



autorité de régulation  
des communications électroniques  
et des postes

RÉPUBLIQUE FRANÇAISE

# ELECTRONIC COMMUNICATIONS SERVICES IN FRANCE

2<sup>ND</sup> QUARTER 2016

OBSERVATORY OF THE ELECTRONIC COMMUNICATIONS  
MARKET

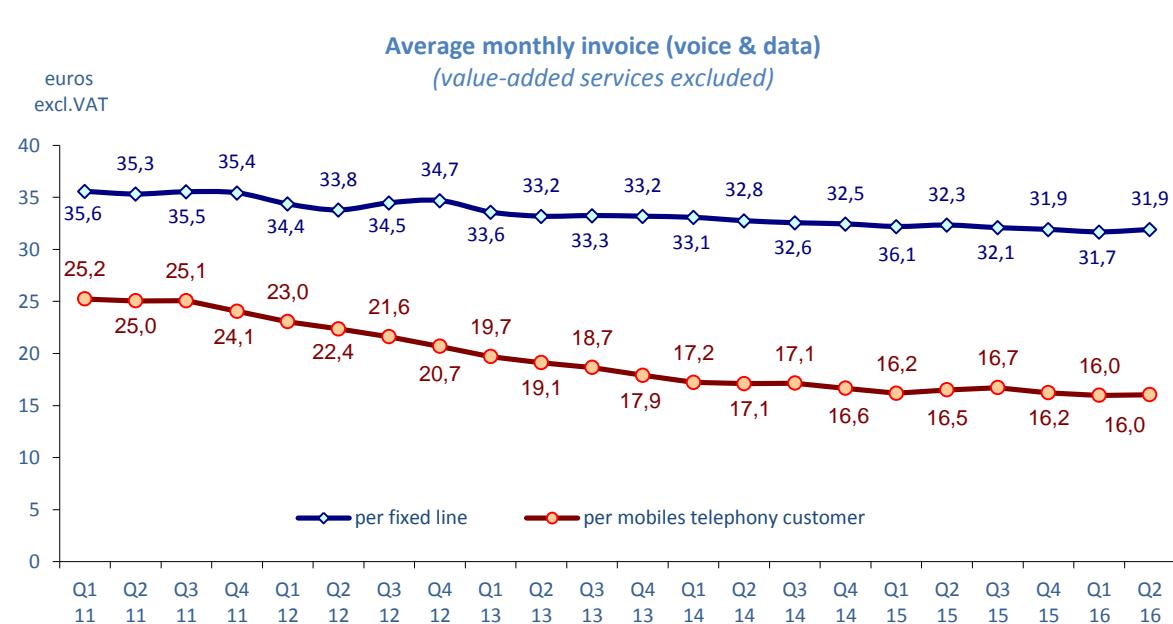
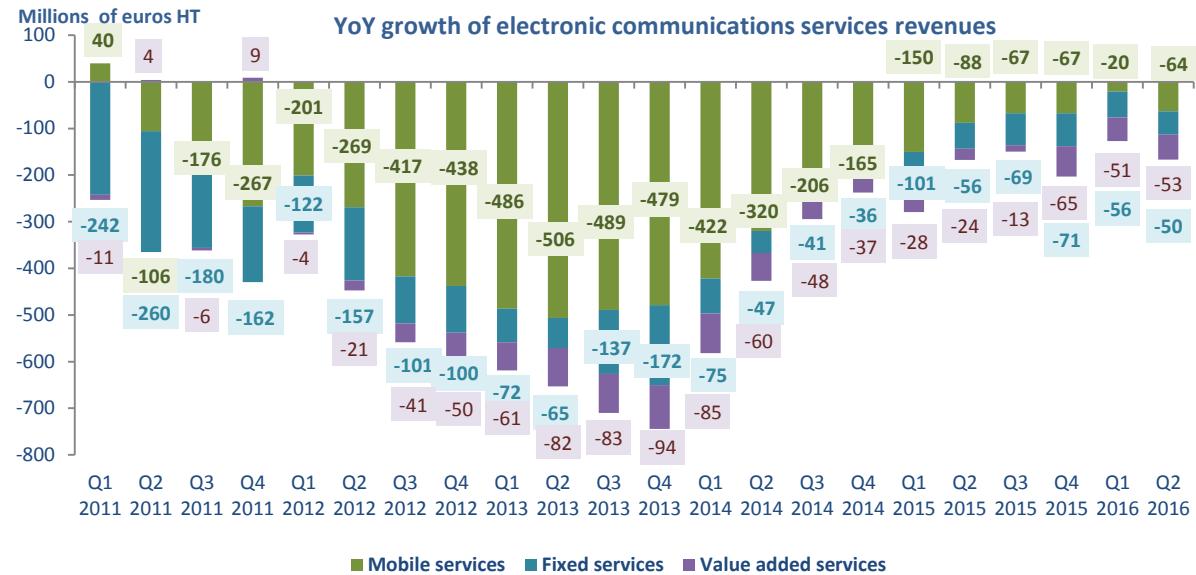
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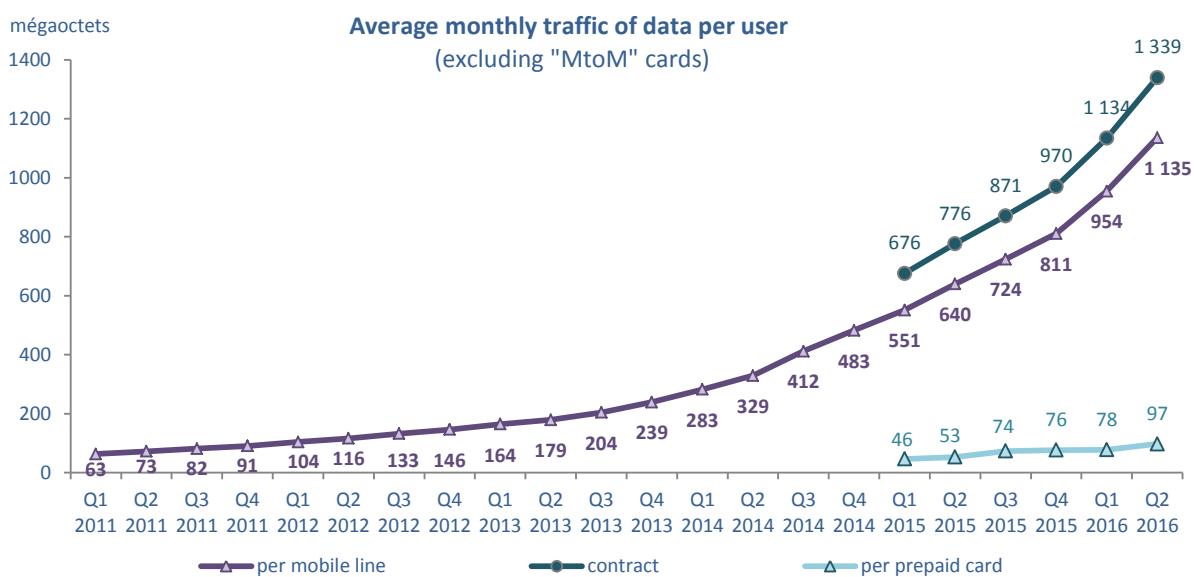
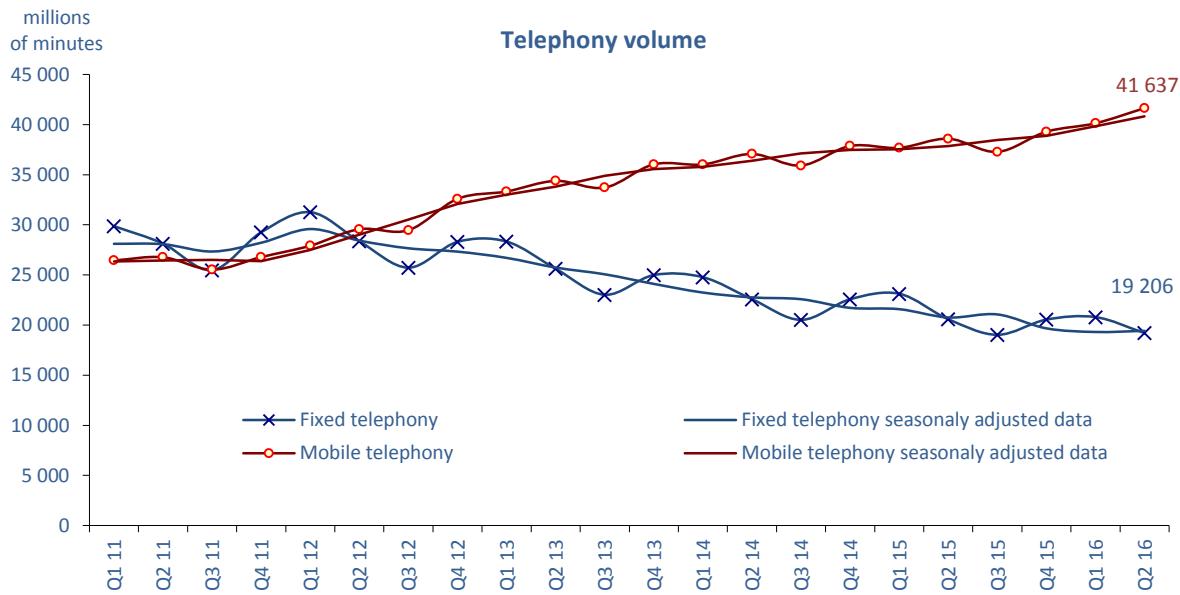
## Synthesis

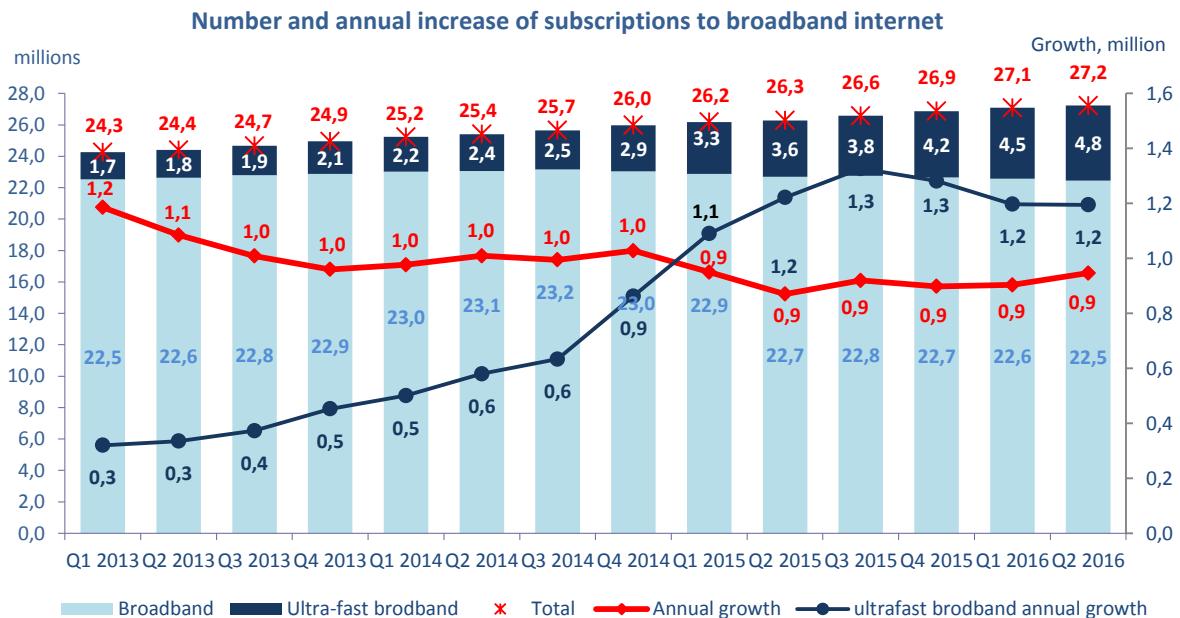
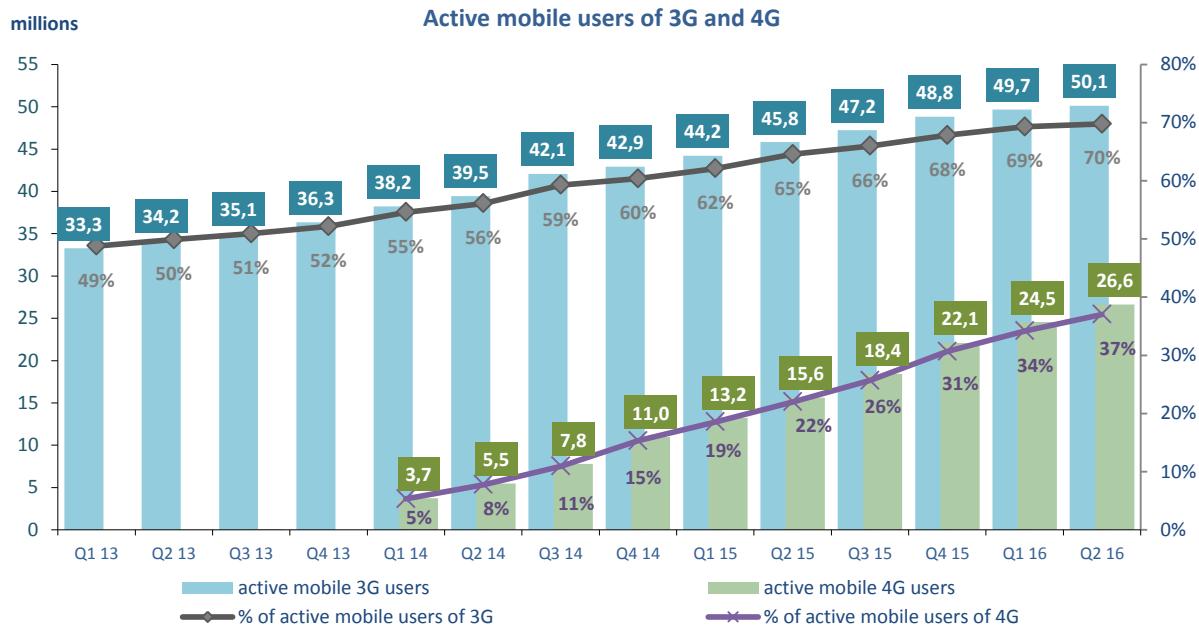
Revenue on the retail market (millions of euros excl.VAT)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Fixed services (capacity services included)	4 262	4 233	4 243	4 189	4 212	-1,2%
Mobile services (MtoM included)	3 550	3 606	3 527	3 474	3 486	-1,8%
All telephony and Internet	7 811	7 839	7 770	7 663	7 698	-1,4%
Advanced services and directory services	345	347	302	304	291	-15,5%
Electronic communications services	8 156	8 187	8 072	7 968	7 989	-2,0%
Others revenues	783	825	1 022	784	784	0,1%
Entire market	8 939	9 011	9 094	8 752	8 773	-1,9%

adjusted figures are in italics

Note: Others revenues do not really fall under the telecommunications services market. Since registered operators contribute little to this market, this indicator gives only a partial idea of total figures. This item covers revenues from terminals and equipment, from hosting and call center management, and from directories and advertising.







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## 1 Fixed networks services – retail services

### 1.1 Internet access and telephony services

#### 1.1.1 Internet access (broadband and ultra-fast broadband)

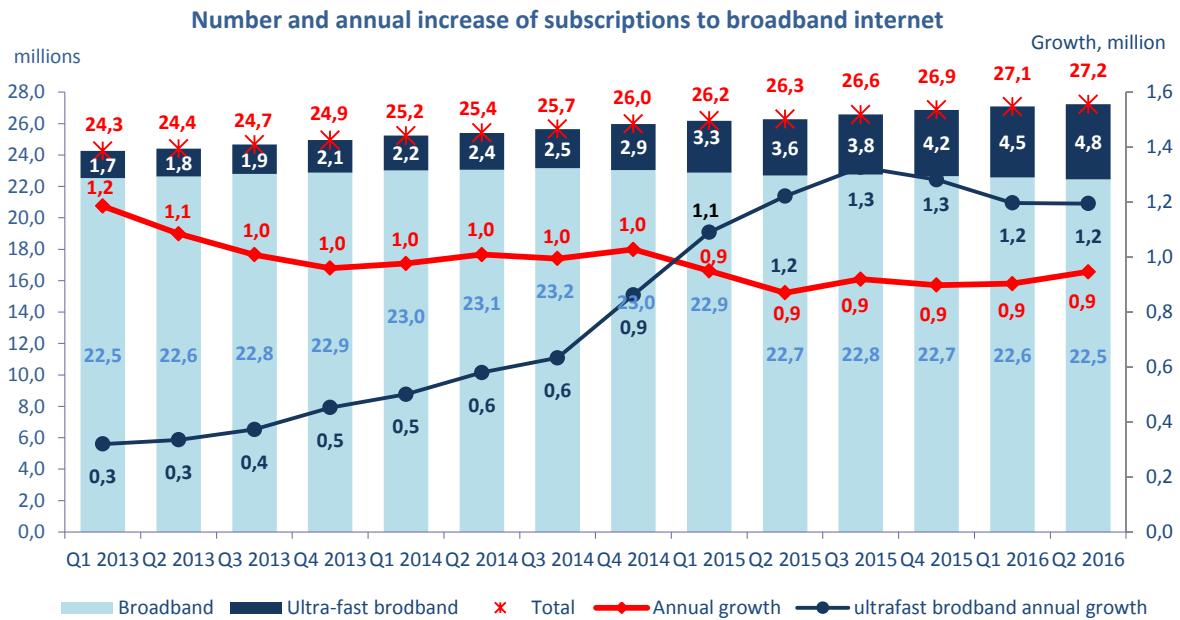
Internet subscriptions (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>Broadband</b>	<b>22,701</b>	<b>22,751</b>	<b>22,658</b>	<b>22,576</b>	<b>22,452</b>	<b>-1,1%</b>
of which xDSL	22,225	22,248	22,146	22,064	21,941	-1,3%
of which other broadband access	0,476	0,503	0,512	0,512	0,512	7,6%
<b>Ultra-fast broadband</b>	<b>3,577</b>	<b>3,824</b>	<b>4,211</b>	<b>4,506</b>	<b>4,772</b>	<b>33,4%</b>
of which with a flow rate superior to 100 Mbit/s	2,155	2,392	2,630	2,764	2,940	36,4%
of which fiber	1,158	1,271	1,443	1,603	1,764	52,4%
of which coaxial cable	0,997	1,121	1,187	1,161	1,176	17,9%
of which with a flow rate between 30 & 100 Mbit/s (VDSL2 and	1,422	1,432	1,582	1,742	1,832	28,8%
<b>Internet subscriptions</b>	<b>26,278</b>	<b>26,575</b>	<b>26,870</b>	<b>27,081</b>	<b>27,224</b>	<b>3,6%</b>

*adjusted figures are in italics*

#### 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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Broadband and fiber	590	603	607	612	617	4,6%

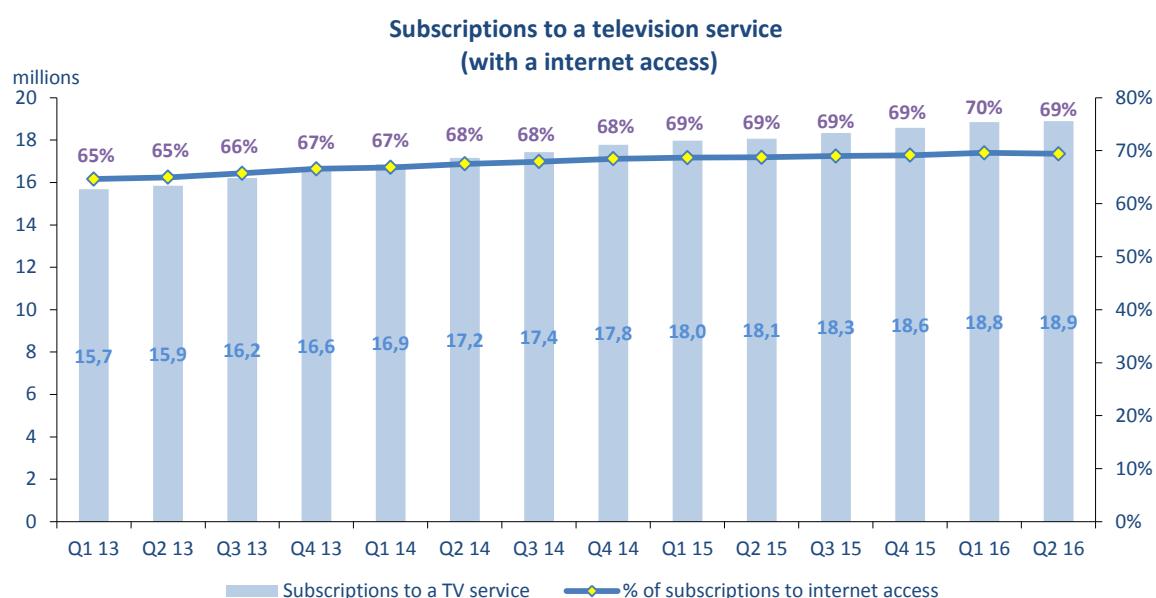


### 1.1.2 TV subscription tied to internet access

TV subscriptions tied to internet access (millions)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
TV subscriptions tied to internet access	18,064	18,332	18,573	18,847	18,895	4,6%
of which subscriptions to TV on DSL	13,545	13,666	13,803	13,907	13,983	3,2%
% of subscriptions to television services	68,7%	69,0%	69,1%	69,6%	69,4%	+0,7 pt

*adjusted figures are in italics*

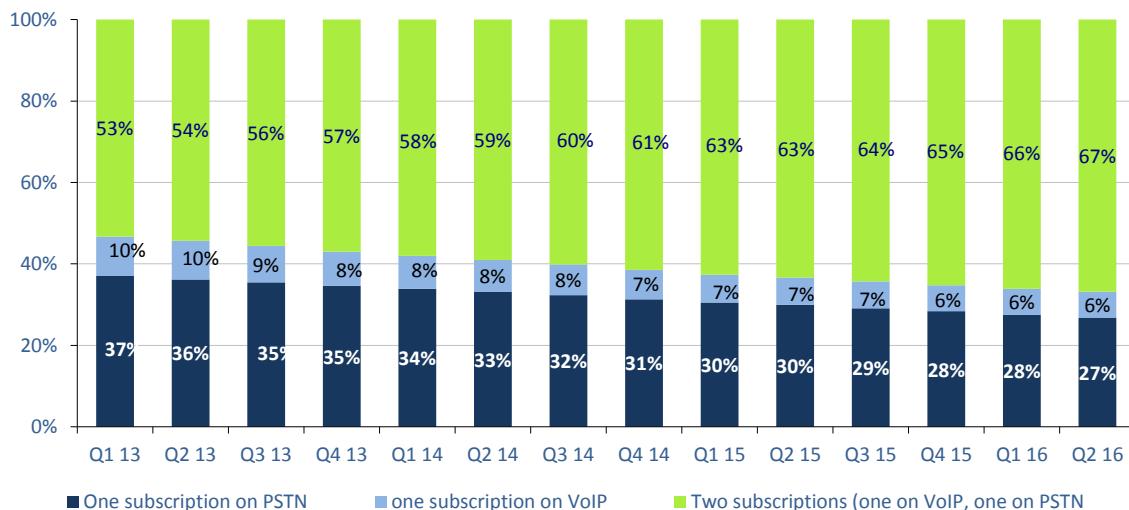
*Note: Taken into account are those subscriptions that were subscribed to separately or as part of bundled offer that includes access to one or several other services aside from TV (Internet, telephony).*



### 1.1.3 Number of fixed lines

Number of fixed lines (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Number of fixed lines <i>adjusted figures are in italics</i>	36,292	36,377	36,455	36,423	36,326	0,1%

Breakdown of fixed lines by subscriptions to telephony services



### 1.1.4 Portability (fixed numbers)

Portability (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Number of fixed numbers ported during the quarter	528	545	576	597	622	17,9%

### 1.1.5 Number of subscriptions to a telephone service

Number of subscriptions to telephone service (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Subscription on narrow band access	13,300	13,002	12,678	12,338	12,059	-9,3%
Access resales	1,603	1,594	1,580	1,555	1,550	-3,3%
Subscription on broadband access	25,416	25,783	26,114	26,406	26,584	4,6%
DSL lines without narrowband access	20,210	20,398	20,555	20,651	20,639	2,1%
<b>Number of subscriptions to telephone service</b>	<b>38,717</b>	<b>38,786</b>	<b>38,792</b>	<b>38,744</b>	<b>38,643</b>	<b>-0,2%</b>

*adjusted figures are in italics*

Note: a subscription to telephone service in VoIP or 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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>Number of indirect connections</b>	0,899	0,858	0,797	0,750	0,722	-19,7%

*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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>Access fees, subscriptions and additional services</b>	698	688	668	647	631	-9,5%

*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...).*

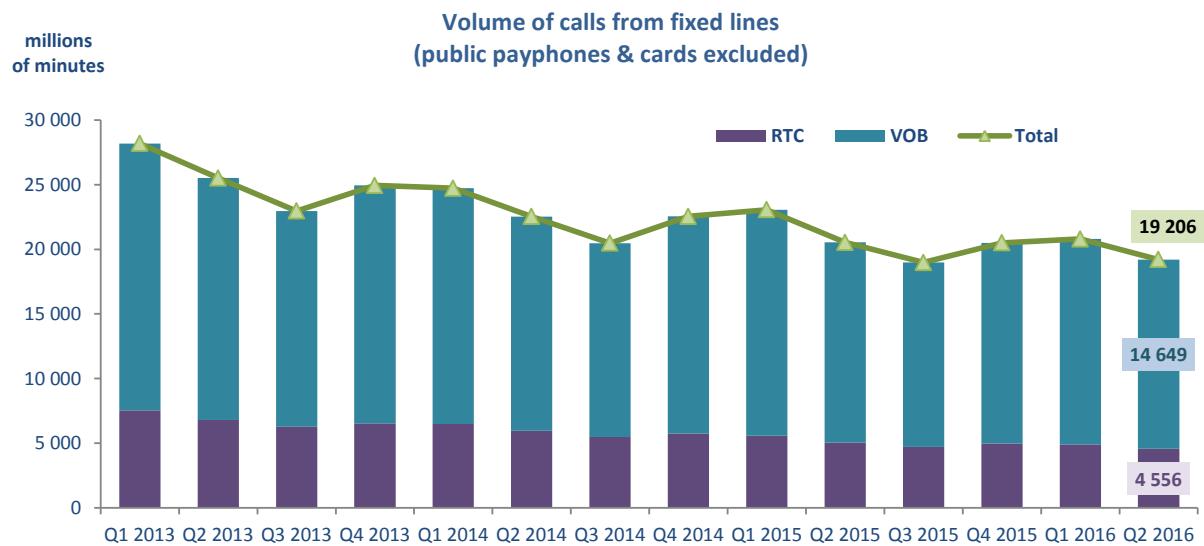
Revenue of calls (millions of euros excl.VAT)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>National calls</b>	165	160	163	171	159	-3,3%
International calls	68	67	59	57	57	-14,9%
Calls to mobiles	116	111	113	109	112	-3,7%
<b>All calls from fixed lines</b>	<b>349</b>	<b>338</b>	<b>335</b>	<b>337</b>	<b>329</b>	<b>-5,7%</b>
<i>Of which calls originating on PSTN/ISDN</i>	223	216	219	221	209	-6,2%
<i>Of which calls originating on Voice over broadband traffic</i>	126	122	116	116	120	-5,1%

*adjusted figures are in italics*

*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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>National calls</b>	13 677	12 555	13 961	14 125	12 782	-6,5%
International calls	2 411	2 238	2 225	2 261	2 149	-10,9%
Calls to mobiles	4 451	4 190	4 315	4 409	4 274	-4,0%
<b>All calls from fixed lines</b>	<b>20 539</b>	<b>18 983</b>	<b>20 502</b>	<b>20 795</b>	<b>19 205</b>	<b>-6,5%</b>
<i>Of which calls originating on PSTN/ISDN</i>	5 048	4 709	4 972	4 906	4 556	-9,7%
<i>Of which calls originating on VoIP services</i>	15 492	14 274	15 530	15 889	14 649	-5,4%

*adjusted figures are in italics*

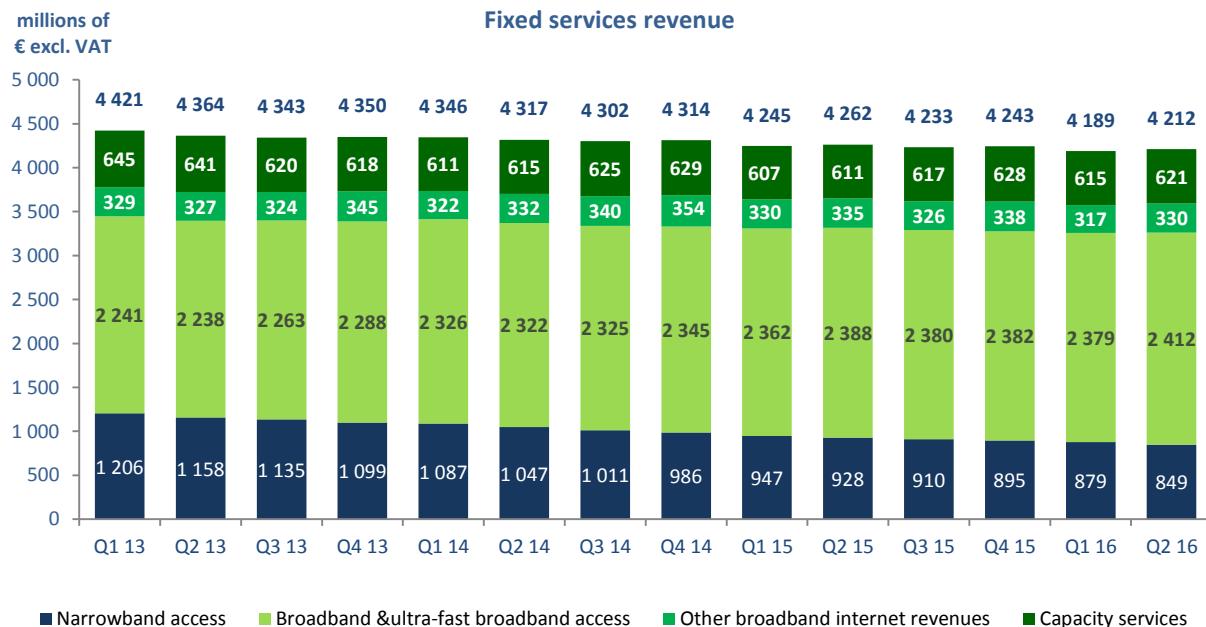


## 1.2 Revenue of fixed services (retail leased lines and data networking included)

Revenue of fixed networks services (millions of euros excl.VAT)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>Narrowband Revenue</b>	<b>928</b>	<b>910</b>	<b>895</b>	<b>879</b>	<b>849</b>	<b>-8,5%</b>
<b>Broadband Revenue</b>	<b>2 723</b>	<b>2 706</b>	<b>2 719</b>	<b>2 695</b>	<b>2 742</b>	<b>0,7%</b>
Broadband Internet and VoB subscriptions	2 388	2 380	2 382	2 379	2 412	1,0%
Other Internet revenue	335	326	338	317	330	-1,7%
<b>Retail leased lines and data networking</b>	<b>611</b>	<b>617</b>	<b>628</b>	<b>615</b>	<b>621</b>	<b>1,6%</b>
<b>Total</b>	<b>4 262</b>	<b>4 233</b>	<b>4 243</b>	<b>4 189</b>	<b>4 212</b>	<b>-1,2%</b>

*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

#### 1.3.1 Per fixed lines

Average monthly revenue and traffic (value added services excluded) (euros -VAT excluded ; hours)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Revenue per fixed line (access, communications and Internet)	32,3	32,1	31,9	31,7	31,9	-1,3%
Traffic per fixed lines	3h08	2h54	3h07	3h10	2h56	-6,6%

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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Fixed PSTN/ISDN telephony user	22,8	22,9	23,0	23,1	23,0	0,6%
Internet & telephony over broadband	33,1	32,7	32,4	32,1	32,4	-2,0%

*adjusted figures are in italics*

#### Notes:

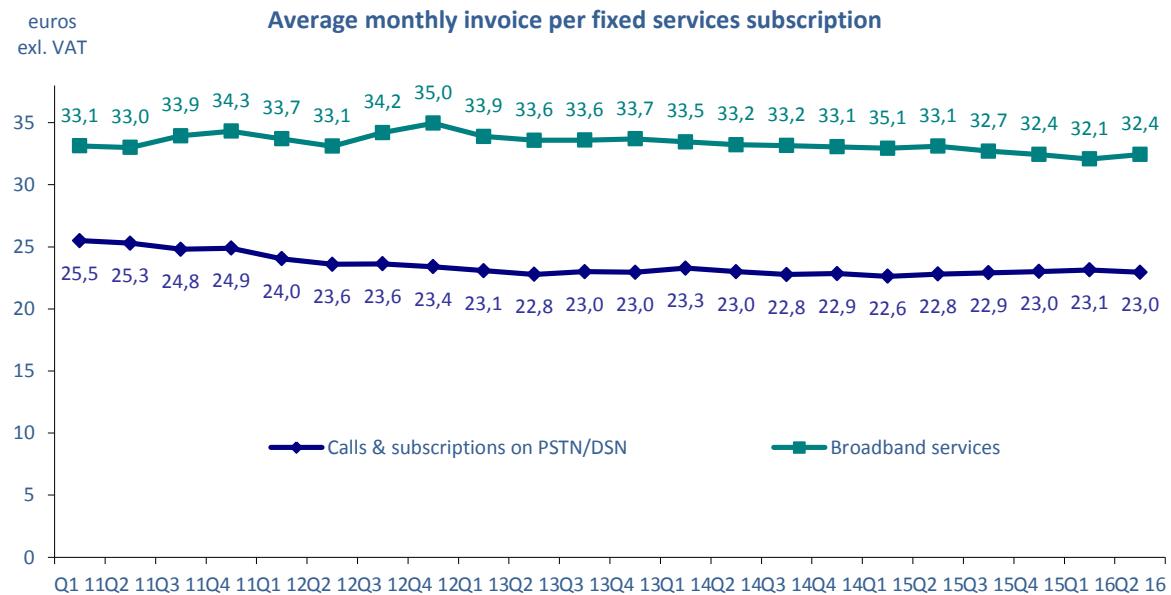
- *The average monthly bill for a PSTN line is calculated by dividing the revenue earned on a PSTN based fixed line subscription and calls (i.e. excluding VOB) for Quarter Q by the estimated average customer base for Quarter Q, then dividing the result by three.*

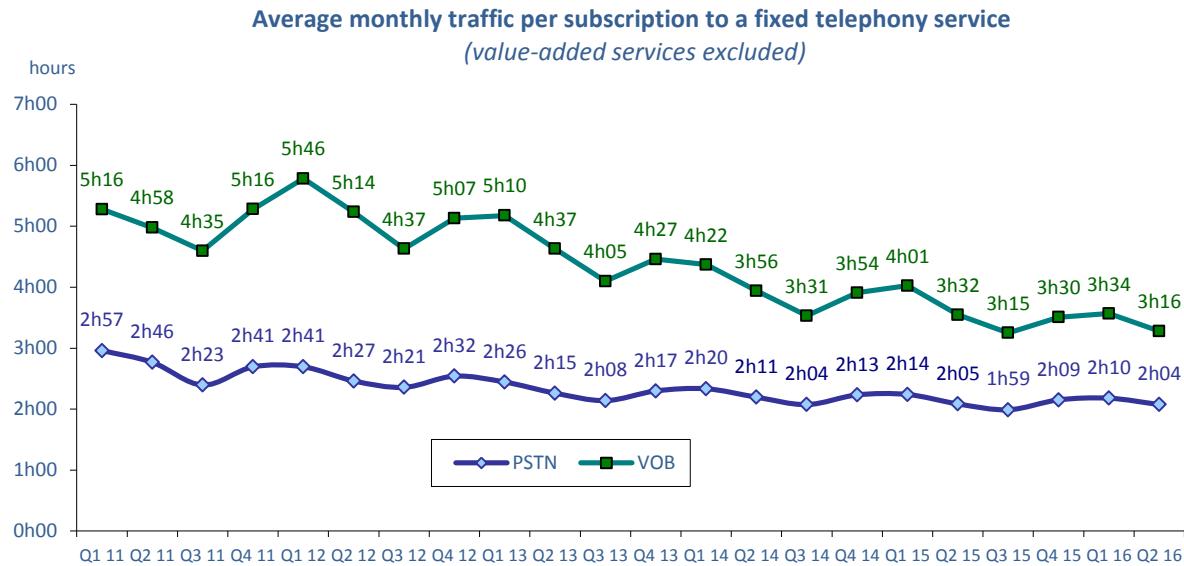
- *The average monthly bill for a broadband or ultra-fast broadband access (name Internet and telephony over broadband) is calculated by dividing the revenue earned on VOB calls made on a fixed line (billed over and above a service bundle flat rate) and the revenue earned on broadband subscription for Quarter Q by the estimated average customer base for Quarter Q, then dividing the result by 3.*

Average monthly traffic per customer (in hours)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Fixed PSTN/ISDN telephony user	2h05	1h59	2h09	2h10	2h04	-0,5%
Fixed VOB telephony user	3h32	3h15	3h30	3h34	3h16	-7,6%

*adjusted figures are in italics*

- *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	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Revenue (internet dial-up, public payphone, cards) <i>(millions of euros excl.VAT)</i>	8	7	9	11	9	20,3%
Number of public payphones at end of quarter (units)	57 309	52 799	45 730	38 500	31 232	-45,5%

## 2 Services on mobile networks – retail market

### 2.1 Mobile phone services

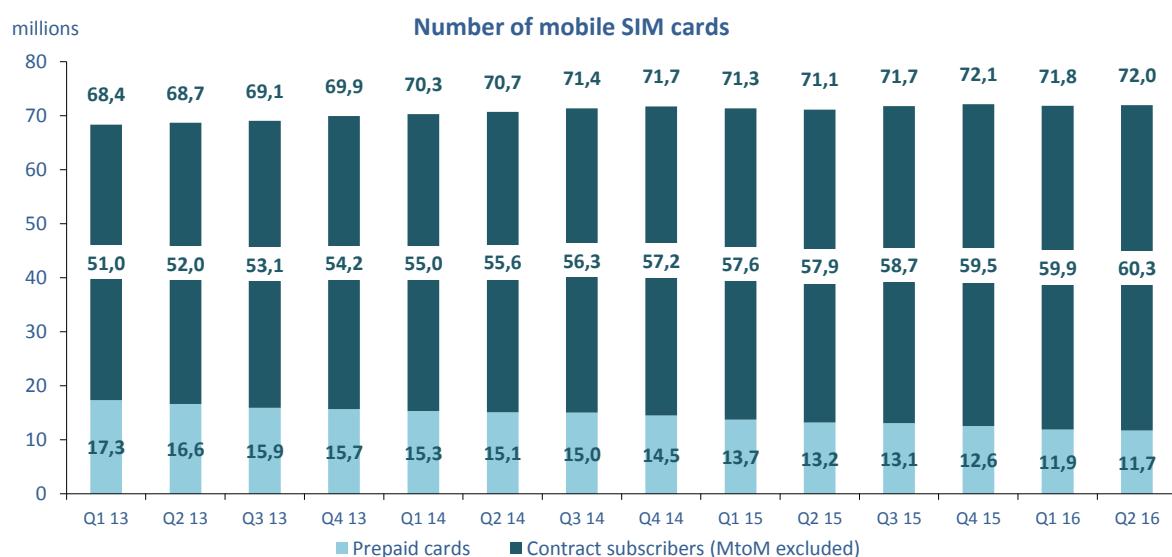
#### 2.1.1 Number of SIM cards

Number of mobile customers (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Contract subscribers	57,947	58,654	59,538	59,912	60,260	4,0%
Prepaid cards	13,181	13,092	12,566	11,914	11,699	-11,2%
<i>of which active prepaid cards *</i>	10,836	10,959	10,230	9,683	9,461	-12,7%
<b>Total number of SIM cards</b>	<b>71,127</b>	<b>71,746</b>	<b>72,104</b>	<b>71,826</b>	<b>71,959</b>	<b>1,2%</b>

*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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Contract subscribers	2,775	2,806	2,810	2,768	2,771	-0,1%
Exclusive Internet prepaid cards	0,760	0,771	0,816	0,849	0,903	18,9%
<i>of which active prepaid cards *</i>	0,248	0,311	0,283	0,253	0,280	13,0%
<b>Number of dedicated data cards</b>	<b>3,535</b>	<b>3,577</b>	<b>3,626</b>	<b>3,617</b>	<b>3,674</b>	<b>3,9%</b>
% in total number of SIM cards	5,0%	5,0%	5,0%	5,0%	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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Number of mobile subscription tied to at least one fixed service	16,549	16,865	17,412	17,948	18,230	10,2%
% in total number of SIM cards	23%	24%	24%	25%	25%	+ 2 Points

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

## 2.1.4 3G and 4G actives cards

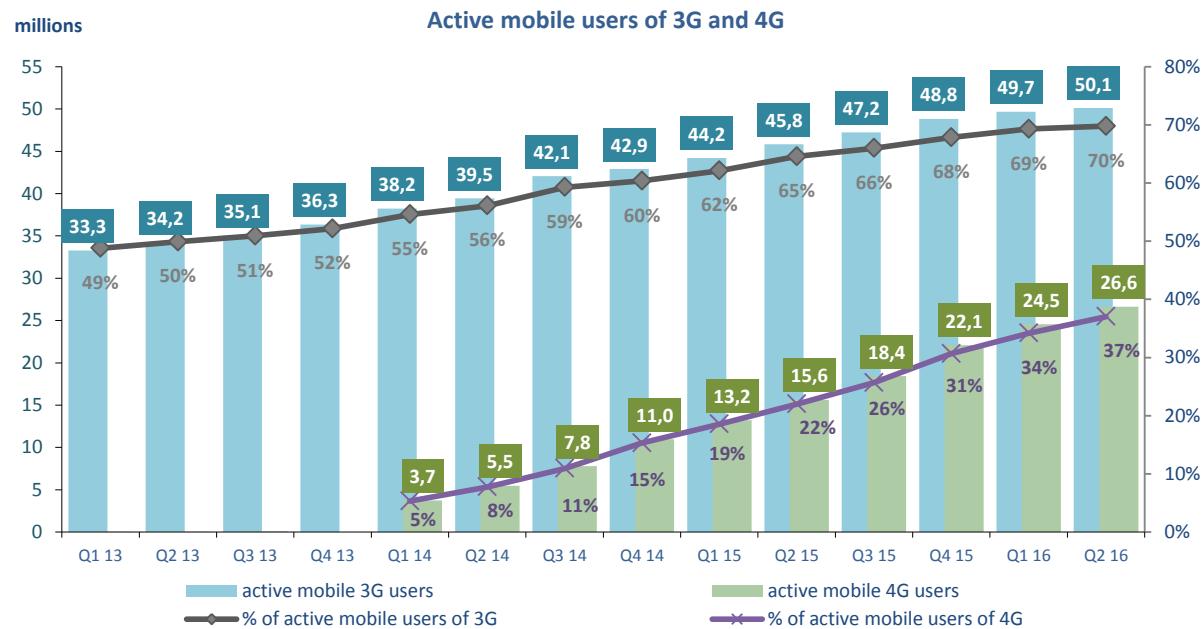
Active 3G and 4G users (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Active 3G users	45,823	47,243	48,831	49,679	50,126	9,4%
Active 4G users	15,629	18,424	22,102	24,546	26,649	70,5%

adjusted figures are in italics

Note:

- 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.

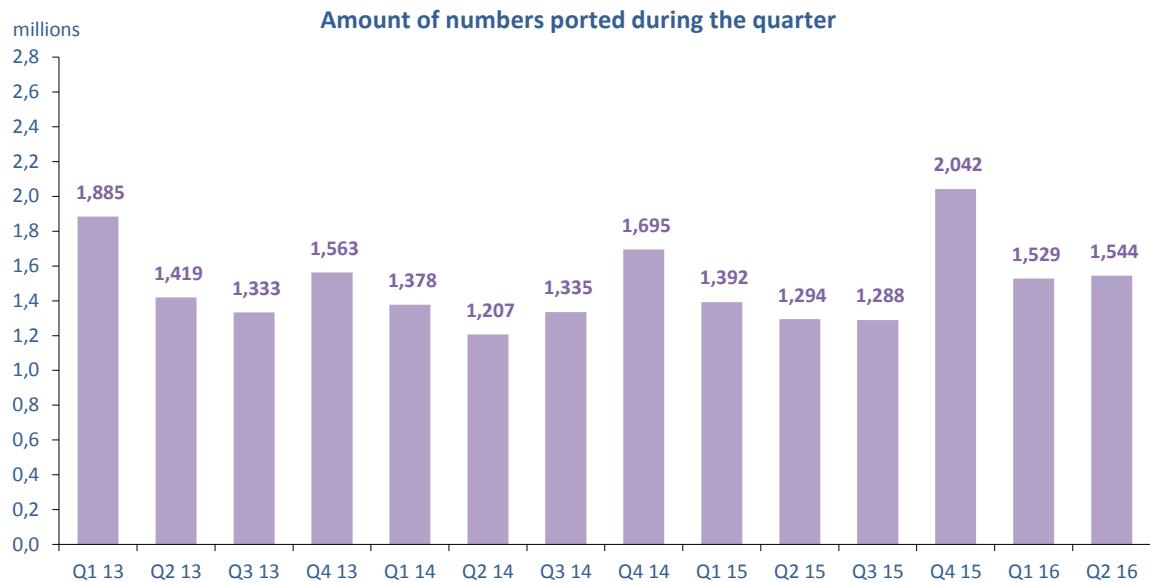


Les ratios sont calculés en excluant les cartes MtoM du total.

## 2.1.5 Portability (mobile numbers)

Portability (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Amount of numbers ported during the quarter	1,294	1,288	2,042	1,529	1,544	19,3%

*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".*

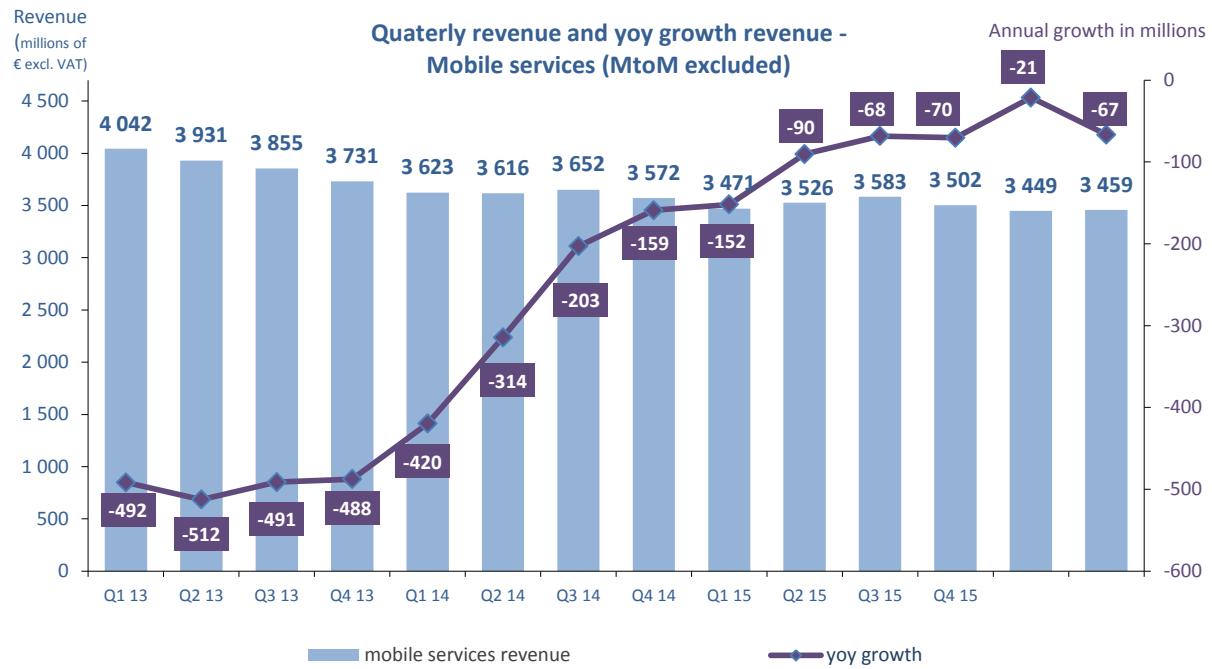


## 2.1.6 Revenue on retail market (value-added services excluded)

Revenue (millions of euros)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Contract subscribers	3 286	3 325	3 261	3 240	3 262	-0,7%
Prepaid cards	240	258	240	210	198	-17,7%
<b>Total mobile telephony and data transport</b>	<b>3 526</b>	<b>3 583</b>	<b>3 502</b>	<b>3 449</b>	<b>3 459</b>	<b>-1,9%</b>

*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.*

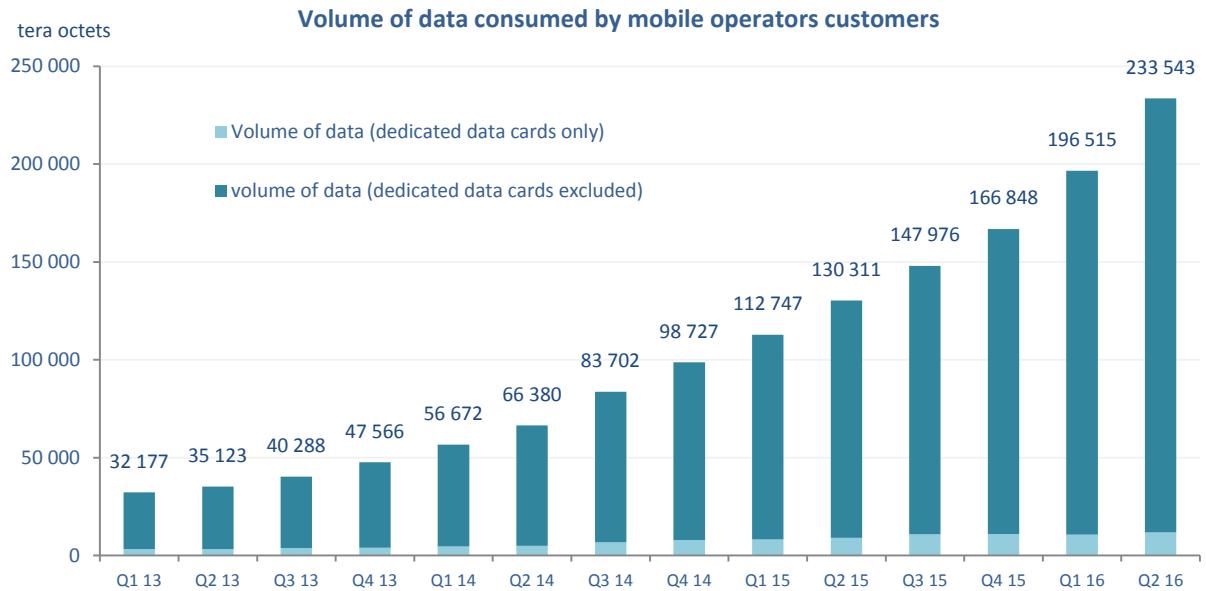


## 2.1.7 Volume of data consumed by mobile customers

Traffics of data consumed by the customers (in Teraoctets)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Contract subscribers	128 264	145 211	164 043	193 797	230 257	79,5%
Prepaid cards	2 047	2 765	2 805	2 718	3 286	60,5%
<b>Traffics of data</b>	<b>130 311</b>	<b>147 976</b>	<b>166 848</b>	<b>196 515</b>	<b>233 543</b>	<b>79,2%</b>
of which dedicated data SIM cards	9 082	10 828	11 042	10 656	11 768	29,6%

*adjusted figures are in italics*

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



## 2.1.8 Traffic of mobile telephony

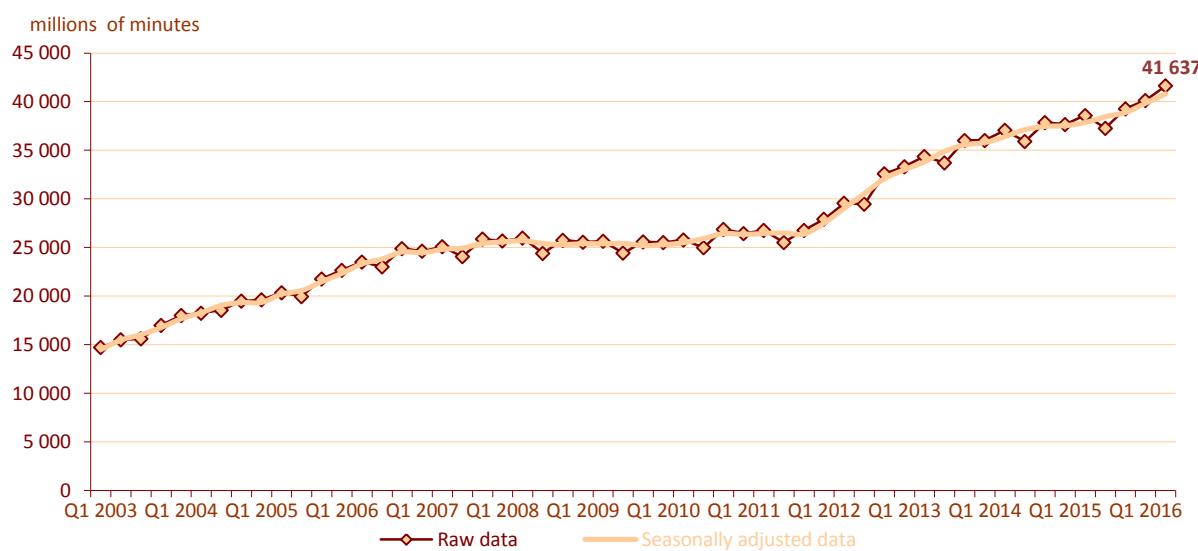
Traffics (millions of minutes)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Contract subscribers	35 936	34 665	36 690	37 679	39 196	9,1%
Prepaid cards	2 651	2 607	2 599	2 451	2 441	-7,9%
<b>Total mobile telephony</b>	<b>38 588</b>	<b>37 271</b>	<b>39 289</b>	<b>40 130</b>	<b>41 637</b>	<b>7,9%</b>

*adjusted figures are in italics*

Traffics (millions of minutes)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Calls to national fixed lines	6 548	6 390	6 744	6 969	7 170	9,5%
Calls to national mobile lines	30 017	28 682	30 568	31 086	32 170	7,2%
Outgoing internationals calls	1 539	1 501	1 475	1 588	1 694	10,1%
Roaming out	483	698	503	488	603	24,9%
<b>Total mobile telephony</b>	<b>38 588</b>	<b>37 271</b>	<b>39 289</b>	<b>40 130</b>	<b>41 637</b>	<b>7,9%</b>

*adjusted figures are in italics*

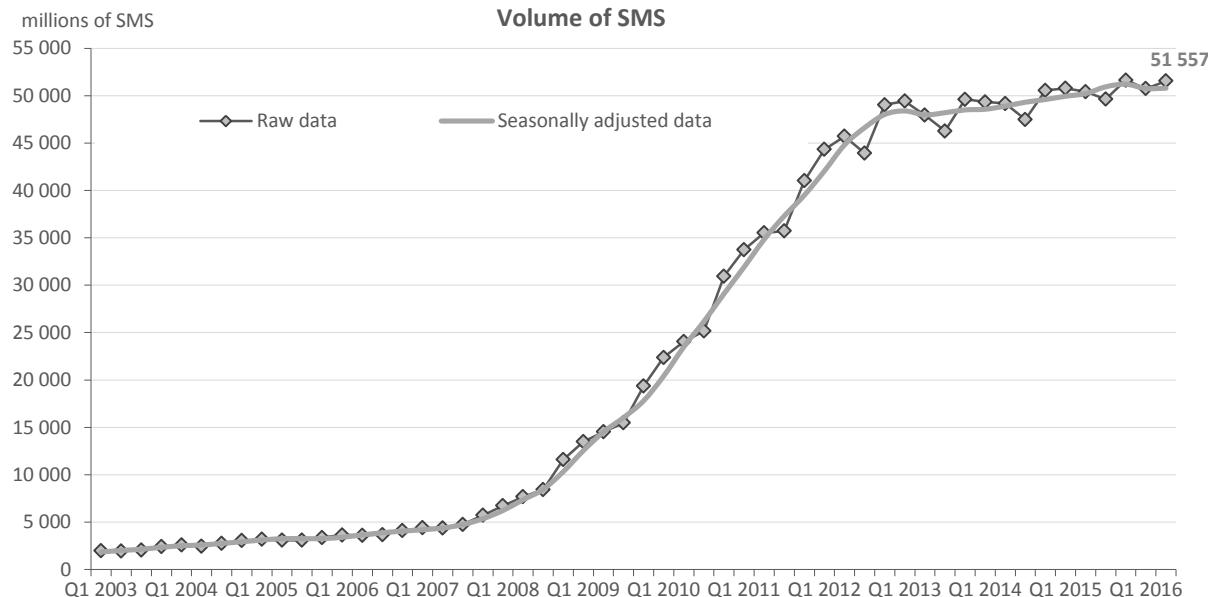
### Volume of calls from mobile



### 2.1.9 Interpersonal messages (SMS, MMS)

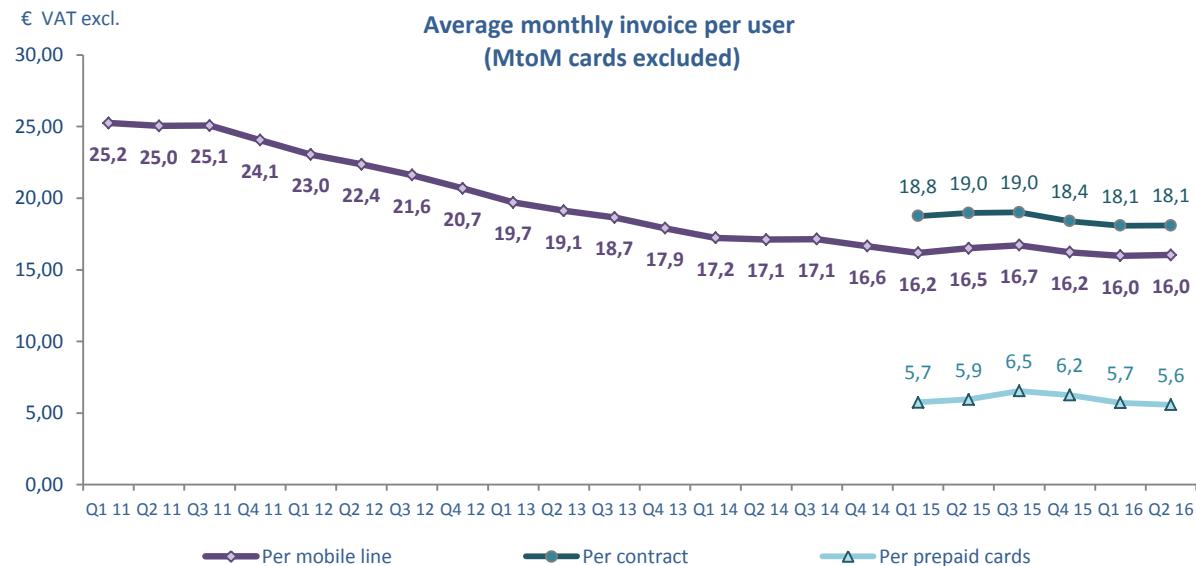
Traffics of interpersonal messages (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Number of interpersonal SMS	50 425	49 633	51 641	50 737	51 557	2,2%
of which from contract subscribers	48 289	47 523	49 461	48 722	49 687	2,9%
of which from prepaid cards	2 136	2 110	2 180	2 015	1 871	-12,4%
Number of interpersonal MMS	996	1 045	1 051	1 049	1 159	16,3%
<b>Number of messages sent</b>	<b>51 422</b>	<b>50 678</b>	<b>52 692</b>	<b>51 786</b>	<b>52 717</b>	<b>2,5%</b>

*adjusted figures are in italics*



## 2.1.10 Average revenue and traffic per user

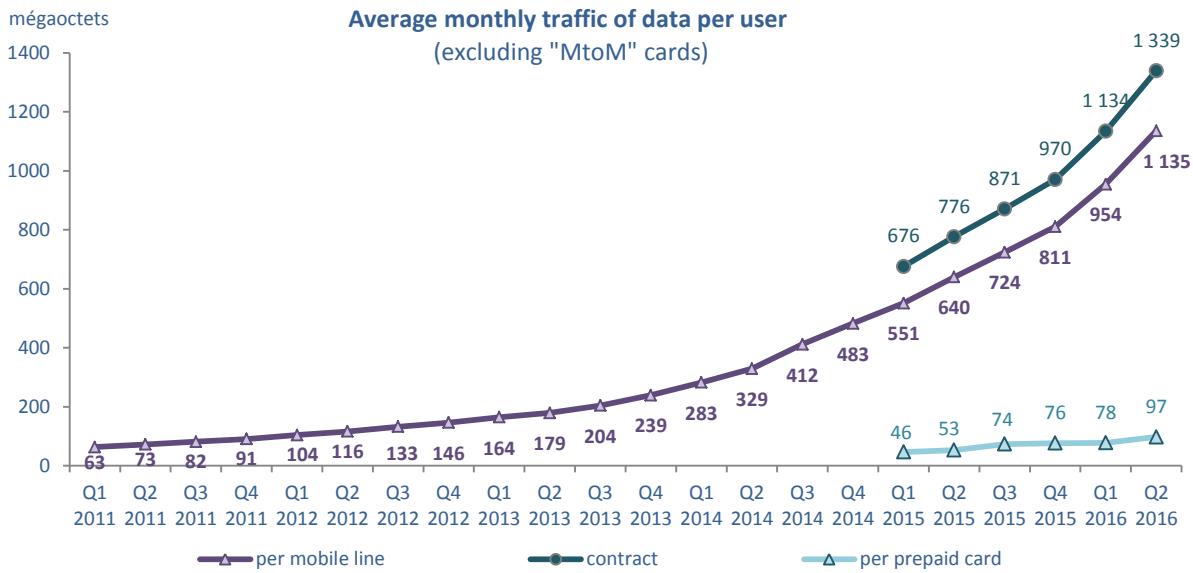
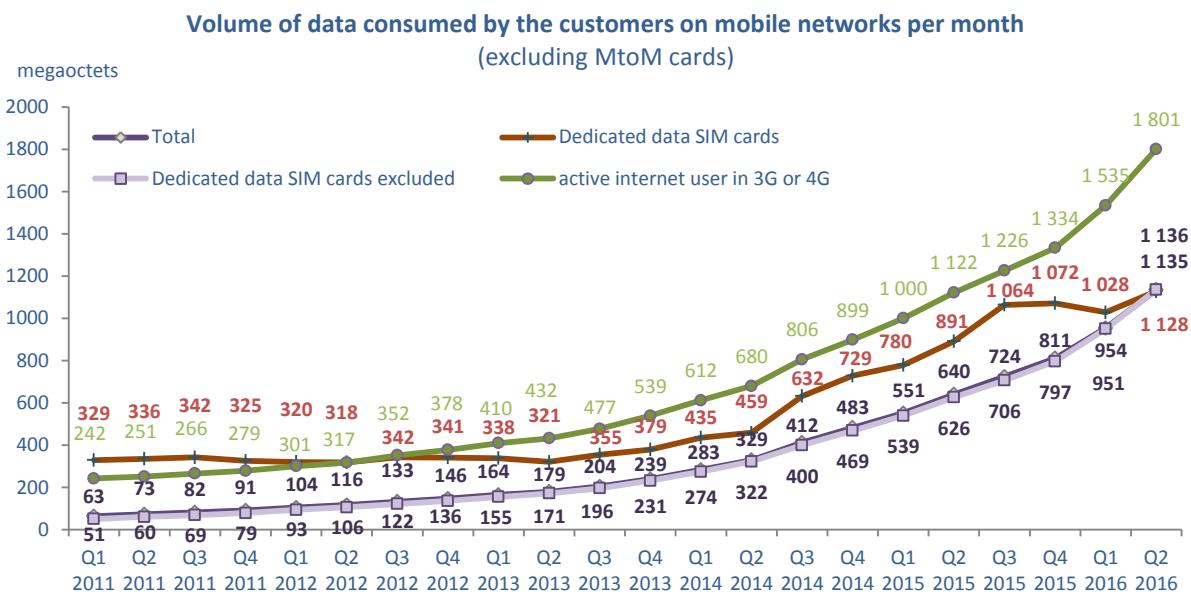
Average monthly revenue (value added services excluded) (in euros -VAT excluded)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>Mobile telephony user</b>	16,5	16,7	16,2	16,0	16,0	-2,8%
Contract subscribers	19,0	19,0	18,4	18,1	18,1	-4,6%
Prepaid cards	5,9	6,5	6,2	5,7	5,6	-6,2%



*Note: 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.*

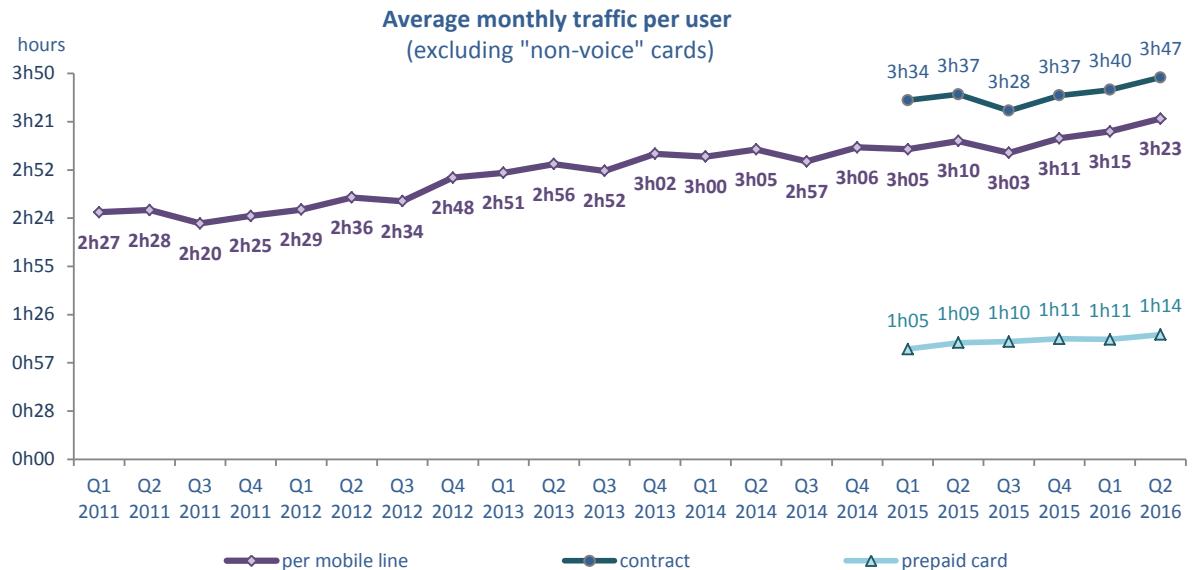
Average monthly traffics of data consumed on mobile networks (en mega octets)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>per mobile operator customer</b>	640	724	811	954	1 135	77,5%
of which dedicated data SIM cards	891	1 064	1 072	1 028	1 128	26,6%
of which from other SIM cards	626	706	797	951	1 136	81,4%
Contract subscribers	776	871	970	1 134	1 339	73%
Prepaid cards	53	74	76	78	97	83,1%
Active 3G and 4G users	1 122	1 226	1 334	1 535	1 801	61%

*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.*

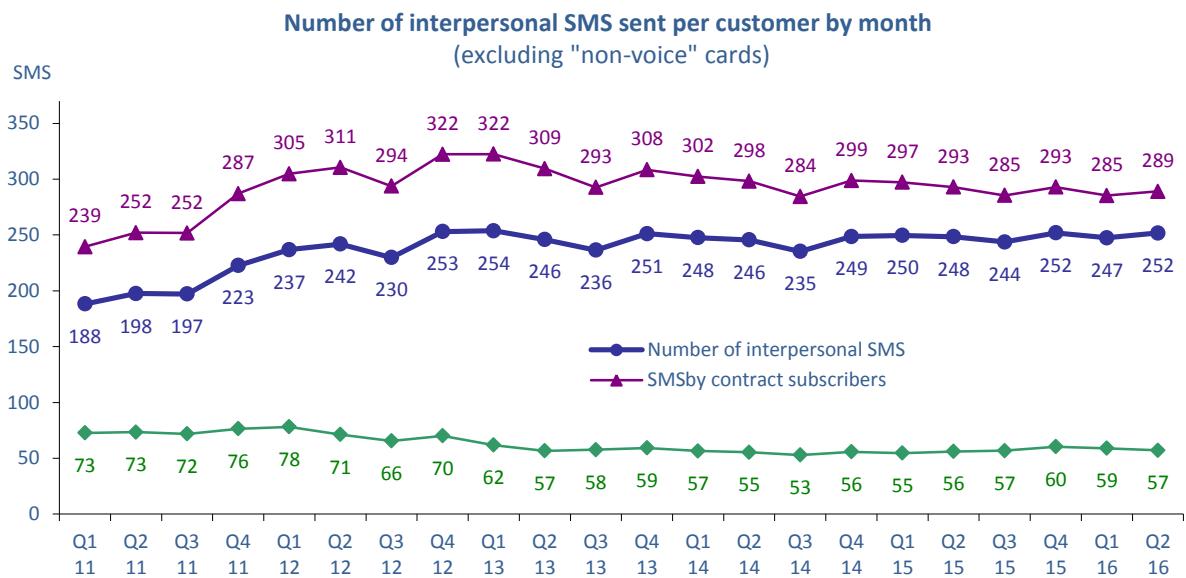


Average monthly outgoing traffic (in hours)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>Mobile telephony user</b>	3h10	3h03	3h11	3h15	3h23	7,0%
Contract subscribers	3h37	3h28	3h37	3h40	3h47	4,6%
Prepaid cards	1h09	1h10	1h11	1h11	1h14	6,9%

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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
<b>Number of SMS sent per user during the quarter</b>						
of which for contract subscribers	248	244	252	247	252	1,4%
of which for prepaid cards	293	285	293	285	289	-1,3%



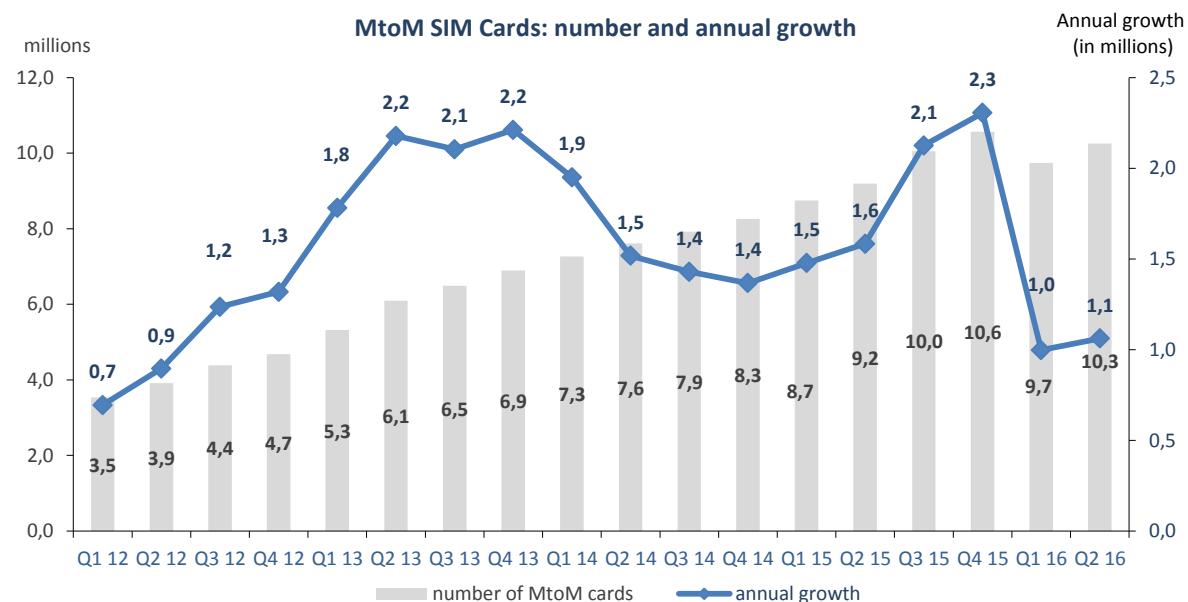
Note: The average number of SMS messages per customer is calculated by dividing the number of SMS messages for quarter N by the estimated average number of customers for quarter N, and then by the number of months. MtoM and exclusive data SIM cards are not taken into account. The number of messages does 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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Revenue of dedicated MtoM cards	24	23	25	24	27	12,2%
Number of dedicated MtoM cards	9,192	10,047	10,562	9,740	10,253	11,5%

*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). 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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Value-added "voice" services	234	237	189	191	185	-20,7%
From fixed telephony network	117	118	122	119	115	-1,9%
From mobile telephony network	116	118	67	72	70	-39,8%
Value-added "data" services	85	86	89	90	82	-3,8%
Directory services	26	24	24	23	24	-6,6%
<b>Value-added services</b>	<b>345</b>	<b>347</b>	<b>302</b>	<b>304</b>	<b>291</b>	<b>-15,5%</b>

*adjusted figures are in italics*

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

*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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
From fixed telephony network	915	932	871	948	989	8,1%
From mobile telephony network	404	444	459	426	436	8,1%
<b>Number of calls</b>	<b>1 319</b>	<b>1 375</b>	<b>1 330</b>	<b>1 374</b>	<b>1 425</b>	<b>8,1%</b>

*adjusted figures are in italics*

Traffic from directory services (millions)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Number of calls (millions of units)	5	4	4	4	8	44,8%

*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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Hosting and call centre management	76	76	83	84	82	8,4%

## 4.2 Terminals and equipments

Revenue from terminals and equipment (millions of euros excl.VAT)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
linked to fixed téléphony & Internet services	163	155	170	167	169	3,4%
linked to mobile services	474	535	720	502	484	2,1%
<b>Terminals and equipment</b>	<b>638</b>	<b>690</b>	<b>890</b>	<b>669</b>	<b>653</b>	<b>2,4%</b>

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)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Fixed operators	<b>1 382</b>	<b>1 365</b>	<b>1 318</b>	<b>1 324</b>	<b>1 321</b>	<b>-4,5%</b>
<i>of which telephony services (incl VGA) *</i>	592	571	547	558	554	-6,5%
<i>of which broadband services</i>	668	671	659	646	636	-4,8%
<i>of which Wholesales leased lined product</i>	122	123	113	120	131	7,0%
Mobile operators	<b>666</b>	<b>708</b>	<b>682</b>	<b>667</b>	<b>671</b>	<b>0,8%</b>
<i>of which voice termination (national and international)</i>	194	199	203	206	207	6,8%
<i>of which SMS/MMS termination</i>	396	389	397	394	383	-3,2%
<i>Roaming in</i>	76	119	83	66	81	6,5%
<b>Revenue (millions of euros)</b>	<b>2 048</b>	<b>2 073</b>	<b>2 001</b>	<b>1 991</b>	<b>1 992</b>	<b>-2,7%</b>

adjusted figures are in italics

\* including revenues from dial-up internet services (< 1 million € per quarter)

Interconnection services (millions of minutes)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Fixed operators	26 541	25 892	26 138	26 458	25 525	-3,8%
Mobile operators	24 180	23 253	24 485	24 710	25 239	4,4%
Traffic	<b>50 721</b>	<b>49 145</b>	<b>50 623</b>	<b>51 168</b>	<b>50 764</b>	<b>0,1%</b>
Incoming SMS	<b>33 094</b>	<b>32 420</b>	<b>33 647</b>	<b>32 954</b>	<b>31 650</b>	<b>-4,4%</b>

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 February 1st 2014 and €8.90 in 2013). The tariff for partial unbundling is set to €1.77.

- Mobile operators' interconnection services include income earned on call and SMS termination and on roaming in. The revenue issued from services of collection for the MVNO / full MVNO or national roaming operators, representing 1.3 billion € for the whole of the year 2015, are not included.

- From January 1st 2016, the price for call termination on mobile networks is set to 0,76c€/minute against 0.78€/minute since January 1st 2015

- The price of call termination for SMS is €1.0c for all operators since January 1st 2013.

Revenue and volume are not settled on the same perimeter which makes the reconciliation between these figures irrelevant.

History of rates is available on the site: <http://www.arcep.fr/index.php?id=8080>.

Unbundling (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Partially unbundled lines	0,665	0,644	0,621	0,595	0,578	-13,1%
Fully unbundled lines	11,660	11,750	11,730	11,580	11,543	-1,0%
Number of unbundled lines	12,325	12,394	12,350	12,175	12,121	-1,7%

"Bitstream" lines (millions of units)	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
"Naked bitstream"	0,846	0,830	0,938	1,121	1,173	38,6%
"Classic bitstream"	0,160	0,154	0,152	0,151	0,145	-9,1%
Number of "bitstream" lines	1,006	0,984	1,090	1,272	1,318	31,0%

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	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	change 2Q16/2Q15
Traffic (millions of minutes)	703	846	659	666	844	20,0%
Traffic of SMS (millions)	216	311	158	171	213	-1,5%
Traffic of data (tera octets)	943	1 678	988	1 247	2 091	121,9%

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 30<sup>th</sup> 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>.*