autorité de régulation des communications électroniques et des postes

RÉPUBLIQUE FRANCAISE

ELECTRONIC COMMUNICATIONS SERVICES IN FRANCE

1ST QUARTER 2017

ELECTRONIC COMMUNICATIONS MARKET OBSERVATORY

06 JULY 2017

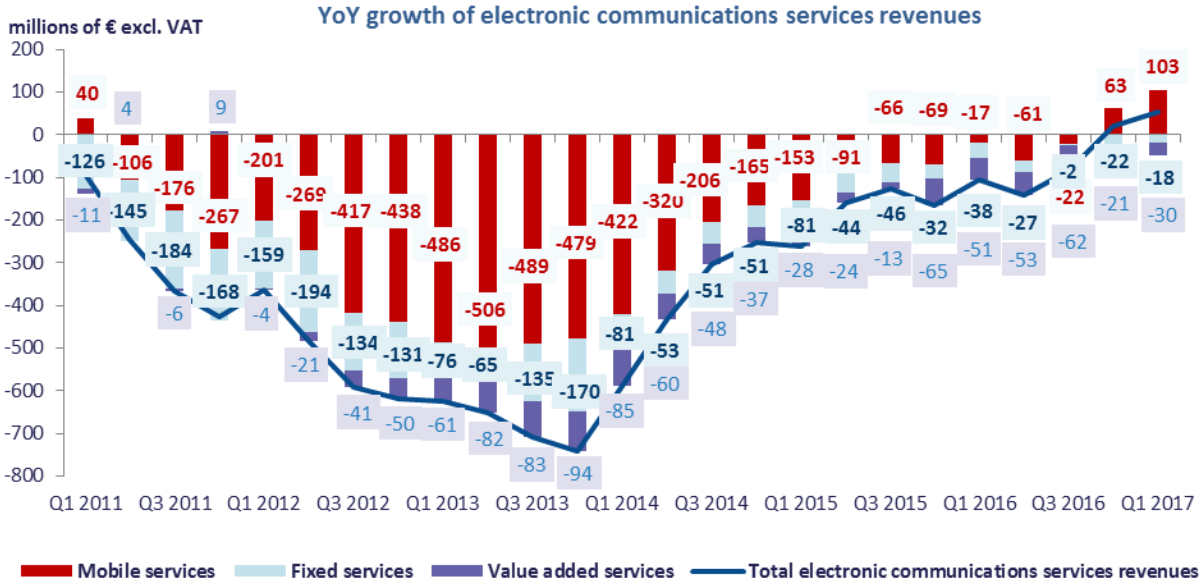
ISSN n°2258-3106

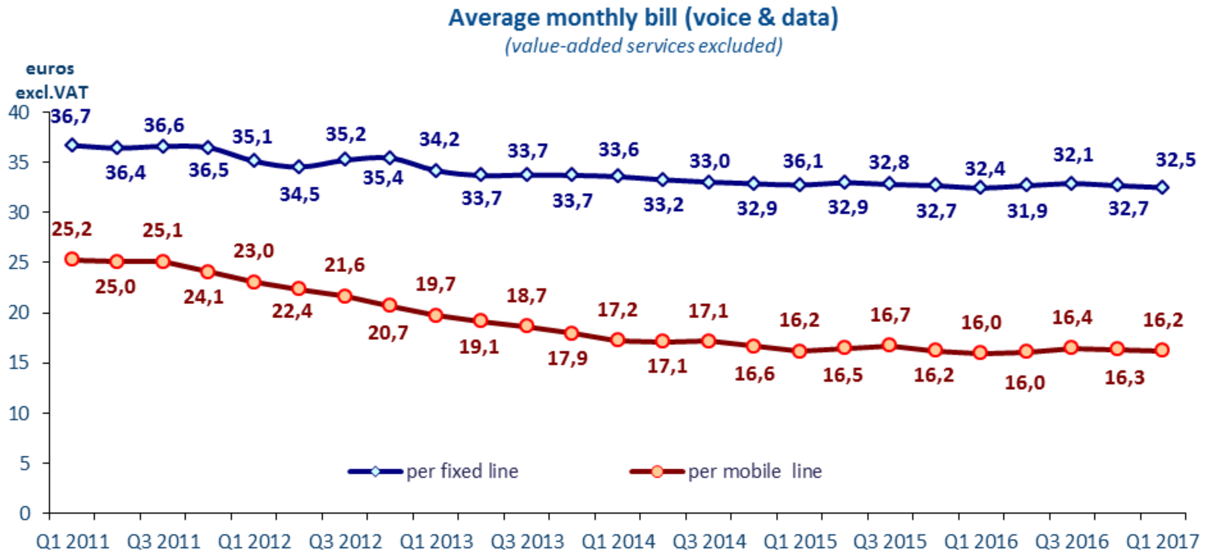
Synthesis

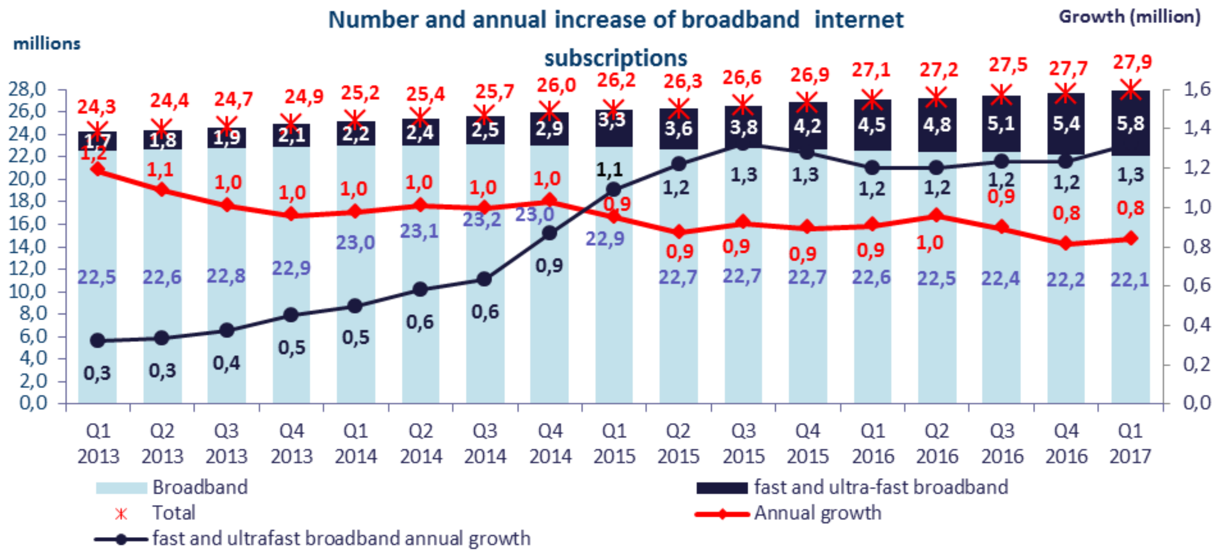
Revenue on the retail market *(millions of euros excl.VAT)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Fixed services (including leased lines and data transport networks)	*4 297*	*4 318*	*4 323*	*4 323*	4 279	-0,4%
Mobile services (MtoM included)	3 474	3 486	3 585	3 588	3 577	3,0%
Value-added services and directory services	304	291	285	*282*	274	-9,8%
Electronic communications services	*8 075*	*8 096*	*8 194*	*8 193*	8 130	0,7%
Others revenues	789	787	839	*1 016*	763	-3,4%
Overall market	*8 864*	*8 882*	*9 033*	*9 209*	8 892	0,3%

adjusted figures are in italics

Note: "Others revenues" are not, strictly speaking, part of the electronic communications services market. The contribution reported by the operators gives only a partial view of these market segments. This topic covers the income related to sale and rental of terminals and equipment (fixed, mobile and internet), hosting and management of call centres, paper directories, advertising and file transfer.

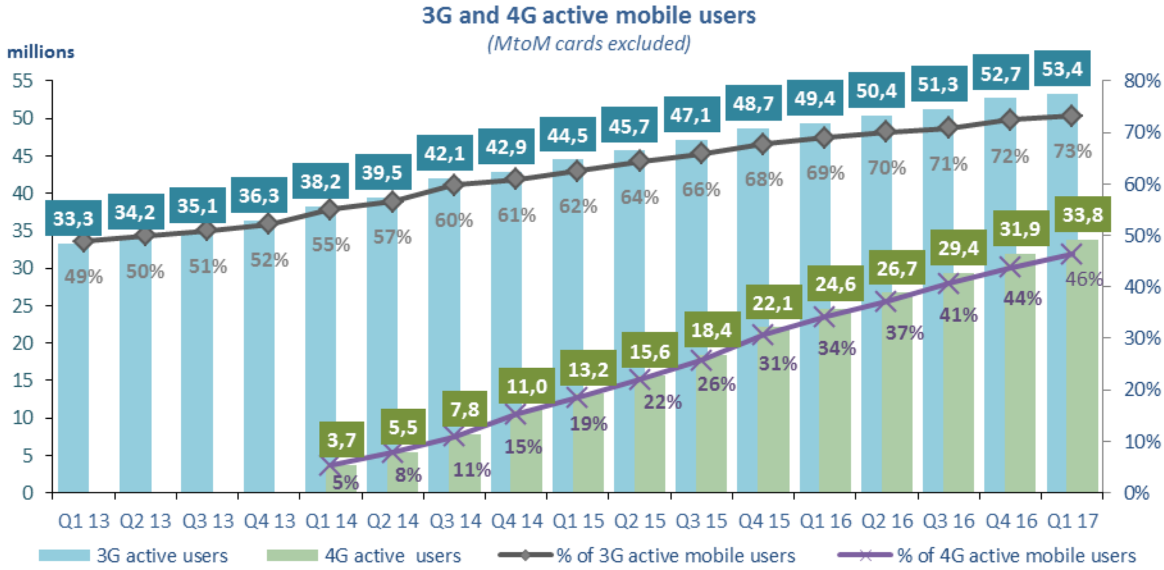


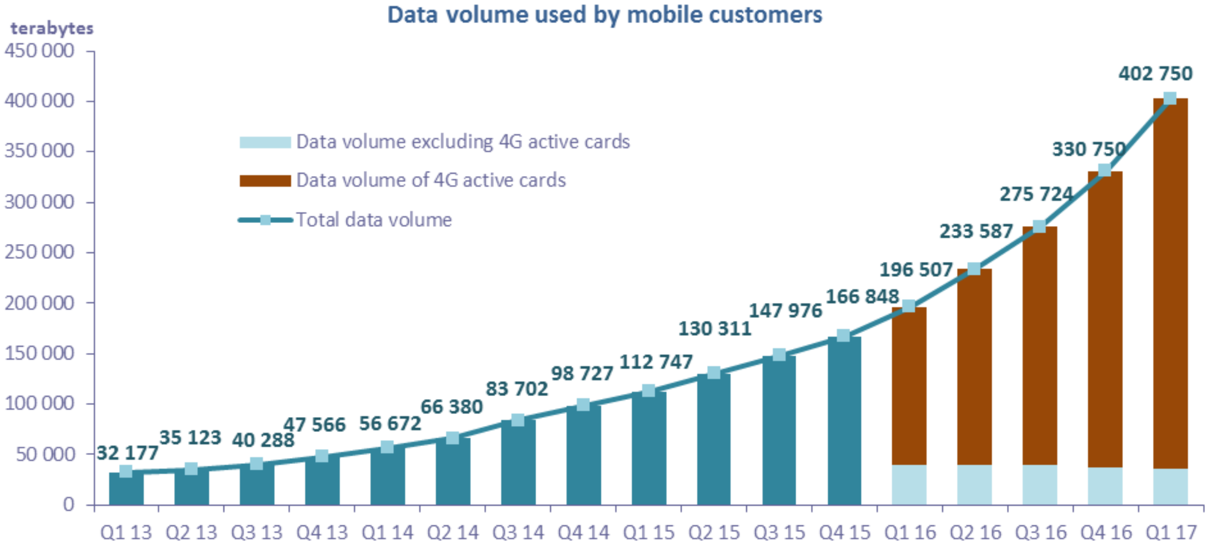


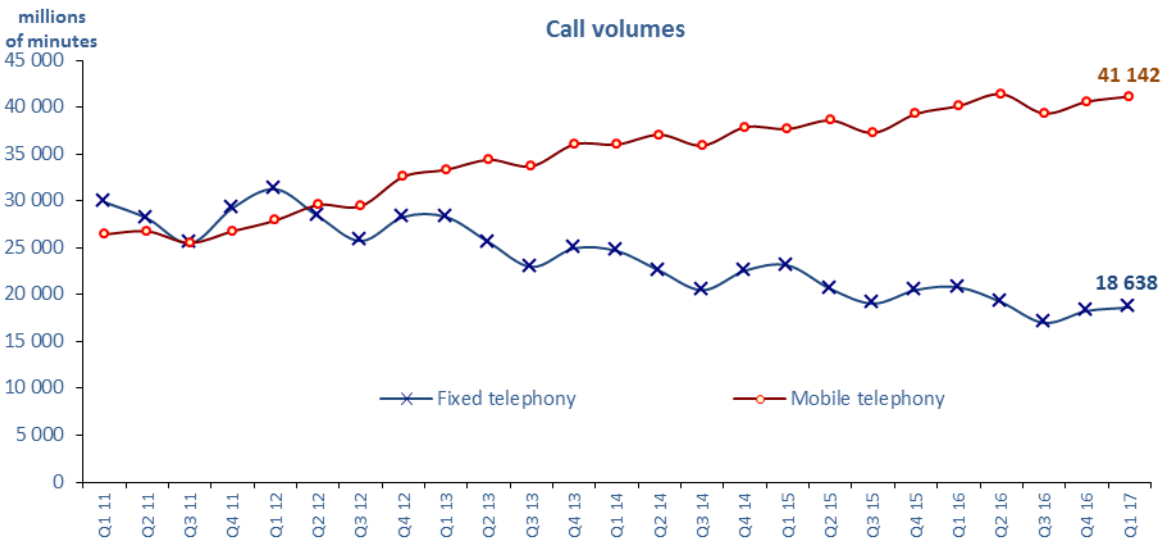


Notes :

- *Potential data revisions for one quarter from one publication to another are explained by corrections made by the operators in their declaration. The discrepancies that may exist between the annual growth in % and the posted levels are related to rounding.*
- *All revenues are exclusive of taxes.*
- *All comparisons are for Quarter N compared to the same quarter of the previous year, unless otherwise stated.*
- *Open data can be downloaded in Excel format on the ARCEP website here or on the site data.gouv.fr*


3G and 4G active mobile users
(MtoM cards excluded)
millions
3G active users
4G active users
% of 3G active mobile users
% of 4G active mobile users
33,3
34,2
35,1
36,3
38,2
39,5
42,1
42,9
44,5
45,7
47,1
48,7
49,4
50,4
51,3
52,7
53,4
3,7
5,5
7,8
11,0
13,2
15,6
18,4
22,1
24,6
26,7
29,4
31,9
33,8
Q1 13 Q2 13 Q3 13 Q4 13 Q1 14 Q2 14 Q3 14 Q4 14 Q1 15 Q2 15 Q3 15 Q4 15 Q1 16 Q2 16 Q3 16 Q4 16 Q1 17


Data volume used by mobile customers
terabytes
Data volume excluding 4G active cards
Data volume of 4G active cards
Total data volume
32 177
35 123
40 288
47 566
56 672
66 380
83 702
98 727
112 747
130 311
147 976
166 848
196 507
233 587
275 724
330 750
402 750
Q1 13 Q2 13 Q3 13 Q4 13 Q1 14 Q2 14 Q3 14 Q4 14 Q1 15 Q2 15 Q3 15 Q4 15 Q1 16 Q2 16 Q3 16 Q4 16 Q1 17


millions
of minutes
Call volumes
41 142
18 638
Fixed telephony
Mobile telephony

Sommaire

1 Fixed networks services - retail services

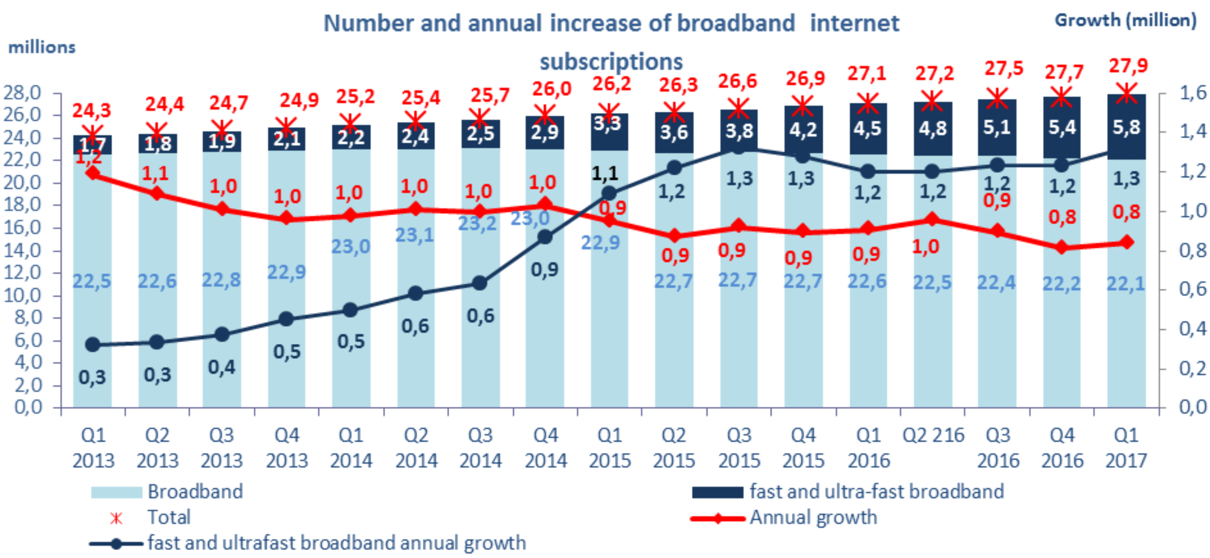
1.1 Internet access and telephony services

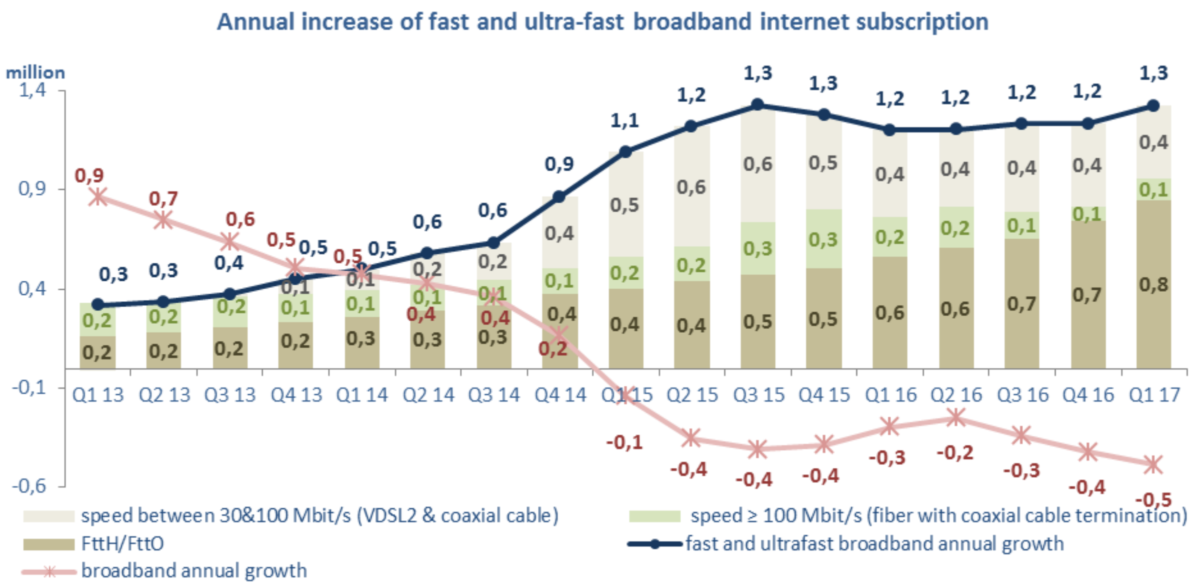
1.1.1 Broadband Internet access

Broadband subscriptions *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Broadband	**22,574**	**22,451**	**22,409**	**22,234**	**22,087**	**-2,2%**
of which xDSL	22,064	21,940	21,891	21,705	21,559	-2,3%
of which other broadband accesses	0,510	0,510	0,518	0,530	0,528	3,4%
Fast and ultra-fast broadband	**4,510**	**4,781**	**5,058**	**5,446**	**5,836**	**29,4%**
of which with a speed equal or greater than 100 Mbit/s	**2,768**	**2,970**	**3,181**	**3,448**	**3,726**	**34,6%**
of which fiber to the home and fiber to the office	1,603	1,764	1,926	2,184	2,448	52,7%
of which fiber with coaxial cable termination	1,165	1,207	1,254	1,264	1,278	9,7%
of which with a speed ≥ 30 and < 100 Mbit/s (VDSL2 & coaxial cable)	**1,742**	**1,811**	**1,877**	**1,998**	**2,109**	**21,1%**
Total number of broadband internet subscriptions	**27,084**	**27,232**	**27,467**	**27,680**	**27,922**	**3,1%**

adjusted figures are in italics

Overseas broadband internet subscriptions *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Total number of subcriptions	**612**	**617**	**624**	**628**	**633**	**3,5%**





Notes :

- *Broadband subscriptions are counted as fast broadband internet subscriptions when the download speed is greater than or equal to 30 Mbit/s. This category includes fiber to the home or to the office (FttH, FttO) subscriptions, "hybrid fiber coaxial cable" (HFC) subscriptions, fiber with coaxial cable termination (FttLA) subscriptions, and VDSL2 subscriptions with a download speed greater than or equal to 30 Mbit/s. Other subscriptions with a speed greater than or equal to 100 Mbit/s are also published.*
- *4G SIM cards only dedicated to fixed internet usage are also counted in fast broadband accesses. These cards are used by the business customers (routers) and residential customers (4G box) and cannot be used in situation of mobility. These offers needs to be distinguished from other types of technologies, such as wireless networks deployed by some actors in order to provide fixed Internet access services, such as Wimax networks, wifi or, in the near future, fast broadband radio networks, which consists of more bandwith from Wimax to LTE technology.*
- *There can be a delay between the delivery of an offer on the wholesale market (LLU or bitstream) and its inclusion in retail market figures. Data comparisons for these different markets may reflect this delay.*
- *VDSL2 is a technology used by operators since October 1st, 2013, whose access to the lines in indirect distribution opened October 27, 2014.*

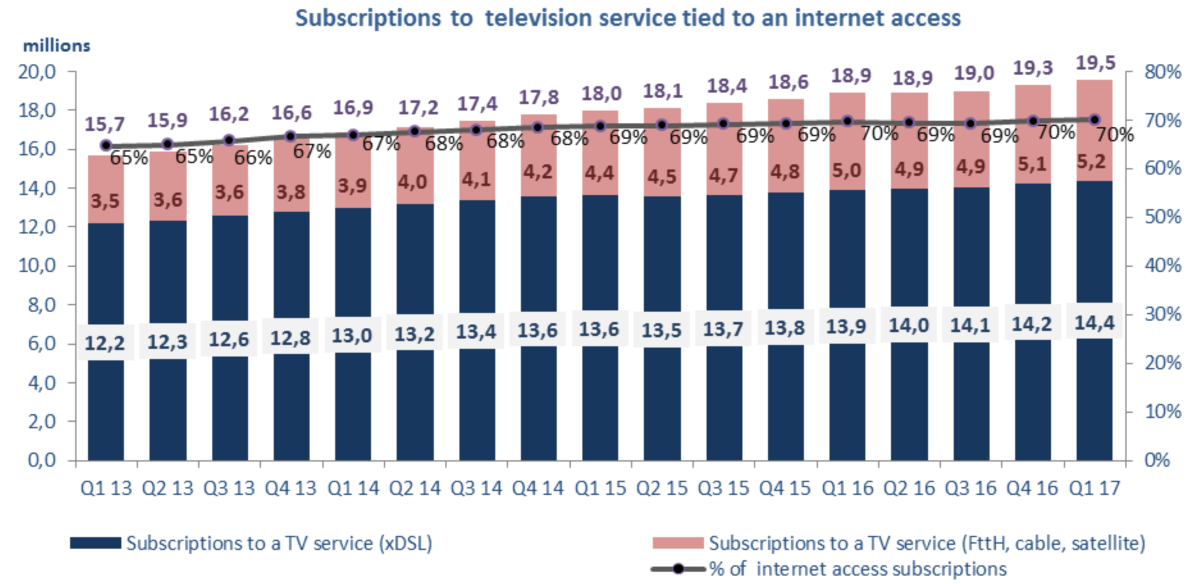
1.1.2 TV subscription tied to internet access

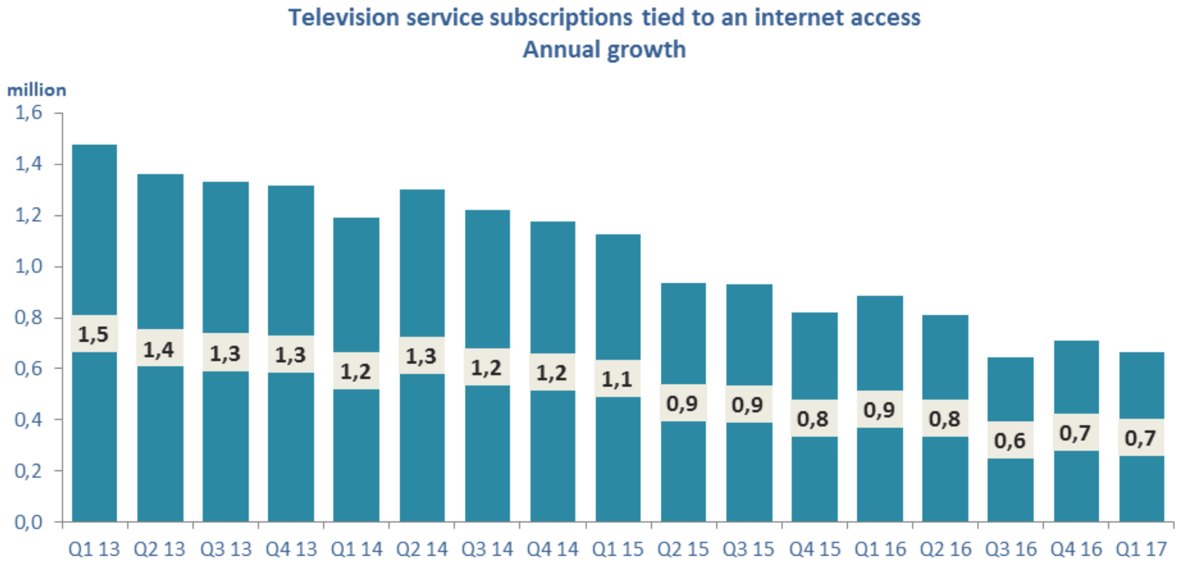
Note : are taken into account the subscriptions that have been subscribed separately or as part of a bundled offer that includes access to one or several other services aside from TV (internet, telephony).

A subscription to TV can be provided by another technology than internet access: for example, a subscription to TV via satellite tied to DSL internet access.

TV subscriptions tied to an internet access *(millions)*	**Q1 2016**	**Q2 2016**	**Q3 2016**	**Q4 2016**	**Q1 2017**	**change 1Q17/1Q16**
TV subscriptions tied to an internet access	***18,875***	**18,902**	***19,002***	***19,308***	**19,542**	**3,5%**
of which xDSL TV subscriptions	13,907	13,983	14,069	14,242	14,366	3,3%
% of subscriptions to television services	69,7%	69,4%	69,2%	69,8%	70,0%	+0,3 pt

adjusted figures are in italics





1.2 Telephone services on fixed lines

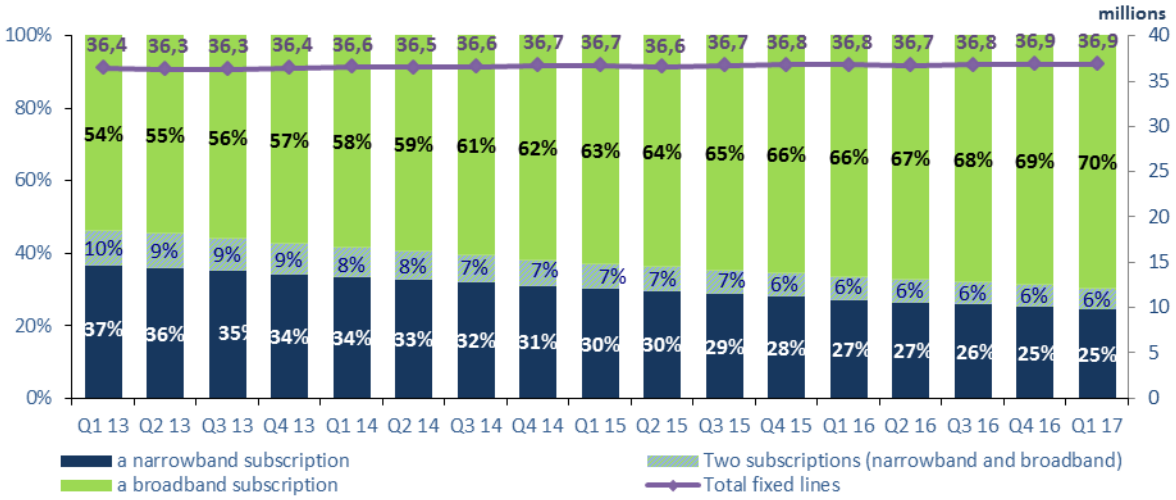
1.2.1 Number of fixed lines (public payphones and telephone cards excluded)

Number of fixed lines *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Number of fixed lines	**36,782**	**36,722**	***36,813***	***36,859***	**36,866**	**0,2%**
of which lines on a broadband access	24,445	24,655	25,022	25,368	25,737	5,3%
of which lines on a narrowband access	10,018	9,751	9,561	9,331	9,034	-9,8%
of which lines with two accesses (narrowband and broadband)	2,319	2,315	2,230	2,159	2,095	-9,7%

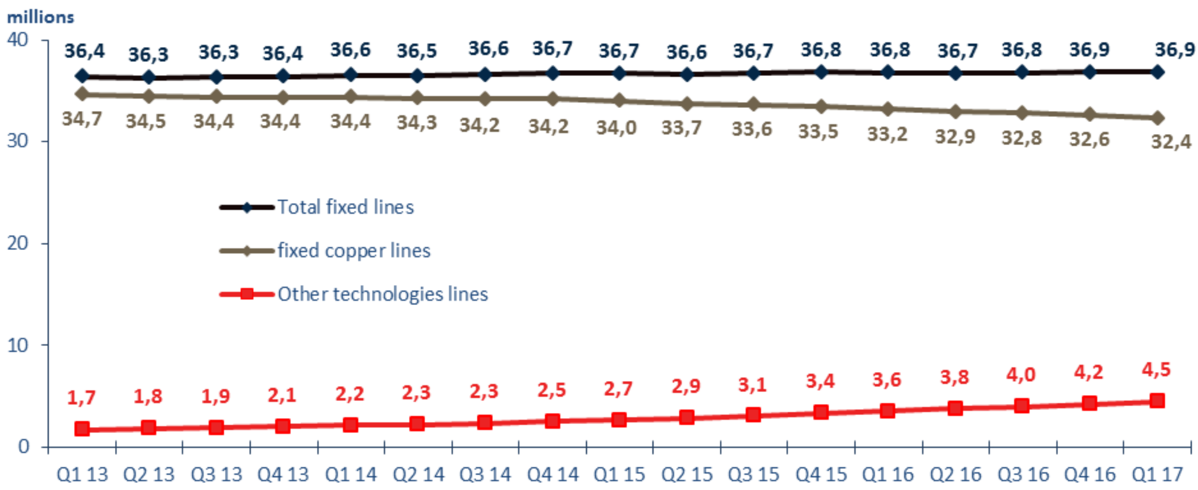
When offers are based on shared unbundling or bitstream accesses, the subscribers possess two landlines telephone subscriptions on the same physical line. The concept of lines refers here to the number of subscriptions without these double subscriptions by counting only one line for customers having both a narrowband telephone subscription and a VOB subscription.

By convention, ***in the case of ISDN lines, are counted as many fixed lines as telephone subscriptions paid by the company****, i.e. 2 lines for a basic access and up to 30 lines for a primary access.*

Breakdown of fixed lines by subscriptions to telephony services



Breakdown of fixed lines by technology (copper / other technologies)

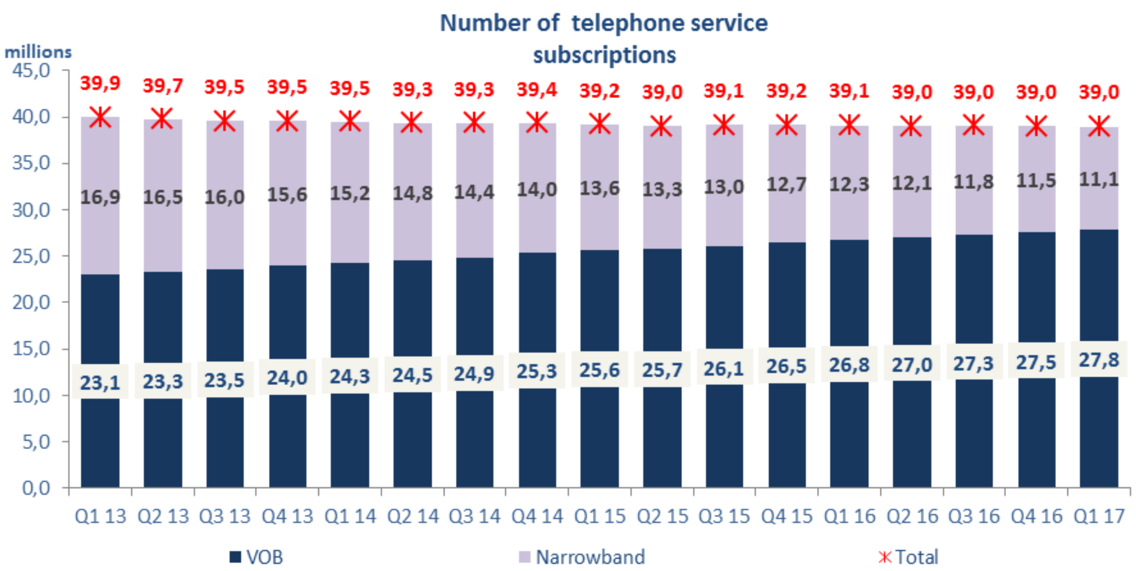


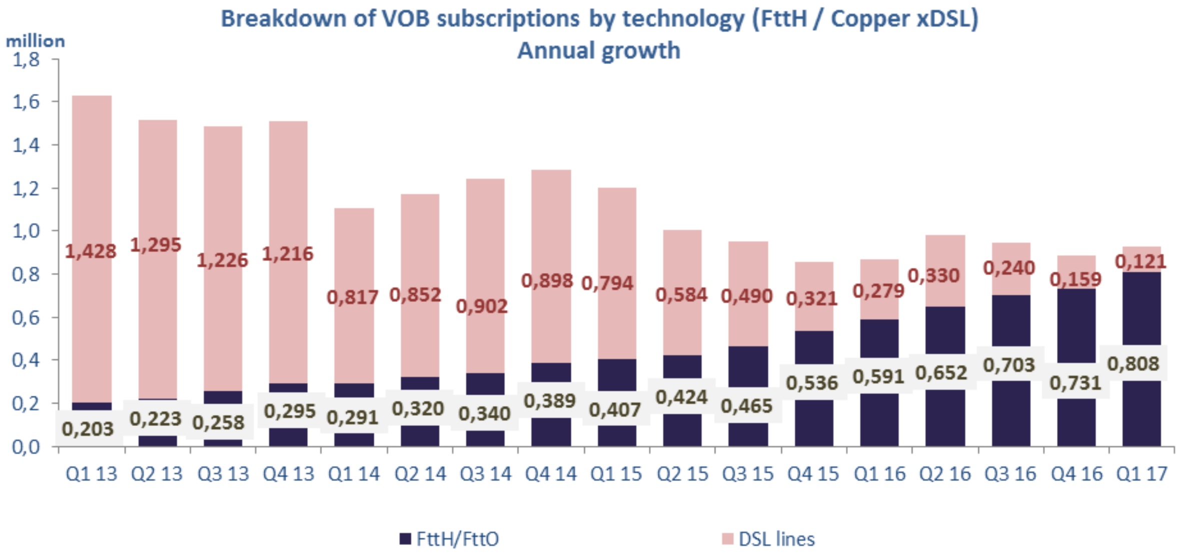
1.2.2 Number of subscriptions to a telephone service

Number of telephone service subscriptions (millions of units)	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Subscriptions on narrowband accesses	12,336	12,067	11,791	11,491	11,129	-9,8%
Access resales (VGAST)	1,555	1,550	1,523	1,499	1,456	-6,4%
Subscriptions on broadband accesses	26,764	26,971	27,252	27,528	27,832	4,0%
of which on DSL lines	23,203	23,190	23,271	23,282	23,325	0,5%
of which DSL lines not tied to a narrowband subscription	20,885	20,875	21,041	21,123	21,230	1,7%
of which on other technologies	3,561	3,781	3,981	4,246	4,507	26,6%
Total number of telephone service subscriptions	**39,100**	**39,038**	**39,043**	**39,019**	**38,961**	**-0,4%**

*Optic fiber to the home, optic fiber with coaxial cable termination, wireless technologies

Note : a VOB subscription on xDSL technology without a narrowband subscription is a subscription on lines where low frequencies are not used as a voice service support (neither Orange nor an alternative operator). This is the case of voice-over-broadband service issued from full unbundling and naked DSL.





1.2.3 Portability of fixed phones numbers

Portability *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Number of fixed phone numbers ported during the quarter	633	602	632	731	670	5,8%

1.2.4 Revenue and traffic of subscriptions and calls (narrowband internet, public payphones and calling cards excluded)

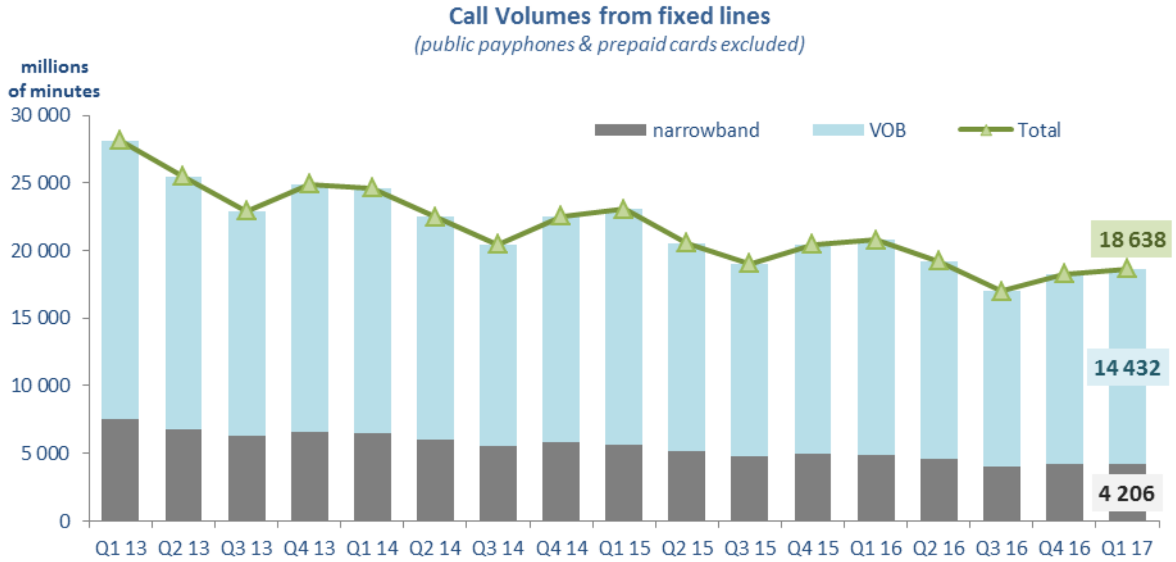
Narrowband access revenue *(millions of euros excl. VAT)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Access fees, subscriptions and additional services	650	634	627	608	590	-9,3%

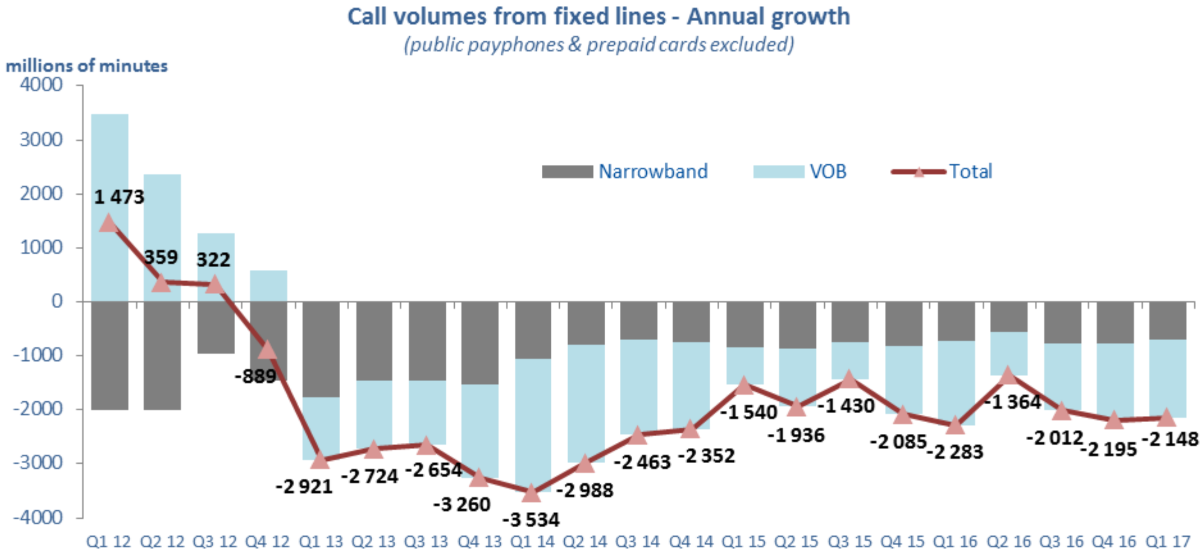
Note: in addition to income earned from providing access to a telephone service, access revenue includes income from IP telephony subscriptions and from additional services (caller ID, etc…).

Call Revenue from fixed lines *(millions of euros excl.VAT)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
National calls	170	159	155	155	149	-12,4%
International calls	57	57	55	53	45	-20,9%
Calls to mobiles	108	106	98	102	96	-11,5%
Total calls from fixed lines	**335**	**322**	**308**	**309**	**290**	**-13,6%**
Of which calls originating from narrowband networks	220	208	195	197	189	-13,9%
Of which calls originating from voice over broadband	116	115	112	113	101	-12,4%

Note: although the volume of voice over broadband calls refers to all end-market traffic, the revenue covers only invoiced VOB traffic (e.g. over and above bundled service flat rates).

Call volumes from fixed lines *(millions of minutes)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
National calls	14 125	12 782	11 211	12 309	12 640	-10,5%
International calls	2 260	2 148	1 911	1 946	1 889	-16,4%
Calls to mobiles	4 400	4 266	3 878	4 011	4 109	-6,6%
Total calls from fixed lines	**20 786**	**19 196**	**17 001**	**18 266**	**18 638**	**-10,3%**
Of which calls originating from narrowband networks	4 897	4 547	4 000	4 196	4 206	-14,1%
Of which calls originating from voice over broadband	15 889	14 649	13 001	14 070	14 432	-9,2%





1.2.5 Public payphones and calling cards

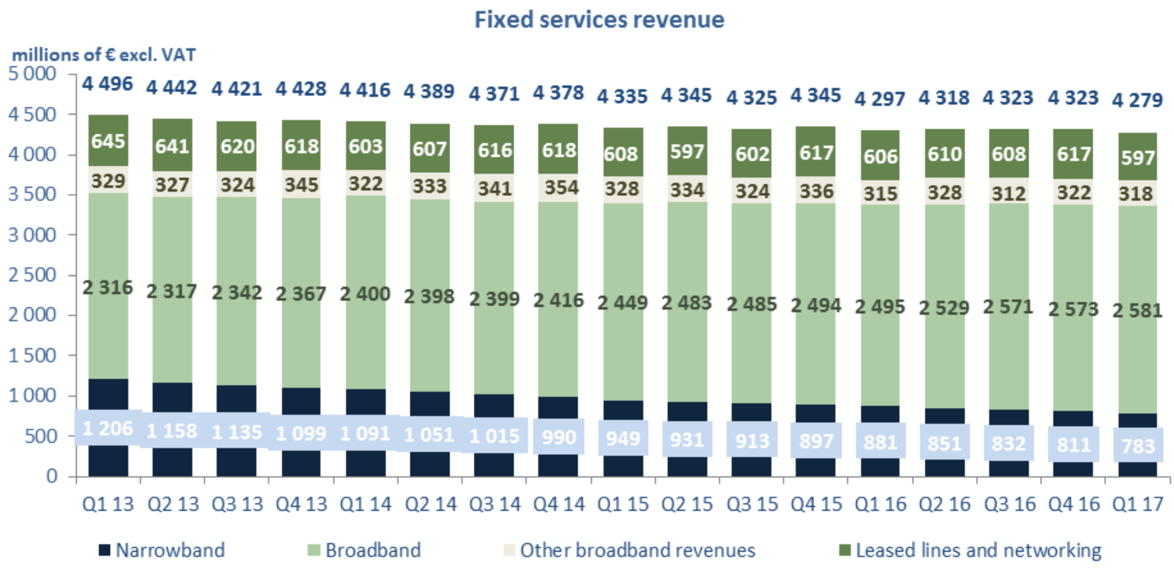
Other fixed services - narrowband	**Q1 2016**	**Q2 2016**	**Q3 2016**	**Q4 2016**	**Q1 2017**	**change 1Q17/1Q16**
Revenue of public payphone and calling cards *(millions of € excl.VAT)*	11	9	10	7	4	-65,2%
Number of public payphones (units)	38 500	31 232	24 123	17 301	11 821	-69,3%

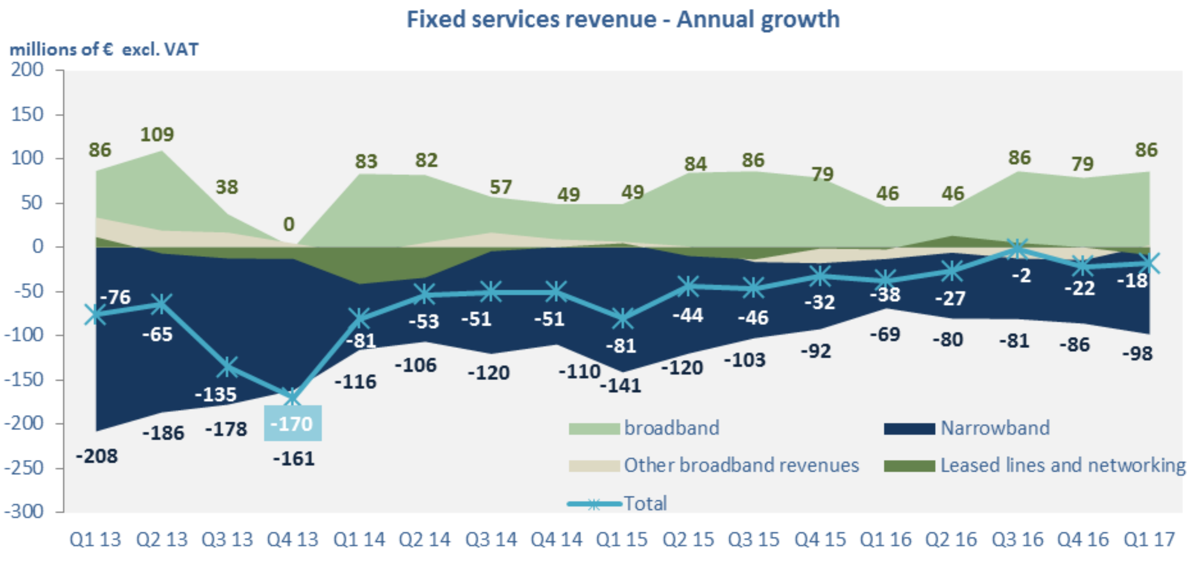
1.3 Revenue of fixed services (retail leased lines and data networking included)

Revenue of fixed networks services *(millions of euros excl.VAT)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Narrowband Revenue	881	851	832	811	783	-11,1%
Broadband Revenue	*2 810*	*2 857*	*2 883*	*2 895*	2 899	3,2%
Broadband internet, VoB subscriptions and revenues from VoB calls	*2 495*	*2 529*	*2 571*	*2 573*	2 581	3,4%
Other Internet revenue	315	328	312	322	318	0,9%
Retail leased lines and data transport networks	606	610	608	617	597	-1,4%
Total revenue	*4 297*	*4 318*	*4 323*	*4 323*	4 279	-0,4%

adjusted figures are in italics

Note: "Other internet revenue" refers to related income earned by ISPs on services such as hosting and online advertising revenue. From now on, this line also includes revenues connected to a broadband internet access and billed by operators (subscriptions to à TV service, video and music downloading…). Revenue generated by terminal sales and rental is included under "fixed operator and ISP terminal sales and rental".





1.4 Average bill and traffic per user

Note : several subscriptions to the telephony service may be subscribed on the same fixed line.

1.4.1 Per fixed line

Average monthly bill and telephone calls *(value added and directory services excluded)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Per fixed line : telephone access, calls and Internet *access (€ VAT excl.)*	*32,4*	*32,7*	*32,9*	*32,7*	32,5	0,1%
Per fixed lines *(in hours)*	3h08	2h54	2h34	2h45	2h48	-10,5%

adjusted figures are in italics

The average bill per fixed line now refers to what customers pay each month for their telephony and Internet services. It include therefore:

- Revenue generated by access to subscriptions and additional services;

- Revenue from calls originating on fixed lines, including IP traffic revenue billed over and above the bundled service flat rate;

- Narrowband and broadband Internet access revenue.

Revenues excluded are:

- Public payphone and prepaid card revenue;

- Revenue generated by other services tied to Internet access, e.g. ISPs' online ad revenue and commissions earned on e-commerce sales;

- VAS and directory assistance services revenue.

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.

Average number of fixed lines for quarter N: [(total fixed lines on quarter N + total fixed lines on quarter N-1)/2]

1.4.2 Per subscription to fixed services

Average monthly bill per customer *(in euros -VAT excluded)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Per fixed narrowband telephone subscription	23,2	23,0	23,0	23,0	23,0	-1,0%
Per fixed broadband access	*33,5*	*33,9*	*34,2*	*33,9*	33,7	0,6%

adjusted figures are in italics

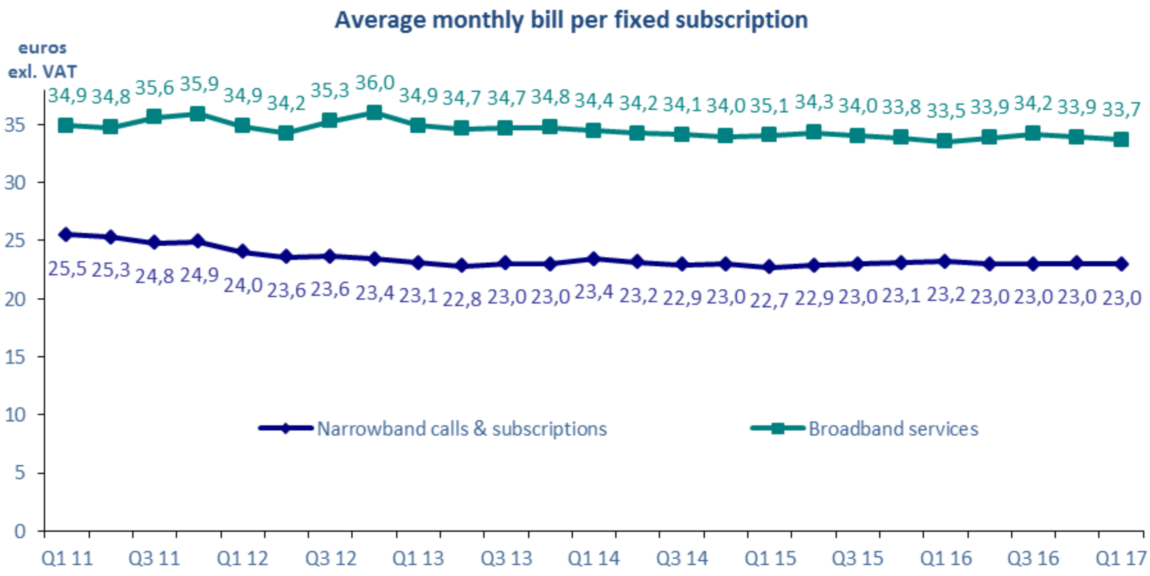
- <u>The average monthly bill for a narrowband line</u> is calculated by dividing the revenue earned on a PSTN based fixed line subscription and calls (i.e. excluding VOB) for Quarter Q by the estimated average customer base for Quarter Q, then dividing the result by three.

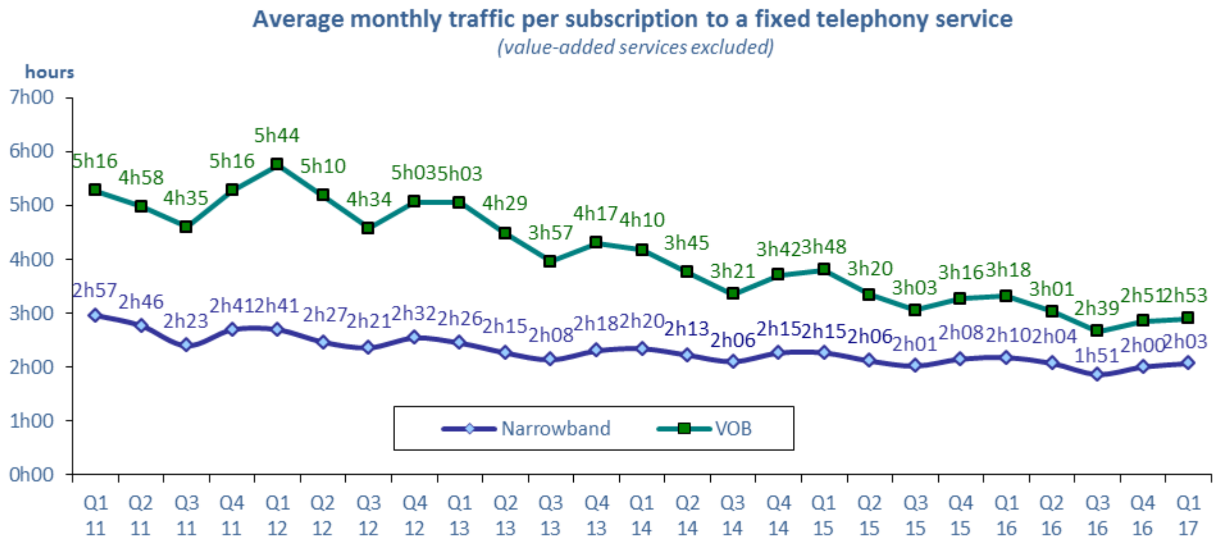
- <u>The average monthly bill for a broadband or ultra-fast broadband</u> access (Internet and telephony over broadband) is calculated by dividing the revenue earned on VOB calls made on a fixed line (billed over and above a service bundle flat rate) and the revenue earned on broadband subscription for Quarter Q by the estimated average customer base for Quarter Q, then dividing the result by three.

Average monthly volume per customer *(in hours)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Per fixed narrowband telephone subscription	2h10	2h04	1h51	2h00	2h03	-5,0%
Per fixed VOB subscription	*3h18*	*3h01*	*2h39*	*2h51*	2h53	-12,6%

adjusted figures are in italics

- <u>The average monthly volume per fixed line</u> is calculated by dividing the traffic earned on a PSTN or VOB based fixed line subscription and calls for quarter Q by the estimated average customer base for quarter Q, then dividing the result by three.





2 Services on mobiles networks - retail market

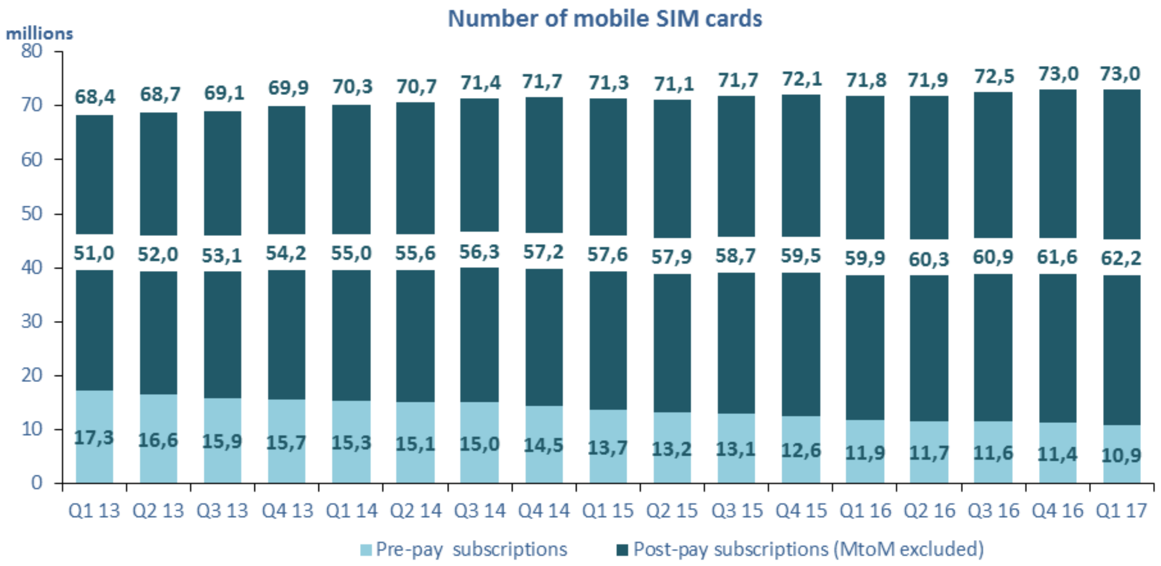
2.1 Mobiles phone services

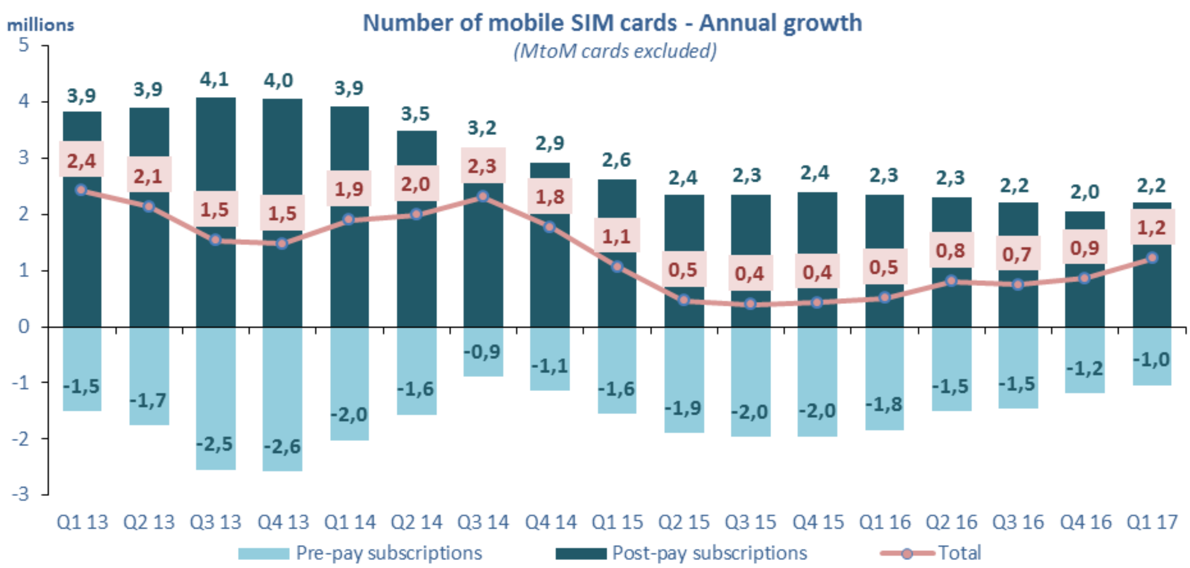
2.1.1 Number of SIM cards

Number of mobile lines *(millions of units)*	**Q1 2016**	**Q2 2016**	**Q3 2016**	**Q4 2016**	**Q1 2017**	**change 1Q17/1Q16**
Post-pay subscriptions	**59,912**	**60,251**	**60,855**	**61,587**	**62,161**	**3,8%**
Pre-pay subscriptions	**11,914**	**11,675**	**11,640**	**11,378**	**10,877**	**-8,7%**
of which active prepaid cards *	9,683	9,463	9,424	9,060	8,332	-14,0%
Total number of SIM cards	**71,826**	**71,927**	**72,495**	**72,965**	**73,039**	**1,7%**

*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.

- A prepaid card is considered active if the customer has made or received at least one call during the past three month. Incoming SMS are not included in the calculation.
- Are excluded dedicated active 4G cards for a fixed use (they cannot be use in mobility).These cards are included with fixed internet access.





2.1.2 Dedicated data cards

Dedicated data cards *(millions of units)*	**Q1 2016**	**Q2 2016**	**Q3 2016**	**Q4 2016**	**Q1 2017**	**change 1Q17/1Q16**
Post-pay subscriptions	**2,768**	**2,771**	**2,773**	**2,787**	**2,776**	**0,3%**
Pre-pay subscriptions	**0,849**	**0,904**	**0,917**	**0,841**	**0,840**	**-1,1%**
of which active prepaid cards *	0,253	0,280	0,337	0,287	0,301	19,0%
Number of dedicated data cards	**3,617**	**3,674**	**3,690**	**3,628**	**3,616**	**0,0%**
% in total number of SIM cards	5,0%	5,1%	5,1%	5,0%	5,0%	+0 Point

Note: the number of dedicated data cards is defined as the number of SIM cards sold by mobile operators (in the form of subscriptions, flat rates or prepaid cards), used exclusively for accessing the Internet (PCMCIA cards, 3G/4G USB keys). These cards cannot be used to make voice calls.

2.1.3 The fixed-mobile convergence

Bundles : mobile subscription tied to fixed services *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Number of mobile subscriptions tied to at least one fixed service	18,645	*18,924*	*19,407*	*19,898*	20,459	9,7%
% in total number of post-pay subscriptions	31%	31%	32%	32%	33%	+2 Points
% in total number of SIM cards	26%	26%	27%	27%	28%	+2 Points

adjusted figures are in italics

Notes :

- Fixed-mobile convergence offers are commercialized by the operators by a package of services (several mobile contracts can be included) or by some price cutting applied to one or the others of the services. Several SIM cards can be tied to a fixed service subscription.

- The quarter figures of year 2016 have been reevaluated.

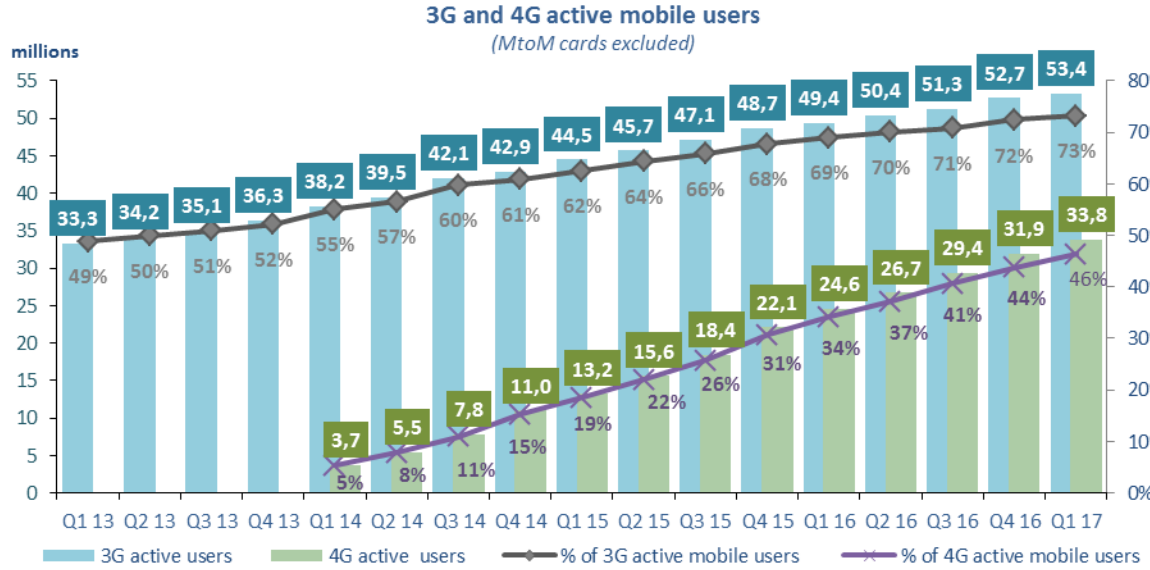
2.1.4 3G and 4G active cards

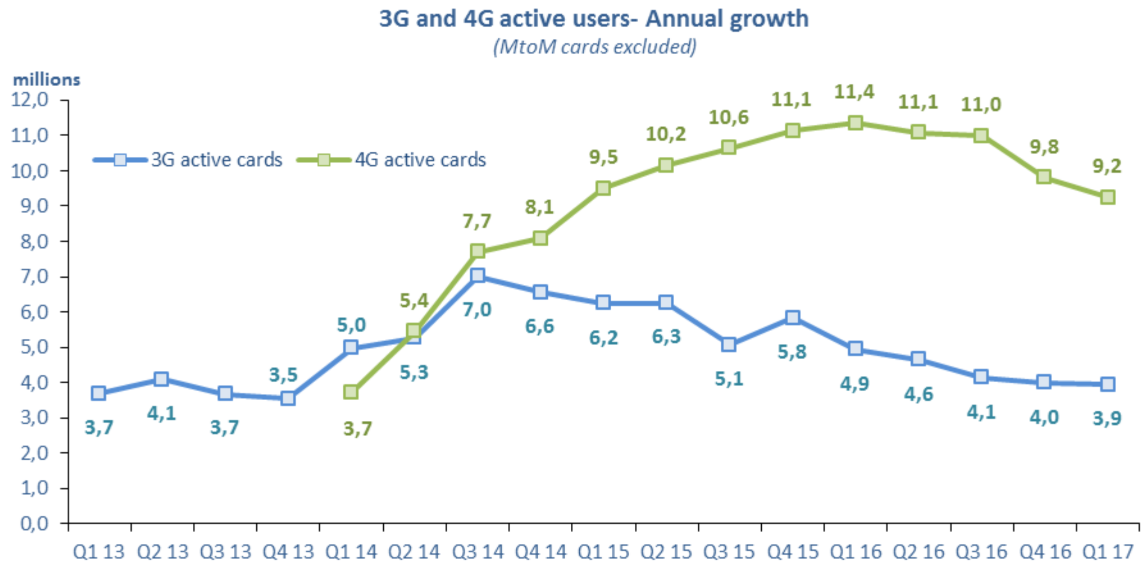
3G and 4G Active users *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
3G active users	*49,422*	*50,358*	*51,274*	*52,727*	53,359	8,0%
4G active users	24,577	26,704	29,419	31,901	33,815	37,6%

- The active 3G base is defined as the number of customers who have accessed a mobile service (voice, videophony, mobile TV, data transfer, etc.) that uses 3G radio access technology, sometime in the past three months (either transmission or reception). An active 3G card can also be active in 4G or in 2G.

- The 4G active users are defined as the number of customers who have accessed a mobile service (data transfer) that uses 4G radio access technology, at least once in the past three months (either transmission or reception). Only active customers are counted here, which therefore have both a 4G offer and a compatible terminal. This definition may differ from those of operator's financial publications, which can account, for example, some offers "4G marketed". A client can have such an offer, but not the suitable terminal, nor 4G coverage. A 4G active user may also use 2G or 3G technologies.

- Are excluded 4G active dedicated data cards for a fixed use (they cannot be use in mobility). These cards are included in fixed internet indicators.

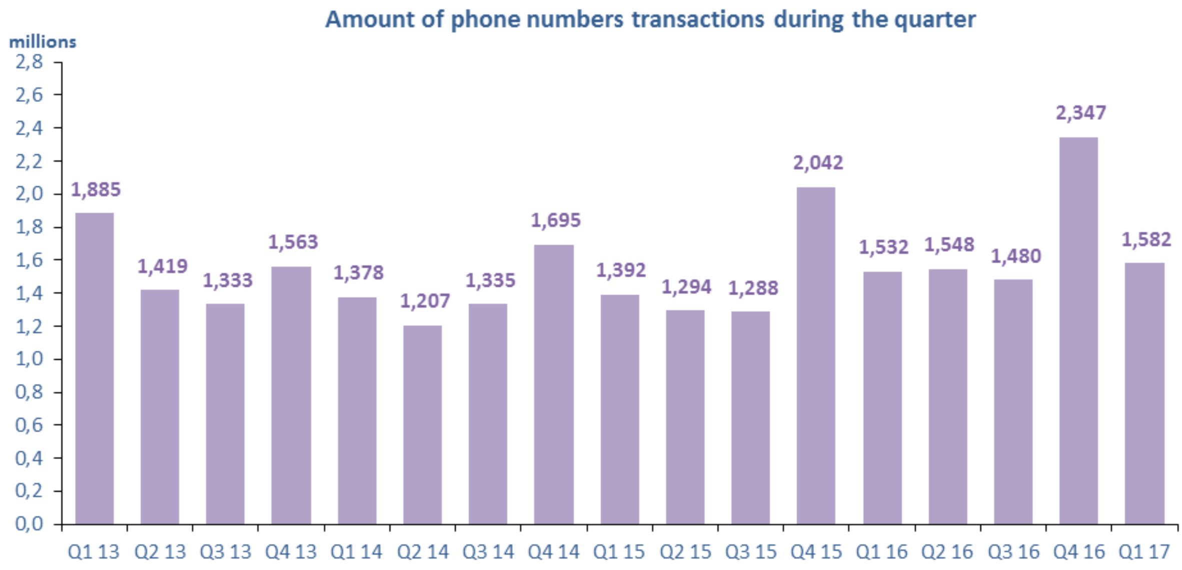




2.1.5 Portability of mobile phone numbers

Number Portability *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Number of transactions during the quarter	1,532	1,548	1,480	2,347	1,582	3,2%

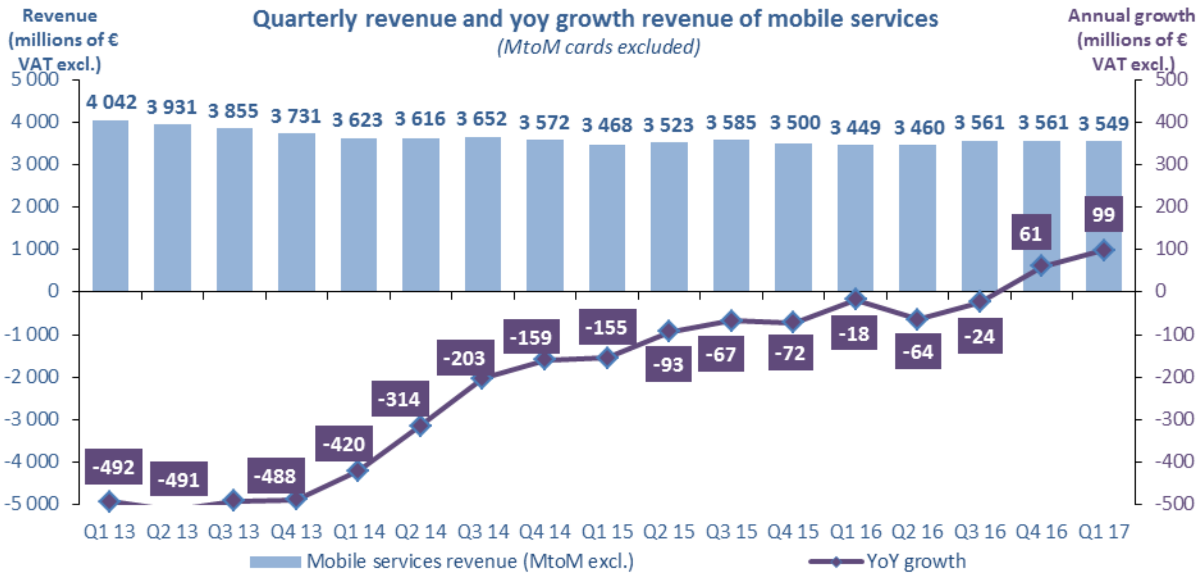
Note: the figures for ported phone numbers refer to the number of at the finalised porting procedures (ported numbers activated by the recipient operator) during the year in question.



2.1.6 Revenue on retail market (Value-added services excluded)

Revenue *(millions of euros VAT excluded)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Post-pay subscriptions	3 244	3 262	3 365	3 361	3 367	3,8%
Pre-pay subscriptions	206	198	196	200	182	-11,6%
Total mobile services revenue (excluding MtoM revenue)	3 449	3 460	3 561	3 561	3 549	2,9%

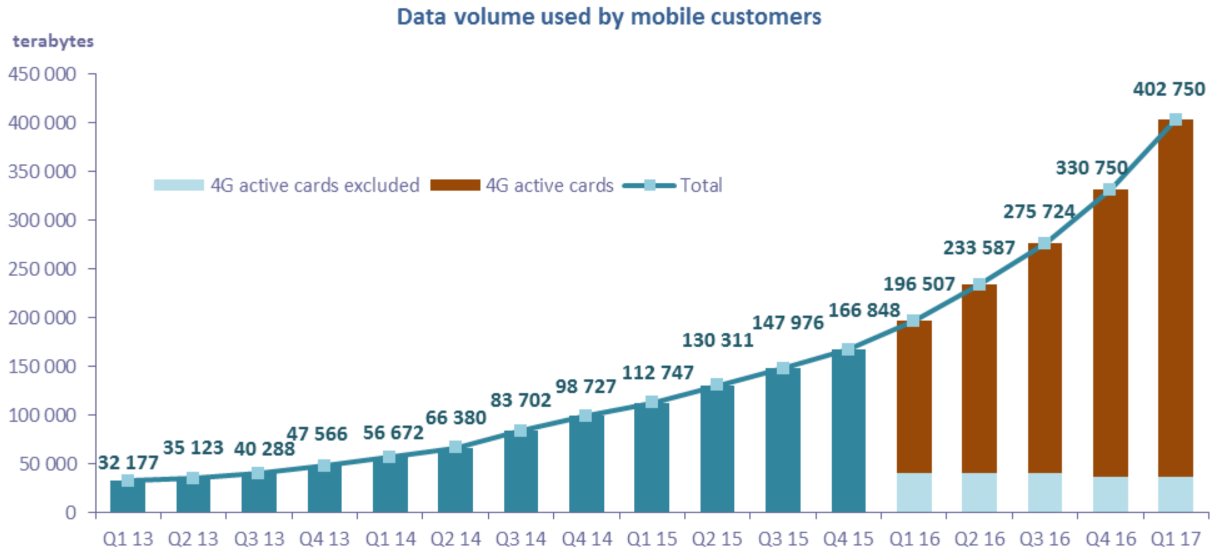
*Note: this is about retail market revenue. Revenues from the market between operators (interconnection, wholesale) are not included. Also excluded is revenue from value-added retail services. In addition, with the development of contract subscribers without a contractual commitment and without the joint purchase of a mobile terminal, part of the revenue previously allocated to mobile services was de facto shifted to sales revenue and terminal leasing Mobile operators (see section **4.2** of this publication) or specialized vendors (outside the scope of the study).*

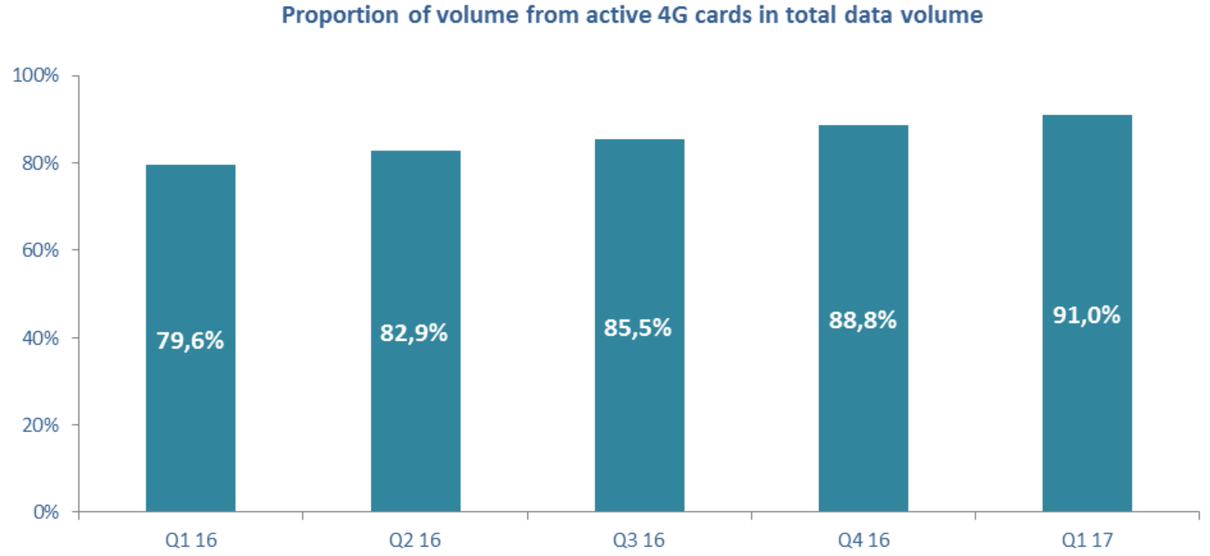


2.1.7 Volume of data consumed by mobile customers

Data volumes used by customers (in terabytes)	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Post-pay subscriptions	193 800	230 306	271 209	325 303	397 838	105,3%
Pre-pay subscriptions	2 708	3 282	4 515	5 447	4 912	81,4%
Total data volumes	**196 507**	**233 587**	**275 724**	**330 750**	**402 750**	**105,0%**
of which dedicated data SIM cards	10 656	11 768	13 641	13 969	12 520	17,5%
of which active 4G customers	156 417	193 729	235 726	293 701	366 630	134,4%

Note: the volume of data on mobile networks includes vocal communications and exchange of interpersonal messages via applications (wifi traffic excluded). It does not include the volume of 4G fixed boxes of the mobiles operators.

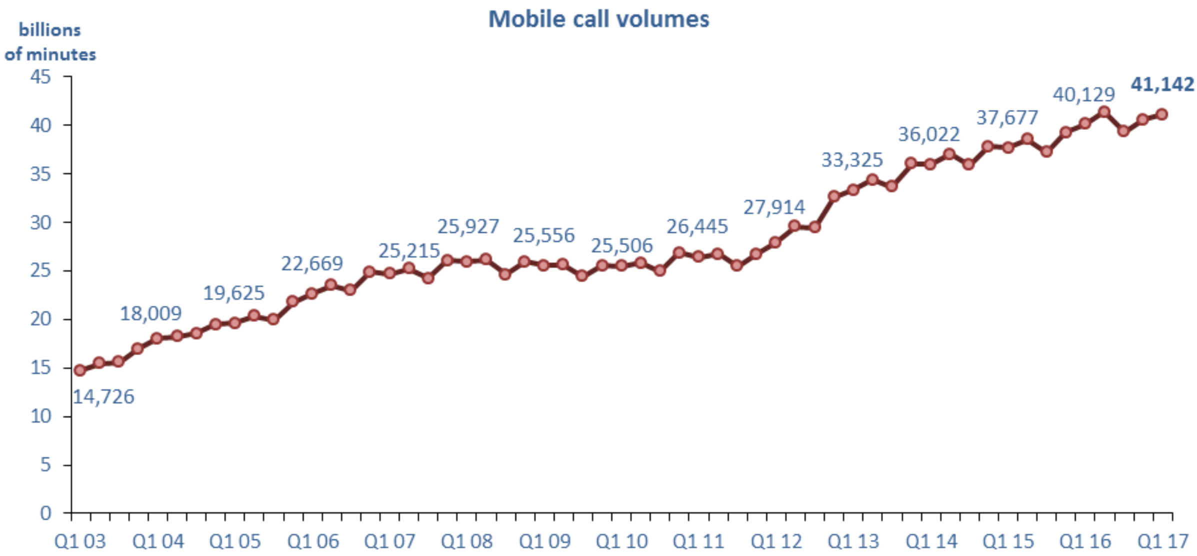




2.1.8 Mobile call volumes

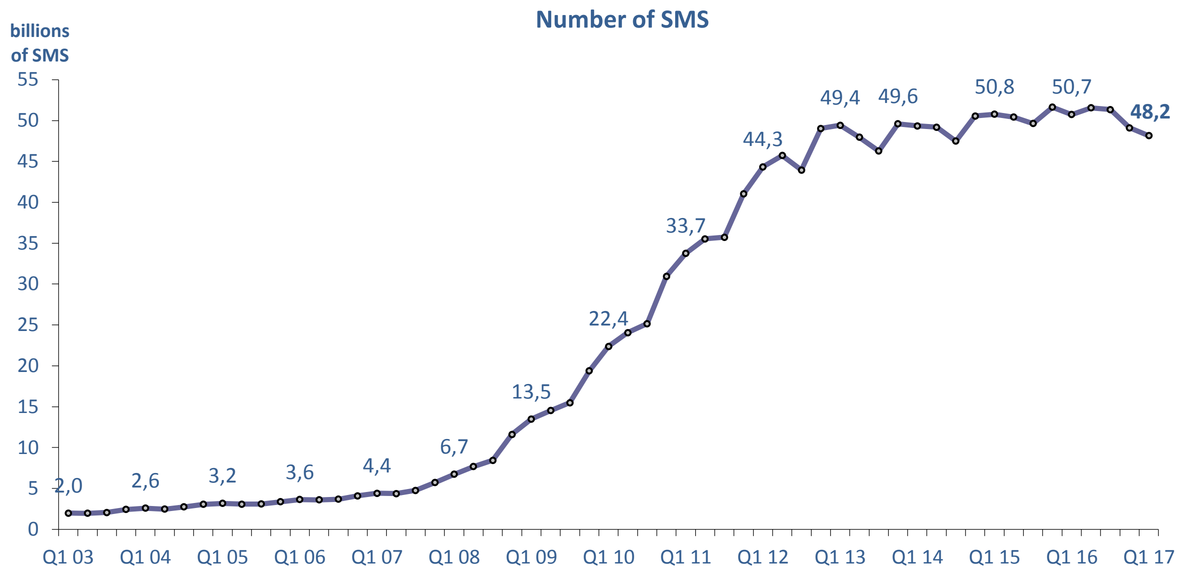
Mobile call volumes *(millions of minutes)*	**Q1 2016**	**Q2 2016**	**Q3 2016**	**Q4 2016**	**Q1 2017**	**change 1Q17/1Q16**
Post-pay subscriptions	37 678	38 960	36 954	38 287	38 990	3,5%
Pre-pay subscriptions	2 451	2 441	2 387	2 298	2 179	-11,1%
Total mobile call volumes	40 129	41 402	39 341	40 585	41 142	2,5%

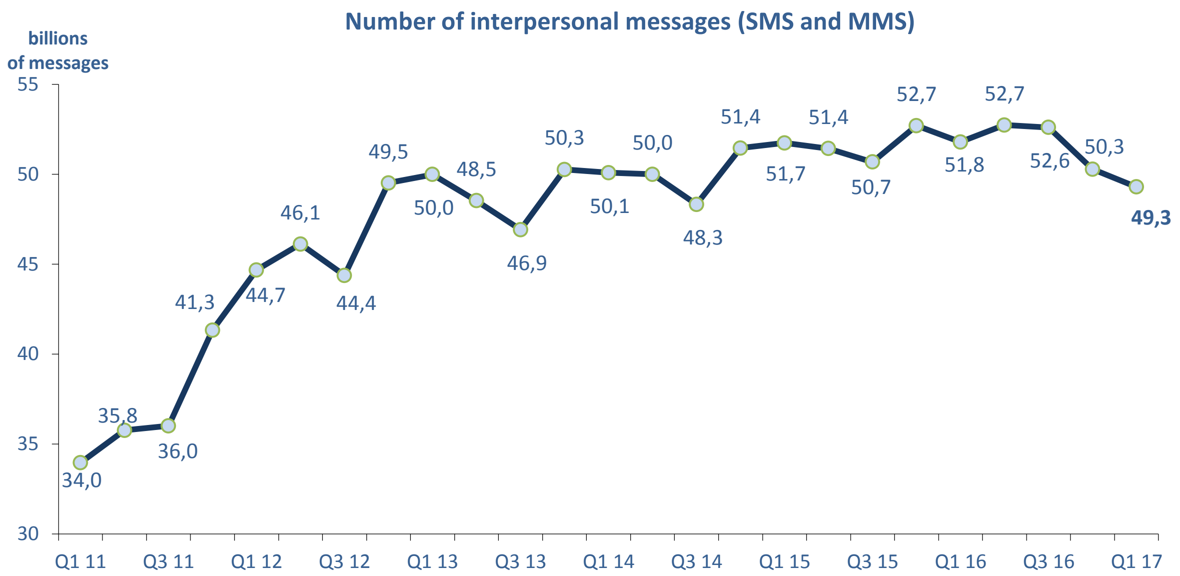
Mobile call volumes *(millions of minutes)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Calls to national fixed lines	6 970	6 935	6 514	6 734	7 005	0,5%
Calls to national mobile lines	31 086	32 170	30 404	31 902	32 369	4,1%
Outgoing internationals calls	1 588	1 694	1 553	1 344	1 270	-20,0%
Roaming out (*)	488	603	869	604	587	20,3%
Total mobile call volumes	**40 129**	**41 402**	**39 341**	**40 585**	**41 142**	**2,5%**



2.1.9 Interpersonal messages (SMS, MMS)

Volumes of interpersonal messages *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Number of SMS	**50 738**	**51 558**	**51 339**	**49 103**	**48 151**	**-5,1%**
of which from post-pay subscriptions	48 723	49 687	49 470	47 277	46 483	-4,6%
of which from pre-pay subscriptions	2 015	1 871	1 871	1 828	1 697	-15,8%
Number of MMS	**1 049**	**1 171**	**1 256**	**1 169**	**1 134**	**8,1%**
Total number of messages sent	**51 788**	**52 729**	**52 595**	**50 273**	**49 284**	**-4,8%**

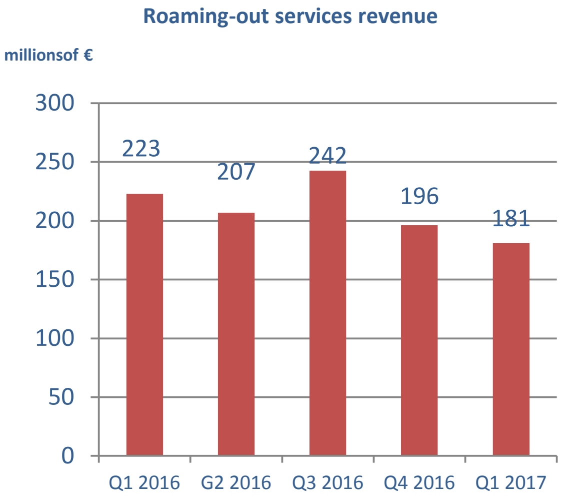


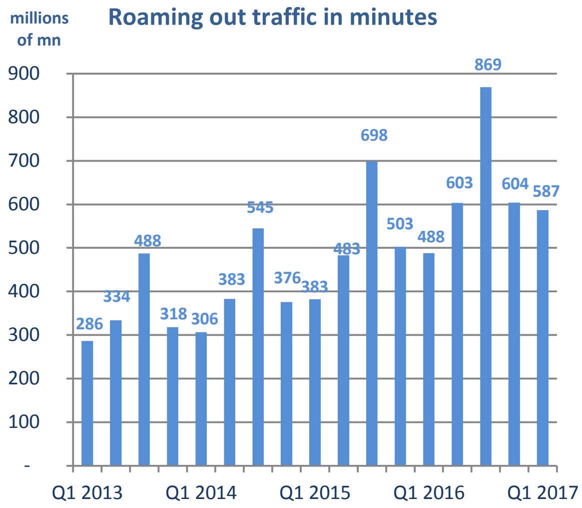


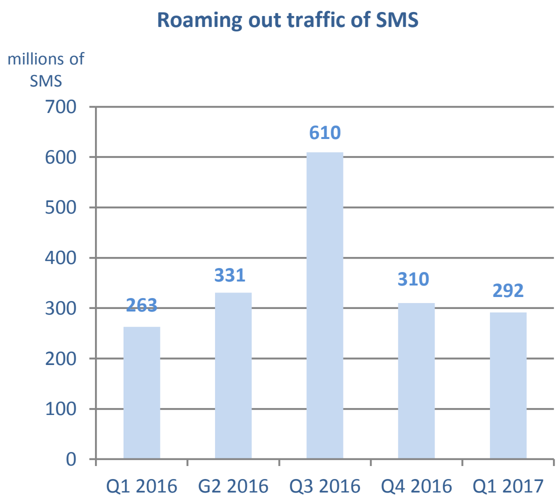
2.1.10 Roaming-out

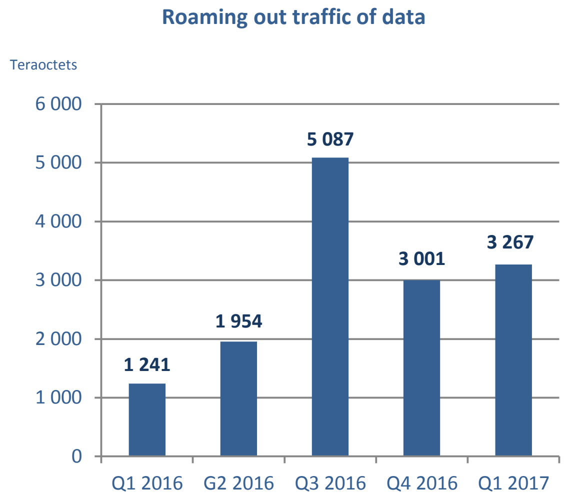
Roaming-out	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Revenue (millions of euros)	223	207	242	196	181	-18,7%
Call volumes (millions of minutes)	488	603	869	604	587	20,3%
SMS volumes (millions)	263	331	610	310	292	10,9%
Data volumes (terabytes)	1 241	1 954	5 087	3 001	3 267	163,3%

Note: roaming out corresponds to mobile services made abroad by customers of French mobile operators. For the revenue, only the services invoiced, specifically or above the fixed price, are counted to the operator's customers for the roaming services, whatever the service (incoming and outgoing voice calls, messaging services, the Internet). Since 30 June 2007, operators have been *obliged to offer the Eurotariff to their customers traveling within the European Union for calls made or received from a mobile phone. For more information on the evolution of retail tariffs, see the Eurotariff note (section 5.2 of this publication).*



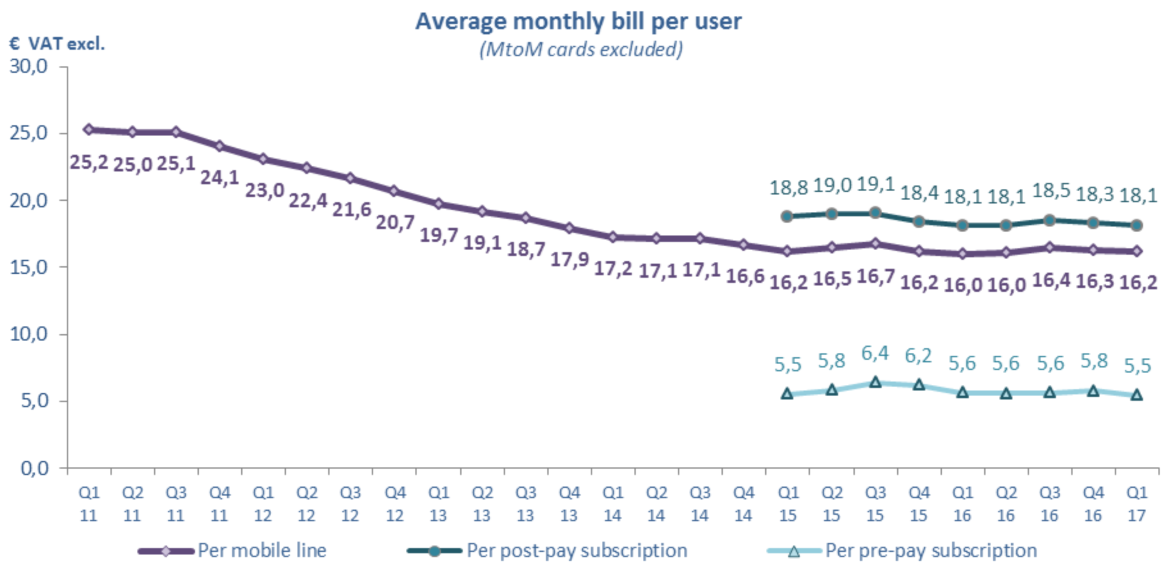


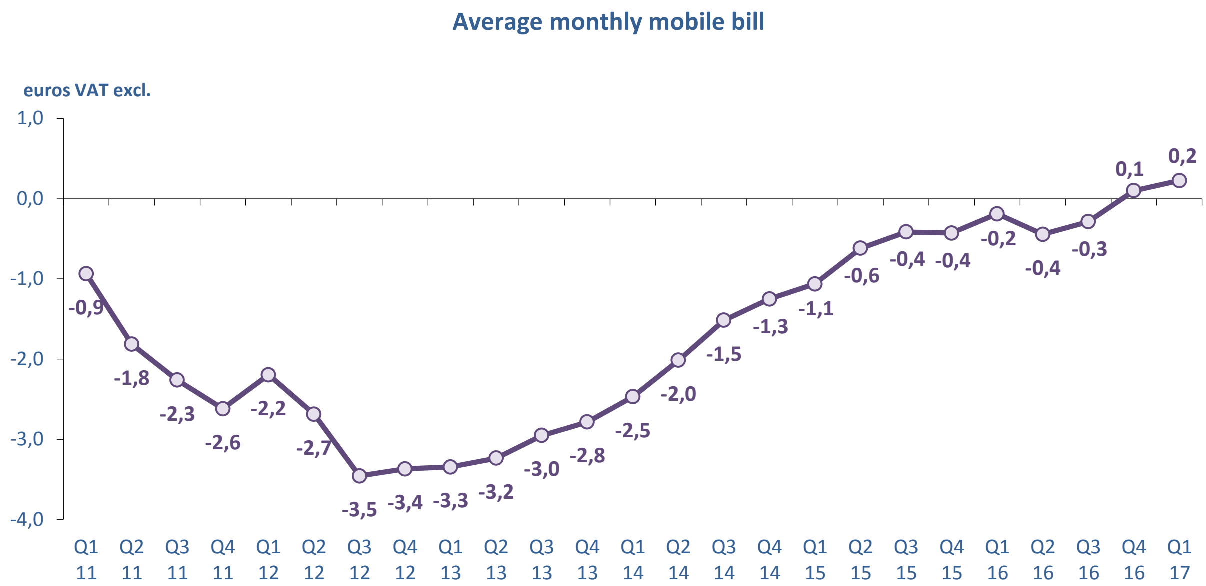




2.1.11 Average monthly bill and traffic per user (MtoM cards excluded)

Average monthly bill (value added services excluded) *(in euros -VAT excluded)*	**Q1 2016**	**Q2 2016**	**Q3 2016**	**Q4 2016**	**Q1 2017**	**change 1Q17/1Q16**
Mobile telephony user	**16,0**	**16,0**	**16,4**	**16,3**	**16,2**	**1,4%**
Post-pay subscriptions	18,1	18,1	18,5	18,3	18,1	0,2%
Pre-pay subscriptions	5,6	5,6	5,6	5,8	5,5	-2,8%





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

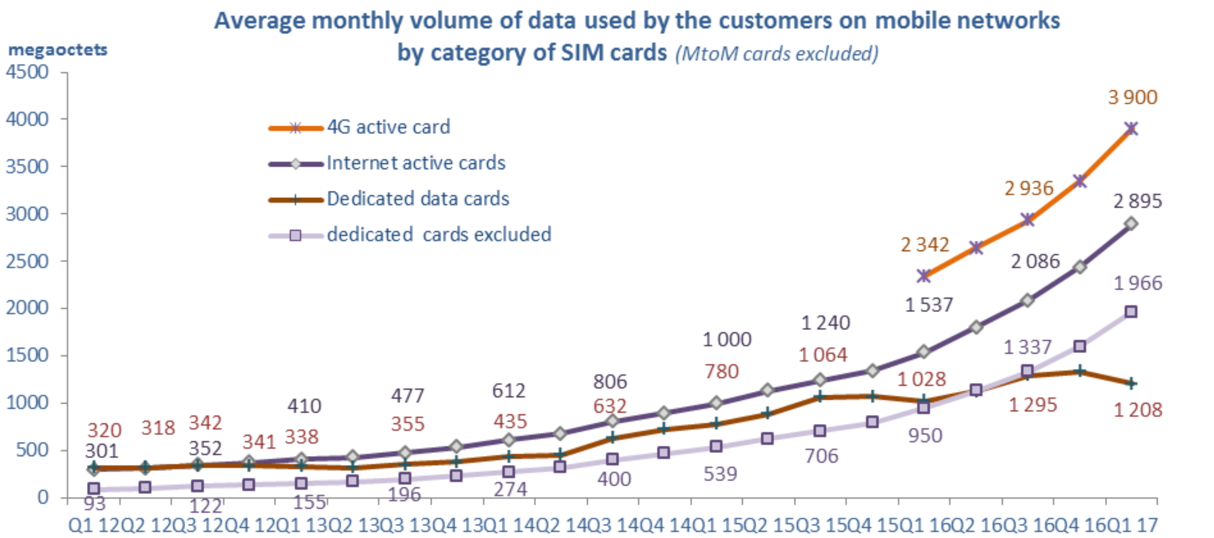
- <u>Average number of mobile cards</u> *for quarter N: [(number of mobile cards (MtoM cards excluded) for quarter N) + (number of mobile cards for quarter N-1(MtoM cards excluded)] / 2.*

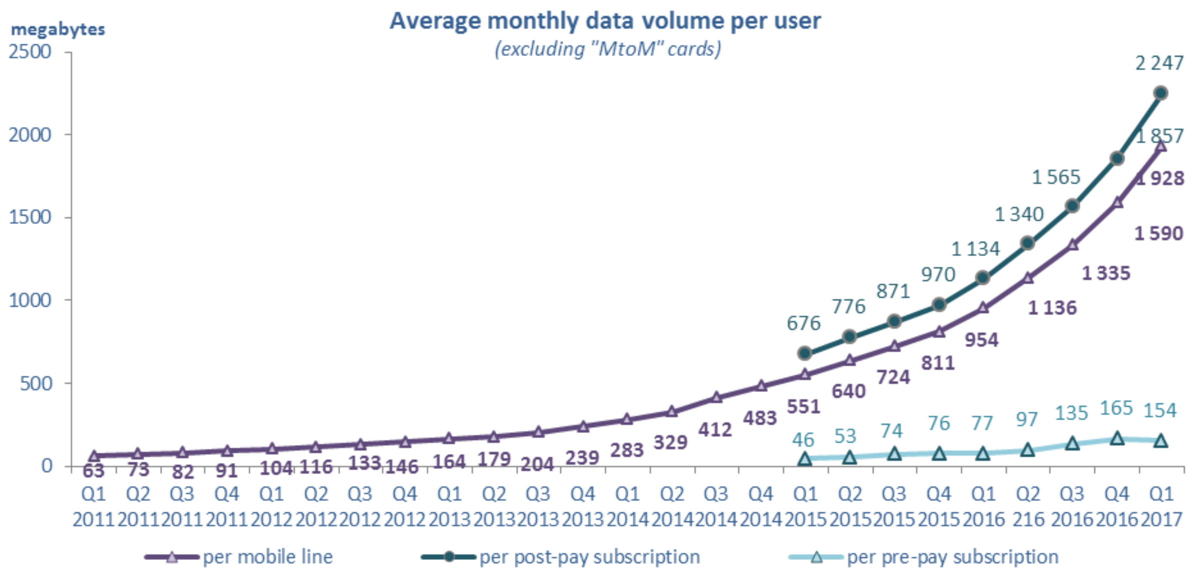
Average monthly traffics of data consumed on mobile networks *(in megabytes)*	**Q1 2016**	**Q2 2016**	**Q3 2016**	**Q4 2016**	**Q1 2017**	**change 1Q17/1Q16**
per mobile operator customer	**954**	**1 136**	**1 335**	**1 590**	**1 928**	**102,0%**
of which dedicated data SIM cards	1 028	1 128	1 295	1 334	1 208	17,5%
of which from other SIM cards	950	1 136	1 337	1 603	1 966	106,8%
of which post-pay subscriptions	1 134	1 340	1 565	1 857	2 247	98,2%
of which pre-pay subscriptions	77	97	135	165	154	99,5%
Per active internet user	**1 537**	**1 801**	**2 086**	**2 436**	**2 895**	**88,3%**
Per 4G active user	**2 342**	**2 641**	**2 936**	**3 348**	**3 900**	**66,5%**

- <u>The average monthly data volume</u> used by mobile customer is calculated by dividing the volume of mobile telephony traffic of data for quarter N by the estimated average number of mobile cards for quarter N, and then by the number of months. SIM cards that can be used only for data (MtoM and data only cards) are not included in the calculations.

- <u>Average number of mobile cards</u> for quarter N: [(number of mobile cards (MtoM cards excluded) for quarter N) + (number of mobile cards for quarter N-1(MtoM cards excluded)] / 2.

- <u>Active 4G cards</u>: use of a 4G mobile network during the last three months.



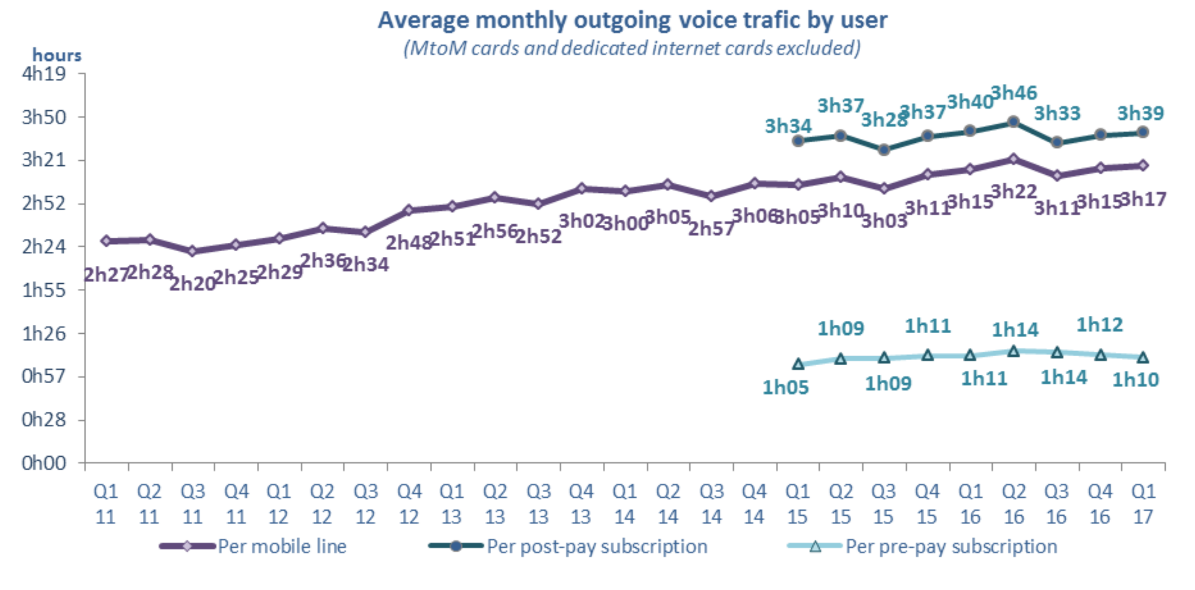


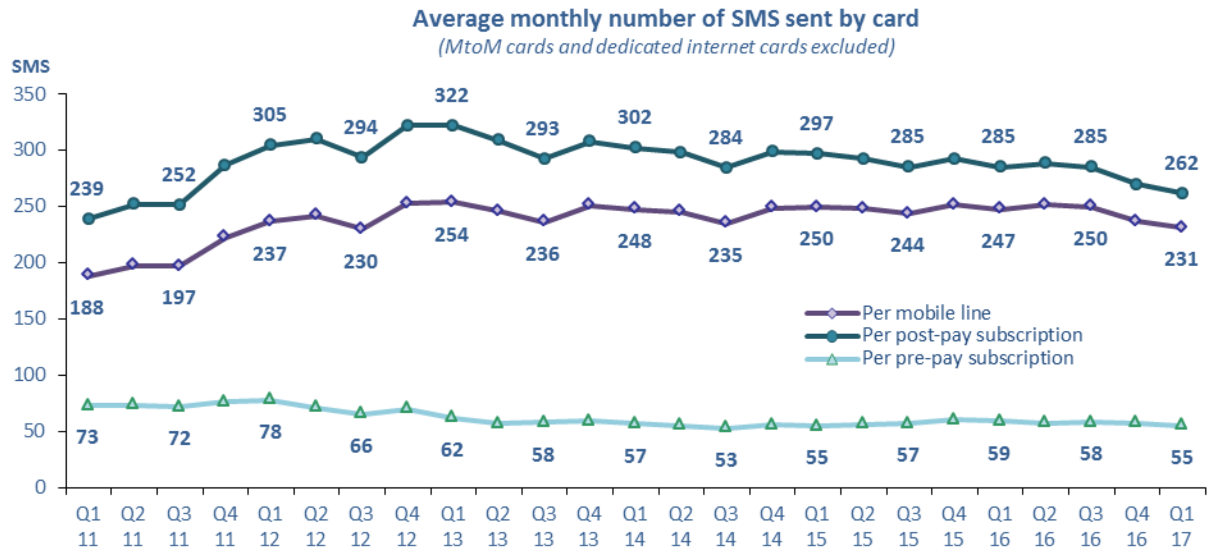
Average monthly outgoing volume *(in hours)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Mobile telephony user	**3h15**	**3h22**	**3h11**	**3h15**	**3h17**	**1,0%**
Post-pay subscriptions	3h40	3h46	3h33	3h38	3h39	-0,3%
Pre-pay subscriptions	1h11	1h14	1h14	1h12	1h10	-1,4%

Note: The average monthly volume of traffic per mobile card is calculated by dividing the volume of mobile telephony traffic (including roaming-out) for quarter N by the estimated average number of mobile cards for quarter N, and then by the number of months. SIM cards that can be used only for data (MtoM and data only cards) are not included in the calculations.

Number of interpersonal SMS sent per user *(units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Number of SMS sent per user during the quarter	**247**	**252**	**250**	**237**	**231**	**-6,5%**
Post-pay subscriptions	285	289	285	270	262	-8,1%
Pre-pay subscriptions	59	57	58	57	55	-6,6%

Note: The average number of SMS messages per card is calculated by dividing the number of SMS messages for quarter N by the estimated average number of cards for quarter N, and then by the number of months. MtoM and exclusive data cards are not taken into account. The number of messages does not include surcharged mini-messages (e.g. sent during a TV program), of which customers send an average of one a month.

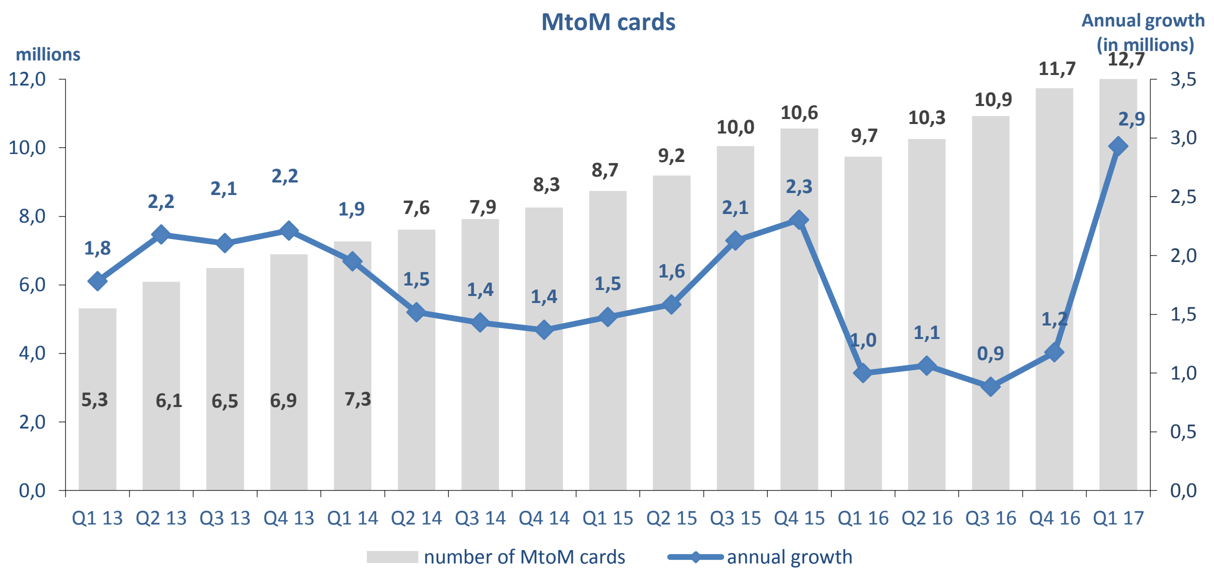




2.2 Internet of things: MtoM cards

MtoM cards	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Revenue of MtoM cards *(millions of € VAT excl.)*	24	27	24	27	28	16,2%
Number of MtoM cards *(units)*	9,740	10,254	10,929	11,737	12,669	30,1%

Note: the number of dedicated machine-to-machine cards (MtoM cards) is defined as the number of SIM cards employed solely for remote machine-to-machine communications (remote management of equipment, terminals and servers, fixed or mobile). These cards are used mainly on the business sector.



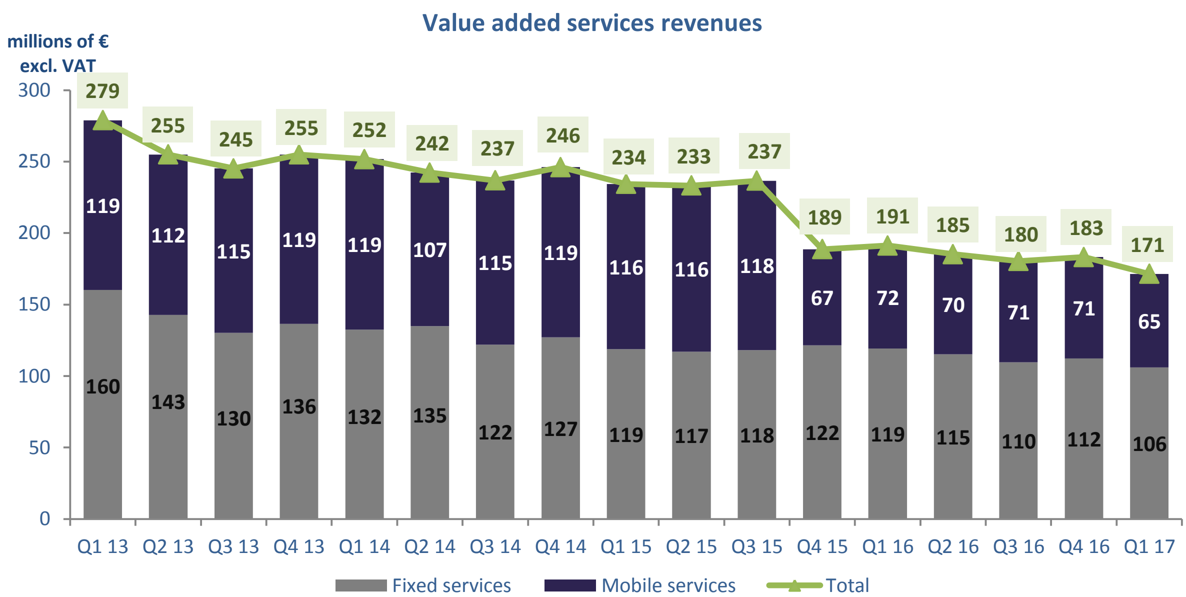
3 Value-added services

Value-added services revenue* *(millions of euros excl.VAT)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Value-added voice services	**191**	**185**	**180**	**183**	**171**	**-10,3%**
From fixed networks	119	115	110	112	106	-11,0%
From mobile networks	72	70	71	71	65	-9,2%
Value-added data services	**90**	**82**	**80**	**73**	**80**	**-11,9%**
Directory services	**23**	**24**	**25**	**26**	**23**	**2,6%**
Value-added services	**304**	**291**	**285**	**282**	**274**	**-9,8%**

Notes :

- 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 push services, chat rooms, weather forecasts, TV game shows, horoscopes, ringtone downloads, etc.

- The pricing reform of calls to value added services, since 1st October 2015, led to distinguish the price of communication (paying the operator) from the price of service (paying the service provider). As a result of this reform, the price of many calls to the SVA is now "unmarked" and the communications part of these calls, previously charged and included in the SVA's revenue, is now directly taken from mobile packages.



Value-added voice services volumes *(millions of minutes)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Calls from fixed network	949	990	943	928	935	-1,4%
Calls from mobile network	440	436	443	463	417	-5,1%
Total call volumes	**1 388**	**1 426**	**1 386**	**1 392**	**1 352**	**-2,6%**

Number of calls from directory services *(millions)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Number of calls (millions of units)	**4**	**4**	**4**	**4**	**4**	**12,6%**

Note: are considered as directory services numbers: 118xyz numbers and short numbers giving access to directory services.

4 Other operators revenue

4.1 Hosting and call center management services

Revenue *(millions of euros excl.VAT)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Hosting and call centre management	**86**	**84**	**83**	**89**	**87**	**1,3%**

4.2 Terminals and equipments

Revenue from terminals and equipment *(millions of euros excl.VAT)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
linked to fixed telephony & Internet services	167	169	162	179	165	-1,4%
linked to mobile services	505	484	555	709	486	-3,9%
Terminals and equipment	**673**	**654**	**717**	**888**	**651**	**-3,3%**

Note: the revenue includes commissions paid to distributors.

5 The intermediate market: interconnection and wholesale market

5.1 The overall market

Interconnection services *(millions of euros)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Fixed operators	**1 310**	**1 326**	**1 326**	***1 328***	**1 292**	**-1,3%**
of which telephony services (incl VGA) *	540	551	555	541	490	-9,3%
of which broadband services	650	644	636	*652*	664	2,2%
of which Wholesales leased lined product	120	131	135	135	139	15,1%
Mobile operators	**662**	**667**	**675**	**647**	**637**	**-3,8%**
of which voice termination (national and international)	201	203	179	189	188	-6,5%
of which SMS/MMS termination	394	383	381	379	372	-5,6%
Roaming in	66	81	115	78	76	15,1%
Revenue (millions of euros)	**1 972**	**1 993**	**2 002**	**1 975**	**1 929**	**-2,2%**

Interconnection services *(millions of minutes)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Fixed operators	26 250	25 218	22 916	*23 960*	23 677	-9,8%
Mobile operators	24 710	25 239	23 591	24 710	25 093	1,5%
Traffic	**50 960**	**50 457**	**46 508**	***48 671***	**48 770**	**-4,3%**
Incoming SMS	**32 954**	**31 650**	**36 429**	**37 173**	**30 659**	**-7,0%**

Definitions and tariffs evolutions on the wholesale market

- 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 revenue 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 includes fixed income such as charges for connection links and intercarrier services).

- Note that the interconnection figures shown above might be counted twice, particularly in the case of fixed operators.

- From January 1st 2017, the price for call termination on fixed networks is set to 0.077c€/minute against 0.078c€/min since January 1st 2016.

- Broadband wholesale services include income from unbundling and bitstream or bitstream equivalent services. The tariff for total unbundling is set at €9.45 since March 1st 2017 against previously at €9.10 since March 1st 2016 (and 9.05€ in 2015, €9.02 in 2014). The tariff for partial unbundling is set to €1.77.

- Mobile operator's interconnection services include income from call termination (voice and SMS) and the roaming in. Are not included revenue from services to MVNO/full MVNO or operators in national roaming (about 1.1billion of euros for the overall of year 2016).

- From January 1st 2017, the price for call termination on mobile networks is set to 0.074c€/minute for all the operators against 0.076c€/min since January 1st 2016.

- From July 1st 2013, the price for SMS termination is set to 1c€/SMS for all the operators.

For price details, see: https://www.arcep.fr/index.php?id=8080

Unbundling *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Shared unbundled lines	0,595	0,578	0,561	0,540	0,517	-13,1%
Fully unbundled lines	11,580	11,543	11,583	11,594	11,588	0,1%
Total number of unbundled lines	**12,175**	**12,121**	**12,144**	**12,134**	**12,105**	**-0,6%**

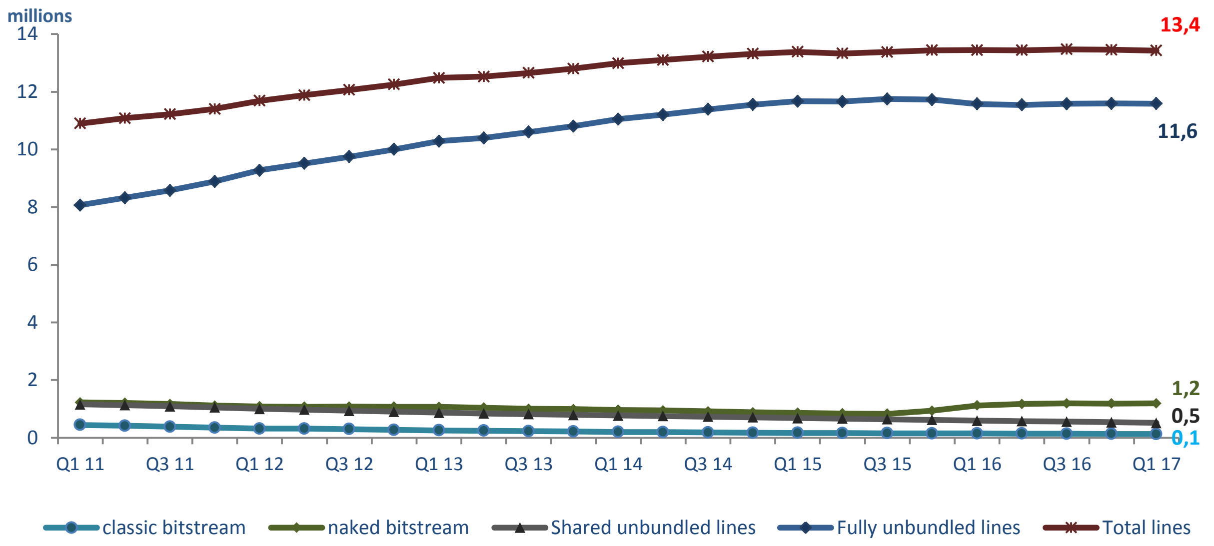
"Bitstream" lines *(millions of units)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
"Naked bistream"	1,121	1,173	1,190	1,189	1,194	6,5%
"Classic bitstream"	0,151	0,145	0,138	0,133	0,130	-14,3%
Total number of "bitstream" lines	**1,272**	**1,318**	**1,328**	**1,322**	**1,324**	**4,1%**

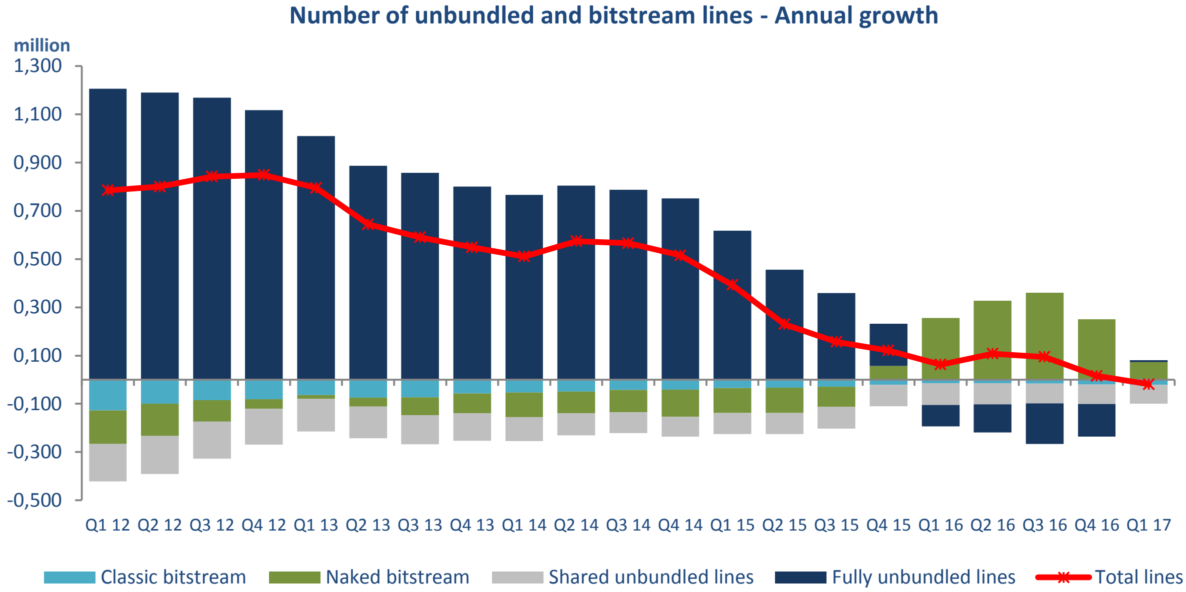
Note: Bitstream is a wholesale solution marketed by the incumbent carrier that allows alternative operators to provide broadband access services to their customers who are located in areas where unbundling is not available, by connecting to one of the incumbent carrier's regional or national connection points.

Number of FttH subscriptions *via* a wholesale offer *(in millions)*	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Subscriptions via a passive sharing offer	0,544	0,584	0,672	0,785	0,894	64,3%
Subscriptions via an active wholesale access product	0,056	0,058	0,055	0,077	0,079	41,1%
Total number of subscriptions via a wholesale offer	**0,600**	**0,642**	**0,727**	**0,862**	**0,973**	**62,2%**

For more information see: https://www.arcep.fr/fileadmin/reprise/observatoire/hd-thd-gros/t1-2017/Obs_HD-THD_T1-2017-deploiements.pdf

Number of unbundled and bitstream lines





5.2 Mobile operators « Roaming-in »

Roaming in	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	change 1Q17/1Q16
Traffic (millions of minutes)	666	844	1 020	812	850	27,7%
Traffic of SMS (millions)	178	213	316	161	169	-5,1%
Traffic of data (teraoctets)	1 228	2 042	3 693	2 252	2 874	134,2%

Notes: this market segment is part of the overall market (cf. section 5.1).

- *Roaming-in refers to French mobile operators' handling of the incoming and outgoing calls made in France by customers of a foreign mobile operator. The revenue corresponds to the remuneration between the two operators. The relationship between call revenue/volume does not correspond to any set price, nor to any price that is billed to customers.*
- *Mobile operators have been subject to a ceiling on international roaming tariffs inside the EU since June 2007.*
- *As a result, from 1st July 2014 to 30th April 2016, these Euro tariffs are settled on the retail market to 0.19€ excl. VAT per minute for calls made from abroad, 0.05€ excl. VAT for calls received when abroad, 0.06 € excl.VAT per SMS and 20c€ per mega octets for mobile internet (see table).*
- *From April 30, 2016, the ceiling of the retail price for roaming is done by comparison with the national rate, that is, the additional costs compared to national rates cannot exceed the thresholds fixed by the regulation. The maximum amounts of additional costs compared to national rates are: +5 c€ per minute for the calls made from abroad, +1,14 c€ per minute for calls received abroad, +2 c€ HT for SMS and +5 c€ /Mo for mobile internet.*

- *After June 15, 2017, prices of roaming in Europe will be aligned with national prices.*

(hors TVA)	Au 1er juillet 2014 (*eurotarifs*)	Au 30 avril 2016 (montant maximal des frais supplémentaires)	Au 15 juin 2017
Appels passés (min)	19 c€	Tarif national (+5c€)	Tarif national (pas de frais supplémentaires pour l'itinérance), dans la limite d'un usage raisonnable
Appels reçus (min)	5 c€	Tarif national (+1,14c€)	
Messages envoyés (SMS)	6 c€	Tarif national (+2c€)	
Internet (Mo)	20 c€	Tarif national (+5c€)	

- *On the wholesale market the tariffs have been set since 1st July 2014 to 2cts€ per message for SMS and to 5c€ per minute for voice calls (against 3cts€ per message for SMS and to 10cts€ per minute for voice calls for the period from 1rst July 2013 to 30 June 2014). The tariff is set to 5cts€ per Mo for mobile internet from 1st July 2014 (against 15 cts€ for the period from 1rst July 2013 to 30 June 2014).*

More information at http://www.arcep.fr/index.php?id=8710.