autorité de régulation des communications électroniques et des postes

RÉPUBLIQUE FRANCAISE

ELECTRONIC COMMUNICATIONS SERVICES IN FRANCE

3RD QUARTER 2016

OBSERVATORY OF THE ELECTRONIC COMMUNICATIONS MARKET

05 JANUARY 2017

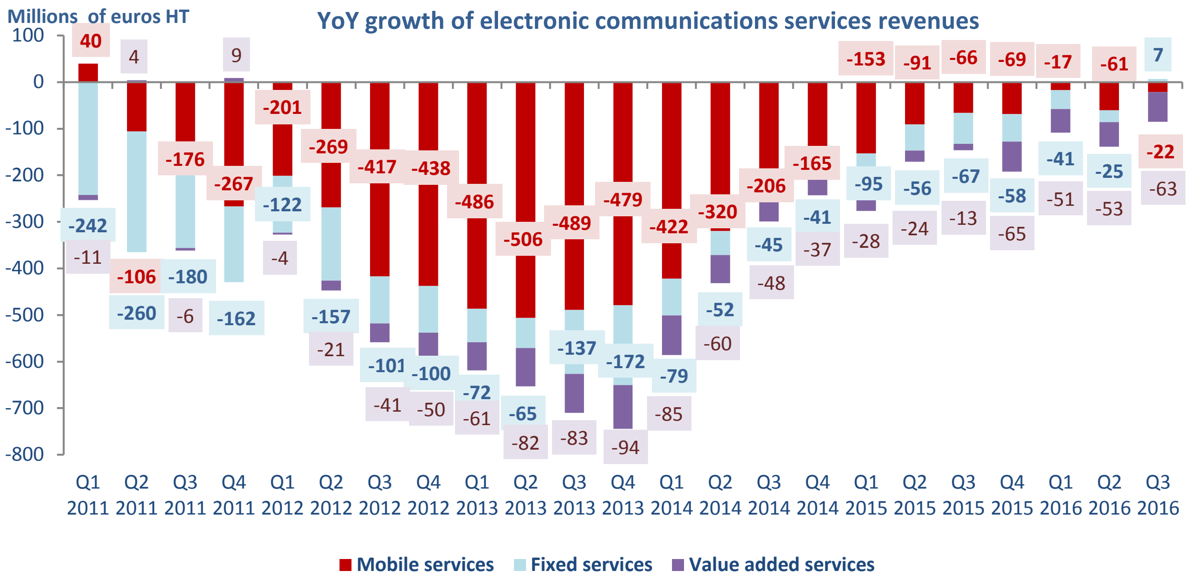
ISSN n°2258-3106

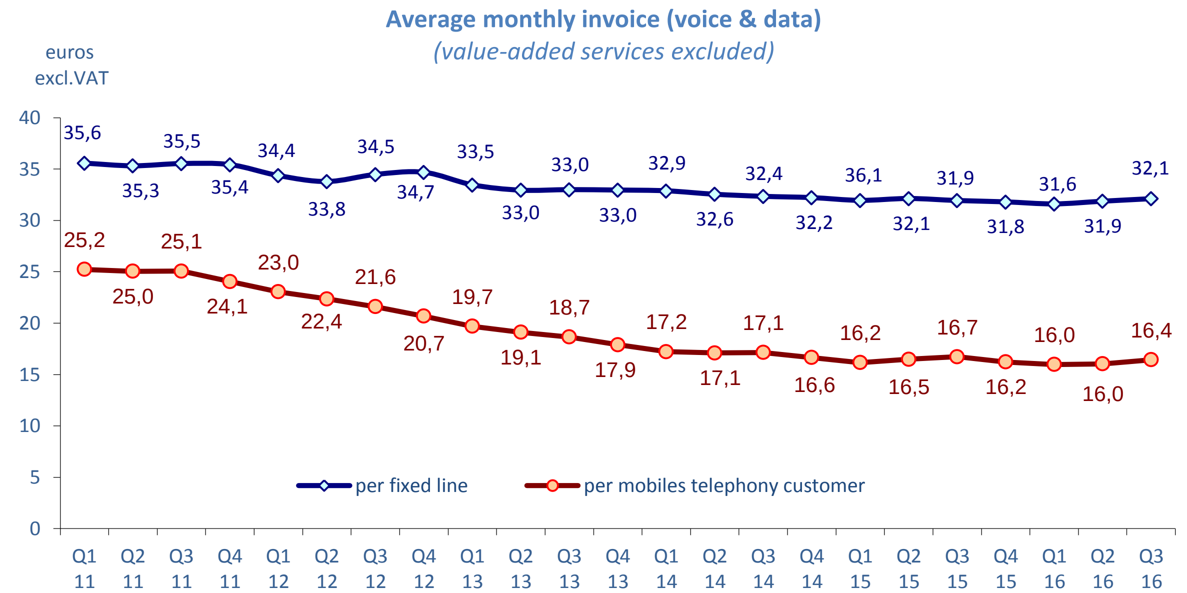
Synthesis

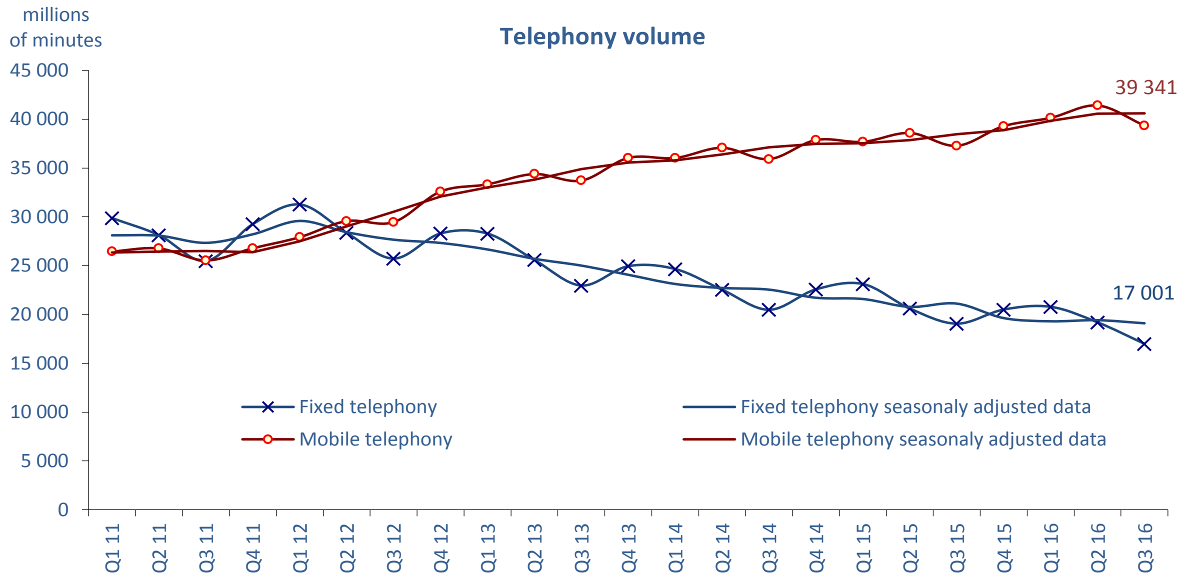
Revenue on the retail market (millions of euros excl.VAT)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Fixed services (capacity services included)	4 231	*4 250*	*4 206*	*4 231*	4 237	0,2%
Mobile services (MtoM included)	3 607	3 525	3 474	3 486	3 585	-0,6%
Advanced services and directory services	347	303	304	291	284	-18,2%
Electronic communications services	**8 185**	***8 078***	***7 984***	***8 009***	**8 107**	**-1,0%**
Others revenues	827	1 023	789	786	839	1,5%
Entire market	**9 012**	**9 100**	**8 773**	**8 795**	**8 946**	**-0,7%**

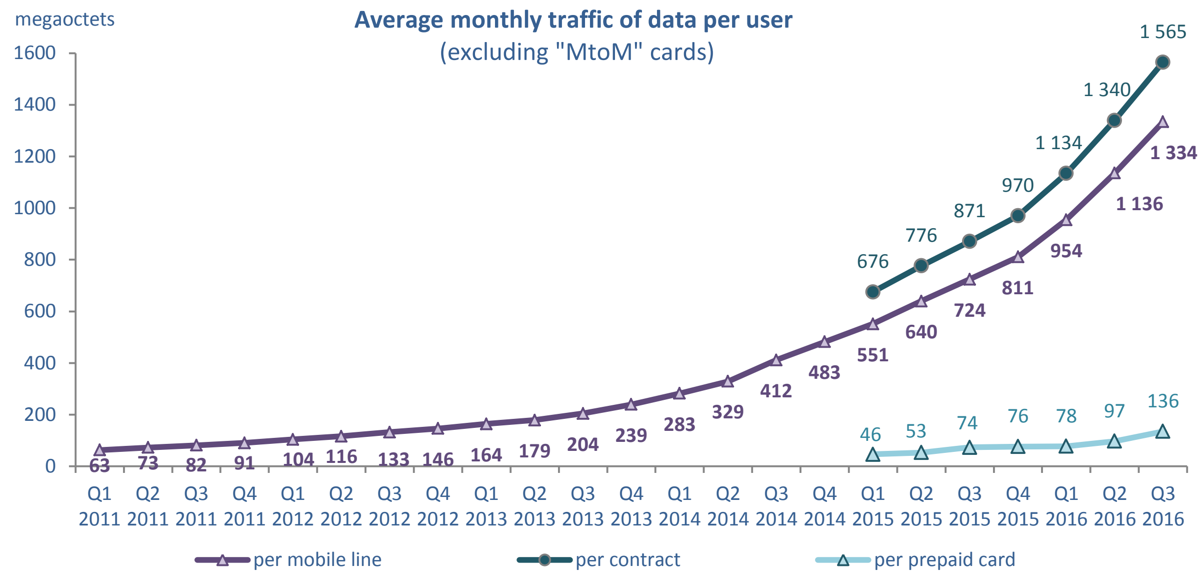
adjusted figures are in italics

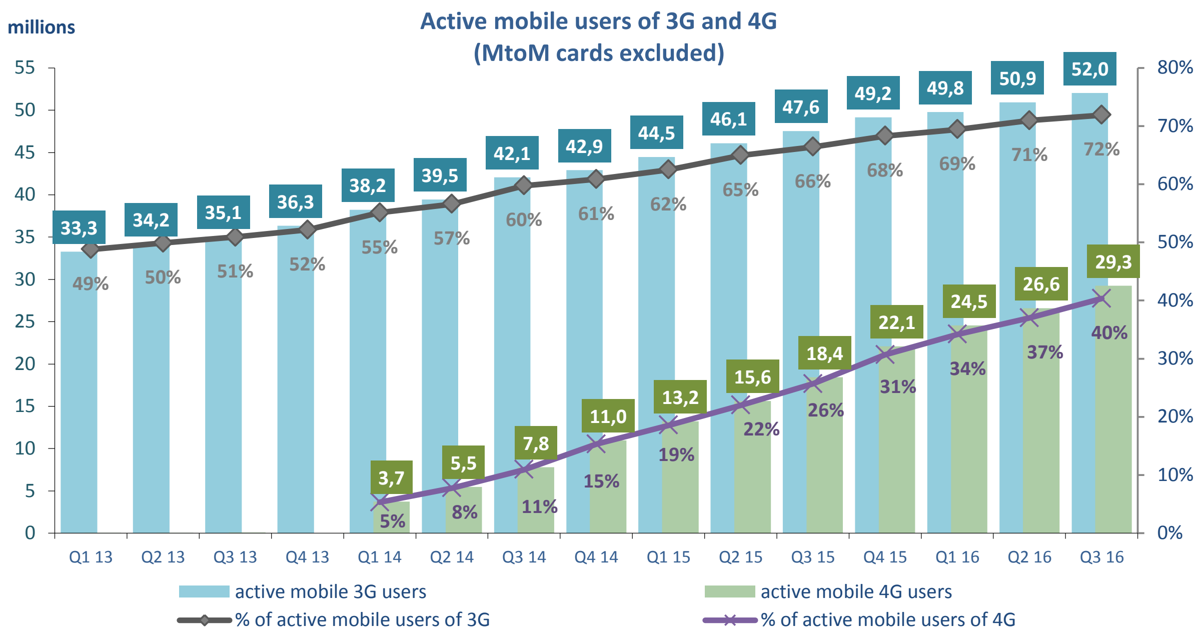
Note : Les revenus annexes ne relèvent pas à proprement parler du marché des services de communications électroniques. La contribution des opérateurs déclarés ne donne qu'une vision partielle de ces segments de marché. Cette rubrique couvre les revenus liés à la vente et à la location de terminaux et équipements (fixes, mobiles et internet), de l'hébergement et de la gestion de centres d'appels, des annuaires papier, de la publicité et des cessions de fichiers.



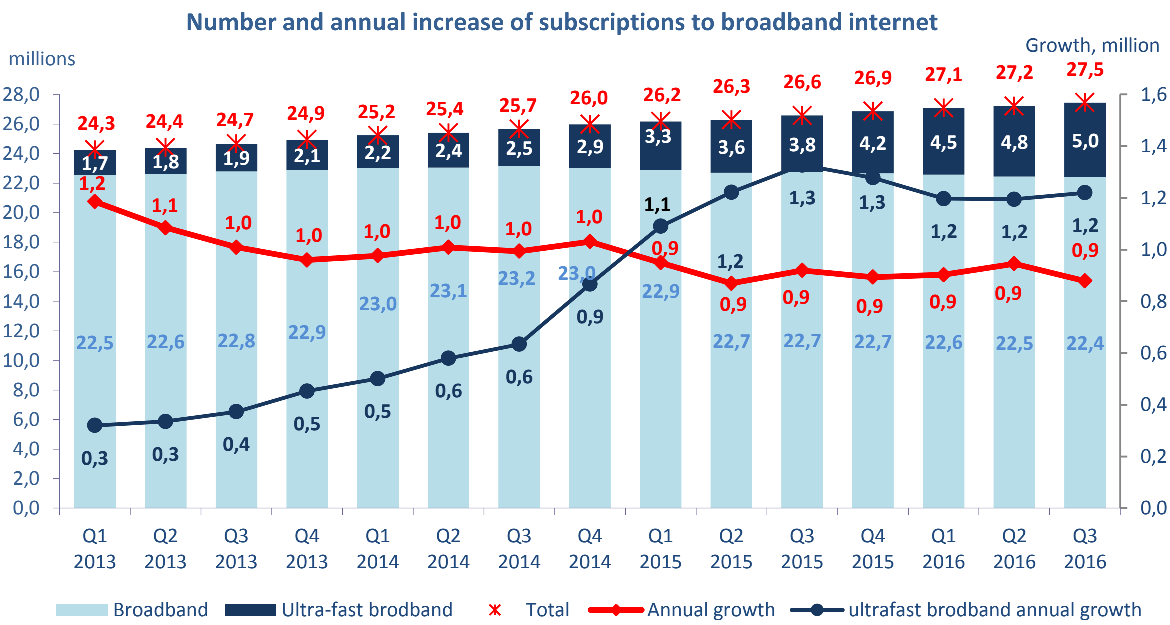



millions of minutes
Telephony volume
45 000
40 000
35 000
30 000
25 000
20 000
15 000
10 000
5 000
0
39 341
17 001
Fixed telephony
Mobile telephony
Fixed telephony seasonaly adjusted data
Mobile telephony seasonaly adjusted data
Q1 11
Q2 11
Q3 11
Q4 11
Q1 12
Q2 12
Q3 12
Q4 12
Q1 13
Q2 13
Q3 13
Q4 13
Q1 14
Q2 14
Q3 14
Q4 14
Q1 15
Q2 15
Q3 15
Q4 15
Q1 16
Q2 16
Q3 16


megaoctets
Average monthly traffic of data per user
(excluding "MtoM" cards)
1600
1400
1200
1000
800
600
400
200
0
1 565
1 340
1 134
970
871
776
676
1 334
1 136
954
811
724
640
551
483
412
329
283
239
204
179
164
146
133
116
104
91
82
73
63
136
97
78
76
74
53
46
Q1 2011
Q2 2011
Q3 2011
Q4 2011
Q1 2012
Q2 2012
Q3 2012
Q4 2012
Q1 2013
Q2 2013
Q3 2013
Q4 2013
Q1 2014
Q2 2014
Q3 2014
Q4 2014
Q1 2015
Q2 2015
Q3 2015
Q4 2015
Q1 2016
Q2 2016
Q3 2016
per mobile line
per contract
per prepaid card



Active mobile users of 3G and 4G
(MtoM cards excluded)
millions
active mobile 3G users
active mobile 4G users
% of active mobile users of 3G
% of active mobile users of 4G



Number and annual increase of subscriptions to broadband internet
millions
Growth, million
Broadband
Ultra-fast brodband
Total
Annual growth
ultrafast brodband annual growth

Contents

1 Fixed networks services – retail services

1.1 Internet access and telephony services

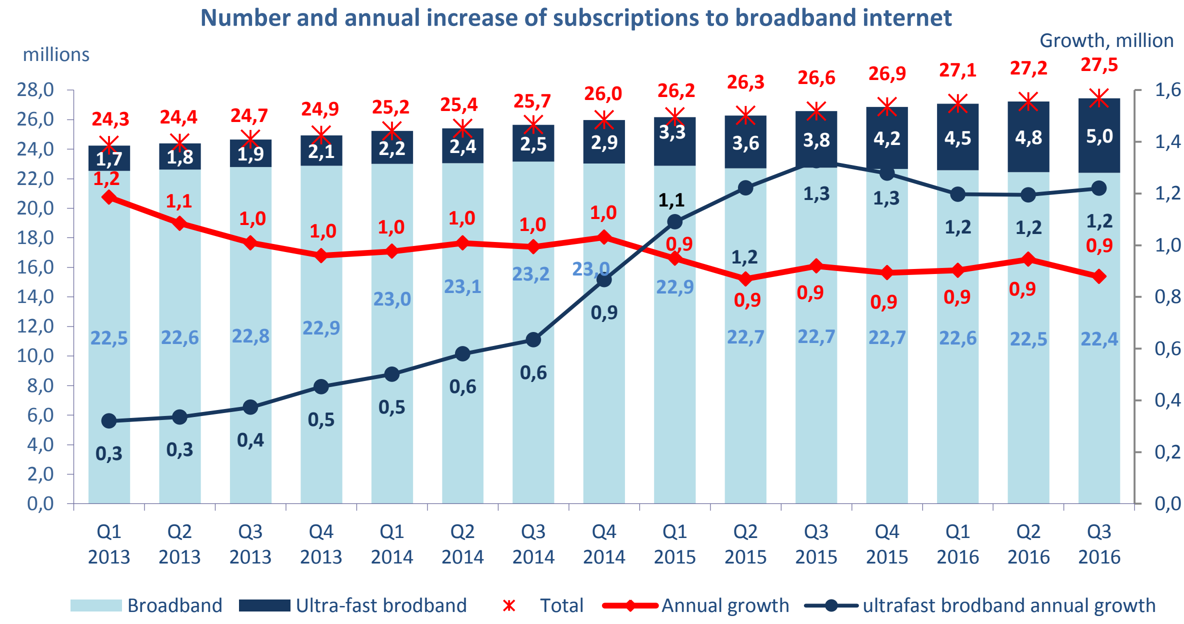
1.1.1 Internet access (broadband and ultra-fast broadband)

Internet subscriptions (millions of units)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Broadband	**22,750**	***22,657***	***22,574***	***22,451***	**22,409**	**-1,5%**
of wich xDSL	22,248	22,146	22,064	21,940	21,891	-1,6%
of wich other broadband access	0,502	0,510	0,510	0,510	0,518	3,2%
Ultra-fast broadband	**3,824**	***4,211***	***4,506***	***4,772***	**5,044**	**31,9%**
of which with a flow rate superior to 100 Mbit/s	**2,392**	**2,630**	**2,764**	**2,962**	**3,167**	**32,4%**
of wich fiber	1,271	1,443	1,603	1,764	1,927	51,6%
of wich coaxial cable	1,121	1,187	1,161	1,198	1,240	10,6%
of which with a flow rate between 30 & 100 Mbit/s (VDSL2 and	**1,432**	**1,582**	**1,742**	**1,810**	**1,877**	**31,1%**
Internet subscriptions	**26,574**	**26,868**	**27,080**	**27,223**	**27,453**	**3,3%**

Notes:

- *Ultra-fast broadband: are counted as very high-speed subscriptions access to the internet with a flow-rate equal or greater to 30 Mbit/s. These categories include subscriptions on fiber to the home or to the office networks (FttH, FttO), on "hybrid fiber coaxial cable" networks (HFC), on optical fiber with coaxial cable termination networks (FttLA), and VDSL2 subscriptions with a flow-rate equal or greater to 30 Mbit/s. Other subscriptions with a flow rate equal or greater than to 100 Mbit/s is also published.*
- *There can be a delay between the delivery of an offer in 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, but whose access to the lines in indirect distribution opened October 27, 2014.*

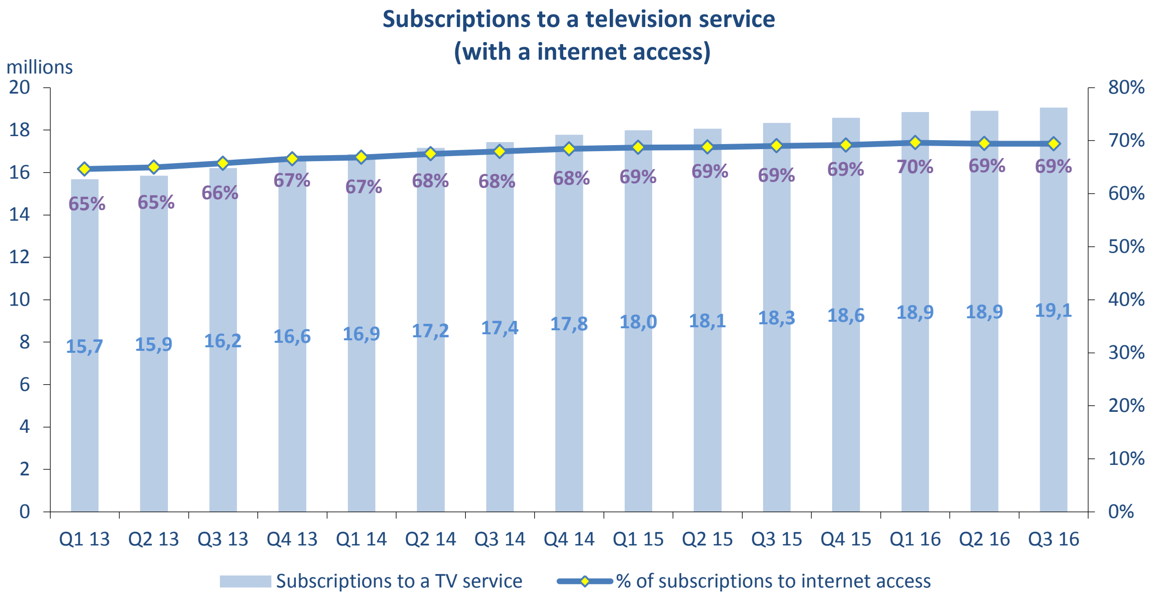
Overseas subscriptions to internet (millions of units)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Broadband and fiber	603	607	612	618	624	3,5%



1.1.2 TV subscription tied to internet access

TV subscriptions tied to internet access (millions)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
TV subscriptions tied to internet access	18,338	18,579	18,854	18,902	19,054	3,9%
of which subscriptions to TV on DSL	13,666	13,803	13,907	13,983	14,069	3,0%
% of subscriptions to television services	69,0%	69,2%	69,6%	69,4%	69,4%	+0,4 pt

Note : Taken into account are those subscriptions that were subscribed to separately or as part of bundled offer that includes access to one or several other services aside from TV (Internet, telephony).

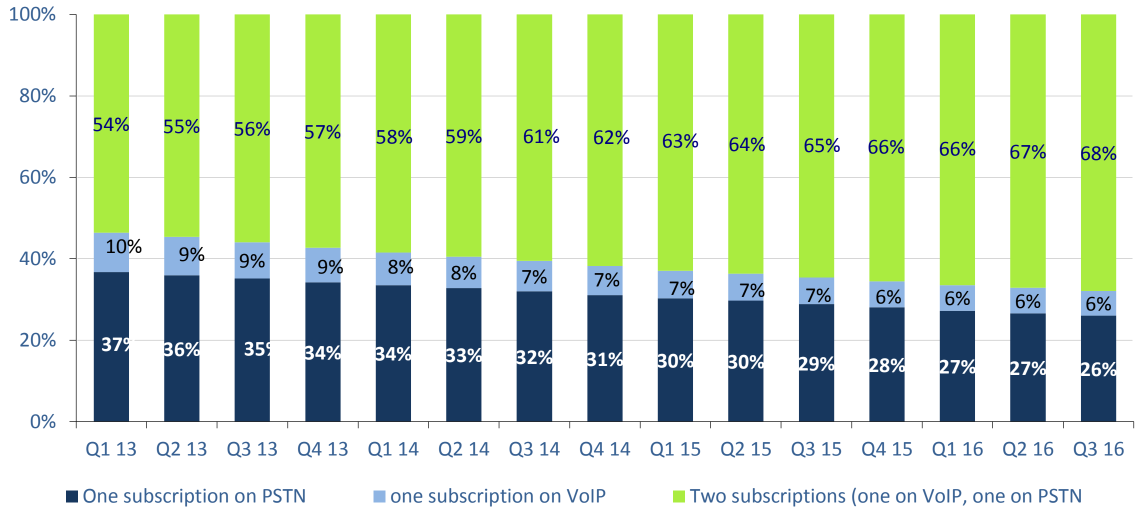


1.1.3 Number of fixed lines

Number of fixed lines (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Number of fixed lines	*36,708*	*36,838*	*36,778*	*36,713*	36,761	0,1%

adjusted figures are in italics

Breakdown of fixed lines by subscriptions to telephony services



1.1.4 Portability (fixed numbers)

Portability (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Number of fixed numbers ported during the quarter	582	573	633	602	632	8,7%

1.1.5 Number of subscriptions to a telephone service

Number of subscriptions to telephone service (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Subscription on narrow band access	12,999	12,678	12,336	12,067	11,791	-9,3%
Access resales	1,594	1,580	1,555	1,550	1,524	-4,3%
Subscription on broadband access	*26,113*	*26,494*	*26,760*	*26,962*	27,200	4,2%
DSL lines without narrowband access	*20,626*	*20,790*	*20,885*	*20,875*	21,041	2,0%
Number of subscriptions to telephone service	***39,112***	***39,172***	***39,096***	***39,029***	**38,991**	**-0,3%**

adjusted figures are in italics

Note: a subscription to telephone service in VoIP on xDSL without PSTN subscriptions 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".

Carrier selection (millions of units)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Number of indirect connections	*0,841*	*0,781*	*0,733*	*0,703*	0,679	-19,3%

adjusted figures are in italics

Note: the call-by-call selection base includes only active subscriptions; the pre-selection base includes only subscriptions that are in service, minus cancellations. The call-by-call and pre-selection customer bases do not include wholesale line rental (VGAST) subscriptions.

1.1.6 Revenue and traffic of subscriptions and calls (dial-up internet, public payphones and calling cards excluded)

Narrow band access revenue (millions of euros excl. VAT)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Access fees, subscriptions and additional services	*692*	*671*	*650*	*634*	627	-9,4%

adjusted figures are in italics

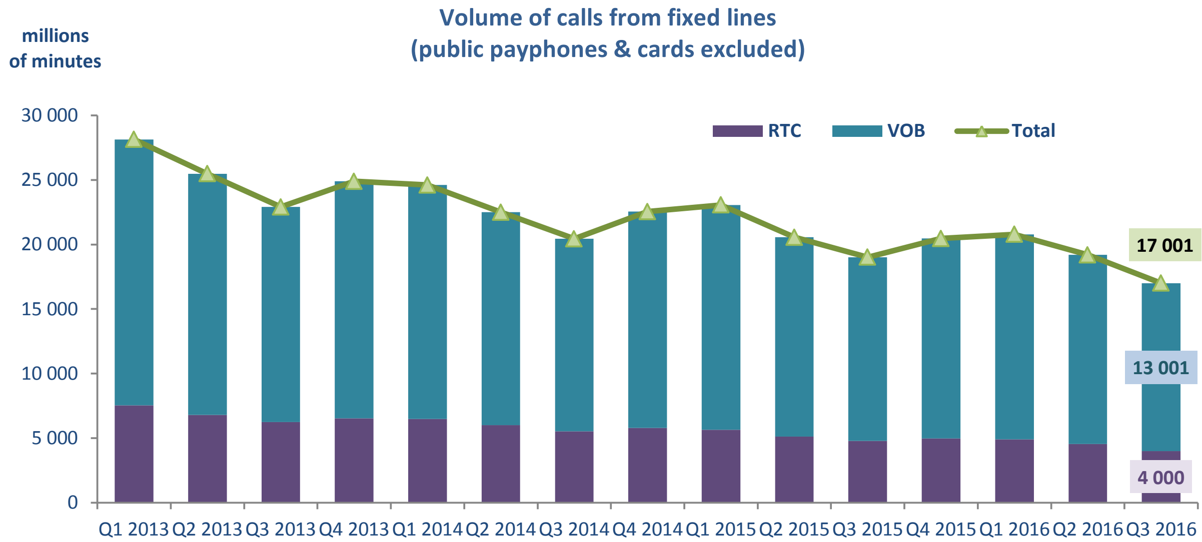
Note: in addition to income earned from providing access to a telephone service, access revenue includes income from IP telephony subscriptions and from additional services (caller ID, etc...).

Revenue of calls (millions of euros excl.VAT)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
National calls	160	163	170	159	155	-3,2%
International calls	67	59	57	57	55	-17,2%
Calls to mobiles	110	113	108	112	98	-11,3%
All calls from fixed lines	**336**	**334**	**335**	**328**	**308**	**-8,6%**
Of which calls originating on PSTN/ISDN	215	218	220	208	195	-9,1%
Of which calls originating on Voice over broadband traffic	122	116	116	120	112	-7,8%

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).

Traffics (millions of minutes)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
National calls	*12 593*	*13 936*	14 125	12 782	11 211	-11,0%
International calls	2 235	2 221	2 260	2 148	1 911	-14,5%
Calls to mobiles	4 185	*4 304*	4 400	4 266	3 878	-7,3%
All calls from fixed lines	***19 013***	***20 461***	**20 786**	***19 196***	**17 001**	**-10,6%**
Of which calls originating on PSTN/ISDN	*4 779*	*4 966*	4 897	*4 547*	4 000	-16,3%
Of which calls originating on VoIP services	*14 234*	*15 495*	15 889	14 649	13 001	-8,7%

adjusted figures are in italics

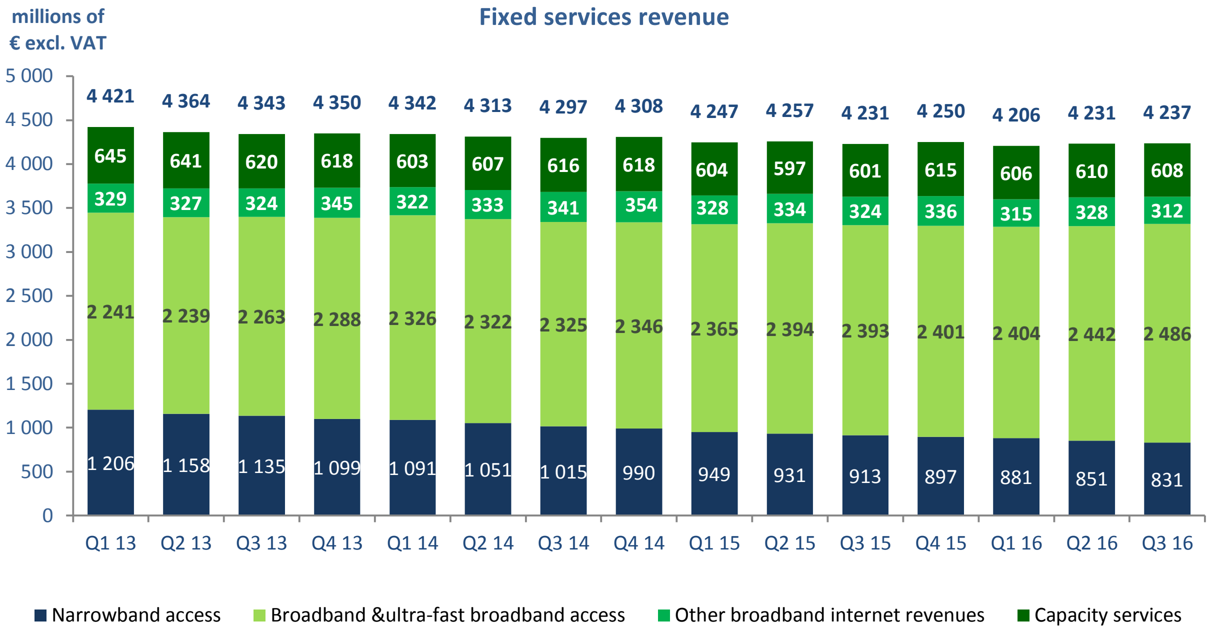


1.2 Revenue of fixed services (retail leased lines and data networking included)

Revenue of fixed networks services (millions of euros excl.VAT)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Narrowband Revenue	**913**	**897**	**881**	**851**	**831**	**-8,9%**
Broadband Revenue	***2 718***	***2 737***	***2 719***	***2 770***	**2 798**	**3,0%**
Broadband Internet and VoB subscriptions	*2 393*	*2 401*	*2 404*	*2 442*	2 486	3,9%
Other Internet revenue	324	336	315	328	312	-3,8%
Retail leased lines and data networking	**601**	**615**	**606**	**610**	**608**	**1,2%**
Total	***4 231***	***4 250***	***4 206***	***4 231***	**4 237**	**0,2%**

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".



1.3 Average revenue and traffic per user

Note : more than one subsciption to telephony service can exist on a fixed line. For more detail, see the annex at the end of this document.

1.3.1 Per fixed line

Average monthly revenue (value added services exclude) (in euros -VAT excluded)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Per fixed line : access, communications and Internet	31,9	31,8	31,6	31,9	32,1	0,6%
Per fixed lines	2h52	3h05	3h08	2h54	2h34	-10,8%

Notes:
The average invoice per fixed line now refers to what customers pay each month for their telephony and Internet services. The revenue included is 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.
Revenue 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.

1.3.2 By subscription to fixed services

Average monthly revenue per customer (in euros -VAT excluded)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Fixed PSTN/ISDN telephony user	23,0	23,1	23,2	23,0	23,0	0,0%
Internet & telephony over broadband	*32,9*	*32,7*	*32,4*	*32,8*	33,2	0,8%

adjusted figures are in italics

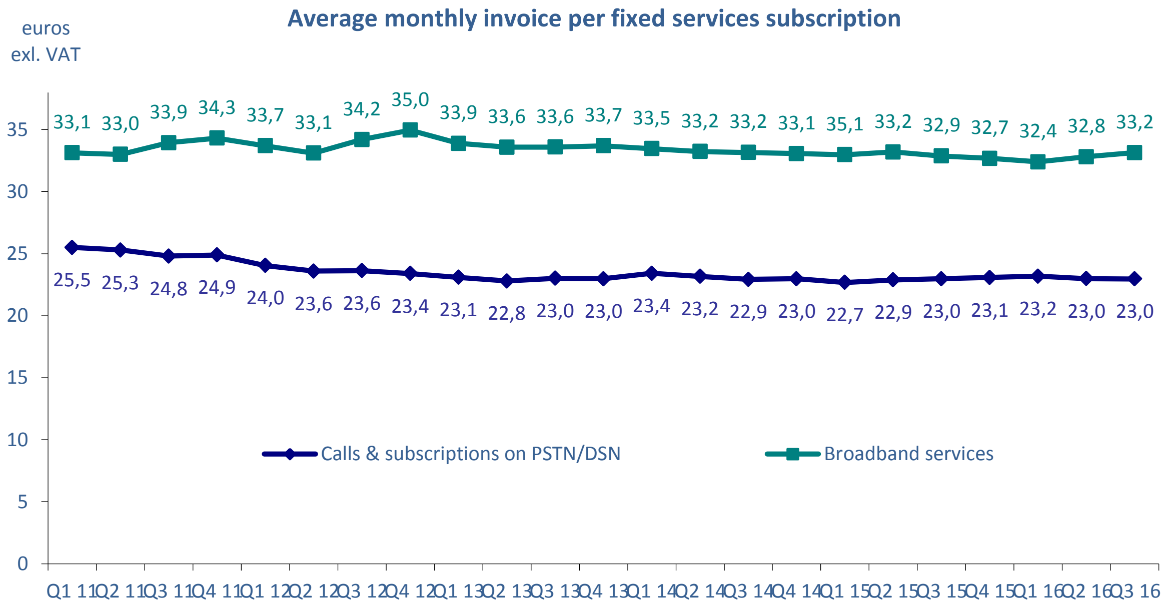
Notes:

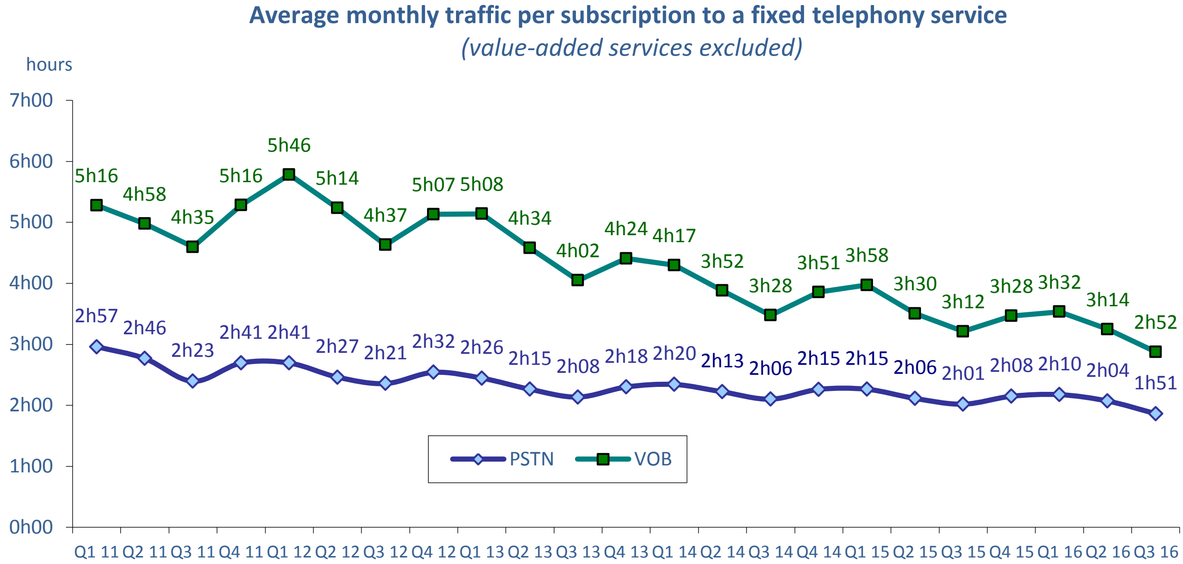
- <u>The average monthly bill for a PSTN line</u> is calculated by dividing the revenue earned on a PSTN based fixed line subscription and calls (i.e. excluding VOB) for Quarter Q by the estimated average customer base for Quarter Q, then dividing the result by three.

- <u>The average monthly bill for a broadband or ultra-fast broadband</u> access (name 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 3.

Average monthly traffic per customer (in hours)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Fixed PSTN/ISDN telephony user	2h01	2h08	2h10	2h04	1h51	-7,7%
Fixed VOB telephony user	3h12	3h28	3h32	3h14	2h52	-10,5%

- The average monthly volume per PSTN or VOB fixed line 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 PSTN or VOB customer base for Quarter Q, then dividing the result by three.





1.4 Dial-up internet, public payphones and calling cards

Other fixed services - narrowband	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Revenue (internet dial-up, public payphone, cards) *(millions of euros excl.VAT)*	7	9	11	9	10	48,4%
Number of public payphones at end of quarter (units)	52 799	45 730	38 500	31 232	24 123	-54,3%

2 Services on mobiles networks – retail market

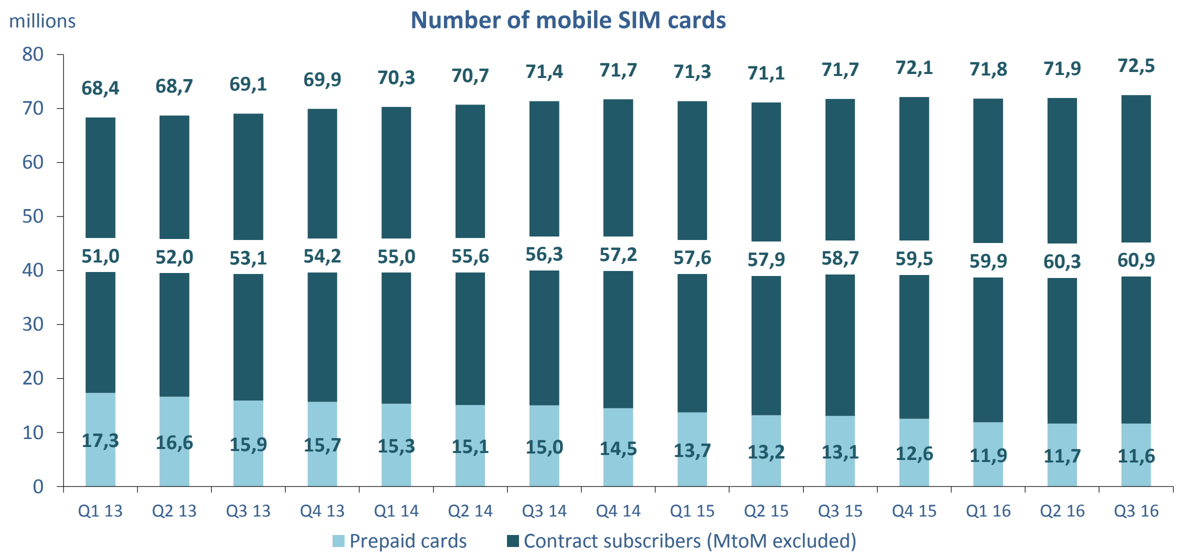
2.1 Mobile phone services

2.1.1 Number of SIM cards

Number of mobile customers (millions of units)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Contract subscribers	58,654	59,538	59,912	*60,251*	60,857	3,8%
Prepaid cards	13,092	12,566	11,914	*11,675*	11,640	-11,1%
*of which active prepaid cards **	10,959	10,230	9,683	*9,463*	9,424	-14,0%
Total number of SIM cards	**71,746**	**72,104**	**71,826**	***71,927***	**72,497**	**1,0%**

adjusted figures are in italics

*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.



2.1.2 Dedicated data cards

Dedicated data cards (millions of units)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Contract subscribers	2,806	2,810	2,768	2,771	2,773	-1,2%
Exclusive Internet prepaid cards	0,771	0,816	0,849	0,904	0,917	18,9%
of which active prepaid cards *	0,311	0,283	0,253	0,280	0,337	8,4%
Number of dedicated data cards	**3,577**	**3,626**	**3,617**	**3,674**	**3,690**	**3,2%**
% in total number of SIM cards	5,0%	5,0%	5,0%	5,1%	5,1%	+0,1 Point

adjusted figures are in italics

**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.

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), to be used solely 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 service (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Number of mobile subscription tied to at least one fixed service	16,865	17,412	17,948	18,230	18,656	10,6%
% in total number of SIM cards	24%	24%	25%	25%	26%	+2 Points

Note: several SIM cards can be tied to a fixed service subscription.

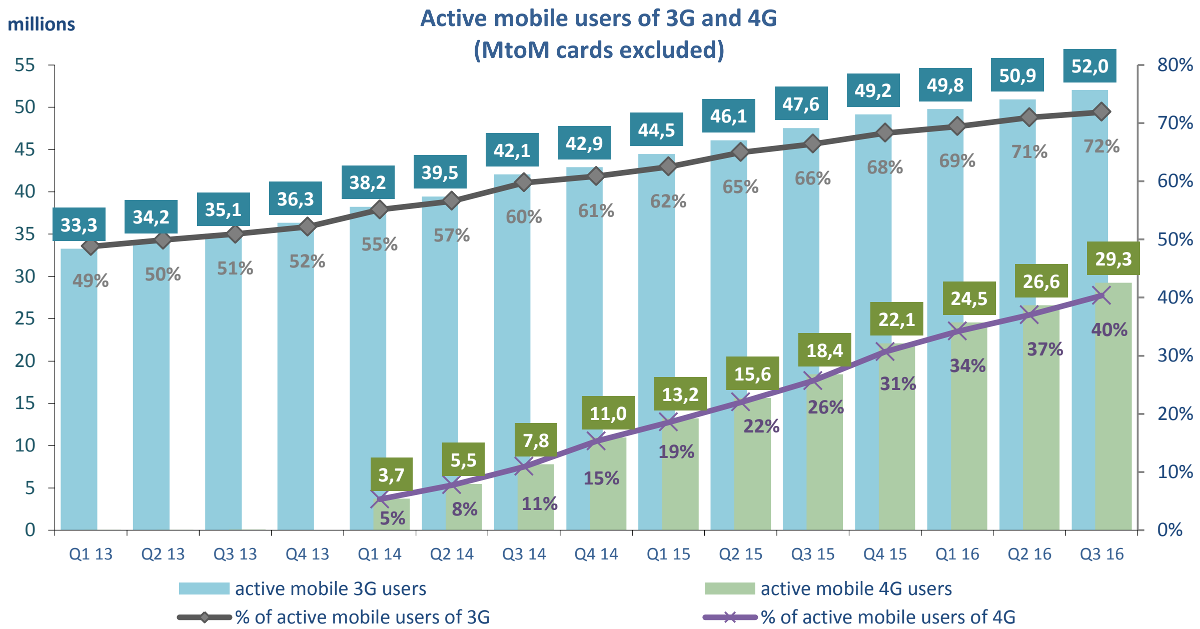
2.1.4 3G et 4G actives cards

Active 3G and 4G users (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Active 3G users	47,553	49,151	49,783	*50,946*	52,033	9,4%
Active 4G users	18,424	22,102	24,546	26,607	29,251	58,8%

adjusted figures are in italics

- 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).

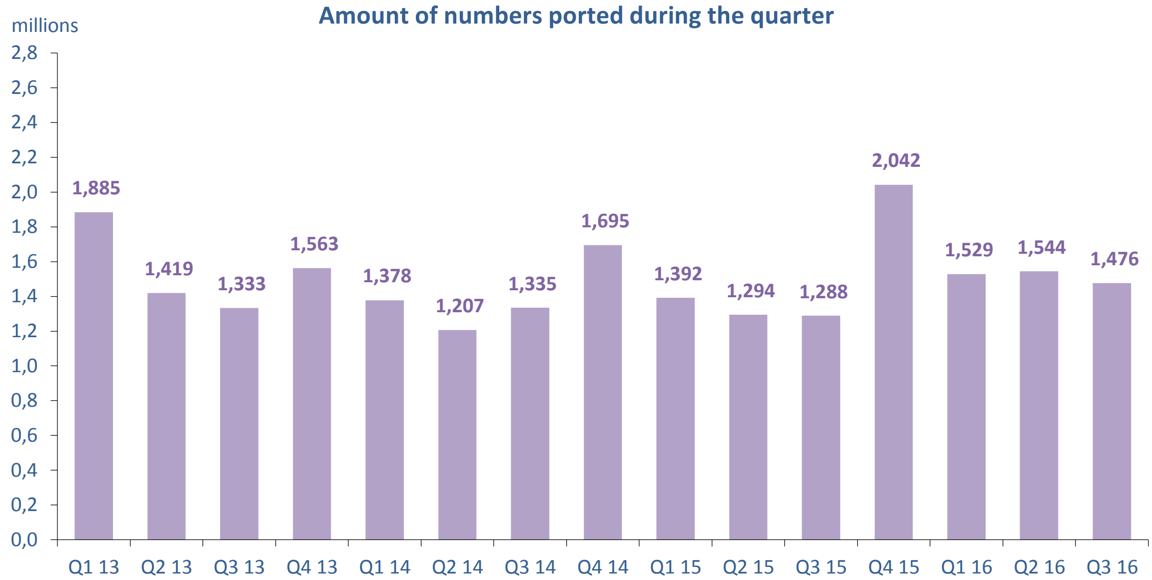
- The active 4G base is defined as the number of customers who have accessed a mobile service (data transfer) that uses 4G radio access technology, sometime in the past three months (either transmission or reception). ARCEP posts here only active customers who have access to 4 G and a compatible terminal. ARCEP attracts the attention of the reader to the fact that this definition may differ from those of financial publications of the operators, which can account, for example, some offers "4G marketed". A client can have such an offer, but not the suitable Terminal, nor 4G coverage.



2.1.5 Portability (mobile numbers)

Portability (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Amount of numbers ported during the quarter	1,288	2,042	1,529	1,544	1,476	14,6%

Note: the figures for ported numbers refer to the number of at the finalised porting procedures (ported numbers activated by the recipient operator) during the year in question. Scope: Metropolitan France and the overseas French "départements".

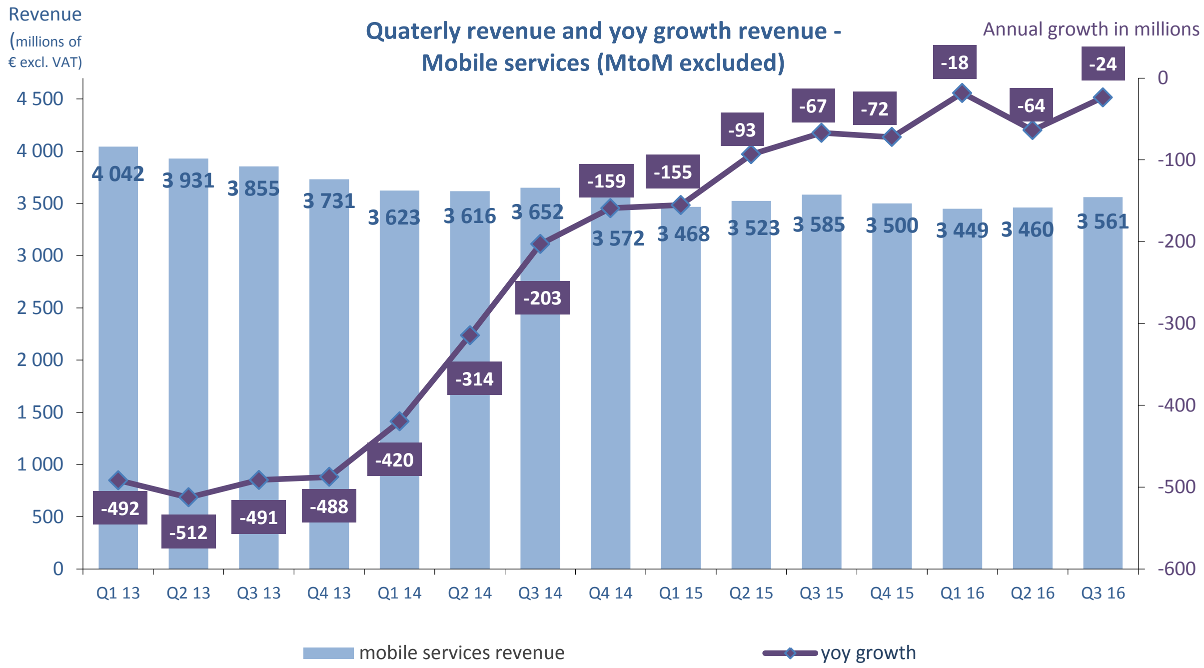


2.1.6 Revenue on retail market (value-added services excluded)

Revenue (millions of euros)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Contract subscribers	3 332	*3 262*	*3 243*	3 262	3 365	1,0%
Prepaid cards	253	*238*	*206*	198	196	-22,4%
Total mobile telephony and data transport	*3 585*	*3 500*	3 449	3 460	3 561	-0,7%

adjusted figures are in italics

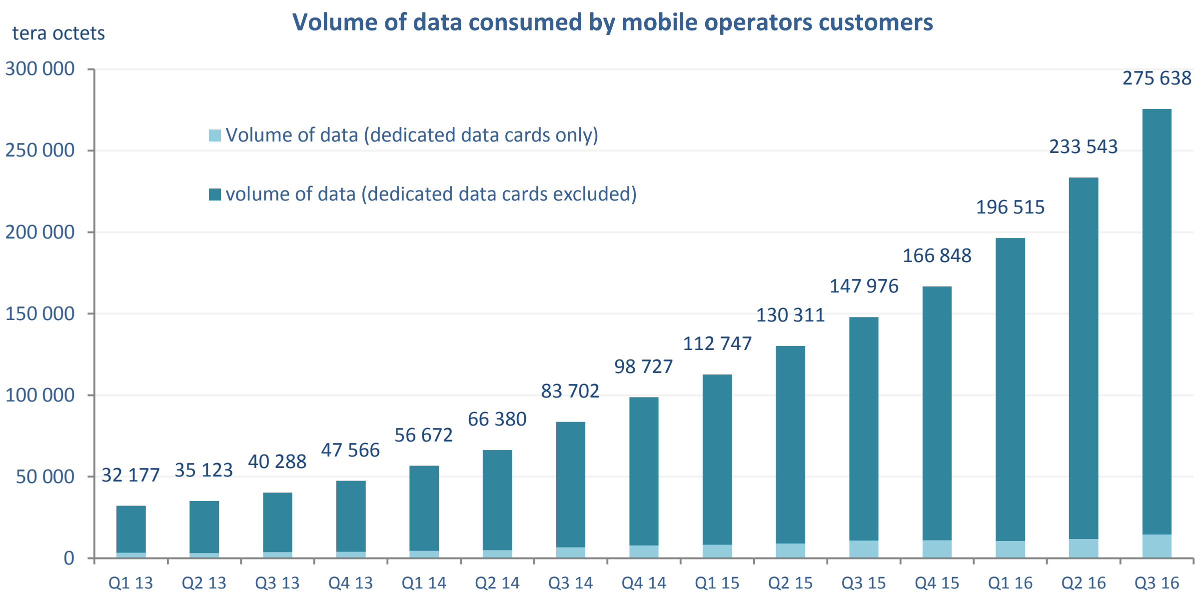
Note: this is about retail market revenue. Revenues from the market between operators (interconnection, wholesale) are not included. Also excluded is revenue from value-added retail services.



2.1.7 Volume of data consumed by mobile customers

Traffics of data consumed by the customers (in Teraoctets)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Contract subscribers	145 211	164 043	193 797	230 257	271 113	86,7%
Prepaid cards	2 765	2 805	2 718	3 286	4 525	63,7%
Traffics of data	**147 976**	**166 848**	**196 515**	**233 543**	**275 638**	**86,3%**
of which dedicated data SIM cards	10 828	11 042	10 656	11 768	14 515	34,0%
of which active 4G customers			156 417	193 729	226 038	-

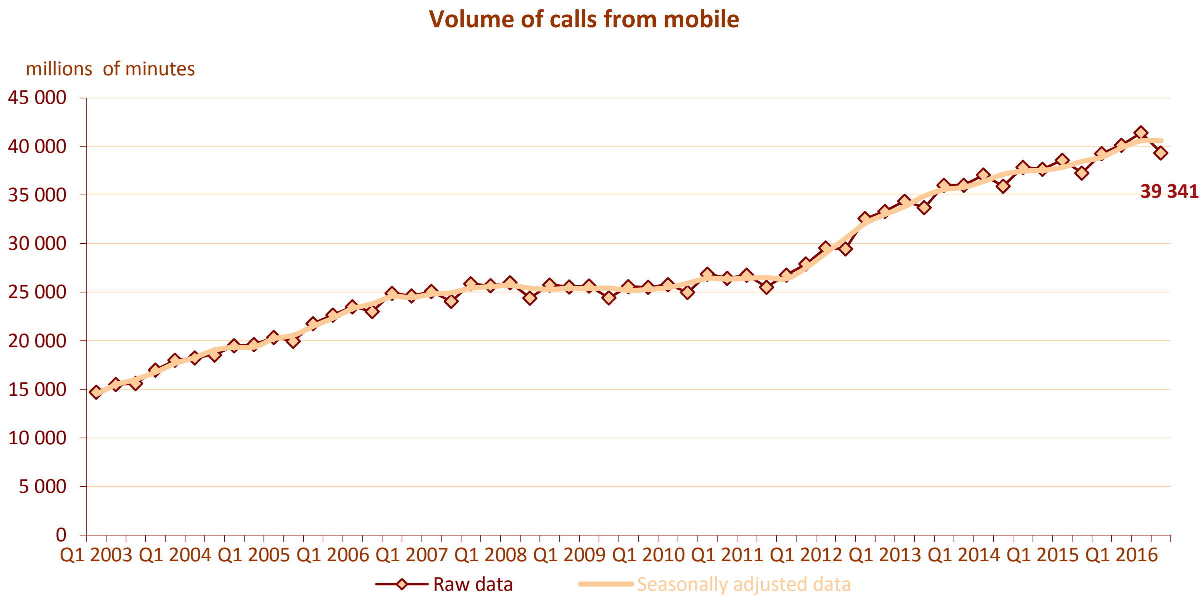
Note: the volume of data on mobiles networks include vocal communications and exchange of interpersonal messages via applications (wifi traffic excluded).



2.1.8 Traffic of mobile telephony

Traffics (millions of minutes)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Contract subscribers	*34 660*	*36 710*	37 679	38 960	36 954	6,6%
Prepaid cards	*2 591*	*2 583*	2 451	2 441	2 387	-7,9%
Total mobile telephony	**37 271**	**39 289**	**40 130**	**41 402**	**39 341**	**5,6%**

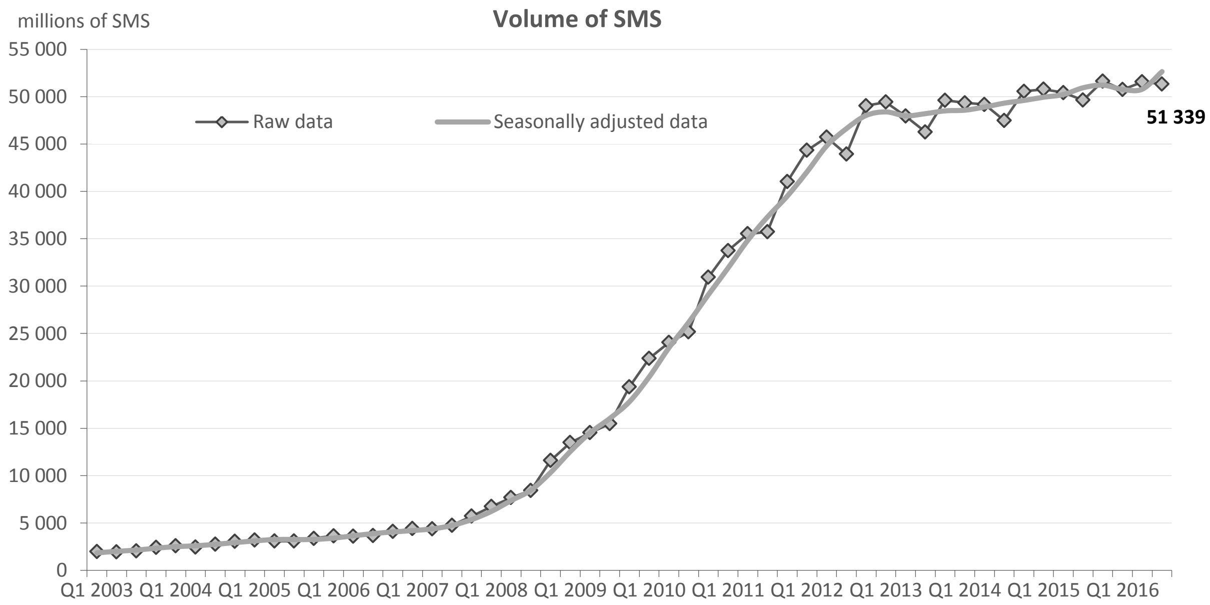
Traffics (millions of minutes)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Calls to national fixed lines	6 390	6 744	6 969	6 935	6 514	1,9%
Calls to national mobile lines	28 682	30 568	31 086	32 170	30 404	6,0%
Outgoing internationals calls	1 501	1 475	1 588	1 694	1 553	3,5%
Roaming out	698	503	488	603	869	24,5%
Total mobile telephony	**37 271**	**39 289**	**40 130**	**41 402**	**39 341**	**5,6%**



2.1.9 Interpersonal messages (SMS, MMS)

Traffics of interpersonal messages (millions of units)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Number of interpersonal SMS	49 633	51 641	50 737	51 557	51 339	3,4%
of which from contract subscribers	47 523	49 461	48 722	49 687	49 470	4,1%
of which from prepaid cards	2 110	2 180	2 015	1 871	1 870	-11,3%
Number of interpersonal MMS	1 045	1 051	1 049	*1 171*	1 256	20,1%
Number of messages sent	**50 678**	**52 692**	**51 786**	***52 729***	**52 679**	**3,9%**

adjusted figures are in italics

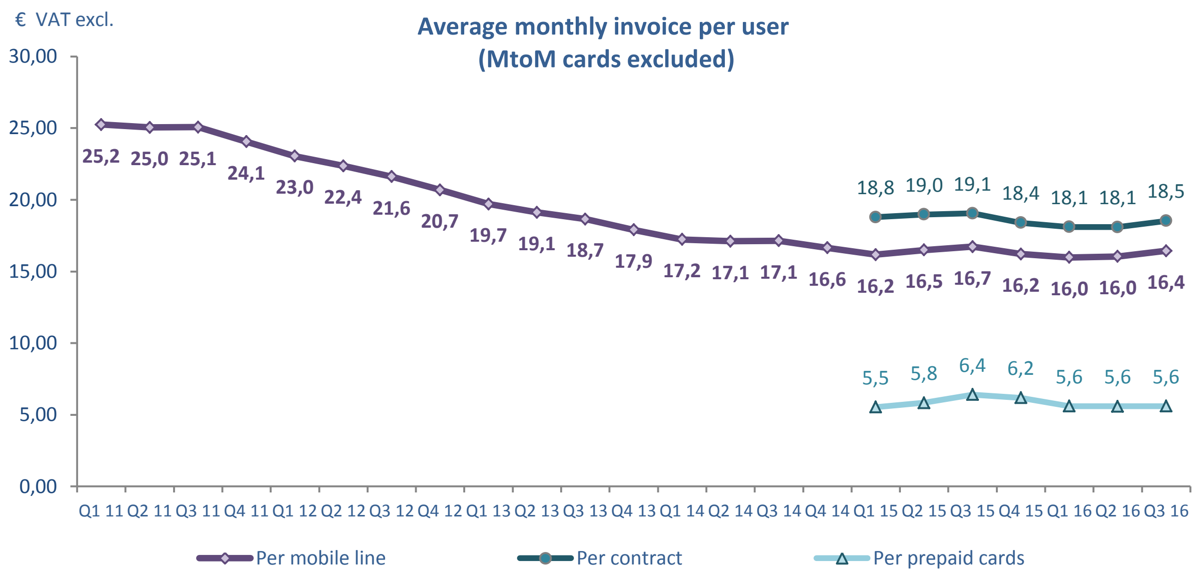


2.1.10 Roaming-out

Roaming-out	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Revenue (millions of euros)			223	207	242	-
Traffic of minutes (millions of minutes)	698	503	488	603	869	24,5%
Traffic of SMS (millions)			263	331	610	-
Traffic of data (teraoctets)			1 241	1 954	5 087	-

2.1.11 Average revenue and traffic per user

Average monthly revenue (value added services excluded) (in euros -VAT excluded)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Mobile telephony user	**16,7**	**16,2**	**16,0**	**16,0**	**16,4**	**-1,7%**
Contract subscribers	19,1	18,4	18,1	18,1	18,5	-2,8%
Prepaid cards	6,4	6,2	5,6	5,6	5,6	-12,6%



Notes:

- The average monthly invoice per mobile 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 customers 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.

- Average number of mobile customers for quarter N: (number of mobile customers (MtoM cards excluded) for quarter N + number of mobile customers for quarter N-1(MtoM cards excluded)) / 2.

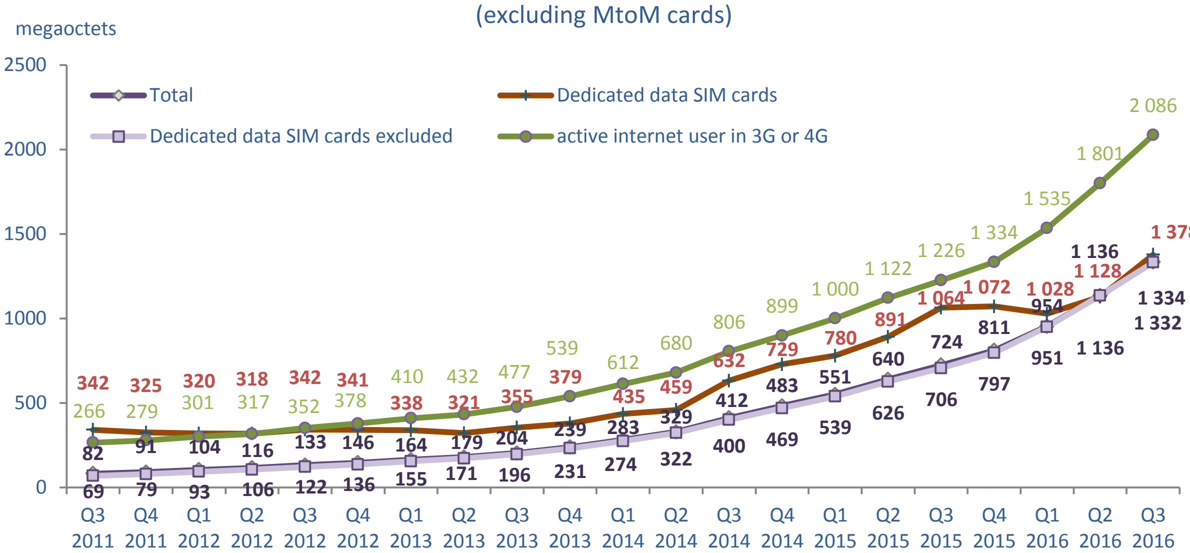
Average monthly traffics of data consumed on mobile networks (en mega octets)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
per mobile operator customer	**724**	**811**	**954**	**1 136**	**1 334**	**84,3%**
of which dedicated data SIM cards	1 064	1 072	1 028	1 128	1 378	29,4%
of which from other SIM cards	706	797	951	1 136	1 332	88,6%
Contract subscribers	871	970	1 134	1 340	1 565	80%
Prepaid cards	74	76	78	97	136	84,5%
Active 3G and 4G users	1 226	1 334	1 535	1 801	2 086	70%

Note:

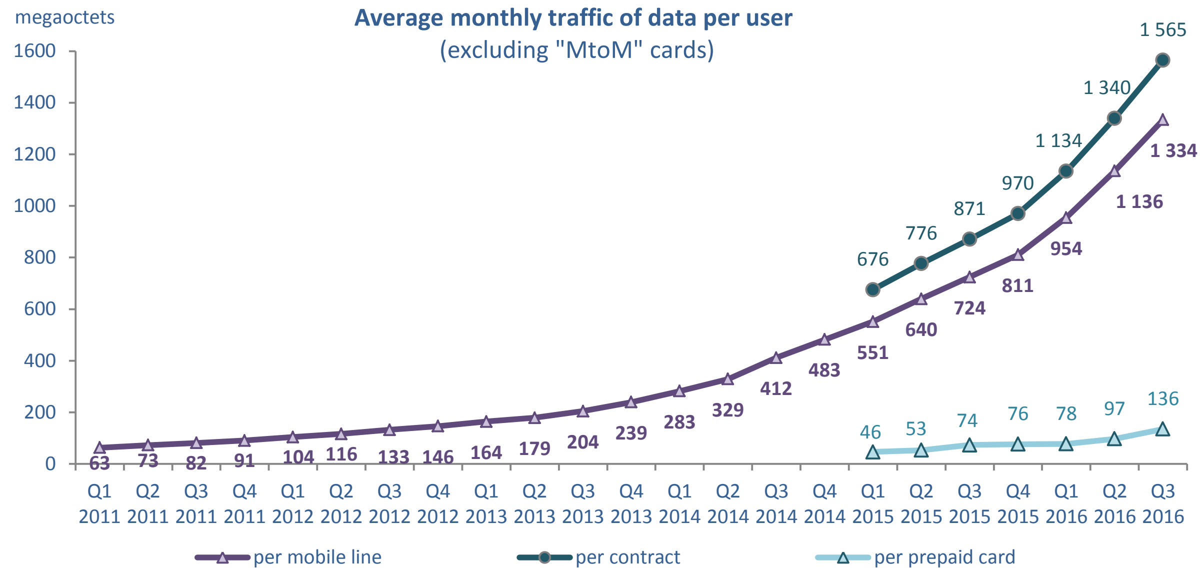
- The average monthly volume of data consumed per mobile operator customer is calculated by dividing the volume of mobile telephony traffic of data for quarter N by the estimated average number of mobile customers for quarter N, and then by the number of months. SIM cards that can be used only for data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

- Average number of mobile customers for quarter N: (number of mobile customers (MtoM cards excluded) for quarter N + number of mobile customers for quarter N-1(MtoM cards excluded)) / 2.

Volume of data consumed by the customers on mobile networks per month
(excluding MtoM cards)

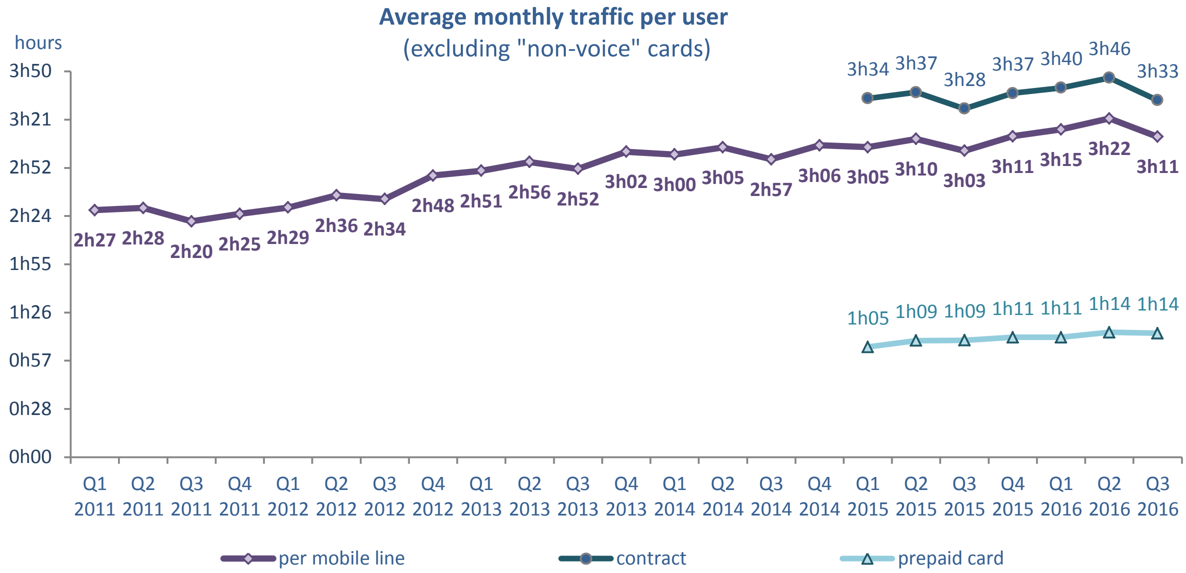


Average monthly traffic of data per user
(excluding "MtoM" cards)

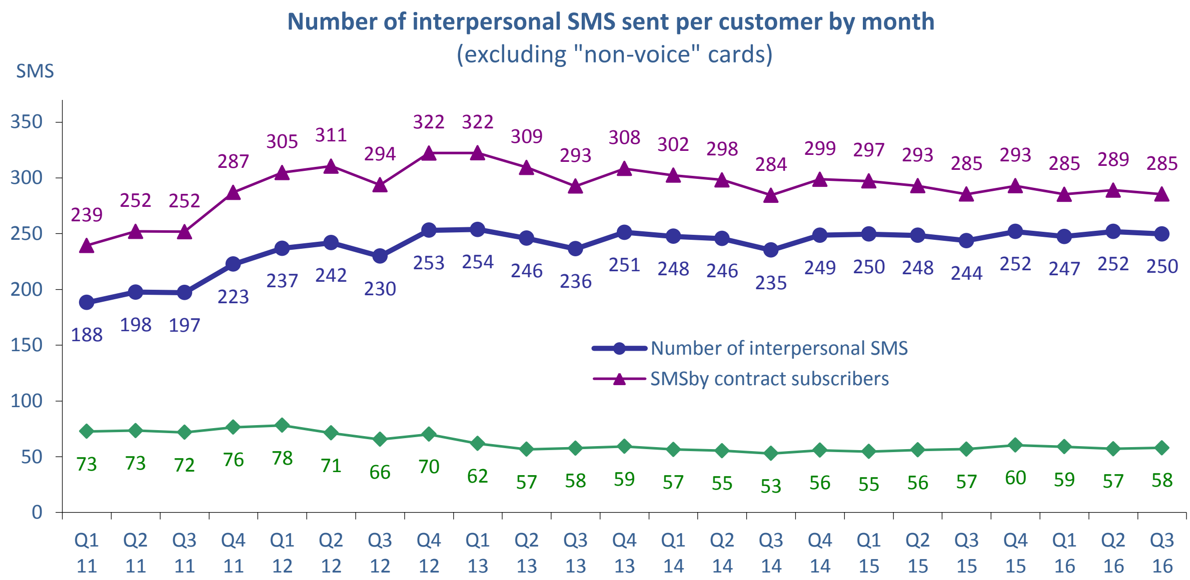


Average monthly outgoing traffic (in hours)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Mobile telephony user	**3h03**	**3h11**	**3h15**	**3h22**	**3h11**	**4,6%**
Contract subscribers	3h28	3h37	3h40	3h46	3h33	2,4%
Prepaid cards	1h09	1h11	1h11	1h14	1h14	6,0%

Note: 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. 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)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Number of SMS sent per user during the quarter	244	252	247	252	250	2,5%
of which for contract subscribers	285	293	285	289	285	0,0%
of which for prepaid cards	57	60	59	57	58	2,1%

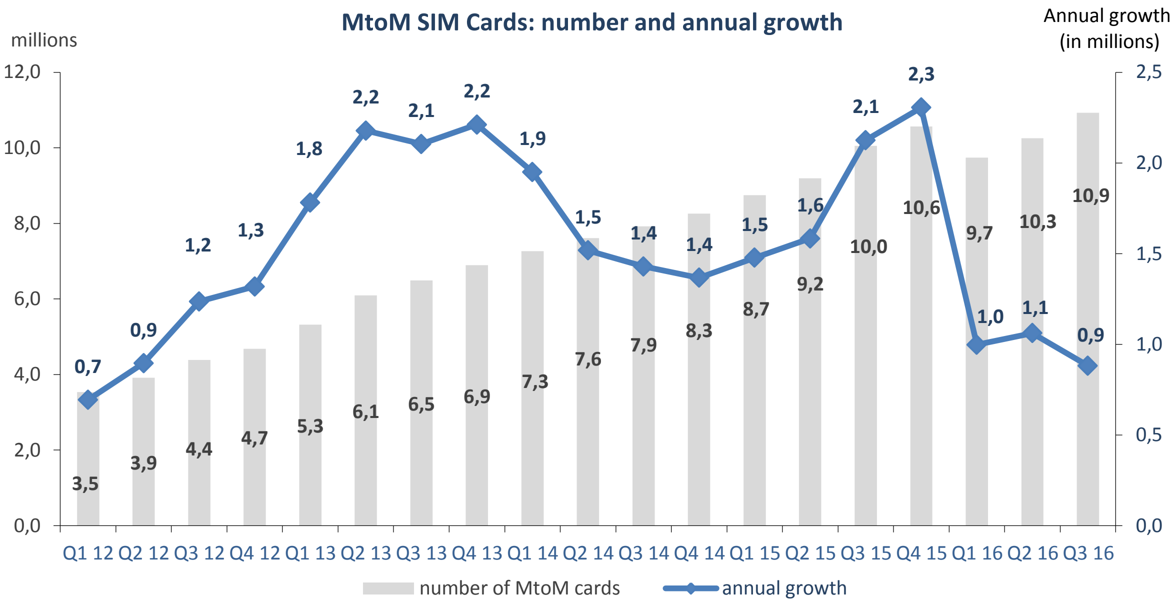


Note: The average number of SMS messages per customer is calculated by dividing the number of SMS messages for quarter N by the estimated average number of customers for quarter N, and then by the number of months. MtoM and exclusive data SIM cards are not taken into account. The number of messages does 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

Dedicated MtoM cards (millions of euros/ units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Revenu of dedicated MtoM cards	23	25	24	27	24	8,1%
Number of dedicated MtoM cards	10,047	10,562	9,740	10,254	10,929	8,8%

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). Are taken into account the SIM cards on "machines", the communication been done only in reception, only upstream or both. The cards used for interpersonal communication and exclusive internet cards must not be included here.



3 Value-added services

Value-added services revenue* (millions of euros excl.VAT)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Value-added "voice" services	237	189	191	185	179	-24,3%
From fixed telephony network	118	122	119	115	108	-8,4%
From mobile telephony network	118	67	72	70	71	-40,1%
Value-added "data" services	86	89	90	82	80	-7,6%
Directory services	24	25	23	24	25	3,0%
Value-added services	**347**	**303**	**304**	**291**	**284**	**-18,2%**

**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.*

Note: the reform of the pricing of the 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 editor). As a result of this reform, the pricing 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 traffics (millions of minutes)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
From fixed telephony network	*929*	*869*	949	990	937	0,8%
From mobile telephony network	444	459	426	436	443	-0,2%
Number of calls	***1 373***	***1 328***	**1 375**	**1 426**	**1 380**	**0,5%**

adjusted figures are in italics

Traffic from directory services (millions)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Number of calls (millions of units)	4	4	4	8	9	105,8%

Note: 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)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Hosting and call centre management	77	85	86	84	83	6,7%

4.2 Terminals and equipments

Revenue from terminals and equipment (millions of euros excl.VAT)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
linked to fixed téléphony & Internet services	155	170	167	169	162	4,0%
linked to mobile services	535	719	505	484	555	3,8%
Terminals and equipment	**691**	**889**	**673**	**653**	**717**	**3,8%**

Note: the revenue includes commissions paid to distributors.

5 The intermediate market (interconnection and wholesale market

5.1 The market as a whole

Interconnection services (millions of euros excl. VAT)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Fixed operators	**1 391**	**1 355**	**1 331**	**1 327**	**1 338**	**-3,8%**
*of which telephony services (incl VGA) **	*592*	*578*	559	554	570	-3,8%
of which broadband services	674	663	650	640	632	-6,4%
of which Wholesales leased lined product	125	115	122	132	137	9,8%
Mobile operators	**708**	**682**	**667**	**671**	**682**	**-3,6%**
of which voice termination (national and international)	199	203	206	207	186	-6,6%
of which SMS/MMS termination	389	397	394	383	381	-2,2%
Roaming in	119	83	66	81	115	-3,5%
Revenue (millions of euros)	**2 099**	**2 037**	**1 998**	**1 998**	**2 020**	**-3,8%**

Interconnection services (millions of minutes)	**Q3 2015**	**Q4 2015**	**Q1 2016**	**Q2 2016**	**Q3 2016**	**change 3Q16/3Q15**
Fixed operators	*26 060*	*26 555*	*26 604*	*25 597*	23 710	-9,0%
Mobile operators	23 253	24 481	24 710	25 239	23 591	1,5%
Traffic	**49 314**	**51 035**	**51 314**	**50 836**	**47 302**	**-4,1%**
Incoming SMS	**32 420**	**33 647**	**32 954**	**31 650**	**36 429**	**12,4%**

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 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 2016, the price for call termination on fixed networks is set to 0.078c€/minute against 0.079c€/min since July 1st 2015.

- Broadband wholesale services include income from unbundling and bitstream or bitstream equivalent services. The tariff for total unbundling is set at €9.10 since March 1st 2016 against previously at €9.05 in 2015 (and 9.02€ since February1st 2014 and €8.90 in 2013). The tariff for partial unbundling is set to €1.77.

Unbundling (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Partially unbundled lines	0,644	0,621	0,595	0,578	0,561	-12,8%
Fully unbundled lines	11,750	11,730	11,580	11,543	11,583	-1,4%
Number of unbundled lines	**12,394**	**12,350**	**12,175**	**12,121**	**12,144**	**-2,0%**

"Bitstream" lines (millions of units)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
"Naked bistream"	0,830	0,938	1,121	1,173	1,190	43,4%
"Classic bitstream"	0,154	0,152	0,151	0,145	0,138	-10,5%
Number of "bitstream" lines	**0,984**	**1,090**	**1,272**	**1,318**	**1,328**	**34,9%**

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.

5.2 Mobiles operators « Roaming-in »

Roaming in	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	change 3Q16/3Q15
Traffic (millions of minutes)	*836*	*654*	666	844	1 020	22,0%
Traffic of SMS (millions)	311	158	171	213	309	-0,6%
Traffic of data (teraoctets)	1 678	988	1 247	2 091	3 781	125,3%

Notes:

- *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.*
- *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.