



هيئة تنظيم الاتصالات  
Telecommunications Regulatory Authority  
مملكة البحرين - Kingdom of Bahrain

# Telecommunications Markets Indicators in the Kingdom of Bahrain

Full year 2015 and up to Q3 2016

Jan 2017



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## Introduction

The collection, analysis and dissemination of accurate and timely market information significantly enhances the design of effective, proportionate and efficient market regulation.

The publication of this report is in accordance with Article 54 of the Telecommunications Law of Bahrain.

Unless specified, the analysis presented in this report is based on data collected from licensed operators by TRA. TRA would like to thank licensed operators for the information provided and looks forward to their continued collaboration in the future.

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This is the eleventh Telecommunications Markets Indicators Report and it covers a large range of telecoms services indicators up to Q3 2016 such as the number of subscribers, penetration rates, calls usage and telecoms revenues.

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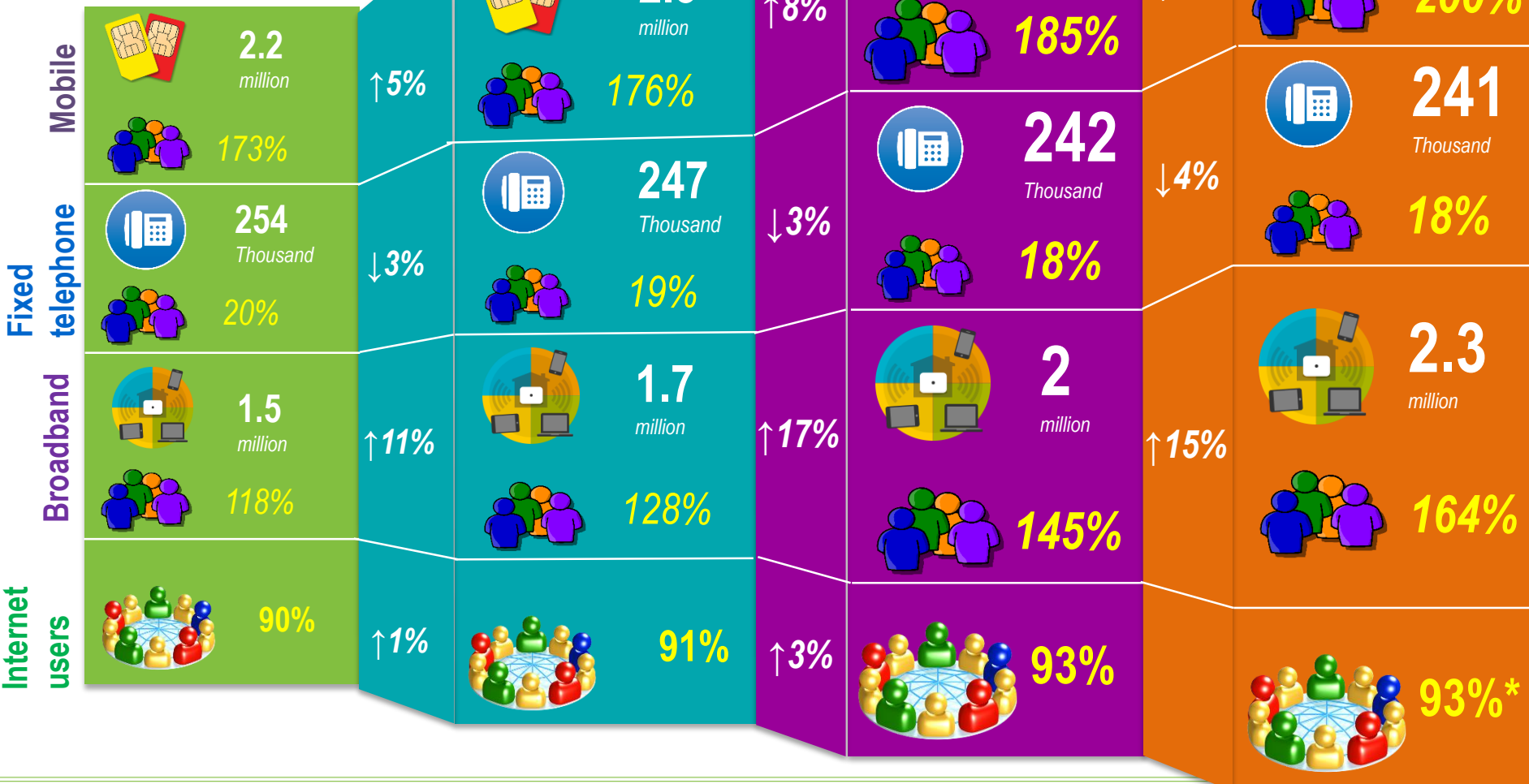


# Q3 2016

## 2015

## 2014

## 2013



\* Based on 2015 survey

## Services offered by active operators

Operator Name	National Fixed	International Calls	Mobile	Internet	Leased line	Other data service	Others
<b>2Connect *</b>	✓	✓		✓	✓	✓	
<b>Ascentech telecoms</b>		✓					
<b>Batelco</b>	✓	✓	✓	✓	✓	✓	
<b>Bahrain Internet Exchange</b>						✓	
<b>Bahrain Broadband Company</b>	✓	✓		✓			
<b>BT Solutions LTD</b>					✓	✓	
<b>Equant Global Network - EGN BV</b>					✓	✓	
<b>Etisacom Bahrain Company</b>	✓	✓		✓			
<b>Gateway Gulf Company</b>				✓	✓	✓	Value added services
<b>Golden Sands Electronic and Phone</b>							Bulk SMS
<b>Gulf Electronic Tawasul Company</b>					✓		
<b>Kalaam telecom (&amp; Lightspeed)</b>	✓	✓		✓	✓		
<b>IMC</b>						✓	
<b>SITA</b>						✓	
<b>Menatelecom</b>	✓	✓		✓	✓	✓	
<b>Moving Gulf Telecom</b>		✓					
<b>Mobitel Communication</b>						✓	Bulk SMS
<b>Mobile Information Services</b>						✓	
<b>North Star Technology Company</b>	✓	✓		✓	✓		
<b>Nuetel Communications</b>	✓	✓		✓	✓	✓	
<b>Orbit Data Systems Company</b>						✓	VSAT
<b>Rapid telecoms</b>	✓	✓		✓	✓	✓	
<b>Viacloud</b>	✓	✓					
<b>VIVA Bahrain</b>	✓	✓	✓	✓	✓		
<b>Zain Bahrain</b>	✓	✓	✓	✓	✓		
<b>Zajil</b>					✓	✓	

\* As of May 2016 2connect transferred their business to new licensee (Infonias)

## Main telecom indicators

Indicator	2008	2009	2010	2011	2012	2013	2014	2015	Growth 2014-2015	CAGR 2008 – 2015
Number of fixed lines	220,386	237,621	227,353	248,479	260,000	251,000	247,000	242,000	-2%	1.35%
Fixed line penetration	20%	20%	19%	21%	21%	20%	19%	18% <sup>5</sup>		
Total mobile subscribers	1,440,782	1,401,974	1,567,745	1,693,650	2,123,903	2,210,190	2,322,860	2,533,208	9%	8%
Mobile penetration	130%	119%	128%	142%	172%	173%	176%	186%		
Total broadband subscribers	114,502	161,815	306,235	567,884	1,148,264	1,507,956	1,679,681	1,985,866	18%	50%
Broadband penetration	10%	13%	25%	48%	93%	118%	128%	145%		
Percentage of individuals using the Internet	52%	53%	55%	77%	88%	90%	91%	93%		
Telecommunications revenues (BD in million)	303	338	360	406	409	423	430	450	4.6%	6%
Number of employees in the telecommunications sector	2469	2504	2584	2708	3141	3000	3,092	3206	4%	4

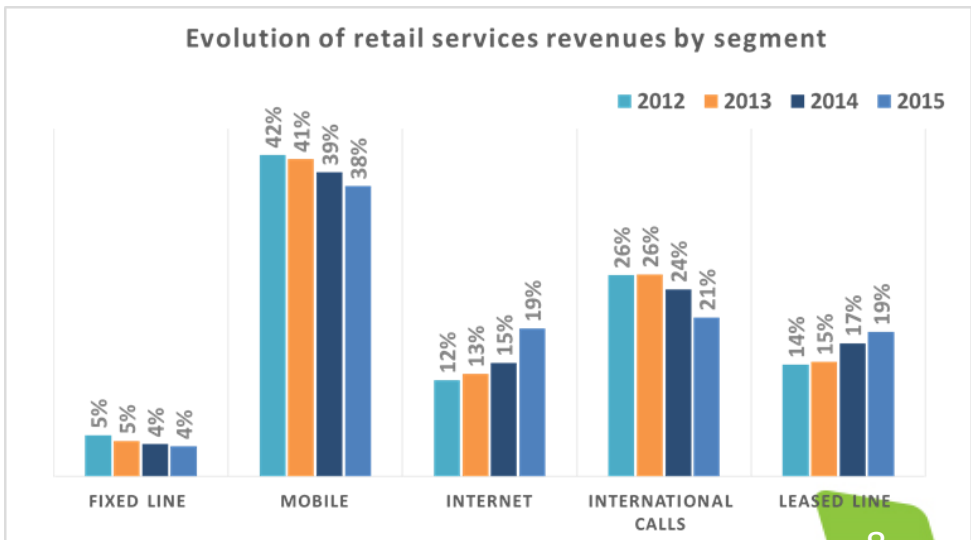
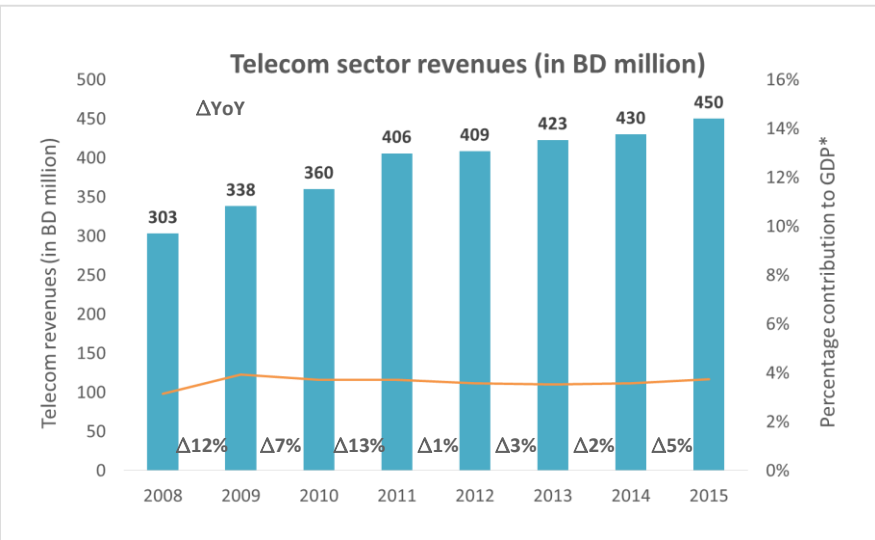
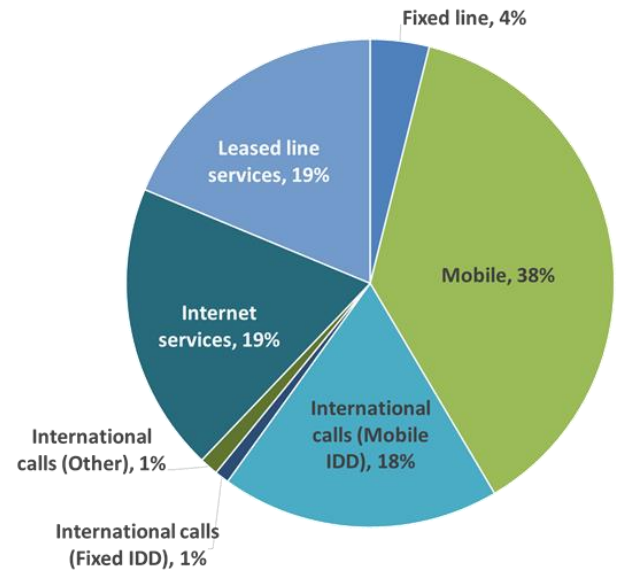
### Notes:

- 1- The number of subscribers refers to the end of the period.
- 2- Number of broadband subscribers include fixed, mobile and wireless.
- 3- The total number of broadband subscriptions have been revised due to the revision of the pay-per-use mobile broadband subscriptions reported by Zain.
- 4- As noted in previous reports, the new numbers of total broadband subscriptions for 2010-2012 have been revised to ensure better alignment with the ITU definition of active mobile broadband subscribers (see definition in slide 38). Comprehensive Pay-per-use figures are not available for 2011 and earlier.
- 5- 2011, 2012 2013 and 2014 revenues include handsets sales.
- 6- CAGR: Compound Annual Growth Rate.
- 7- The source of Percentage of individuals using the Internet is the ITU and TRA residential survey.

# Revenues in the telecom sector

- Telecommunication operators revenues reached BD 450 million in 2015 compared to BD 430 million in 2014 (4.7% growth between 2014 and 2015).
- The compound annual growth rate is 6% between 2007 and 2015.
- Telecommunication sector revenues represent about 4% of the GDP as of 2015.
- Mobile services revenue account for more than half of the telecom retail services revenue (As it reached 56% if we include revenues generated from international).

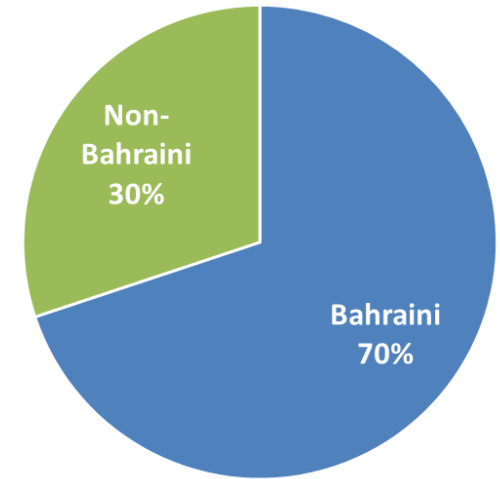
Breakdown of retail services revenues in 2015



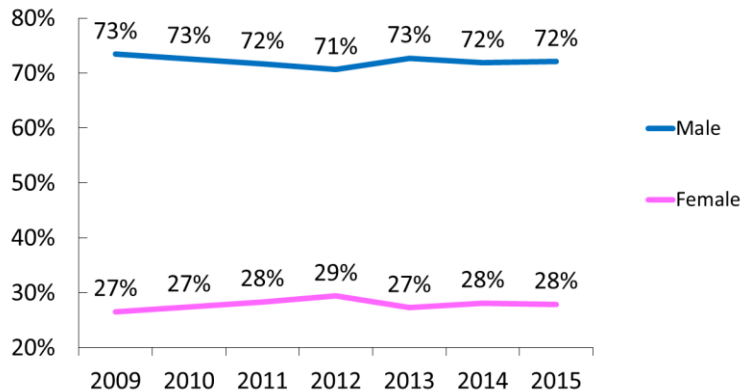
# Employment in the telecom sector

- 3,200 employees are working in the telecommunication sector in 2015.
- The sector achieves high degree of Bahrainisation (70% as of 2015).
- The females are representing 28% of employees in the telecom sector.

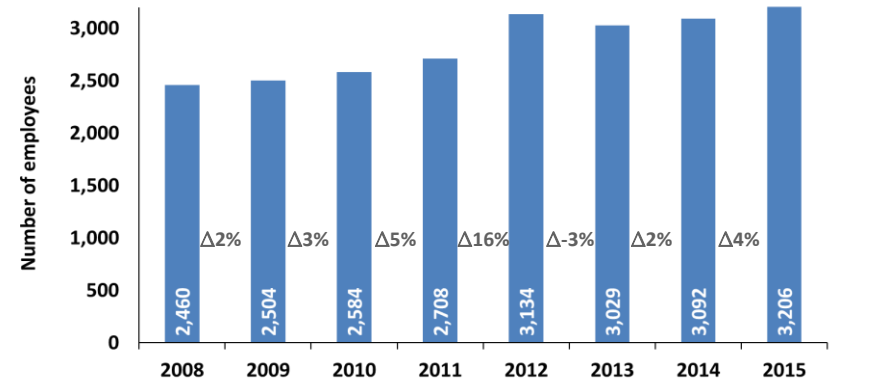
Distribution of employees by nationality 2015



Proportion of male and female working in the telecommunication sector



Number of employees working in the telecommunications sector  $\Delta$ YoY



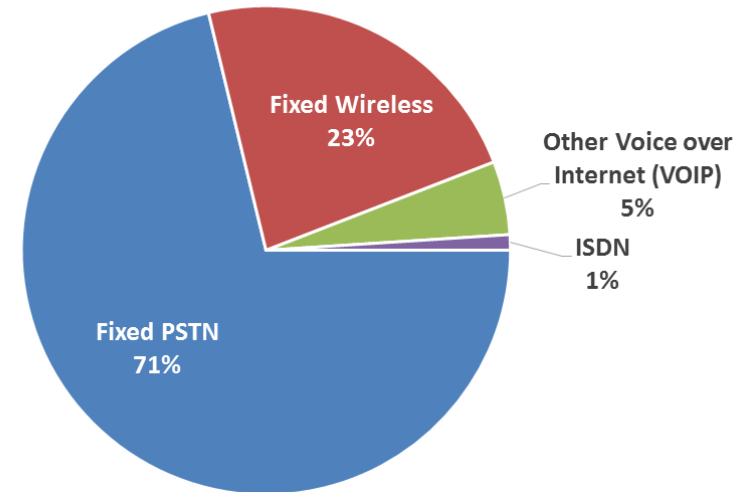
# Fixed telephony services

By the end of Q3 2016, there were 244,000\* fixed lines (20%\* penetration), a fall of -1% compared to the number of fixed lines in Q3 2015.

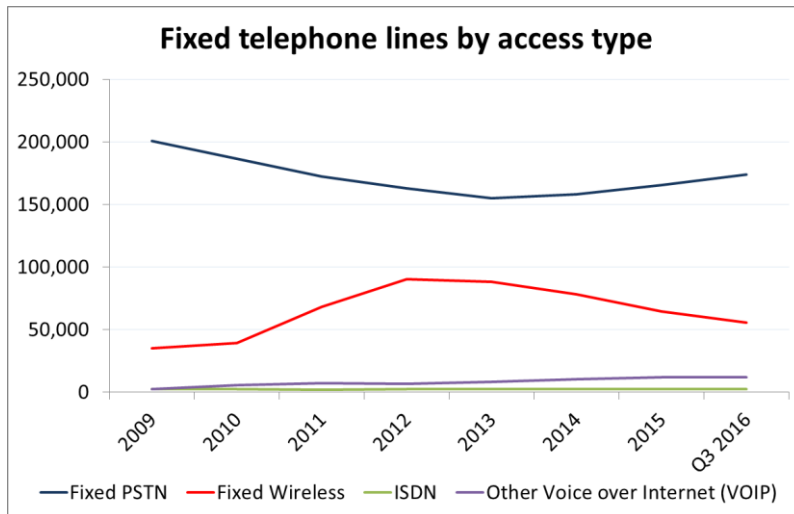
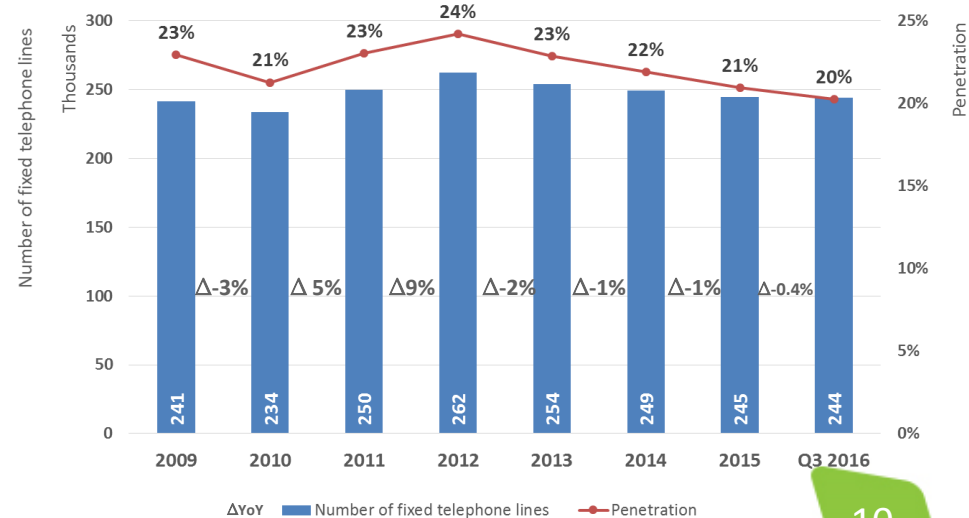
The number of fixed wired telephone services increased by almost 12% up to Q3 2016 comparing to the end of Q3 2015; that was due to increase demand on fiber.

While the number of fixed wireless telephone services continue in falling, it decreased by almost -14% over the same period.

Proportion of fixed line by access type Q3 2016




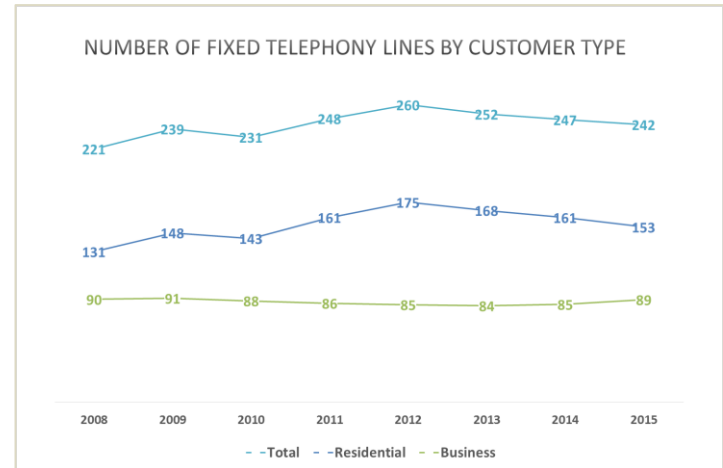
Evolution of fixed telephone lines




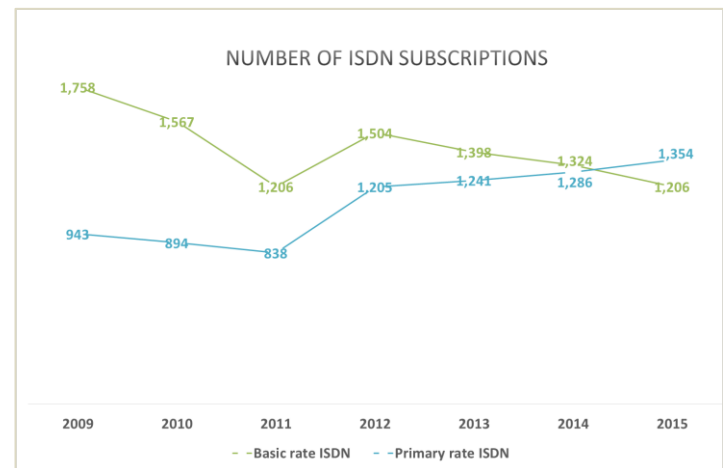
\* ISDN voice channel equivalents are included in the penetration rate. Basic-rate voice-channel equivalents is the number of basic-rate ISDN subscriptions multiplied by 2, and primary-rate voice-channel equivalents is the number of primary-rate ISDN subscriptions multiplied by 30.

# Fixed telephony services by customer type

 The reduction in the total number of fixed telephony lines in 2015 mirrors the reduction in residential services.

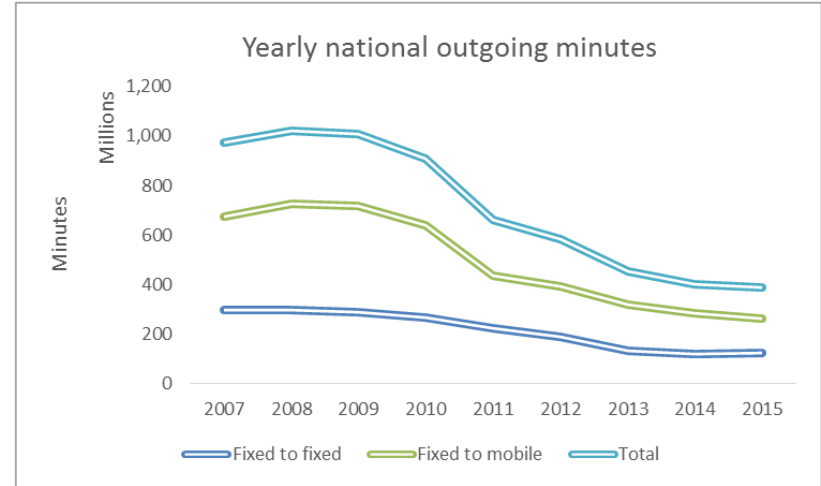


 By the end of 2015 there were increase in Primary rate ISDN services by 5% to reach 1,354 while the Basic rate ISDN decreased by 9% to reach 1,206.

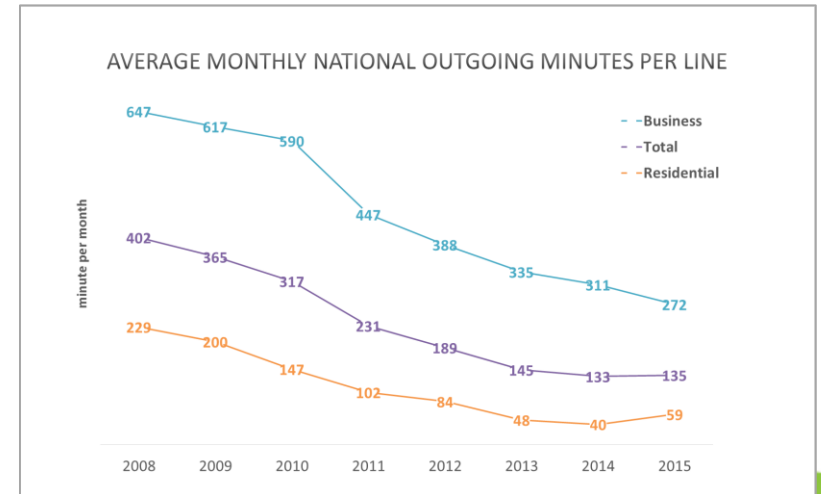
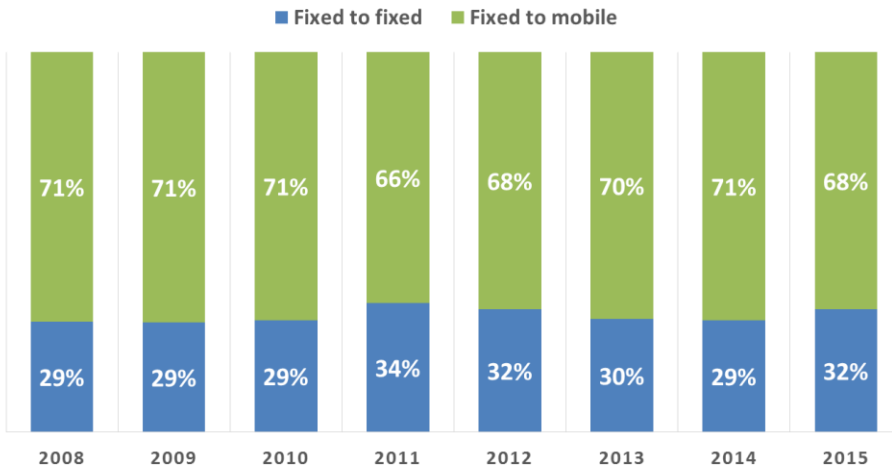


# Fixed telephony outgoing minutes

- Fixed telephony national traffic decreased by -3% between 2014 and 2015 due to substitution towards mobile.
- 68% of national traffic originated from fixed lines are fixed-to-mobile calls.



## Proportion of fixed national calls (Minutes)

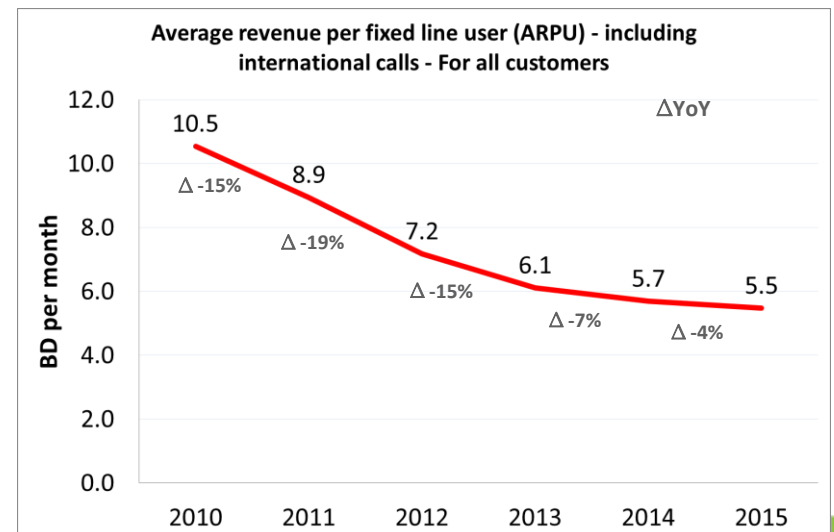
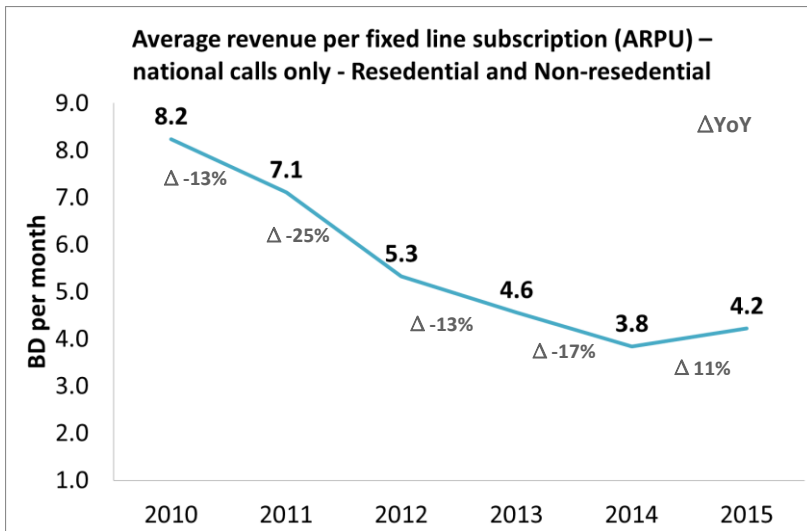
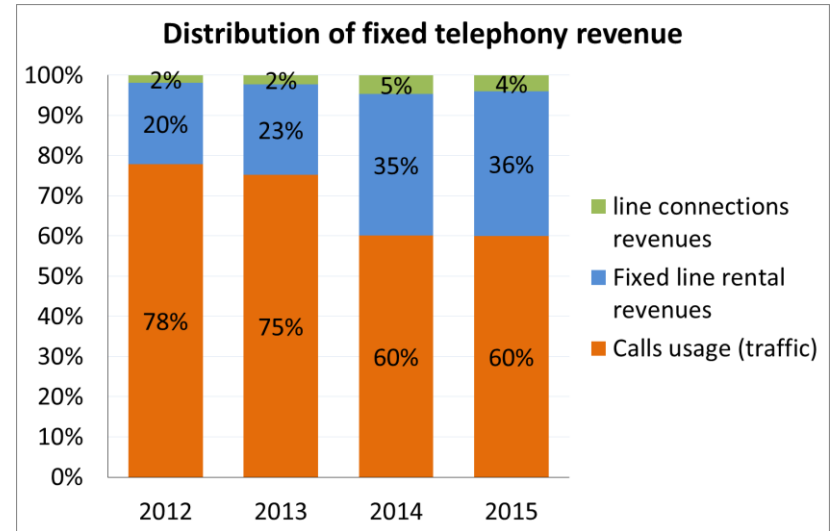


# Fixed telephony service revenue

Fixed line revenues dropped by 8% between 2014 and 2015.

BD in million	2014	2015	Growth 2014- 2015
	13.1	12.1	(8%)

Source: TRA analysis based on operators data



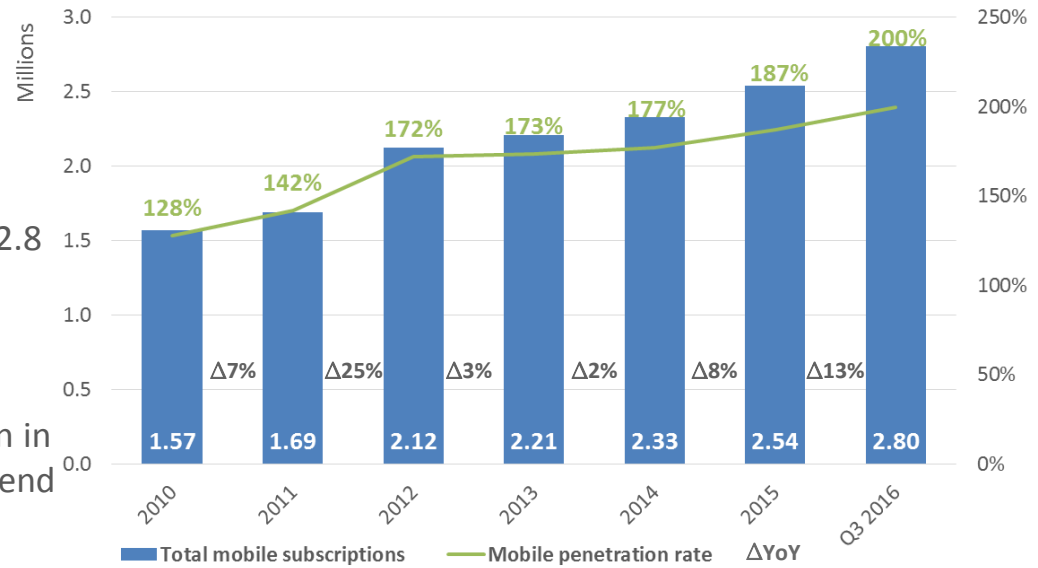
# Mobile services

At the end of Q3 2016 there were about 2.8 million mobile subscribers in Bahrain, an increase of 12% compared to Q3 2015.

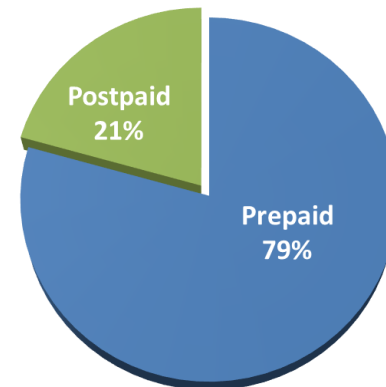
At the end of Q3 2016 mobile penetration in Bahrain reached 200% from 180% at the end of Q3 2015.

The mobile market in Bahrain remains predominantly prepaid. Prepaid subscribers represented 79% of mobile subscribers at the end of Q3 2016.

Growth in mobile subscriptions and penetration



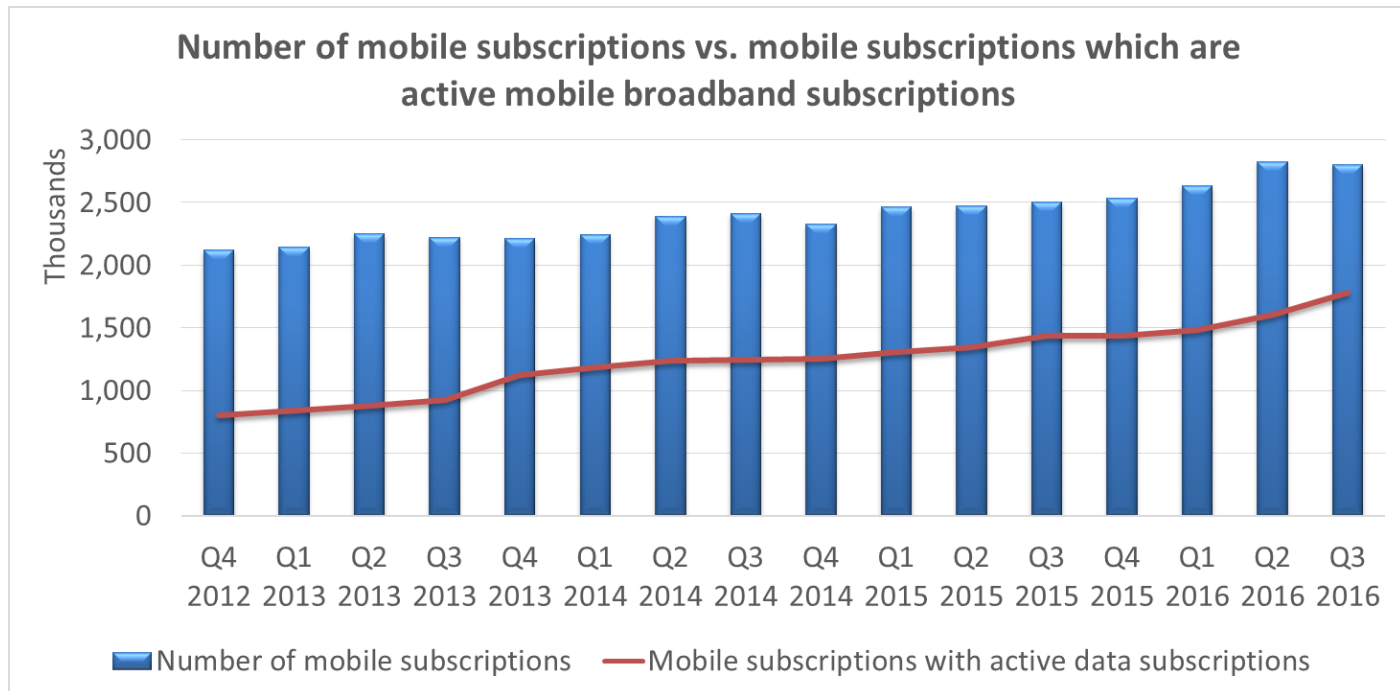
Proportion of prepaid and postpaid subscriptions as of Q3 2016



Mobile Subscriptions	2010	2011	2012	2013	2014	2015	Q3 2016	Growth 2014 – Q3 2016
Prepaid	1,289,274	1,379,820	1,720,958	1,777,864	1,821,364	1,975,192	2,223,803	22%
Postpaid	278,471	313,830	402,945	432,326	507,630	558,016	579,415	14%
<b>Total</b>	<b>1,567,745</b>	<b>1,693,650</b>	<b>2,123,903</b>	<b>2,210,190</b>	<b>2,328,994</b>	<b>2,533,208</b>	<b>2,803,218</b>	<b>21%</b>

## Mobile subscriptions having data subscriptions

- At the end of Q3 2016, there were 1.8 million mobile subscribers with a mobile data subscription (pay per use, add-on and bundles) compared to 800,000 in 2012 (increase by 89%).
- Active mobile broadband subscriptions (pay per use, add-on and bundles) represent 64% of total mobile subscriptions at the end of Q3 2016 compare to 57% of total mobile subscriptions at the end of Q3 2015.



\*(Pay per use, Add-on and Bundles)

# Mobile traffic

At the end of 2015, mobile generated 6.6 billion domestic minutes, representing a growth of 2% 2014 and 2015.

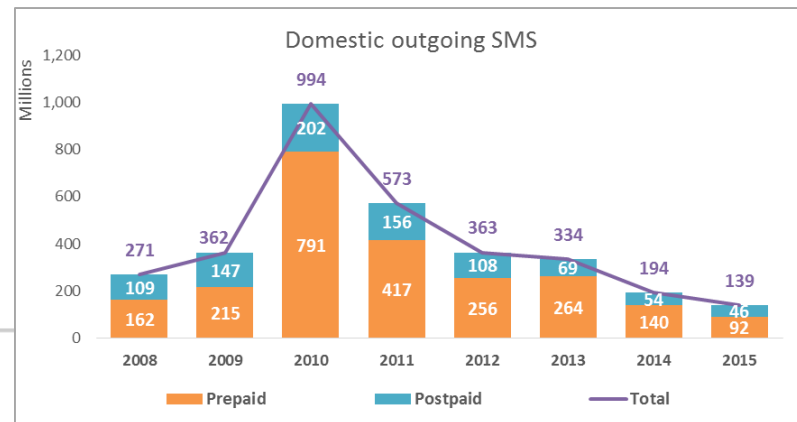
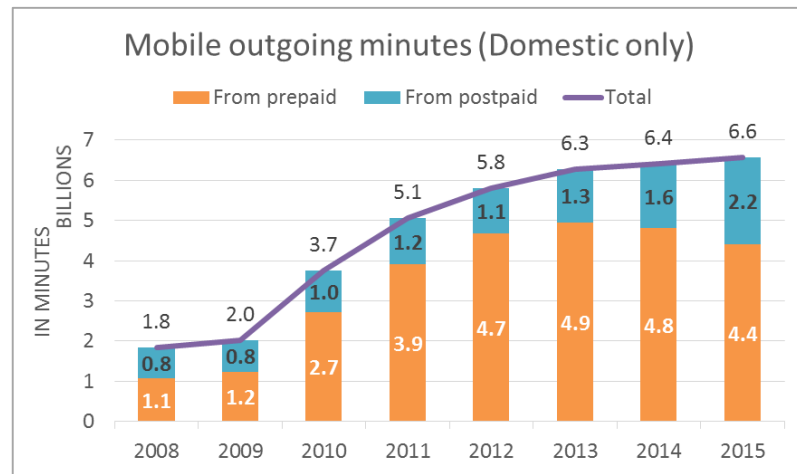
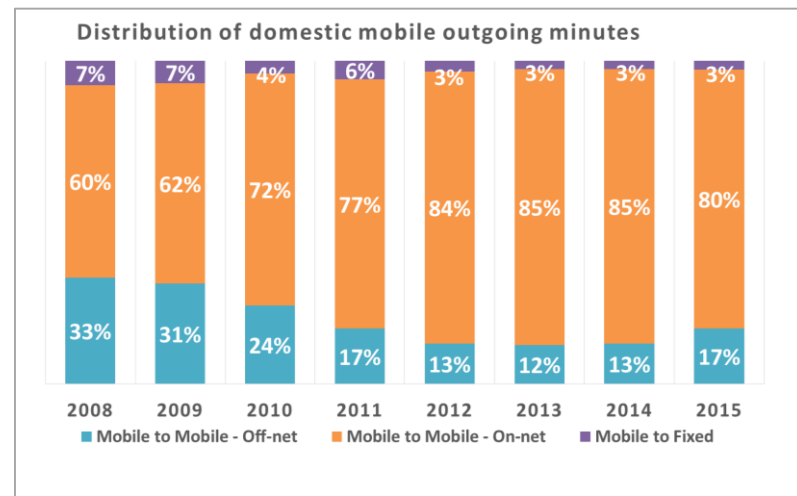
75% growth in domestic mobile originated traffic between 2010 and 2015.

Comparing 2015 to 2014, the domestic postpaid mobile outgoing minutes grew by 35%, while the traffic originated from prepaid dropped by 8%. This could be a result of the increase of postpaid offers.

In 2015, domestic mobile originated on-net traffic decreased to reach 80% comparing to 85% at the end of 2014.

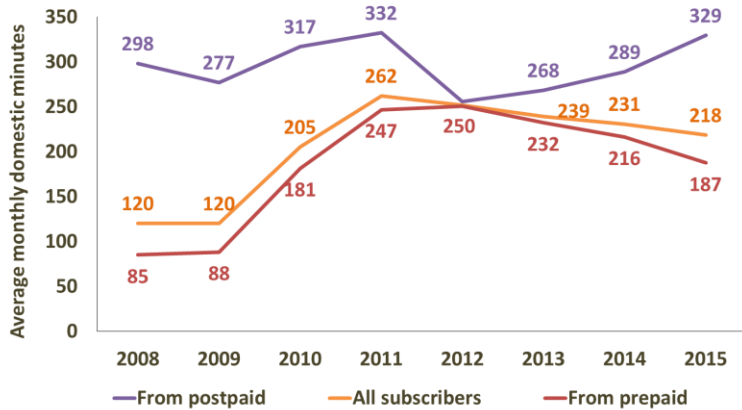
After 3 consecutive years of decline on off-net traffic, on 2015 it increased by 5% comparing to 2014 , that was mainly due to free off-net minutes offered by mobile operators.

Number of domestic SMS dropped by 29% between 2014 to 2015 mainly due to the increase in mobile data services/applications (e.g. WhatsApp).



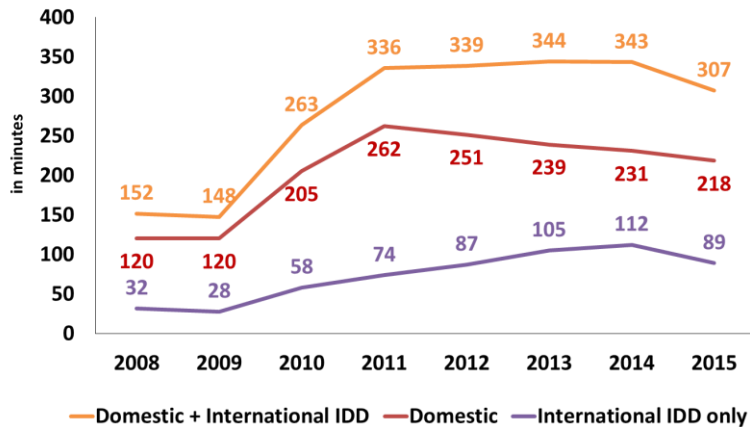
# Average monthly outgoing minutes

Average monthly outgoing minutes per subscriber  
(Domestic traffic only)



As shown in the figure the average monthly domestic traffic (in minutes) for postpaid subscribers increased from 289 minutes in 2014 to 329 minutes in 2015, a result of an increase in unlimited calls plans.

Average monthly outgoing minutes per subscriber  
(Domestic and International traffic)



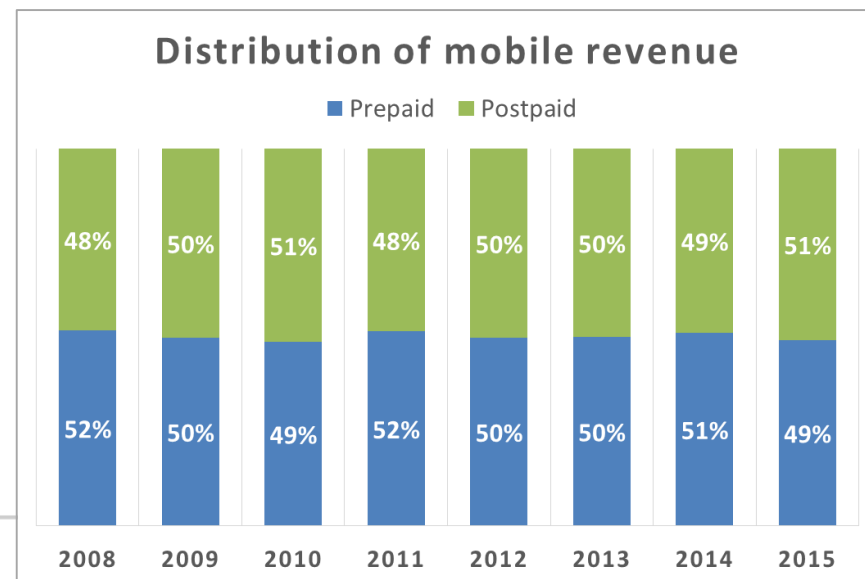
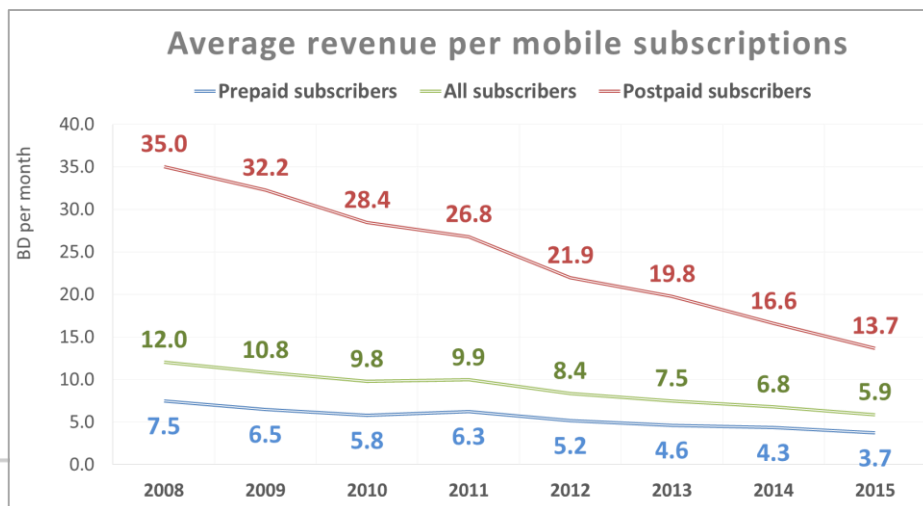
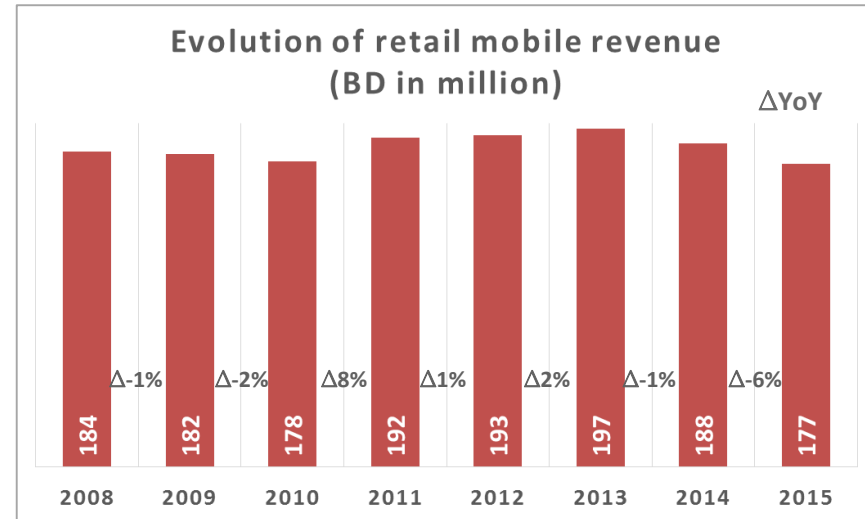
The average monthly domestic traffic (in minutes) for prepaid customers dropped further from 216 minutes in 2014 to 187 minutes in 2015.



The average monthly volume of international direct dial (IDD) calls has decreased by -20.5% between 2014 and 2015.

# Mobile revenue

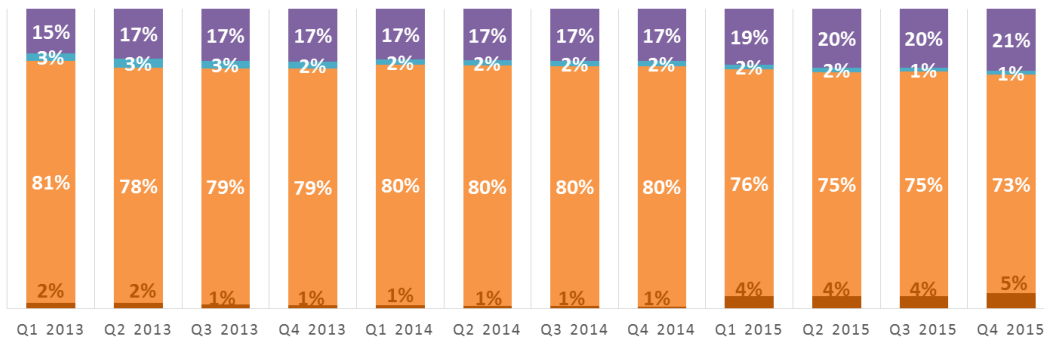
- Mobile revenues dropped by 4.5% between 2014 and 2015.
- Although postpaid mobile subscriptions represent 20% of total mobile subscriptions, however, the revenue generated from postpaid mobile subscriptions represent 51% of the total retail mobile revenue in 2015.
- The reduction in mobile service prices resulted in a drop in the average revenue per subscription by 57.6% for postpaid and 43% for prepaid in the last six years (From 2009).



# Distribution of mobile revenue

## DISTRIBUTION OF MOBILE REVENUE - PREPAID

■ subscription ■ Voice ■ SMS ■ Data

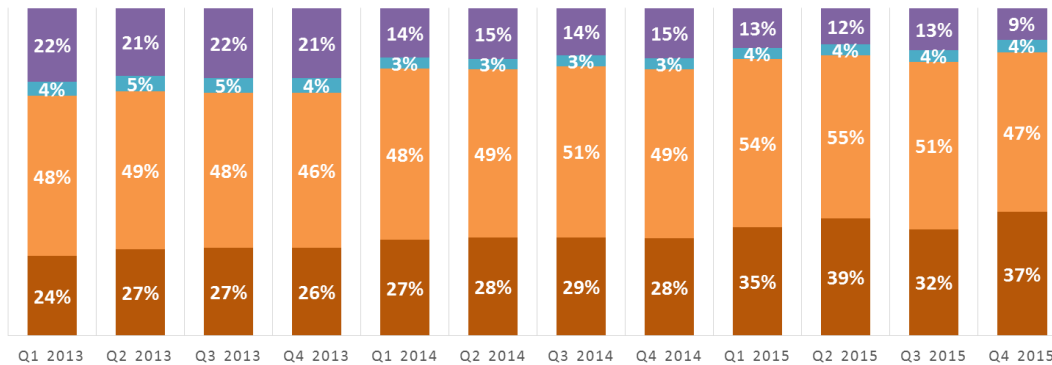


Voice services continue to be the main source of revenues for mobile operators, followed by data.

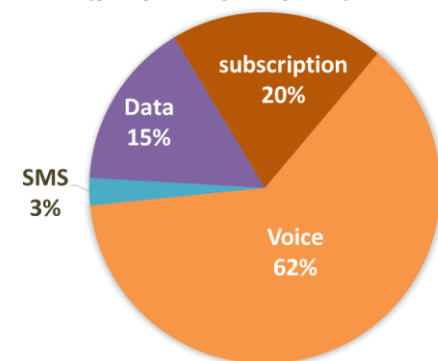
- For prepaid, voice generated about 73% of prepaid revenues and data generated 21% in Q4 2015.
- For postpaid, voice generated about 47% of postpaid revenues and data generated 9% in Q4 2015.

## DISTRIBUTION OF MOBILE REVENUE - POSTPAID

■ subscription ■ Voice ■ SMS ■ Data



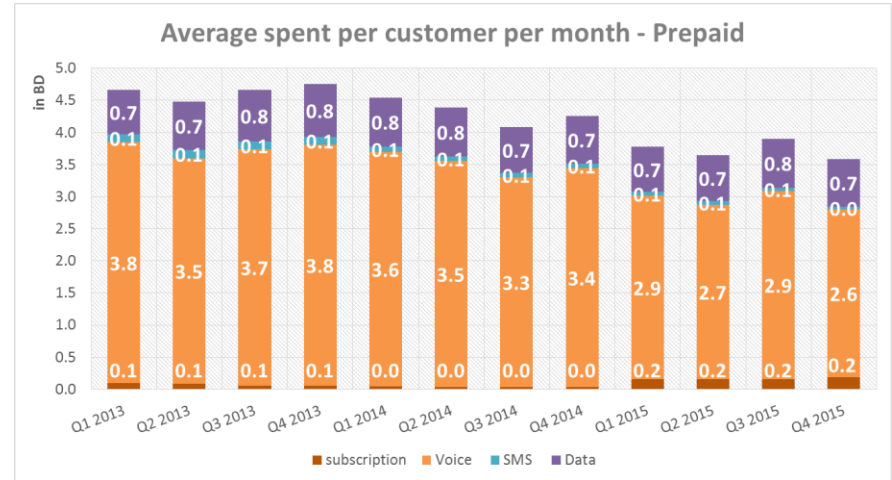
## Distribution of mobile revenue (prepaid+postpaid) - 2015



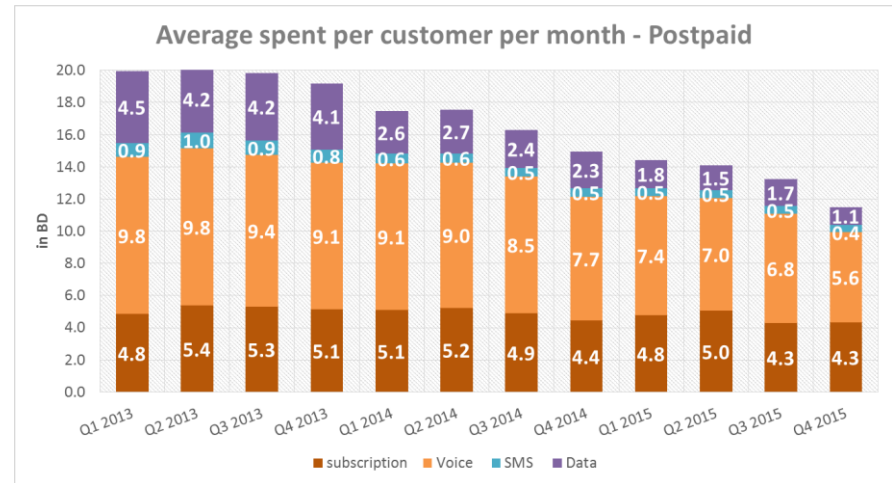
# Average spend per subscriber per month



The average monthly spend per subscriber for voice is about BD2.6 for prepaid and BD5.6 for postpaid subscribers in Q4 2015.

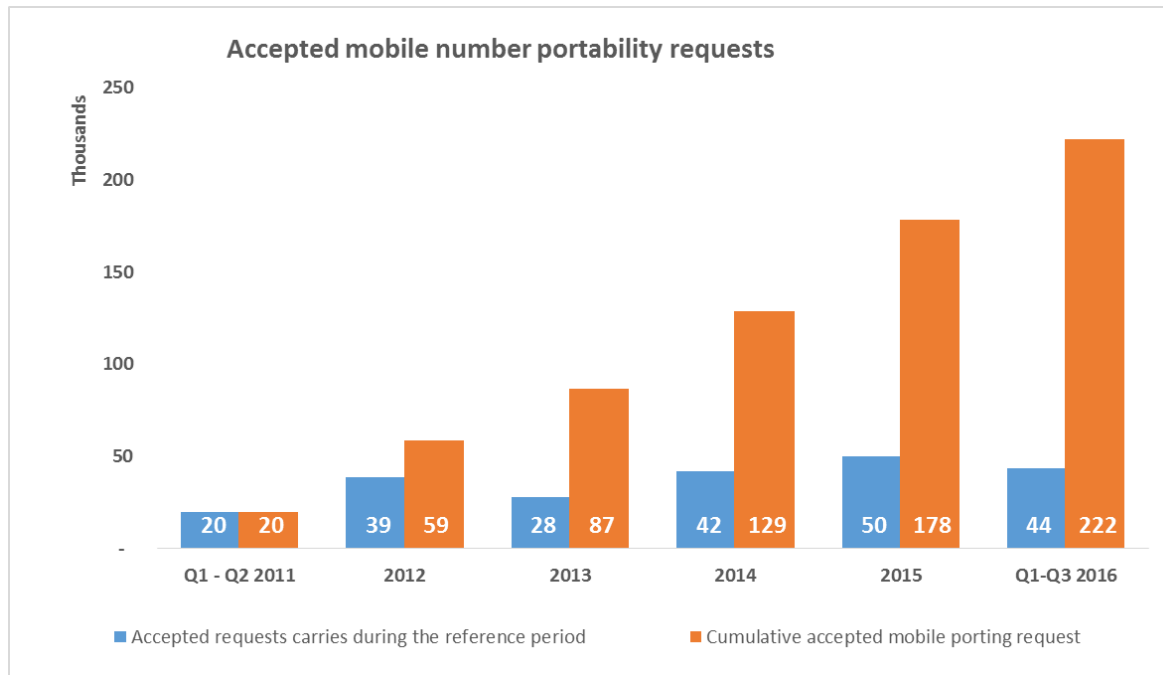


The average monthly spend per subscriber for data is about BD 0.700 for prepaid and BD1.100 for postpaid subscribers in Q4 2015.



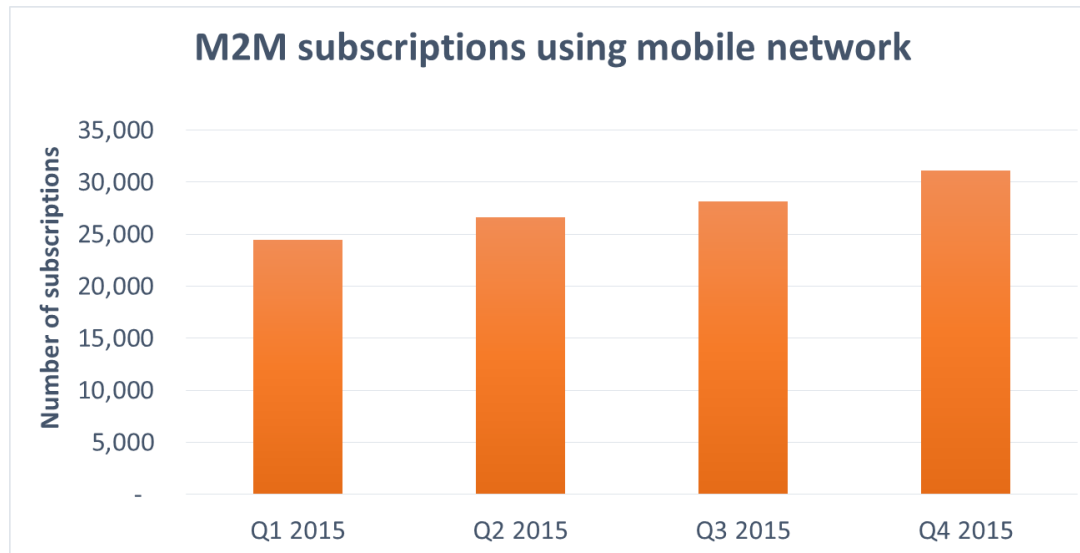
# Mobile number portability

- ☎ The volume of mobile numbers successfully ported has gradually increased. By the end of Q3 2016, a total of approximately 221,900 mobile numbers had been ported successfully since the introduction of number portability in July 2011.
- ☎ This represents 8% of the mobile customer base at the end of Q3 2016.





## Machine-to-Machine (M2M)



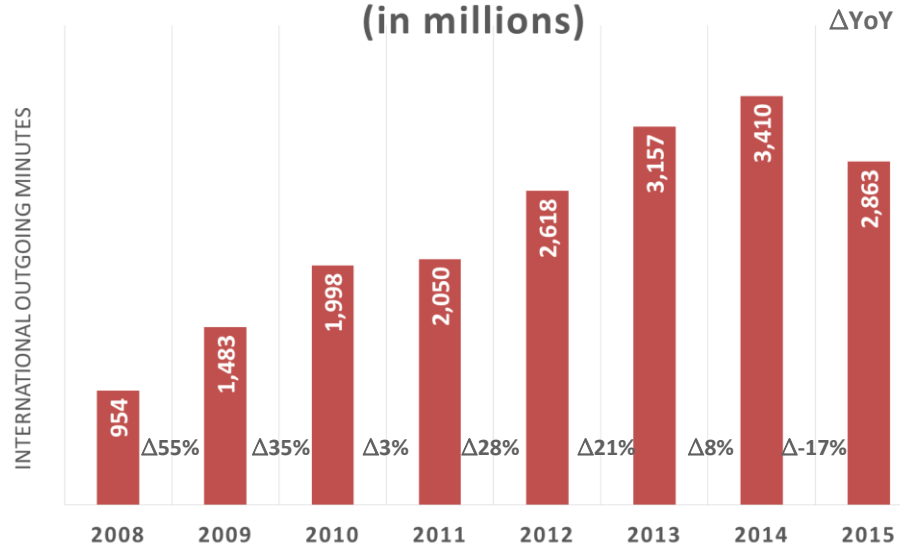
- ❶ Number of Machine-to-machine (M2M) subscriptions used for data communication between devices or systems in which, human intervention does not occur. These technologies may encompass either wireless or wired communications, or both.
- ❷ At the end of 2015 there were almost 30,000 M2M connection data using mobile networks (SIM cards).

# International outgoing minutes

For the first time the overall international traffic volume drops, it dropped by 16% between 2014 and 2015, while the international calls revenue has decreased 17% between 2014 and 2015

This decline indicates ongoing competitive pressure on pricing, as well as change in the overall subscribers' behaviour and usage especially in Zone 2.

## International outgoing minutes (in millions)



## International outgoing minutes

Minutes (in millions)	2010	2011	2012	2013	2014	2015	Growth 2014-2015
GCC	193.0	108.3	123.6	124.3	104.3	79.9	-23%
Zone 2	1,570.0	1,713.8	2,236.	2,763.0	3,060.6	2,561.8	-16%
Zone 3	84.0	53.3	87.1	82.5	66.4	63.9	-7%
Zone 4	151.0	174.6	170.9	187.0	177.0	157.7	-11%
<b>Total</b>	<b>1,998.0</b>	<b>2,050.0</b>	<b>2,617.6</b>	<b>3,156.8</b>	<b>3,410.3</b>	<b>2,833</b>	<b>-17%</b>

## International calls revenue

Revenues (BD in millions)	2010	2011	2012	2013	2014	2015	Growth 2014-2015
GCC	12.70	11.40	11.8	12.4	11.00	8.6	-22%
Zone 2	38.80	38.80	46.5	49.2	48.78	41.7	-15%
Zone 3	6.70	5.10	8.5	6.3	5.2	4.3	-16%
Zone 4	13.90	13.90	13.7	13.09	11.69	8.8	-25%
<b>Total</b>	<b>72.10</b>	<b>69.20</b>	<b>80.5</b>	<b>80.9</b>	<b>76.67</b>	<b>63.2</b>	<b>-17%</b>

GCC countries (Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates).

Zone 2: Calls to South Asian countries (Bangladesh, India, Pakistan, the Philippines and Sri Lanka).

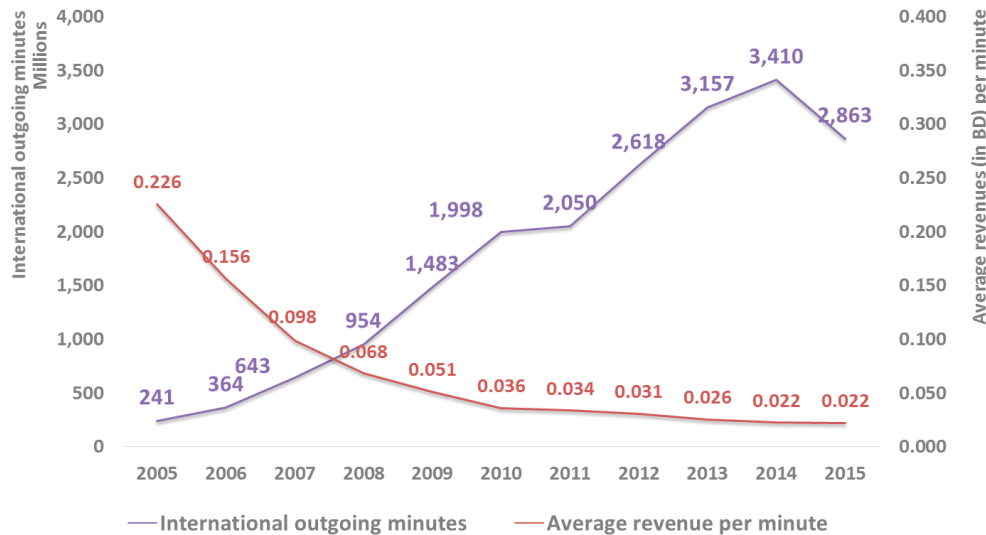
Zone 3: Calls to other major destinations (Australia, Canada, France, Germany, Greece, Italy, Iran, New Zealand, Thailand, UK, USA and Yemen).

Zone 4: Calls to all other international destinations.

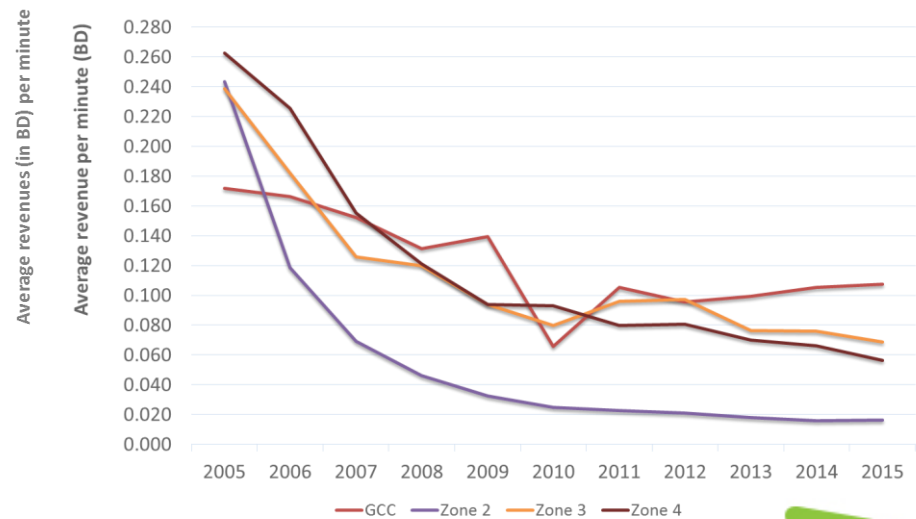
# Average revenue per minute for international calls

- 📶 The average revenue per minute for international calls has fallen by almost 90% over the last ten years.
- 📶 Despite the huge decrease in traffic, the average revenue per minute stayed constant.
- 📶 Comparing to 2014, on 2015 the biggest decrease was mainly from Zone 4 followed by Zone 3, -15% and -10% consecutively.

Average revenue per minute vs. growth in traffic

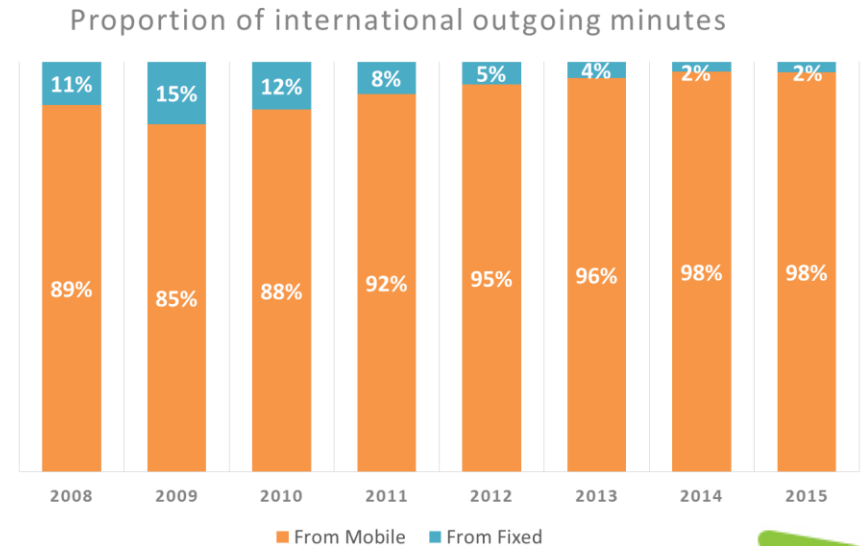
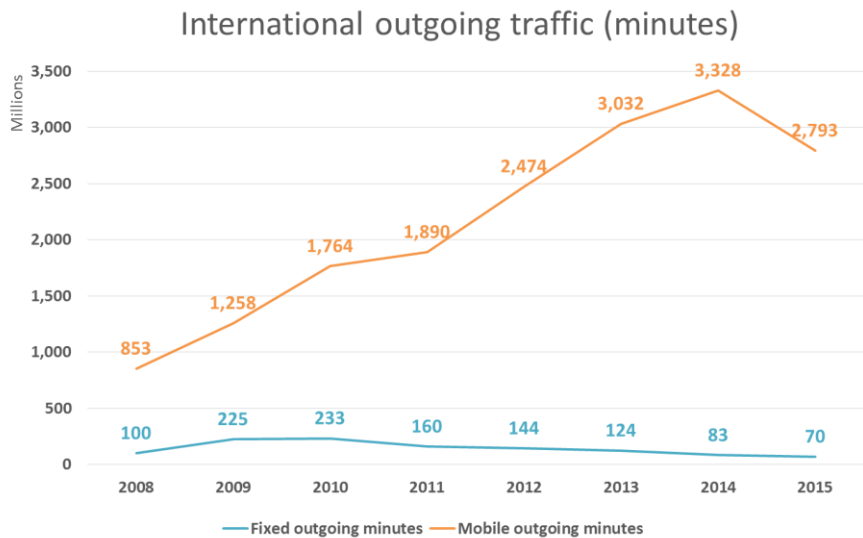


Average revenue per minute by zone




# International outgoing minutes

- International outgoing minutes originated on mobile<sup>1</sup> dropped by 16% between 2014 and 2015 as well, the minutes originated on fixed fell by 15% between 2014 and 2015.
- International outgoing minutes originated on mobile represented 98% of the total international outgoing minutes in 2015.

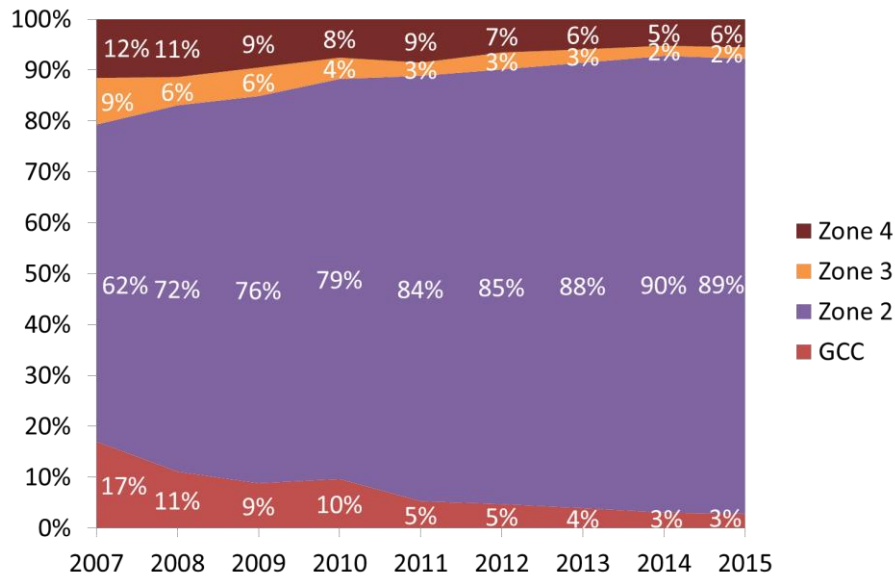


<sup>1</sup>Minutes including prepaid calling card traffic.

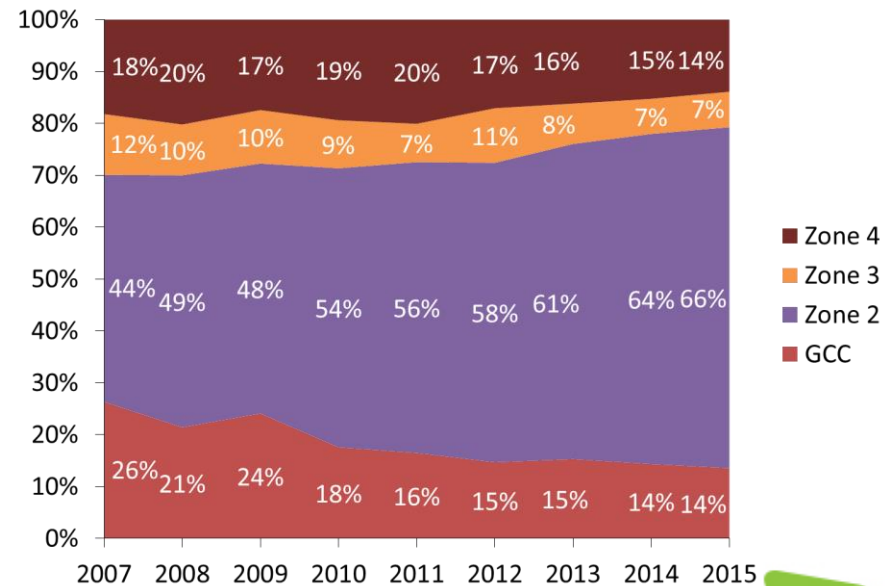
# International traffic Vs. Revenues by destination called

 The average revenue per minute earned from calls to South Asian countries (Zone 2) continues to be relatively low

89% of total international calls **minutes** were made to Zone 2 (South Asian countries) in 2015.

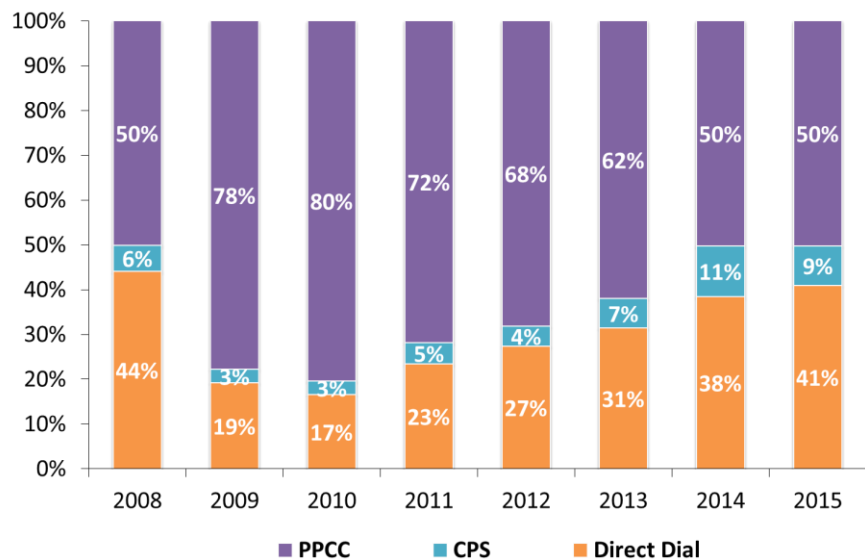


66% of international **revenues** were generated from calls to Zone 2 (South Asian countries) in 2015.

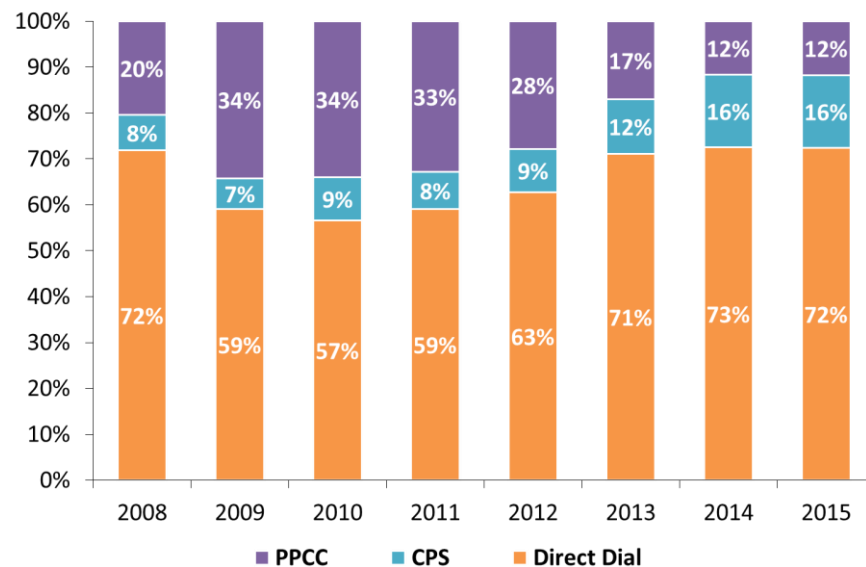


# Distribution of international outgoing minutes/revenues by access type - Fixed telephony

Distribution of international **minutes** originated from fixed by access type



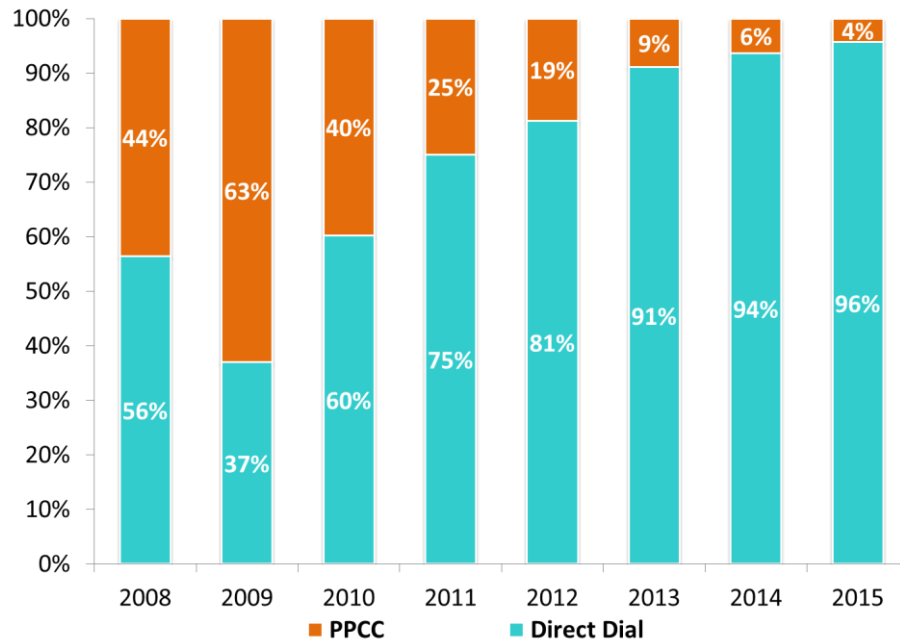
Distribution of international **revenues** originated from fixed by access type



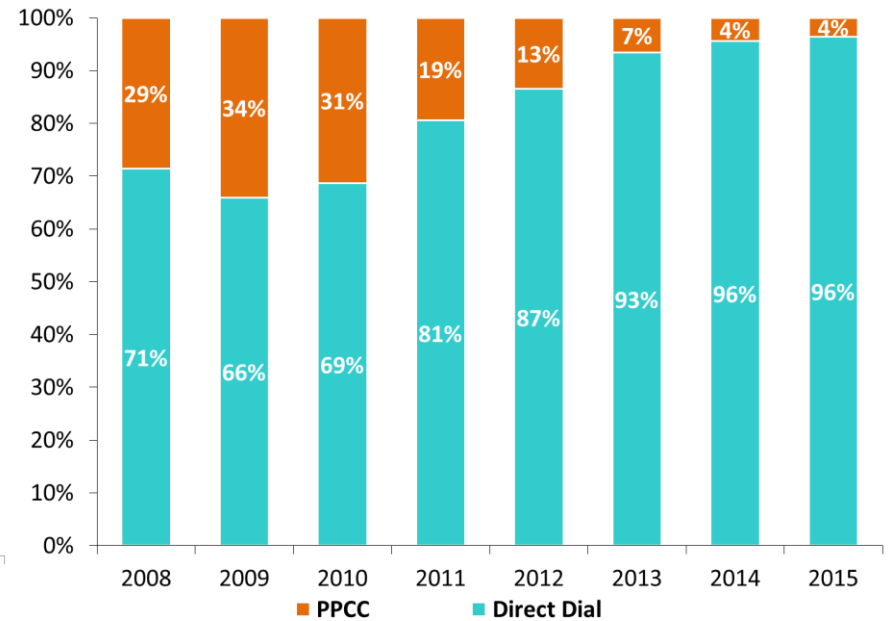
While the Direct Dial increased to 41% of total fixed originated minutes on 2015, the revenue has decreased by 1% comparing to 2014.

# Distribution of international outgoing minutes/revenues by access type - Mobile

Distribution of international **minutes** originated from mobile by access type



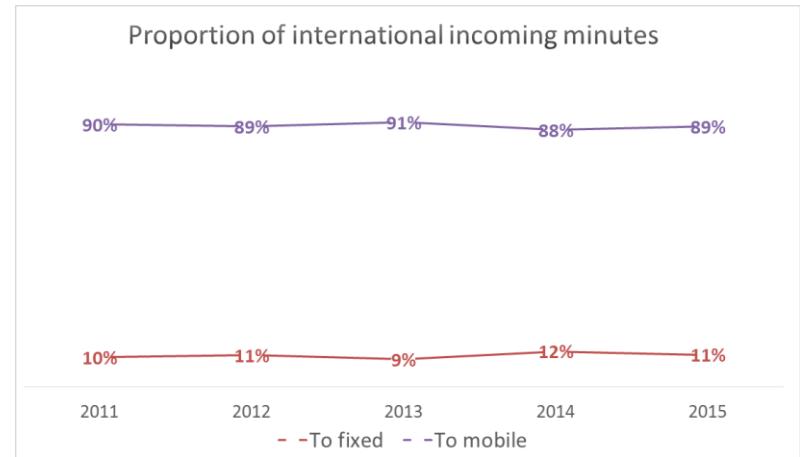
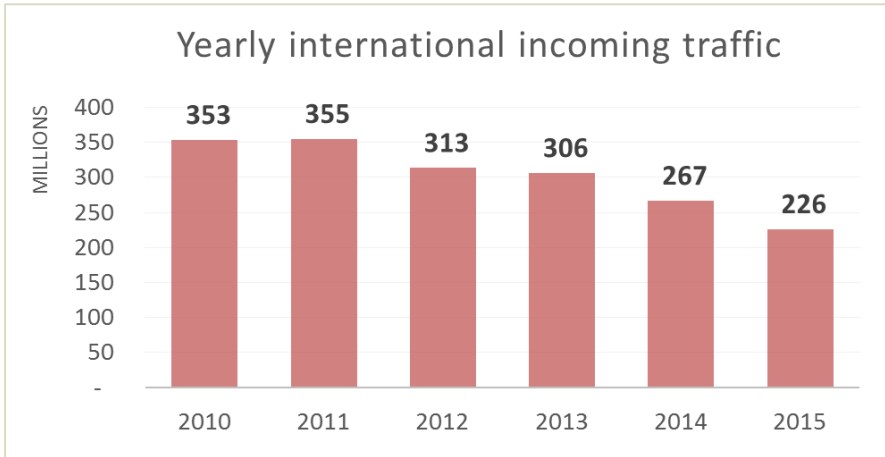
Distribution of international **revenues** originated from mobile by access type



📡 In 2015, international direct dial traffic originated from mobile represented 96% of the total traffic, up from 94% in 2014 and 91% in 2013. The pricing of mobile-originated international direct dial services has become even more competitive in recent years.

📡 The direct dial represented 96% of total revenues originated from mobile

# International incoming call minutes



- In 2015, the total volume of international incoming minutes was 226 million minutes, compared to 267 million in 2014 a decrease by 15%.
- About 90% of international incoming calls were made to mobile.

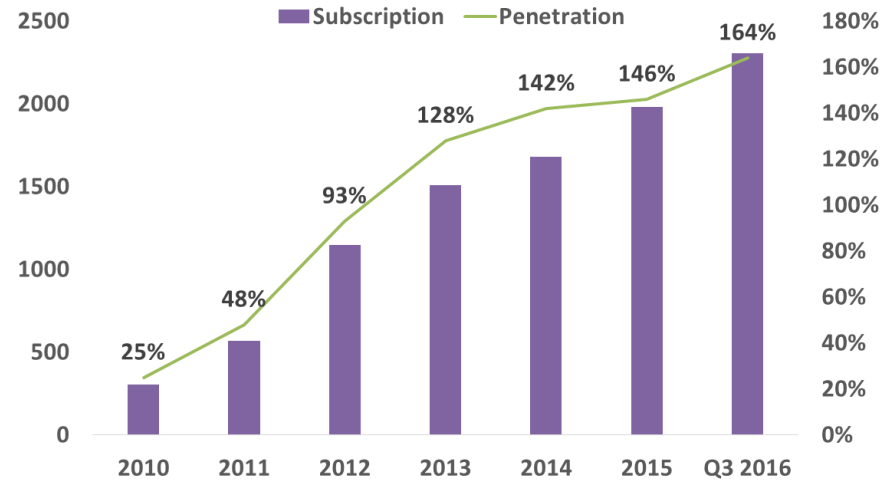
# Broadband services

At the end of Q3 2016, there were approximately 2.3 million broadband subscriptions compared to 1.94 million at the end of Q3 2015 (23% growth), representing a broadband penetration of 164%.

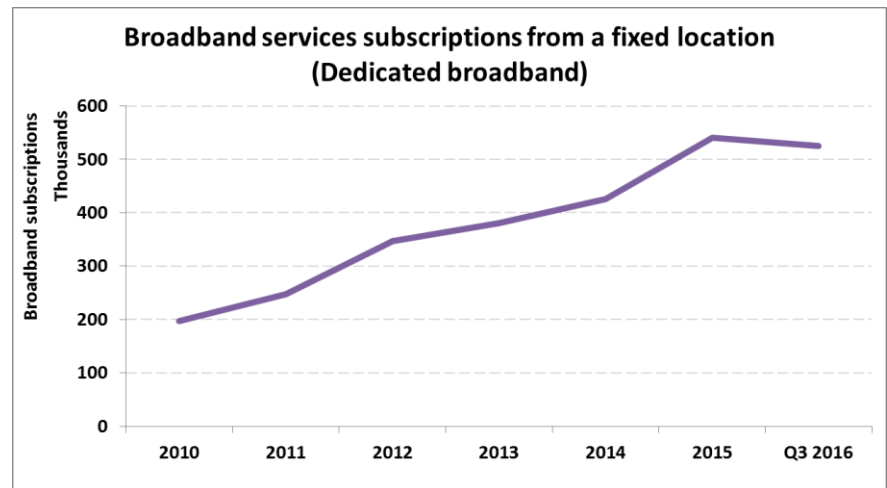
Broadband subscription growth continues to be driven by growth in the number of mobile broadband subscriptions.

At the end of Q3 2016, there were 524.7 thousand subscriptions for dedicated broadband services.

Broadband Subscriptions and penteration



Broadband services subscriptions from a fixed location (Dedicated broadband)



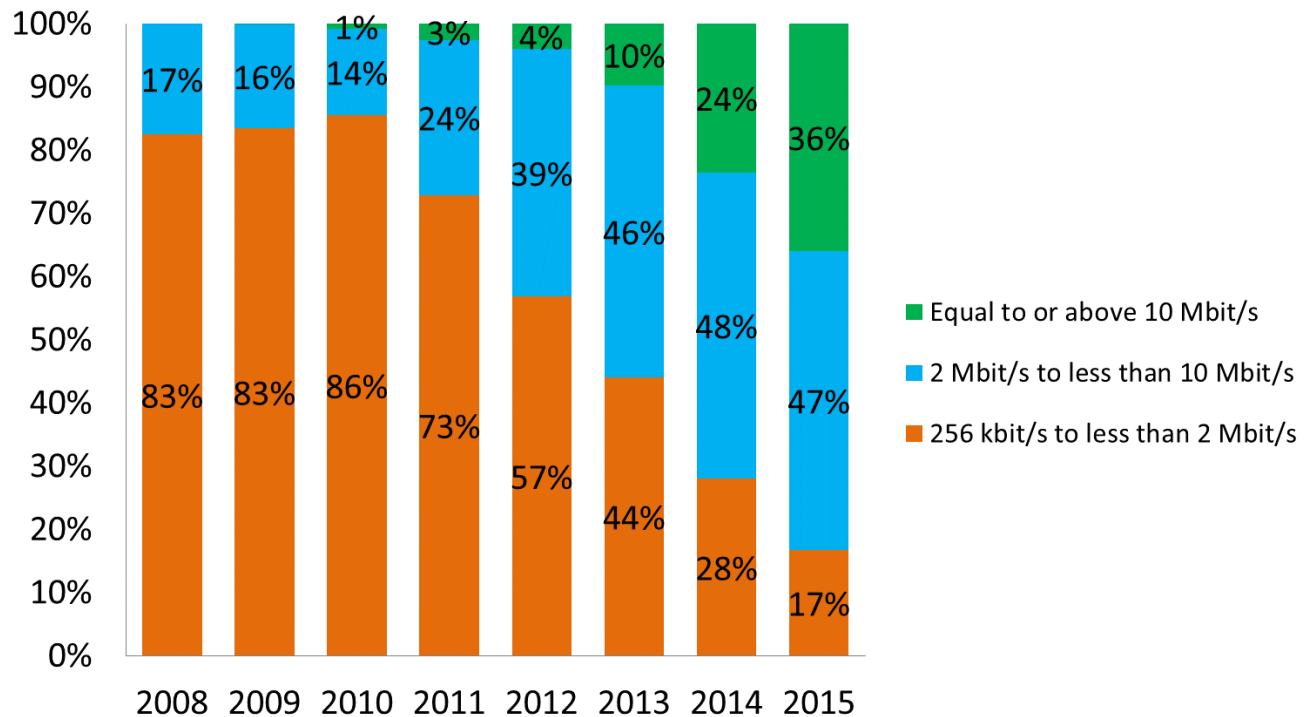


# Proportion of broadband subscribers by access speed



About 83% of fixed broadband subscribers at the end of 2015 were on plans with advertised speeds of 2Mbps and above compared to only 15% in 2010.

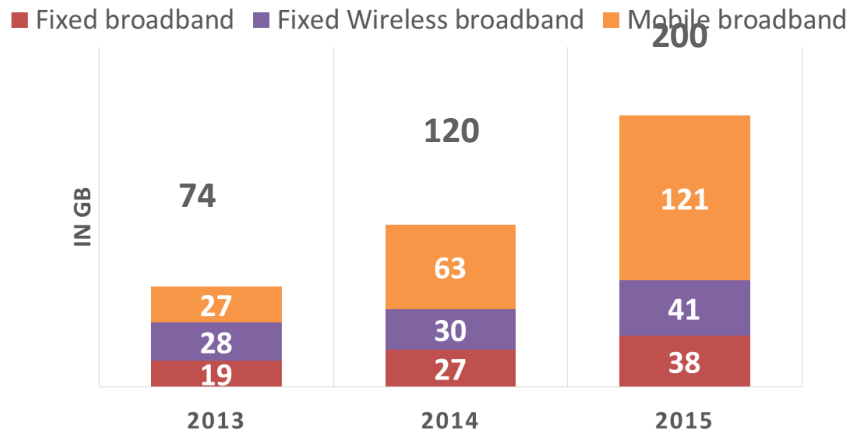
**Proportion of fixed broadband subscribers by access speed**



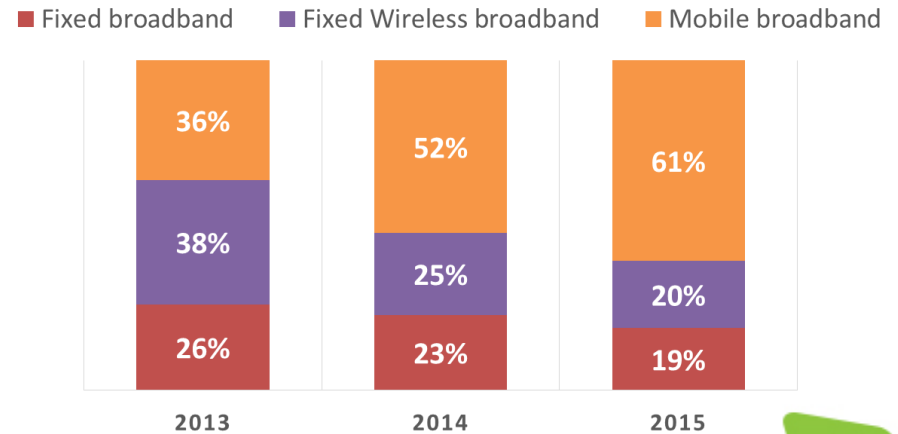
# Broadband usage

- In 2015, total broadband usage reached about 200 million GB comparing to 120 million GB in 2014 (67% growth).
- The yearly usage of mobile broadband doubled between 2014 and 2015.
- The traffic (in GB) generated from mobile broadband represented 61% of the total broadband usage in 2015, compared to 52% in 2014 and 36% in 2013. This remarkable increase in Mobile Broadband traffic is being driven by the growing number of mobile subscribers, particularly smartphone users.

**BROADBAND USAGE TRAFFIC**



**PROPORTION OF BROADBAND INTERNET TRAFFIC BY ACCESS TYPE**



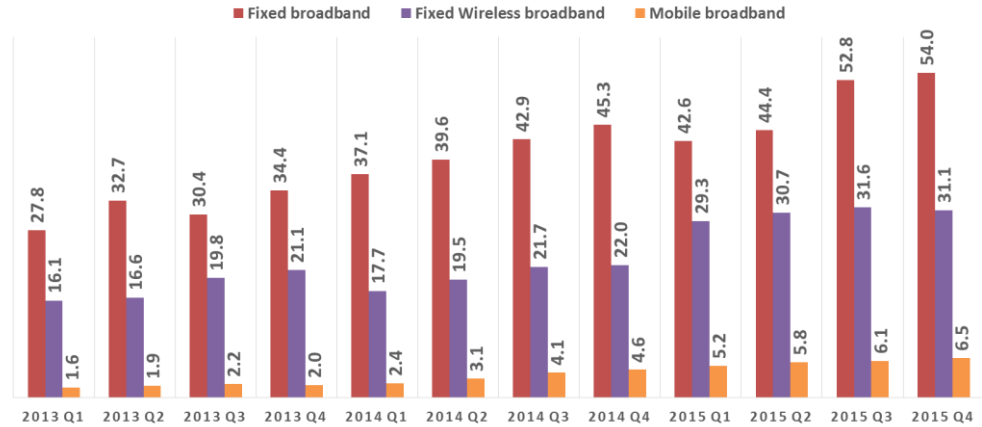
# Average usage (in GB) per broadband subscription

The average usage (in GB) per subscriber per month varies based on the broadband access type.

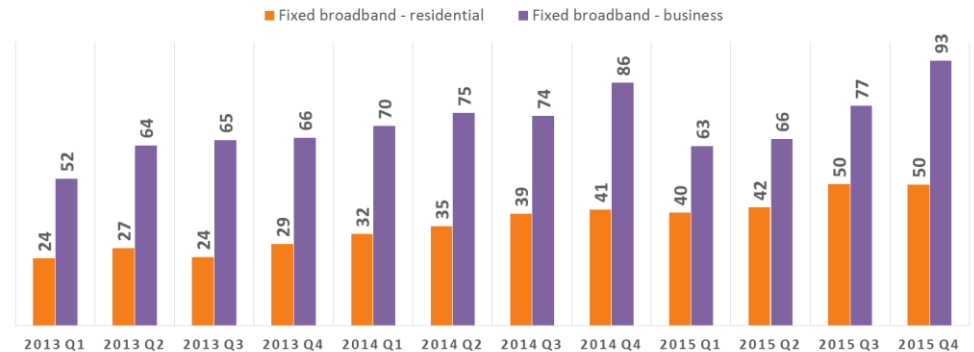
Fixed (wired) broadband subscribers generated the highest average monthly usage followed by Wireless subscribers and lowest usage was generated by mobile broadband subscribers (although the mobile broadband usage per subscriber is heavily influenced by low use pay-per-use subscribers).

The average monthly usage for fixed broadband business subscribers represents almost double of the average usage of fixed broadband residential subscribers.

AVERAGE MONTHLY DATA USAGE (IN GB) PER SUBSCRIBER



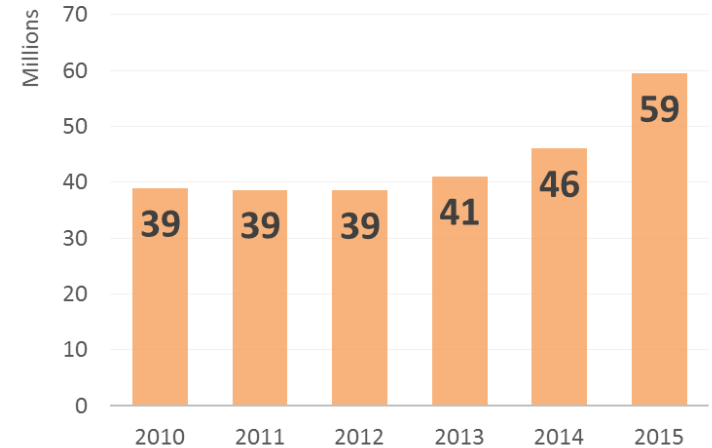
AVERAGE MONTHLY DATA USAGE (IN GB) PER SUBSCRIBER



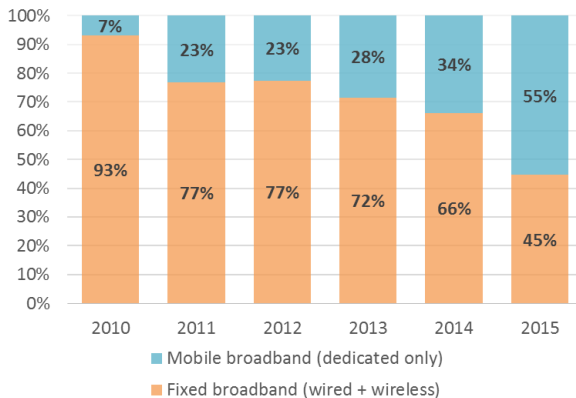
# Broadband revenue

- Broadband revenues increased by 29% between 2010 and 2015.
- Revenue generated from mobile broadband represents about 55% of total broadband revenue in 2015 compared to 7% in 2010.
- Revenue generated from business fixed broadband represents about 29% of total fixed broadband revenue in 2015 compared to 27% in 2010.
- The reduction in residential broadband prices resulted in a drop in the average revenue per subscription by -19% over the last year only, while the average revenue per subscription of business broadband has increased by 11% over the same period.

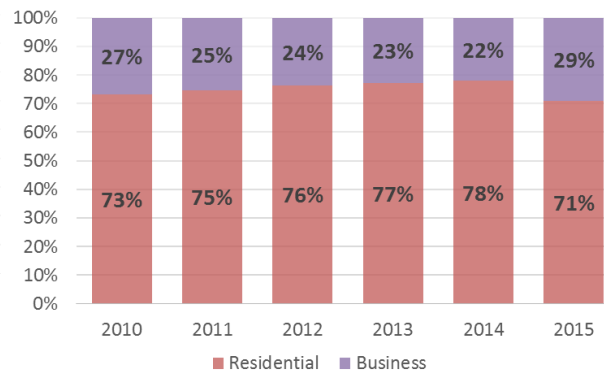
Total broadband revenue (BD in million)



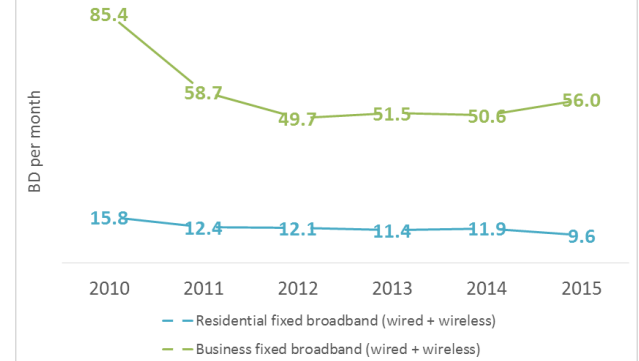
Distribution of broadband revenue



Distribution of revenue generated from fixed broadband (wired + wireless)



Average monthly revenues per fixed (wired and wireless) broadband subscription

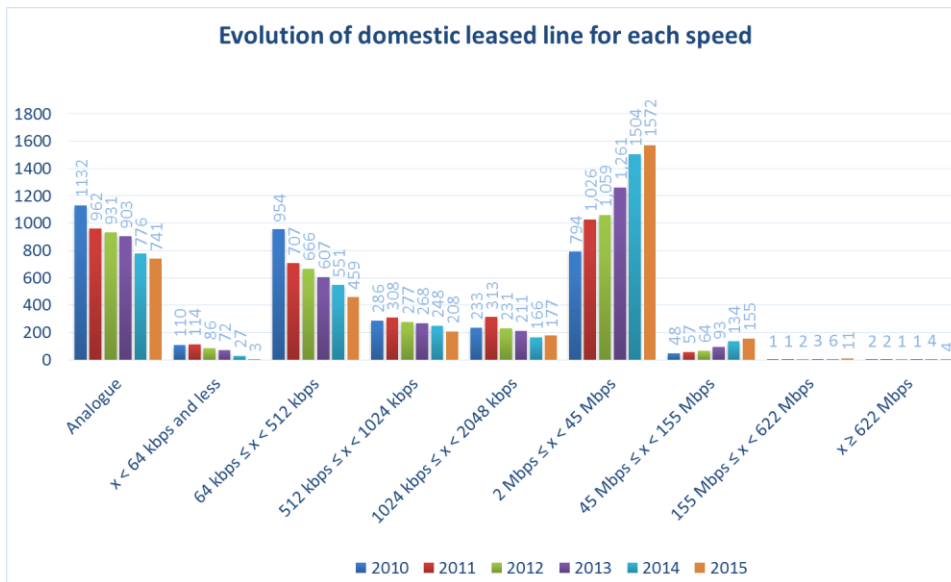


# Domestic leased line

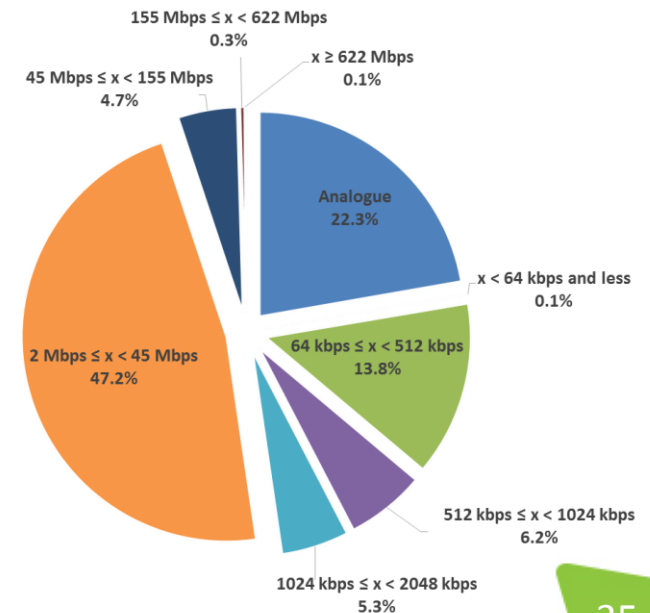
The total number of domestic leased lines has been stable in recent years, although there has been a further drop in slower speed services, that drop was corresponded by increase in higher speed services.

A similar pattern has been observed in respect of international leased lines in recent years.

## Evolution of the number of domestic leased line



## Distribution of domestic leased line by speed

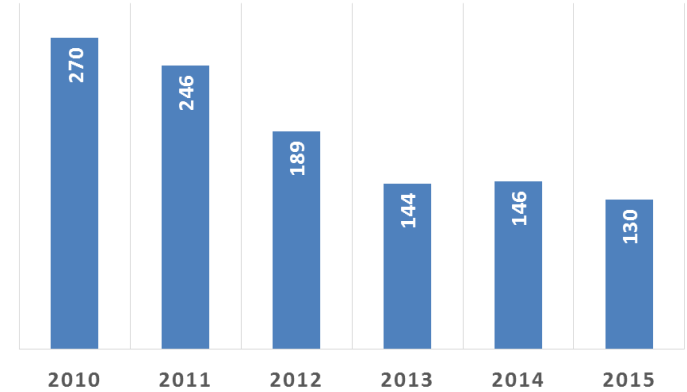


# International leased lines

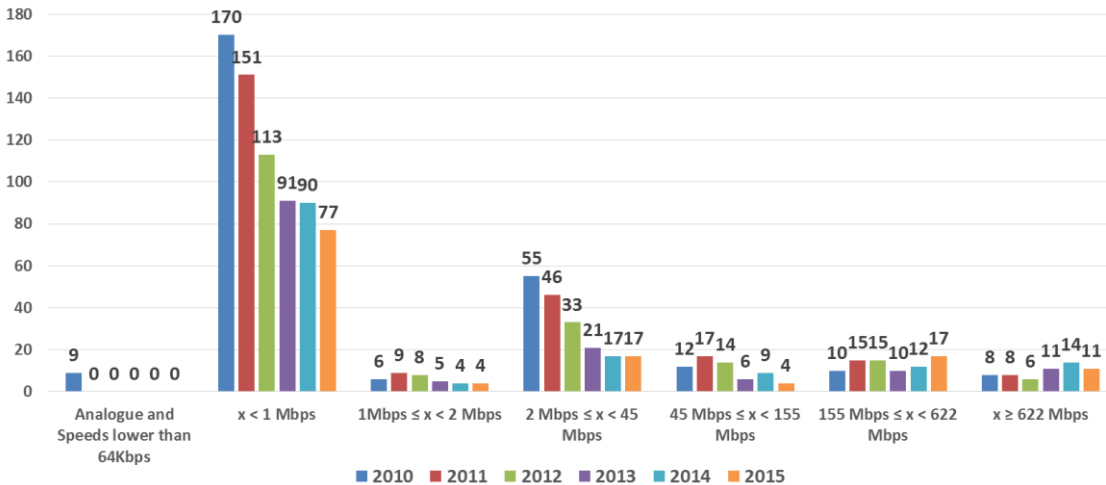
Similar pattern to the domestic leased line has been observed in respect of international leased lines in recent years

The total number of international leased lines decreased over the last year, most of international leased lines providers decreased their supply, while other few operators started to lease international lines.

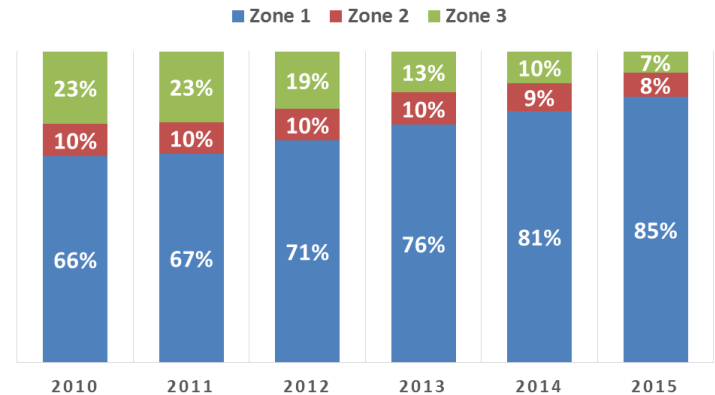
Evolution of international leased line



Evolution of international leased lines



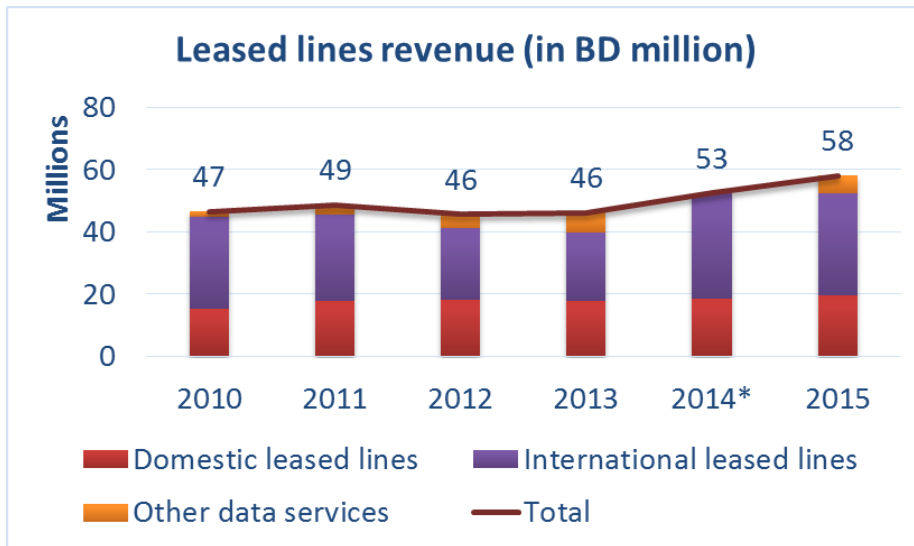
Distribution of international leased lines by destination zone



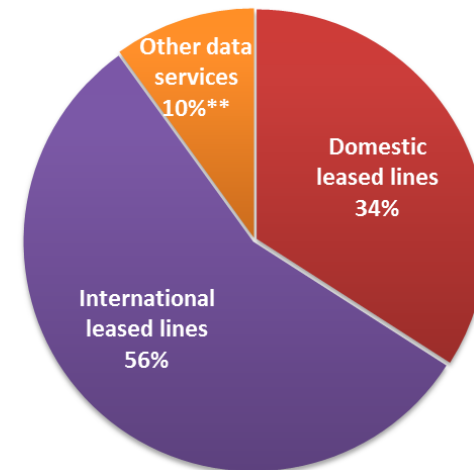
Zone 1 (GCC)  
 Zone 2 (rest of Middle East, Turkey, Cyprus, Greece, India, Pakistan, South Africa)  
 Zone 3 (Continental USA, Canada, Europe, SE Asia)

# Leased line revenues

The revenue generated from leased lines services increased by 8% over 2015, that revenue increase was mainly from data services provided, as few operators were successful in acquiring new business and benefited from business user's price adjustments.



**Distribution of leased lines revenue**

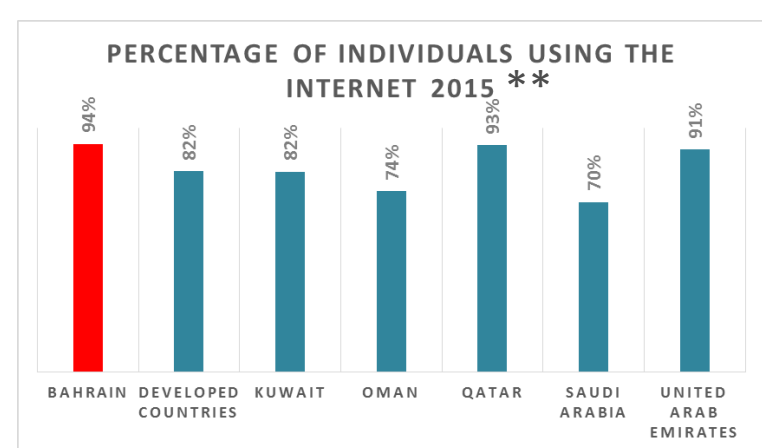
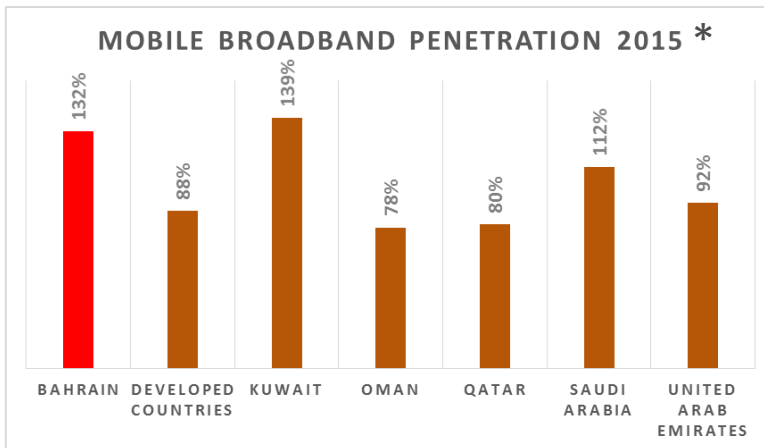
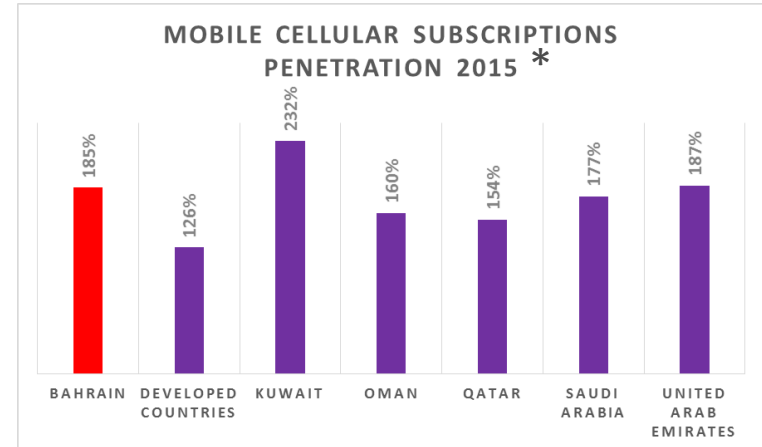
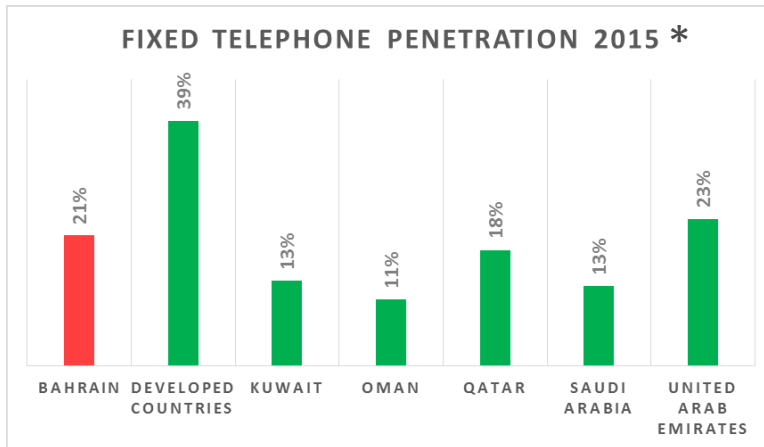


\* 2014 Data was revised for 2 operators on 2015's reporting

\*\* Other Data services includes national and international frame relay, MPLS/IPVPN, managed leased line and ATM services

# Benchmarking of telecom service penetration rates with GCC countries

Bahrain compares well with other GCC countries and with developed countries in terms of telecom services penetration.



\* Based on ICT Facts and Figures 2016 – ITU

\*\* Based on ITU Key 2005-2016 ICT data for the world, by geographic regions and by level of development

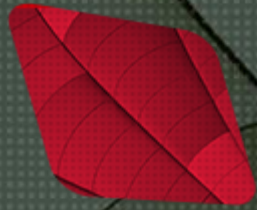


## List of acronyms

<b>ADSL</b>	<b>Asymmetric Digital Subscriber Line</b>
BD	Bahraini Dinar
CPS	Carrier Pre-Selection
GCC	Gulf Cooperation Council
IDD	International Direct Dial
ITU	International Telecommunication Union
Kb/s	Kilobit per second
Mb	Megabit
Mbps	Megabit per second
OLO	Other licensed operators
PPCC	Pre-Paid Calling Card
PSTN	Public Switched Telephone Network
PPP	Purchasing power parity
SMS	Short Message Service
TRA	Telecommunications Regulatory Authority

# Definitions

Indicator	Definition
Fixed-telephone subscriptions	Fixed-telephone subscriptions refers to the sum of active number of analogue fixed-telephone lines, voice-over-IP (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions.
Prepaid mobile subscribers	Prepaid mobile-cellular telephone subscriptions (ITU code i271p) Refers to the total number of mobile-cellular telephone subscriptions that use prepaid refills. These are subscriptions where, instead of paying an ongoing monthly fee, users purchase blocks of usage time. Only active subscriptions should be included (those used at least once in the last three months for making or receiving a call or carrying out a non-voice activity such as sending or reading an SMS or accessing the Internet).
Postpaid mobile subscribers	Postpaid mobile-cellular telephone subscriptions Refers to the total number of mobile-cellular subscriptions where subscribers are billed after their use of mobile services, at the end of each month. The postpaid service is provided on the basis of a prior arrangement with a mobile cellular operator. Typically, the subscriber's contract specifies a limit or allowance of minutes, text messages, etc. The subscriber will be billed at a flat rate for any usage equal to or less than that allowance. Any usage above that limit incurs extra charges. Theoretically, a subscriber in this situation has no limit on use of mobile services and, as a consequence, unlimited credit.
Active mobile-broadband subscriptions	<p>Active mobile-broadband subscriptions refers to the sum of standard mobile-broadband and dedicated mobile broadband subscriptions to the public Internet. It covers actual subscribers, not potential subscribers, even though the latter may have broadband enabled-handsets. The indicator can be further broken down into:</p> <p>Standard mobile-broadband subscriptions (ITU code i271mb_active): Refers to active mobile-cellular subscriptions with an advertised data speed of 256 kbit/s or greater that allow access to the greater Internet via HTTP and have been used to make a data connection using Internet protocol (IP) in the previous three months. Standard SMS and MMS messaging do not count as active Internet data connections, even if they are delivered via IP.</p> <p>This includes mobile subscriptions that use mobile-broadband services on a pay-per-use basis. It excludes mobile subscriptions with a separate monthly data plan for mobile-broadband access (see Indicator 25b, Dedicated mobile broadband subscriptions).</p> <p>Dedicated mobile-broadband subscriptions (ITU code i271md): Refers to subscriptions to dedicated data services (over a mobile network) that allow access to the greater Internet and that are purchased separately from voice services, either as a standalone service (e.g. using a data card such as a USB modem/dongle) or as an add-on data package to voice services that requires an additional subscription. All dedicated mobile-broadband subscriptions with recurring subscription fees are included as 'active data subscriptions' regardless of actual use. Prepaid mobile-broadband plans require use in the last three months if there is no monthly subscription. This indicator could also include mobile WiMAX subscriptions.</p>



**Thank you!**