L'OBSERVATOIRE

The electronic communications services market in France in the 4th quarter 2008

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AUTORITÉ DE RÉGULATION des Communications électroniques et des Postes

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Introduction

Electronic communications operators earned €11.3 billion in revenue on the end market in the fourth quarter 2008. Interconnection services and sales between operators on the wholesale market generated €2.2 billion in additional revenue during the quarter.
Revenue from just electronic communications services on the end market, i.e. excluding operators' related revenues (terminal sales, directory services, advertising, hosting, call centre management, etc.) was €10.2 billion in the fourth quarter 2008, up 1.9% over one year.
Telephony services and mobile telephony traffic represented 53.6 billion minutes in the fourth quarter 2008, declining 0.5% with respect to the fourth quarter 2007.

Fixed telephony and Internet)

There were 40.7 million subscriptions to telephone services at the end of the fourth quarter 2008. This number rose 2.6% over one year thanks to the growth of subscriptions to broadband telephony services (IP DSL or cable). The number of subscriptions rose by 3.5 million (31.8%) over one year, while the number of telephone subscriptions on dial-up access fell by 2.4 million (-8.5%). With 14.4 million subscriptions at the end of the fourth quarter 2008, voice on broadband represented 35% of all telephone subscriptions. Thanks to the wholesale telephone subscription offer, alternative operators directly invoiced 0.9 million dial-up telephone subscriptions at end 2008.

The proportion of fixed lines supporting only a "traditional" telephone subscription on the PSTN declined to just 59% at the end of the fourth quarter 2008, compared with 68% a year earlier. A growing number of lines now have a subscription to a voice-on-IP offer, replacing, or in addition to, the PSTN subscription.
Certain voice-on-IP offers replace a PSTN subscription entirely. They are created (by alternative operators and by the incumbent) on fully unbundled lines or using "naked ADSL". Their number has been growing regularly and, at the end of the fourth quarter 2008, the share of fixed lines supporting just a subscription to a telephone service on IP reached 25% compared with 17% a year earlier. The share of lines on which two telephone subscriptions coexist (a subscription on IP complementing a PSTN subscription), was 16% in the fourth quarter 2008, and has been holding steady since early 2008.

Revenue directly attributable to fixed telephony (subscriptions and communications) has been shrinking for several years. It was €2.6 billion in the fourth quarter 2008, declining 4.1% over one year. Revenue from subscriptions represented 57% of fixed telephony revenue (€1.5 billion in the fourth quarter 2008). This revenue declined for the second quarter in a row in the fourth quarter 2008 (-2.8% over one year) due to the decrease in the number of "traditional" telephone subscriptions on the PSTN. Revenue from telephone communications has been shrinking for several years. At €1.1 billion in the fourth quarter 2008, call revenue dropped 5.7% over one year.
Traffic originating on fixed phones (excluding public payphones and cards) reached 27.5 billion minutes in the fourth quarter 2008, holding steady with respect to the fourth quarter 2007 (-0.2%). The contribution of IP call minutes barely offsets the decline in the number of calls on the PSTN (2.6 billion fewer minutes in one year). If we cancel out seasonal variations, this traffic has held steady at a relatively high level throughout 2008.
At 13.0 billion minutes, IP calls represented 47% of all traffic originating on fixed phones in the fourth quarter 2008 and have been growing strongly (+24.3% over one year). The

proportion of minutes sent on IP for international calls now exceeds two-thirds (67%), and represents half of all long-distance calls to fixed phones (49%). On the other hand, just 20% of minutes of fixed-mobile calls are made on IP.

There were 18.7 million Internet subscriptions at the end of the fourth quarter 2008 with 17.7 million accesses to high speed. The number of high-speed Internet accesses rose by 2.1 million (13.8%) over one year. Annual growth was 2.9 million the previous year.
Internet revenue rose 16.1% over one year to €1.4 billion in the fourth quarter 2008, thanks to revenue from high-speed accesses, which represented €1.3 billion, but also thanks to additional revenue from Internet access providers (€139 million). The amount of the average monthly invoice of a high-speed Internet subscription (€24.00 excluding VAT in the fourth quarter 2008) has been stable for the past two years.
The number of subscriptions to a television service on ADSL rose 36.8% over one year, reaching 6.2 million at end 2008, and representing close to 37% of ADSL subscribers.

Mobile telephony

There were 58 million mobile telephony users in France (number of SIM cards in service) at the end of the fourth quarter 2008. This number increased by 2.6 million over one year, for an annual increase of 4.7%. The rate of growth, which reached 7% during the first quarter 2008, slowed over the course of the year. Flat-rate subscriptions are definitely in the majority, and their number grew strongly once more (+8.1% over one year in the fourth quarter 2008) while the number of pre-paid cards fell (-1.7% over one year). Of the 58 million SIM cards, one million are used solely for mobile Internet connections and cannot be used for voice services.

Revenue from mobile services (telephony and data transport) was €4.7 billion in the fourth quarter 2008, rising by 4.5%. During the third and fourth quarters of 2008, the annual growth rate of this revenue (4.5% and 3.2% respectively) was lower than that registered in the previous two years (between 5 and 6%). This slowdown is due to the telephony component, where revenue, which had previously been on the rise, slowed slightly for the first time (-0.4% in the fourth quarter 2008). On the other hand, the growth in data transport services revenue (€840 million in the fourth quarter 2008) has remained above 20% over the past five quarters (+23.6% at the fourth quarter 2008).

Revenue from data transport services now represents 18% of all mobile service revenues.

Mobile multimedia services (access to Internet mobile, MMS) were used by 18.7 million customers during the quarter. The number of active users of services available on third-generation mobile networks (voice, videophone, mobile television, data transfers, etc.) doubled in one year, reaching 11.4 million in the fourth quarter 2008.
A full 11.7 billion interpersonal messages were sent during the fourth quarter 2008, including 11.6 billion SMS. The number of SMS rose very strongly during the fourth quarter 2008, doubling in one year, and was 3 billion more than the number of SMS sent during the previous quarter. On average, each customer sent 67 SMS per month in the third quarter 2008, almost twice as many as a year earlier (35 SMS).

Mobile telephony traffic represented 25.8 billion minutes in the fourth quarter 2008. The annual growth of this traffic, which had reached 4% early in the year, progressively slowed in the following months. Following weak growth (+1.4%) in the third quarter, this volume did not grow (-0.4%) during the fourth quarter 2008. This decline is due to a large part to the slowdown in “on-net” traffic (which now represents close to half of all volumes originating on mobile phones), which was down 4.3% over one year. Mobile-fixed call traffic was also down (-1.5% over one year) while the volume of mobile to third-party mobile calls rose (+8.6% over one year).

Other market components

Income from value-added services reached €593 million in the fourth quarter of 2008, down 10.0% over one year. Revenue from “voice and telematic” services was down (-14.0% in the fourth quarter 2008) while income from data services grew (+4.9% in the fourth quarter) and now represents one-quarter of all value-added services. Close to nine-tenths of calls to value-added services are made on fixed phones.

Income from directory services (€40 million) shrank 2.6% over one year in the fourth quarter of 2008. The number of calls to directory services has been declining continuously for the past two years. Just 29 million calls were made in the fourth quarter 2008, 3.8 million fewer than in the fourth quarter 2007. Seven out of every ten calls to directory services are made on mobile telephones

For sector operators, revenue from terminal sales and rentals was €924 million in the fourth quarter 2008 (+17.4% over one year). With €715 million, mobile operators generate most of this revenue, thanks primarily to the success of touch-screen terminals.

Note: The figures relating to a particular quarter may be revised from one issue to the next as a result of corrections made by operators to their reports. Any discrepancies between annual growth figures expressed as a percentage and the corresponding values are due to rounding.

Contents

1 The electronic communications market in its entirety

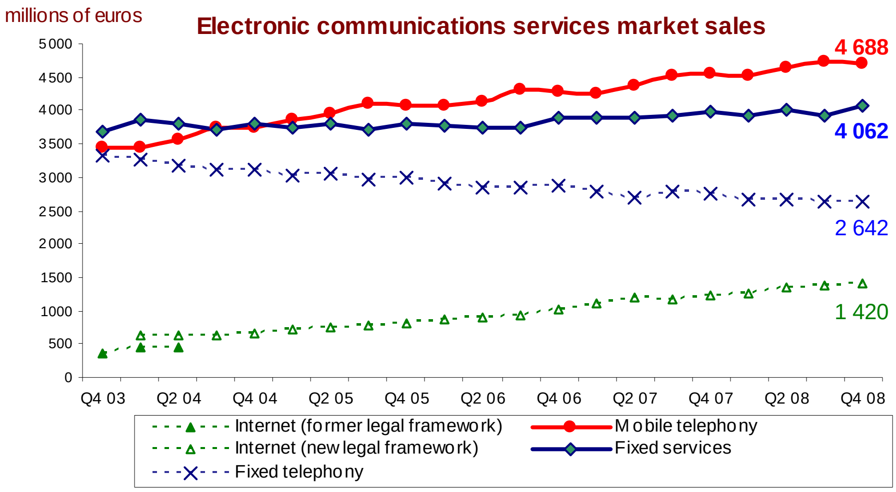
1.1 The end customer market

Revenue *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed services	*3 979*	*3 932*	*4 003*	*3 995*	4 062	2,1%
Fixed telephony (1)	2 755	2 660	*2 662*	*2 629*	2 642	-4,1%
Internet	*1 223*	*1 272*	*1 341*	*1 366*	1 420	16,1%
Mobile telephony (2)	4 542	4 510	4 630	4 728	4 688	3,2%
All telephony and Internet	***8 521***	***8 442***	***8 634***	***8 723***	**8 750**	**2,7%**
Advanced services	659	*645*	*616*	599	593	-10,0%
Directory services. directories and advertising	41	38	39	42	40	-2,6%
Leased lines	369	382	372	*380*	388	5,2%
Data transport (3)	466	462	467	462	478	2,5%
Electronic communications services	***10 056***	***9 969***	***10 128***	***10 206***	**10 249**	**1,9%**
Others revenues (4)	*982*	*740*	*832*	*967*	1 096	11,7%
Entire market	**11 037**	***10 709***	***10 959***	***11 174***	**11 345**	**2,8%**

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 (VoIP) 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.



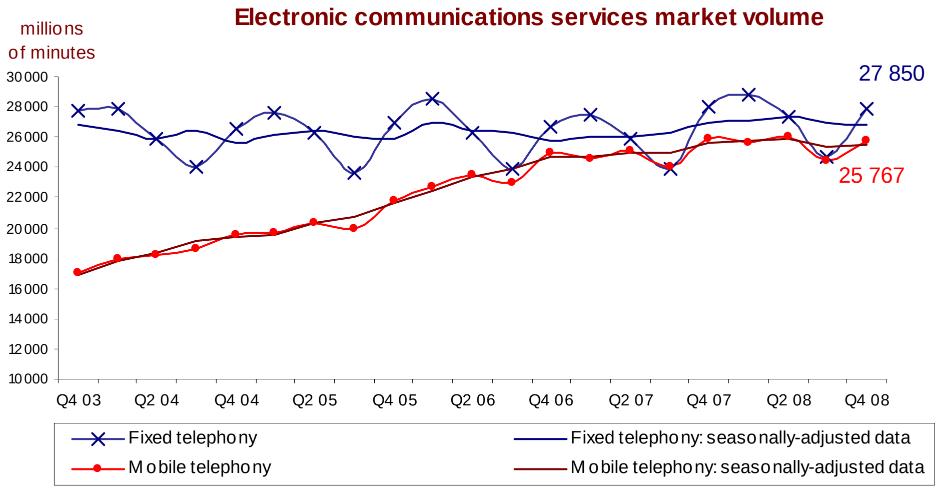
Revenue from electronic communications services sold by operators on the end market (excluding operators' related revenues) reached €10.2 billion in the fourth quarter 2008, growing 1.9% over one year.
Revenue from fixed services (fixed telephony and Internet) reached €4.1 billion in the fourth quarter 2008, up 2.1% over one year. Revenue directly attributable to fixed telephony (from subscriptions and telephone calls) was €2.6 billion, and has been declining for a number of years (-4.1% over one year in the fourth quarter 2008). Revenue from Internet services (€1.4 billion) maintained strong growth (+16.1% over one year in the fourth quarter 2008) although it saw slower growth than the high level observed in 2007 (+20% to +30% at an annual rate, depending on the quarter).
Revenue from mobile services was €4.7 billion, or close to 46% of revenue from electronic

communications services. The annual growth rate of the past two quarters in 2008 (+4.5% in the third quarter and +3.2% in the fourth) was down sharply from the first two quarters of 2008 (close to 6%).

Volumes *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed telephony	28 007	28 802	*27 327*	*24 651*	27 850	-0,6%
Mobile telephony	25 866	25 679	25 967	24 406	25 767	-0,4%
Total voice services	53 873	54 481	*53 294*	*49 057*	53 616	-0,5%
Internet (dial-up)	3 037	2 798	2 584	2 259	2 165	-28,7%
Number of SMS sent *(millions of units)*	5 712	6 732	7 680	8 432	11 553	102,3%

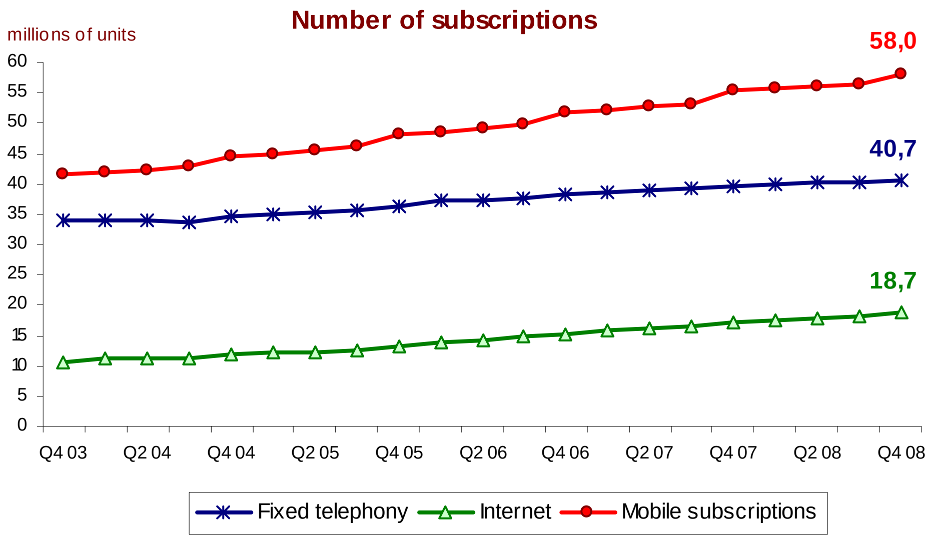
adjusted figures are in italics

The volume of "voice" services (on fixed and mobile networks) was 53.6 billion minutes in the fourth quarter 2008, down 0.5% over one year.
The volume of calls made from fixed phones was 27.9 billion minutes in the fourth quarter 2008. This fixed telephony volume has been growing by 3 to 5% since early 2008 thanks to the strong development of telephony on IP. Growth declined by 0.6% in the fourth quarter 2008.
Mobile telephony traffic represented 25.8 billion minutes in the fourth quarter 2008. When corrected for seasonal variations, this traffic has held stable for the past year, whereas it had previously been growing.
The number of SMS sent grew strongly in 2008. The number of SMS sent each quarter has doubled in one year, reaching 11.6 billion in the fourth quarter 2008.



Number of subscriptions *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of subscription to telephone service	39,632	*40,050*	*40,141*	*40,194*	40,651	2,6%
Internet subscriptions	17,059	*17,593*	*17,893*	*18,292*	18,674	9,5%
Number of mobile customers	55,349	55,743	56,045	56,392	57,972	4,7%

adjusted figures are in italics



Clarification on the "fixed services" segment

The fixed segment is composed of fixed telephony and Internet. By convention, the segmentation used in the Observatory covers all revenues from multi-service offers to Internet and includes only directly attributable revenues to fixed telephony revenues. The indicator for revenues directly attributable to fixed telephony services covers revenues from access fees and subscriptions to telephone service (PSTN and VoIP when invoiced separately from Internet service), revenues from calls made on fixed lines explicitly invoiced (PSTN and VoIP invoiced in addition to multiplay packages), and revenues from public payphones and cards. Access to a voice-on-IP service and calls on IP, when included in the invoices for high-speed Internet packages, are not covered by this indicator: they are included in the "high-speed Internet access revenues" indicator and, more broadly, in the "Internet revenues" indicator.

1.2 The intermediate market (interconnection and wholesale market)

1.2.1 *The total market*

Revenue from interconnection services exchanged between operators on the intermediate market represented €2.2 billion in the fourth quarter 2008.
Revenue from services exchanged between fixed-network operators represented €1.2 billion in the fourth quarter 2008, up 5.1% over one year. Revenue from wholesale high-speed access services (unbundling, wholesale bitstream offers, etc.) reached €439 million during the quarter. Still, the rate of growth in the revenue from these services (+6.6% over one year in the fourth quarter 2008) slowed at end 2008. Revenue from telephone services (€758 million in the fourth quarter 2008, or +4.7% over one year) was up, thanks in part to the contribution of income from the wholesale telephone subscription offer.
Fixed operators' global interconnection traffic was down 2.0% over one year, primarily due to consolidation on the fixed market which cut the number of players on the intermediate market.
The reduction of the wholesale mobile call termination tariff on 1st January 2008 (13% cut for Orange France and SFR and 8% for Bouygues Telecom) led to a decline in the revenue generated by interconnection services (-4.2% over one year). Over the same period, the volume of interconnection minutes between mobile operators rose 4.5%.
The revenue and volume of dial-up Internet interconnection services are marginal and shrinking significantly (over 40% over one year in the fourth quarter 2008).

Interconnection services *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed operators	1 142	1 156	1 151	1 145	1 201	5,1%
of which telephony services	724	727	713	716	758	4,7%
of which dial-up Internet	7	7	5	5	4	-35,6%
of which broadband services	412	422	432	424	439	6,6%
Mobile operators	1 040	900	993	1 022	996	-4,2%
Revenue	**2 182**	**2 055**	**2 143**	**2 167**	**2 196**	**0,7%**

Interconnection services *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed operators	36 223	36 018	33 090	*31 706*	35 512	-2,0%
Internet (dial-up)	1 724	1 652	1 337	1 230	1 019	-40,9%
Mobile operators	10 954	11 014	11 400	11 246	11 448	4,5%
Volume	**48 901**	**48 685**	**45 826**	***44 182***	**47 979**	**-1,9%**

adjusted figures are in italics

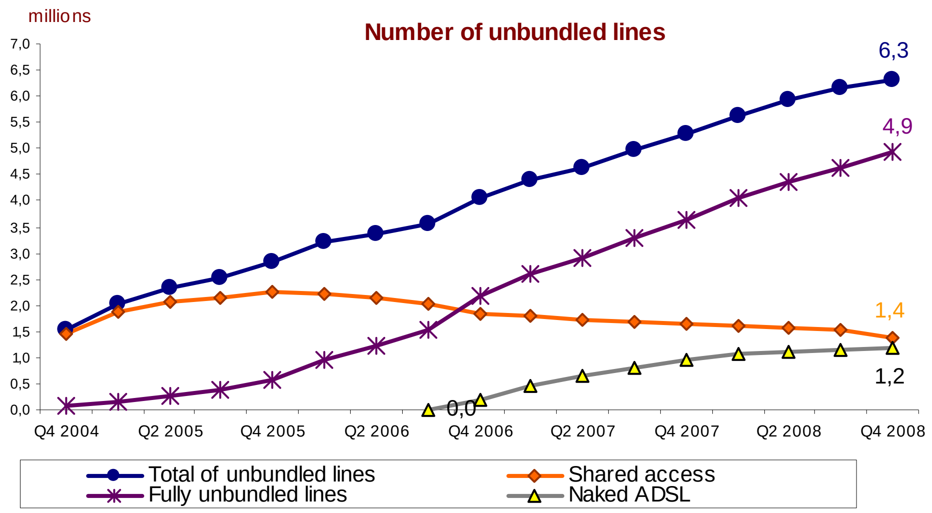
Notes:

- Interconnection covers all the services provided by one carrier to another under the terms of an interconnection agreement. In cases of mergers or takeovers, some of the revenue streams between the telcos disappear, which might account for decreases in revenues from one quarter to the next.
- Interconnection income and traffic volumes are not calculated on the basis of the same criteria, making a comparison between the two indicators unsuitable for estimating average prices (interconnection income include fixed income such as charges for connection links and intercarrier services).
- Note that the interconnection figures shown above might be accounted for twice, particularly in the case of fixed operators
- Wholesale broadband services include revenues from both LLU and bitstream or equivalent services.

There were 6.3 million unbundled lines at the end of the fourth quarter 2008, representing more than 18% of all fixed lines. The number of fully unbundled lines rose sharply by 1.3 million lines over one year in the fourth quarter 2008, for 35.8% growth.
Partial unbundling (1.4 million lines at the end of the fourth quarter 2008) was down 16.1% over one year, and now concerns just one in five unbundled lines compared with one in three a year earlier.

Unbundling *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Partially unbundled lines	1,641	1,589	1,558	*1,535*	1,376	-16,1%
Fully unbundled lines	3,626	4,042	4,354	*4,631*	4,922	35,8%
Number of unbundled lines	**5,267**	**5,631**	**5,912**	***6,166***	**6,299**	**19,6%**

adjusted figures are in italics



"Naked ADSL" *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of lines	0,942	1,052	1,123	1,137	1,186	25,9%

At end December 2008, operators had purchased 1.2 million “naked ADSL” lines from the incumbent. The volume of these purchases was up 25.9% over one year.

1.2.2 Incoming international interconnection[1]

Operators' income from incoming international interconnection services in the fourth quarter 2008 was €143 million.

The global volume of incoming international interconnection traffic was 2.9 billion minutes. The volume of international traffic terminating on French mobile networks represented less than one-quarter of this traffic but grew more quickly than foreign traffic terminating on French fixed networks (annual growth of +11.0% and +4.1%, respectively, in the fourth quarter 2008).

Revenue of incoming international interconnection services *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed operators	96	93	100	110	96	0,0%
Mobile operators	47	44	45	50	47	-1,6%
Revenue	**143**	**137**	**145**	**160**	**143**	**-0,5%**

Volume of incoming international interconnection services *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed operators	2 137	2 062	2 202	2 312	2 224	4,1%
Mobile operators	593	606	641	687	658	11,0%
Volume	**2 730**	**2 668**	**2 843**	**3 000**	**2 883**	**5,6%**

adjusted figures are in italics

1.2.3 Mobile operators roaming-in[2]

In June 2007, a European Union regulation imposed international roaming prices on mobile operators in the EU zone, as well as multi-year price cuts. As a result, the price of calls abroad (the "Eurotarif") has declined from €0.49 excluding VAT on 30 August 2008 to €0.46 excluding VAT for calls to foreign countries and from €0.24 excluding VAT to €0.22 excluding VAT for calls received from foreign countries.

Roaming in	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Revenue *(millions of euros)*	144	136	162	211	148	2,6%
Volume *(millions of minutes)*	366	402	478	596	405	10,8%

Note: Roaming-in is a service whereby a French mobile operator carries calls made and received in France by customers of foreign mobile operators. Revenues correspond to the out-payments made between operators. The ratio of revenue to volume does not correspond to any specific tariff and particularly not to the price billed to the customer.

[1] *This market segment is a subset of the overall market (cf. 1.2.1)*

[2] This market segment is a subset of the overall market

2 Market segments

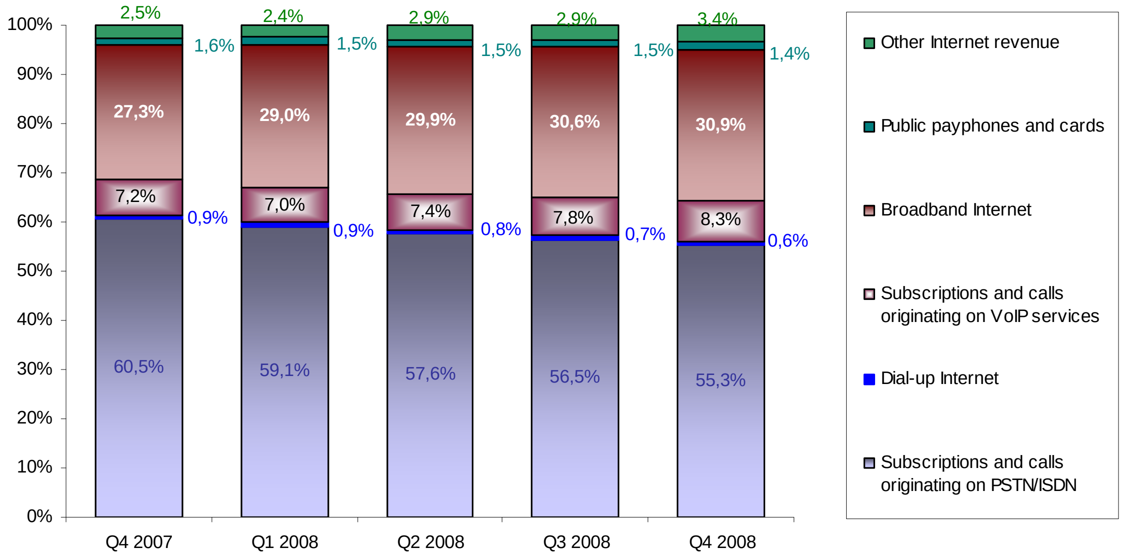
2.1 Fixed networks services

Revenue from high-speed services on fixed networks (fixed telephony on broadband and high-speed Internet) grew 16.3% over one year in the fourth quarter 2008, representing 39.3% of all income from fixed services compared with 34.5% a year earlier. At the same time, revenue from dial-up services on fixed networks (telephony on the PSTN, dial-up Internet) declined 7.1%. Other Internet access-related revenues (advertising, e-commerce and site hosting) rose 39.7% over one year. The "public payphones and cards" activity was down 7.8% over on year.

Revenue of fixed networks services *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Narrowband Revenue	**2 445**	**2 360**	**2 335**	**2 284**	**2 270**	-7,1%
Subscriptions and calls originating on PSTN/ISDN	2 408	2 324	2 304	2 256	2 246	-6,7%
Dial-up Internet	37	35	31	29	24	-34,5%
Broadband Revenue	**1 372**	**1 418**	**1 494**	**1 536**	**1 595**	16,3%
Subscriptions and calls originating on VoIP services	285	277	298	313	339	18,7%
Broadband Internet	1 086	1 141	1 196	1 223	1 256	15,6%
Other revenue	**162**	**155**	**175**	**175**	**197**	21,5%
Public payphones and cards	62	59	60	60	57	-7,8%
Other Internet revenue	100	96	115	115	139	39,7%
Revenue of fixed lines services	***3 979***	***3 932***	***4 003***	**3 995**	**4 062**	**2,1%**

adjusted figures are in italics

Revenue of fixed networks services



2.2 Fixed telephony

2.2.1 Access, subscriptions and fixed lines

There were 40.7 million subscriptions to a telephone service on fixed lines at the end of the fourth quarter 2008. Over one year, the number of subscriptions rose 2.6% thanks to the rapid expansion in the number of subscriptions to voice-on-broadband services.

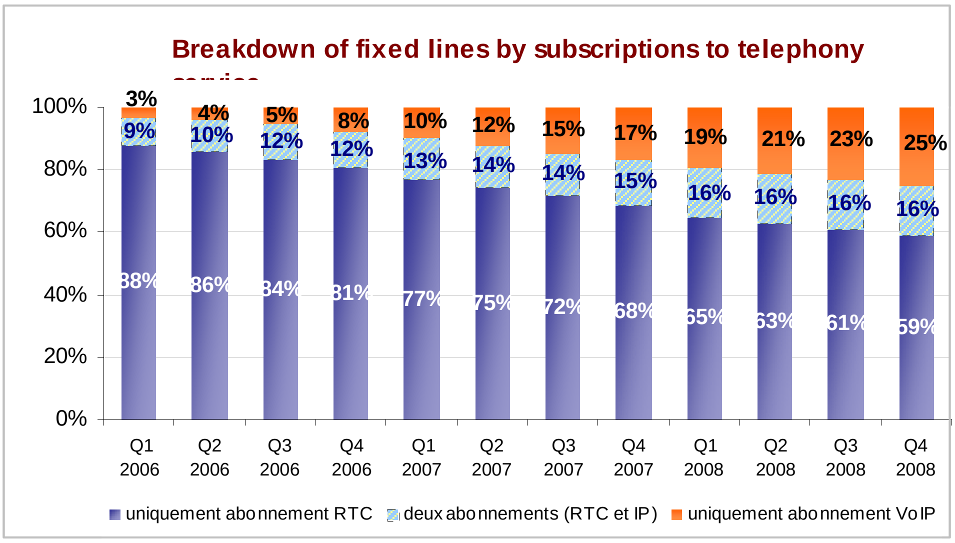
There were 14.4 million subscriptions to a voice on broadband service (IP DSL or cable subscription) at the end of the fourth quarter 2008, representing 35% of all fixed telephony service subscriptions. The number of subscriptions to telephony-on-broadband services grew by 3.5 million in one year (+31.8%).
At the same time, the number of dial-up subscriptions (on analogue or digital lines and on cable) has been declining for several years. At 26.4 million subscriptions at the end of the fourth quarter 2008, this number was down 2.3 million over one year (-7.9%).
Resulting from the wholesale telephone subscription sale offer, 857 000 subscriptions to telephone services on the PSTN (or 3.2% of these subscriptions) were invoiced directly to customers by an operator other than the incumbent at the end of the fourth quarter 2008.

Number of subscriptions to telephone service *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Subscription on narrow band access (analogue or digital lines, cable)	28,743	27,946	27,309	26,682	26,298	-8,5%
Access resales	0,703	0,762	0,820	0,834	0,857	21,9%
Subscription on broadband access (IP DSL,cable)	10,888	*12,104*	*12,832*	*13,512*	14,352	31,8%
DSL lines without narrowband access	5,467	6,204	6,839	7,410	8,049	47,2%
Number of subscriptions to telephone service	**39,632**	***40,050***	***40,141***	***40,194***	**40,651**	**2,6%**

adjusted figures are in italics

Note:
- Subscription to telephone on IP service on xDSL lines without PSTN subscription: a subscription to telephone service on lines where low frequencies are not used to support voice service (by the incumbent or by an alternative operator). This is the case of offers to broadband voice services resulting from full unbundling and "naked ADSL" offers.
- Subscription to telephone on IP service on xDSL lines with PSTN subscription: a subscription to telephone service on lines where low frequencies are also used to support voice service, on the PSTN. This is the case of telephone offers resulting from partial unbundling and "bitstream" outside "naked ADSL".

Part—still the majority but shrinking—of telephone lines supports only a subscription to "traditional" telephony on the PSTN (59% of telephone lines at the end of the fourth quarter 2008 compared with 68% a year earlier). This is because an increasing number of lines now support telephone service on IP. These voice-on-IP offers can be created by operators through:
- fully unbundled lines or "naked ADSL". The customer has only a subscription to a voice-on-IP service and no longer has a "traditional" telephone subscription on the PSTN. The proportion of these lines has been growing constantly, and represented 25% of all fixed lines at the end of the fourth quarter 2008, compared with 17% a year earlier.
- partially unbundled lines or based on wholesale "bitstream" offers (excluding "naked ADSL"). Here, the subscription to a voice-on-IP service is in addition to a PSTN telephone subscription, which the user keeps. The proportion of lines supporting two subscriptions to telephone service was 16% at the end of the fourth quarter 2008, and this proportion has not changed since the beginning of 2008.



Further information concerning the IP telephony service indicators

The terminology used:

The IP telephony service indicators referred to in this issue cover broadband voice services, regardless of the type of bearer (primarily DSL IP, but also cable IP) and Internet voice services where the operators are registered with ARCEP.

ARCEP uses the term "broadband voice services" to refer to fixed telephony services which use VoIP technology over an Internet access network with a bandwidth of more than 128 kbit/s and whose quality is controlled by the operator providing the service, and "Internet voice services" to mean voice call services using the public Internet network and whose quality is not controlled by the operator providing the service.

The Observatory records only VoIP service calls which originate in the access layer. The indicators do not cover traffic which uses IP protocol solely in the core network.

Furthermore, the Observatory does not take into account unregistered operators which offer PC-to-PC Internet voice services. These operators are not covered by the scope of the survey.

Revenues taken into account:

The Observatory distinguishes between calls originating from IP telephony services and other voice calls. However, while the volume of VoIP calls relates to all such traffic on the retail market, recorded revenues cover only billed VoIP traffic (e.g. calls made on top of those included in a multiplay package).

There were 674 000 numbers kept through "porting" between fixed telephony operators during the fourth quarter 2008.

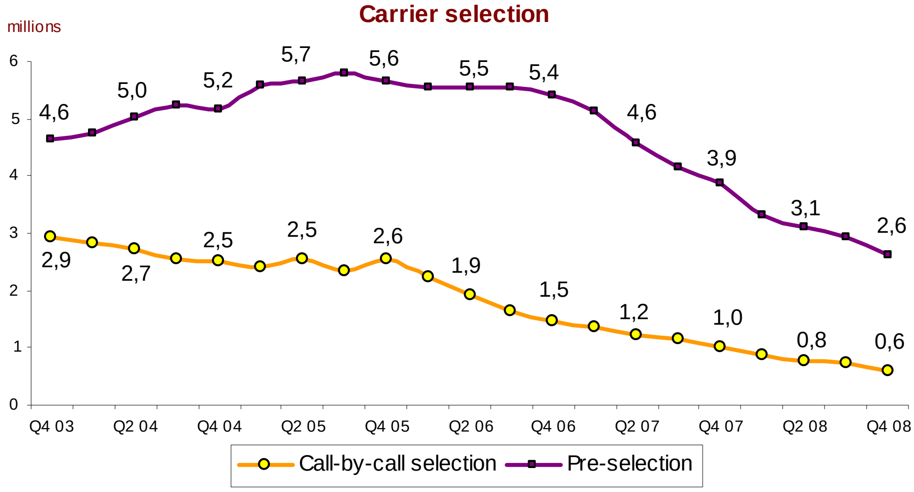
Portability *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of fixed numbers ported during the quarter	0,665	*0,673*	*0,446*	*0,545*	0,674	1,3%

adjusted figures are in italics

Competition from telephony-on-IP offers and offers including a telephone subscription has caused the number of subscriptions to these offers to shrink continuously since the beginning of the year 2006 As a result, these offers concerned only 3.2 million customers at the end of the fourth quarter 208, 1.7 million fewer than a year earlier.
There were 585 000 subscriptions to call-by-call selection offers at the end of the fourth quarter 2008. It has been declining at a rapidly for two years (-43.1% in the fourth quarter 2008). The number of subscriptions to pre-selection (2.6 million at the end of the fourth quarter 2008) declined by 1.2 million over one year (-32.0%).

Carrier selection *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Call by call selection	1,028	0,887	0,751	0,749	0,585	-43,1%
Pre-selection	3,856	*3,320*	*3,101*	*2,944*	2,621	-32,0%
Number of indirect connections	**4,884**	***4,207***	***3,852***	***3,692***	**3,206**	**-34,4%**

adjusted figures are in italics



Note: The number of call-by-call selection customers takes into account only active subscriptions, while carrier pre-selection figures take into account only current subscriptions, net of cancellations.

Access and subscription revenues reached €1.5 billion in the fourth quarter 2008, representing 57% of all revenue from fixed telephony services. This revenue has been declining (-2.8% over one year in the fourth quarter 2008) due primarily to the decline in the number of "traditional" telephone subscriptions on the PSTN.

Access revenue *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Access fees, subscriptions and additional services	1 547	1 520	1 499	1 505	1 504	-2,8%
of which from IP subscriptions	152	139	153	163	173	13,8%

adjusted figures are in italics

Note: In addition to revenues relating to access to the telephone service, access revenues also include subscriptions to IP telephony and revenues generated by additional services (such as calling line identification presentation, etc.).

2.2.2 Calls from fixed lines (excluding public payphones and cards)

Revenue directly attributable to telephone calls from fixed lines was €1.1 billion in the fourth quarter 2008. This revenue declined 5.7% over one year due to the drop in income from calls made on the PSTN (down 9.6% over the same period). On the other hand, revenues from calls originating on IP access (€166 million in the fourth quarter 2008) were up 24.2% over one year. Since most IP calls are included in high-speed Internet packages, they are not included in this revenue. Despite this, revenue from billed IP calls represented 15% of all revenues from calls from fixed lines in the fourth quarter 2008.

Revenue *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
National calls	558	532	535	520	536	-4,0%
International calls	146	135	*147*	*142*	140	-3,9%
Calls to mobiles	442	414	421	402	405	-8,4%
All calls from fixed lines	**1 146**	**1 081**	***1 103***	***1 064***	**1 081**	**-5,7%**
Of which calls originating on PSTN/ISDN	1 013	943	*958*	*914*	915	-9,6%
Of which calls originating on VoIP services	133	138	145	150	166	24,2%

adjusted figures are in italics

Note: Revenues from VoIP calls only include the charges billed by operators for such calls made in addition to those included in a multiplay package. Therefore, this amount does not include the cost of the multiplay subscription, nor the charge for connection to a broadband telephone service.

Traffic originating on fixed phones (PSTN and IP traffic) reached 27.5 billion minutes in the fourth quarter 2008, holding steady with respect to the fourth quarter 2007 (-0.2%). The strong growth in the volume of long-distance calls made on IP (+24.3% over one year in the fourth quarter 2008) offset the decline in long-distance calls made on the PSTN (-15.2% or 2.6 billion fewer minutes over the same period).
Fixed long-distance calls, which represented 82% of total call volumes originating on fixed lines, stabilised (-0.3% over one year) in the fourth quarter 2008. The volume of these calls has been rising since the fourth quarter 2007 at an annual rate of 3% to 6%. International traffic continued to grow (up 10.4% over one year in the fourth quarter 2008) thanks to the strong growth in the volume of international calls made on IP (+28.2% over one year in the fourth quarter 2008). Traffic to mobiles, which sees fewer IP telephony minutes than fixed long-distance and international calls, has been slowing since late 2006 (-5.2% over one year in the fourth quarter 2008).

Volumes *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
National calls	22 625	23 427	*22 017*	*19 549*	22 549	-0,3%
International calls	1 858	1 946	*1 998*	*1 856*	2 051	10,4%
Calls to mobiles	3 063	3 008	*2 935*	2 837	2 902	-5,2%
All calls from fixed lines	**27 546**	**28 381**	***26 949***	***24 243***	**27 501**	**-0,2%**
Of which calls originating on PSTN/ISDN	17 056	16 753	*15 293*	*13 524*	14 458	-15,2%
Of which calls originating on VoIP services	10 490	11 628	11 657	10 718	13 044	24,3%

adjusted figures are in italics

Note:
- While the volume of VoIP calls covers all of this traffic observed on the end market, revenue covers only invoiced VoIP traffic (for example in addition to a multiplay package).

a) Calls on the PSTN

Revenue of calls originating on PSTN/ISDN *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
National calls	553	525	527	511	525	-5,2%
International calls	103	94	104	98	92	-10,7%
Calls to mobiles	356	324	326	304	299	-16,2%
All calls originating on PSTN/ISDN	**1 013**	**943**	**958**	**914**	**915**	**-9,6%**

Volumes of calls originating on PSTN/ISDN *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
National calls	13 682	13 523	12 196	*10 554*	11 467	-16,2%
International calls	785	771	*714*	*679*	675	-14,0%
Calls to mobiles	2 589	2 459	2 383	*2 292*	2 315	-10,6%
All calls originating on PSTN/ISDN	**17 056**	**16 753**	***15 293***	***13 524***	**14 458**	**-15,2%**

adjusted figures are in italics

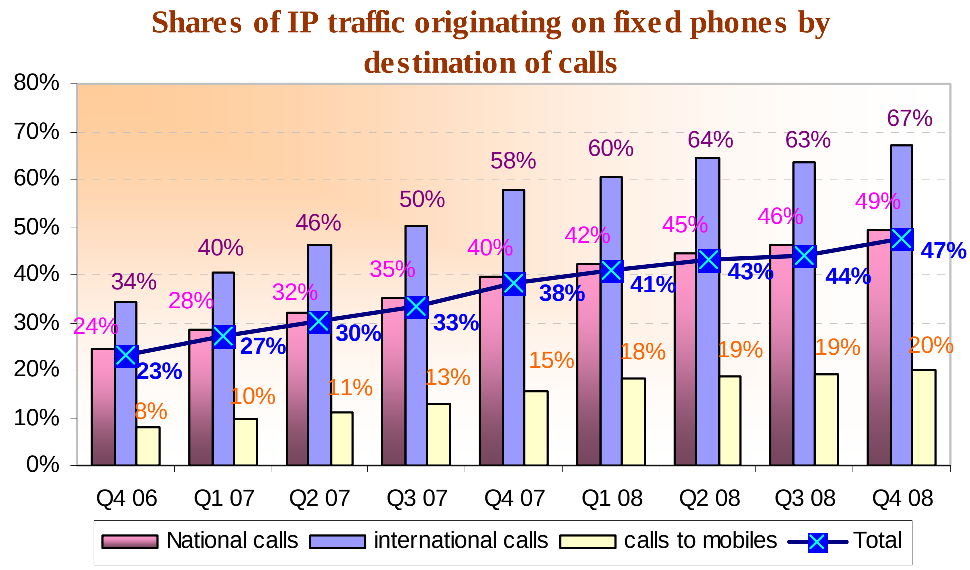
Just 14.5 billion minutes of calls were made from the public switched telephone network (PSTN) in the fourth quarter 2008, dropping 15.2% over one year. Revenues generated by these communications also declined (-9.6% over one year). This downward trend in calls on the PSTN has been continuous for a number of years, and affects all types of calls (long distance, international or to a mobile).

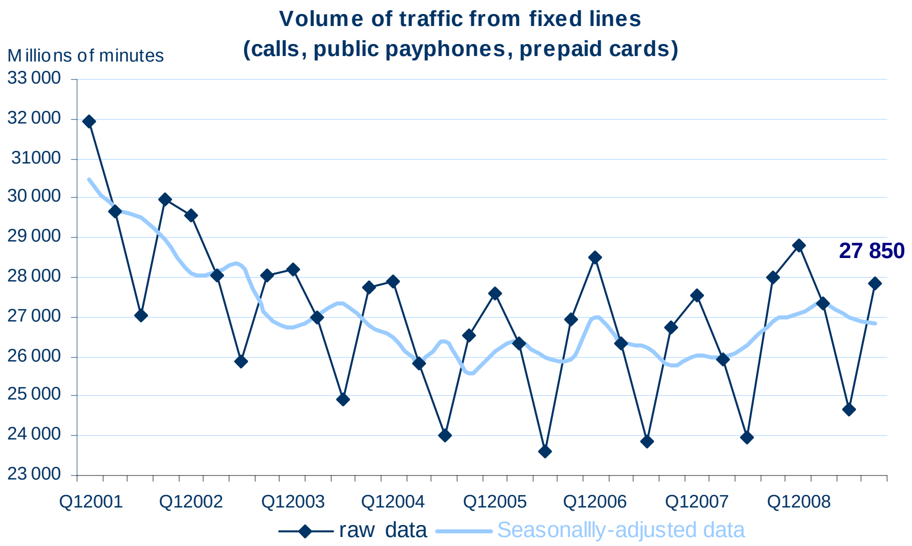
b) Calls on IP originating on fixed networks

Volumes (IP trafic) *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
National calls	8 944	9 904	9 821	8 995	11 082	23,9%
International calls	1 073	1 175	1 284	1 177	1 375	28,2%
Calls to mobiles	473	549	551	546	587	24,0%
All IP calls	**10 490**	**11 628**	**11 657**	**10 718**	**13 044**	**24,3%**

The volume of calls made originating on IP access represented 13.0 billion minutes in the fourth quarter 2008. Over one year, traffic on IP rose 24.3% and now represents 47.4% of the total volume of minutes originating on fixed phones.

The growth in IP traffic is particularly noticeable for calls to fixed long-distance and international phones, which benefit from “multiplay” packages. So, while just 20% of fixed-mobile calls are made on IP, half of all long-distance to fixed phones traffic (49%) and over two-thirds (67%) of international traffic is now made on IP.





Notes:

- *The volume of traffic originating on a fixed line includes calls from fixed telephones, public payphones and prepaid phone cards.*
- *The seasonally adjusted values for this data can be found in the "Séries chronologiques" spreadsheets available on the ARCEP website*

Since the fourth quarter 2007, the quarterly volume of traffic originating on fixed phones has held firm at around 27 billion minutes: in seasonally adjusted data, it was one billion minutes higher than the previous three years.

2.2.3 Fixed telephony cards and public payphones

Charge and prepaid cards	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Revenue *(millions of euros)*	31	33	32	*31*	33	7,1%
Volume *(millions of minutes)*	337	334	288	*318*	286	-15,2%

adjusted figures are in italics

Public telephony	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of public payphones at end of quarter *(units)*	159 799	157 656	155 114	153 744	152 075	-4,8%
Revenue *(millions of euros)*	31	26	28	30	24	-22,9%
Volumes *(millions of minutes)*	125	87	89	91	62	-50,0%

The number of public payphones in service has been falling at an annual rate of 5 to 6% for several years (4.8% decline over one year in the fourth quarter 2008). The decrease in the number of phones in service is mirrored by a drop in revenue (-22.9%) and a particularly strong decline in the volume of calls this quarter (-50.0%).

2.3 Internet on fixed networks

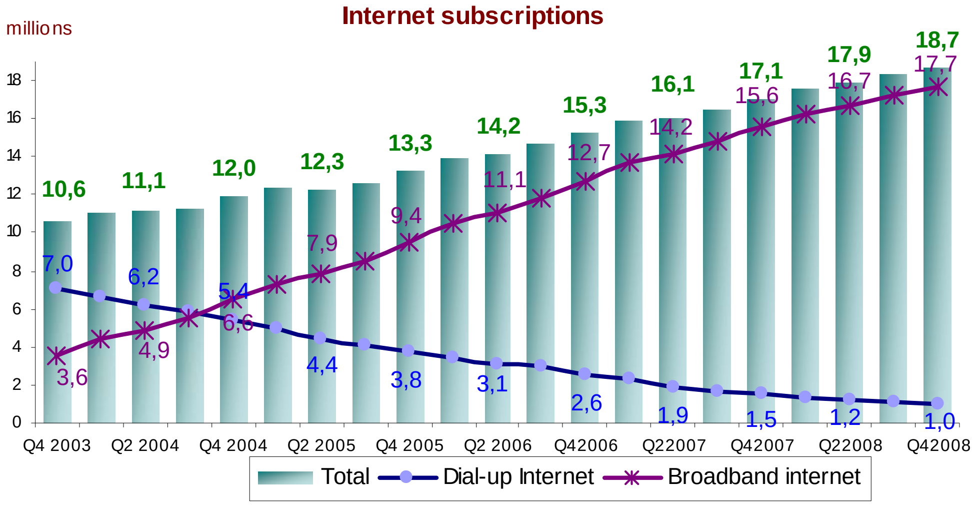
There were 18.7 million subscriptions to Internet access at the end of the fourth quarter 2008, of which 17.7 million accesses were for high speed. The growth in the number of high-speed accesses remained strong at 13.8% over one year in the fourth quarter 2008. However, 2007 saw growth of 3 million new subscriptions annually, while 2008 saw annual growth of around 2.5 million in the first three quarters, and 2.1 million in the fourth quarter.

Revenue from all Internet accesses was up 16.1% over one year in the fourth quarter 2008, reaching €1.4 billion. High-speed accesses represented practically all of this revenue (€1.3 billion). Like the number of high-speed accesses, high speed revenue has been growing more slowly in 2008 than in 2007. ISPs' related revenue grew €139 million in the fourth quarter 2008.
The average monthly invoice for a high-speed Internet subscription was €24.00 excluding VAT in the fourth quarter 2008.
The number of dial-up Internet accesses was less than 1.1 million at the end of 2008 and the volume of traffic generated by these accesses was marginal. The average monthly invoice for a dial-up Internet subscription was €7.80 excluding VAT.

Internet subscriptions *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Dial-up	1,508	1,337	1,204	1,105	0,983	-34,8%
Broadband	15,551	*16,256*	*16,689*	*17,187*	17,691	13,8%
Internet subscriptions	**17,059**	***17,593***	***17,893***	***18,292***	**18,674**	**9,5%**

adjusted figures are in italics

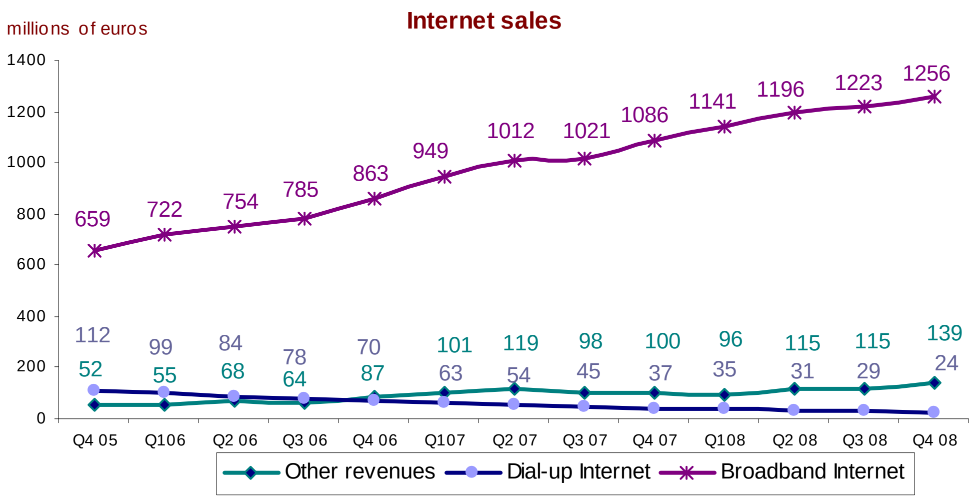
Note: There may be a time lag between the delivery of a service on the wholesale market (LLU or bitstream) and its actual availability on the retail market. A comparison between the data relating to these different markets might reflect this.



Total Internet revenue *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Dial-up	37	35	31	29	24	-34,5%
Broadband	1 086	*1 141*	*1 196*	*1 223*	1 256	15,6%
Other revenue	*100*	*96*	*115*	*115*	139	39,7%
Total Internet revenue	***1 223***	***1 272***	***1 341***	***1 366***	**1 420**	**16,1%**

adjusted figures are in italics

Note: The "Other Internet services" item corresponds to related ISP revenues such as web hosting or revenues from online advertising. Income from the sale and rental of telephones and terminal equipment is included in the item "Sale and rental of telephones and terminal equipment by fixed operators and Internet service providers".



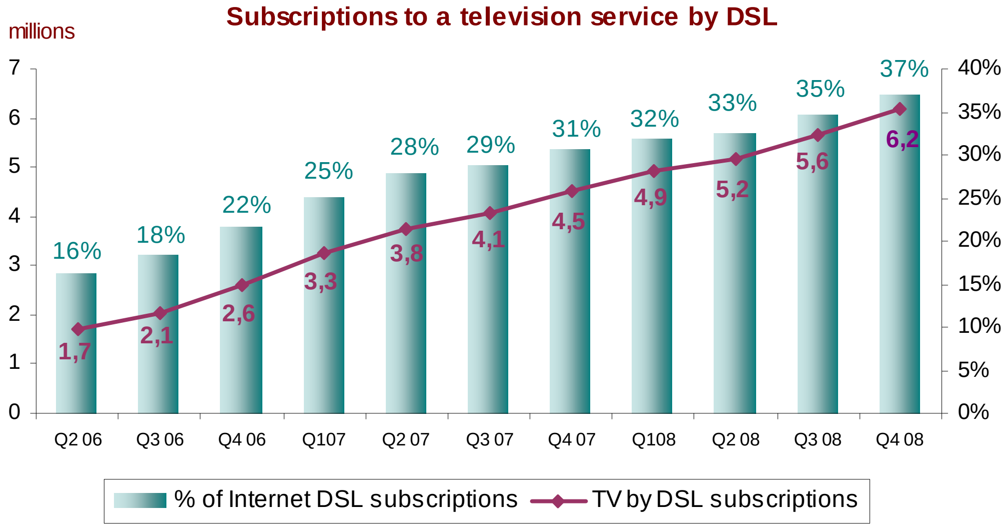
Volumes of dial-up Internet *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Volumes of dial-up Internet	3 037	2 798	2 584	2 259	2 165	-28,7%

2.4 Internet and television on ADSL

There were 16.8 million Internet-on-ADSL subscriptions at the end of the fourth quarter 2008, or 2 million more than a year earlier. A growing number of these subscribers (close to 37% at end 2008, or 6.2 million) also use this technology to watch television on ADSL.

Subscriptions *(millions)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Subscriptions to Internet on DSL	14,805	*15,484*	*15,872*	*16,323*	16,804	13,5%
Subscriptions to television services on DSL	4,534	4,920	5,167	5,643	6,200	36,8%
% of subscriptions to television services	30,6%	31,8%	32,6%	34,6%	36,9%	-

adjusted figures are in italics



Note: This indicator covers subscriptions which are "eligible" for television services, i.e. those where subscribers are able to activate this type of service, regardless of the number of channels available or the pricing plan involved. It takes into account both standalone subscriptions and those which are part of a "multiplay" service package that includes access to one or more other services besides television (Internet, telephone service).

2.5 Mobile telephony

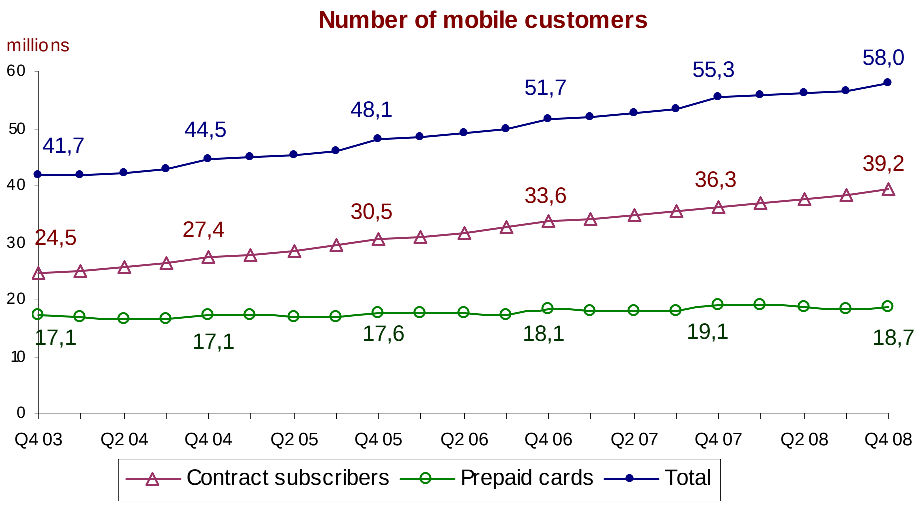
2.5.1 Subscriptions

Number of mobile customers *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Contract subscribers	36,298	36,843	37,478	38,249	39,237	8,1%
Prepaid cards	19,051	18,901	18,567	18,143	18,734	-1,7%
*of which active prepaid cards **	17,776	17,556	17,070	16,797	17,002	-4,4%
Mobile Telephonie	**55,349**	**55,743**	**56,045**	**56,392**	**57,972**	**4,7%**

*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.

ARCEP also publishes a geographic segmentation of these subscriptions and a breakdown by type of customer in its advanced mobile market observatory (Mobile Indicator Monitor [http://www.arcep.fr/index.php?id=9728&L=1tx_gspublication_pi1%5Btypo]

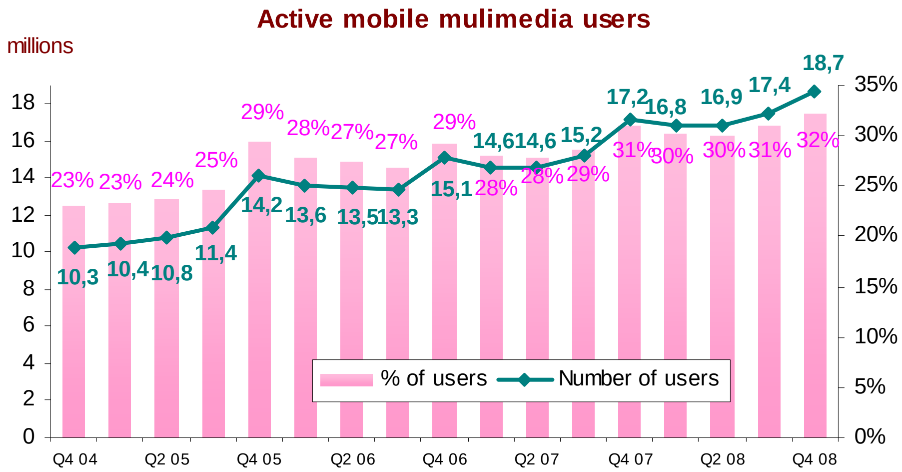
There were 58.0 million users of mobile telephony services (number of SIM cards in service) at the end of the third fourth 2008, up 2.6 million in one year. However, this growth rate, which was 7% at the beginning of the year, slowed and was just 4.7% in the fourth quarter.
The number of "post-paid" package subscriptions represents two-thirds of all subscriptions (67.7%), and this proportion continues to grow with respect to "pre-paid card" formulas. While the number of "pre-paid" subscriptions fell 1.7% over one year in the fourth quarter 2008, the annual growth rate for "post-paid" subscriptions has held firm at over 8% since third quarter 2007.

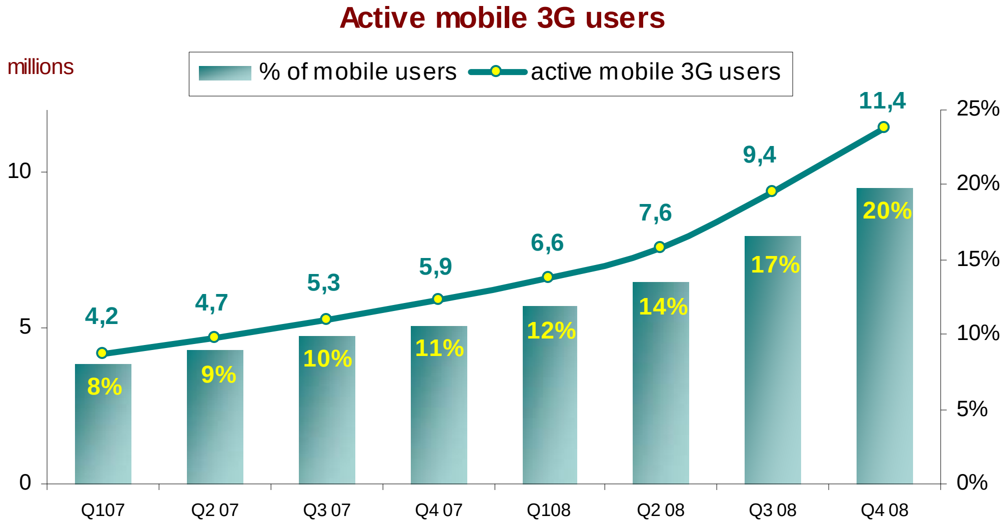


Multimedia users, 3G users and Internet SIM cards *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Active mobile multimedia users	17,190	16,804	16,881	17,449	18,712	8,9%
Active mobile 3G users	5,879	6,611	7,583	9,356	11,439	94,6%
Number of Internet data SIM cards	0,491	0,589	0,700	0,821	0,997	102,9%

Notes:
- The number of active multimedia users is defined as the number of customers (contract or prepaid subscribers) who have used a multimedia service such as WAP, i-Mode, MMS or e-mail (text messages are not covered by this definition) at least once in the past month, regardless of the type of carrier technology used (CSD, GPRS, UMTS, etc.). Scope: Mainland France and overseas dependencies.
- The number of active 3G users is defined as the number of customers having used (sent or received) a high-speed mobile service (voice, videophone, mobile TV, data transfer, etc.) using 3G wireless technology during the past three months.

There were 18.7 million users of mobile multimedia services (“mobile Internet” services, MMS, etc.) at the end of the fourth quarter 2008.
Since the third quarter 2007, the number of uses of these services has doubled, reaching 11.4 million in the third quarter 2008. The number of active 3G users grew strongly in 2008, probably due to the development of data access offers and suitable terminals beginning in the second half of 2008. The number of users rose by 3.9 million between June and December 2008, compared with 1.7 million during the first six months of the year. These users now represent close to 20% of all mobile operators’ customers.
There were 997 000 Internet-only SIM cards at the end of the fourth quarter 2008. This number doubled in one year. These SIM cards are used only for mobile Internet connections (using a PCMCIA card, a 3G or 3G+ Internet key, etc.) and cannot be used to make voice calls.



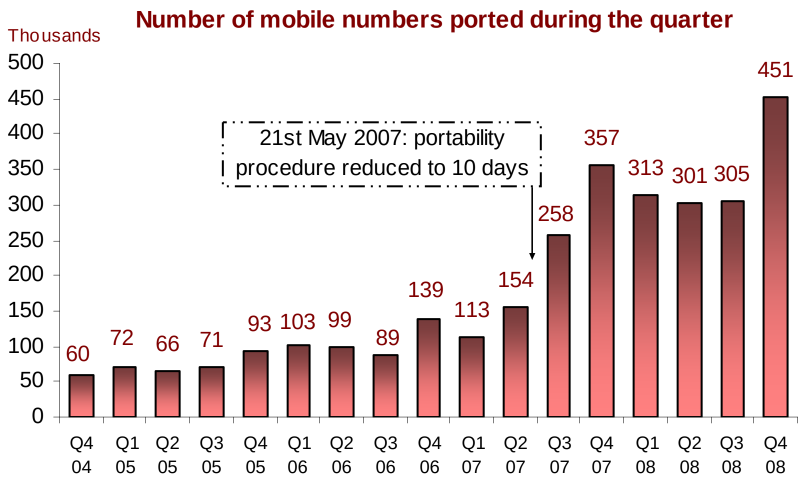


Portability *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of mobile numbers ported during the quarter	0,357	0,313	0,301	0,305	0,451	26,4%

adjusted figures are in italics

Note: The number of ported numbers is defined as the number of telephone numbers effectively ported to another operator (numbers activated by the receiving operator) during the course of the quarter in question. Scope: Mainland France and overseas dependencies.

In the fourth quarter 2008, 451 000 mobile numbers were ported from one operator to another, close to 100 000 more than a year earlier.



2.5.2 Income and volumes indicators

Revenue from mobile services (telephony and data transport) was €4.7 billion in the fourth quarter 2008, growing 3.2% over one year, following 4.5% growth the previous quarter. For the second quarter in a row, growth in mobile services revenue was slower than that recorded during the first two quarters of 2008 (at close to 6%).
This slowdown is caused by sluggish growth in telephony revenue. After growth of over 3% in the first half of 2008, and 1.2% in the third quarter, telephony revenue slowed slightly in the fourth quarter (0.4%).
Revenue from mobile data transport services (interpersonal messaging, mobile Internet access and multimedia services) was €840 million in the fourth quarter 2008. Annual growth in data transport revenue was over 20% in 2008 (+23.6% at the fourth quarter 2008) The share of data transport in revenue from mobile operators represented 18% at the end of the fourth quarter 2008, compared with 15% a year earlier.

Revenue *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Mobile telephony	3 863	3 792	3 903	3 930	3 848	-0,4%
of which outgoing internationals calls	173	172	173	194	191	10,5%
Data transport on mobile networks	679	718	728	798	840	23,6%
of which interpersonal messaging (SMS, MMS)	435	459	451	472	507	16,5%
of access to mobile Internet & to multimedia services	244	259	276	326	333	36,5%
Total mobile telephony and data transport	**4 542**	**4 510**	**4 630**	**4 728**	**4 688**	**3,2%**

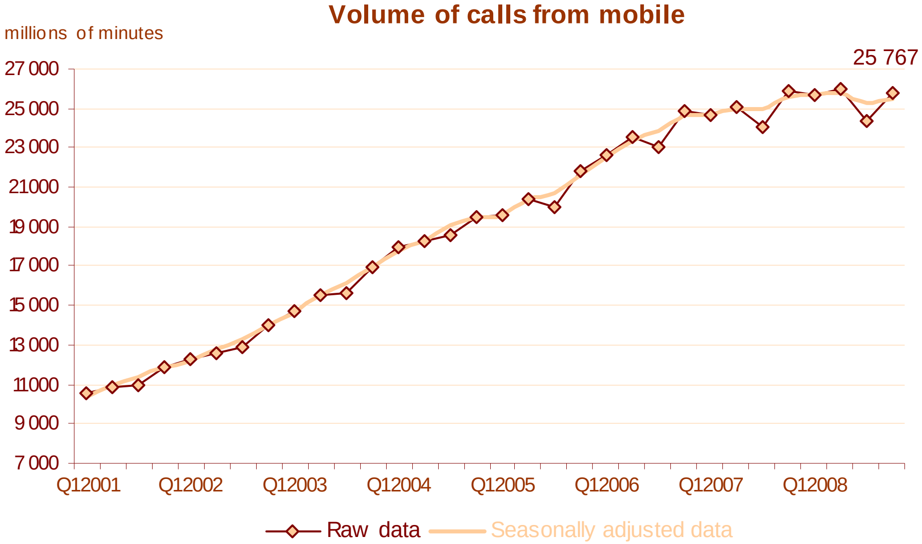
Notes:
- These are revenues on the retail market. Revenues from the market between operators (interconnection, wholesale) are not included. Also excluded are retail revenues from value-added services.
- Following changes in accounting methods, certain revenues which were previously included with data transfer revenues are now included with mobile operators' "data" added-value service revenues, in accordance with the Observatory definition. The data in the table below take these corrections into account.

Volumes *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Calls to national fixed lines	4 803	4 708	4 719	4 402	4 730	-1,5%
Calls to mobiles on the same network (1)	13 812	13 823	13 695	12 473	13 223	-4,3%
Calls to other networks	6 578	6 488	6 822	6 678	7 145	8,6%
Outgoing internationals calls	369	363	382	397	395	7,0%
Roaming out (2)	303	298	350	455	274	-9,7%
Total mobile telephony	**25 866**	**25 679**	**25 967**	**24 406**	**25 767**	**-0,4%**

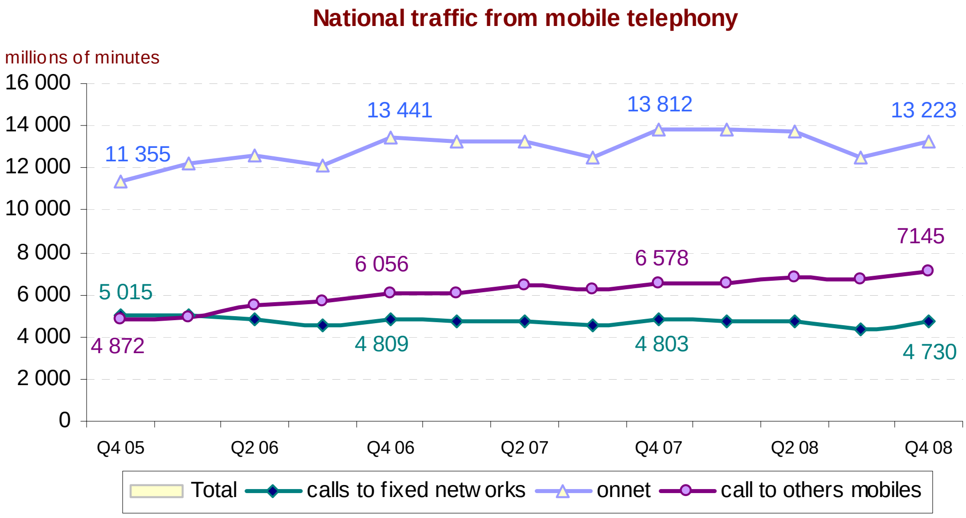
(1) onnet calls on the same network (MNO or MVNO)
(2) Roaming out corresponds to calls made in other countries by customers of French mobile operators

The volume of traffic originating on mobiles was 25.8 billion minutes in the fourth quarter 2008. In seasonally adjusted data, this traffic, which had been growing at the end of 2007, has held steady overall for the past year at a level of about 25.6 billion.
This slowdown in mobile traffic is caused in part by a drop in traffic to the national fixed network (down for several years, and -1.5% over one year in the third quarter 2008). However, the main cause is related to the slowdown in the growth in the volume of calls exchanged between mobiles on the same network representing over half of total traffic volume from mobile phones) which has progressively slowed over these past two years. After stagnating (-0.2%) in the third quarter 2008, this volume shrank 4.3% in the fourth quarter 2008.

The volume of mobile calls to third-party mobile networks has grown at an annual rate of 7% over one year since the beginning of 2008. It grew slightly more strongly in the fourth quarter, reaching 8.6%.



(The seasonally adjusted values for this data can be found in the "Séries chronologiques" spreadsheets available on the ARCEP website)

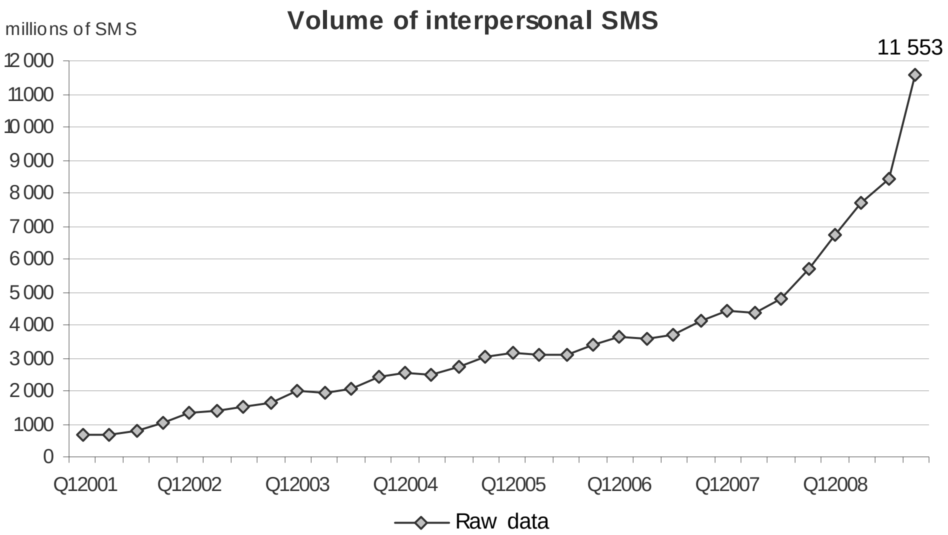


Mobile operators' customers sent 11.7 billion interpersonal messages (SMS and MMS) during the fourth quarter 2008.

Close to 99% interpersonal messages are text messages (SMS) which have multiplied thanks to mobile operators' "unlimited texting" offers. These have been growing very strongly since the fourth quarter 2007. The number of SMS sent during the fourth quarter 2008 doubled in one year and topped the number of SMS sent in the previous quarter by 3 billion.

On average, each customer sent 67 SMS per month in the fourth quarter 2008, or almost twice as many as a year earlier (35 SMS). Subscribers having a flat-rate package send many more SMS than customers using a pre-paid formula (78 and 45 SMS per month, respectively).

Volumes of interpersonnal messages *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of interpersonnal SMS	5 712	6 732	7 680	8 432	11 553	102,3%
of witch from contract subscribers	4 586	5 419	6 046	6 635	9 083	98,1%
of witch from prepaid cards	1 125	1 313	1 633	1 797	2 470	119,6%
Number of interpersonnal MMS	76	86	87	95	100	31,6%
Number of messages sent	**5 790**	**6 817**	**7 767**	**8 527**	**11 653**	**101,3%**



2.6 Revenue and voice traffic of metropolitan mobile operators

Until now, total recurring revenue and total recurring voice traffic indicators were published in the Mobile Indicator Monitor (MIM) one quarter after other indicators in this publication. In order to protect the coherence of the indicator publications for the same quarter, revenue and recurring traffic now appear in this Observatory with the current quarter.
Furthermore, total revenue and total traffic indicators for the residential retail market are now published on geographic and service perimeters, equivalent to recurring revenue and traffic indicators (indicators for Metropolitan France and including VAS).

2.6.1 *Residential retail market (mobile services and value-added services of Metropolitan mobile operators)*

Total revenue of the residential retail market in millions of euros / as a %	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Voice and data revenue (including value added services)	**-**	**-**	**-**	**4 052**	**3 985**
- *Year-on-year growth*					
o/w revenue from post-paid customers - *Year-on-year growth*	-	-	-	*3428*	*3401*

Notes: for the residential market only, this indicator includes:
- Revenue from mobile services (telephony and data). This is the "residential" part of the retail market revenue appearing in item 2.5.2.
- Revenue from value-added services (including directory services). This is the "residential" part of the retail market revenue appearing in items 2.7.1 and 2.7.2.

Total traffic of the residential retail market in millions of minutes / as a %	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Voice traffic including value added services	**-**	**-**	**-**	**20 135**	**20 879**
- *Year-on-year growth*					

Notes: for the residential market only, this indicator includes:
- Mobile telephony services traffic. This is the "residential" part of the retail market revenue appearing in item 2.5.2.
- Value-added services traffic (including directory services). This is the "residential" part of the retail market revenue appearing in items 2.7.1 and 2.7.2.

2.6.2 *Total recurring sales and recurring voice traffic of mobiles networks operators (Metropolitan)*

Total recurring sales of mobile networks operators en millions of euros / as a %	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Recurring sales	**5 457**	**5 318**	**5 556**	**5 649**	**5 632**
- *Year-on-year growth*	*3,2%*	*4,1%*	*5,6%*	*4,9%*	*3,2%*
- o/w per post-paid customer	4 738	4 648	4 799	4 827	4 921
- *Year-on-year growth*	*4,2%*	*5,7%*	*5,6%*	*5,5%*	*3,9%*
- o/w per active pre-paid customer	720	670	756	823	711
- *Year-on-year growth*	*-2,8%*	*-6,2%*	*5,5%*	*1,8%*	*-1,1%*

Note: Mobile network operators' recurring revenue covers all revenues generated by the operator's customers on the retail and wholesale markets, which will not be repaid to third parties. It includes *revenues:*

- *for customer access to mobile services on the retail or wholesale market*
- *outgoing traffic on the retail market (including roaming out) and on the access and mobile call origination wholesale market by hosted MVNOs*
- *incoming traffic for call termination (including for calls to the MVNO hosted by the network operator)*

Any promotions and discounts granted to customers are deducted from recurring revenue. On the other hand, unpaid invoices are not deducted (in accordance with the IFRS standard).
Connection fees, terminal sales and roaming-in are not included. Recurring revenue excludes repayments to third parties for the quarter and geographic area in question, linked in particular to value-added services (special numbers, SMS+, etc.) or directory services.
***Total recurring revenue** is the total recurring revenue of the various network operators. It is the total of all revenues received from end customers (residential and business) and the total of intermediate revenues exchanged between operators on the wholesale market for call termination.*
Total recurring revenue of network operators does not include revenues received by MVNOs from their customers.

Total recurring voice traffic in millions of minutes	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Recurring voice traffic	**35 581**	**35 419**	**35 785**	**33 713**	**35 680**
- *Year-on-year growth*	*7,2%*	*5,2%*	*3,3%*	*0,9%*	*0,3%*
- o/w per post-paid customer	31 543	31 363	31 697	30 118	31 760
- *Year-on-year growth*	*5,9%*	*4,6%*	*2,9%*	*2,2%*	*0,7%*
- o/w per active pre-paid customer	4 038	4 056	4 089	3 596	3 920
- *Year-on-year growth*	*18,0%*	*9,9%*	*6,3%*	*-8,8%*	*-2,9%*

Note: Mobile network operators' recurring traffic (in circuit mode) covers all voice traffic, both incoming and outgoing, generated by, or to, the operator's customers and MVNOs. Recurring traffic does not include roaming in. It includes:

- *outgoing calls to fixed telephones*
- *calls to third-party mobiles*
- *calls to mobiles on the same network, in particular calls to check voice messages, including to virtual mobile operators*
- *incoming calls from telephony and mobile telephony networks, including traffic to hosted MVNOs*
- *roaming out*

***Total recurring revenue** is the total recurring revenue of the various network operators. Total recurring voice traffic includes double accounting; outgoing minutes to an operator's third-party mobiles are also counted by other operators as incoming minutes. On the other hand, outgoing minutes to mobiles on the same network, or to fixed telephones, are counted just once.*

2.7 Other market components

2.7.1 Value added services (excluding directory services)

Note: Following changes in accounting methods, certain revenues which were previously included with data transfer revenues, are now included with mobile operators' "data" added-value services revenues, in accordance with the Observatory definition. The data in the table below take these corrections into account.

Revenue from value-added services reached €593 million in the fourth quarter of 2008, down

10.0% over one year. Revenue from “voice and telematic” services was down (-14.0% in the fourth quarter 2008) while income from data services grew (+4.9% in the fourth quarter) and represents one-quarter of all value-added services.

During the quarter, 1.2 billion calls were sent to “voice and telematic” services, generating traffic volume of 3.0 billion minutes. The vast majority of these calls (86.4%) and of the volume of minutes they represent (85.5%) are made on fixed phones.

Value-added services revenue* *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Value-added "voice" services	519	518	461	450	446	-14,0%
From fixed telephony network	317	312	285	262	266	-15,9%
From mobile telephony network	202	207	175	188	180	-11,0%
Value-added "data" services	140	*127*	*155*	*148*	147	4,9%
Value-added services	**659**	***645***	***616***	***599***	**593**	**-10,0%**

adjusted figures are in italics

** This corresponds to all amounts billed to customers by operators, including out payments from operators to service providers. “Data” value-added services include premium-rate services such as those on the Orange “Gallery” portal, push services, chat rooms, weather forecasts, TV game shows, horoscopes, ringtone downloads, etc.*

Value-added "voice" and "télématic" services volumes *(millions of minutes)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
From fixed telephony network	2 945	2 845	2 705	2 613	2 575	-12,6%
From mobile telephony network	453	430	428	452	438	-3,4%
Number of calls	**3 399**	**3 275**	**3 134**	**3 065**	**3 013**	**-11,4%**

Number of calls to value-added "voice" and "télématic" services *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
From fixed telephony network	1 084	1 048	1 055	1 050	1 044	-3,7%
From mobile telephony network	177	168	163	167	165	-6,8%
Volumes	**1 260**	**1 216**	**1 218**	**1 217**	**1 208**	**-4,1%**

Value-added "data" service volumes *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of messages (SMS+, MMS+)	198	*166*	*173*	*180*	181	-8,6%

adjusted figures are in italics

2.7.2 Directory services

Revenue from telephone directory services was €40 million in the fourth quarter 2008.

The number of calls to directory services numbers was on the decline. During the fourth quarter 2008, with 29 million calls, the decline was 11.7% over one year, representing 3.8 million fewer calls during the period. Seven-tenths of calls to directory services are made from mobile phones.

Revenue from directory services *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Directory services operators	41	38	39	42	40	-2,6%

Directory services	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of calls *(millions of units)*	33	31	31	30	29	-11,7%
Volume of calls *(millions of minutes)*	72	68	69	69	65	-10,2%

Note: Directory information services include the 118xyz numbers in use since November 2005 and short numbers used to access reverse lookup directory services (3288, 3217, and 3200) or international directory services (3212).

2.7.3 Leased lines and data transport (fixed operators)

Revenue from leased lines on the end market was €388 million in the fourth quarter 2008. More than half of this revenue (€205 million) comes from leased line sales made by operators with other operators.
Data transport revenue was €478 million in the fourth quarter 2008.

Revenue *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Leased lines	369	382	372	*380*	388	5,2%
Data transport	466	462	467	462	478	2,5%

adjusted figures are in italics

Note: Revenues from leased lines may be accounted for twice since the figures include operator-to-operator sales. These sales may represent up to 29% of total leased-line revenues

2.7.4 Hosting and call centre management services

Revenue *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Hosting and call centre management	11	11	7	4	3	-75,3%

2.7.5 Terminals and equipments

Revenue from terminal sales and rentals reached €924 million in the fourth quarter 2008, growing 17.4% over one year. Mobile operators generated over three-quarters of these revenues (€715 million during the quarter) thanks to the success of the launch of new touch-screen terminals in mid 2008.

Revenue from terminals and equipment *(millions of euros)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed & Internet operators	*184*	*177*	*180*	181	209	13,8%
Mobile operators	603	439	458	599	715	18,6%
Terminals and equipment	***787***	***616***	***637***	**781**	**924**	**17,4%**

** adjusted figures*

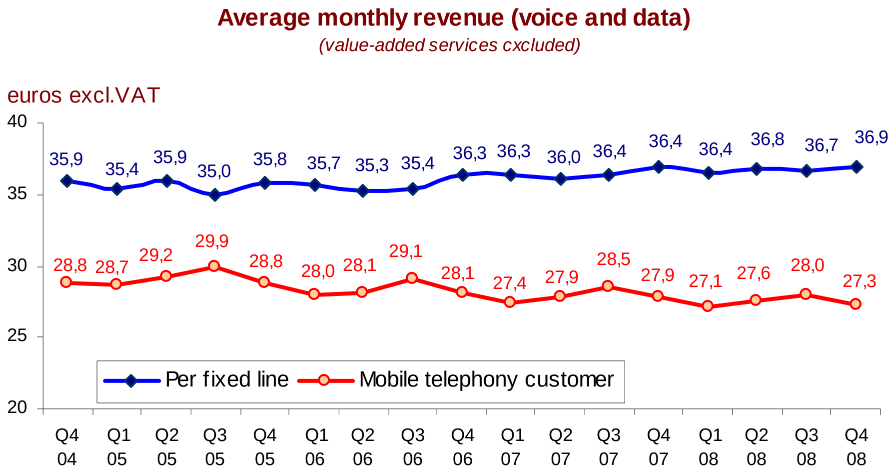
Note: Revenues from terminals and equipment include commissions to distributors.

2.8 Indicators per customer

Average monthly revenue (value added services exclude) *(in euros -VAT excluded)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Per fixed line : access, communications and Internet	36,9	36,4	36,8	36,7	36,9	0,2%
Mobile telephony user	27,9	27,1	27,6	28,0	27,3	-2,1%

*The average monthly invoice per fixed line is calculated by dividing the income from calls originating on fixed lines (line rental, call charges and Internet service charges) for quarter N by the estimated average number of fixed lines in existence for quarter N, and then by the number of months. (**See the box on page 36 for an explanation of the concept of a "line")***

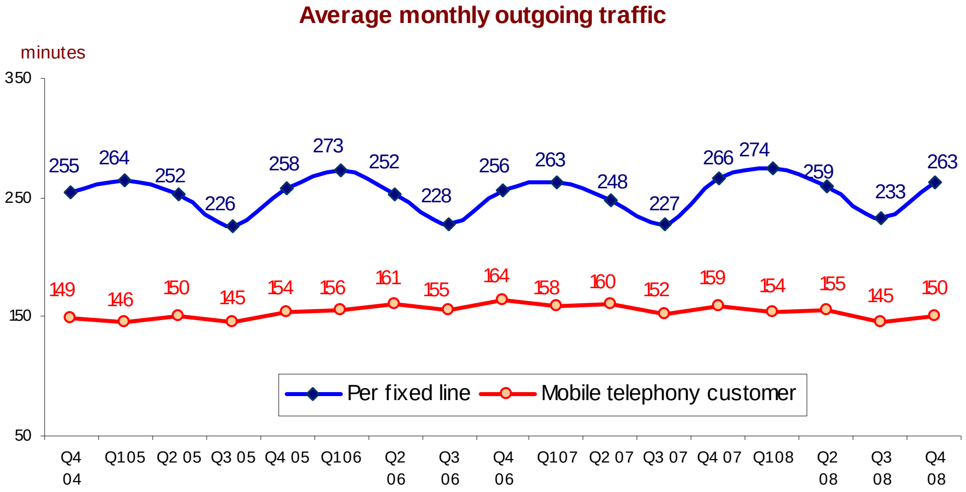
The average monthly invoice per mobile customer is calculated by dividing the income from mobile telephony (voice and data revenues, including roaming-out, excluding revenue from incoming calls) for quarter N by the estimated average number of mobile customers for quarter N, and then by the number of months. This indicator, which does not include interconnection revenues, or those from value-added services, is not the same as the traditional Average Revenue Per User (ARPU) indicator.



Average monthly outgoing traffic *(in hours)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Per fixed lines	4h26	4h34	4h19	3h53	4h23	-1,3%
Mobile telephony user	2h39	2h34	2h35	2h25	2h30	-5,5%

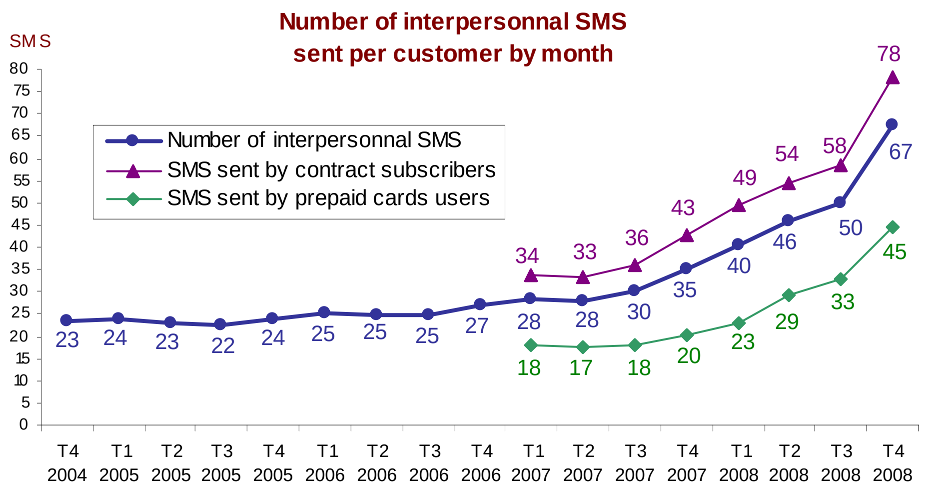
The average monthly volume of traffic per fixed line is calculated by dividing the volume of traffic (PSTN and IP) for quarter N by the estimated average number of fixed lines in existence for quarter N, and then by the number of months.

The average monthly volume of traffic per mobile operator customer is calculated by dividing the volume of mobile telephony traffic (including roaming-out) for quarter N by the estimated average number of mobile customers for quarter N, and then by the number of months.



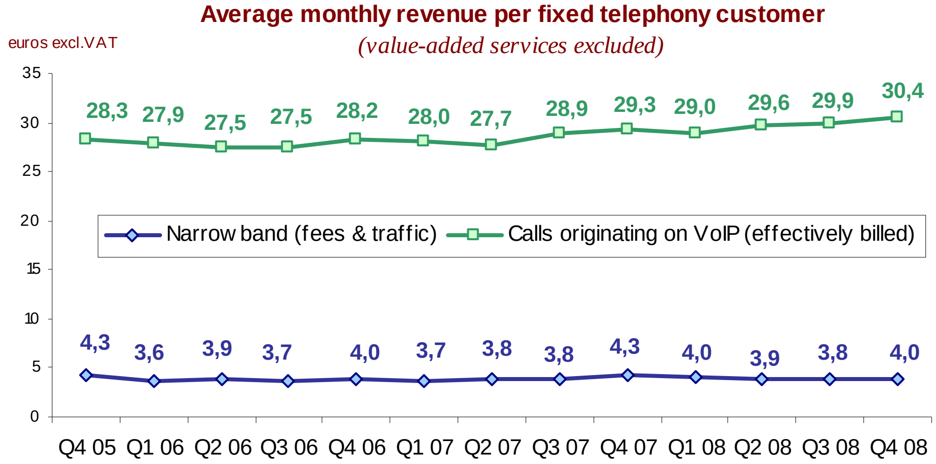
Number of interpersonnal SMS sent per user *(units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of SMS sent per user during the quarter	35,1	40,4	45,8	50,0	67,3	91,9%
of witch for contract subscribers	42,7	49,4	54,2	58,4	78,1	83,0%
of witch for prepaid cards	20,3	23,1	29,1	32,6	44,6	119,4%

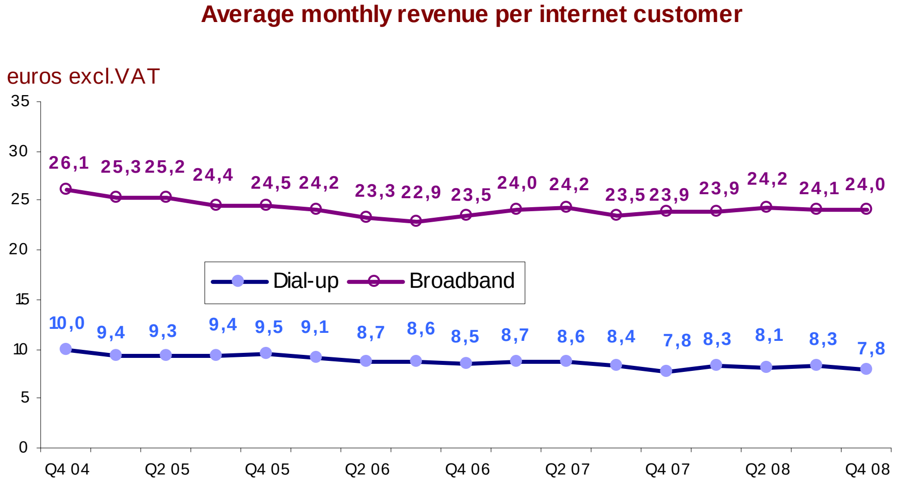
<u>The average number of SMS messages per customer</u> is calculated by dividing the number of SMS messages for quarter N by the estimated average number of customers for quarter N, and then by the number of months.



Average monthly revenue per customer *(in euros -VAT excluded)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed PSTN/ISDN telephony user	29,3	29,0	29,6	29,9	30,4	3,8%
Fixed IP telephony user	4,3	4,0	3,9	3,8	4,0	-7,9%
Dial-up Internet user	7,8	8,3	8,1	8,3	7,8	0,6%
Broadband Internet user	23,9	23,9	24,2	24,1	24,0	0,6%

The average monthly invoice per PSTN subscription is calculated by dividing the income from line rental and calls made from PSTN fixed lines (i.e. excluding VoIP revenues) for quarter N by the estimated average number of subscriptions for quarter N, and then by the number of months.
The average monthly invoice per subscription to an IP telephony service is calculated by dividing the income just from IP calls billed (i.e. those made in addition to those included in a multiplay package) for quarter N by the estimated average number of subscriptions for quarter N, and then by the number of months.
The average monthly invoice per dial-up (or broadband) Internet subscription is calculated by dividing the income from the dial-up (or broadband) Internet connections for quarter N by the estimated average number of customers for quarter N, and then by the number of months.





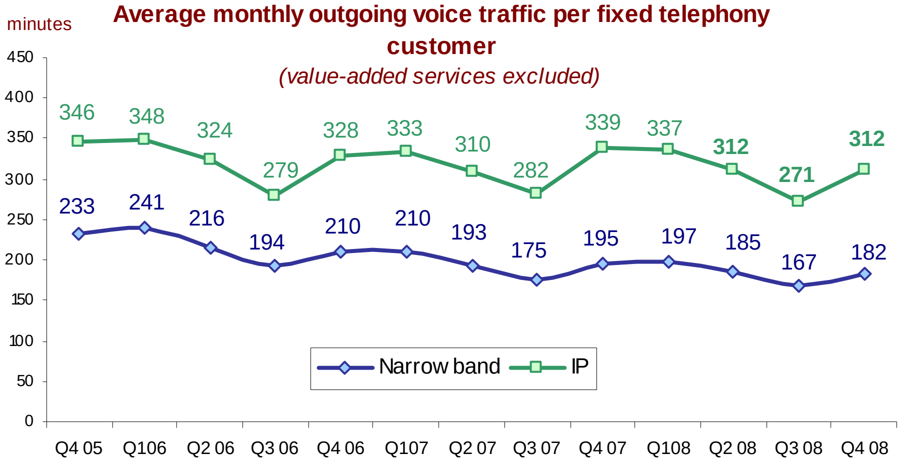
Average monthly traffic per customer *(in hours)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Fixed PSTN/ISDN telephony user	3h15	3h17	*3h05*	2h47	3h02	-6,9%
Fixed IP telephony user	5h39	5h37	5h12	4h31	5h12	-7,8%
From dial-up Internet	10h31	10h56	11h18	10h52	11h31	9,5%

adjusted figures are in italics

The average monthly volume of PSTN (or IP) traffic is calculated by dividing the volume of PSTN (or

IP) traffic for quarter N by the estimated average number of subscriptions to a PSTN (or IP) telephone service for quarter N, and then by the number of months.

<u>The average monthly volume of dial-up Internet traffic</u> is calculated by dividing the volume of dial-up Internet traffic for quarter N by the estimated average number of subscriptions to a dial-up Internet service for quarter N, and then by the number of months.



<u>Average number of customers for quarter N</u>: [(total number of customers at the end of quarter N + total number of customers at the end of quarter N-1) / 2]

Further information about indicators per customer

With the growing use of broadband voice services as a second line, it is no longer very useful to use average revenue per subscription as an indicator. In fact, a large number of households now have a second telephone service subscription, usually a VoIP service, but this doesn't mean that they make twice as many calls. So naturally, the average volume of traffic and average bill per subscription is lower. In order to obtain a clearer picture of the indicators reflecting customers' usage of telephone services and their average expenditure, the concept of what constitutes a "line" has been redefined.

Until 2004, the terms "line" and "subscription" were used interchangeably when referring to the number of subscriptions to telephone services.

In the case of telephony over analogue lines, a subscription corresponded to a fixed line. For digital lines, it was accepted practice to take the number of channels subscribed for as the number of fixed lines, i.e. two for BRI lines and up to 30 for PRI lines. In practice, the business customer pays as many monthly line rental charges as the number of channels subscribed for, i.e. two for BRI lines and up to 30 for PRI lines. This convention has been retained.

With the implementation of broadband voice services, operators can provide an IP telephone service over an analogue line which is already used for a PSTN telephone service. In order to facilitate comparisons over time, the number of "lines" indicator has been defined as:

- for digital lines: the number of channels subscribed for, i.e. two for BRI lines and up to 30 for PRI lines;
- for analogue lines: - the number of PSTN subscriptions
  - the xDSL line subscriptions without a PSTN subscription
- for cable telephone service subscriptions: the subscription

As far as revenues are concerned, the number of multiservice packages is constantly growing. These include the possibility of making unlimited calls to national fixed lines and to certain international destinations at no additional charge. Consequently, the overall bill covers an increasing range of services, regardless of the number of calls made (as also happens with mobile services). Internet access and telephone services are becoming increasingly inseparable.

The average bill per line reflects what the customer pays per month for both telephone service and Internet access. Revenues taken into account are:

- revenues from service subscription charges and supplementary services
- revenues from calls made from fixed-line telephones, including IP calls made in addition to the multiplay inclusive package
- revenues from dial-up Internet access and broadband Internet access

The following are not taken into account:

- revenues from payphones and phone cards
- revenues from other services linked to Internet access, which correspond to the ISP revenues from online advertising and commissions paid to the ISPs in relation to online trading
- revenues from value-added services and information services

Number of fixed lines *(millions of units)*	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Change 4Q08/4Q07
Number of fixed lines	34,517	34,594	34,719	34,746	35,001	1,4%

The market Observatory publishes indicators for the **average monthly invoice per subscription for fixed telephony, mobile telephony and Internet**. These indicators correspond to the average subscription and call charges (voice and data) billed by operators to customers.
Revenues from interconnection (incoming calls) are not taken into account. These indicators are not the same as the **ARPU** (Average Revenue Per User) figures which generally correspond to the operators' revenues from all income related to the use of the network. For instance, in the case of mobile operators, the ARPU includes revenues from outgoing calls, data services and value-added services *as well as* revenues from incoming calls (interconnection). It may or may not include revenue from roaming, depending on the operator.
The Observatory also publishes indicators for the **average monthly outgoing traffic per customer**, representing the use consumers make of their telephones.
As with the ARPU, the indicator of average traffic per customer or **AUPU** (Average Usage Per User) is used by certain financial firms and the operators. It covers some or all of the incoming calls in order to create a figure for volume which is comparable to that used for the ARPU. It does not represent the average usage per customer and is considered, rather, as an indicator of the operator's volume of business per customer.

Average monthly recurring sales per active customer in euros per month / in %	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Average monthly recurring sales per customer	**34,8**	**33,8**	**35,3**	**35,7**	**35,0**
- *Year-on-year growth*	*-4,4%*	*-1,9%*	*0,4%*	*-0,2%*	*0,4%*
- o/w per post-paid customer	44,4	42,9	44,3	43,7	43,6
- *Year-on-year growth*	*-5,8%*	*-3,7%*	*-2,4%*	*-2,7%*	*-2,0%*
- o/w per active pre-paid customer	14,4	13,7	15,4	17,1	14,8
- *Year-on-year growth*	*-5,4%*	*-4,9%*	*6,6%*	*3,5%*	*2,8%*

Note: Average recurring monthly revenue per active customer equals recurring revenue for the quarter divided by 3, divided by the average number of active customers ((Number of active customers at the end of the previous quarter + Number of active customers at the end of the quarter in question)/2).