

# **ELECTRONIC COMMUNICATIONS SERVICES IN FRANCE**

THE FOURTH QUARTER 2015

## **OBSERVATORY OF THE ELECTRONIC COMMUNICATIONS MARKET**

Avril 7th, 2016

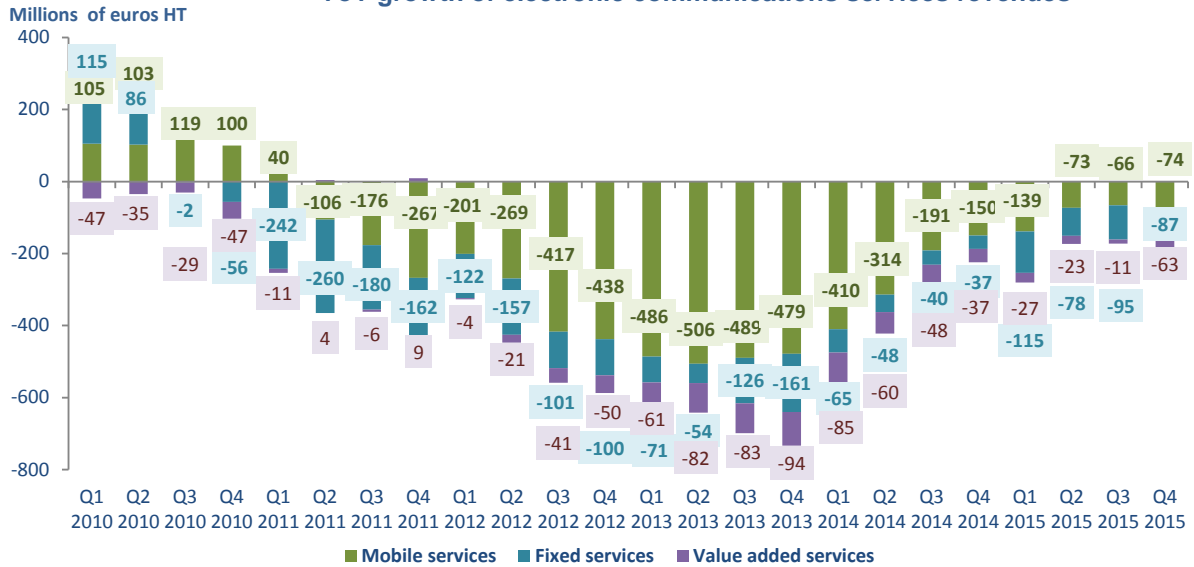
# SYNTHESIS

Revenue on the retail market (millions of euros excl.VAT)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Fixed services (capacity services included)	4 323	4 243	4 249	4 218	4 236	-2,0%
Mobile services (MtoM included)	3 609	3 517	3 571	3 622	3 535	-2,1%
Advanced services and directory services	367	356	346	350	304	-17,3%
<b>Electronic communications services</b>	<b>8 300</b>	<b>8 116</b>	<b>8 166</b>	<b>8 190</b>	<b>8 075</b>	<b>-2,7%</b>
Others revenues	956	718	783	807	1 018	6,5%
<b>Entire market</b>	<b>9 256</b>	<b>8 834</b>	<b>8 949</b>	<b>8 997</b>	<b>9 094</b>	<b>-1,8%</b>

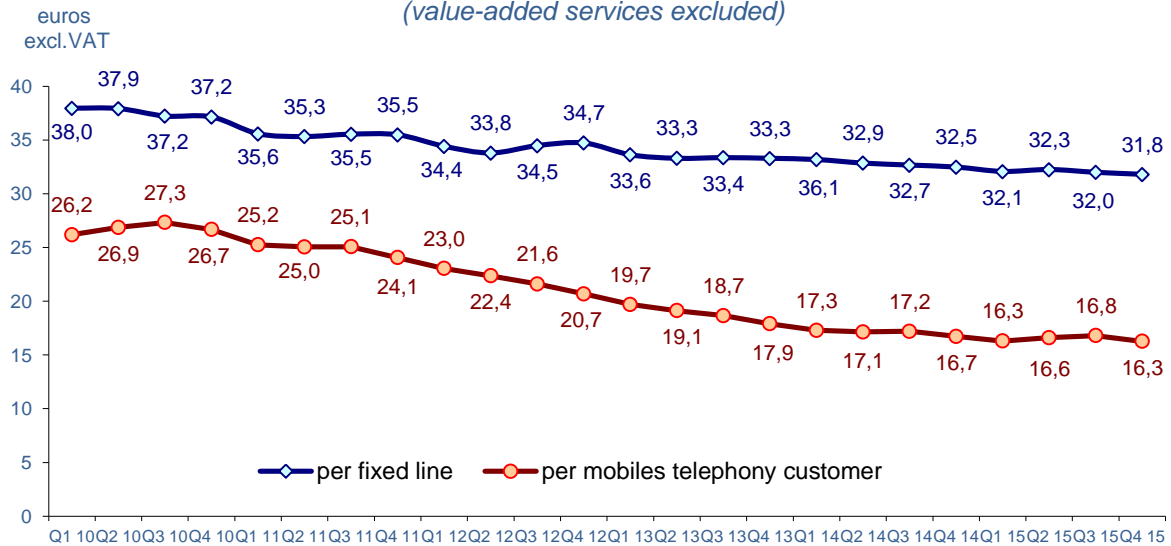
*adjusted figures are in italics*

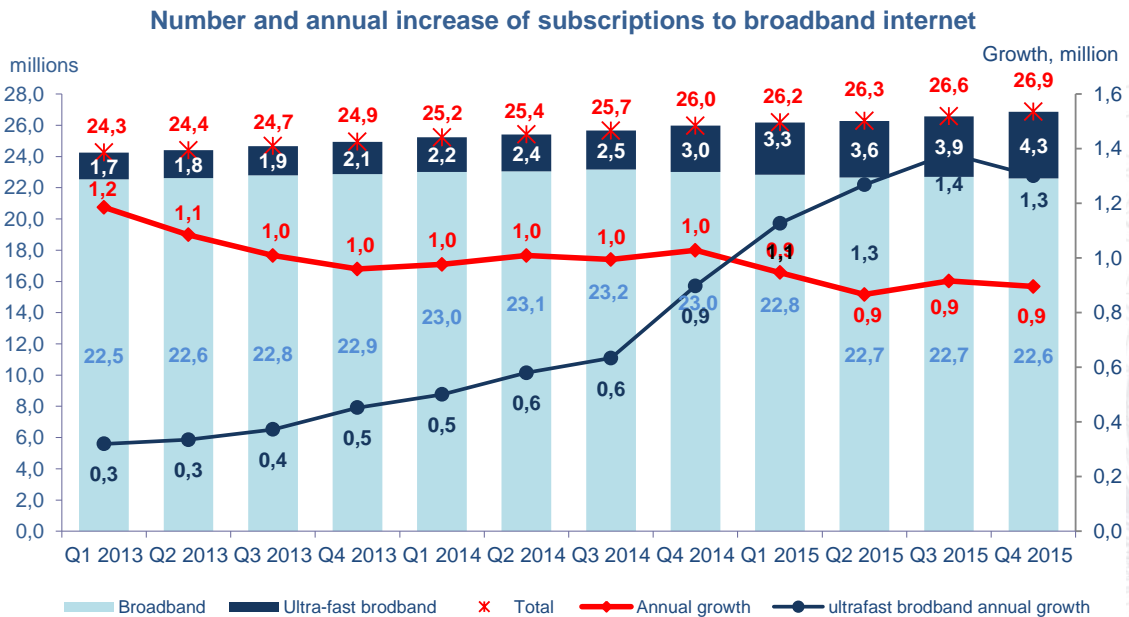
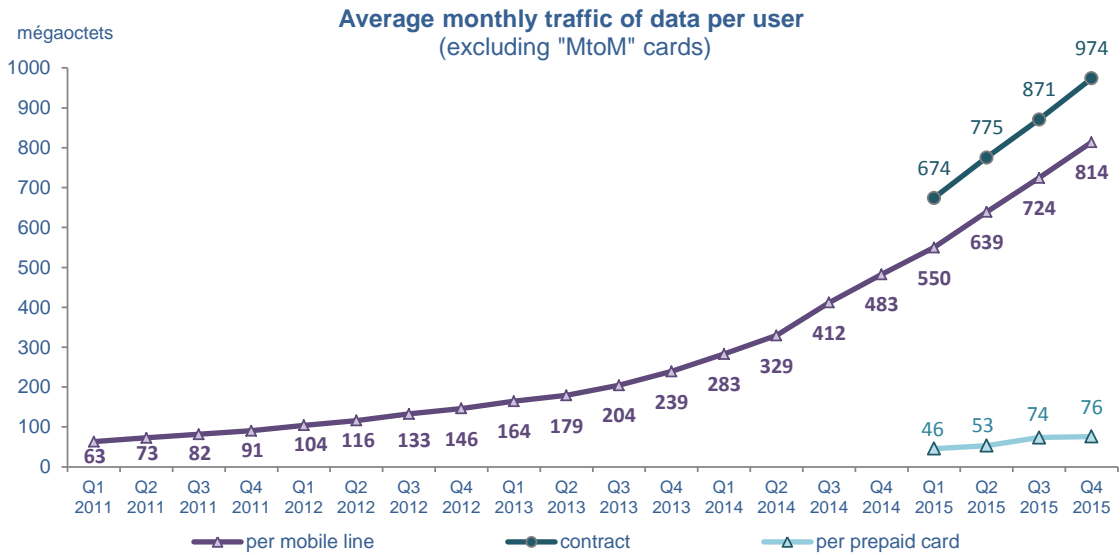
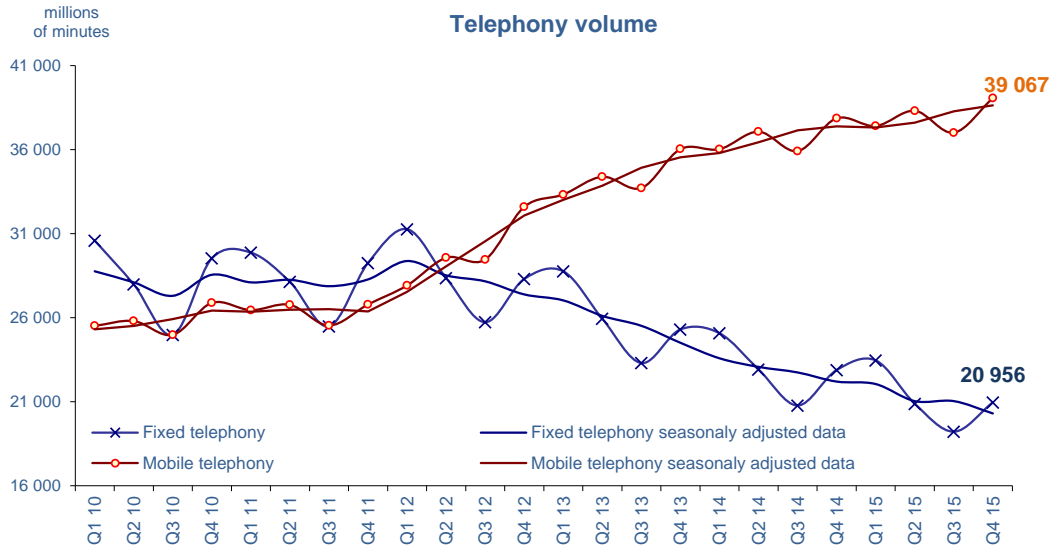
Other revenues does not really fall under the telecommunications services market. Since registered operators contribute little to this market, this indicator gives only a partial idea of total figures. This item covers revenues from terminals and equipment, from hosting and call centre management, and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

## YoY growth of electronic communications services revenues

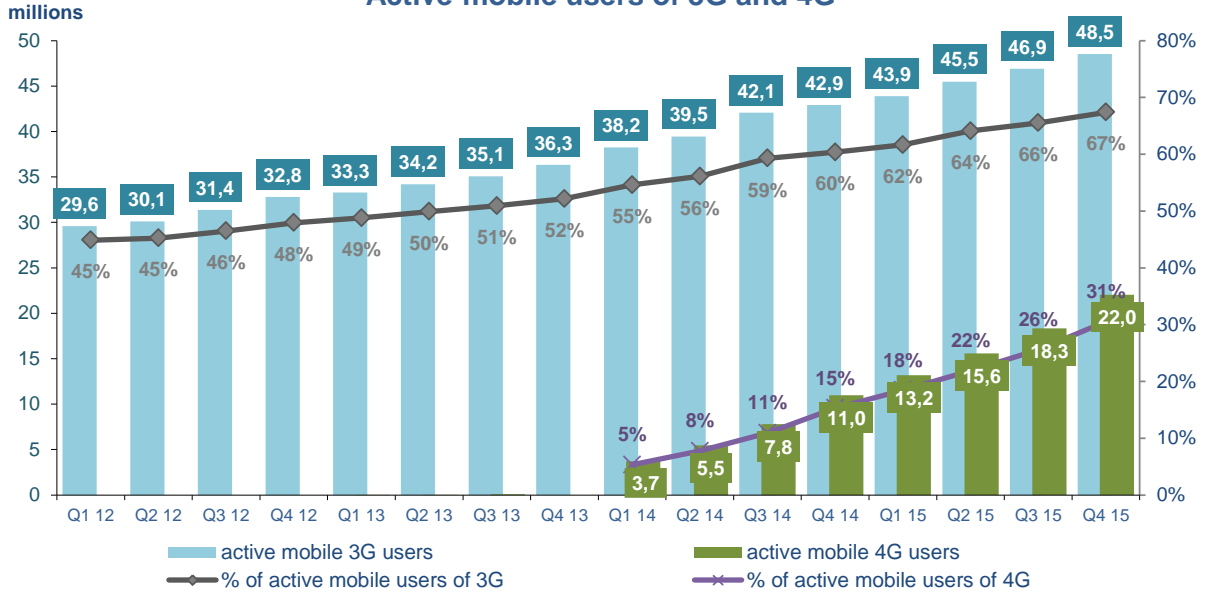


## Average monthly invoice (voice & data) (value-added services excluded)





### Active mobile users of 3G and 4G



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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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
<b>Broadband</b>	<b>23,007</b>	<b>22,829</b>	<b>22,651</b>	<b>22,692</b>	<b>22,601</b>	<b>-1,8%</b>
of which xDSL	22,533	22,353	22,175	22,189	22,090	-2,0%
of which other broadband access	0,473	0,476	0,476	0,503	0,512	8,1%
<b>Ultra-fast broadband</b>	<b>2,965</b>	<b>3,345</b>	<b>3,624</b>	<b>3,879</b>	<b>4,266</b>	<b>43,9%</b>
of which with a flow rate between 30 Mbit/s & 100 Mbit/s (*)	1,139	1,344	1,472	1,491	1,640	44,0%
of which with a flow rate superior to 100 Mbit/s	0,893	0,963	1,011	1,135	1,201	34,5%
of which fiber to the home (FTTH)	0,933	1,038	1,141	1,253	1,424	52,6%
<b>Internet subscriptions</b>	<b>25,972</b>	<b>26,175</b>	<b>26,274</b>	<b>26,571</b>	<b>26,867</b>	<b>3,4%</b>

*adjusted figures are in italics*

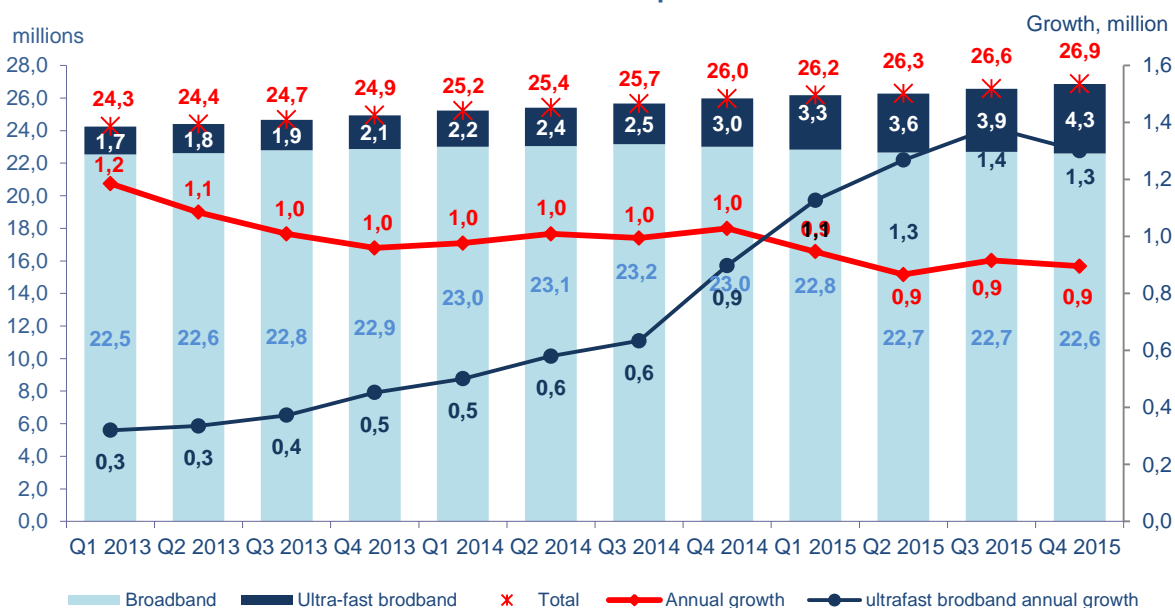
*including VDSL2 subscriptions with a flow rate >= 30 Mbit/s*

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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Broadband and fiber	580	585	590	603	607	4,7%

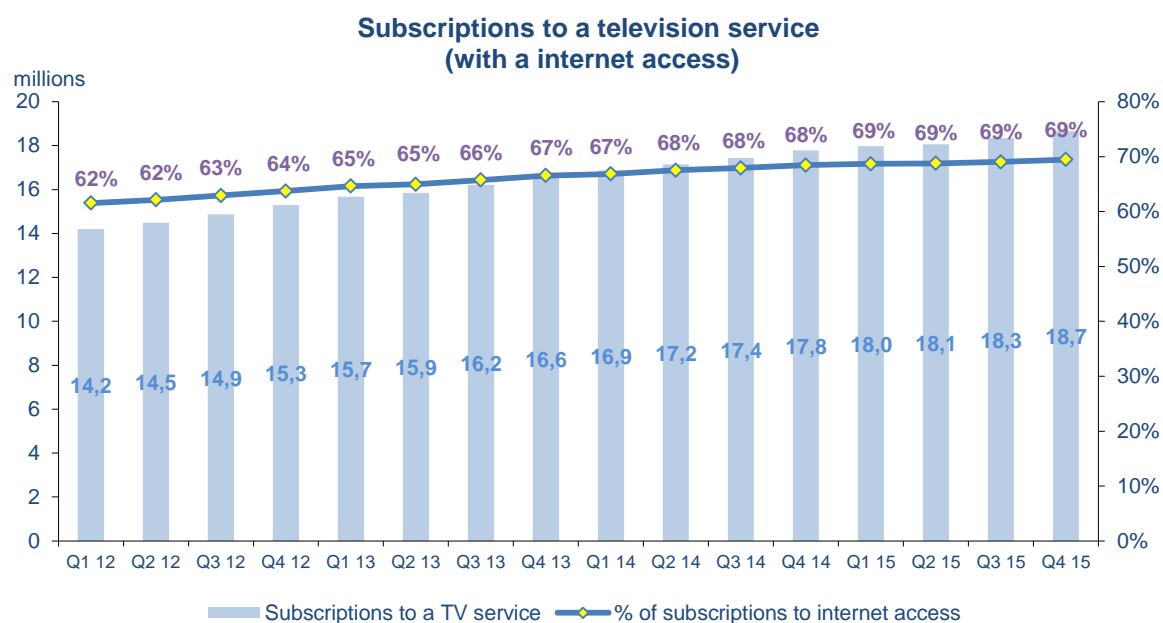
Number and annual increase of subscriptions to broadband internet



## 1.1.2 TV subscription tied to internet access

TV subscriptions tied to internet access (millions)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
TV subscriptions tied to internet access	17,781	17,982	18,071	18,340	18,669	5,0%
of which subscriptions to TV on DSL	13,554	13,635	13,545	13,685	13,831	2,0%
% of subscriptions to television services	68,5%	68,7%	68,8%	69,0%	69,5%	

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

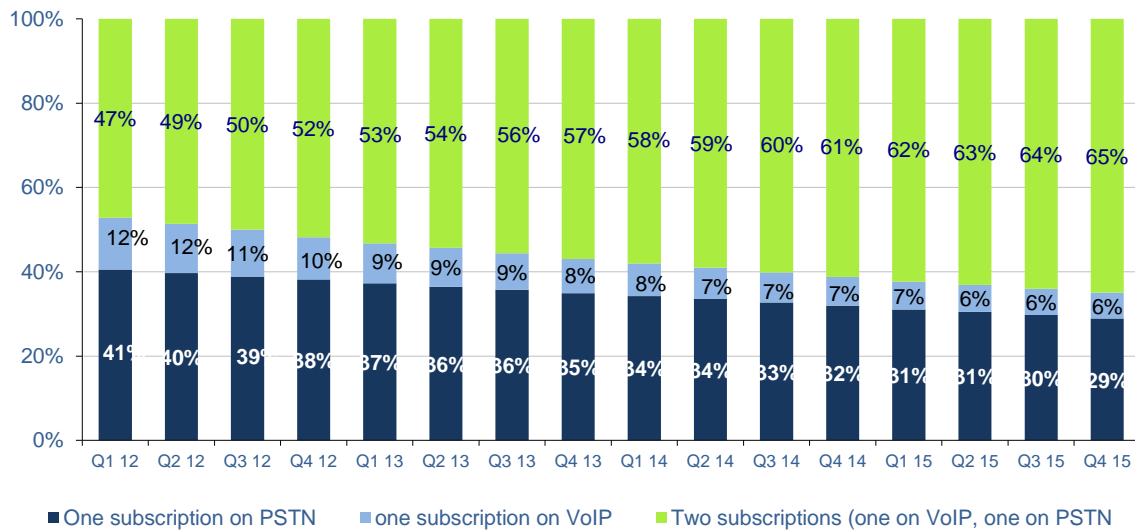


## 1.1.3 Number of fixed lines

Number of fixed lines (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Number of fixed lines	36,530	36,496	36,387	36,481	36,674	0,4%

*adjusted figures are in italics*

## Breakdown of fixed lines by subscriptions to telephony services



### 1.1.4 Portability (fixed numbers)

Portability (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Number of fixed numbers ported during the quarter	633	620	528	528	576	-9,1%

### 1.1.5 Number of subscriptions to a telephone service

Number of subscriptions to telephone service (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Subscription on narrow band access	14,168	13,729	13,418	13,123	12,855	-9,3%
Access resales	1,631	1,596	1,585	1,576	1,563	-4,2%
Subscription on broadband access	24,869	25,151	25,272	25,635	26,074	4,8%
DSL lines without narrowband access	19,934	20,169	20,187	20,381	20,478	2,7%
<b>Number of subscriptions to telephone service</b>	<b>39,036</b>	<b>38,880</b>	<b>38,689</b>	<b>38,758</b>	<b>38,929</b>	<b>-0,3%</b>

*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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Number of indirect connections	1,064	1,038	1,009	0,965	0,905	-14,9%

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

Narrow band access revenue (millions of euros excl. VAT)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Access fees, subscriptions and additional services	741	715	712	702	681	-8,1%

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...).

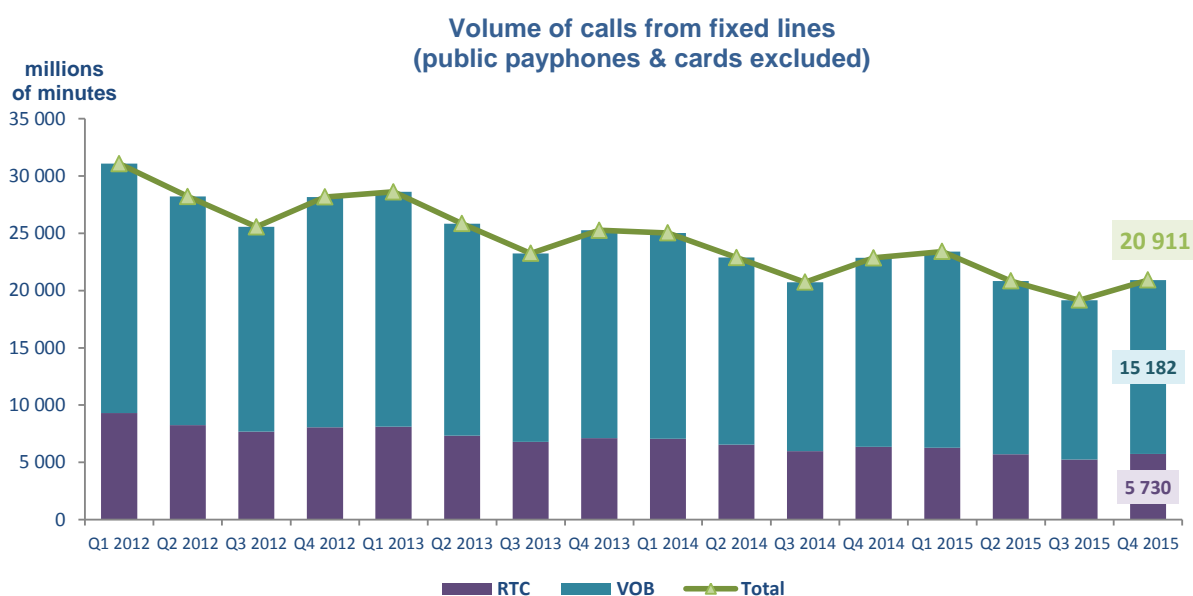


Revenue of calls (millions of euros excl.VAT)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
National calls	180	176	166	161	165	-8,5%
International calls	72	71	68	67	60	-16,9%
Calls to mobiles	129	120	118	113	115	-11,0%
<b>All calls from fixed lines</b>	<b>381</b>	<b>367</b>	<b>352</b>	<b>341</b>	<b>340</b>	<b>-10,9%</b>
<i>Of which calls originating on PSTN/ISDN</i>	<i>255</i>	<i>248</i>	<i>233</i>	<i>225</i>	<i>229</i>	<i>-9,9%</i>
<i>Of which calls originating on Voice over broadband traffic</i>	<i>126</i>	<i>119</i>	<i>120</i>	<i>116</i>	<i>110</i>	<i>-13,0%</i>

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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
National calls	15 644	16 167	13 884	12 692	14 218	-9,1%
International calls	2 510	2 535	2 442	2 253	2 317	-7,7%
Calls to mobiles	4 697	4 699	4 506	4 219	4 376	-6,8%
<b>All calls from fixed lines</b>	<b>22 851</b>	<b>23 401</b>	<b>20 831</b>	<b>19 164</b>	<b>20 911</b>	<b>-8,5%</b>
<i>Of which calls originating on PSTN/ISDN</i>	<i>6 372</i>	<i>6 280</i>	<i>5 711</i>	<i>5 259</i>	<i>5 730</i>	<i>-10,1%</i>
<i>Of which calls originating on VoIP services</i>	<i>16 479</i>	<i>17 121</i>	<i>15 119</i>	<i>13 905</i>	<i>15 182</i>	<i>-7,9%</i>

adjusted figures are in italics

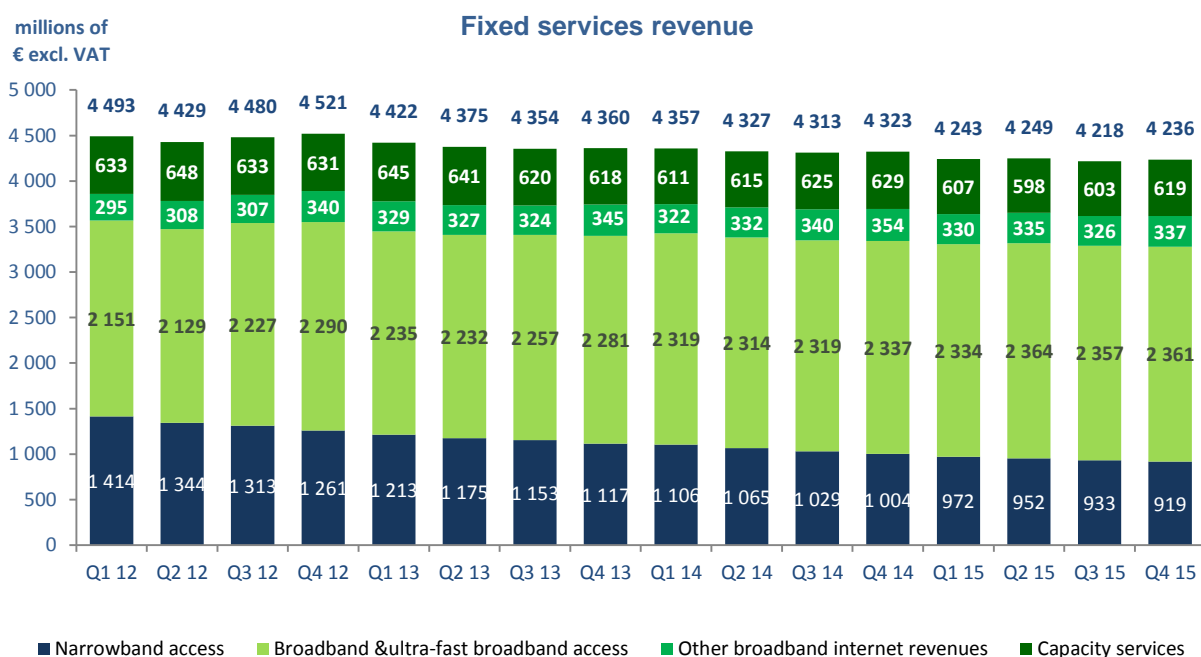


## 1.2 Revenue of fixed services (retail leased lines and data networking included)

Revenue of fixed networks services (millions of euros excl.VAT)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
<b>Narrowband Revenue</b>	<b>1 004</b>	<b>972</b>	<b>952</b>	<b>933</b>	<b>919</b>	<b>-8,5%</b>
<b>Broadband Revenue</b>	<b>2 691</b>	<b>2 663</b>	<b>2 699</b>	<b>2 682</b>	<b>2 698</b>	<b>0,3%</b>
Broadband Internet and VoB subscriptions	2 337	2 334	2 364	2 357	2 361	1,0%
Other Internet revenue	354	330	335	326	337	-4,6%
<b>Retail leased lines and data networking</b>	<b>629</b>	<b>607</b>	<b>598</b>	<b>603</b>	<b>619</b>	<b>-1,5%</b>
<b>Total</b>	<b>4 323</b>	<b>4 243</b>	<b>4 249</b>	<b>4 218</b>	<b>4 236</b>	<b>-2,0%</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 consumption per user

### 1.3.1 Per fixed line

Average monthly revenue (value added services exclude) (in euros -VAT excluded)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Per fixed line : access, communications and Internet	32,5	32,1	32,3	32,0	31,8	-2,1%
Per fixed lines	3h29	3h33	3h10	2h55	3h10	-8,9%

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

Average monthly revenue per customer (in euros -VAT excluded)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Fixed PSTN/ISDN telephony user	23,2	23,0	23,2	23,3	23,4	0,8%
Internet & telephony over broadband	33,0	32,6	32,8	32,4	32,2	-2,4%

Notes:

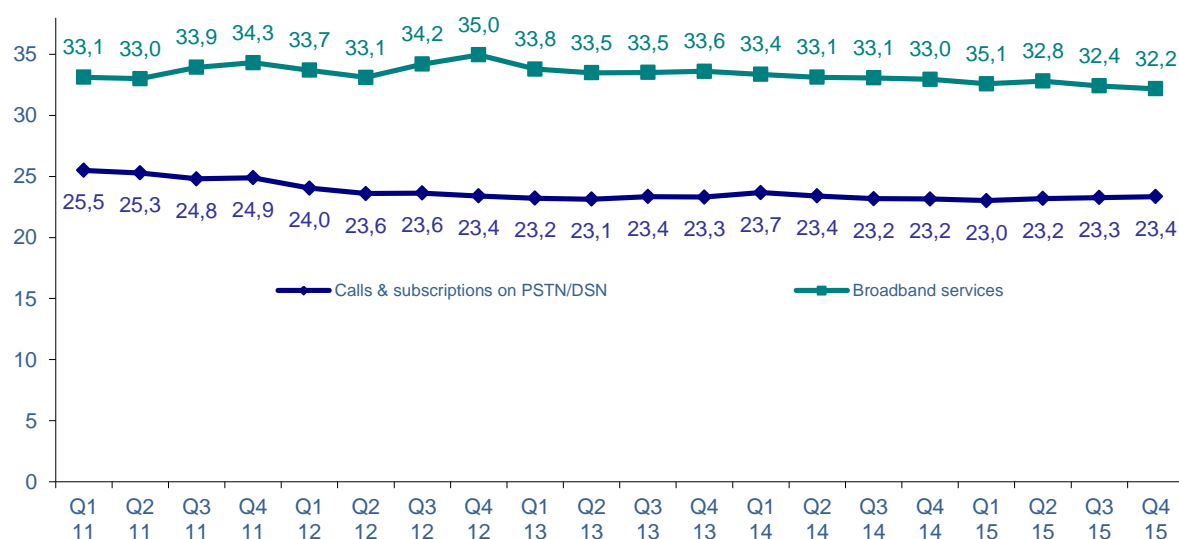
- The average monthly bill for a PSTN line is calculated by dividing the revenue earned on a PSTN based fixed line subscription and calls (i.e. excluding VOB) for Quarter Q by the estimated average customer base for Quarter Q, then dividing the result by three.
- The average monthly bill for a broadband 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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Fixed PSTN/ISDN telephony user	2h28	2h30	2h20	2h12	2h27	-0,9%
Fixed VOB telephony user	3h51	3h57	3h29	3h11	3h26	-10,6%

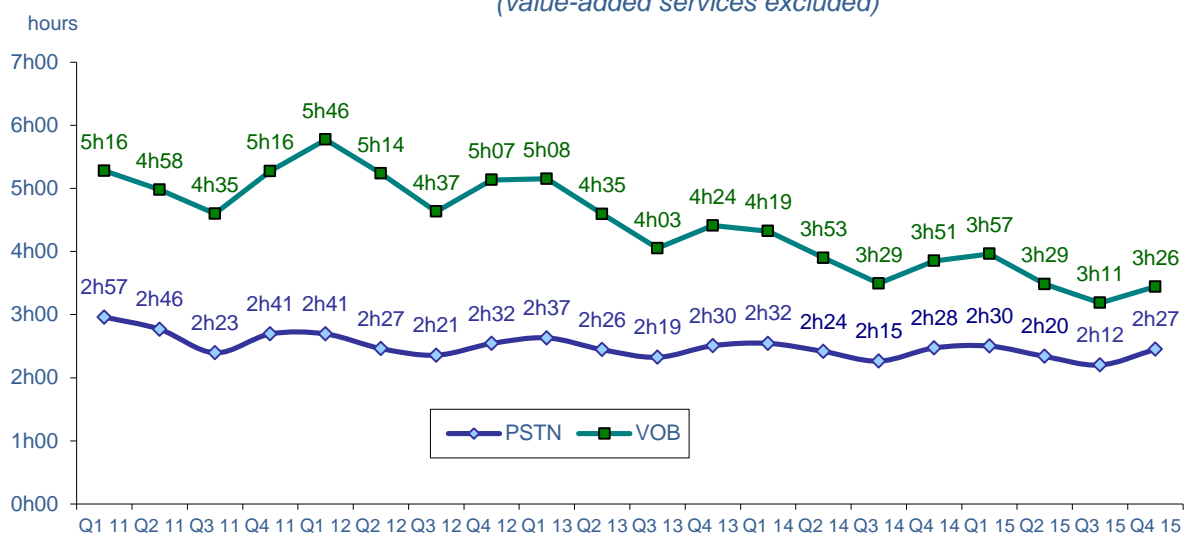
- The average monthly volume per PSTN fixed line is calculated by dividing the traffic earned on a PSTN based fixed line subscription and calls (i.e. excluding VOB) for Quarter Q by the estimated average PSTN customer base for Quarter Q, then dividing the result by three.
- The average monthly volume per narrowband (VOB) subscription is calculated by dividing narrowband (VOB) volume for Quarter Q by the estimated narrowband (VOB) customer base for Quarter Q, then dividing the result by 3.

euros  
exl. VAT

### Average monthly invoice per fixed services subscription



### Average monthly traffic per subscription to a fixed telephony service (value-added services excluded)



## 1.4 Dial-up internet, public payphones and calling cards

### Other fixed services - narrowband

	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Revenue (internet dial-up, public payphone, cards) (millions of euros excl. VAT)	8	9	8	7	9	4,1%
Traffic- public payphones and cards (millions of minutes)	30	54	46	47	45	50,5%
Number of public payphones at end of quarter (units)	69 398	62 620	57 309	52 799	45 730	-34,1%

## 2 SERVICES ON MOBILES NETWORKS – RETAIL MARKET

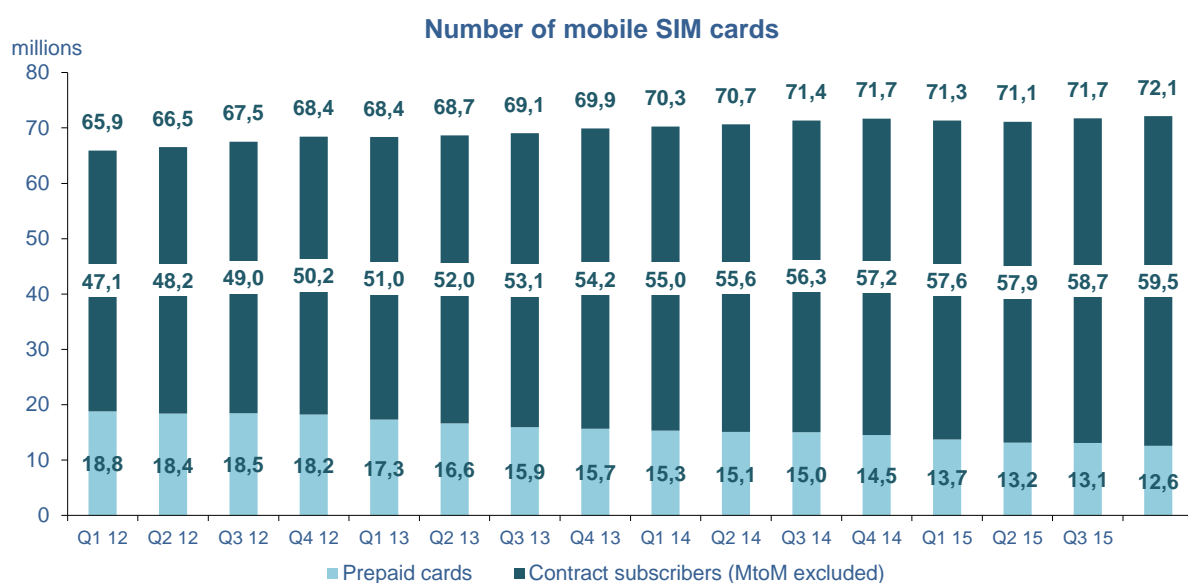
### 2.1 Mobile phone services

#### 2.1.1 Subscriptions to mobiles services

Number of mobile customers (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Contract subscribers	57,158	57,570	57,947	58,654	59,547	4,2%
Prepaid cards	<i>14,518</i>	<i>13,746</i>	<i>13,180</i>	<i>13,091</i>	<i>12,585</i>	-13,3%
of which active prepaid cards **	<i>11,428</i>	<i>10,926</i>	<i>10,834</i>	<i>10,977</i>	<i>10,233</i>	-10,5%
<b>Total number of SIM cards</b>	<b>71,675</b>	<b>71,315</b>	<b>71,127</b>	<b>71,745</b>	<b>72,132</b>	<b>0,6%</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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Contract subscribers	2,928	2,802	2,772	2,812	2,816	-3,8%
Exclusive Internet prepaid cards	0,814	0,785	0,759	0,770	0,816	0,3%
of which active prepaid cards *	0,231	0,223	0,248	0,311	0,283	22,5%
<b>Number of dedicated data cards</b>	<b>3,742</b>	<b>3,587</b>	<b>3,531</b>	<b>3,582</b>	<b>3,631</b>	<b>-2,9%</b>
% in total number of SIM cards	5,2%	5,0%	5,0%	5,0%	5,0%	-0,2 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), 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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Number of mobile subscription tied to at least one fixed service	15,373	16,048	16,549	16,865	17,412	13,3%
% in total number of SIM cards	21%	23%	23%	24%	24%	+ 3 Points

Note: Several SIM cards can be coupled to a same fixed Internet subscription.

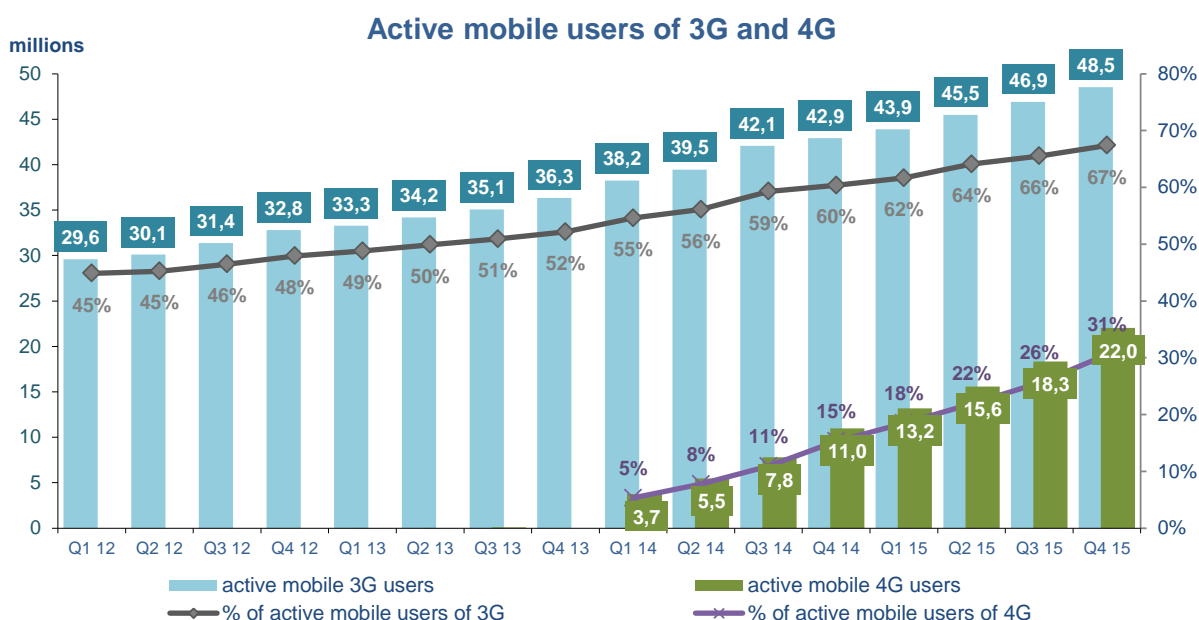
## 2.1.4 3G and 4G users

Active 3G and 4G users (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Active 3G users	42,911	43,881	45,494	46,913	48,512	13,1%
Active 4G users	10,969	13,171	15,573	18,345	22,033	100,9%

*adjusted figures are in italics*

Notes:

- 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 4G 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.



% are calculated without MtoM cards.

## 2.1.5 Portability (mobile numbers)

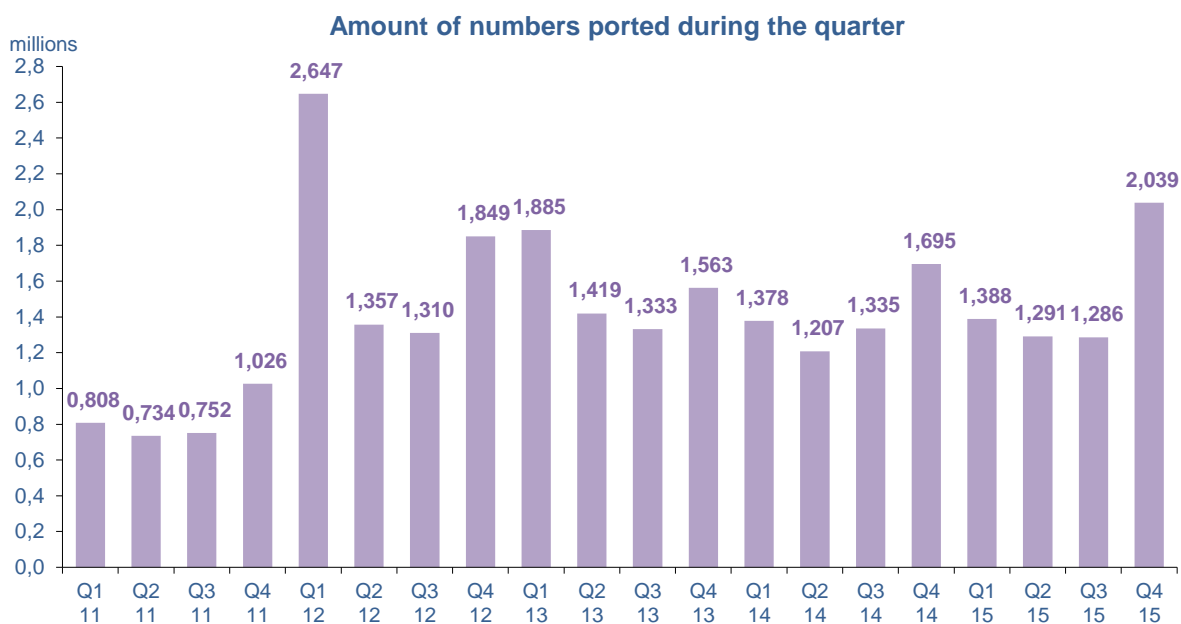
Portability (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Amount of numbers ported during the quarter	1,695	1,388	1,291	1,266	2,039	20,3%

*adjusted figures are in italics*

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".
- The portability deadline is 3 working days since November 7, 2011 for metropolitan France and two days from July 31, 2012, for the departments of Réunion and Mayotte, and November 12, 2012 for the

departments of Guadeloupe, Martinique and French Guyana as well as for the communities of Saint-Martin and Saint-Barthélemy.

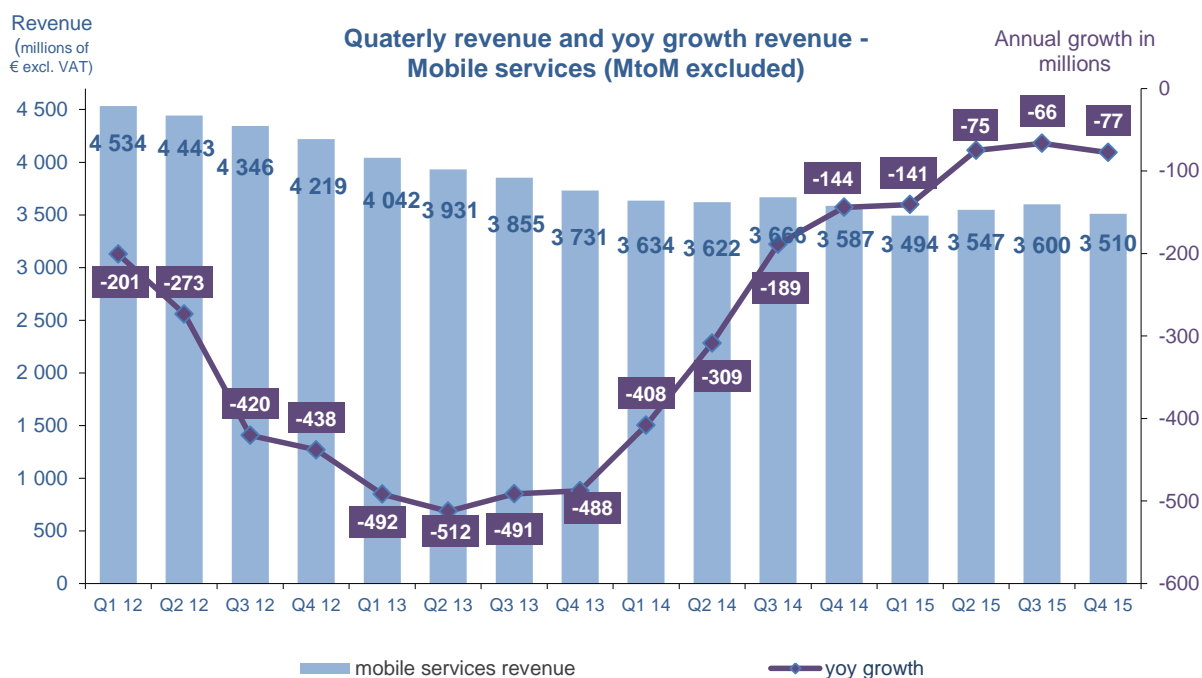


## 2.1.6 Retail market revenue and traffic (excluding value added services)

Revenue (millions of euros)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Contract subscribers		3 226	3 286	3 325	3 261	-
Prepaid cards		267	262	274	249	-
<b>Total mobile telephony and data transport</b>	<b>3 587</b>	<b>3 494</b>	<b>3 547</b>	<b>3 600</b>	<b>3 510</b>	<b>-2,2%</b>
of which outgoing international calls	221	196	202	215	190	-14,1%

*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.



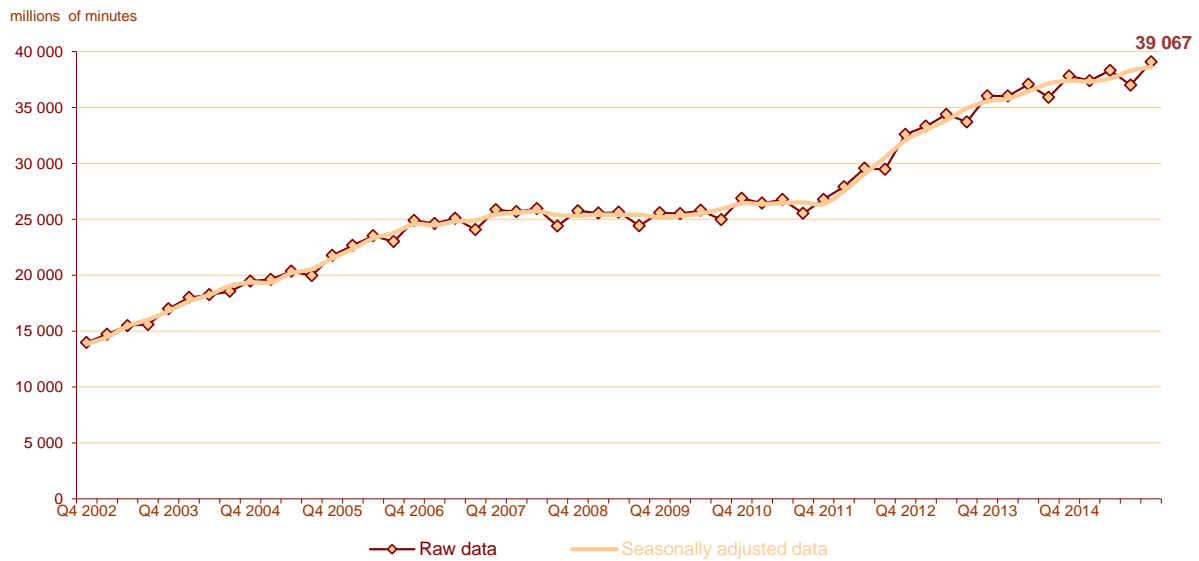
Traffics (millions of minutes)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Calls to national fixed lines	6 542	6 661	6 548	6 393	6 767	3,4%
Calls to national mobile lines	29 371	28 840	29 741	28 416	30 325	3,2%
Calls to mobiles on the same network	13 296	0	0	0	0	-100,0%
Calls to other networks	16 075	0	0	0	0	-100,0%
Outgoing international calls	1 576	1 518	1 539	1 501	1 475	-6,4%
Roaming out	374	381	481	695	501	33,8%
<b>Total mobile telephony</b>	<b>37 862</b>	<b>37 399</b>	<b>38 309</b>	<b>37 004</b>	<b>39 067</b>	<b>3,2%</b>

*adjusted figures are in italics*

Traffics (millions of minutes)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Contract subscribers		34 783	35 673	34 413	36 485	-
Prepaid cards		2 616	2 636	2 591	2 583	-
<b>Total mobile telephony</b>	<b>37 862</b>	<b>37 399</b>	<b>38 309</b>	<b>37 004</b>	<b>39 067</b>	<b>3,2%</b>



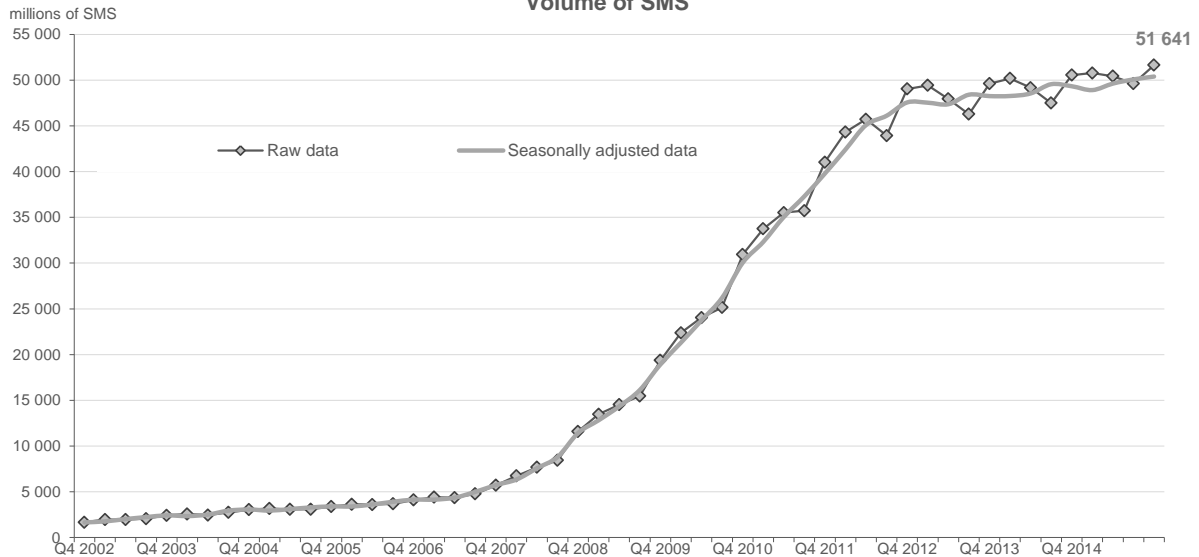
### Volume of calls from mobile



### Traffics of interpersonal messages (millions of units)

	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Number of interpersonal SMS	50 554	50 783	50 425	49 626	51 641	2,1%
of which from contract subscribers	48 212	48 595	48 289	47 516	49 461	2,6%
of which from prepaid cards	2 343	2 189	2 136	2 110	2 180	-7,0%
Number of interpersonal MMS	897	954	996	1 044	1 051	17,2%
<b>Number of messages sent</b>	<b>51 450</b>	<b>51 738</b>	<b>51 422</b>	<b>50 670</b>	<b>52 692</b>	<b>2,4%</b>

### Volume of SMS



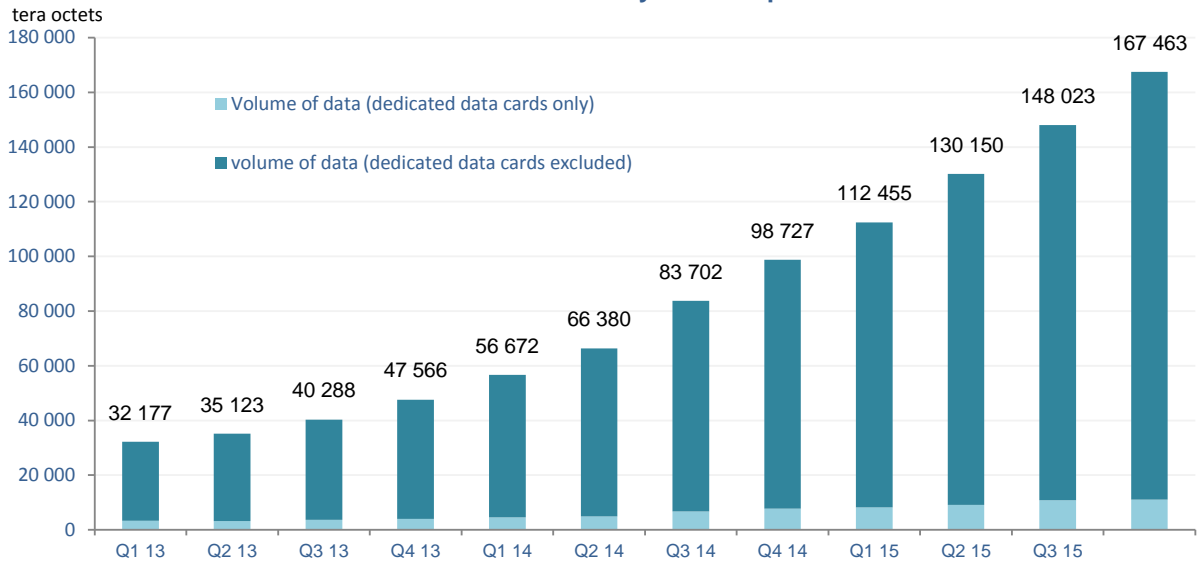
### Traffics of data consumed by the customers (in Teraoctets)

	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Contract subscribers		110 599	128 110	145 258	164 673	-
Prepaid cards		1 856	2 040	2 764	2 790	-
<b>Traffics of data</b>	<b>98 727</b>	<b>112 455</b>	<b>130 150</b>	<b>148 023</b>	<b>167 463</b>	<b>69,6%</b>
of which dedicated data SIM cards	7 797	8 177	9 084	10 830	11 043	41,6%

*adjusted figures are in italics*

Note: the volume of data on mobile networks includes voice communications and exchange of interpersonal messages via software (excluding traffic by wifi).

## Volume of data consumed by mobile operators customers

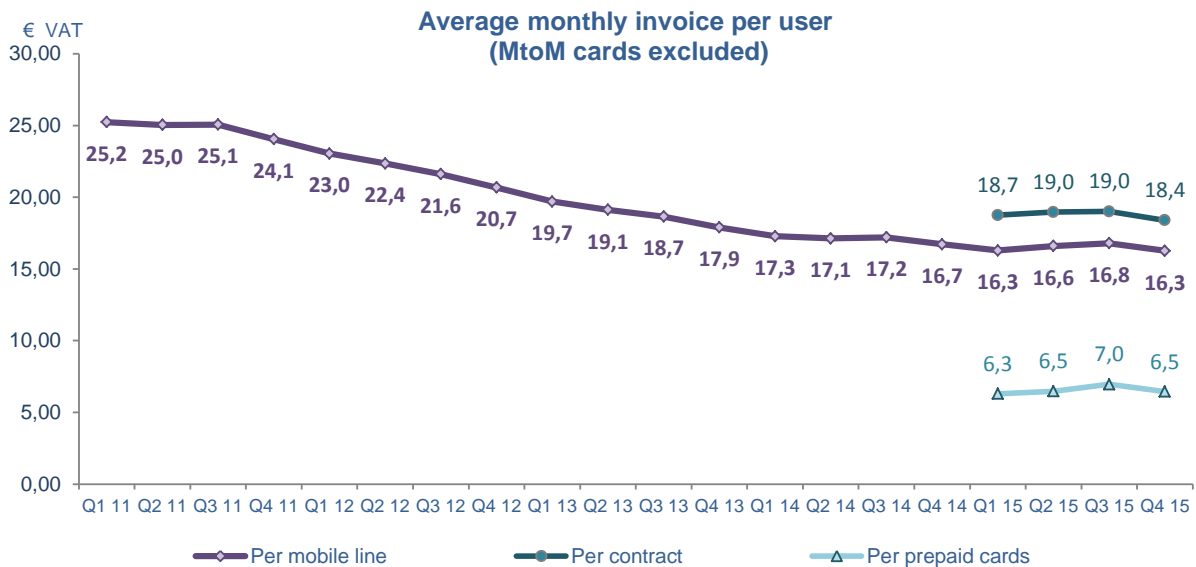


## 2.1.7 Average revenue and consumption per user

Average monthly revenue (value added services excluded)  
(in euros - VAT excluded)

	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Mobile telephony user	16,7	16,3	16,6	16,8	16,3	-2,7%
Contract subscribers		18,7	19,0	19,0	18,4	-
Prepaid cards		6,3	6,5	7,0	6,5	-

*adjusted figures are in italics*

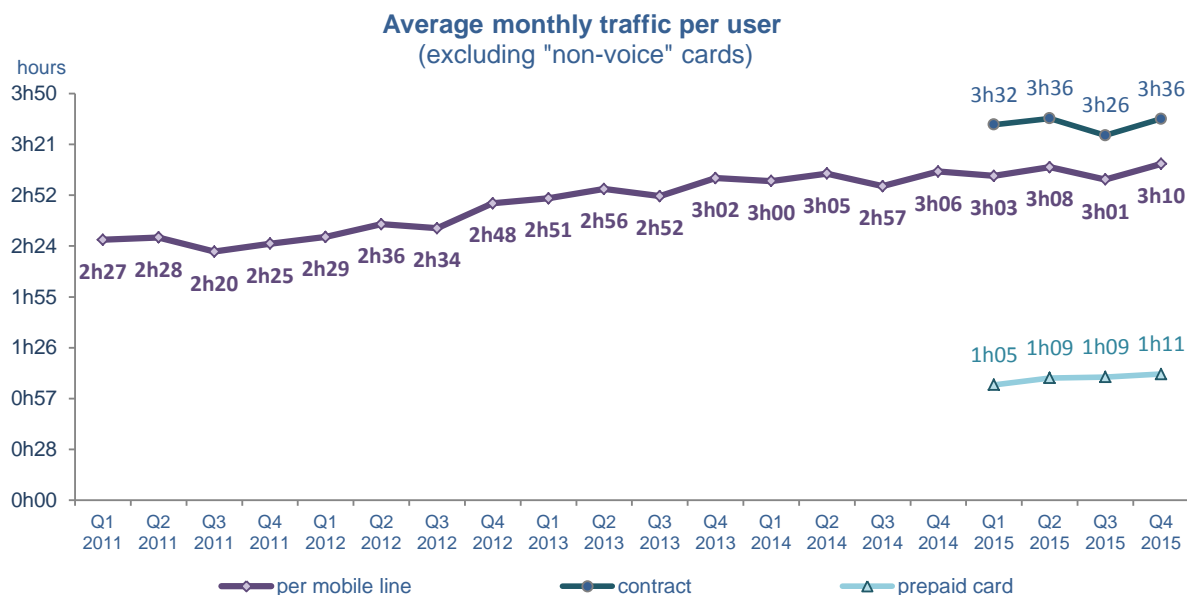


### Notes:

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 monthly outgoing traffic (in hours)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Mobile telephony user	3h06	3h03	3h08	3h01	3h10	2,3%
Contract subscribers		3h32	3h36	3h26	3h36	-
Prepaid cards		1h05	1h09	1h09	1h11	-

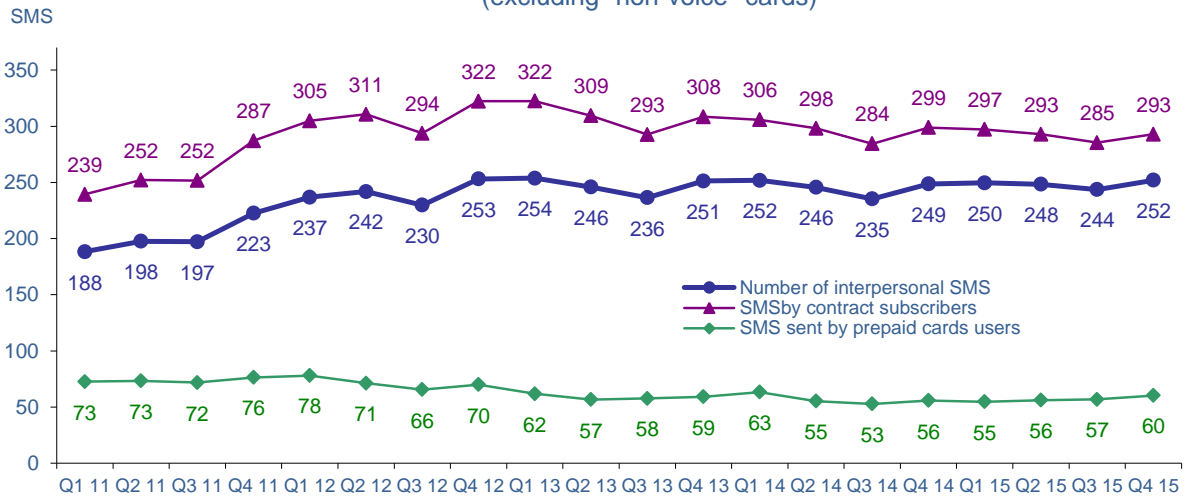
*Note : The average monthly volume of traffic per mobile operator customer is calculated by dividing the volume of mobile telephony traffic (including roaming-out) for quarter N by the estimated average number of mobile customers for quarter N, and then by the number of months. SIM cards that can be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



Number of interpersonal SMS sent per user (units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Number of SMS sent per user during the quarter	249	250	248	244	252	1,3%
of which for contract subscribers	299	297	293	285	293	-2,0%
of which for prepaid cards	56	55	56	57	60	8,0%

*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.*

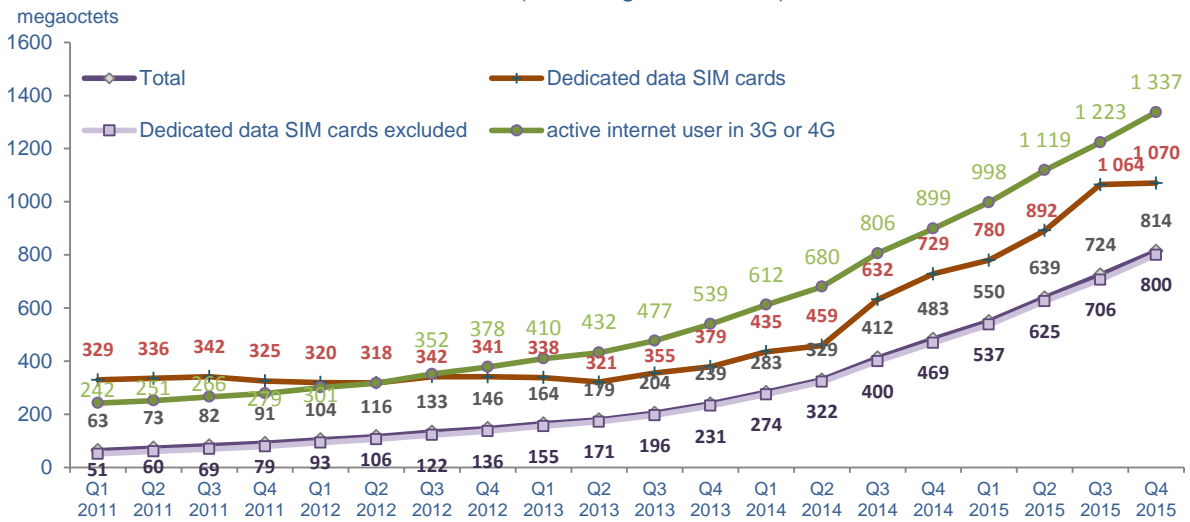
### Number of interpersonal SMS sent per customer by month (excluding "non-voice" cards)

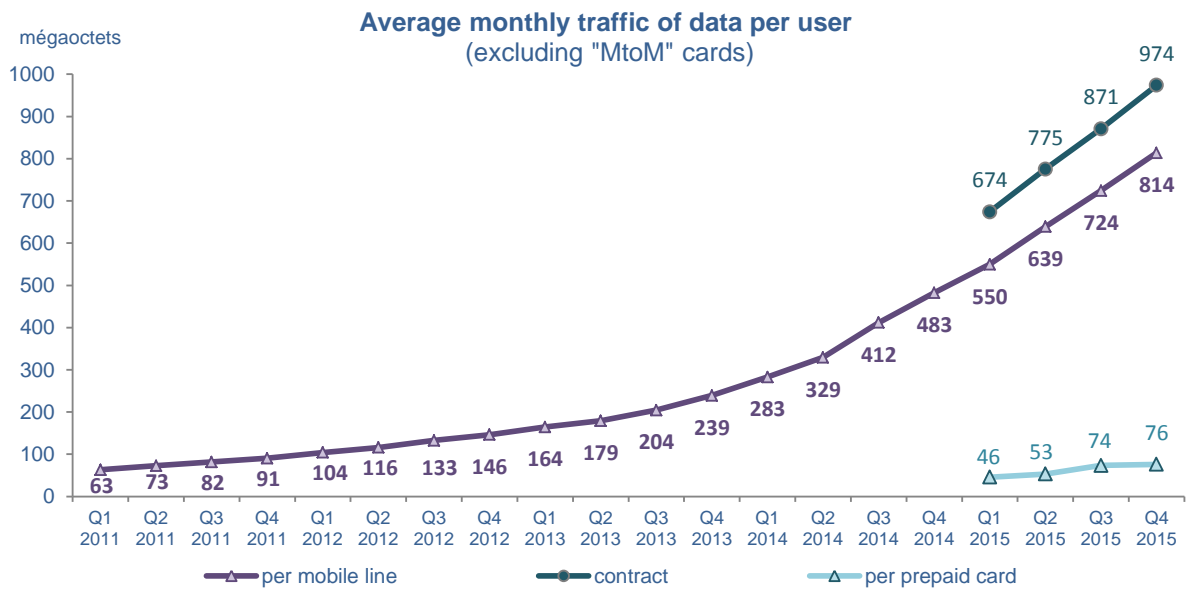


Average monthly Traffic of data consumed on mobile networks  
(en mega octets)

	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
per mobile operator customer	483	550	639	724	814	68,6%
of which dedicated data SIM cards	729	780	892	1 064	1 070	46,9%
of which from other SIM cards	469	537	625	706	800	70,6%
Contract subscribers		674	775	871	974	-
Prepaid cards		46	53	74	76	-
Active 3G and 4G users		998	1 119	1 223	1 337	-

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

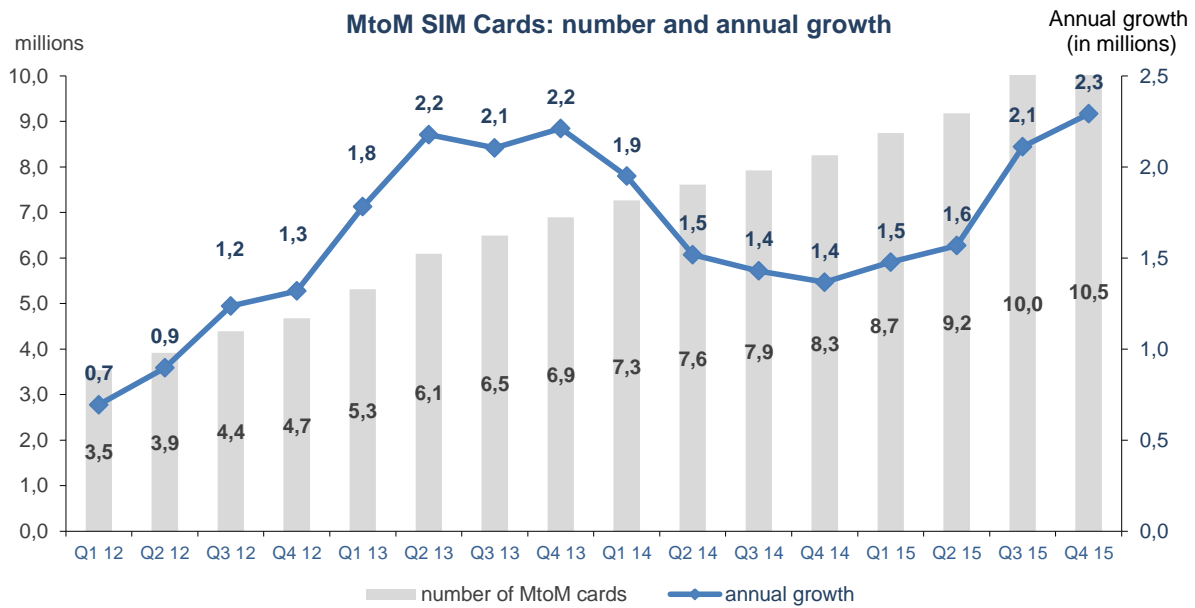




## 2.2 Internet of things : MtoM cards

Dedicated MtoM cards (millions of euros/ units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Revenu of dedicated MtoM cards	22	24	24	23	25	14,6%
Number of dedicated MtoM cards	8,257	8,742	9,177	10,033	10,549	27,8%

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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Value-added "voice" services	246	236	235	239	190	-22,7%
From fixed telephony network	127	121	119	120	123	-3,1%
From mobile telephony network	119	116	116	119	67	-43,5%
Value-added "data" services	92	93	85	86	89	-3,5%
Directory services	29	27	26	24	24	-15,1%
<b>Value-added services</b>	<b>367</b>	<b>356</b>	<b>346</b>	<b>350</b>	<b>304</b>	<b>-17,3%</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.

Value-added "voice" services Traffics (millions of minutes)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
From fixed telephony network	1 096	985	929	948	886	-19,1%
From mobile telephony network	424	415	404	444	459	8,3%
<b>Number of calls</b>	<b>1 520</b>	<b>1 400</b>	<b>1 333</b>	<b>1 393</b>	<b>1 345</b>	<b>-11,5%</b>

Traffics from directory services (millions)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Number of calls (millions of units)	6	6	5	4	4	-38,9%

### 4 OTHER REVENUE

#### 4.1 Hosting and call center management services

Revenue (millions of euros excl.VAT)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Hosting and call centre management	75	73	76	76	83	11,2%

#### 4.2 Terminals and equipments

Revenue from terminals and equipment (millions of euros excl.VAT)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
linked to fixed téléphonie & Internet services	168	163	163	155	170	1,4%
linked to mobile services	645	435	474	517	717	11,1%
<b>Terminals and equipment</b>	<b>813</b>	<b>598</b>	<b>638</b>	<b>673</b>	<b>887</b>	<b>9,1%</b>

*adjusted figures are in italics*

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)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Fixed operators	1 398	1 359	1 388	1 372	1 325	-5,2%
of which telephony services	594	562	592	571	546	-8,0%
of which broadband services	680	669	668	671	659	-3,0%
of which Wholesales leased lined product	125	128	128	130	120	-4,0%
Mobile operators	639	628	653	696	671	5,0%
of which voice termination	178	179	189	196	200	12,7%
of which SMS termination	383	385	388	381	388	1,4%
Roaming in	79	63	76	119	83	4,9%
<b>Revenue (millions of euros)</b>	<b>2 037</b>	<b>1 987</b>	<b>2 040</b>	<b>2 068</b>	<b>1 996</b>	<b>-2,0%</b>

adjusted figures are in italics

Interconnection services (millions of minutes)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Fixed operators	27 515	26 817	25 650	25 043	25 323	-8,0%
Mobile operators	23 108	23 351	23 838	22 911	24 143	4,5%
<b>Traffic</b>	<b>50 623</b>	<b>50 167</b>	<b>49 488</b>	<b>47 955</b>	<b>49 466</b>	<b>-2,3%</b>
<b>Incoming SMS</b>	<b>32 498</b>	<b>32 550</b>	<b>32 234</b>	<b>31 558</b>	<b>32 712</b>	<b>0,7%</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 2015, the price for call termination on fixed networks is set to 0,079c€/minute against 0,08c€/min since July 1st 2013.
  - Broadband wholesale services include income from unbundling and bitstream or bitstream equivalent services. The tariff of the unbundling is set at €9.05 in 2015 against previously at €9.02 since February 1st 2014 (€8.90 in 2013).
  - 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 2014, are not included.
  - From January 1st 2015, the price for call termination on mobile networks is set to 0,78c€/minute against 0,8€/minute since July 1st 2013
  - The price of call termination for SMS is €1.0c for all operators since January 1<sup>st</sup> 2013.
- History of rates is available on the site: <http://www.arcep.fr/index.php?id=8080>.

Unbundling (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Partially unbundled lines	0,710	0,684	0,665	0,644	0,621	-12,5%
Fully unbundled lines	11,556	11,670	11,660	11,750	11,730	1,5%
<b>Number of unbundled lines</b>	<b>12,265</b>	<b>12,354</b>	<b>12,325</b>	<b>12,394</b>	<b>12,350</b>	<b>0,7%</b>

"Bitstream" lines (millions of units)	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
"Naked bitstream"	0,880	0,864	0,846	0,830	0,938	6,5%
"Classic bitstream"	0,174	0,166	0,160	0,154	0,152	-12,5%
<b>Number of "bitstream" lines</b>	<b>1,054</b>	<b>1,031</b>	<b>1,006</b>	<b>0,984</b>	<b>1,090</b>	<b>3,4%</b>



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	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	change 4Q15/4Q14
Traffic (millions of minutes)	553	594	703	846	659	19,2%
Traffic of SMS (millions)	168	179	216	311	158	-6,1%
Traffic of data (teraoctets)	469	598	943	1 678	988	110,5%

- 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. This European regulation also includes a multi-annual plan for a steady decrease in this maximum price. As a result, on 1<sup>st</sup> July 2014, these Euro tariffs went from 0.24€ excl. VAT to 0.19€ excl. VAT for calls made from abroad, and from 0.07€ excl. VAT to 0.05€ excl. VAT for calls received when abroad. SMS tariff on the retail market has been reduced from 0.08€ to 0.06 € excl.VAT per message. The tariff for mobile internet has been reduced from 45c€ to 20c€ per mega octets.

- On the wholesale market the tariffs have been set since 1<sup>st</sup> 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 1<sup>st</sup> July 2013 to 30 June 2014). The tariff is set to 5cts€ per Mo for mobile internet from 1<sup>st</sup> July 2014 (against 15 cts€ for the period from 1<sup>st</sup> July 2013 to 30 June 2014).

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