

L'OBSERVATOIRE

**The electronic communications services market  
in France  
in the 4<sup>th</sup> quarter 2006**

## Introduction

At the fourth quarter 2006, electronic communications operators on the end customer market generated €10.6 billion in revenues, of which €9.7 billion from electronic communications services *per se*. The difference between these two amounts represents revenue from other services (terminal and equipment sales and rental, directories, advertising, hosting and call centre management, etc.).

The three main market segments together (fixed telephony, Internet and mobile telephony) represented €8.2 billion at the fourth quarter 2006, up 3.6% over one year.

### Fixed telephony and Internet

The services on fixed networks market was strongly marked by the emergence of services offered on broadband.

The number of subscriptions to telephony service on fixed lines (38.2 million) rose 4.9% over one year at the fourth quarter 2006. This growth was due entirely to the rapid development of subscriptions to telephony on IP services, of which the number has doubled since the end of 2005. These are replacing traditional telephone subscriptions (-4.7% over one year) or are being purchased in addition to them.

The volume of traffic on IP represented close to one quarter of traffic originating on fixed phones at the fourth quarter 2006 and more than doubled in one year. The volume of international calls, up 23.3% over one year, benefited from the growth of telephony on IP. Thanks to the contribution of telephony on IP, the total volume of fixed phone calls has stabilised since the middle of 2004 after a period of decline.

Revenue from fixed telephony has been declining for several years despite increases in subscription fees (7.6% increase at 3 March 2005 and 7.2% at 1<sup>st</sup> July 2006). At the fourth quarter 2006, this slowdown was 4.8%.

The number of fully unbundled lines (2.2 million at the end of 2006) grew rapidly and is now higher than that of partially unbundled lines (1.8 million). The very strong growth of full unbundling (+1.6 million over one year) has been in part a the expense of partial unbundling whose slowdown, which began in early 2006, accelerated during the fourth quarter (-0.4 million over one year). More and more customers also wished to keep their number when switching: close to 500 000 fixed numbers were ported from one operator to another during the fourth quarter 2006.

There were 15.3 million Internet accesses during the fourth quarter 2006, for €1 billion in revenue. The growth of the Internet sector remains strong thanks to the development of high speed, where the number of subscriptions rose 34.4% over one year (with 3.2 million new subscriptions) and revenue rose 30.7% during the fourth quarter 2006.

With 12.7 million accesses, high speed represented 83% of the total number of Internet accesses and at €862 million, 85% of Internet revenue. xDSL technology continues to predominate strongly for high speed access.

## **Television**

The Observatory is publishing a new indicator for the number of subscriptions to television service on xDSL. This indicator covers subscriptions including this service which customers have the technical possibility of activating (“eligible” subscriptions).

The subscriptions were taken into account:

- regardless of the number of channels accessible and regardless of the pricing formula
- whether the subscription was taken out alone or as part of a multiplay package which includes access to one or more services in addition to television (Internet, telephony service)
- whether the customer has or has not effectively activated the television service

The number of subscriptions to television service on xDSL reached 2.6 million at the end of 2006, doubling in one year.

## **Mobile telephony**

At the end of the fourth quarter 2006, there were 51.7 million mobile telephony customers in France, of which two-thirds subscribed to flat-rate formulas. Mobile telephony numbers have been growing at a strong annual rate of 7 to 8% since the end of 2003. At the fourth quarter 2006, the growth rate was 7.4% over one year.

At close to 139 000, the number of customers having switched mobile operators while keeping their number during the fourth quarter reached its highest level since the implementation of mobile number portability.

With €4.3 billion at the fourth quarter 2006, revenue from mobile services (excluding advanced services) represented close to 45% of all revenue from electronic communications services.

Revenue grew 5.6% over one year, at a rate equal to that of the first three quarters of the year. This is slower than in 2005, when the growth rate was 8 to 10%. The continuing strong increase in the number of customers and the more moderate growth in revenue resulted in a 2% decline in the average monthly invoice per mobile customer, which was €28.20 excluding taxes at the fourth quarter 2006.

Mobile telephony (86.5% of revenue of mobile services) generated €3.7 billion during the fourth quarter 2006, up 4.6% over one year. Revenue from data services (interpersonal messaging, access services to mobile Internet or to multimedia services) was €582 million at the fourth quarter 2006. It grew more rapidly (+12.5% over one year) than revenue from mobile telephony.

Once again, the volume of mobile telephony traffic saw strong growth during the fourth quarter 2006 (+14.4% over one year), boosted by the increase in the number of customers and by the introduction of so-called “abundance” offers by mobile operators.

The average monthly consumption of a mobile operator customer was 2 hours and 44 minutes during the fourth quarter 2006, or ten minutes more than a year earlier.

The volume of interpersonal SMS also grew strongly with 4.1 billion messages sent during the fourth quarter 2006, up 21.5% over one year. On average, that represents 26.9 SMS sent per customer and per month.

### **Directory services**

The closure of the old directory services numbers on 3 April 2006 and their replacement by the new 118xyz numbers, was followed by a consequential decline in the volume of calls to these services.

The number of calls to directory services continued to decline during the fourth quarter 2006: 38 million calls were made to these services compared with 40 million during the third quarter and 41 million during the second quarter. On the other hand, revenue from directory services was €40 million, compared with €38 million during the third quarter and €37 million during the second quarter.

*Note: Revisions may be made to a quarter's data from one issue of the Observatory to the next because of corrections made by operators in their reports. Any discrepancies between annual growth as a percent and values were caused by rounding.*

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# 1 The communications market in its entirety

## 1.1 The end customer market

Revenue (millions of euros)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed telephony (1)	2 983	2 900	2 849	2 830	2 841	-4,8%
Internet	823	876	906	927	1 018	23,6%
Mobile telephony (2)	4 069	4 083	4 139	4 345	4 299	5,6%
<b>All telephony and Internet</b>	<b>7 875</b>	<b>7 858</b>	<b>7 894</b>	<b>8 101</b>	<b>8 157</b>	<b>3,6%</b>
Advanced services	635	666	594	601	637	0,3% *
Directory services, directories and advertising	52	47	37	38	40	-23,3%
Leased lines	520	371	371	366	403	-22,6% **
Data transport (3)	555	487	488	463	472	-15,0%**
<b>Electronic communications services</b>	<b>9 638</b>	<b>9 430</b>	<b>9 385</b>	<b>9 569</b>	<b>9 709</b>	<b>0,7% **</b>
Others revenues (4)	760	652	702	741	856	n.s. ***
<b>Entire market</b>	<b>10 398</b>	<b>10 081</b>	<b>10 087</b>	<b>10 310</b>	<b>10 565</b>	<b>n.s.</b>

*adjusted figures are in italics*

(1) This indicator covers revenues from access fees and subscriptions, from calls from fixed lines excluding Internet connection calls, public telephones and cards. Communications from fixed lines included in multiplay flat-rate (Volp) are not valued.

(2) This item includes data transport on mobile networks (in particular SMS).

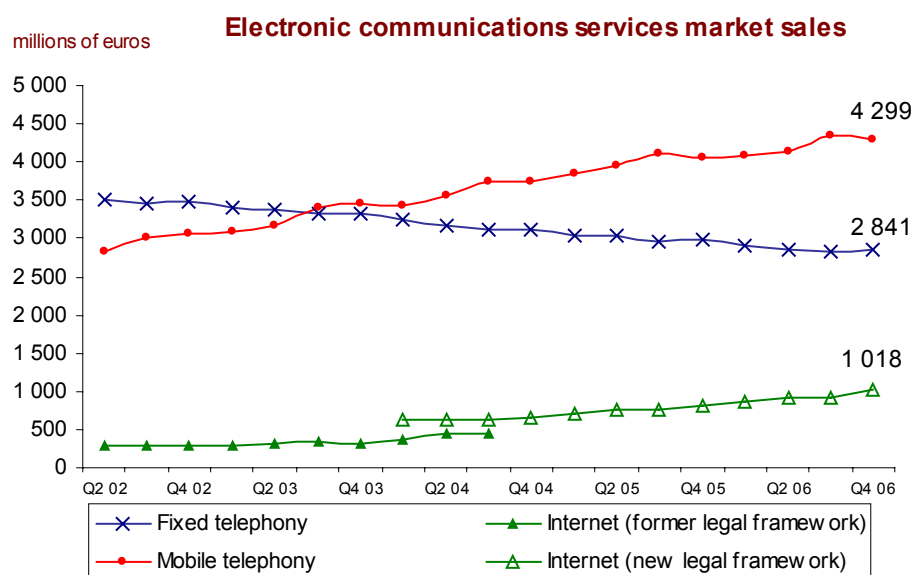
(3) The indicator includes only revenue from data transport originating on fixed lines. Data transport on mobile lines is included in the overall total for mobile.

(4) This market does not really fall under the telecommunications services market. Since registered operators contribute little to this market, this indicator gives only a partial idea of total figures. This item covers revenues from terminals and equipment, from hosting and call centre management, and from directories and advertising.

(\*) This item include, on the fourth quarter 2005, an estimate of the Observatory on advanced services. This estimate is intended to insure a continuity between the perimeter of the fourth quarter 2005 and the perimeter of the first quarter of 2006.

(\*\*) the change figures of leased lines and data transport are strongly affected by merges between operators. This explain the decrease of revenue on the end market from the beginning of year 2006.

(\*\*\*) the "directories" component of this item take into account a new and important directories operator from the first quarter of 2006.



Revenue from electronic communications services sold on the end market (excluding revenue from related services) represented €9.7 billion at the fourth quarter 2006.

The three main sectors contributing to the electronic communications market continued to develop in contrasting ways:

- mobile telephony generated €4.3 billion in revenues at the fourth quarter 2006, for a 5.6% increase over one year. The growth of the mobile sector was continuous in 2006, although slower than in 2005.

- Internet revenue reached the €1 billion mark during the fourth quarter 2006. Thanks to the development of high-speed Internet, the annual growth rate of this sector remained high in 2006 (greater than 20%), and was +23.6% over one year during the fourth quarter 2006.

- fixed telephony revenue has been declining for several years. The slowdown was -4.8% over one year at the fourth quarter 2006.

On the capacity services market (leased lines and data transport), a consolidation movement between operators explains the declines which have been recorded since the beginning of 2006.

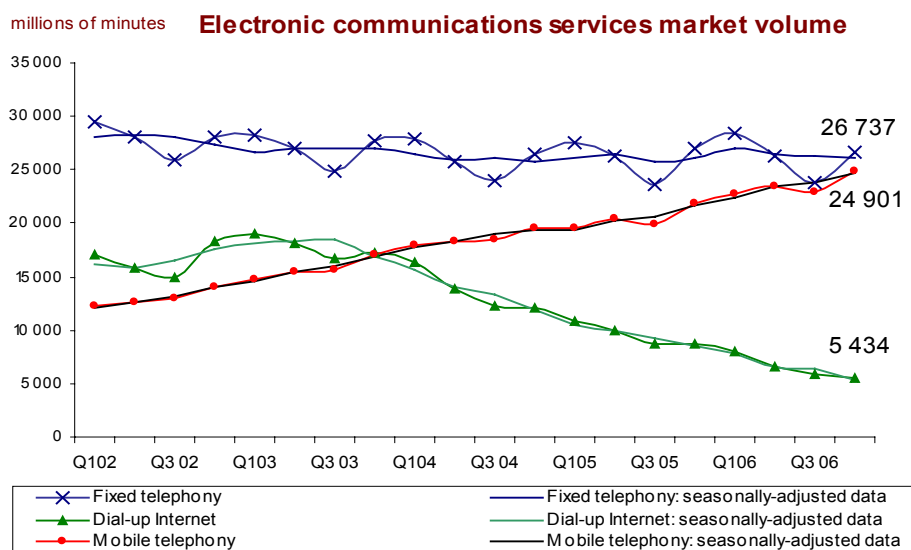
<b>Volumes</b> <i>(millions of minutes)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed telephony	26 923	28 502	26 336	23 864	26 737	-0,7%
Mobile telephony	21 772	22 669	23 519	23 004	24 901	14,4%
<i>Total voice services</i>	<i>48 695</i>	<i>51 171</i>	<i>49 855</i>	<i>46 868</i>	<i>51 638</i>	<i>6,0%</i>
Internet (dial-up)	8 726	8 033	6 601	5 853	5 434	-37,7%
Number of SMS sent <i>(millions of units)</i>	3 373	3 641	3 605	3 679	4 098	21,5%

*adjusted figures are in italics*

The volume of traffic originating on fixed networks was stable with respect to that of the fourth quarter 2006. The rapid increase in volumes of IP traffic stabilised fixed traffic which had declined until the middle of 2004.

The growth in the volume originating on mobiles was strong for the fourth consecutive quarter (+14.4% over the fourth quarter 2005), it was boosted by the increase in the number of customers of mobile operators (+7.4% over one year) and by the increase in these customers' average monthly consumption, which reached 2 hours and 44 minutes at the fourth quarter 2006 (or 10 minutes more than a year earlier).

The decline in dial-up Internet volumes (-37.7% at the fourth quarter 2006) mirrored the ebb in the number of dial-up Internet accesses in service.



## 1.2 The intermediate market (interconnection services / wholesale market)

### 1.2.1 The total market

<b>Interconnection services</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed operators	831	745	732	730	732	-12,0%
Internet	205	182	191	189	170	-16,9%
<i>of which dial-up Internet</i>	16	14	11	14	13	-22,4%
Mobile operators	1 223	1 018	1 102	1 150	1 110	-9,3%
<b>Revenue</b>	<b>2 259</b>	<b>1 944</b>	<b>2 026</b>	<b>2 070</b>	<b>2 011</b>	<b>-11,0%</b>

*adjusted figures are in italics*

<b>Interconnection services</b> <i>(millions of minutes)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed operators	26 606	42 597	40 720	37 656	39 374	n.s.
Internet	5 215	4 489	3 591	3 875	3 215	-38,4%
Mobile operators	7 956	8 106	8 698	8 722	9 199	15,6%
<b>Volume</b>	<b>39 777</b>	<b>55 192</b>	<b>53 009</b>	<b>50 253</b>	<b>51 789</b>	<b>n.s.</b>

*adjusted figures are in italics*

Total revenue from interconnection services (services sold between operators on the intermediate market) was down 11.0% over one year at the fourth quarter 2006.

Revenue from interconnection services from fixed operators was down 12.0% over one year. The annual change in interconnection volumes of fixed operators was not significant, because until the end of 2005, part of these volumes was not included in quarterly data (unlike data published in annual surveys).

Revenue from Internet interconnection services declined 16.9% over one year despite the dynamism of the Internet market. The decline in wholesale prices explains this trend; plus, major Internet access providers have their own infrastructure which limits their service purchases from other operators.

The decline in call termination charges (-24% at 1<sup>st</sup> January 2006) imposed by ARCEP on mobile operators causes a clear gap between the revenue and volume of interconnection services of mobile operators. The revenue declined -9.3% over one year at the fourth quarter 2006, despite the 15.6% increase in volume.

#### Notes:

- *Interconnection revenue and volumes were not based on the same perimeter, making it inappropriate to compare these indicators when estimating average prices (interconnection revenue includes fixed revenue such as payments for connection and services to operators).*
- *Interconnection includes all services provided to operators by operators under interconnection agreements. In the event of mergers or concentrations of enterprises, some of the flows between the firms disappear, which could explain decreases from one quarter to the next.*
- *Please note that the interconnection figures above may be counted twice, in particular for fixed operators.*

### 1.2.2 Incoming international interconnection<sup>1</sup>

<b>Incoming international interconnection services</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed operators	100	88	89	100	84	-16,8%
Mobile operators	41	32	35	43	41	-0,7%
<b>Revenue</b>	<b>141</b>	<b>120</b>	<b>124</b>	<b>143</b>	<b>124</b>	<b>-12,1%</b>

<b>Incoming international interconnection services</b> <i>(millions of minutes)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed operators	1 772	1 624	1 637	1 726	1 696	-4,3%
Mobile operators	311	326	357	439	413	32,8%
<b>Volume</b>	<b>2 083</b>	<b>1 950</b>	<b>1 993</b>	<b>2 165</b>	<b>2 108</b>	<b>1,2%</b>

*adjusted figures are in italics*

### 1.2.3 Mobile operators roaming-in<sup>2</sup>

<b>Roaming in</b>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Revenu <i>(millions of euros)</i>	165	171	205	259	163	-1,4%
Volume <i>(millions of minutes)</i>	294	314	382	496	321	9,2%

*Note: In roaming-in, a French mobile operator carries calls made and received in France by the customers of foreign mobile operators*

## 2 Market segments

### 2.1 Fixed telephony

#### 2.1.1 Access, subscriptions and fixed lines

There were 38.2 million subscriptions to telephone service at the end of the fourth quarter 2006. The growth in the total number of subscriptions (+4.9% over one year) was due in full to the very rapid growth in subscriptions to telephony on IP services (+101.8%). The number of subscriptions to dial-up access on analogue or digital lines or on cable fell 4.7% over the same period.

<b>Number of subscriptions to telephone service</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Subscription on narrow band access (analogue or digital lines, cable)	33,105	32,987	32,549	32,133	31,560	-4,7%
Subscription on broadband access (IP DSL, cable)	3,275	4,201	4,839	5,541	6,608	101,8%
<b>Number of subscriptions to telephone service</b>	<b>36,380</b>	<b>37,188</b>	<b>37,388</b>	<b>37,674</b>	<b>38,168</b>	<b>4,9%</b>

*adjusted figures are in italics*

*Note: more than one subscription to telephone services can exist on the same fixed line (such as a "traditional" PSTN subscription and a subscription to telephony on IP service).*

<sup>1</sup> This market segment is a sub part of the whole market (cf. 1.2.1)

<sup>2</sup> This market segment is a sub part of the whole market (cf. 1.2.1)

The number of subscriptions to a telephone service on IP doubled in one year and reached 6.6 million at the end of the fourth quarter 2006 compared with 3.3 million at the end of the fourth quarter 2005.

These subscriptions to a telephone service on IP correspond to either subscriptions taken out by customers in addition to a traditional subscription on an analogue or digital line (4.3 million at the end of 2006) or to subscriptions to a telephony service on IP on fully unbundled lines (2.3 million at the end of 2006).

### **Explanation of the indicators for telephone on IP service**

#### *On the terminology used:*

The indicators for telephone service on IP in this issue cover voice on broadband regardless of the medium (primarily IP DSL, but also IP on cable) and voice on Internet when the operators are registered with ARCEP.

ARCEP designates as “voice on broadband” fixed telephony services using VoIP technology on an Internet access network whose bit rate exceeds 128 kbit/s and whose quality is controlled by the operator providing it; and by “voice on Internet” voice communications services using the public Internet network and whose quality of service is not controlled by the operator providing it.

Calls originating on VoIP services counted in the Observatory correspond to services at the access level. These indicators do not correspond to the traffic using the Internet protocol only on the network core.

The Observatory does not survey unregistered operators providing PC-to-PC voice on Internet. They are not currently covered by the scope of the survey.

#### *On the income taken into account:*

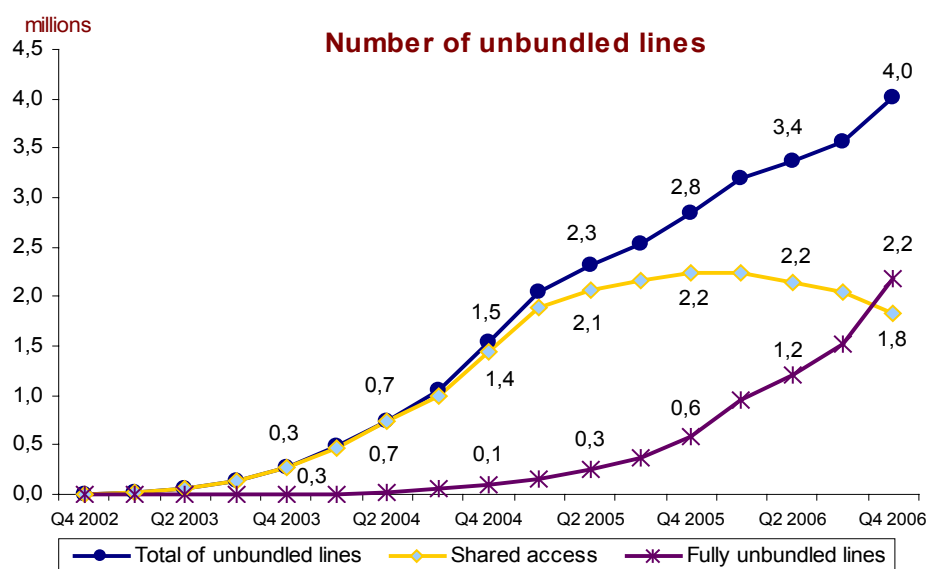
The Observatory distinguishes between calls originating on telephony on IP services and other voice calls. Still, while the volume of VoIP calls covers all of this traffic on the end market, the corresponding revenue covers only invoiced VoIP traffic (e.g. in addition to a multi-play package

<b>Unbundling</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Partially unbundled lines	2,248	2,236	2,150	2,046	1,831	-18,5%
Fully unbundled lines	0,592	0,959	1,211	1,513	2,189	269,8%
<b>Number of unbundled lines</b>	<b>2,840</b>	<b>3,195</b>	<b>3,362</b>	<b>3,559</b>	<b>4,020</b>	<b>41,6%</b>

*adjusted figures are in italics*

The number of unbundled lines reached 4 million at the end of the fourth quarter 2006 thanks to the strong growth of full unbundling (+269.8% over one year). Over half of unbundled lines (2.2 million) were fully unbundled lines.

The decline in the number of partially unbundled lines was accentuated during the fourth quarter 2006 (-18.5% over one year). Part of the partially unbundled lines were converted to fully unbundled lines as the areas open to full unbundling were extended.



<b>Portability</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Number of fixed numbers ported during the quarter		0,399	0,409	0,378	0,480	

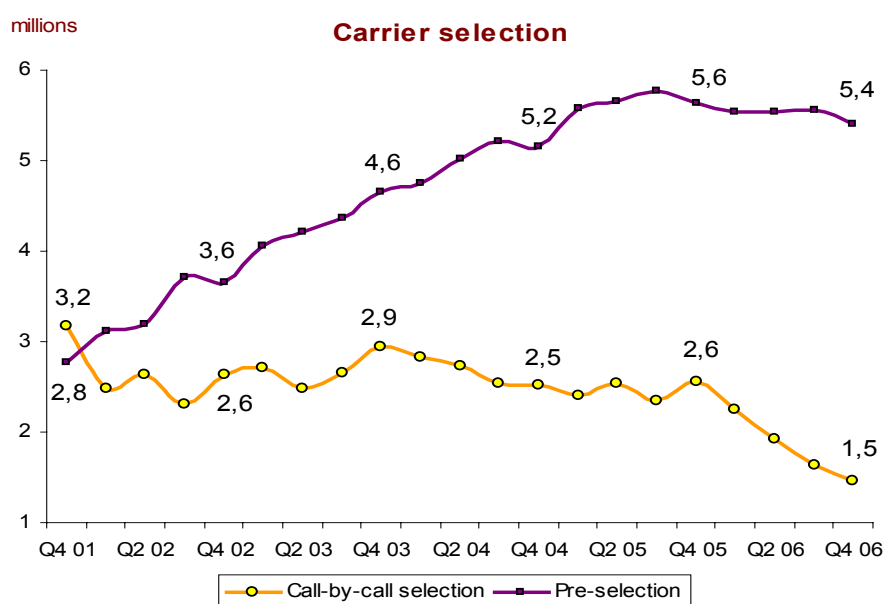
*adjusted figures are in italics*

During the fourth quarter 2006, 480 000 numbers were ported between fixed operators. The growth in the number of fully unbundled lines encouraged these number migrations.

Carrier selection (millions of units)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Call by call selection	2,563	2,244	1,926	1,639	1,470	-42,7%
Pre-selection	5,636	5,540	5,544	5,558	5,413	-4,0%
<b>Number of indirect connections</b>	<b>8,199</b>	<b>7,784</b>	<b>7,469</b>	<b>7,196</b>	<b>6,883</b>	<b>-16,1%</b>

*adjusted figures are in italics*

Carrier selection offers saw strong competition from telephony on IP offers which developed rapidly. The slowdown in the use of call-by-call selection offers was very marked since the beginning of 2006 with 42.7% decline, or one million fewer subscriptions over one year. The number of subscriptions to pre-selection also declined since the beginning of 2006 but at a more moderate rate (-223 000 subscriptions over one year at the fourth quarter 2006 or -4.0% over one year).



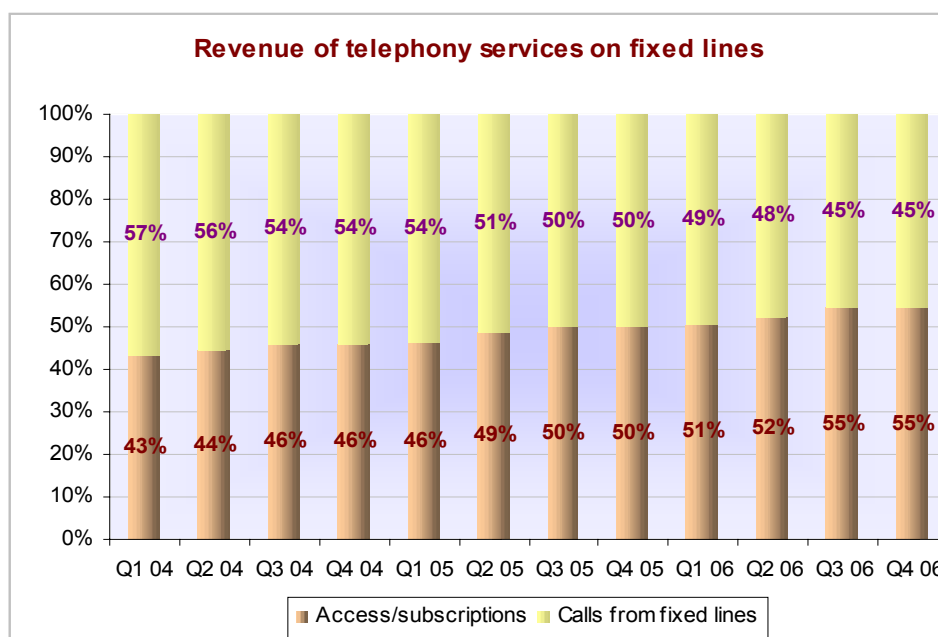
*Note: Call-by-call selection numbers include only active subscriptions, pre-selection numbers include only subscriptions in service, net of cancellations.*

Access revenue (millions of euros)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Access fees, subscriptions and additional services	1 425	1 419	1 442	1 490	1 500	5,3%

Revenue from access, subscriptions and additional services was €1.5 billion at the fourth quarter 2006. It rose 5.3% over one year, and represented 55% of fixed telephony revenue at the fourth quarter 2006 (compared with 50% a year earlier).

This evolution was mainly the result of France Telecom's 7.2% increase in the monthly telephone subscription on 1<sup>st</sup> July 2006.

*Note: In addition to revenues from access to telephone service, access revenues also include revenues from subscriptions for access to telephony on IP as well as revenues from additional services (number display, etc.).*



### 2.1.2 Calls from fixed lines (excluding public payphones and cards)

Revenue from telephone calls on fixed lines (€1.2 billion) declined by 13.0% over one year at the fourth quarter 2006 despite stabilisation in the volume of calls from fixed lines.

This decline in revenue can be explained on the one hand by the price changes decided in February 2005 which, in exchange for an increase in the France Telecom subscription, led to a decrease in national call charges.

On the other hand, retail charges for calls to mobiles fell following the decline in mobile call termination charges (-24% at 1<sup>st</sup> January 2006).

Revenue (millions of euros)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
National calls	752	781	762	701	705	-6,1%
International calls	145	148	138	145	134	-7,5%
Calls to mobiles	535	458	411	392	407	-24,1%
<b>All calls from fixed lines</b>	<b>1 432</b>	<b>1 387</b>	<b>1 311</b>	<b>1 238</b>	<b>1 246</b>	<b>-13,0%</b>
<i>Of which calls originating on VoIP services</i>	37	40	53	57	73	100,6%

*adjusted figures are in italics*

*Note: Revenue from calls originating on access on IP covers only amounts billed by operators for calls on IP in addition to multiplay flat rates. Therefore, this amount does not include the amount of the multiplay packages, nor access to telephone service on broadband.*

Volumes (millions of minutes)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
National calls	21 837	23 337	21 252	19 096	21 748	-0,4%
International calls	1 067	1 151	1 197	1 159	1 316	23,3%
Calls to mobiles	3 221	3 286	3 198	2 899	3 005	-6,7%
<b>All calls from fixed lines</b>	<b>26 126</b>	<b>27 774</b>	<b>25 646</b>	<b>23 154</b>	<b>26 069</b>	<b>-0,2%</b>
<i>Of which calls originating on VoIP services</i>	2 863	3 905	4 387	4 340	5 986	109,1%

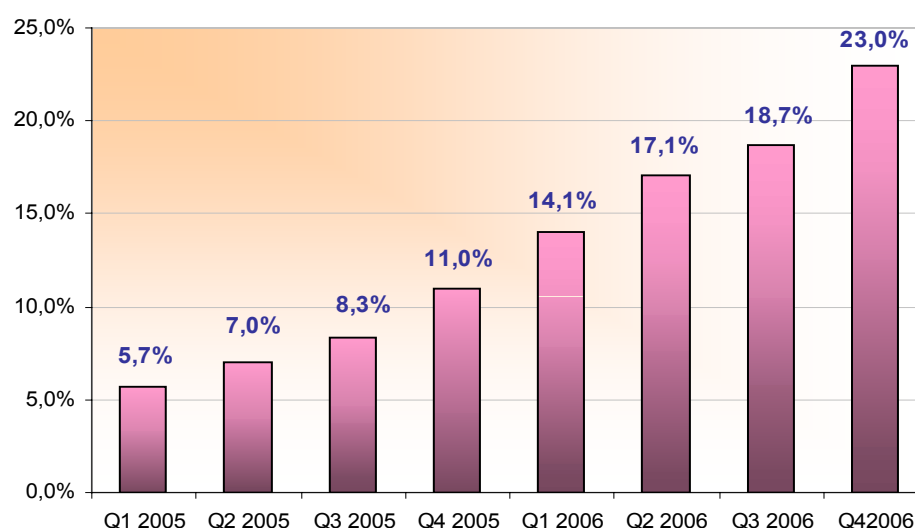
*adjusted figures are in italics*

Call volumes from fixed lines stabilised (-0.2% over one year at the fourth quarter 2006) due to the sustained growth of VoIP calls (+109.1% over one year at the fourth quarter 2006). If we consider only IP calls, the volume of traffic originating on fixed phones declined by 13.7% over one year at the fourth quarter 2006.

At the end of 2006, the volume of VoIP calls represented 23.0% of total traffic (residential and business customers) originating on fixed lines compared with 11% at end 2005.

The volume of international traffic rose +23.3% over one year at the fourth quarter 2006. This growth should be compared with VoIP (attractive international call charges, unlimited calling to fixed phones in certain foreign countries offered by several operators). On the other hand, volumes of fixed national traffic and fixed-to-mobile traffic declined by 0.4% and 6.7% respectively over one year.

**Proportion of IP traffic from fixed lines**



Notes:

- The Observatory distinguishes between calls originating on telephony on IP services and other voice calls. However, while the volume of VoIP calls covers all of this traffic observed on the end market, income covers only invoiced VoIP traffic (for example in addition to a multi-play flat rate).
- The volumes and income from calls originating on VoIP services are included in each of the market segments (national, international and to mobiles).

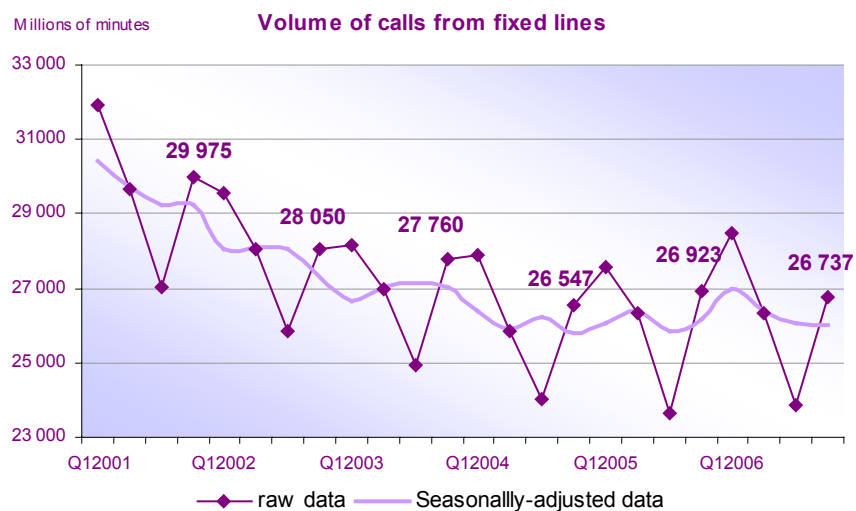
### 2.1.3 Fixed telephony cards and public payphones

Subscriber cards and prepaid cards	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Revenue (millions of euros)	72	54	47	57	50	-30,3%
Volume (millions of minutes)	618	574	527	538	531	-14,1%

Public telephony	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Number of public payphones at end of quarter (units)	179 770	176 327	173 677	171 828	169 790	-5,6%
Revenue (millions of euros)	54	40	48	44	44	-17,3%
Volumes (millions of minutes)	179	154	163	173	138	-23,1%

Public telephone revenue and volumes declined 17.3% and 23.1% respectively over one year at the fourth quarter 2006. This reduction mirrored that of the number of installed public pay phones which has been declining at a regular rate of 5 to 6% for the past year (-5.6% over one year at the fourth quarter 2006).

#### 2.1.4 Volume of calls from fixed lines



#### Notes:

- The volume of calls from fixed lines include calls from fixed telephones, from public payphones and from prepaid card
- (The series of values are found in the "séries chronologiques" file available for consultation on ARCEP's web site).

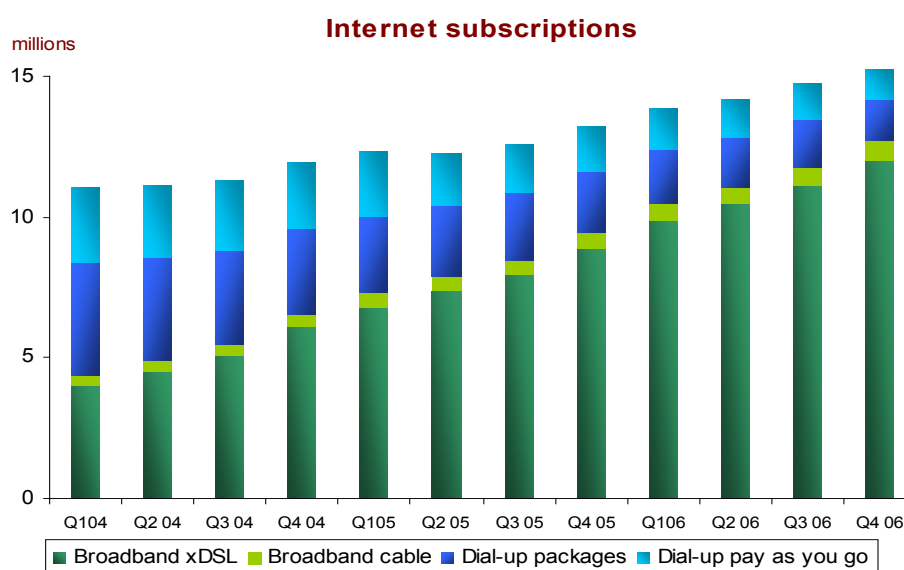
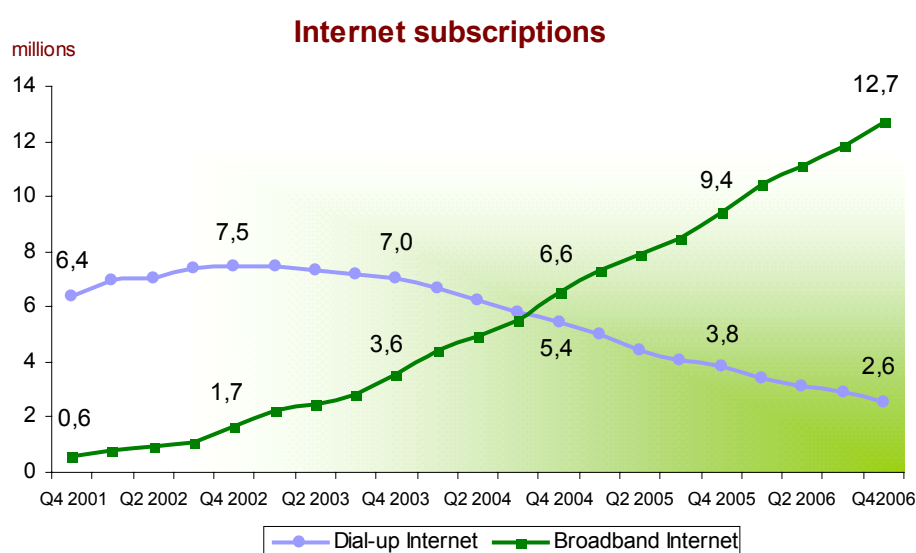
## 2.2 Internet

The number of Internet accesses reached 15.3 million at the end of the fourth quarter 2006, which represented 15.1% growth over one year.

- high speed (Internet access on xDSL, cable, WLL, etc.) continued to grow rapidly, at a rate of 34.4% over one year at the fourth quarter 2006. At end 2006, high speed represented 12.7 million subscriptions and 83% of Internet accesses.

- dial-up (Internet access at speeds of less than 128 kbits/s) had been slowing at a regular annual rate of around 30% for two years and concerned only 2.6 million accesses at end 2006. Most cancelled dial-up subscriptions were exchanged for high-speed Internet access.

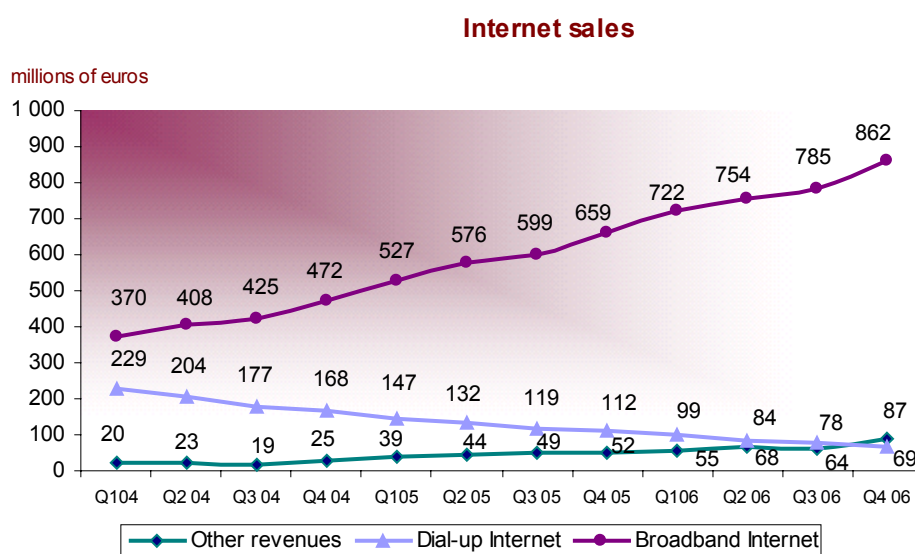
Internet subscriptions (millions of units)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Dial-up	3,809	3,403	3,096	2,935	2,557	-32,9%
Broadband	9,448	10,475	11,092	11,793	12,695	34,4%
<b>Internet subscriptions</b>	<b>13,256</b>	<b>13,879</b>	<b>14,188</b>	<b>14,728</b>	<b>15,252</b>	<b>15,1%</b>



<b>Total Internet revenue</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Dial-up	112	99	84	78	69	-38,3%
Broadband	659	722	754	785	862	30,7%
Other revenue	52	55	68	64	87	68,3%
<b>Total Internet revenue</b>	<b>823</b>	<b>876</b>	<b>906</b>	<b>927</b>	<b>1 018</b>	<b>23,6%</b>

*adjusted figures are in italics*

*Note: The “other Internet services” item corresponds to IAPs’ related income such as site hosting or income from on-line advertising. Revenue related to the sale and rental of terminals has been reassigned to the “sale and rental of terminals by fixed operators and Internet” item.*



Internet revenue (revenue from subscriptions and related services) reached the €1 billion mark at the fourth quarter 2006 and grew 23.6% over the fourth quarter 2005.

Revenue from high-speed access rose 30.7% over one year and, with €862 million, represented close to 85% of total Internet revenue at the fourth quarter 2006.

Revenue from dial-up access (€69 million) followed the ebb in the number of dial-up accesses and declined 38.3% during the fourth quarter 2006.

## 2.2.1 Dial-up Internet

The number of subscriptions to dial-up Internet access was down 32.9% over one year at the end of the fourth quarter 2006. The slowdown was similar for flat-rate subscriptions (-32.3%) and for pay-as-you-go accounts (-33.7%).

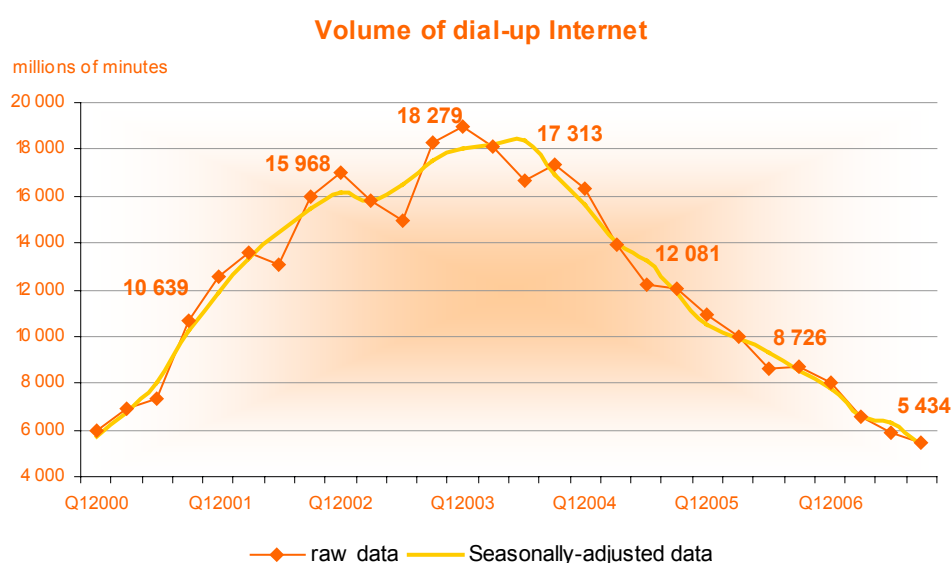
<b>Dial-up Internet subscriptions</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Flat-rate packages	2,187	1,909	1,721	1,677	1,482	-32,3%
Free access accounts	1,622	1,495	1,374	1,257	1,076	-33,7%
<b>Dial-up Internet subscriptions</b>	<b>3,809</b>	<b>3,403</b>	<b>3,096</b>	<b>2,935</b>	<b>2,557</b>	<b>-32,9%</b>

Note: We distinguish between two types of subscription for dial-up Internet access for the end customer:

1. the customer pays a flat rate for unlimited Internet access to the IAP
2. the customer has a so-called "free" account (with no monthly charge) with an IAP and pays only for the time actually consumed ("pay as you go") directly to the local loop operator (free access accounts or billed for use).

<b>Revenue of dial-up Internet</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Flat-rate packages	84	72	64	59	51	-39,1%
Free access accounts	28	27	20	19	18	-36,0%
<b>Revenue of dial-up Internet</b>	<b>112</b>	<b>99</b>	<b>84</b>	<b>78</b>	<b>69</b>	<b>-38,3%</b>

*adjusted figures are in italics*



(The series of values are found in the "séries chronologiques" file available for consultation on ARCEP's web site).

The volume of dial-up Internet calls declined 15.6% in seasonally adjusted values at the fourth quarter 2006. After a more moderate decline (-3.8%) during the third quarter 2006, we saw a stronger drop more in line with that of the first two quarters of 2006 (-9.1% during the first quarter and -15.6% in the second quarter).

<b>Volumes of dial-up Internet</b> <i>(millions of minutes)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Flat-rate packages	7 577	6 868	5 641	5 003	4 682	-38,2%
Free access accounts	1 148	1 165	959	850	751	-34,6%
<b>Volumes of dial-up Internet</b>	<b>8 726</b>	<b>8 033</b>	<b>6 601</b>	<b>5 853</b>	<b>5 434</b>	<b>-37,7%</b>

*adjusted figures are in italics*

### 2.2.2 High-speed Internet

The growth in the number of high-speed Internet subscriptions remained strong during the fourth quarter 2006 with 3.2 million additional accesses in one year, or +34.4%.

There were 12.7 million subscriptions to high-speed Internet at the end of the fourth quarter 2006, including 12 million accesses using xDSL technology.

<b>High-speed Internet subscriptions</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
<b>High-speed Internet</b>	<b>9,448</b>	<b>10,475</b>	<b>11,092</b>	<b>11,793</b>	<b>12,695</b>	<b>34,4%</b>
of which Xdsl	8,882	9,870	10,456	11,138	12,019	35,3%

*adjusted figures are in italics*

Revenue from high-speed Internet access, €862 million at the fourth quarter 2006, rose 30.7% over the fourth quarter 2005. Revenue from xDSL access (€822 million at the fourth quarter 2006) represented over 95% of high speed revenue.

<b>High-speed Internet revenue</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
<b>High-speed Internet</b>	<b>659</b>	<b>722</b>	<b>754</b>	<b>785</b>	<b>862</b>	<b>30,7%</b>
of which Xdsl	617	680	711	745	822	33,1%

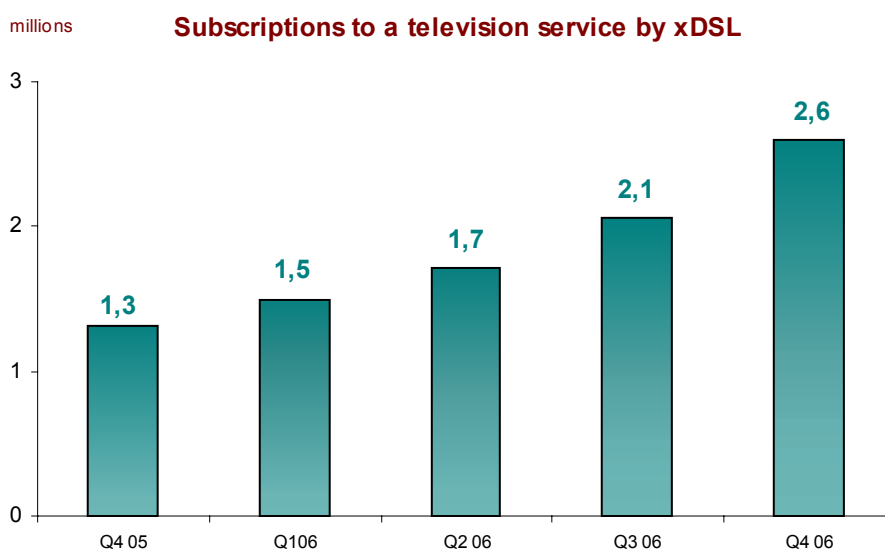
*adjusted figures are in italics*

## 2.3 Television

At the fourth quarter 2006, there were 2.6 million subscriptions to a television service using xDSL technology, doubling over the fourth quarter 2005 (1.3 million).

This indicator covers subscriptions “eligible” for television service, that is, where the subscriber has the possibility of activating this service, regardless of the number of channels accessible and regardless of the pricing formula. Both subscriptions taken out singly and those part of a multiplay package which includes access to one or more services in addition to television (Internet, telephony service) were considered.

Subscriptions (millions)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Subscriptions to television services on DSL	1,318	1,489	1,713	2,055	2,596	97,0%



## 2.4 Mobile telephony

Note: The scope covers both network operators and mobile virtual operators (MVNOs)

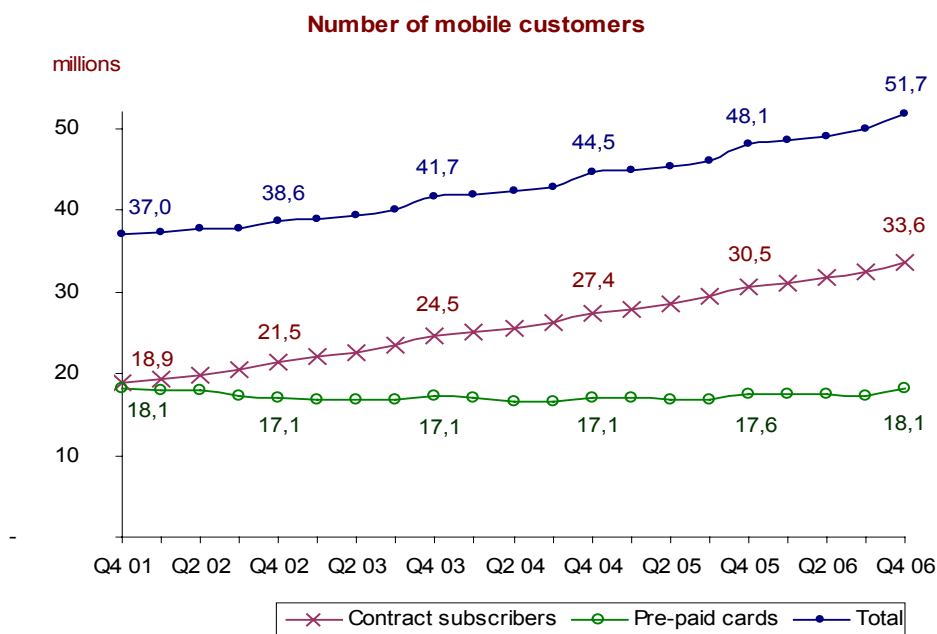
### 2.4.1 Subscriptions

Number of mobile customers (millions of units)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Contract subscribers	30,515	31,027	31,688	32,510	33,572	10,0%
Pre-paid cards	17,583	17,565	17,393	17,316	18,090	2,9%
of which active pre-paid cards *	16,714	16,703	16,531	16,385	17,185	2,8%
<b>Mobile Telephony</b>	<b>48,098</b>	<b>48,592</b>	<b>49,081</b>	<b>49,827</b>	<b>51,662</b>	<b>7,4%</b>

\*A prepaid card is considered active if the customer has made or received at least one call during the past three months. Only telephone calls are considered, whether free or payable. SMS are not included in the calculation.

At the end of the fourth quarter 2006, the number of customers to a mobile telephony service reached 51.7 million of which 33.6 million (or 65%) had flat-rate formulas.

Mobile telephony numbers have been growing at an annual rate of 7 to 8% since the end of 2003. At the fourth quarter 2006, the annual growth rate was 7.4%.

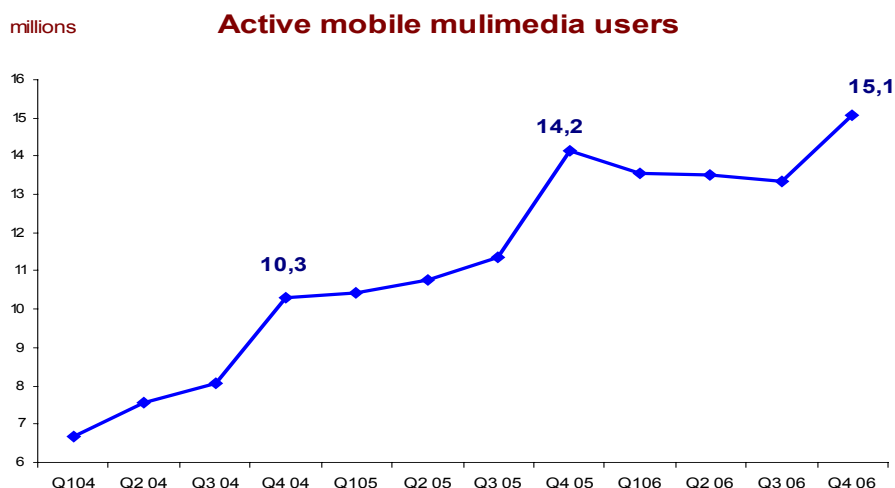


Multimedia users and portability (millions of units)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Active mobile multimedia users	14,154	13,564	13,495	13,345	15,079	6,5%
Number of mobile numbers ported during the quarter	0,093	0,103	0,099	0,089	0,139	49,7%

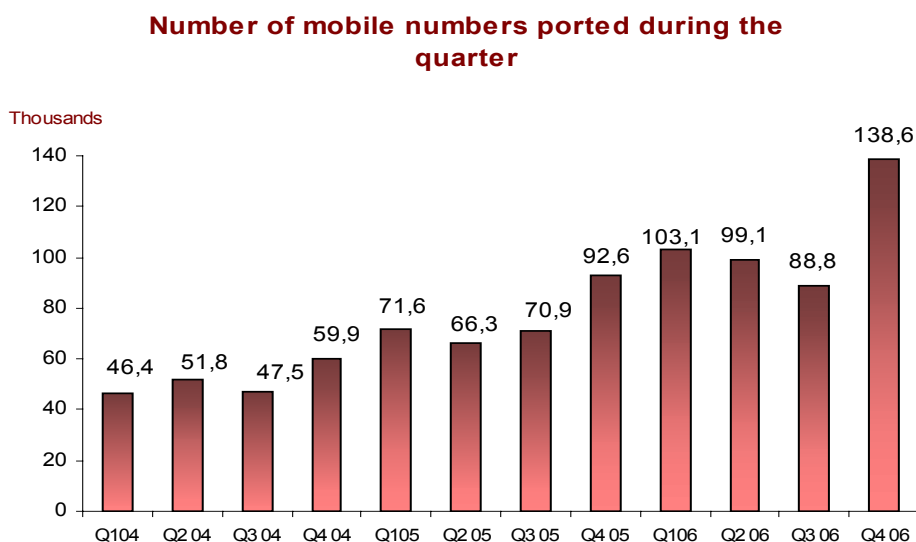
*adjusted figures are in italics*

Mobile multimedia services (access to mobile Internet services, MMS, etc.) were used by over 15 million users during the fourth quarter 2006. The end of the year generally sees a peak in the use of this type of services, although this year saw lower numbers than in the past two years.

The annual growth rate in the number of users slowed throughout 2006: +30% during the first quarter, +25% during the second quarter, +17% during the third quarter and +6.5% during the fourth quarter.



During the fourth quarter 2006, the number of mobile numbers ported from one operator to another operator reached its highest level since the opening of portability to mobile numbers, with close to 139 000 numbers. Growth was 49.7% higher than the fourth quarter 2005.



*Notes:*

- The number of active multimedia users is defined as the number of customers (subscribers or prepaid) who have used at least one multimedia service such as Wap, i-Mode, MMS or e-mail (SMS were not covered by this definition) within the past month, regardless of the technology used (CSD, GPRS, UMTS, etc.). Perimeter: Metropolitan France and DOM.

- The number of ported numbers is defined as the number of telephone numbers effectively ported (numbers activated with the receiving operator) during the past quarter. Scope: Metropolitan France and DOM.

## 2.4.2 Income and volume indicators

Revenue from mobile services (telephony and data transport) reached €4.3 billion during the fourth quarter 2006 and rose 5.6% over one year. The annual growth rate in 2006 was at a lower level than in 2005 (8 to 10% growth).

Revenue generated by mobile data transport (revenue from interpersonal messaging and from access services to mobile Internet or to multimedia services) represented €582 million. The share of data transport in total mobile services revenue increased, but at a moderate rate in 2006: rising from 10% at the end of 2004, to 12.7% at the end of 2005 and to 13.5% at the end of 2006.

<b>Revenue</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
<b>Mobile telephony</b>	3 552	3 536	3 611	3 763	3 717	4,6%
of which outgoing international calls	135	135	146	159	149	10,3%
<b>Data transport on mobile networks</b>	517	547	528	582	582	12,5%
of which interpersonal messaging (SMS, MMS)	352	374	350	386	380	7,8%
of access to mobile Internet & to multimedia services (1)	165	173	178	196	202	22,5%
<b>Total mobile telephony and data transport</b>	<b>4 069</b>	<b>4 083</b>	<b>4 139</b>	<b>4 345</b>	<b>4 299</b>	<b>5,6%</b>

*adjusted figures are in italics*

(1) Income of this item corresponds to amounts invoiced by operators to their customers for access to services; part of this income is then repaid by the operators to content publishers

<b>Volumes</b> <i>(millions of minutes)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Calls to national fixed lines	5 015	4 984	4 818	4 570	4 809	-4,1%
Calls to mobiles on the same network (1)	11 355	12 244	12 601	12 085	13 441	18,4%
Calls to other networks	4 872	4 932	5 534	5 640	6 056	24,3%
Outgoing international calls	256	260	280	308	311	21,8%
Roaming out (2)	275	249	285	400	283	3,0%
<b>Total mobile telephony</b>	<b>21 772</b>	<b>22 669</b>	<b>23 519</b>	<b>23 004</b>	<b>24 901</b>	<b>14,4%</b>

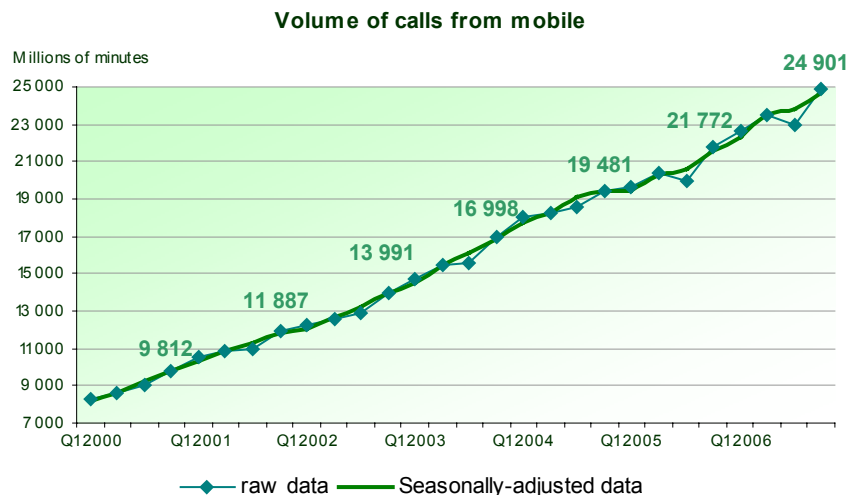
(1) onnet calls on the same network (MNO or MVNO)

(2) Roaming out corresponds to calls made in other countries by customers of French mobile operators

The volume of traffic originating on mobiles rose at the fourth quarter 2006 by 14.4% over the fourth quarter 2005. This growth, significantly higher than revenues, can be explained primarily by the introduction of “abundance” offers by mobile operators which encourage the development of the volume of calls made from mobile telephones.

The annual growth of the volume of calls was especially marked for mobile-to-mobile calls (+18.4% over one year for calls to mobiles on the same network and +24.3% for calls to mobiles on a different network) and for international calls (+21.8% over one year).

The volume of calls to fixed phones has been declining continuously since the beginning of 2005 (-4.1% over one year at the fourth quarter 2006).

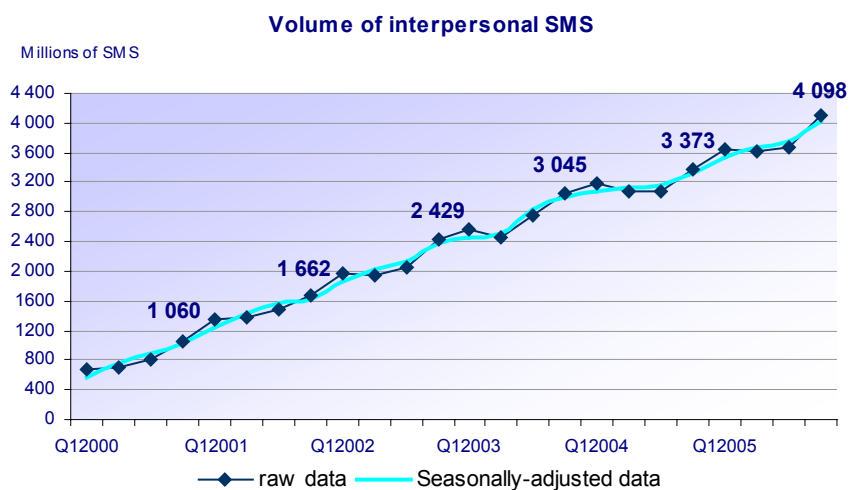


(The series of values are found in the “séries chronologiques” file available for consultation on ARCEP’s web site).

Mobile telephony users sent 4.2 billion interpersonal messages (SMS and MMS) during the fourth quarter 2006, for a 21.1% increase over one year. Close to 98% of interpersonal messages exchanged were text messages (SMS).

<b>Volumes of interpersonal messaging</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Number of interpersonal SMS	3 373	3 641	3 605	3 679	4 098	21,5%
Number of interpersonal MMS	80	81	74	73	82	2,5%
<b>Number of interpersonal messages sent</b>	<b>3 452</b>	<b>3 722</b>	<b>3 680</b>	<b>3 753</b>	<b>4 179</b>	<b>21,1%</b>

*adjusted figures are in italics*



(The series of values are found in the “séries chronologiques” file available for consultation on ARCEP’s web site).

## 2.5 Other market components

### 2.5.1 Value-added services

Revenue from value-added services was €637 million at the fourth quarter 2006, for a very slight increase of 0.4% over the fourth quarter 2005.

<b>Value added services revenue**</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Value added "voice" services	556	579	521	526	558	0,4%
Value added "data" services	79	87	73	75	79	-0,7%
<b>Value added services</b>	<b>635</b>	<b>666</b>	<b>594</b>	<b>601</b>	<b>637</b>	<b>0,3%</b>

*adjusted figures are in italics*

\* The income corresponds to all amounts invoiced by operators to customers, including amounts repaid by the operators to service suppliers. For example, value added "data" services include: "gallery" services, alert services, chat services, weather forecasts, horoscopes, TV game shows, ring tone downloads, etc.

<b>Value added "voice" and "télématique" services volumes</b>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
From fixed telephony network	2 191	3 165	2 880	2 610	2 817	<i>n.s.</i>
From mobile telephony networks	380	380	374	387	402	5,6%
<b>Volumes</b>	<b>2 571</b>	<b>3 545</b>	<b>3 254</b>	<b>2 997</b>	<b>3 218</b>	<b>n.s.</b>

*adjusted figures are in italics*

Note: The strong increase in the volume of value-added services beginning the first quarter 2006 was due to a better consideration of "voice and telematic" services by the operators in the survey. The impact was estimated at about 700 million minutes in volume on one quarter. The Observatory is not able to provide corrected data for 2005.

<b>Value added "data" service volumes</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Number of messages (SMS+, MMS+)	160	167	154	157	160	-0,1%

*adjusted figures are in italics*

### 2.5.2 Directory services

A major decline in revenue generated by directory services followed the closure of the old directory services numbers on 3 April 2006 (which were replaced by the new 118xyz numbers).

Revenue from directory services was €40 million at the fourth quarter 2006, compared with €37 and €38 million respectively at the second and third quarters 2006.

<b>Revenue from directory services</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
local loop	52					
Directory services operator's		47	37	38	40	

The number of calls to directory services has tended to decline since the closure of the old directory services numbers. Thirty-eight million calls were made during the fourth quarter 2006 compared with 40 million during the third quarter 2006 and 41 million during the second quarter 2006.

<b>Directory services</b> <i>(millions of units)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Number of calls		53	41	40	38	

*Note: Directory services include the old fixed (12, 3200, 3211, 3212) and mobile (612, 712, 222) directory service numbers in service until 3 April 2006, the new 118xyz numbers in service since November 2005 and short codes providing access to director services including the reverse directory (3288, 3217, 3200) and international directory (3212).*

### 2.5.3 Leased lines and data transport (fixed operators)

Since the first quarter 2006, part of the revenue from leased lines and data transport is no longer included in the end market because of market restructuring (in particular, the integration of Transpac in France Telecom).

<b>Revenue</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Leased lines	520	371	371	366	403	-22,6%
Data transport	555	487	488	463	472	-15,0%

*adjusted figures are in italics*

*Note: Revenue from leased lines may be counted twice since operator-to-operator sales were included. These sales may represent up to 35% of the total revenue from leased lines.*

### 2.5.4 Hosting and call centre management services

Certain revenues which were previously included in revenue from hosting and call centre management services (revenues from services associated with the provision of data transport) have been reassigned to the revenue from data transport for 2005 and 2006.

<b>Revenue</b> <i>(millions of euros)</i>	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Hosting and call centre management	5	9	7	7	13	134,7%

*adjusted figures are in italics*

## 2.5.5 Terminals and equipment

Revenue from terminals and equipment (millions of euros)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed & Internet operators	207	181	175	181	196	-5,4%
Mobile operators	530	354	326	363	469	-11,6%
<b>Terminals and equipment</b>	<b>737</b>	<b>534</b>	<b>500</b>	<b>544</b>	<b>664</b>	<b>-9,8%</b>

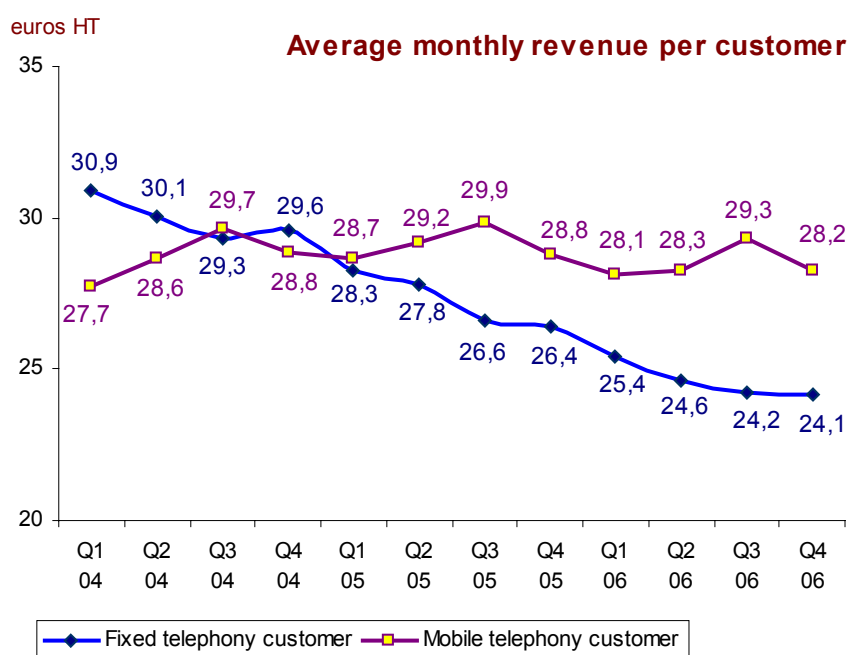
\* adjusted figures

Note: As in previous issues, income from packs and terminals includes commissions to distributors.

## 2.6 Indicators per customer

Average monthly revenue per customer (in euros -VAT excluded)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
Fixed telephony user	26,4	25,4	24,6	24,2	24,1	-8,7%
Mobile telephony user	28,8	28,1	28,3	29,3	28,2	-2,0%
Dial-up Internet user	9,5	9,1	8,7	8,6	8,4	-11,2%
Broadband Internet user	24,5	24,2	23,3	22,9	23,5	-4,3%

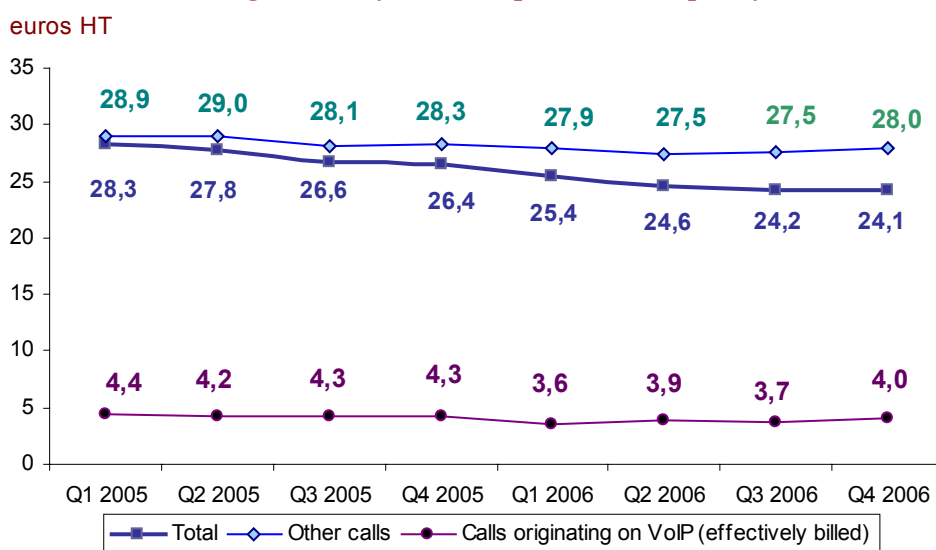
adjusted figures are in italics



The average monthly invoice per fixed subscription is calculated by dividing the income from calls on fixed lines (access and voice income) and that from the subscription for the quarter N by an estimate of the average number of subscriptions of the quarter N, divided by the number of months.

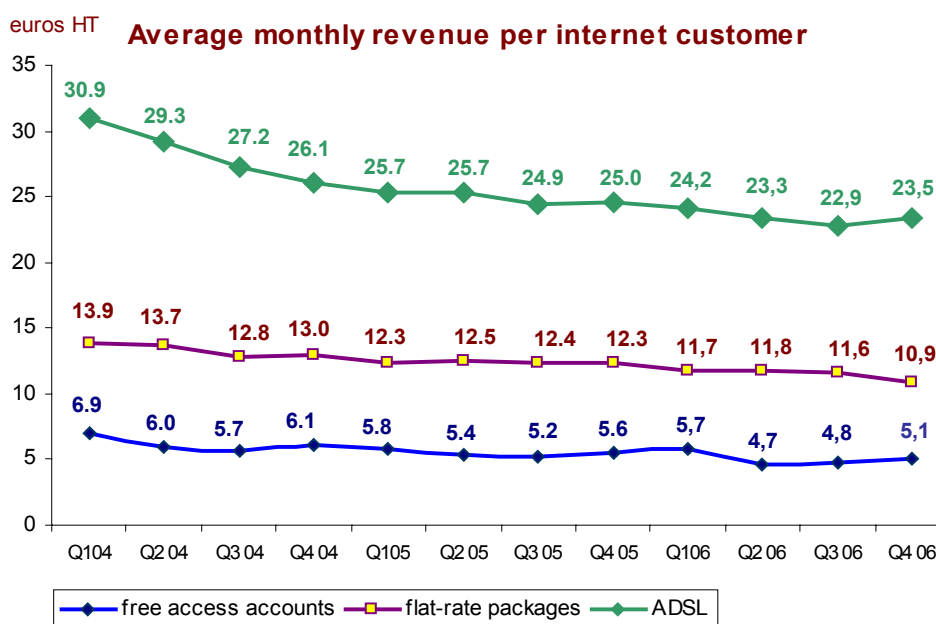
The average monthly invoice per customer of mobile operators is calculated by dividing mobile telephony income (voice and data income) of the quarter N by an estimate of the average number of customers of the quarter N, divided by the number of months. This indicator, which does not include income from interconnection, nor from advanced services, is different from the traditional Average Revenue Per User indicator (ARPU) indicator.

### Average monthly revenue per fixed telephony customer



The average monthly invoice per PSTN subscription is calculated by dividing the income from subscriptions and from calls on PSTN fixed lines (excluding VoIP income), for the quarter N by an estimate of the average number of subscriptions of the quarter N.

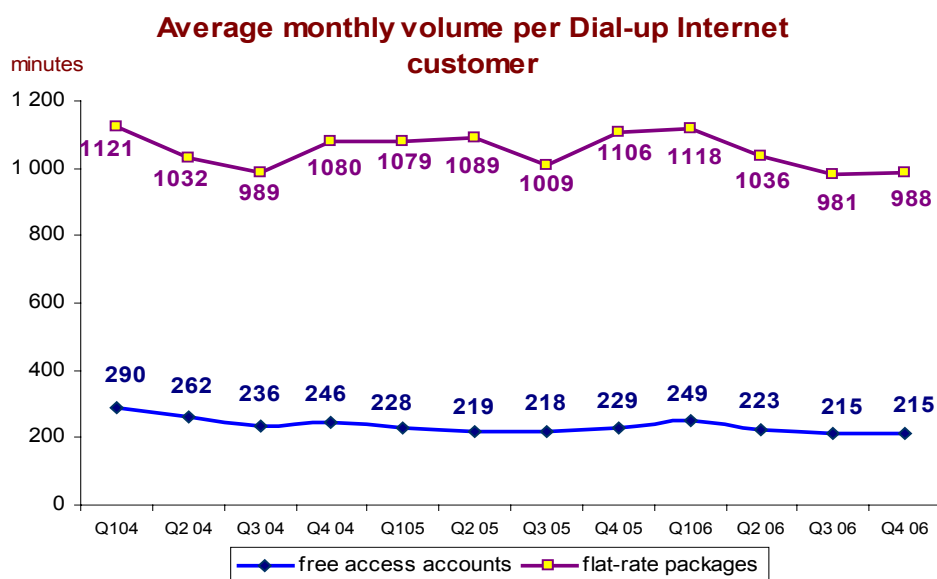
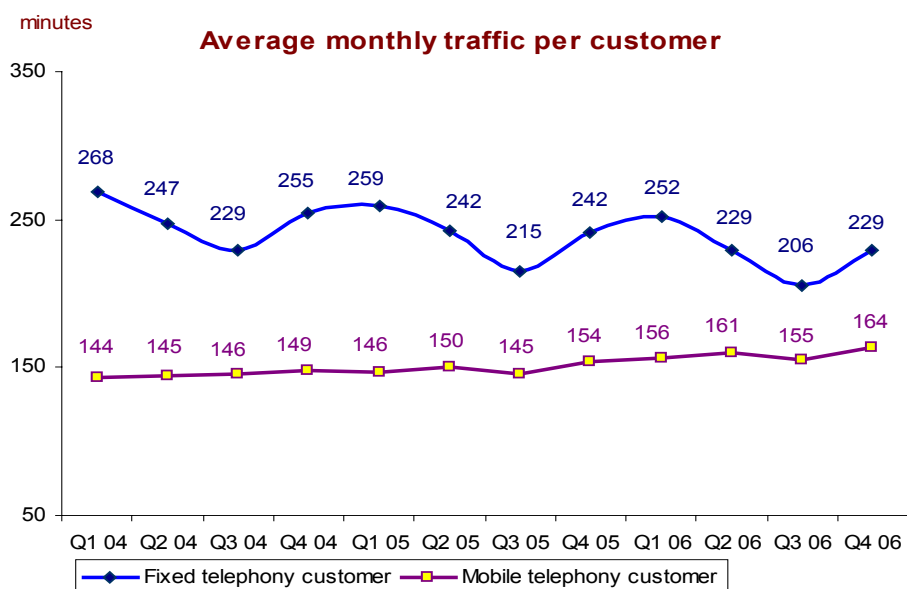
The average monthly invoice per subscription to IP telephony access is calculated by dividing only income from invoiced IP calls (i.e. excluding multi-play flat rates) on the quarter N by an estimate of the average number of subscriptions of the quarter N.



The average monthly invoice per dial-up Internet subscription (respectively high-speed) is calculated by dividing the income from dial-up access (respectively high-speed) to Internet of the quarter N by an estimate of the average number of customers of the quarter N, divided by the number of months.

Average monthly traffic per customer (in hours)	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Change 4Q06/4Q05
From fixed telephony network	4h02	4h12	3h49	3h26	3h49	-5,2%
From mobile telephony networks	2h34	2h36	2h41	2h35	2h44	6,1%
From dial-up Internet	12h16	12h23	11h17	10h47	11h00	-10,4%
(units)						
Number of SMS sent per user during the quarter	23,9	25,1	24,6	24,8	26,9	12,8%

*adjusted figures are in italics*



The volume of average monthly traffic is calculated by dividing the volume of traffic of the quarter N by an estimate of the average number of subscriptions of the quarter N, divided by the number of months.

Like for SMS, the indicator is calculated by dividing the number of SMS of the quarter N by an estimate of the average number of customers of the quarter N, divided by the number of months.

Average number of customers of the quarter N:  $[(\text{total number of customers at the end of the quarter } N + \text{total number of customers at the end of the quarter } N-1) / 2]$

### **Information on billing and average monthly volumes per customer indicators**

The Market Observatory publishes **average monthly invoice per subscription indicators for fixed telephony, mobile telephony and Internet**. These are the amounts invoiced on average by the operator to the customer for the subscription and calls (voice and data). These indicators are different from **ARPU** (Average Revenue Per User) which are generally operator revenues from all income related to network use.

In other words, the revenues used to calculate the average monthly invoice on mobile networks are revenues from outgoing calls, data services (interpersonal messaging and Internet access services) and roaming out. Revenues from interconnection (incoming calls) are not taken into account.

Financial analysts and operators publish an Average Revenue Per User indicator (average recurring revenue, or **ARPU**). This includes revenues from outgoing calls, data services, value-added services *and* revenues from incoming calls (interconnection). According to operators, it may or may not include roaming income.

The Observatory also publishes **average monthly outgoing traffic per customer** indicators, which are representative of customers' telephone use.

By analogy with the ARPU, some financial agencies and operators use an average traffic per customer indicator, or **AUPU** (Average Usage Per User); it covers all or part of incoming calls to create a volume base which is comparable with that used for the ARPU. It does not represent the average consumption per customer but is rather an indicator of the operator's volume of activity per customer.

For fixed telephony, the revenues used are only those corresponding to subscriptions and telephone calls (including Internet access calls) excluding all other revenue, in particular from advanced services and Internet. This is a partial view of the fixed invoice because it includes only telephony values.

For Internet, the revenues taken into account are those from flat-rate subscriptions providing access to Internet and revenues from pay-as-you-go Internet connections.