

ELECTRONIC COMMUNICATIONS SERVICES IN FRANCE

4TH QUARTER 2018

ELECTRONIC COMMUNICATIONS MARKET OBSERVATORY

4 APRIL 2019

Synthesis

Revenue on the retail market <i>(millions of euros VAT excluded)</i>	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Fixed services (including leased lines and data transport networks)	4 346	4 297	4 215	4 212	4 205	-3,2%
Mobile services (MtoM included)	3 305	3 197	3 259	3 319	3 303	-0,1%
Value-added services and directory services	294	258	253	240	246	-16,4%
Electronic communications services	7 945	7 751	7 727	7 772	7 754	-2,4%
Others revenues	1 436	1 153	1 070	1 156	1 390	-3,2%
Overall market	9 381	8 904	8 798	8 928	9 144	-2,5%

adjusted figures are in italics

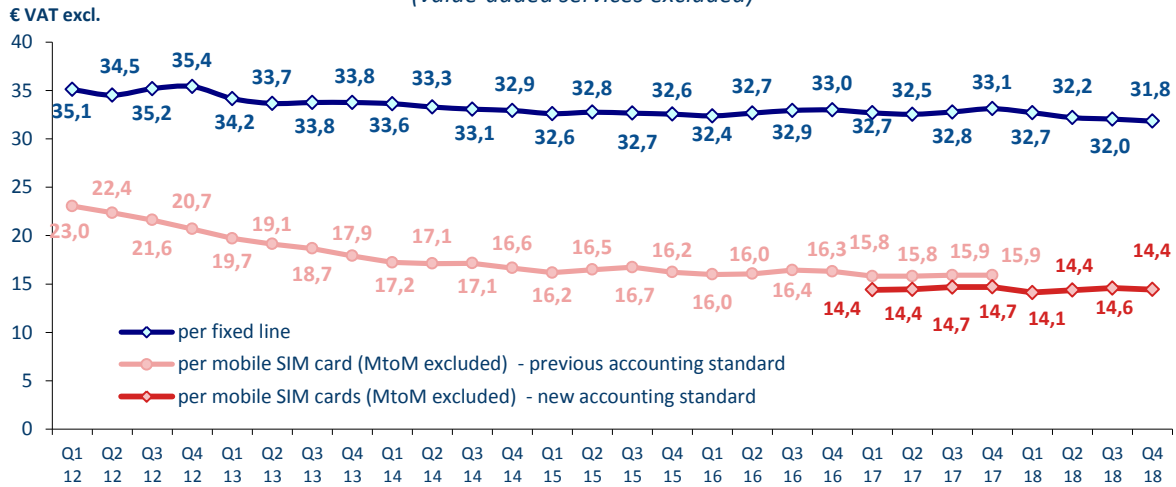
Note: "Others revenues" are not, strictly speaking, part of the electronic communications services market. The contribution reported by the operators gives only a partial view of these market segments. This topic covers the income related to sale and rental of terminals and equipment (fixed, mobile and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

The new accounting standard IFRS 15 applied by operators since January 1, 2018, mainly leads to a transfer of revenue from mobile services toward revenue of mobile terminals (line « other revenue »). Revenues in the table above are presented at a constant scope, i.e., after application of the new accounting standard. For more information, see the appendix on p. 39.

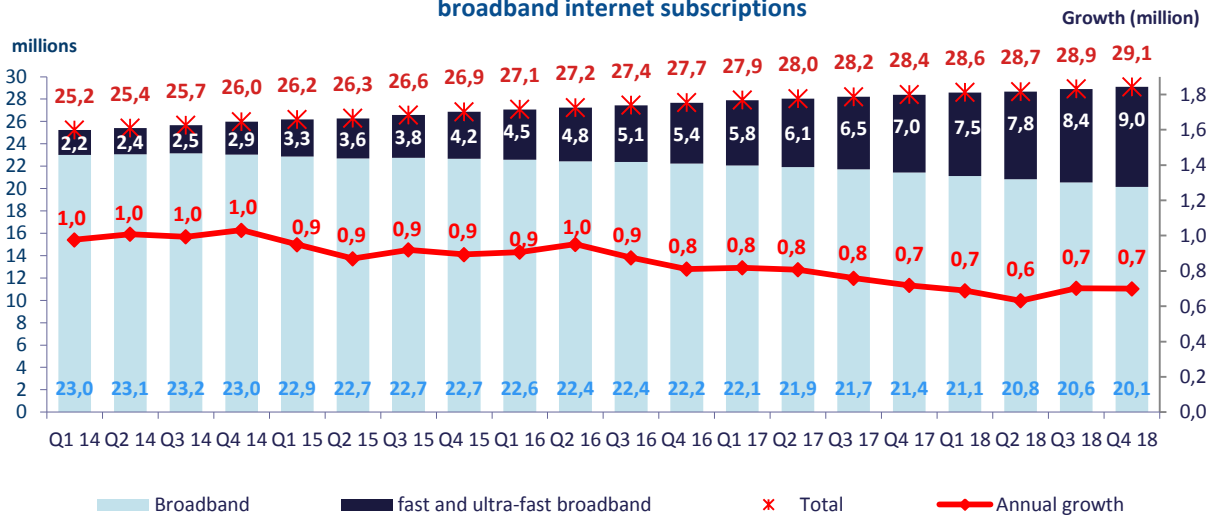
Notes:

- 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

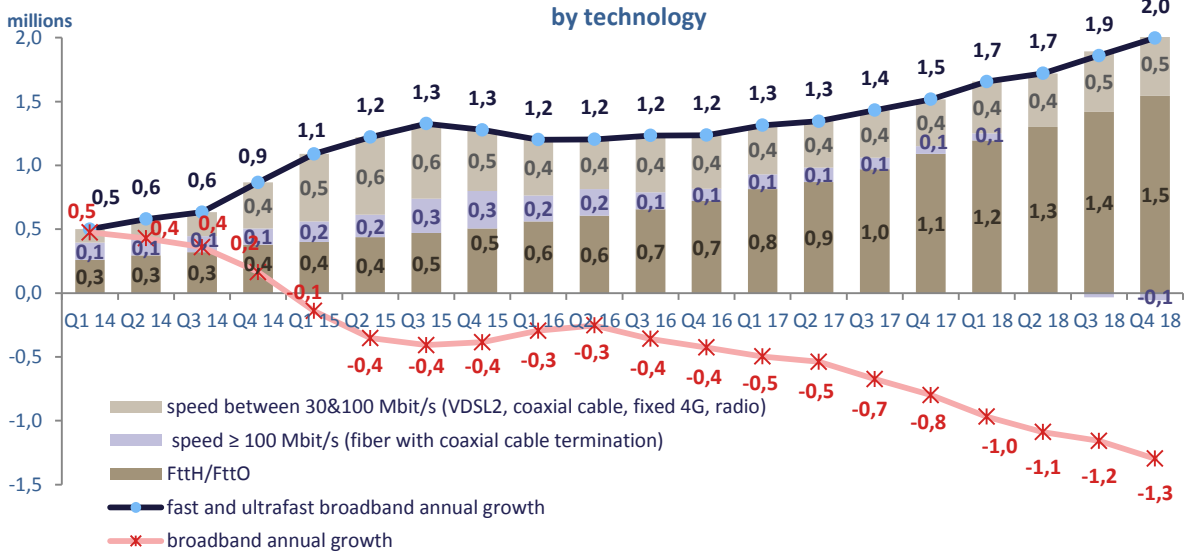
Average monthly bill (voice & data) (value-added services excluded)



Number and annual increase of broadband internet subscriptions



Annual increase of fast and ultra-fast broadband internet subscriptions by technology



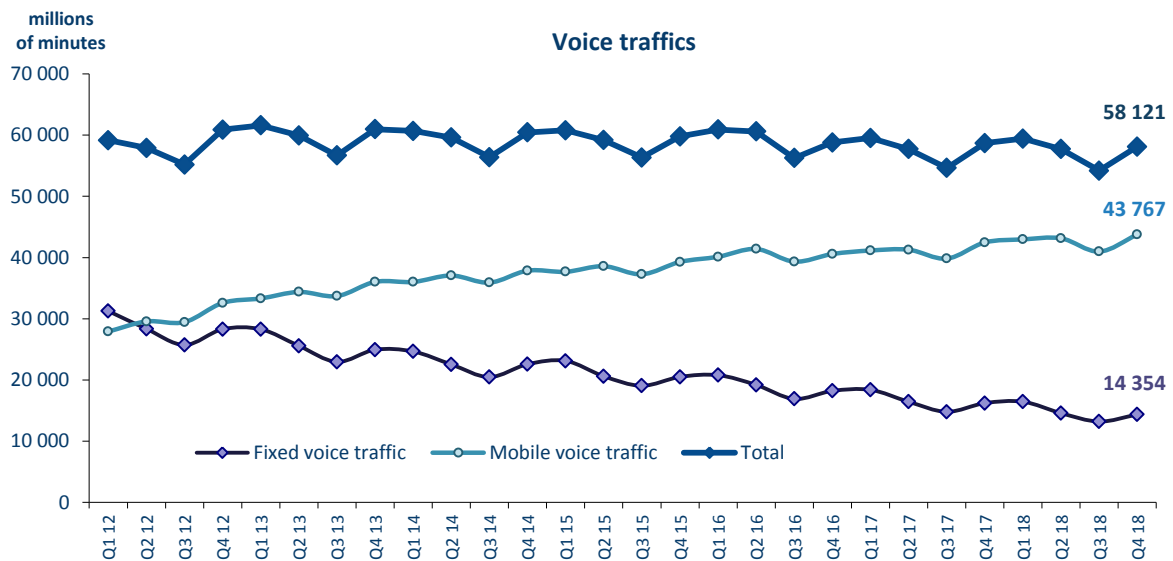
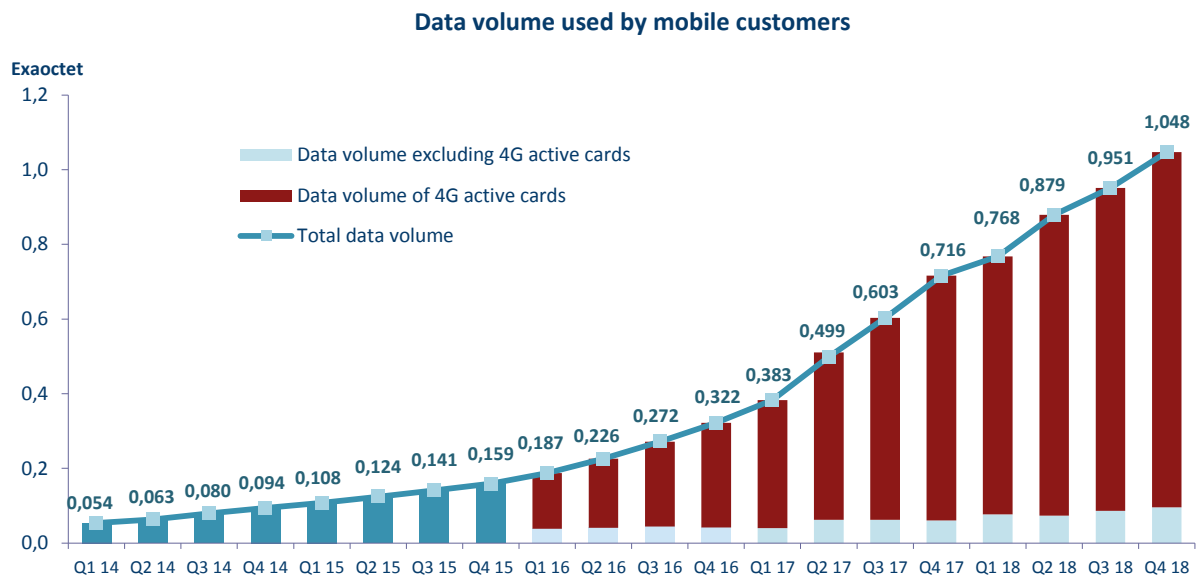
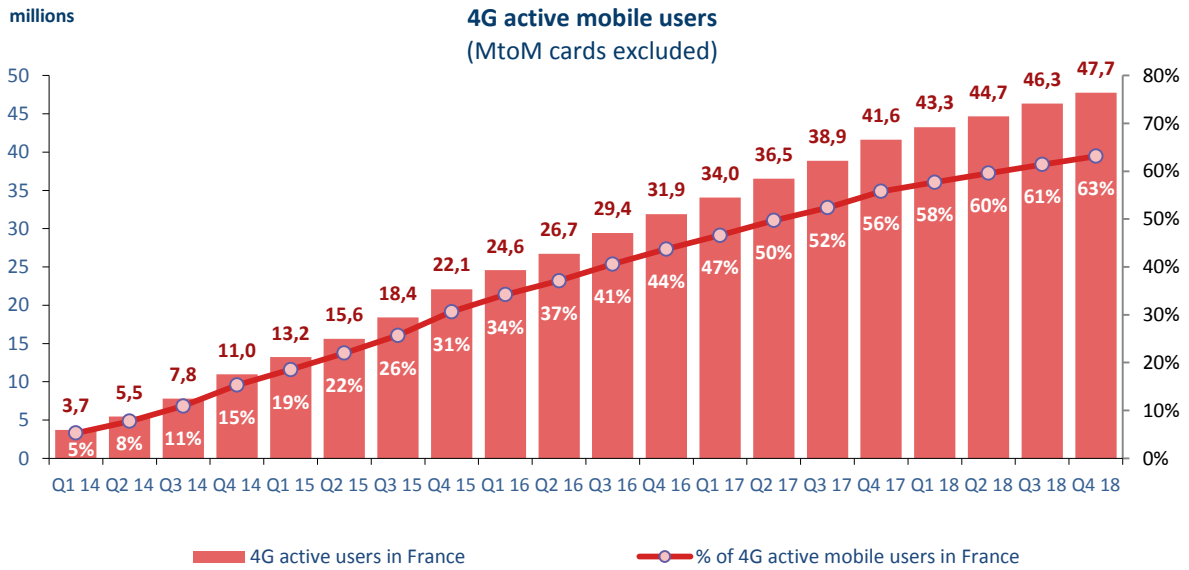


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1 Fixed networks services - retail market

1.1 Internet access and telephony services

1.1.1 Broadband, fast and ultra-fast broadband Internet access

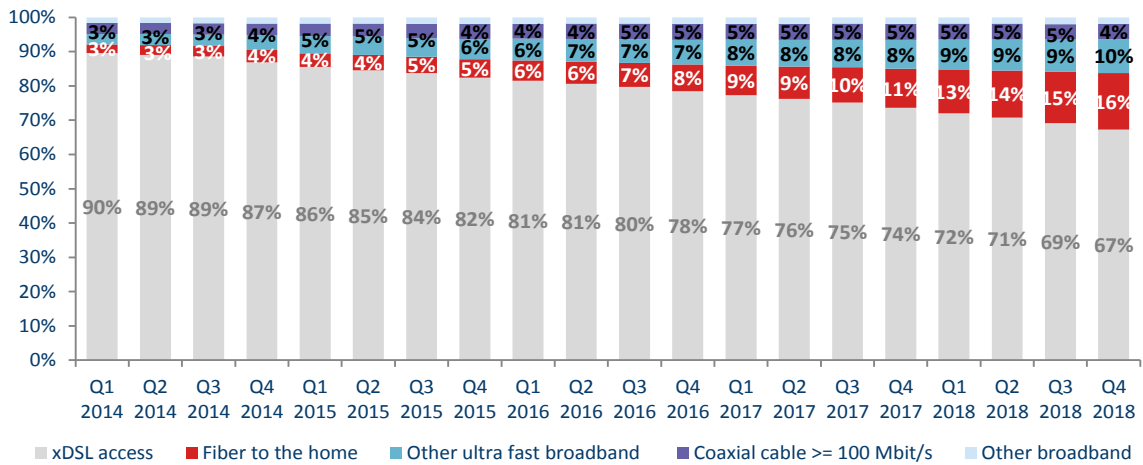
Broadband subscriptions (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Broadband	21,432	21,109	20,820	20,560	20,133	-6,1%
of which xDSL	20,895	20,576	20,283	19,986	19,563	-6,4%
of which other broadband access	0,537	0,533	0,537	0,573	0,571	6,3%
Fast and ultra-fast broadband	6,966	7,481	7,847	8,350	8,964	28,7%
of which with a speed equal or greater than 100 Mbit/s	4,597	4,948	5,255	5,626	6,085	32,4%
of which fiber to the home and fiber to the office	3,255	3,615	3,935	4,314	4,799	47,4%
of which fiber with coaxial cable termination	1,342	1,333	1,319	1,312	1,286	-4,2%
of which with a speed ≥ 30 and < 100 Mbit/s (VDSL2 & coaxial cable, fixed 4G, fast broadband radio)	2,369	2,533	2,592	2,724	2,879	21,5%
Total number of broadband internet subscriptions	28,398	28,590	28,667	28,910	29,097	2,5%

Overseas broadband internet subscriptions (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Total number of subscriptions	642	640	639	636	643	0,1%

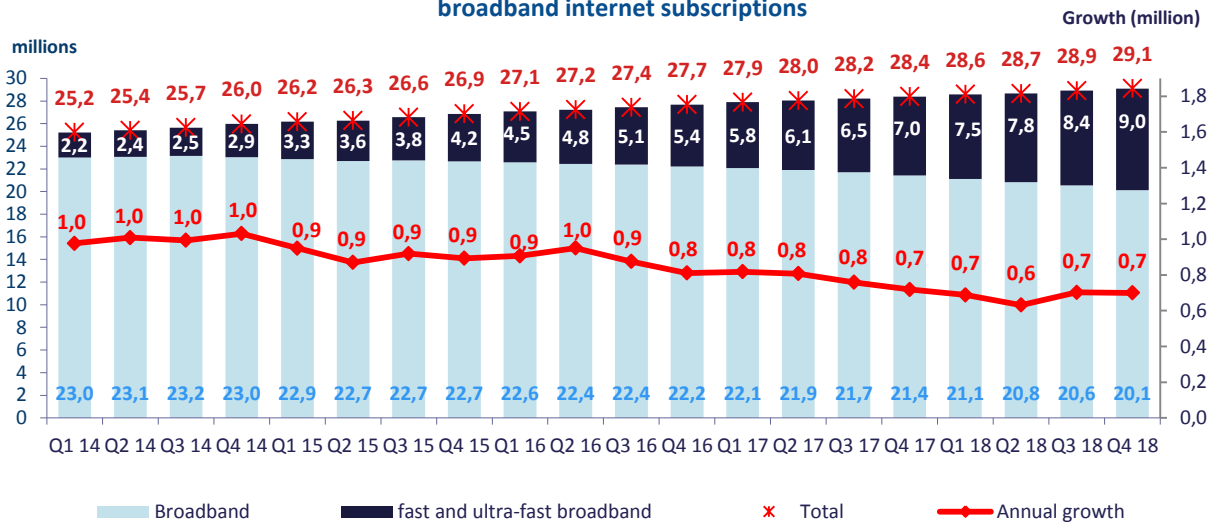
Notes :

- 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, Wi-Fi or "fast broadband radio" networks, which consists of more bandwidth 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.

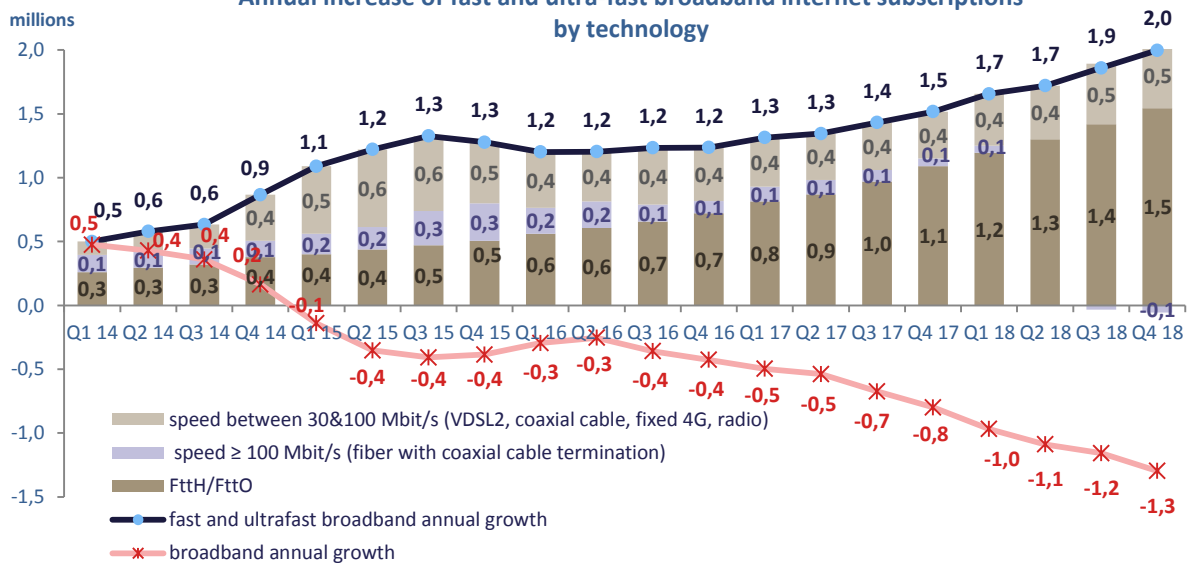
Breakdown of internet broadband subscriptions par flow rate and technology

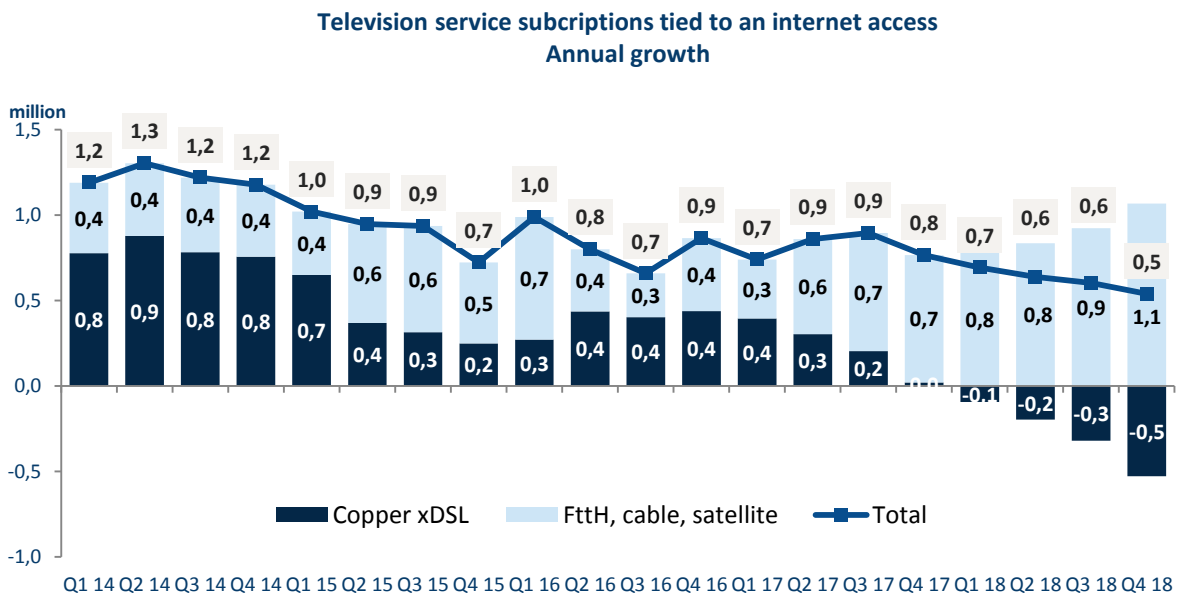
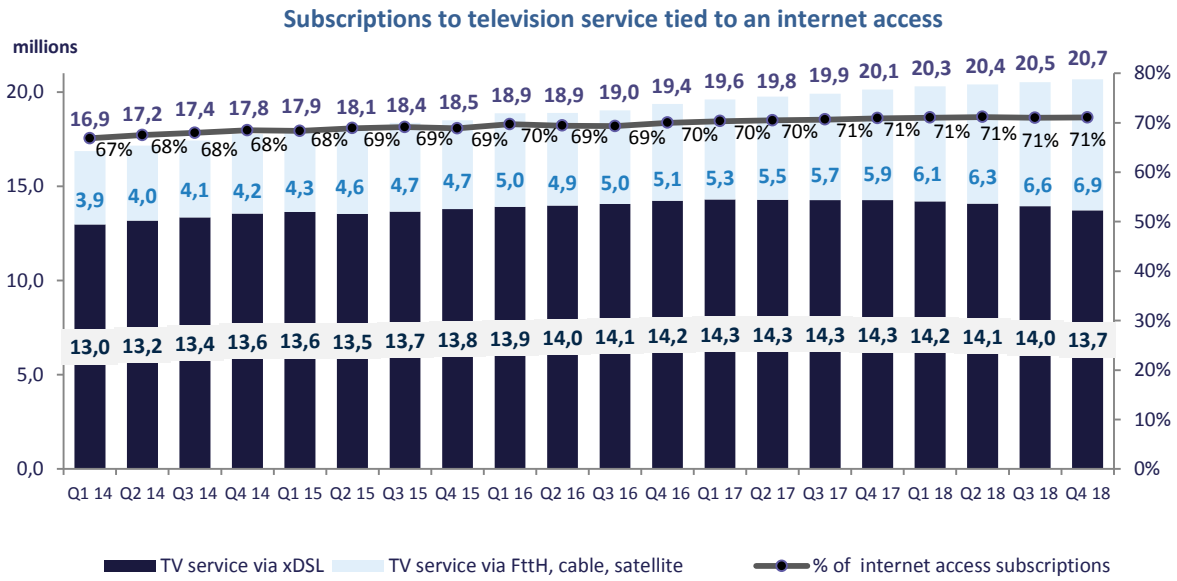


Number and annual increase of broadband internet subscriptions



Annual increase of fast and ultra-fast broadband internet subscriptions by technology





1.1.2 TV subscription tied to internet access

TV subscriptions tied to an internet access (millions)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
TV subscriptions tied to an internet access	20,137	20,310	20,401	20,527	20,678	2,7%
of which xDSL TV	14,263	14,211	14,090	13,954	13,735	-3,7%
of which FttH, cable, satellite	5,874	6,100	6,311	6,573	6,943	18,2%
% of subscriptions to television services	70,9%	71,0%	71,2%	71,0%	71,1%	+0,2 pt

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.

1.2 Telephone services on fixed lines (public payphones and telephone cards excluded)

1.2.1 Number of fixed lines

Number of fixed lines (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Number of fixed lines	36,839	36,642	36,609	36,729	36,740	-0,3%
of which lines on a broadband access	26,497	26,784	26,993	27,359	27,664	4,4%
of which lines on a narrowband access	8,454	7,976	7,748	7,498	7,196	-14,9%
of which lines with two accesses (narrowband & broadband)	1,889	1,882	1,868	1,871	1,880	-0,5%

adjusted figures are in italics

1.2.2 Number of subscriptions to a telephone service

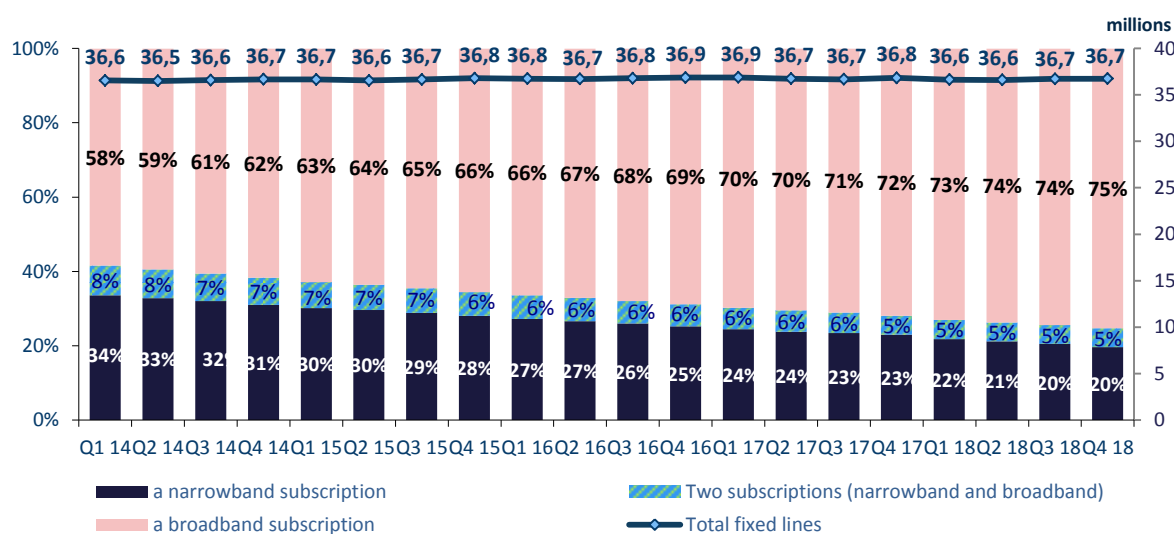
Number of telephone service subscriptions (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Subscriptions on narrowband accesses	10,343	9,858	9,616	9,369	9,076	-12,2%
<i>Access resales (VGAST)</i>	1,401	1,380	1,359	1,332	1,304	-6,9%
Subscriptions on broadband accesses	28,386	28,666	28,862	29,231	29,544	4,1%
of which on DSL lines	22,966	22,886	22,761	22,713	22,550	-1,8%
<i>of which DSL lines not tied to a narrowband subscription</i>	21,078	21,004	20,893	20,842	20,670	-1,9%
of which on other technologies	5,419	5,780	6,100	6,517	6,994	29,1%
Total number of telephone service subscriptions	38,728	38,524	38,478	38,600	38,620	-0,3%

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

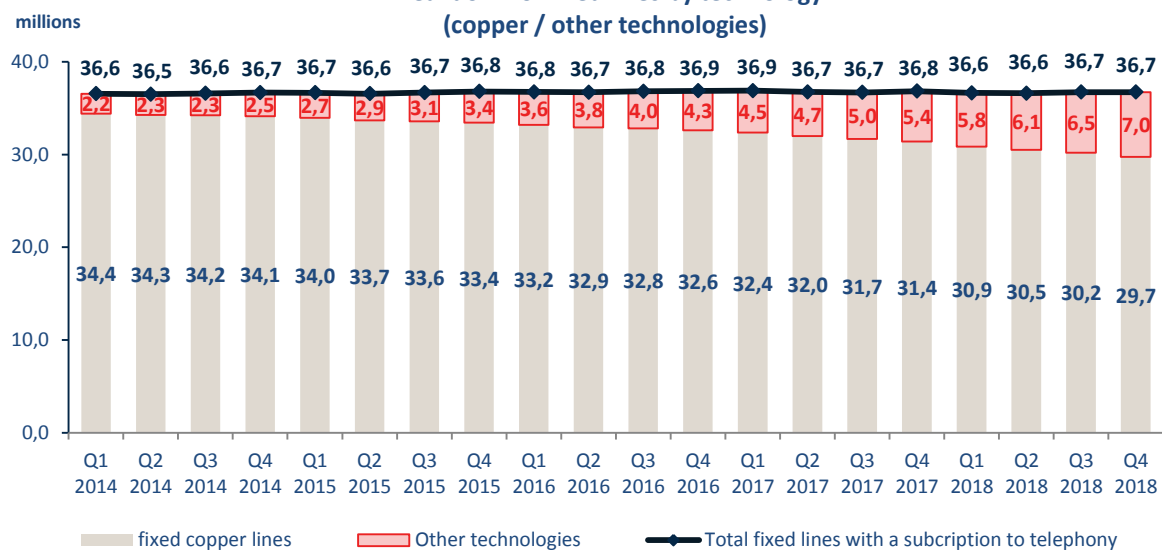
adjusted figures are in italics

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.

Breakdown of fixed lines by subscriptions to telephony services

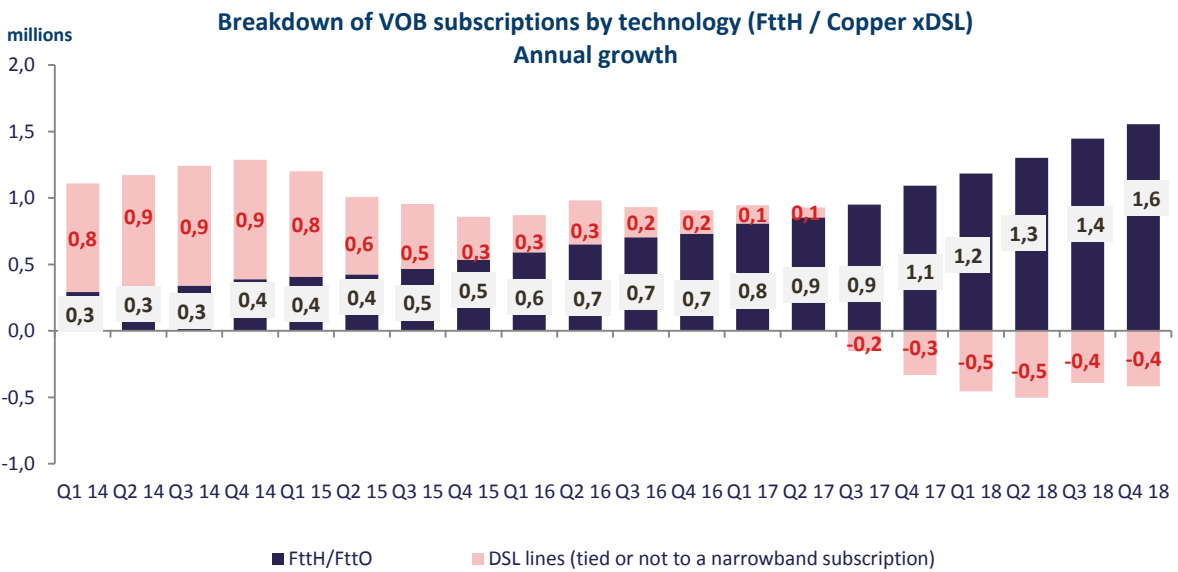
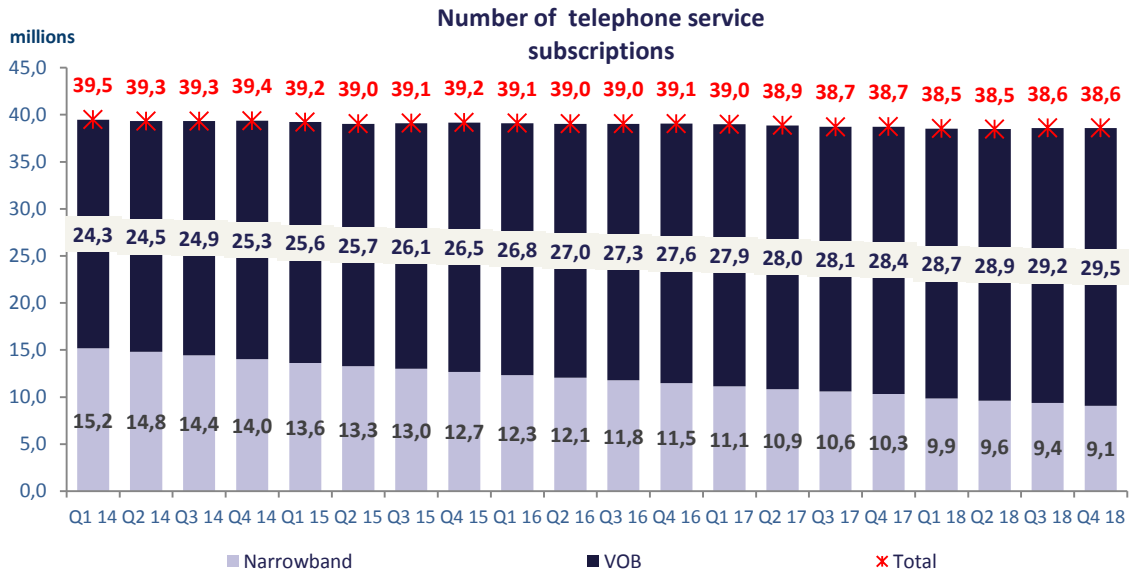


Breakdown of fixed lines by technology (copper / other technologies)



When offers are based on shared unbundling or bitstream accesses, the subscribers possess two fixed 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 and a VOB subscription.

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



1.2.3 Portability of fixed phones numbers

Portability (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Number of fixed phone numbers ported during the quarter	660	670	510	590	700	6,1%

1.2.4 Fixed voice: traffic and revenue (narrowband internet, public payphones and voice traffic cards excluded)

Narrowband access revenue (millions of euros excl. VAT)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Access fees, subscriptions and additional services	560	543	530	513	499	-10,8%

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...).

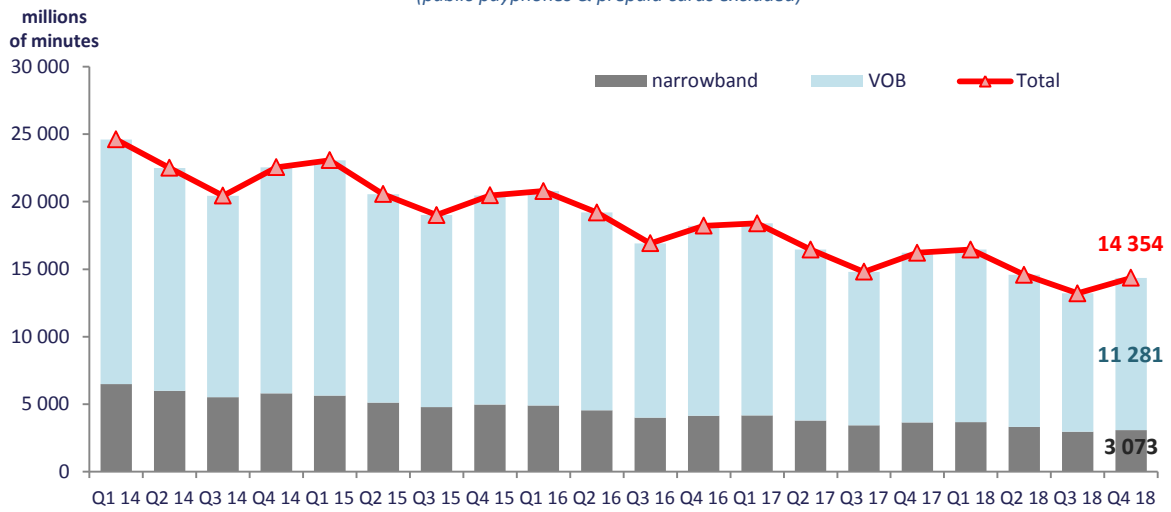
Fixed voice traffic revenue (millions of euros VAT excluded)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
National voice traffic	138	127	123	116	117	-15,4%
International voice traffic	41	41	40	36	32	-22,1%
To mobile network	88	90	86	83	86	-2,6%
Total voice traffic revenue	267	258	249	234	235	-12,2%
<i>Of which calls originating from narrowband networks</i>	169	162	156	145	145	-14,0%
<i>Of which calls originating from voice over broadband</i>	99	96	93	89	89	-9,3%

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).

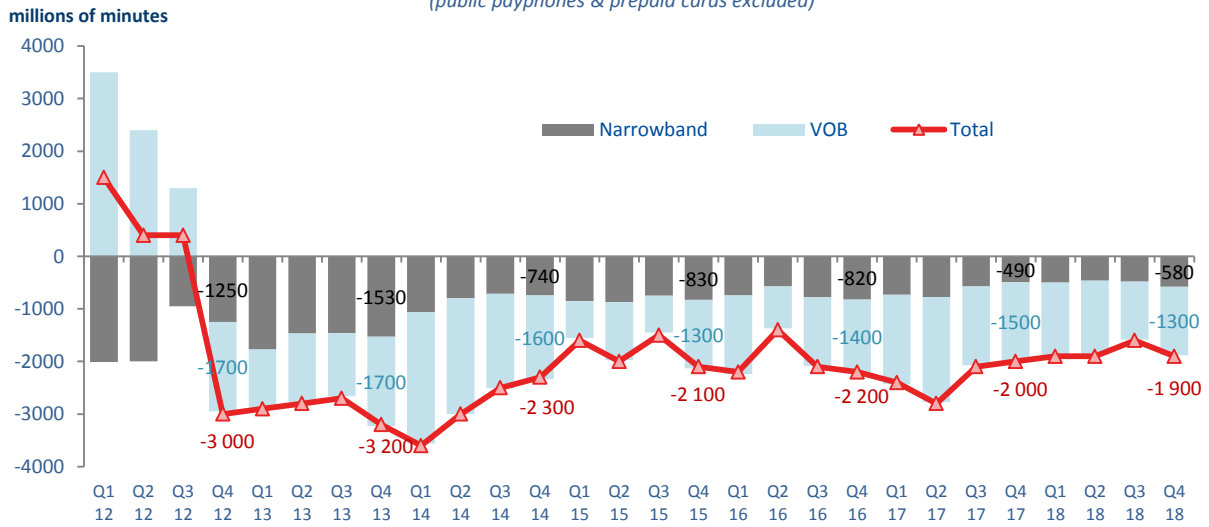
Fixed voice traffic (millions of minutes)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
To national fixed voice traffic	10 811	11 120	9 583	8 731	9 610	-11,1%
To international fixed voice traffic	1 531	1 455	1 343	1 156	1 203	-21,5%
To mobile network	3 876	3 879	3 651	3 326	3 542	-8,6%
Total fixed voice traffic	16 219	16 453	14 577	13 212	14 354	-11,5%
<i>Of which calls originating from narrowband networks</i>	3 657	3 667	3 322	2 958	3 073	-16,0%
<i>Of which calls originating from voice over broadband</i>	12 561	12 787	11 255	10 255	11 281	-10,2%

adjusted figures are in italics

Fixed voice traffic (public payphones & prepaid cards excluded)



Fixed voice traffic - Annual growth (public payphones & prepaid cards excluded)



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

Revenue of fixed networks services (millions of euros excl.VAT)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Narrowband Revenue	730	707	687	660	646	-11,5%
Broadband Revenue	3 012	2 977	2 930	2 943	2 940	-2,4%
Broadband Internet, VoB subs.and revenue from VoB calls	2 325	2 326	2 317	2 343	2 347	0,9%
Other Internet revenue	687	651	613	600	594	-13,6%
Retail leased lines and data transport networks	604	613	598	609	619	2,6%
Total revenue	4 346	4 297	4 215	4 212	4 205	-3,2%

adjusted figures are in italics

Notes :

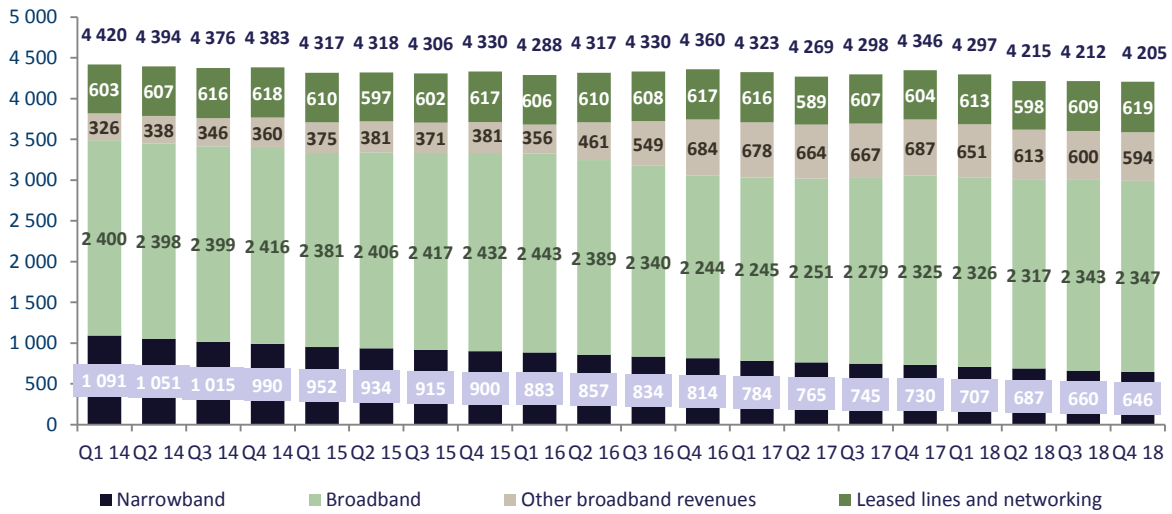
- For fiscal reasons, some operators have, in 2016 and 2017, transferred a part of the revenue from multi-service subscriptions (previously fully declared in the "broadband internet revenue" section) to the "other internet revenues".

- "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 TV service, video and music downloading...). Revenue generated by terminal sales and rental is included under "fixed operator and ISP terminal sales and rental".

- Revenue from telephony cards and public payphones is about one million of euros HT for the fourth quarter 2018.

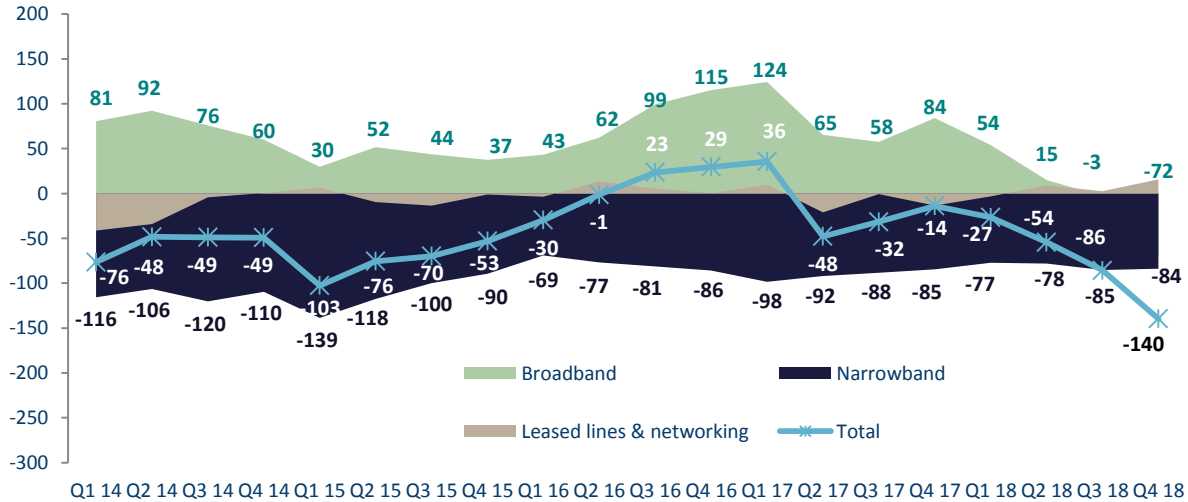
millions of €
VAT excluded

Evolution of fixed services revenue



Fixed services revenue - Annual growth

millions of €
VAT excluded



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)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Per fixed line : telephone access, voice traffic and Internet access (€ VAT excl.)	33,1	32,7	32,2	32,0	31,8	-3,9%
Per fixed lines (in hours)	2h27	2h29	2h12	2h00	2h10	-11,4%

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: $[(\text{total fixed lines on quarter N} + \text{total fixed lines on quarter N-1})/2]$

1.4.2 Per subscription to fixed services

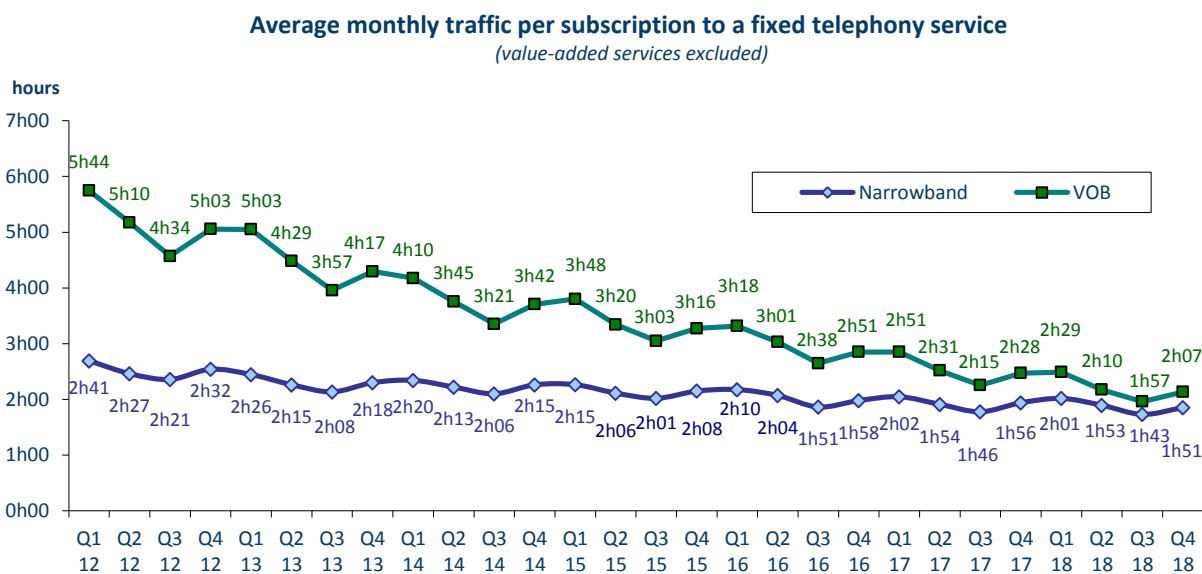
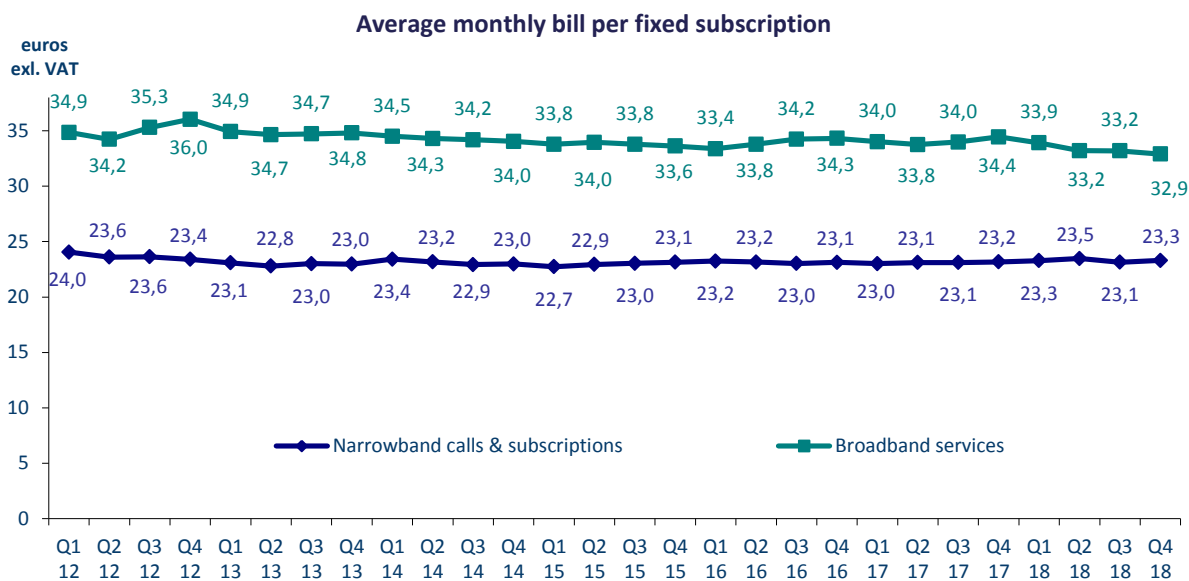
Average monthly bill per customer (in euros -VAT excluded)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Per fixed narrowband telephone subscription	23,2	23,3	23,5	23,1	23,3	0,5%
Per fixed broadband access	34,4	33,9	33,2	33,2	32,9	-4,5%

- The average monthly bill for a narrowband line 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.

- The average monthly bill for a broadband or ultra-fast broadband 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)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Per fixed narrowband telephone subscription	1h56	2h01	1h53	1h43	1h51	-4,5%
Per fixed VOB subscription	2h28	2h29	2h10	1h57	2h07	-13,7%

- The average monthly volume per 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 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 subscriptions (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Postpaid	<i>64,336</i>	<i>65,025</i>	<i>65,385</i>	<i>65,999</i>	<i>66,507</i>	3,4%
Prepaid	<i>10,261</i>	<i>9,935</i>	<i>9,558</i>	<i>9,477</i>	<i>9,090</i>	-11,4%
of which active prepaid cards	<i>7,724</i>	<i>7,548</i>	<i>7,220</i>	<i>7,056</i>	<i>6,945</i>	-10,1%
Total number of SIM cards	74,596	74,960	74,943	75,475	75,597	1,3%

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 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)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Postpaid subscriptions	<i>2,778</i>	<i>2,869</i>	<i>2,887</i>	<i>2,909</i>	<i>2,905</i>	4,6%
Prepaid subscriptions	<i>0,682</i>	<i>0,630</i>	<i>0,606</i>	<i>0,555</i>	<i>0,497</i>	-27,1%
of which active prepaid cards	<i>0,264</i>	<i>0,251</i>	<i>0,187</i>	<i>0,201</i>	<i>0,157</i>	-40,5%
Number of dedicated data cards	3,459	3,500	3,493	3,465	3,402	-1,7%
% in total number of SIM cards	4,6%	4,7%	4,7%	4,6%	4,5%	-0,1 Point

adjusted figures are in italics

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. Dedicated active 4G cards for a fixed use are excluded.

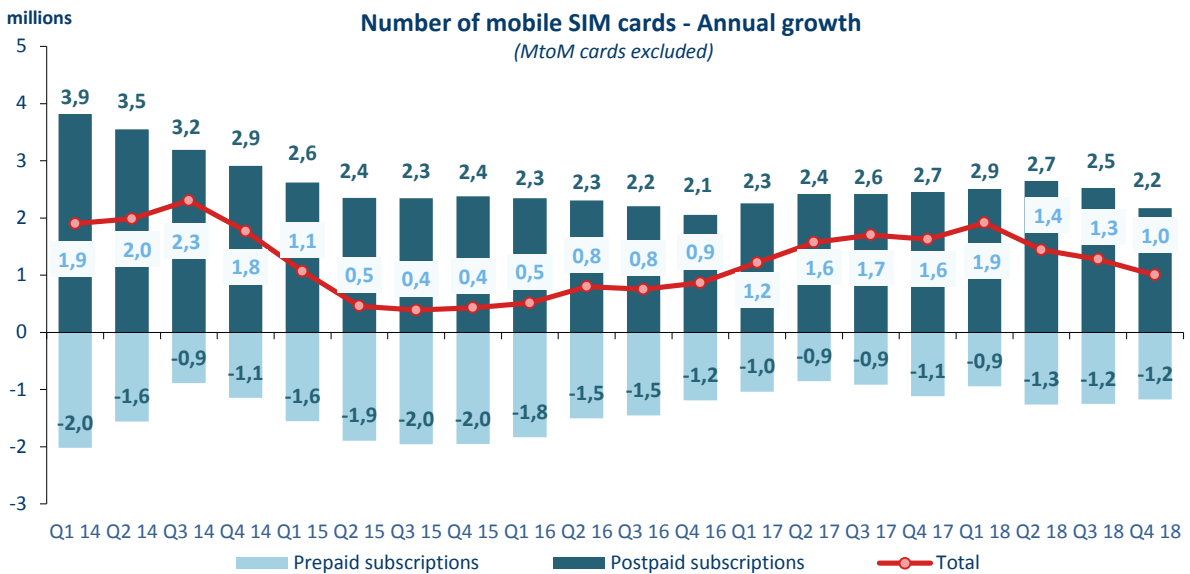
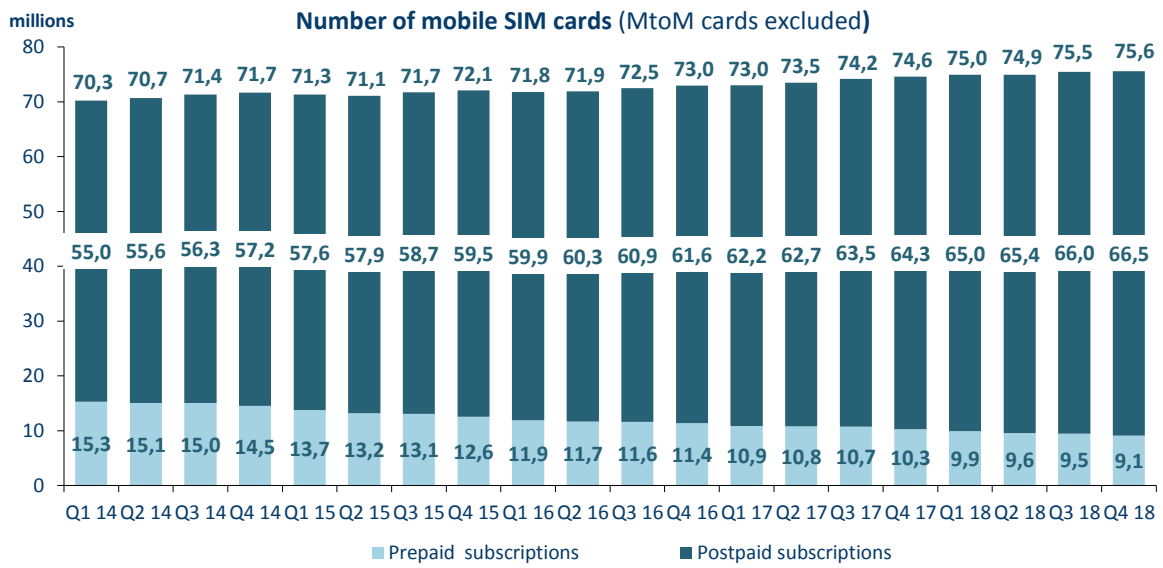
2.1.3 The fixed-mobile convergence

Bundles : mobile subscription tied to fixed services (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Number of mobile subscriptions tied to at least one fixed service	19,687	19,821	19,842	19,891	20,136	2,3%
% in total number of postpaid subscriptions	31%	30%	30%	30%	30%	-0,3 Point
% in total number of SIM cards	26%	26%	26%	26%	27%	+0,2 Point

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.



2.1.4 3G and 4G active cards

3G and 4G active users (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
3G active users	56,138	56,588	57,169	58,549	59,425	5,9%
4G active users	41,626	43,260	44,672	46,346	47,744	14,7%

adjusted figures are in italics

- The active 3G users are 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 (voice or data services) 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)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Number of transactions during the quarter	2,490	2,174	2,097	2,128	1,831	-26,5%

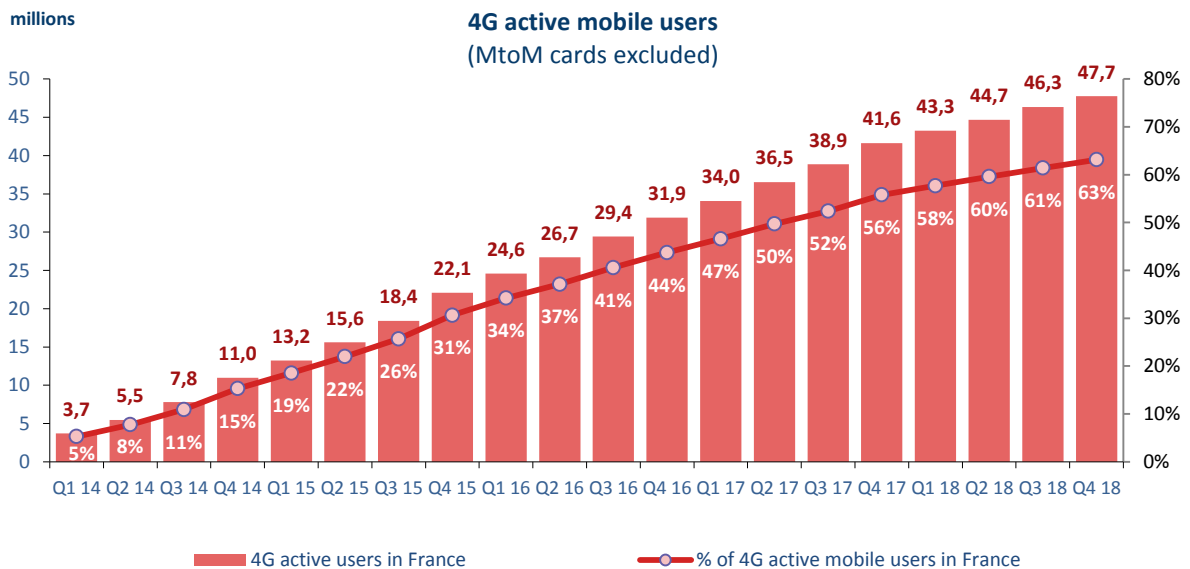
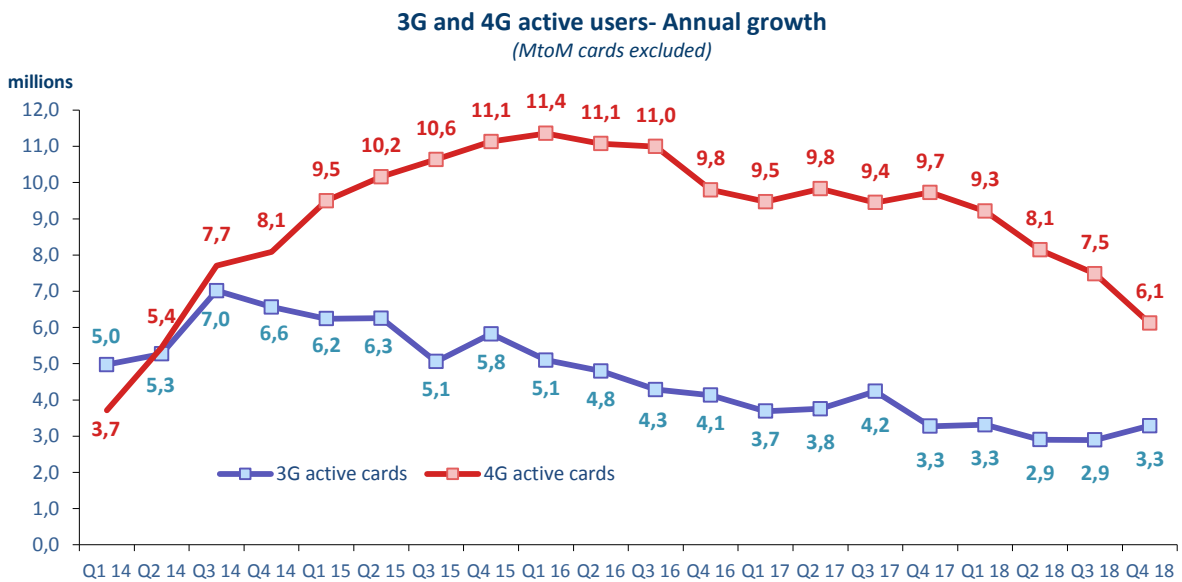
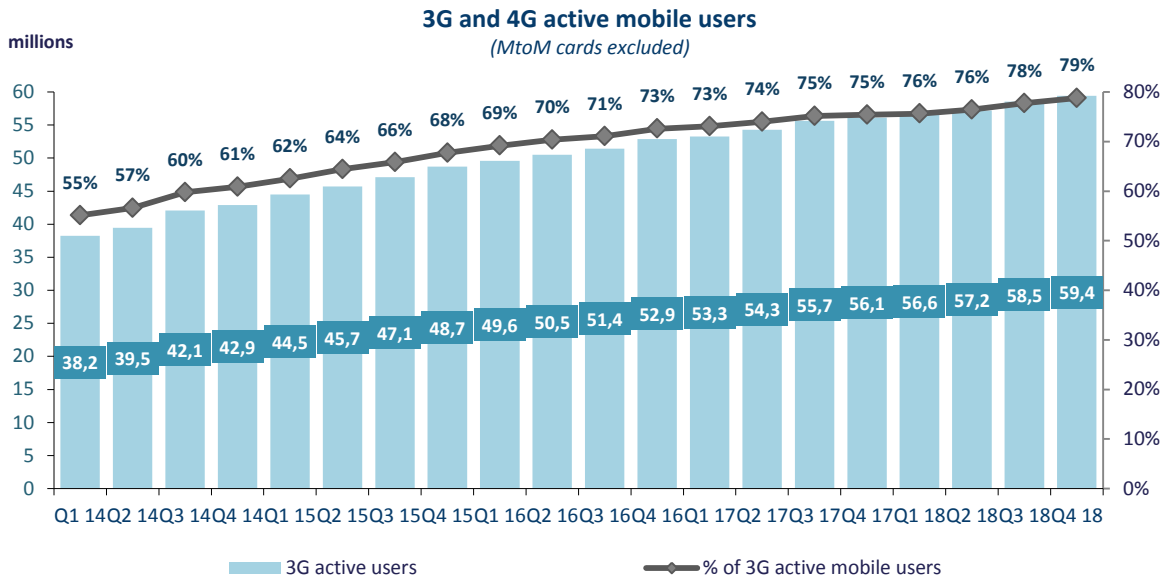
Note: the figures for ported phone numbers refer to the number of at the finalized porting procedures (ported numbers activated by the recipient operator) during the quarter in question.

2.1.6 Mobile revenue on the retail market (value-added services excluded)

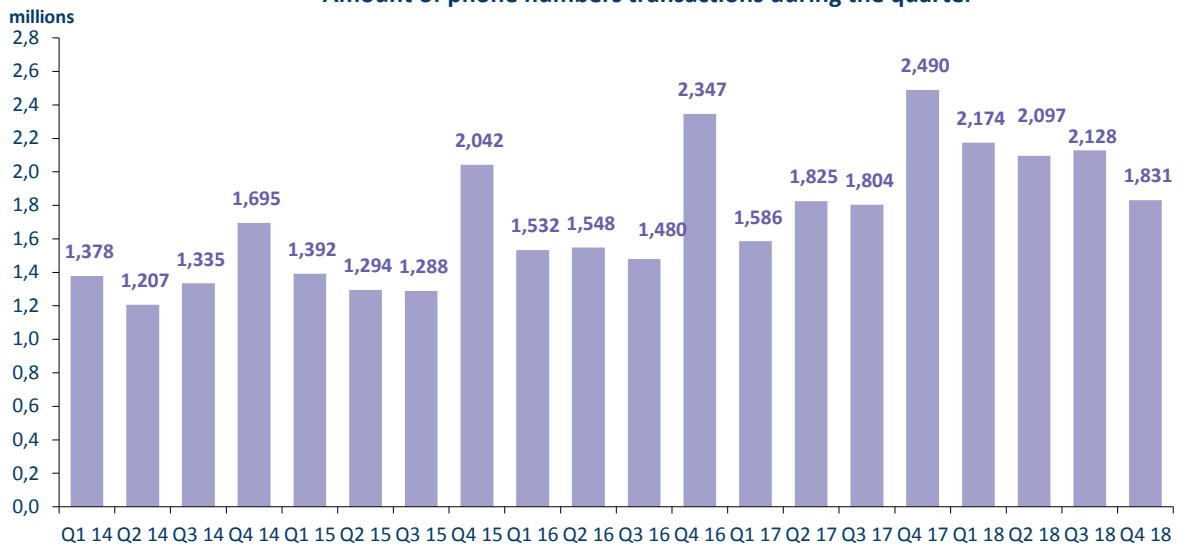
Revenues in the table below are presented at a constant scope, i.e., after application of the new accounting standard. For more information, see the appendix on p. 39.

Mobile services revenue (millions of euros VAT excluded)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Postpaid subscriptions	3 112	3 015	3 081	3 139	3 123	0,4%
Prepaid subscriptions	168	152	148	150	146	-13,2%
Total mobile services revenue (excluding MtoM revenue)	3 280	3 167	3 229	3 289	3 269	-0,3%

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.

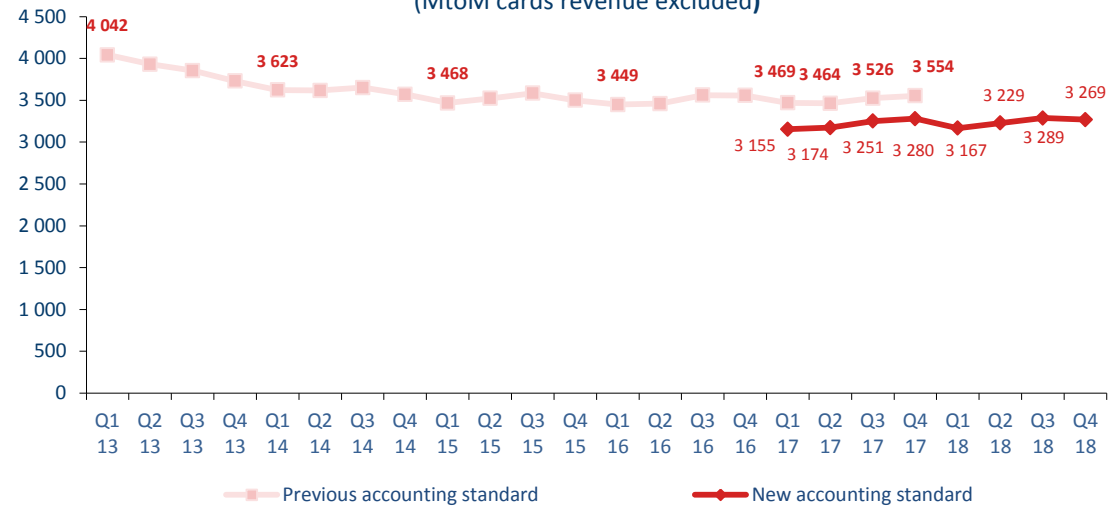


Amount of phone numbers transactions during the quarter



millions of €
VAT excl.

Revenue of mobile services
(MtoM cards revenue excluded)



2.1.7 Volume of data consumed by mobile customers

Data volumes used by customers (in Exabyte)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Postpaid subscriptions	0,708	0,759	0,870	0,937	1,029	45,3%
Prepaid subscriptions	0,008	0,009	0,010	0,014	0,019	130,4%
Total data volumes	0,716	0,768	0,879	0,951	1,048	46,3%
of which dedicated data SIM cards	0,018	0,017	0,019	0,021	0,022	25,3%
of which active 4G customers	0,656	0,691	0,806	0,865	0,952	45,2%

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 voice traffic

Mobile voice traffic (millions of minutes)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Postpaid subscriptions	40 398	41 004	41 149	39 046	41 826	3,5%
Prepaid subscriptions	2 071	1 963	1 998	1 933	1 940	-6,3%
Total mobile voice traffic	42 472	42 967	43 147	40 979	43 767	3,0%

Mobile voice traffic (millions of minutes)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
To national fixed lines	6 897	6 766	6 577	6 202	6 554	-5,0%
To national mobile lines	33 380	33 939	34 119	32 031	34 865	4,5%
Outgoing international voice traffic	1 293	1 353	1 390	1 328	1 310	1,3%
Roaming out *	902	908	1 061	1 419	1 037	15,0%
Total mobile voice traffic	42 472	42 967	43 147	40 979	43 767	3,0%

(*) Roaming-out : calls sent and received abroad by french mobile operators customers

2.1.9 Interpersonal messages (SMS, MMS)

Volumes of interpersonal messages (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Number of SMS	44 329	43 471	43 033	42 631	42 271	-4,6%
of which from postpaid subscriptions	42 892	42 114	41 663	41 304	41 016	-4,4%
of which from prepaid subscriptions	1 436	1 358	1 371	1 328	1 255	-12,6%
Number of MMS	1 264	1 225	1 327	1 404	1 305	3,3%
Total number of messages sent	45 592	44 697	44 360	44 036	43 576	-4,4%

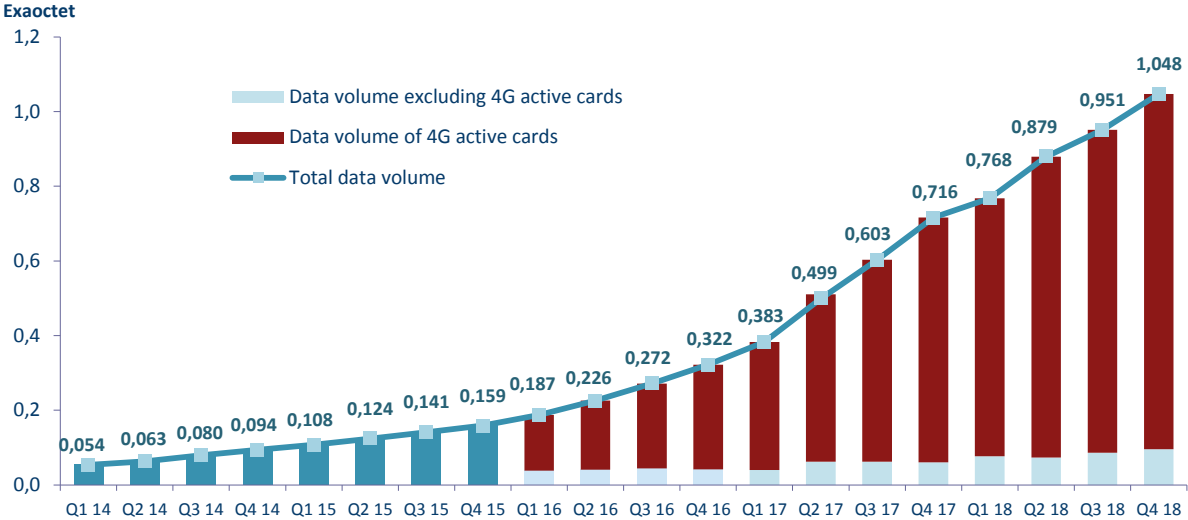
2.1.10 Roaming-out

Roaming-out	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Revenue (voice, SMS, data) (millions of euros)	158	162	171	185	154	-2,5%
Voice traffic (millions of minutes)	902	908	1 061	1 419	1 037	15,0%
SMS traffic (millions)	417	414	521	894	436	4,6%
Data traffic (terabytes)	10 979	11 957	17 378	33 293	19 559	78,1%

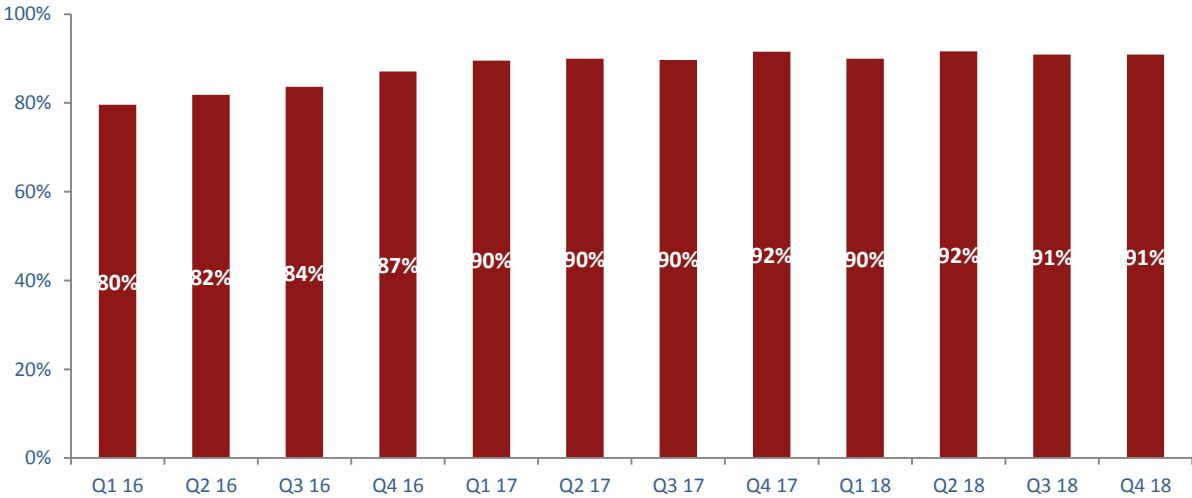
Note: roaming out corresponds to mobile services made abroad by customers of French mobile operators. For the revenue, only the services invoiced, specifically or above the fixed price, are counted to the operator's customers for the roaming services, whatever the service (incoming and

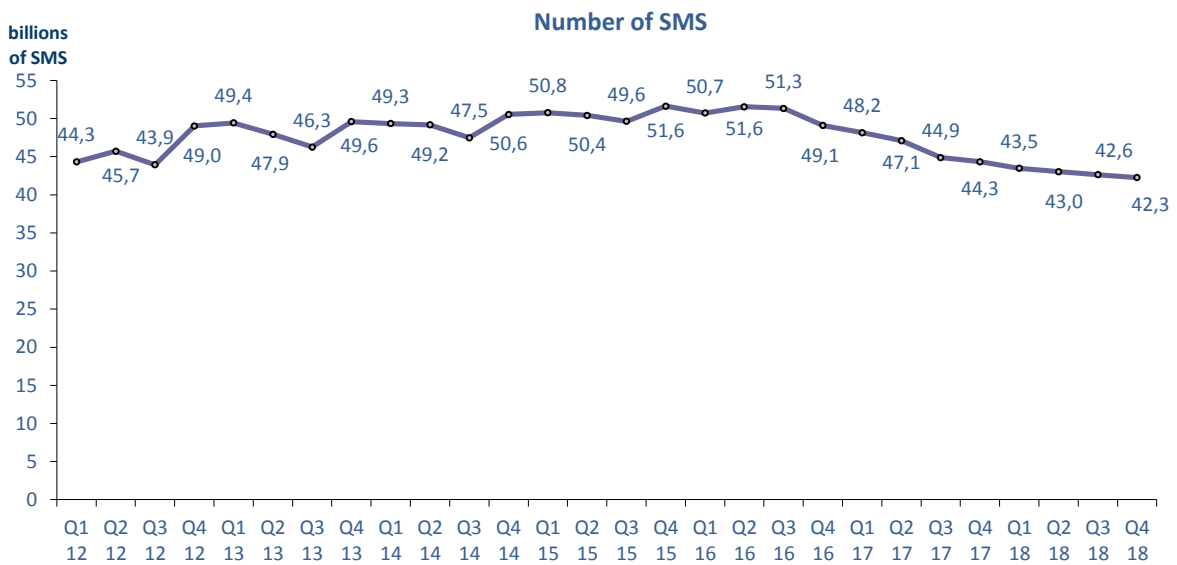
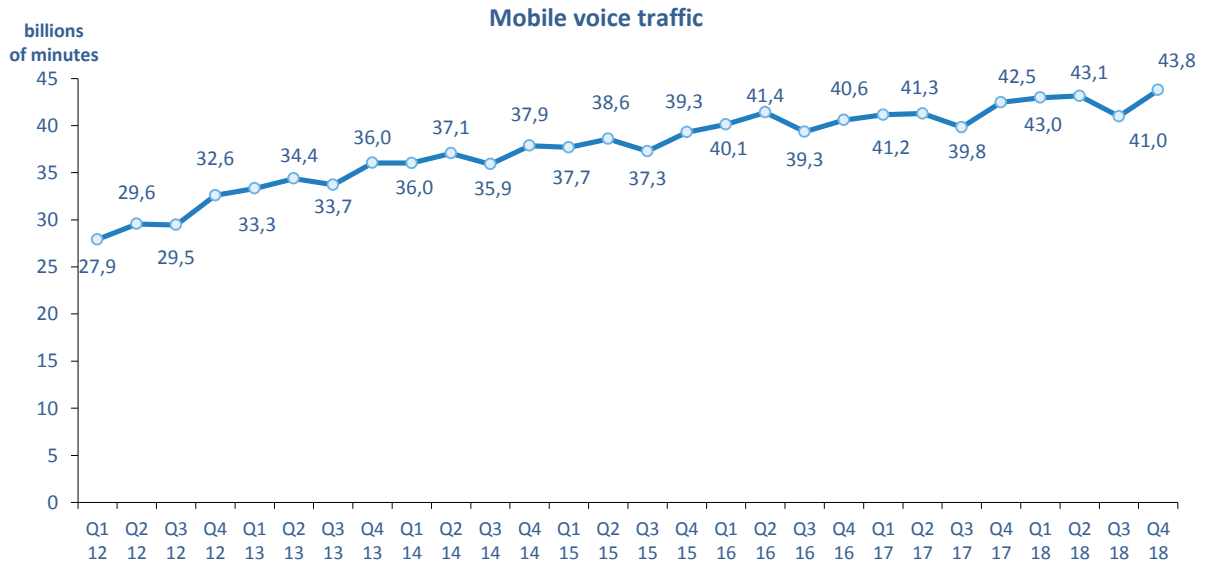
outgoing voice calls, messaging services, the internet). Since 15 June 2017, operators have had to offer the national tariffs to their customers traveling within the European Union for calls made or received from a mobile phone. For more information on the evolution of retail tariffs, see the Eurotariff note (section 5.2 of this publication).

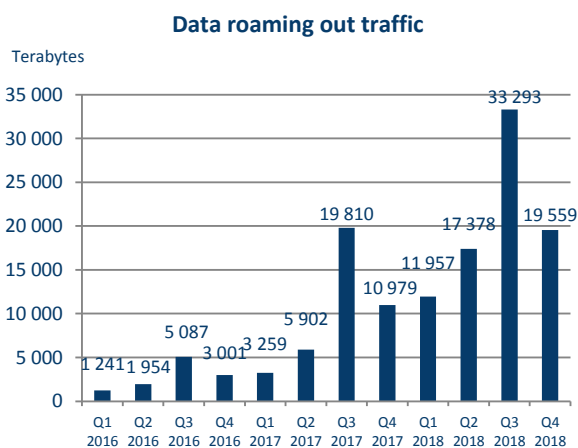
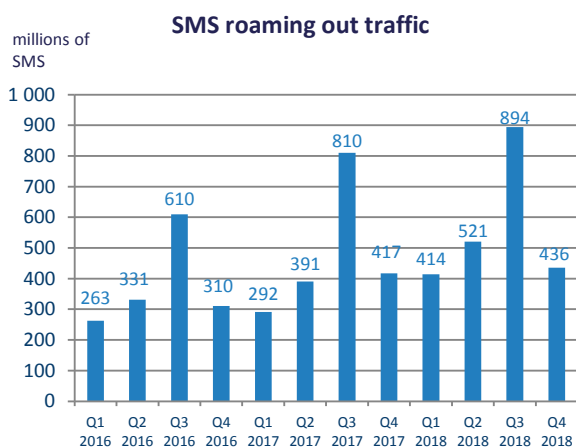
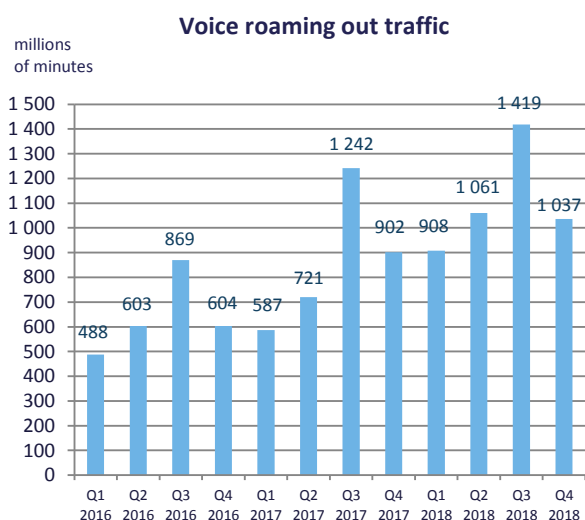
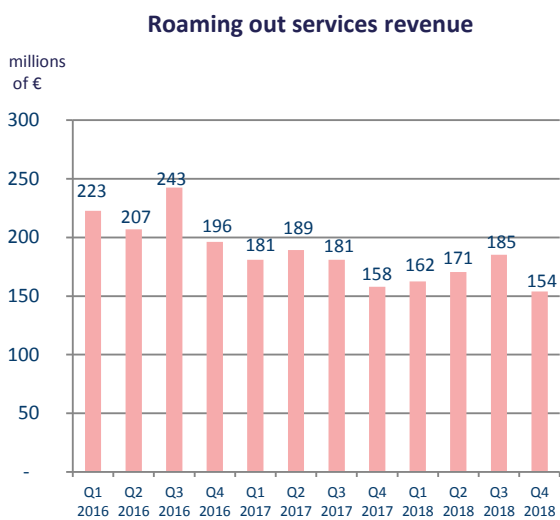
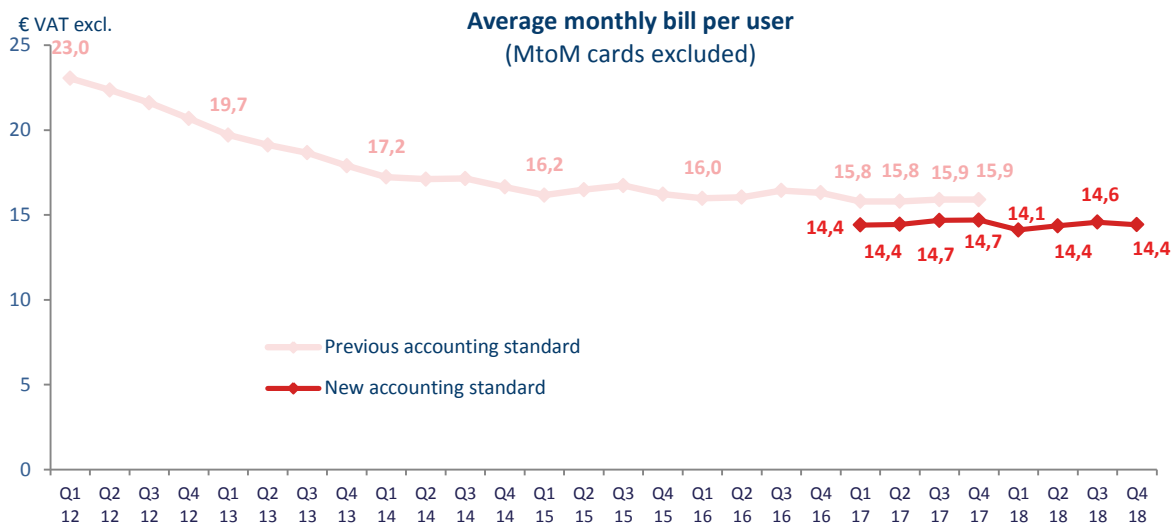
Data volume used by mobile customers



Proportion of volume from active 4G cards in total data volume







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

The average monthly bills in the table below are presented at a constant scope, i.e., after application of the new accounting standard. For more information, see the appendix on p. 39.

Average monthly bill (value added services excluded) (in euros - VAT excluded)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Mobile telephony user	14,7	14,1	14,4	14,6	14,4	-1,8%
Postpaid subscriptions	16,2	15,5	15,7	15,9	15,7	-3,2%
Prepaid subscriptions	5,3	5,0	5,1	5,3	5,2	-1,9%

- *The average monthly bill per mobile card 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.*

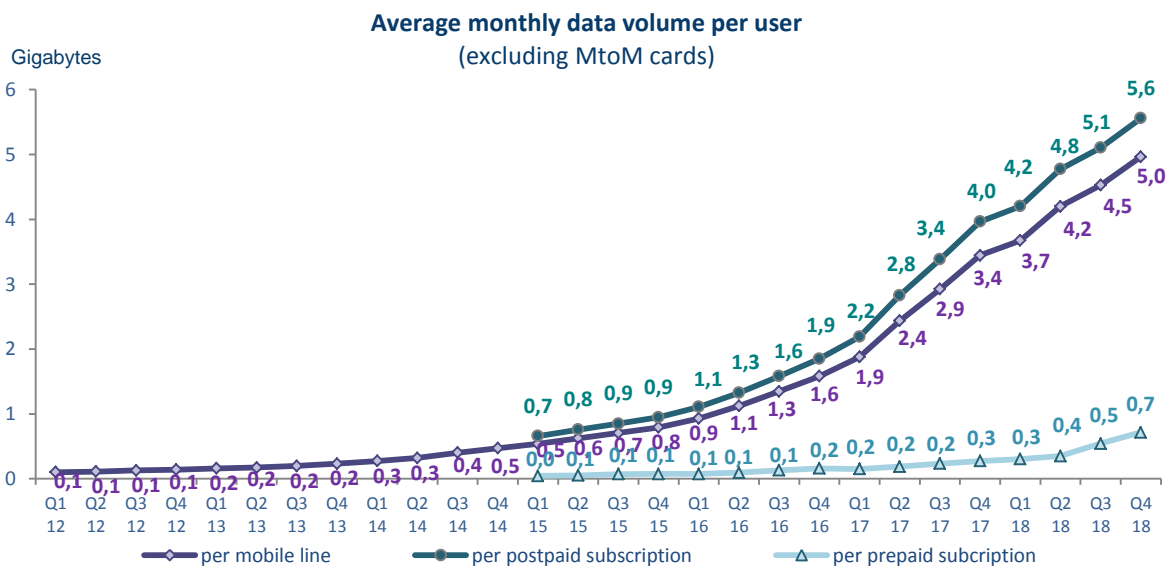
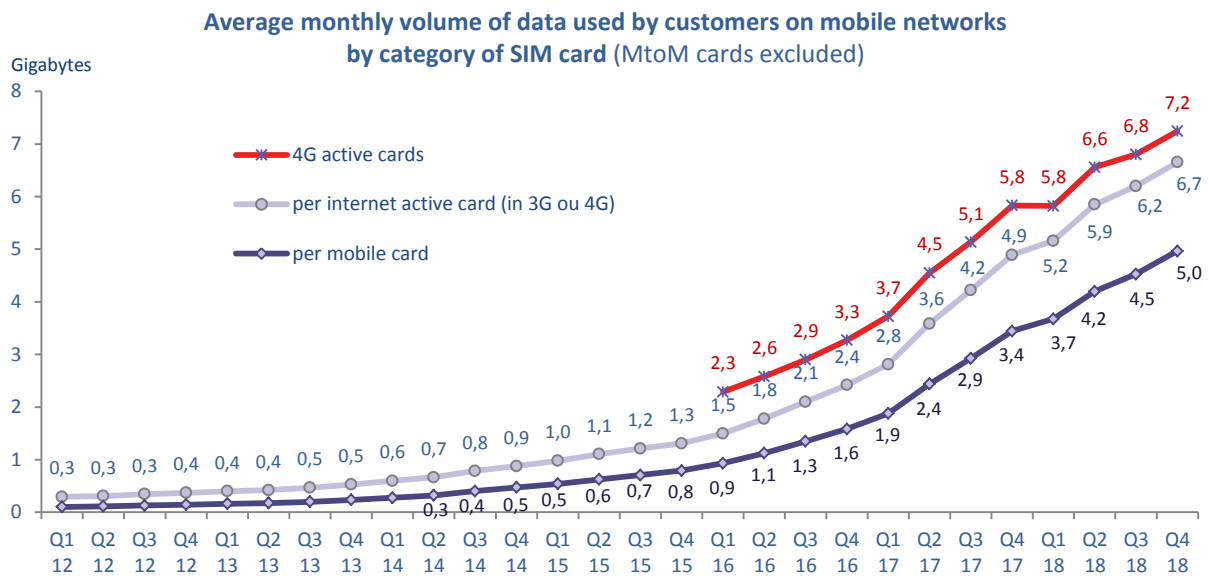
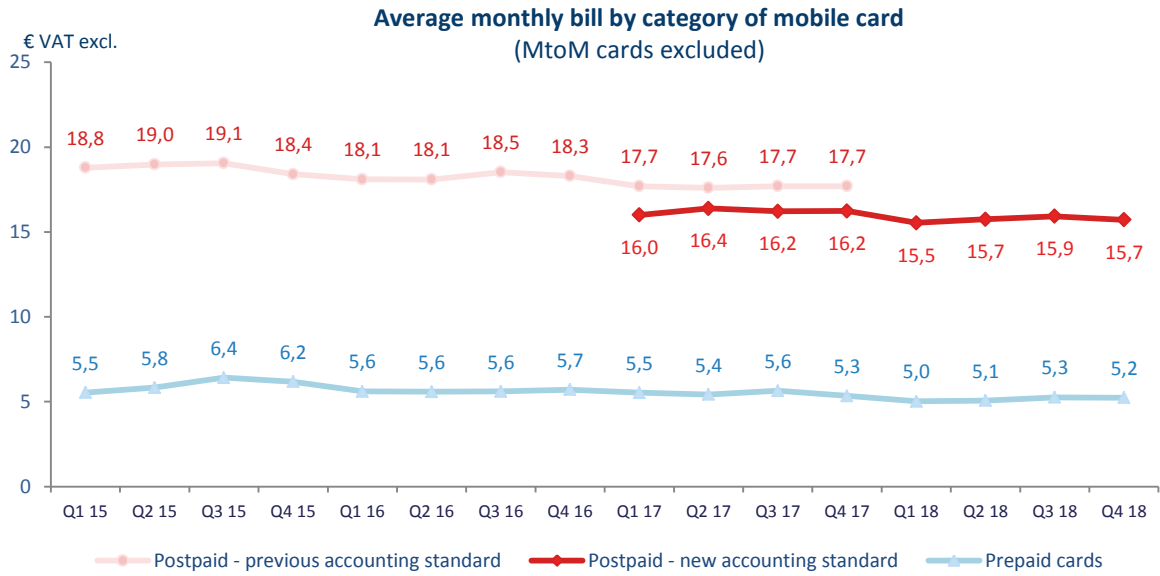
- *Average number of mobile cards for quarter N: [(number of mobile cards (MtoM cards excluded) for quarter N) + (number of mobile cards for quarter N-1(MtoM cards excluded))] / 2.*

Average monthly traffics of data consumed on mobile networks (in gigabytes)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
of which postpaid subscriptions	4,0	4,2	4,8	5,1	5,6	40,2%
of which prepaid subscriptions	0,3	0,3	0,4	0,5	0,7	160,4%
per mobile operator customer	3,4	3,7	4,2	4,5	5,0	44,1%
Per active internet user	4,9	5,2	5,9	6,2	6,7	36,0%
Per 4G active user	5,8	5,8	6,6	6,8	7,2	24,2%

- *The average monthly data volume 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.*

- *Average number of active internet cards: Active internet cards that used a data service in the last three months via 3G or 4G networks.*

- *Active 4G cards: use of a 4G mobile network during the last three months.*

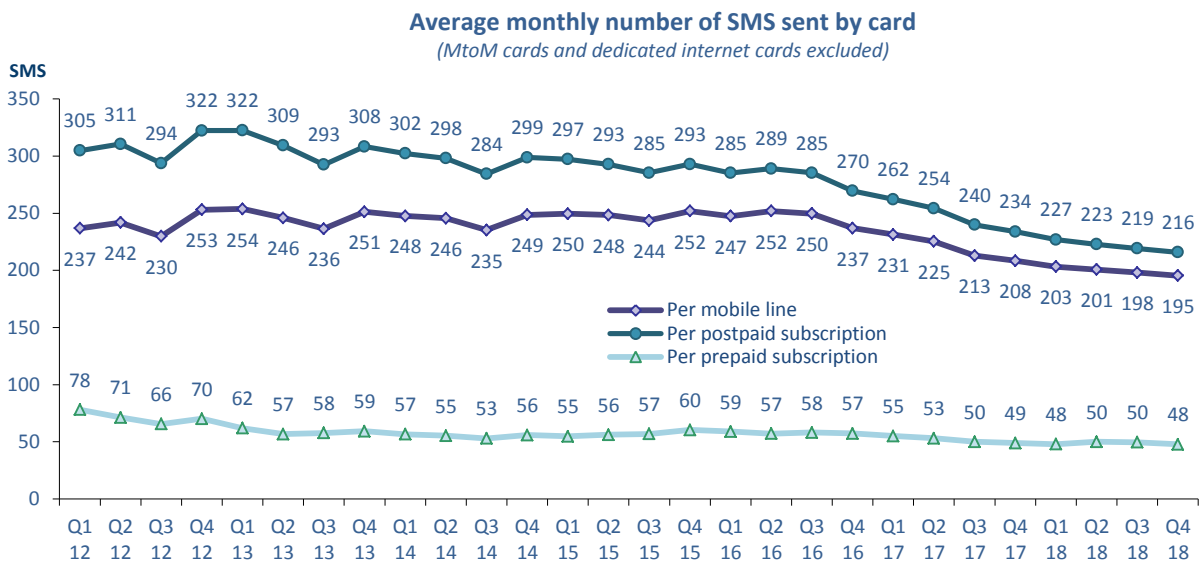
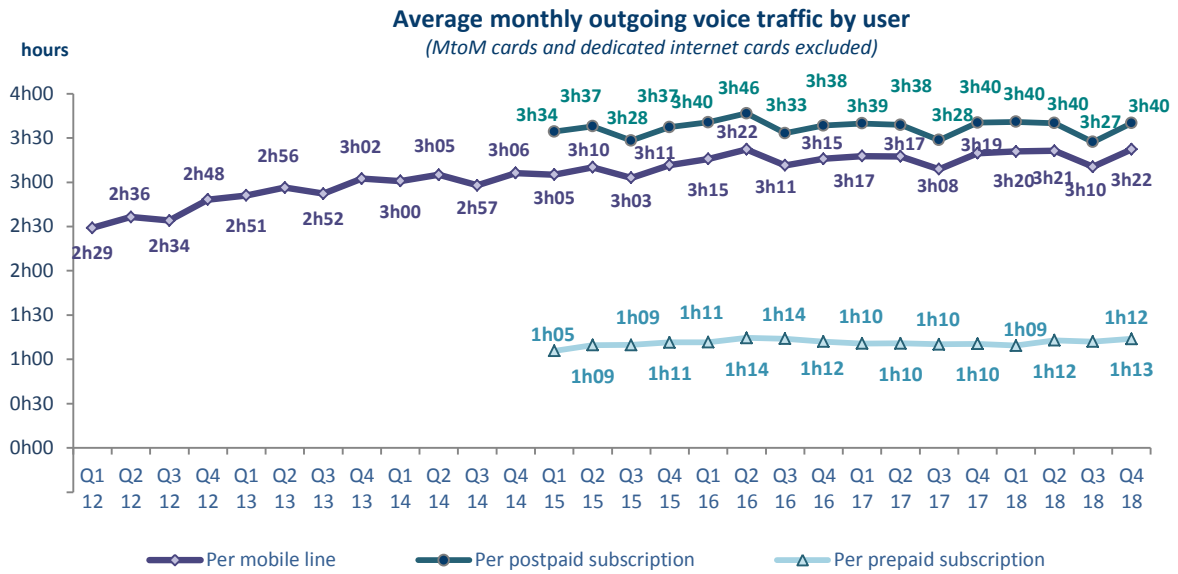


Average monthly outgoing volume (in hours)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Mobile telephony user	3h19	3h20	3h21	3h10	3h22	1,3%
Postpaid subscriptions	3h40	3h40	3h40	3h27	3h40	-0,1%
Prepaid subscriptions	1h10	1h09	1h12	1h12	1h13	4,7%

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)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Number of SMS sent per user during the quarter	208	203	201	198	195	-6,2%
Postpaid subscriptions	234	227	223	219	216	-7,7%
Prepaid subscriptions	49	48	50	50	48	-2,3%
Number of MMS sent per user during the quarter	7	7	8	9	8	7,1%
Number of messages sent per user during the quarter	214	209	207	205	201	-6,0%

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).

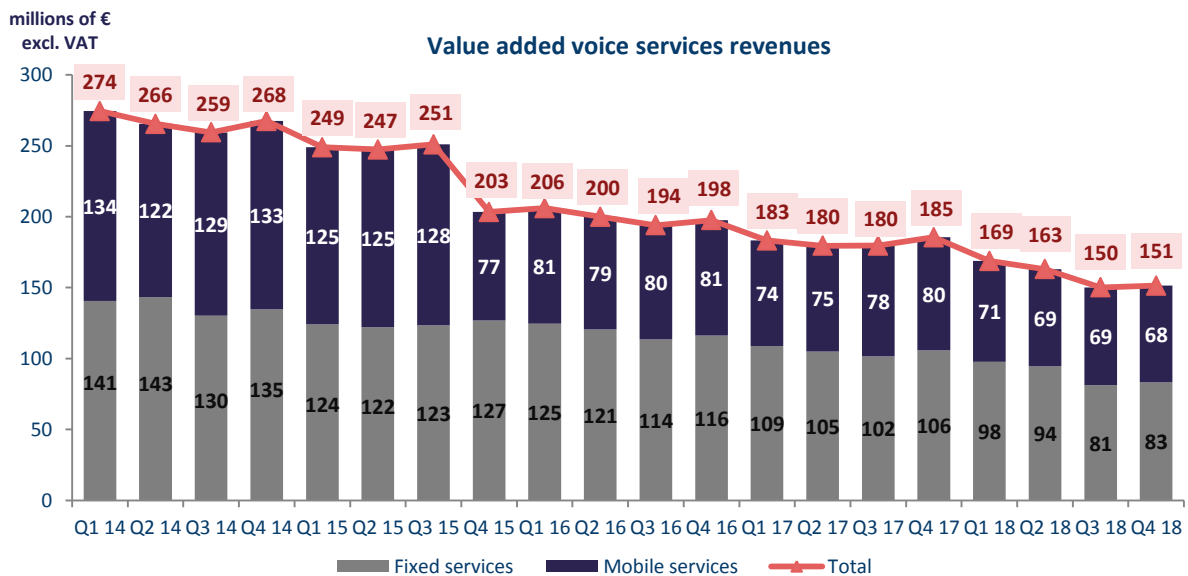
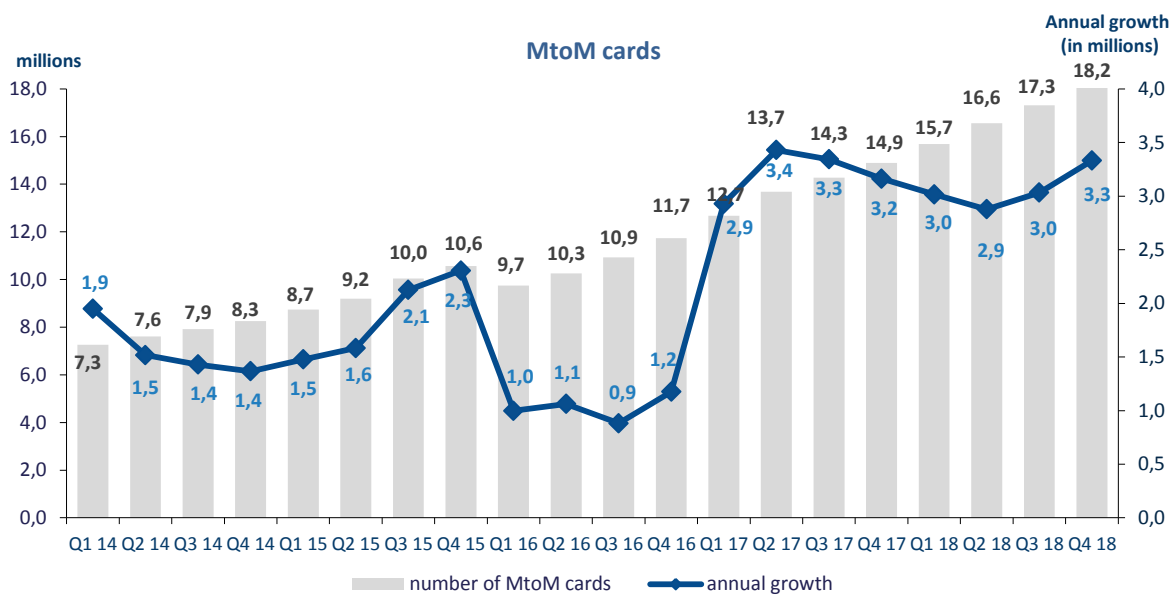


2.2 Internet of things: MtoM cards

MtoM cards	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Revenue of MtoM SIM cards (millions of € VAT excl.)	25	30	30	30	34	34,1%
Number of MtoM SIM cards (millions of units)	14,899	15,685	16,561	17,305	18,230	22,4%

adjusted figures are in italics

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)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Value-added voice services	185	169	163	150	151	-18,4%
From fixed networks	106	98	94	81	83	-21,4%
From mobile networks	80	71	69	69	68	-14,3%
Value-added data services	82	73	73	76	72	-13,1%
Directory services	26	15	18	14	23	-12,7%
Value-added services	294	258	253	240	246	-16,4%

Notes:

- 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.

- This reform led to a decrease of the revenue since the fourth quarter (approximately -40% in annual evolution between the fourth quarter of 2015 and the third quarter of 2016).

Value-added voice traffics (millions of minutes)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Voice traffic from fixed network	839	853	791	741	745	-11,2%
Voice traffic from mobile network	467	468	438	469	456	-2,4%
Total voice traffics	1 307	1 320	1 229	1 209	1 202	-8,1%

Number of calls from directory services (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Number of calls	4	3	3	3	4	-30,2%

Note: are considered as directory services numbers: 118xyz numbers and short numbers giving access to directory services (3288, 3217, 3200, 3212).

4 Other operators revenue

4.1 Hosting and call center management services

Revenue (millions of euros excl. VAT)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Hosting and call center management	85	84	82	84	97	13,8%

4.2 Terminals and equipments

Revenues from mobile equipment in the table below are presented at a constant scope, i.e., after application of the new accounting standard. For more information, see the appendix I.

Revenue from terminals and equipment (millions of euros excl. VAT)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
linked to fixed telephony & Internet services	253	229	238	239	248	-2,1%
linked to mobile services	1 072	826	725	814	1 027	-4,2%
Terminals and equipment	1 325	1 055	963	1 053	1 274	-3,8%

adjusted figures are in italics

Note: the revenue includes commissions paid to distributors

5 The intermediate market: interconnection and wholesale market

5.1 The overall market

Interconnection services Revenue (millions of euros)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Fixed operators	1 334	1 285	1 314	1 260	1 284	-7,5%
of which telephony services (incl VGA)	472	432	422	411	413	-12,4%
of which broadband services	707	703	745	690	712	0,7%
of which wholesale leased lines products	155	150	147	159	159	3,0%
Mobile operators	661	628	657	703	656	-0,8%
of which voice termination (national and international)	196	199	200	190	197	0,7%
of which SMS/MMS termination	363	351	355	356	346	-4,8%
Roaming in	102	78	102	157	113	10,7%
Total revenue	1 995	1 913	1 970	1 963	1 941	-2,7%

adjusted figures are in italics

Interconnection services volumes	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Fixed operators	23 240	23 023	21 120	21 112	22 326	-3,9%
Mobile operators	26 485	26 699	26 338	25 429	26 371	-0,4%
Total voice traffics (in millions of minutes)	49 725	49 722	47 458	46 541	48 697	-2,1%
Incoming SMS (in millions)	28 851	27 960	27 517	27 375	27 076	-6,2%

adjusted figures are in italics

Definitions and tariffs evolutions on the wholesale market

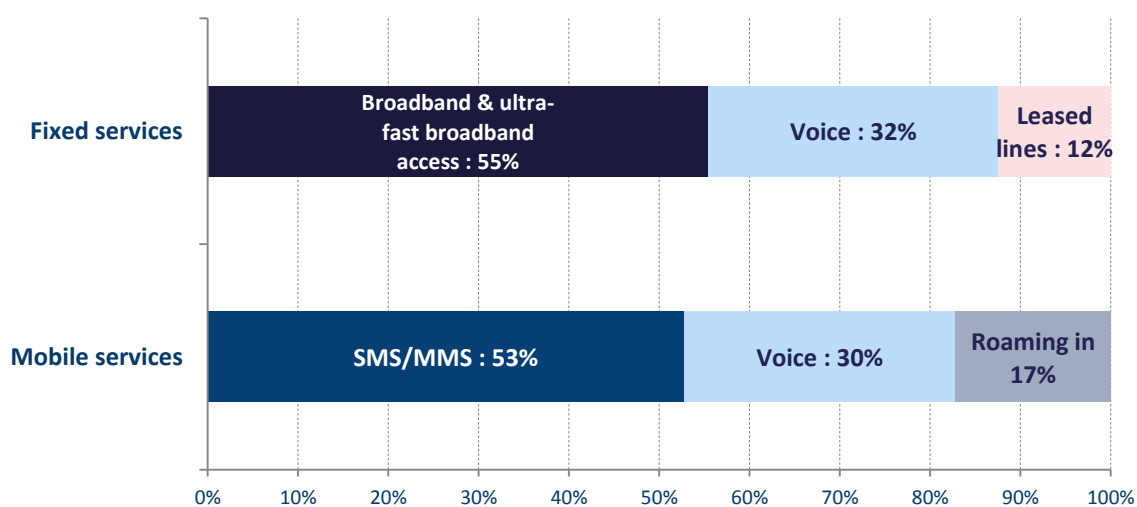
- *Interconnection covers all the services provided by one carrier to another under the terms of an interconnection agreement. In cases of mergers or takeovers, some of the revenue streams between the telcos disappear, which might account for decreases in revenue from one quarter to the next.*
- *Interconnection 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 €9.31 since January 1st 2018 against previously at €9.45 between March 1st 2017 and 31th December 2017 and 9.10€ between March 1st 2016 and 29th February 2017. The tariff for partial unbundling is set to €1.77.*

For more information, see: <https://archives.arcep.fr/?id=6989>

- *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 one billion of euros for the overall of year 2017).*
- *From January 1st 2017, the price for call termination on mobile networks is set to 0.74c€/minute for all the operators against 0.76c€/min since January 1st 2016.*
- *From July 1st 2013, the price for SMS termination is set to 1c€/SMS for all the operators (metropolitan and overseas operators).*

For price details, see: <https://www.arcep.fr/la-regulation/grands-dossiers-thematiques-transverses/les-terminaisons-dappel.html>

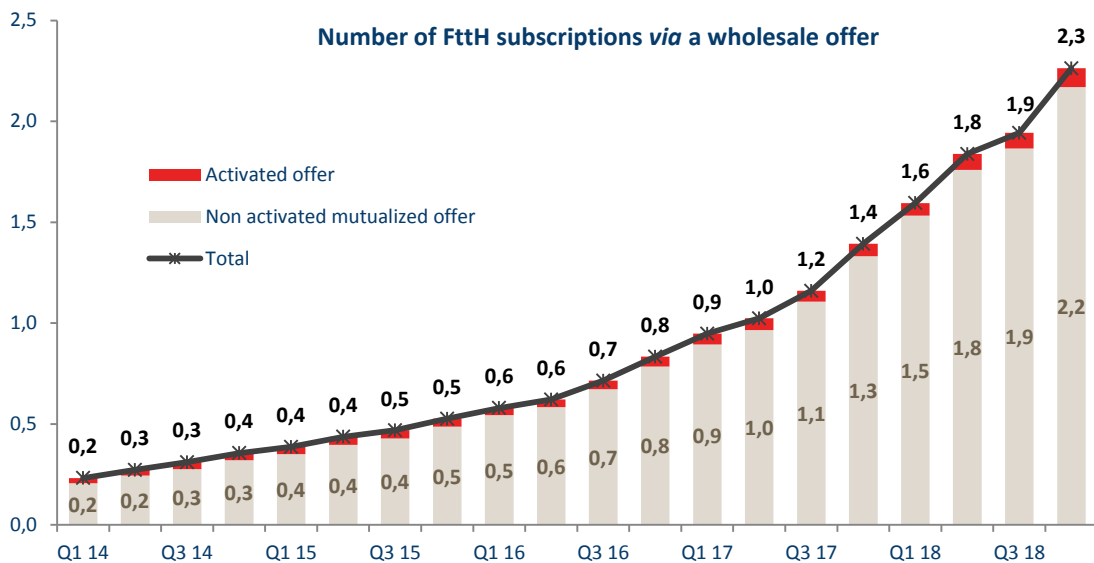
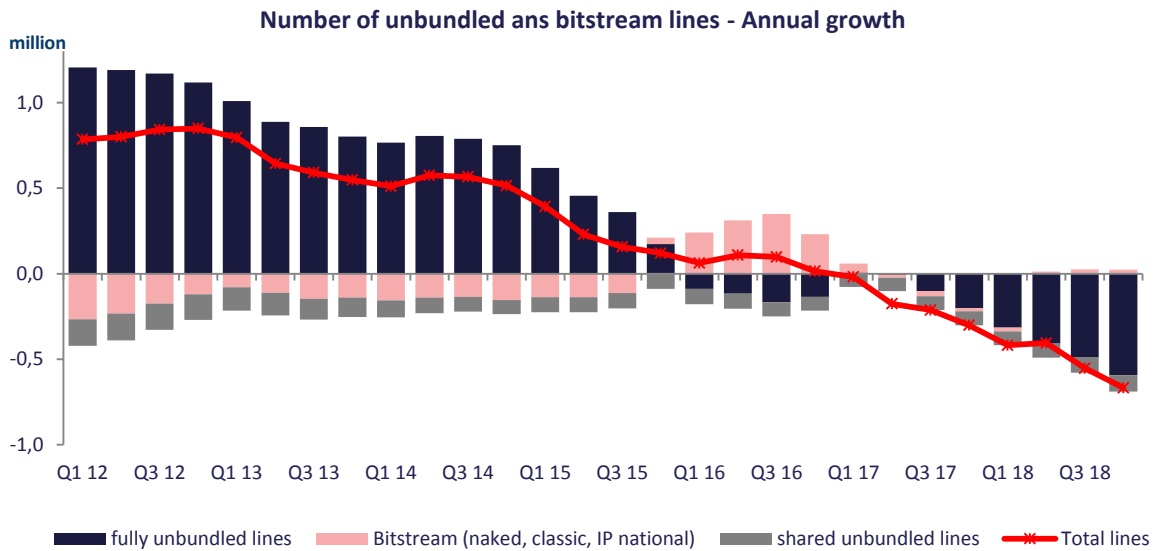
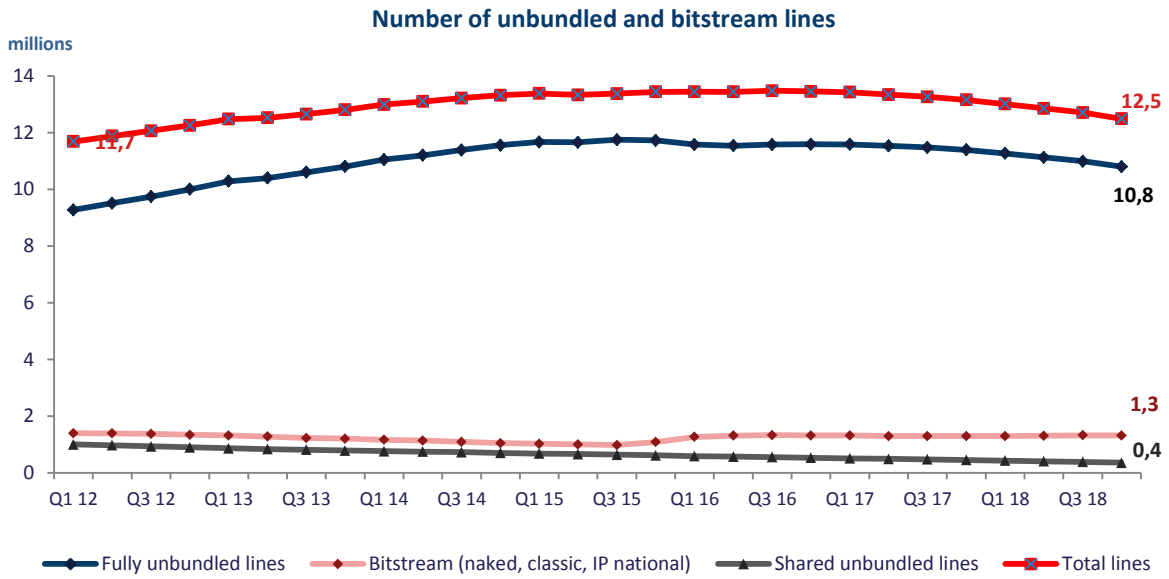
Interconnection services revenue - Fourth quarter 2018



Unbundling (millions of units)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Shared unbundled lines	0,459	0,435	0,416	0,389	0,364	-20,7%
Fully unbundled lines	11,393	11,273	11,128	10,994	10,799	-5,2%
Bitstream (naked, classic and IP national)	1,302	1,303	1,314	1,327	1,325	1,7%
Total number of unbundled lines	13,154	13,010	12,858	12,710	12,488	-5,1%

Number of FttH subscriptions <i>via</i> a wholesale offer (in millions)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Subscriptions <i>via</i> a passive sharing offer	1,331	1,533	1,759	1,866	2,169	63,0%
Subscriptions <i>via</i> an active wholesale access product	0,062	0,062	0,079	0,077	0,094	51,6%
Total number of subscriptions <i>via</i> a wholesale offer	1,393	1,595	1,838	1,943	2,263	62,5%

For more information, see: <https://www.data.gouv.fr/fr/datasets/le-marche-du-haut-et-tres-haut-debit-fixe-deploiements/>



5.2 Mobile operators « Roaming-in »

Roaming in	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Voice traffic (millions of minutes)	1 267	1 323	1 467	1 664	1 419	12,0%
SMS traffic (millions)	197	211	241	373	188	-4,6%
Data traffic (terabytes)	8 156	10 415	14 125	25 331	14 491	77,7%

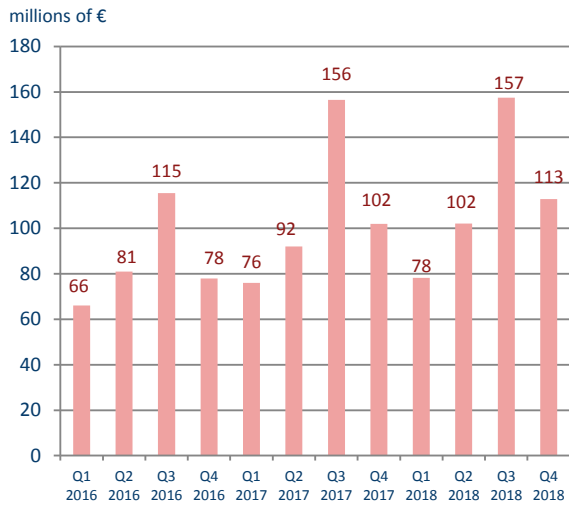
Notes: this market segment is part of the overall market (cf. section 5.1).

- *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.*
- *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€ VAT excl. per minute for the calls made from abroad, +1,14 c€ VAT excl. per minute for calls received abroad, +2 c€ VAT excl. for SMS and +5 c€ VAT excl./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 15 June 2017 to 1c€ per message for SMS (against 2c€ VAT excl. per message for the period from 1st July 2014 to 14 June 2017); to 3,2c€ per minute for voice calls (against 5c€ VAT excl. per minute for the period from 1st July 2014 to 14 June 2017). The tariff for mobile internet is set to 6,0cts€ VAT excl. /GO from 1st January 2018 (against 7,7ct€ VAT excl. /Go previously).*

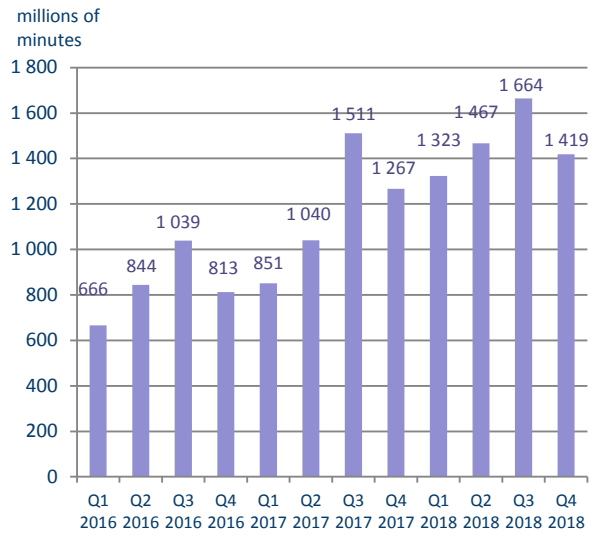
More information at <https://www.arcep.fr/la-regulation/grands-dossiers-reseaux-mobiles/grand-dossier-roaming.html>

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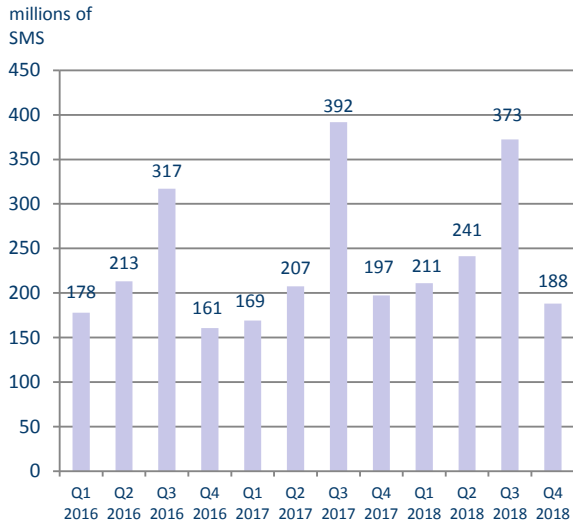
Roaming in services revenue



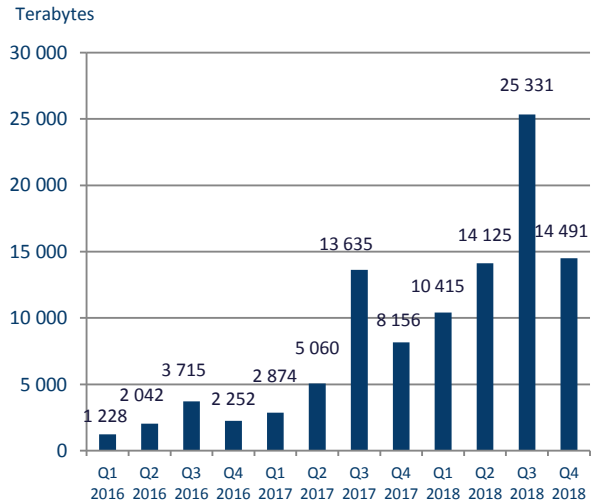
Voice roaming in traffic



SMS roaming in traffic



Data roaming in traffic



Appendix 1: change due to the new accounting standard IFRS15

IFRS 15 revenue recognition principles

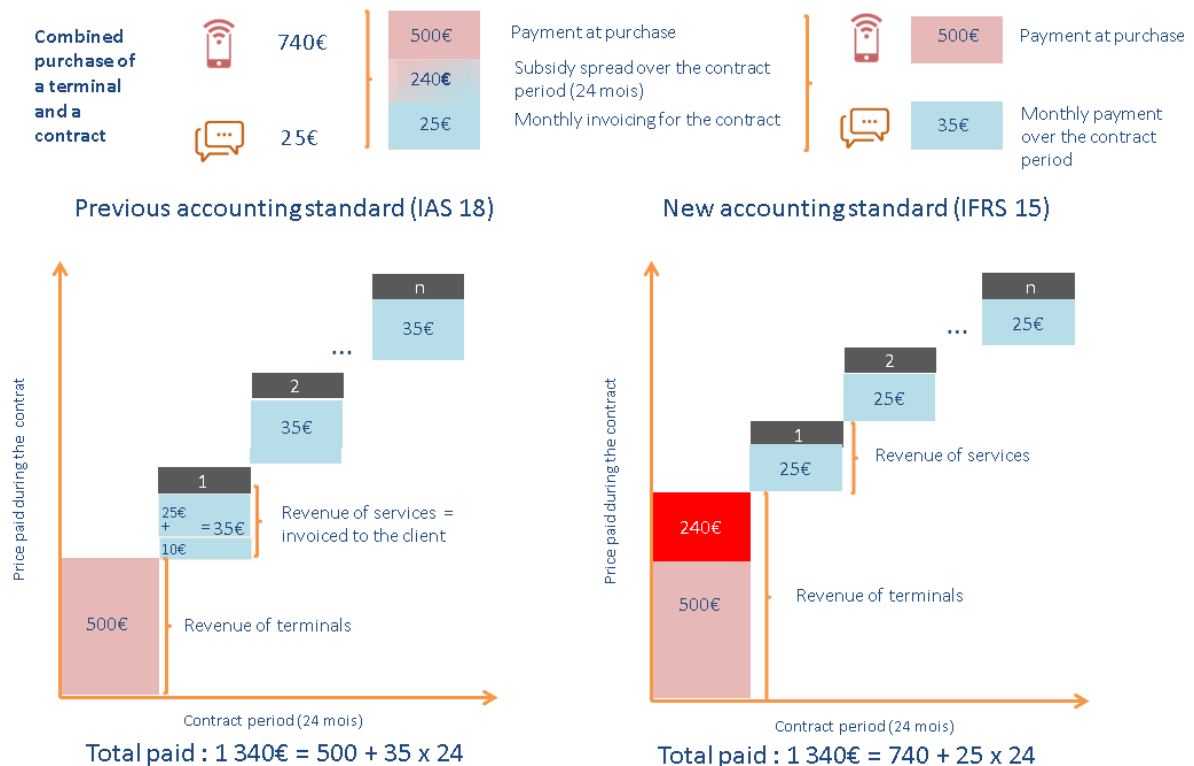
With the application of new accounting standards (IFRS 15) since January 1, 2018, the revenue from mobile postpaid packages, as the revenue of the sale and the rental of terminals, are affected by the change in allocating the part related to the terminal subsidy, which is now accounted in full at the date of its purchase by the customer, in the revenues from terminals. .

Previously, this revenue (the "operator subsidy") was charged to the customer through his monthly subscription, during all his commitment period. After the commitment period, if the customer did not modify his contract, the revenue was allocated to revenue from mobile services.

So, there are several effects:

- A transfer of revenue between the postpaid packages and the terminals (of the amount of the monthly reimbursement during the commitment period)
- An accounting of that revenue at the date of purchase, versus a monthly spreading of this amount (usually 24 months)

Beyond the commitment period (linked to the reimbursement of the terminal), the full amount of the postpaid package, invoiced each month, is recorded in mobile services revenue (postpaid packages).



1. Revenue indicators on the retail market – previous accounting standard

Revenue on the retail market (millions of euros VAT excluded)	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Fixed services (including leased lines and data transport networks)	4 323	4 269	4 298	4 346
Mobile services (MtoM included)	3 497	3 492	3 556	3 579
Value-added services and directory services	290	281	286	294
Electronic communications services	8 111	8 042	8 140	8 218
Others revenues	844	848	925	1 128
Overall market	8 956	8 890	9 066	9 346

adjusted figures are in italics

Mobile services revenue (millions of euros VAT excluded)	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Postpaid subscriptions	3 285	3 288	3 343	3 386
Prepaid subscriptions	185	176	182	168
Total mobile services revenue (excluding MtoM revenue)	3 469	3 464	3 526	3 554

Average monthly bill (value added services excluded) (in euros - VAT excluded)	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Mobile telephony user	15,8	15,8	15,9	15,9
Postpaid subscriptions	17,7	17,6	17,7	17,7
Prepaid subscriptions	5,5	5,4	5,6	5,3

Revenue from terminals and equipment (millions of euros VAT excluded)	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Linked to fixed telephony & Internet services	235	235	240	253
Linked to mobile services	498	490	573	763
Terminals and equipment	733	725	813	1 016

2. Revenues from mobile services and sale of mobile terminals – previous and new accounting standards

Revenue from mobile services and sales of mobile terminals (in millions of euros VAT excluded)	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Revenue from mobile services (excluded MtoM revenue)	3 469	3 464	3 526	3 554
Revenue from mobile terminals	498	490	573	763
Total of revenue (mobile services & terminals)	3 967	3 954	4 099	4 317

Revenue from mobile services and sales of mobile terminals (in millions of euros VAT excluded)	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	change Q417/Q418
Revenue from mobile services (excluded MtoM revenue)	3 280	3 167	3 229	3 289	3 269	-0,3%
Revenue from mobile terminals	1 072	826	725	814	1 027	-4,2%
Total of revenue (mobile services & terminals)	4 352	3 993	3 953	4 102	4 296	-1,3%

Revenue of mobile services and mobile terminals Impact of the new accounting standard IFRS 15

