29.2 42.2 48.4 26.7 44.9 45.2 67.7 24.6	53.8 31.2 1.4 39.3 43.8 0.6 74.3 7.9 1.9 29.2 42.2 0.0 48.4 26.7 0.0 44.9 45.2 0.1 67.7 24.6 0.9

Source: ICP-ANACOM

As can be seen, revenues from the subscription television service have grown at a high rate, with the service's separable revenues growing by 12 % in the year. The cable

TV distribution service represents 65 % of total revenues, DTH 27 percent and the other platforms 8 %.

Separable revenues from the subscription television service | Table 161

	2008	2009	Var. (%) 2008/2009	
Cable	410,189	421,310	2.7 %	
DTH	163,862	177,425	8.3 %	
IPTV and similar	9,824	50,700	>100 %	
FTTH	27	2,263	>100 %	
Total	583,902	651,697	11.6 %	
11 1 1 000				

Unit: 1,000 euros Source: ICP-ANACOM

It should be mentioned that the proliferation of service bundles which include the paid TV service will, in some cases, make it impossible to separate the revenues derived from these offers into the individual services. For this reason, the following table shows the revenues derived from bundled offers which include the subscription television service (and other services) which the operators did not separate according to the component services. In comparison to the previous year, revenues of this type have increased by over 100 %.

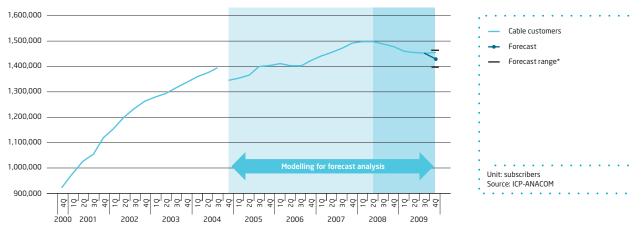
2008		2009	Var. (%) 2008/2009	
2 Play				
TV+Internet	233	8,046	>100 %	
TV+Fixed telephone	115	7,259	>100 %	
3 Play				
TV + internet + Fixed telephone	21,700	111,428	>100 %	
Total	22,048	126,732	>100 %	
Unit: thousands of euros Source: ICP-ANACOM				

Non-separable revenue from service bundles which include subscription TV | Table 162

CDS evolution: number of subscribers

At the end of 2009, there were around 1.45 million subscribers to the cable television distribution service in Portugal, 23 thousand fewer subscribers than in 2008 (a decline of 1.5 %). This figure is slightly higher than would be expected from the recent historical trend.

Evolution in number of subscription TV subscribers and forecast analysis | Graph 160



Notes: * Forecast range with 95 % significance level A linear regression model was used estimated with the following significant independent variables at a 95 % confidence level: linear trend (t1) up to 1st quarter 2008 and quadratic trend (t2 and t22) as from 2nd quarter 2008. A change in structure is observed resulting from the spin-off of PT Multimédia which occurred in 4th quarter 2007. The modelling was conducted as from 4th quarter 2004 as the time that a change in series was reported by one of the operators.

It is noted that as of 2nd quarter 2008, a change in trend is reported in the series of subscribers to the service, arising from the increased inter-modal competition that resulted from the spin-off of PT Multimédia.

Until this period, the number of cable customers was in a growth trend, – with an average of 11 thousand new subscribers signing up to the service each quarter. As from this period, the trend reversed, with a slight downtrend reported in the series (negative quadratic trend).

The fact that the figure reported in 2009 is above the forecast range might indicate a new turn in the trend, possibly due to ZON's response to PT's entry into these

markets (i.e. the launch of new commercial multiple play offers and offers supported over EuroDOCSIS 3.0).

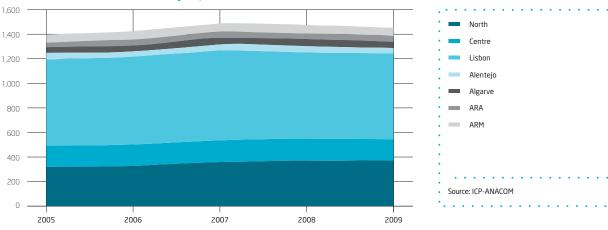
In 2009, all regions reported a fall in the number of subscribers. In the last five years however, almost all region report a positive growth rate, with the exception of Lisbon, which saw strong growth in the number of subscribers to other technologies.

The North and Alentejo region, which are the regions where the service's penetration rate is lowest, were the regions which reported the largest increases in subscriber numbers.

	2008	2009	Var. (%) 2008/2009	Annual average var. (%) 2005/2009	Accumulated variation (%) 2005/2009
North	378,757	378,076	-0.2 %	3.6 %	15.4 %
Centre	175,860	171.214	-2.6 %	0.5 %	1.9 %
Lisbon	702,972	695,006	-1.1 %	-0.4 %	-1.8 %
Alentejo	45,898	43 ,140	-6.0 %	3.1 %	13.2 %
Algarve	54,618	52,851	-3.2 %	0.1 %	0.5 %
Autonomous Region of Azores	46,063	44,470	-3.5 %	2.7 %	11.0 %
Autonomous Region of Madeira	70,428	67,273	-4.5 %	0.5 %	1.8 %
Total	1,474,596	1,452,030	-1.5 %	0.9 %	3.7 %

Number of CDS subscribers | Table 163

Unit: 1 subscriber, % Source: ICP-ANACOM



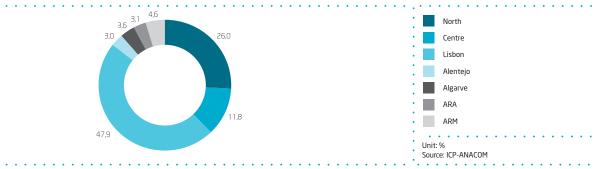
Evolution of CDS subscribers | Graph 161

The significant growth reported in the Azores between 2005 and 2009 was directly influenced by the protocol signed between the General Government, the Regional Government, ICP-ANACOM and the only television distribution network operator currently operating in this region. The protocol in force in the Azores was signed on 5 November 2006 and was valid for one year; as such its effects were seen during 2006, namely with the increase in the number of cable television service subscribers. The protocol in force in the Madeira was signed on 6 August 2004, influencing

the number of cable television service subscribers since the fourth quarter of that year, and having a less evident impact on the data whose analysis is being reported here based on data from 2005.

Concerning the spatial concentration of cable TV distribution subscribers, 48 % of subscribers are concentrated in Lisbon, with the second largest concentration (26 %) reported in the North region.





It is noted that as at the end of 2009, over half of all CDS subscribers - 45.7 % of the total, were already receiving the signal in digital format.

Number of CDS digital subscribers | Table 164

	2008	2009	Var. (%) 2008/2009
North	145,207	211,421	45.6 %
Centre	40,813	75,575	85.2 %
Lisbon	285,014	384,464	34.9 %
Alentejo	11,419	19,677	72.3 %
Algarve	22,788	28,684	25.9 %
Autonomous Region of Azores	21,237	23,811	12.1 %
Autonomous Region of Madeira	46,388	51,200	10.4 %
Total	572,866	794,832	38.7 %

Source: ICP-ANACOM

Evolution of CDS: penetration

In 2009, the penetration rate reported for subscribers of the cable television service, calculated in terms of households, remained at 26 subscribers per 100 households. In the period between 2005 and 2009, the penetration rate reported for subscribers of the cable television service in terms of total households grew by just 0.4 % points.

It is again noted that the growth seen in the Azores (3.1 % points) is due to the impact of the entry into force of the protocols described above, agreed with the autonomous regions.

Penetration of cable TV subscribers in terms of total households | Table 165

NUTS II	2008	2009	Var. (p.p.) 2008/2009	Annual average var. (p.p.) 2005/2009	Accumulated var. (p.p.) 2005/2009
North	20.9	20.9	0.0	0.6	2.4
Centre	12.8	12.4	-0.3	0.0	0.0
Lisbon	50.5	49.9	-0.6	-0.4	-1.7
Alentejo	10.1	9.5	-0.6	0.2	0.9
Algarve	16.4	15.8	-0.5	-0.2	-0.7
Autonomous Region of Azores	44.6	43.1	-1.5	0.8	3.1
Autonomous Region of Madeira	59.9	57.2	-2.7	-0.6	-2.3
Total	26.4	26.0	-0.4	0.1	0.4
Init: subscribers per 100 bousebolds, p.p.					

Unit: subscribers per 100 households, p.p.

Source: ICP-ANACOM

It is noted that the penetration rate of cable TV subscribers in terms of classic family households (value used by Eurostat) is 38 %.

The map below shows the geographic distribution of penetration of the subscribers to this service.

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. Subscribers per 100 households 75 to 100 50 to 75 25 to 50 0 to 25 0 Source: ICP-ANACOM

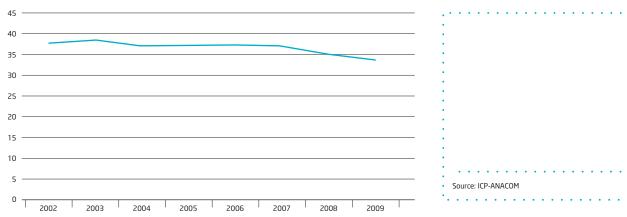
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Geographic distribution of cable TV penetration (Mainland Portugal) | Figure 9



Geographic distribution of cable TV penetration (autonomous regions of the Azores and Madeira) | Figure 10

The pattern of subscriber penetration is similar to that of cabled households: this service's subscribers are concentrated in the larger urban centres such as Greater Lisbon and Greater Porto, the Setúbal peninsula, Northern coastline, and the Algarve, while significant numbers of subscribers can also be seen in the autonomous regions of Madeira and of the Azores, particularly in the main towns. It is also possible to measure cable TV subscriber penetration in terms of the sum of all cabled households by each operator.

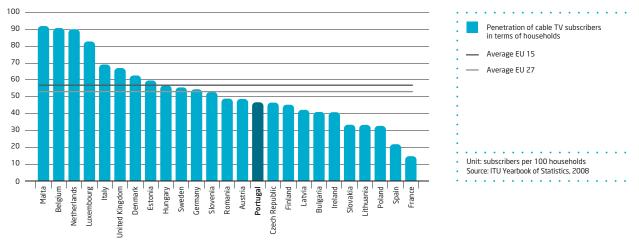


Evolution of CDS penetration in terms of cabled households | Graph 163

As shown, the service's penetration in terms of cabled households is below 35 %. This figure has been declining, above all in recent years, as the number of cabled households continues to increase without a proportional increase seen in the number of subscribers.

Meanwhile, it can be seen that cable TV penetration in households is relatively low when compared to other European countries.





Note: Subscriber data from Romania is from 2008, Belgian data refers to 2009, data from Spain, Luxemburg, Latvia, Poland and Slovakia is from 2005, French data is from 2001 and data from Finland, the Netherlands and Sweden is from 2003. Data from the Czech Republic includes DVB-T.

DTH service

The DTH service is an important part of the activity of certain cable distribution network operators, particularly Grupo ZON/TV Cabo Group and, since 2008, PTC.

As at the end of 2009, the number of satellite television distribution service subscribers reached around 645 thousand. In 2009 this service saw growth of almost 10 %, which translates into 58 thousand new subscribers.

Between 2006 and 2009, the DTH service reported growth far in excess of that reported for the cable television distribution service and saw an average of 63 thousand new subscribers per year, corresponding to an average growth rate of 13 %.

The growth reported in 2009 is within the forecast range resulting from the recent historical trend.



Evolution in DTH TV subscribers | Graph 165

Notes: * Forecast range with 95 % significance level

A linear regression model was used estimated with the following significant independent variables at a 95 % confidence level: quadratic trend (t2 and t22) for two distinct time period (1st structure up to 2nd quarter 2007 and 2nd structure as from 3rd quarter 2007) due to the entry of other operators into the market (TVTEL in 3rd quarter 2007 and PTC in 3rd quarter 2008), outliers for 1st, 2nd and 3rd quarters 2006 resulting from a change of series made by one operator.

Attention is drawn to the fact that, since 3rd quarter 2007, changes have been seen in the structure of the series of number of customers of the satellite TV distribution service (DTH). This change results from the entry of new operators into the market following this date (first TVTEL during the quarter in question and later PTC in 2nd quarter 2008).

Up to 3rd quarter 2007, the number of customers was reported with a trend with a growing but significantly slowing trend (negative quadratic trend). After the entry of the two mentioned operators into these markets, the trend

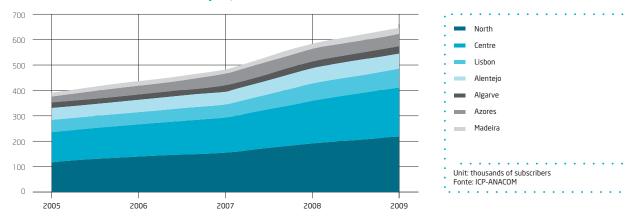
changed, reported with a steepening upward slope (positive quadratic trend).

In terms of the regional distribution of the growth reported in the number of subscribers, the North, Centre and Lisbon regions made the largest contribution, in absolute terms, to the growth seen in 2009. The only region reporting a decline over the previous year was the Azores, possible due to the availability of offers supported using other platforms.

Number of DTH subscribers | Table 166

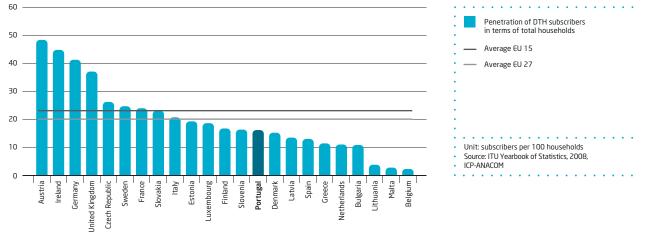
	2008	2009	Var. (%) 2008/2009	Annual average var. (%) 2005/2009	Accumulated variation (%) 2005/2009
North	192,363	219,049	13.9 %	15.4 %	77.4 %
Centre	168,666	190,826	13.1 %	13.0 %	63.0 %
Lisbon	65,965	74 ,184	12.5 %	13.0 %	62.8 %
Alentejo	60,692	62,242	2.6 %	6.2 %	27.1 %
Algarve	27,778	29,157	5.0 %	10.3 %	48.0 %
Autonomous Region of Azores	47,942	44,693	-6.8 %	18.0 %	93.9 %
Autonomous Region of Madeira	22,983	24,446	6.4 %	10.1 %	46.7 %
Total	586,389	644,597	9.9 %	13.1 %	63.4 %

Unit: 1 subscriber, % Source: ICP-ANACOM



Evolution in DTH TV subscribers | Graph 166

According to available information, Portugal is in 14th place in the European rankings in terms of penetration of subscribers of the satellite television service, with a penetration rate of 16 per 100 households with TV.

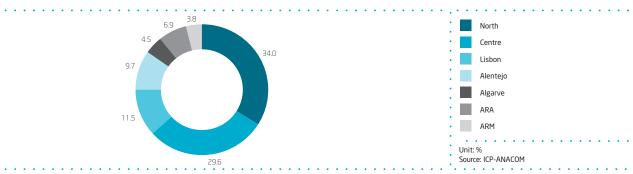


Penetration of DTH subscribers in terms of households | Graph 167

Note: Subscriber data from Luxemburg and Latvia is from 2005, data from the Netherlands dates from 2004, data from Estonia, Finland and Slovenia is from 2003 and data from Greece and Sweden refers to 2002. No data is available from Cyprus, Hungary, Poland and Romania. Data from Portugal was compiled by ICP-ANACOM.

The graph below illustrates the geographic distribution of subscribers to DTH technology at the end of 2009, showing

that the North and Centre regions continue to account for the largest % of users of this technology.



Distribution of DTH TV subscribers by NUTS II - 2009 | Graph 168

Subscription television service over optical fibre (FTTH)

During 2007, the first offer of subscription TV appeared based on optical fibre to the customer's home. At the end of 2008, a second offer appeared, also totally based on

optical fibre. In 2009, the number of customers grew at a very significant rate – adding 29 thousand customers in net terms. The penetration of these offers remains, however, very low.

Subscribers to subscription television service over optical fibre | Table 167

	2008	2009	Var. (%) 2008/2009	
North	238	10,081	>100 %	
Centre	0	2,535	-	
Lisbon	1,458	17,436	>100 %	
Alentejo	0	0	-	
Algarve	0	25	-	
Autonomous Region of Azores	0	61	-	
Autonomous Region of Madeira	0	920	-	
Total	1,696	31,058	>100 %	
Unit: 1 subscriber				

Unit: 1 subscriber Source: ICP-ANACOM

IPTV service and similar

As previously mentioned, new TV distribution services emerged at the end of 2005, using IPTV and DVB-T.

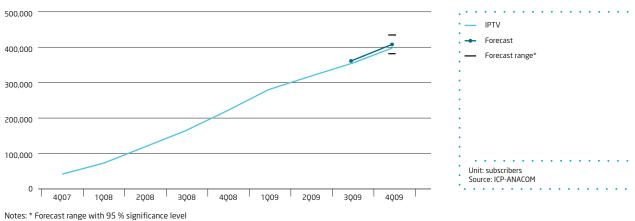
Penetration of these services continues to grow at considerable rates since PTC entered these markets.

	2008	2009	Var. (%) 2008/2009	
North	49,086	95,256	94.1 %	
Centre	32,952	70,702	>100 %	
Lisbon	105,511	148,926	41.1 %	
Alentejo	18,022	42.223	>100 %	
Algarve	12,894	27,092	>100 %	
Autonomous Region of Azores	2,734	9,735	>100 %	
Autonomous Region of Madeira	1,648	6,800	>100 %	
Total	222,847	400,734	79.8 %	

Subscribers to the new television signal distribution offers | Table 168

Unit: 1 subscriber Source: ICP-ANACOM

The growth reported in 2009 is in line with the historical trend seen since the launch of the service (rising linear trend), and within the resulting forecast range.

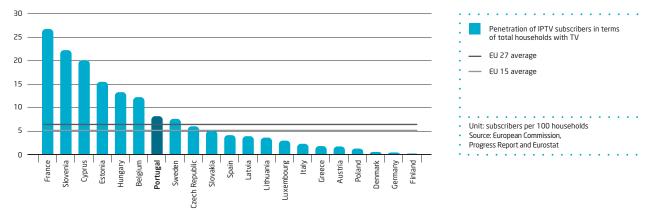


Evolution in number of IPTV subscribers | Graph 169

A linear regression model was used estimated with the significant independent variable at a 95 % confidence level.

These offers represent around 16 % of subscription television offers and are now present in 280 of the country's 308 municipalities, including on the islands.

Meanwhile, in comparison with the other countries of the EU, and according to data from the European Commission's Progress Report, Portugal comes in 7th place in the ranking of IPTV subscriber penetration per 100 households and is above the European average.



Penetration of IPTV subscribers in terms of households with TV- 2009 | Graph 170

Note: Data was unavailable for Bulgaria and the Netherlands. In the case of Ireland and Sweden data was obtained from the respective national statistics offices.

5.3.4. Evaluation by consumers

According to the results of the consumer survey, the overall level of satisfaction with the paid television service (measured on a scale of 1 to 10, from "very dissatisfied" to "very satisfied") is high. Around 80 % of respondents gave the service an evaluation of 7 or more. It is also noted that the proportion of respondents who gave the service a positive evaluation increased, compared to the previous year, by around 10 % points.

"State your current level of satisfaction towards the provided paid television service?" | Table 169

3.2 #	3.9 *	
20.7	16.6 *	
62.8	56.7	
13.2 *	22.8	
100	100	
100	100	
	20.7 62.8 13.2 * 100	

Unit: %

Source: ICP-ANACOM, Inquérito ao Consumo das Comunicações Electrónicas (Electronic Communications Consumer Survey), December 2008 and 2009 Base: Family households with access to the subscription television service e (not including non-responses).

Note: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a significance level of 95 %. The following key is used: (#) Coefficient of variation greater than or equal to 25 % (unreliable estimate)

(*) Coefficient of variation greater than or equal to 10 % and less than 25 % (acceptable estimate) (no symbol) Coefficient of variation less than 10 % (reliable estimate)

Perhaps as a result of the evident satisfaction, over 90 % of respondents affirmed that they had not switched or attempted to switch operator.

Switching operator in 2009 | Table 170

	Dec.09
Switched operator	3.2 #
Did not switch operator by tried / considered	3.7 #
Did not switch or attempt to switch operator	93.2
Total	100

Unit: % Source: ICP-ANACOM, Inquérito ao Consumo das Comunicações Electrónicas (Electronic Communications Consumer Survey), December 2009 Base: Family households with access to the subscription television service e (not including non-responses).

Note: The coefficient of variation is considered as sampling error indicator, based on the variance of the "proportion" estimator of a simple random sample and assuming a signifi-cance level of 95 %. The following key is used: (#) Coefficient of variation greater than or equal to 25 % (unreliable estimate) (*) Coefficient of variation greater than or equal to 10 % and less than 25 % (acceptable estimate) (no symbol) Coefficient of variation less than 10 % (reliable estimate)