

# Telecommunications markets indicators in the Kingdom of Bahrain

November 2014

2014



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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 ninth Telecommunications Markets Indicators Report and it covers a large range of telecoms services indicators up to Q4 2013 such as the number of subscribers, penetration rates, calls usage and telecoms revenues. Some subscriber numbers and penetration rates cover the period up to Q3 2014.

<sup>1</sup> Note that Person is defined in the Telecommunications Law to mean any natural or artificial person or public authority.

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# Key market trends and observations

## ► Overall

- BD423 million annual gross turnover of telecoms sector in 2013, an increase of 3.5% from 2012.
- Telecoms revenues represented about 4% of GDP in 2013.
- By the end of 2013, mobile domestic services revenues represent 41% of retail services revenues followed by international calls (26%), leased lines (15%), internet (13%) and fixed telephony (4%).
- In 2013 approximately 3,000 employees worked directly in the telecoms sector.
- 4% Compound Annual Growth Rate in the number of employees between 2007 and 2013.
- The sector achieves a high degree of Bahrainisation (72%).

## ► Subscriptions, penetration rates and volumes

- By the end of Q3 2014, there were approximately 246,000 fixed lines in Bahrain, representing fixed line penetration of 19%.
- At the end of Q3 2014, there were about 2.41 million mobile subscriptions in Bahrain, representing a mobile penetration rate of 183%. Prepaid subscriptions represented 79% of mobile subscriptions at the end of Q3 2014.
- At the end of Q3 2014, there were 1.44 million active mobile broadband subscriptions (pay per use, add-on and bundles), representing 60% of mobile subscriptions.
- At the end of Q3 2014, there were approximately 1.84 million broadband subscriptions, representing a broadband penetration of 140%.
- Mobile broadband subscriptions continue to grow (albeit at more moderate growth than during 2012) and represented 91% of the broadband customer base in Q3 2014.
- Fixed wired broadband (e.g. ADSL and fibre) subscriptions have started to increase after a long decline, and this is a result of the deregulation of the residential broadband market (and the attractive pricing introduced by Batelco as a result).
- 3.15 billion minutes of international calls generated in 2013. The volume of international outgoing minutes grew by 21% between 2012 and 2013.
- During 2013, 88% of total international minutes were made to South Asian countries, while only 61% of international revenues were generated from calls to South Asian countries.

# TRA highlights (up to Q3 2014)

## ► Determinations

- Determination of Significant Market Power and Determination of Dominant Position in the Markets for Provision of Broadband Internet Access from Fixed Location (27 March 2014).
- Kalaam/Lightspeed merger.
- Determination of Significant Market Power and Determination of Dominant Position in the Markets for Domestic Data Connectivity Services (10 Apr 2014).

## ► Guidelines

- Guidelines for the Setting of the Amount of a Fine for Violations of Articles 35 and/or 65 of the Telecommunications Law (16 Mar 2014)
- Ongoing development of bottom up cost models (finalised in Q1 2014)

## ► International meetings hosted by TRA

- 14<sup>th</sup> edition of the annual International Telecommunication Union's (ITU) Global Symposium for Regulators (GSR)

## ► Awards

- TRA's Chairman Dr. Mohammed Al Amer wins the Best Telecom Regulator Leader in the SAMENA Region Award.
- TRA wins the Industry Recognition Award in Customer Experience Management (Middle East Summit).
- General Director of TRA, Mr. Mohammed Bubashait received the Leading CEO for Excellence award at the 11<sup>th</sup> Leading CEO awards ceremony.

# Services offered by active operators

Operator Name	National Fixed	International Calls	Mobile	Internet	Leased line	Other data service
2Connect	✓	✓		✓	✓	✓
Ascentech telecoms		✓		✓		
Batelco	✓	✓	✓	✓	✓	✓
Bahrain Internet Exchange						✓
BT Solutions LTD					✓	
EQUANT EGN BV						✓
Etisalcom	✓	✓		✓	✓	
GatewayGulf				✓		
Greenisis (Bahrain Broadband)				✓		
Kalaam telecoms	✓	✓		✓	✓	
Light Speed	✓	✓		✓	✓	
Mena telecoms	✓	✓		✓	✓	✓
Moving Gulf		✓				
Northstar		✓		✓	✓	
Nuetel Communications	✓	✓		✓	✓	
Rapid telecoms	✓	✓		✓	✓	
Gulf Electronic Tawasul Company						✓
Viacloud		✓				
VIVA Bahrain		✓	✓	✓	✓	
Zain Bahrain	✓	✓	✓	✓	✓	

Data services: For example, national frame relay service, international managed leased line services and international MPLS/IPVPN service.

# Main telecoms indicators

Indicator	2007	2008	2009	2010	2011	2012	2013	Growth 2012-2013	CAGR 2007 - 2013
<b>Fixed line services</b>									
Number of fixed lines	203,541	220,386	237,621	227,353	248,479	260,000	251,000	-3.5%	4%
Fixed line penetration	20%	20%	20%	19%	21%	21%	20%		
<b>Mobile services</b>									
Total mobile subscribers	1,115,979	1,440,782	1,401,974	1,567,745	1,693,650	2,123,903	2,210,190	4.1%	12%
Mobile penetration	107%	130%	119%	128%	142%	172%	173%		
<b>Internet services</b>									
Total broadband subscribers	73,563	109,994	158,335	306,235	567,884	1,254,808	1,641,000	30.8%	68%
Broadband penetration	7%	10%	13%	25%	48%	102%	129%		
Percentage of individuals using the Internet	33%	52%	53%	55%	77%	88%	90%		
Telecommunications revenues (BD in million)	285	303	338	360	406	409	423	3.4%	7%
Number of employees in the telecommunications sector	2,381	2,469	2,504	2,584	2,708	3,141	3,000	-4.5%	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- 2011, 2012 and 2013 revenues include handsets sales.

4- CAGR: Compound Annual Growth Rate

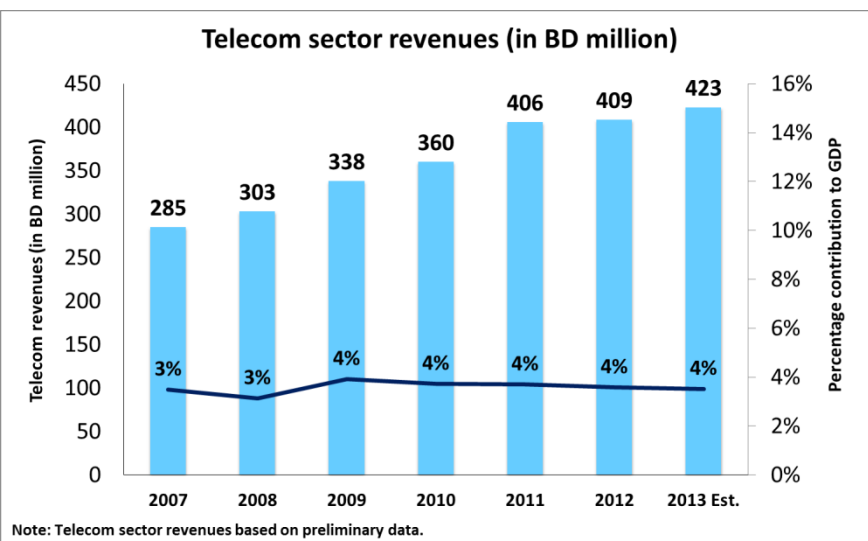
5- As noted in previous reports, the new numbers of total broadband subscriptions for 2010-2012 have been revised to ensure better alignment with the ITU definition of active mobile broadband subscribers (see definition in slide 38). Comprehensive Pay-per-use figures are not available for 2011 and earlier.

6- The source of Percentage of individuals using the Internet is the ITU.

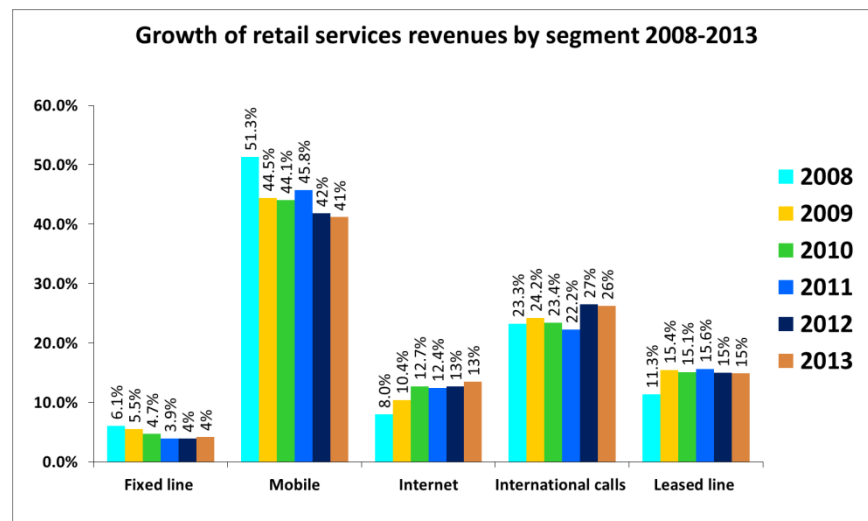
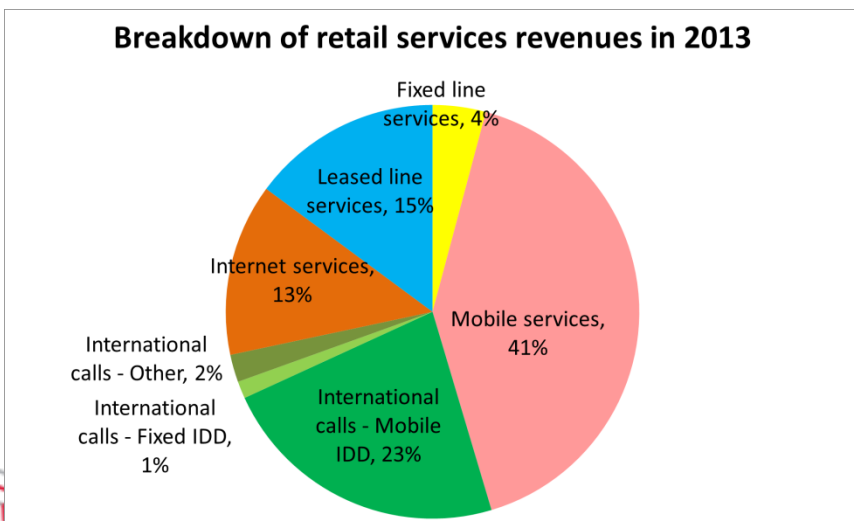


# Revenues in the telecoms sector

- ▶ Telecom revenues reached BD 423 million in 2013 compared to BD 409 million in 2012 (3.4% growth between 2012 and 2013).
- ▶ 7% compound annual growth rate between 2007 and 2013.
- ▶ Telecoms revenues represent about 4% of GDP.
- ▶ Mobile services revenues account for nearly half of the telecoms retail services revenue.



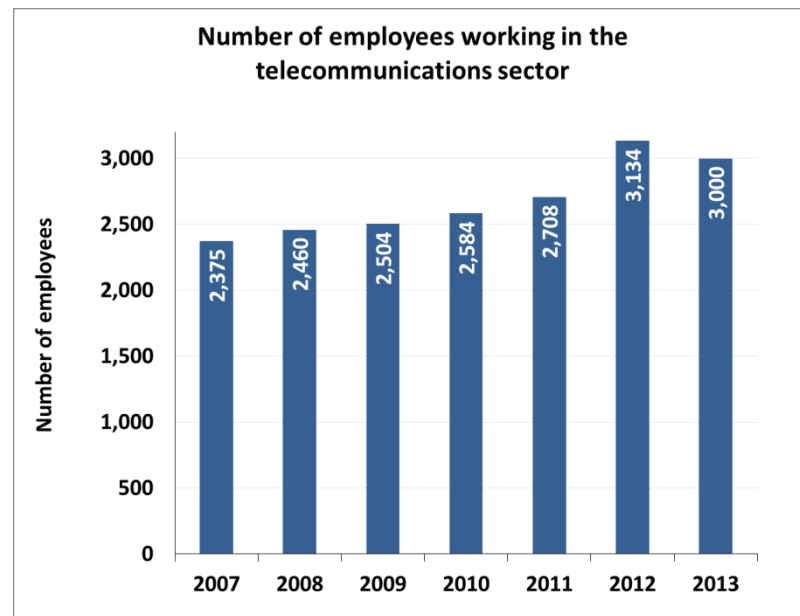
Source: TRA analysis based on operators data.  
2011 and 2012 revenues including handsets revenues.



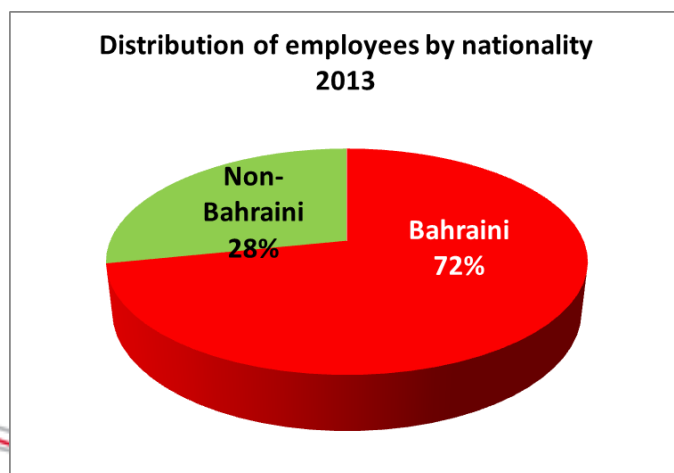
Source: TRA analysis based on operators data.  
Note: Mobile and fixed services revenues do not include international calls revenue.

# Employment in the telecoms sector

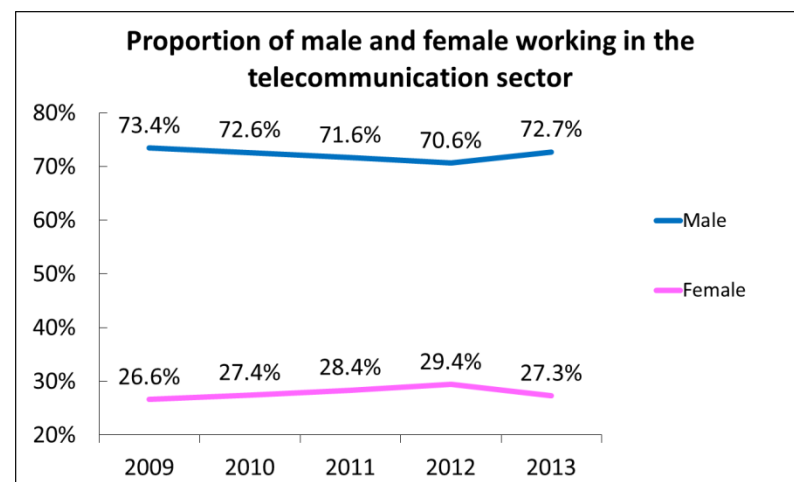
- ▶ About 3,000 employees are working in the telecommunications sector in 2013.
- ▶ 4% compound annual growth rate in the number of employees between 2007 and 2013.
- ▶ The sector achieves a high degree of Bahrainisation (72%).
- ▶ 27% of employees are female.



Source: TRA analysis based on operators data.



Source: TRA analysis based on operators data.



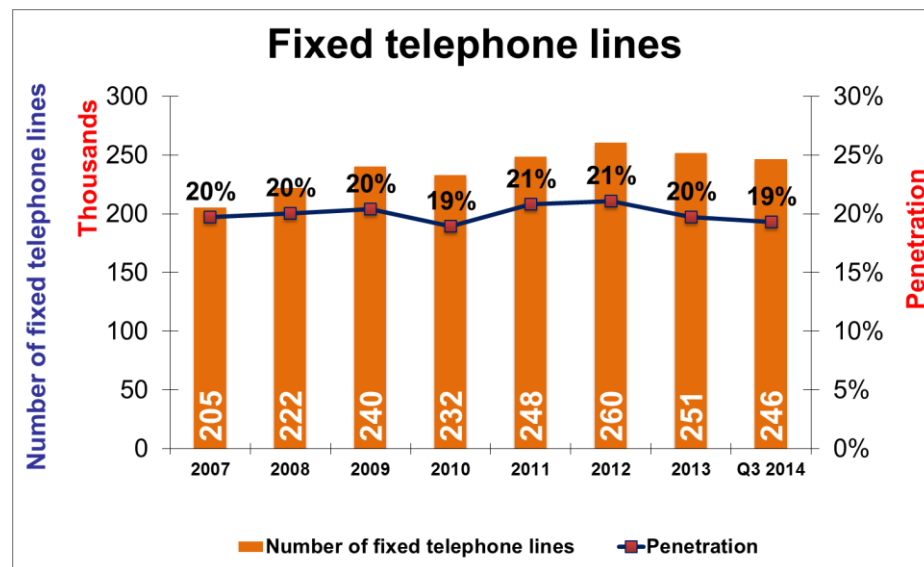
Source: TRA analysis based on operators data.

# Fixed telephony services

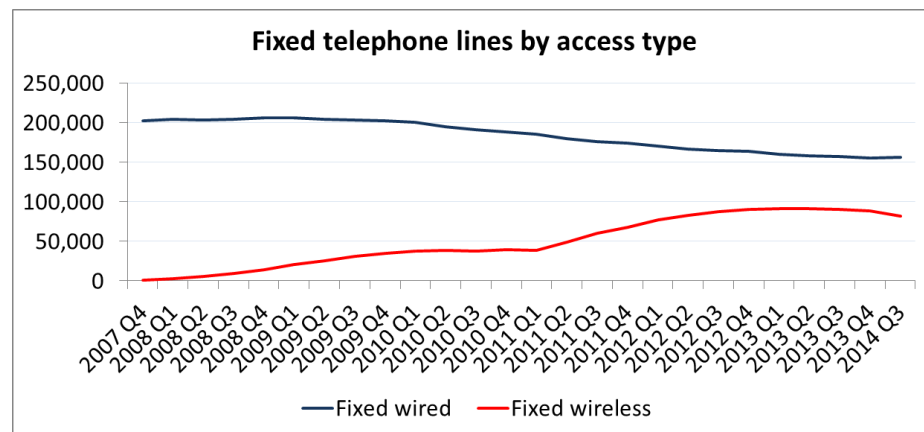
► By the end of 2013, there were approximately 250,000 fixed lines (20% penetration\*), a fall of -4.2% compared to the number of fixed lines in 2012

- the number of fixed wired telephone services continued to fall during 2013;
- after 5 years of growth, the number of fixed wireless telephone services fell in 2013 (-2%)
- the fall in both fixed wired and fixed wireless telephony services observed in 2013 is likely to be due to substitution towards mobile (where voice/data bundles are becoming increasingly popular).

► Fixed wireless services as a proportion of total fixed lines has increased from less than 1% in 2007 to 27% in 2011 and 35% in 2013 due to the offers of Menatelecom and Zain.



Source: TRA analysis based on operators data.

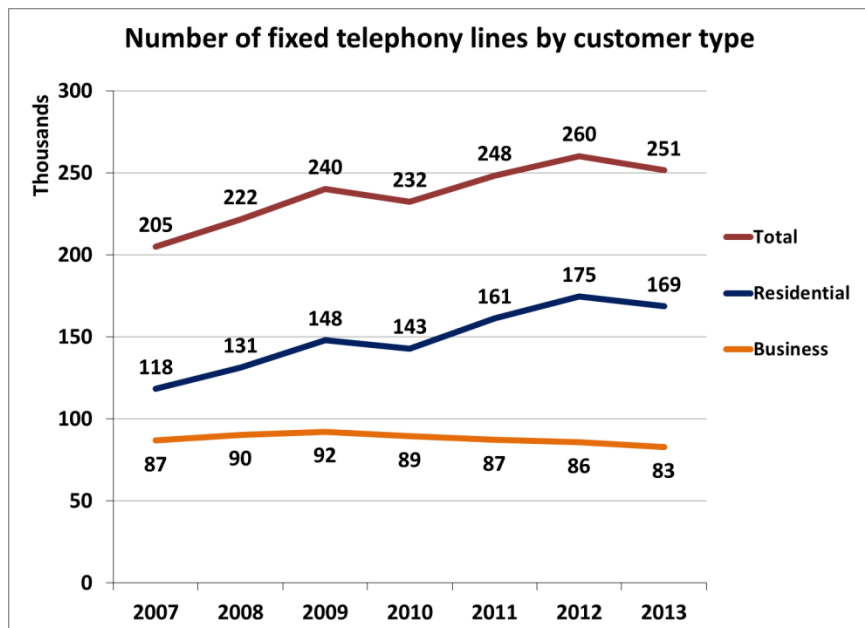


Source: TRA analysis based on operators data.

\* The penetration rate increases to 23% once ISDN voice channel equivalents are included. 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.

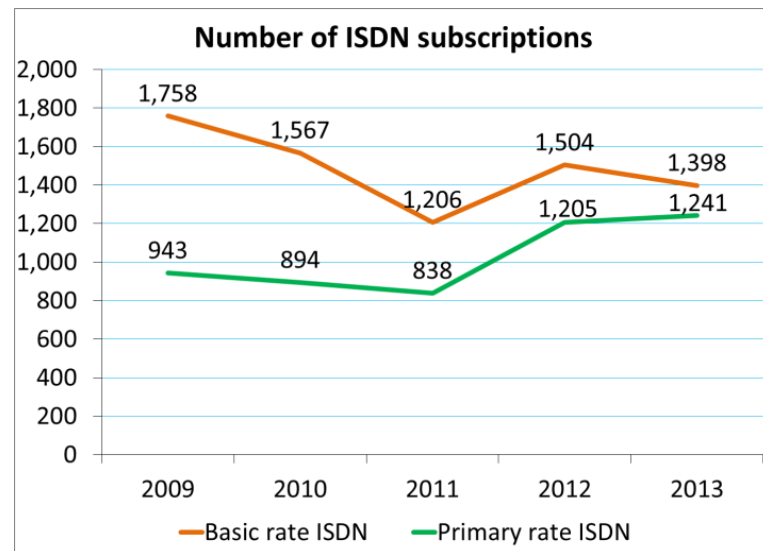
# Fixed telephony services by customer type

- ▶ The reduction in the total number of fixed telephony lines in 2013 mirrors the reduction in residential services.
- ▶ By the end of 2013 there were 1,398 Basic rate ISDN and 1,241 Primary rate ISDN services.



Source: TRA analysis based on operators data.

Number of fixed lines including: PSTN, Fixed wireless and voice-over-IP (VoIP).



Source: TRA analysis based on operators data.

Note: The reason for the increase in the number of ISDNs is that Batelco has changed the reporting system.

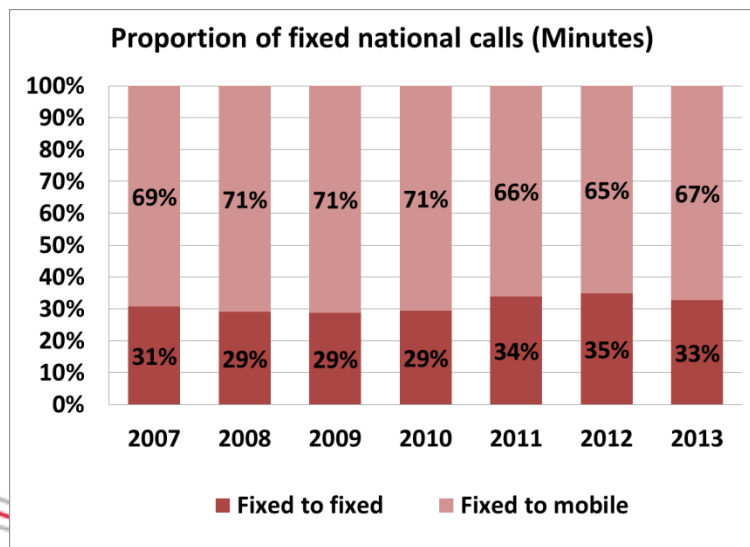
# Fixed line outgoing minutes

- ▶ Fixed telephony national traffic decreased by 23% between 2012 and 2013 due to substitution towards mobile.
- ▶ 67% of national traffic originated from fixed lines are fixed-to-mobile calls.
- ▶ 43% reduction in average national monthly minutes per residential line from 2012 to 2013.

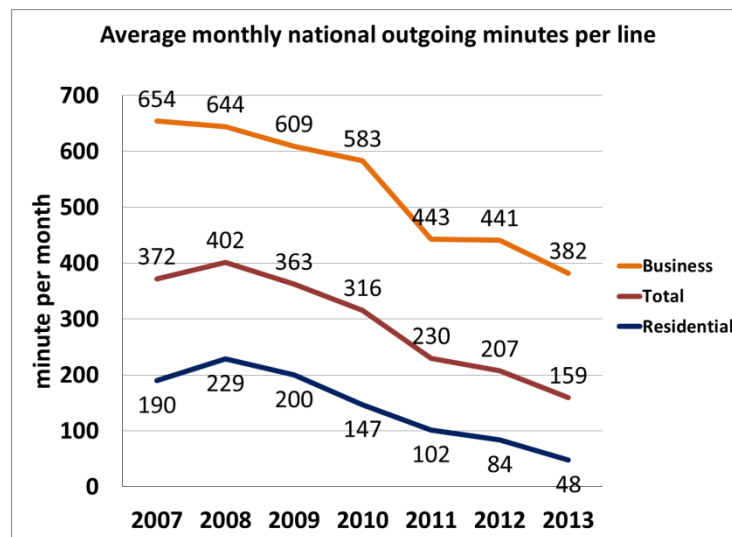
## Fixed lines national outgoing minutes (volume)

Yearly national outgoing minutes in million	2009	2010	2011	2012	2013	Growth 2012 - 2013
Fixed to fixed	291	267	224	223	162	-28%
Fixed to mobile	718	641	438	417	333	-20%
<b>Total</b>	<b>1,009</b>	<b>908</b>	<b>662</b>	<b>640</b>	<b>495</b>	<b>-23%</b>

Source: TRA analysis based on operators data.



Source: TRA analysis based on operators data.



Source: TRA analysis based on operators data.

# Fixed line service revenue

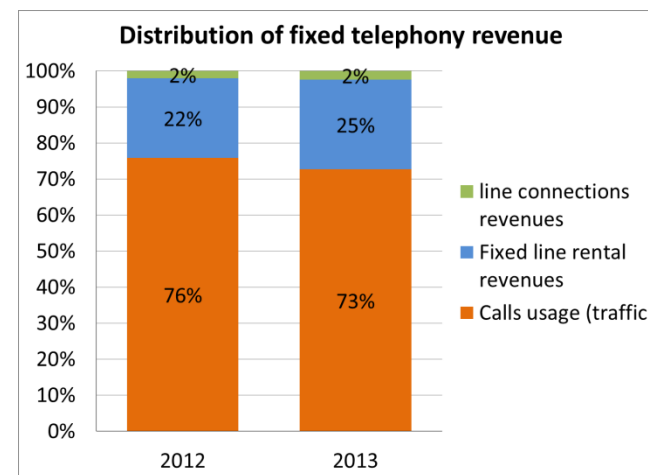
## Fixed line revenue

BD in million	2012	2013	Growth 2012-2013
Residential	3.7	2.8	-24%
Non-residential	11.3	10.0	-12%
<b>Total</b>	<b>15.0</b>	<b>12.8</b>	<b>-15%</b>

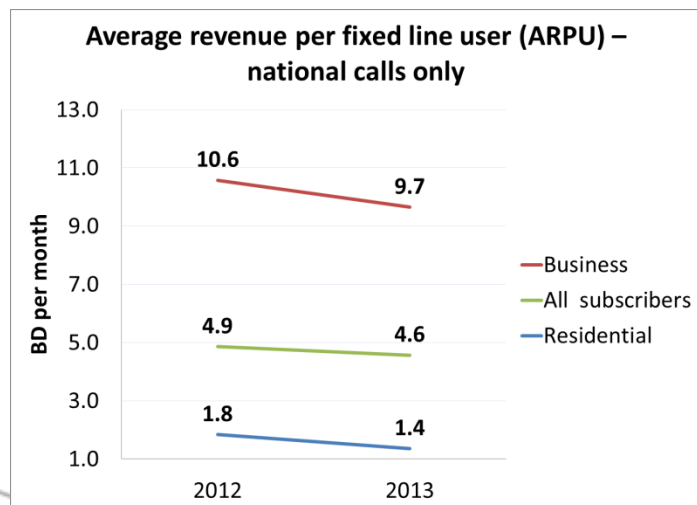
Source: Source: TRA analysis based on operators data.

Note: 2012 revenues have been revised.

- Fixed line revenues dropped by 15% between 2012 and 2013. The main driver is the reduction in the revenues earned from residential fixed telephony services, as residential customers switched to mobile services.

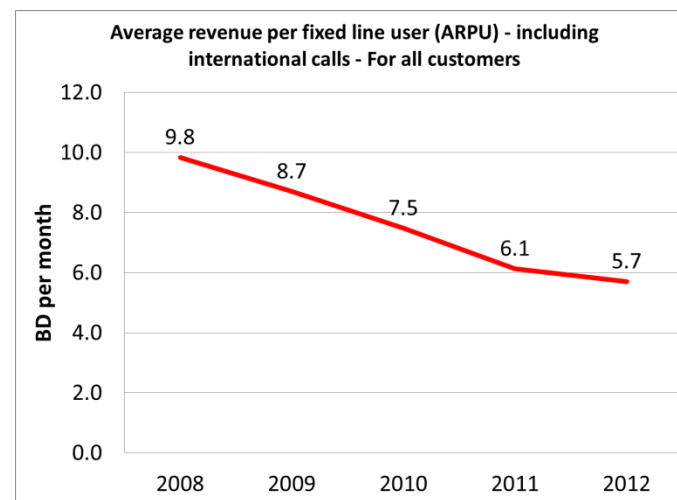


Source: TRA analysis based on operators data.



Source: TRA analysis based on operators data.

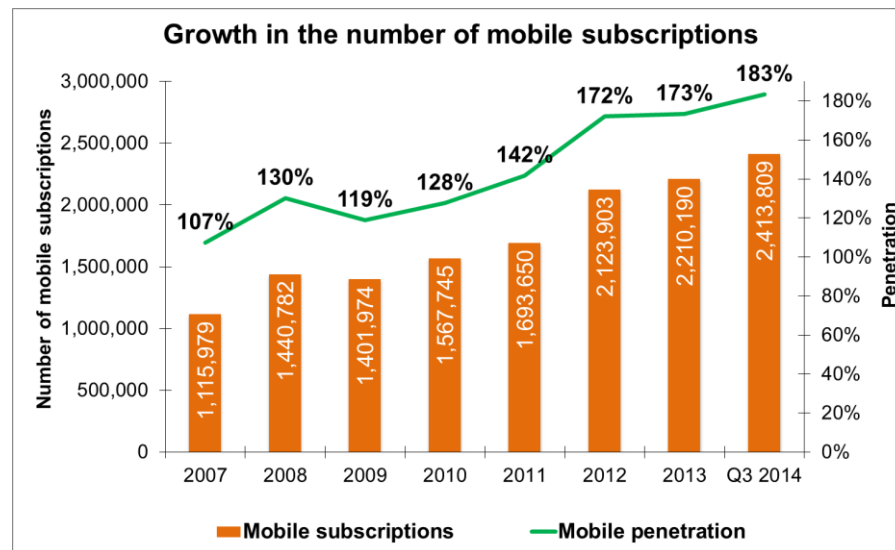
Note: Revenue includes national calls revenue, monthly rental and subscription fees. 2012 ARPUs have been revised.



Source: TRA analysis based on operators data.

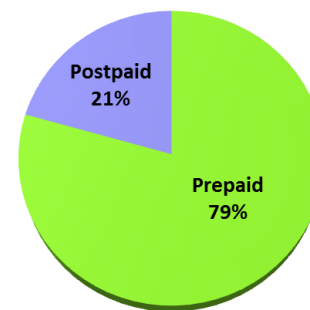
# Mobile services

- ▶ At the end of Q3 2014 there were about 2.4 million mobile subscribers in Bahrain, an increase of 9% compared to 2013.
  - ▶ Prepaid increased by 8%
  - ▶ Postpaid increased by 15%
- ▶ At the end of Q3 2014 mobile penetration in Bahrain was 183%.
- ▶ The mobile market in Bahrain remains predominantly prepaid. Prepaid subscribers represented 79% of mobile subscribers at the end of Q3 2014.



Source: TRA analysis based on operators data.

## Proportion of prepaid and postpaid subscriptions at the end of Q3 2014



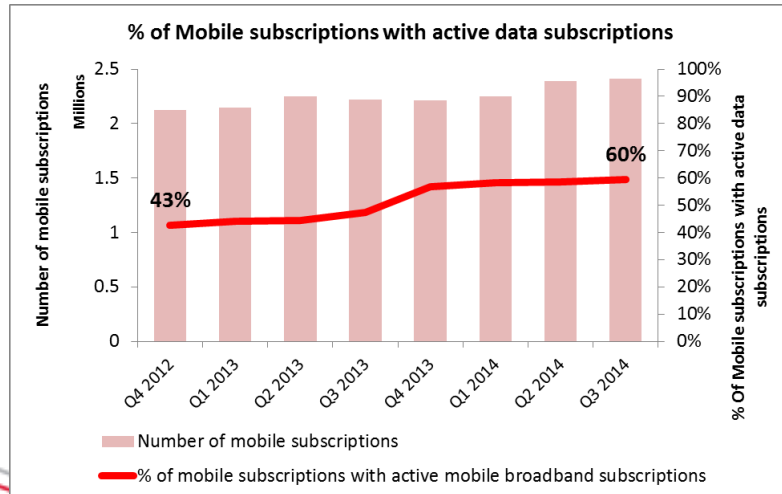
Source: TRA analysis based on operators data.

Mobile subscribers	2010	2011	2012	2013	Q3 2014	Growth Q3 2014 - 2013
Prepaid	1,289,274	1,379,820	1,720,958	1,777,864	1,916,116	8%
Postpaid	278,471	313,830	402,945	432,326	497,693	15%
<b>Total</b>	<b>1,567,745</b>	<b>1,693,650</b>	<b>2,123,903</b>	<b>2,210,190</b>	<b>2,413,809</b>	<b>9%</b>

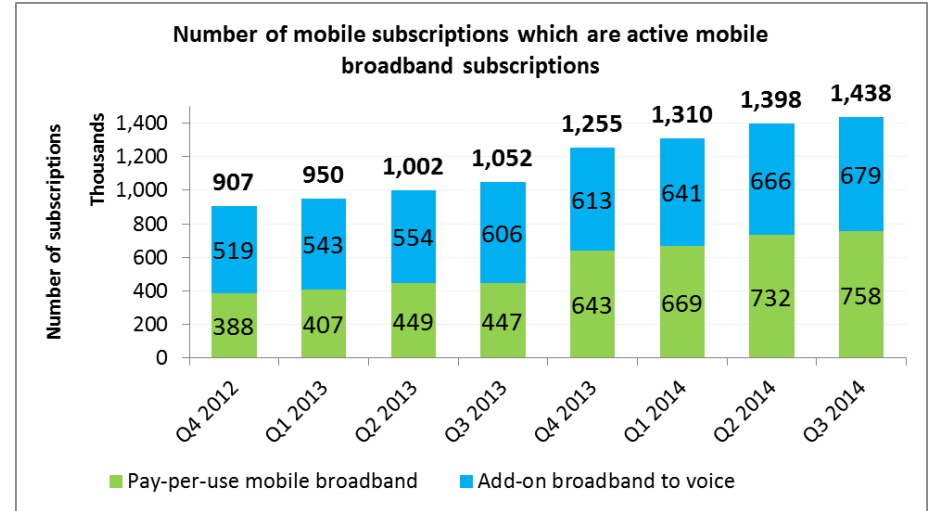
Source: TRA analysis based on operators data.

# Mobile subscriptions having data subscriptions (pay per use, add-on and bundles)

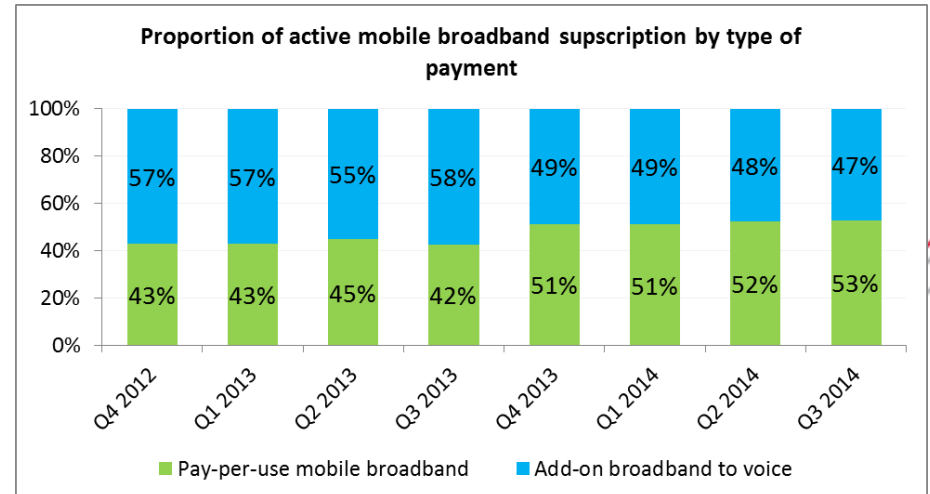
- ▶ At the end of Q3 2014, there were 1.44 million mobile subscribers with a mobile broadband subscription (pay per use, add-on and bundles) compared to 907,000 in 2012 (increase by 58%).
- ▶ Active mobile broadband subscriptions (pay per use, add-on and bundles) represent 60% of the total mobile subscriptions at the end of Q3 2014.
- ▶ Pay per use subscriptions represent 53% of mobile subscriptions having data subscriptions at the end of Q3 2014.



Source: TRA analysis based on operators data.



Source: TRA analysis based on operators data.



Source: TRA analysis based on operators data.



# Mobile traffic

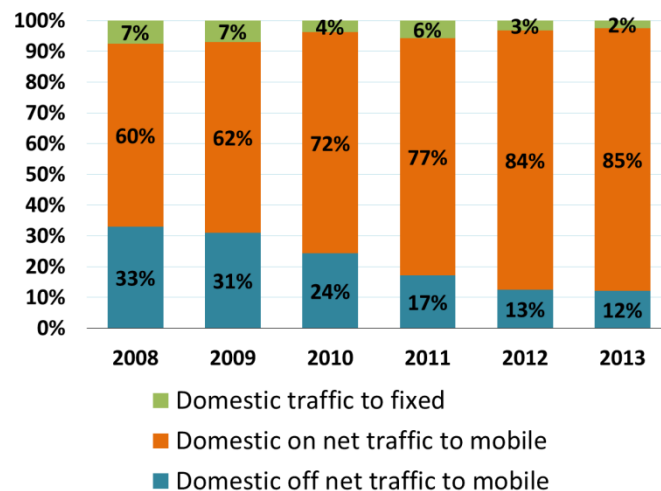
## Mobile domestic outgoing minutes (volume)

Mobile outgoing minutes (Domestic only, in millions)	2009	2010	2011	2012	2013	Growth 2012 - 2013
From prepaid	1,235	2,730	3,904	4,672	4,947	6%
From postpaid	783	1,015	1,152	1,128	1,333	18%
<b>Total</b>	<b>2,018</b>	<b>3,745</b>	<b>5,056</b>	<b>5,801</b>	<b>6,280</b>	<b>8%</b>

Source: TRA analysis based on operators data.

- ▶ 8% growth in domestic mobile originated traffic between 2012 and 2013.
- ▶ 68% growth in domestic mobile originated traffic between 2010 and 2013.
- ▶ Most domestic mobile traffic originates from prepaid subscribers (79% in 2013).
- ▶ Domestic prepaid mobile outgoing minutes grew by 6% between 2012 and 2013.
- ▶ However, while the number of postpaid mobile subscribers grew by 7% in 2013, the domestic postpaid mobile outgoing minutes grew by 18%.
- ▶ In 2013, 85% of domestic mobile originated traffic was on-net traffic to mobile.
- ▶ Number of domestic SMS dropped by 8% from 2012 to 2013 mainly due to the increase in mobile data services/applications (e.g. WhatsApp).

Distribution of domestic mobile outgoing minutes



Source: TRA analysis based on operators data.

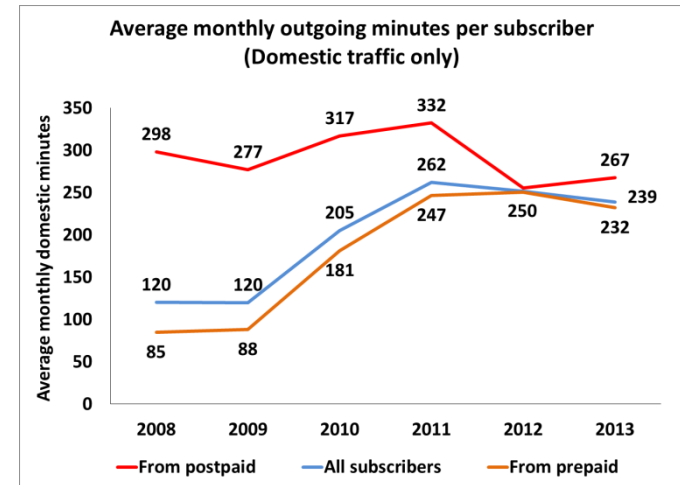
## Number of domestic SMS

Total SMS (millions)	2009	2010	2011	2012	2013	Growth 2012 - 2013
Prepaid	214.9	791.3	417.3	255.9	264.2	3%
Postpaid	146.6	202.5	155.9	107.5	69.4	-35%
<b>Total</b>	<b>361.5</b>	<b>993.8</b>	<b>573.2</b>	<b>363.4</b>	<b>333.6</b>	<b>-8%</b>

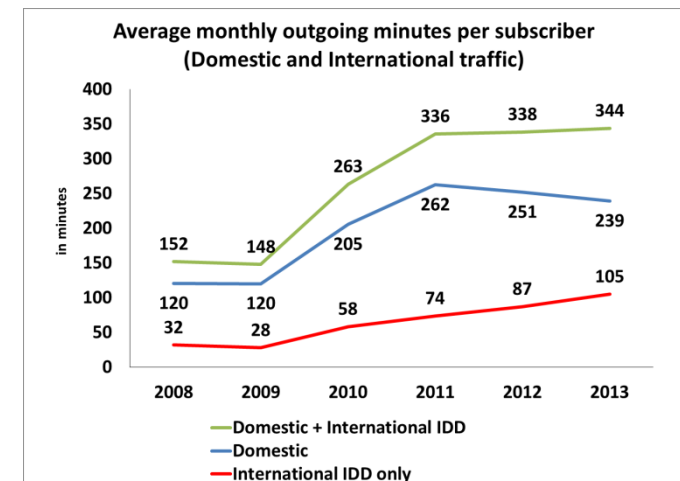
Source: TRA analysis based on operators data.

# Average monthly outgoing minutes

- ▶ As shown in the figure the average monthly domestic traffic (in minutes) for postpaid subscribers increased from 250 minutes in 2012 to 267 minutes in 2013, a result of an increase in unlimited calls plans.
- ▶ The average monthly domestic traffic (in minutes) for prepaid customers dropped from 250 minutes in 2012 to 232 minutes in 2013.
- ▶ The average monthly volume of international direct dial (IDD) calls has increased by 21% between 2012 and 2013.



Source: TRA analysis based on operators data.



Source: TRA analysis based on operators data.

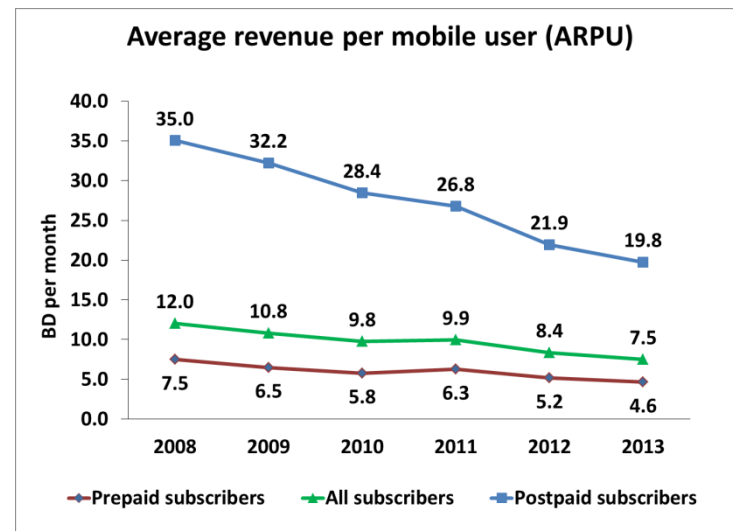
# Mobile revenue

## Mobile revenue

Revenue (BD in millions)	2008	2009	2010	2011	2012	2013	Growth 2012 – 2013
Prepaid	95.3	90.9	86.9	99	96.3	98.8	2.5%
Postpaid	88.4	91.2	91.2	92.9	96.8	98.4	1.7%
<b>Total</b>	<b>183.7</b>	<b>182.1</b>	<b>178.1</b>	<b>191.9</b>	<b>193.1</b>	<b>197.2</b>	<b>2.1%</b>

Source: TRA analysis based on operators data

Note: Revenues including connection charges, monthly subscription fees and usage charges (including international direct dial usage) .



Source: TRA analysis based on operators data

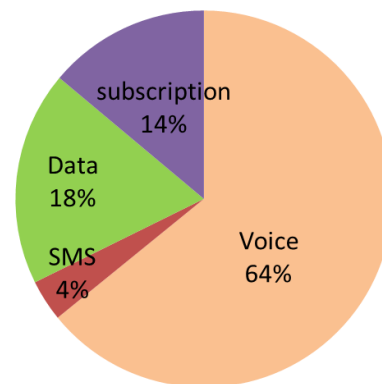
► As shown in the figure, the average revenues per user (ARPU) continue dropping. Between 2012 and 2013

- Postpaid ARPU dropped by 9.6%
- Prepaid ARPU dropped by 11.5%

# Distribution of mobile revenue

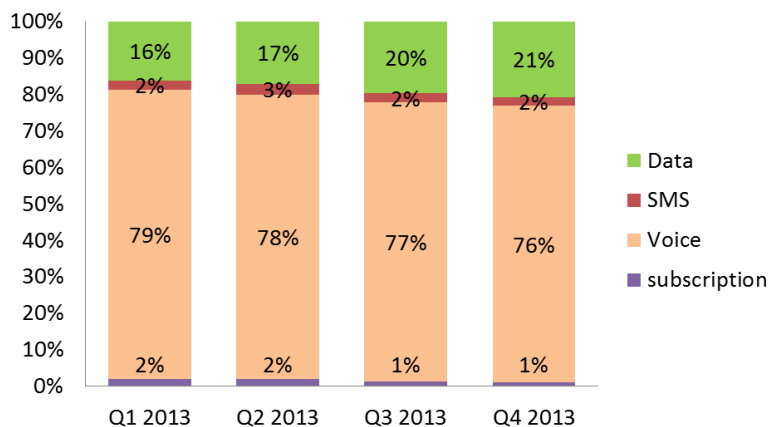
- ▶ Voice services continue to be the main source of revenues for mobile operators, followed by data.
- ▶ For prepaid, voice generated about 76% of prepaid revenues and data generated 21% in Q4 2013.
- ▶ For postpaid, voice generated about 45% of postpaid revenues and data generated 15% in Q4 2013.

Distribution of mobile revenue (prepaid+postpaid) - 2013

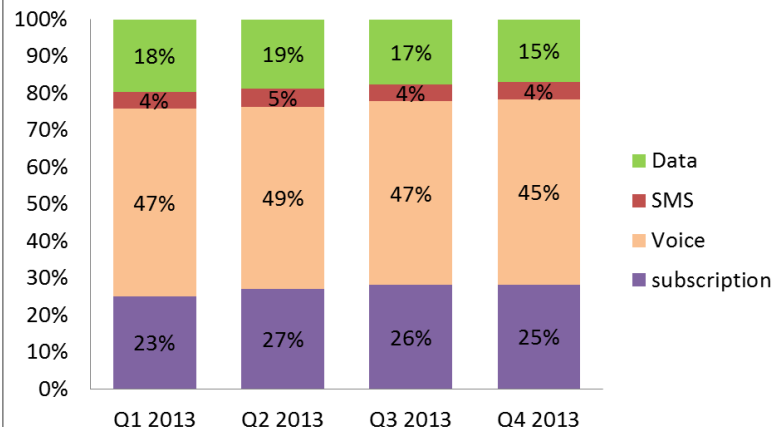


Source: TRA analysis based on operators data

Distribution of mobile revenue - Prepaid



Distribution of mobile revenue - Postpaid

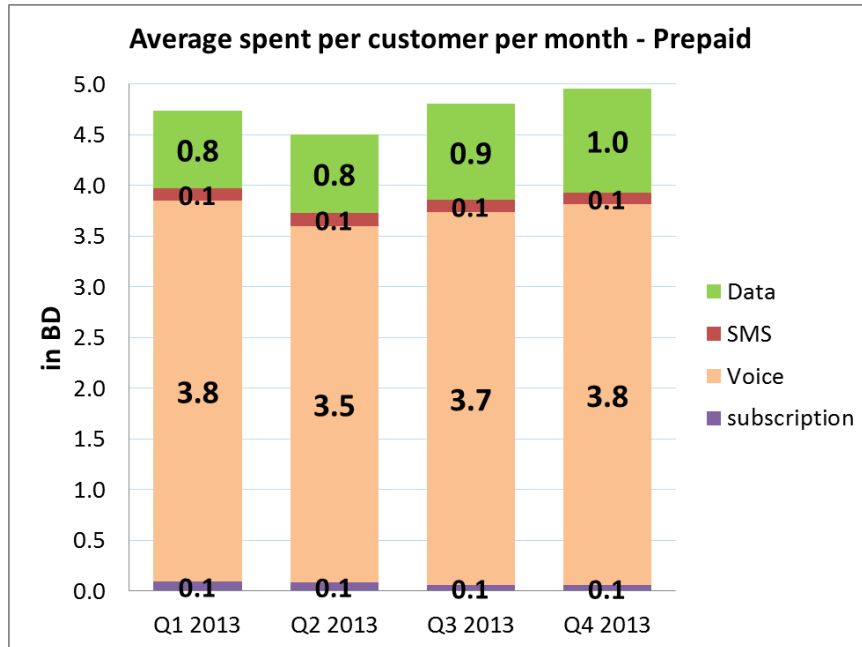


Source: TRA analysis based on operators data

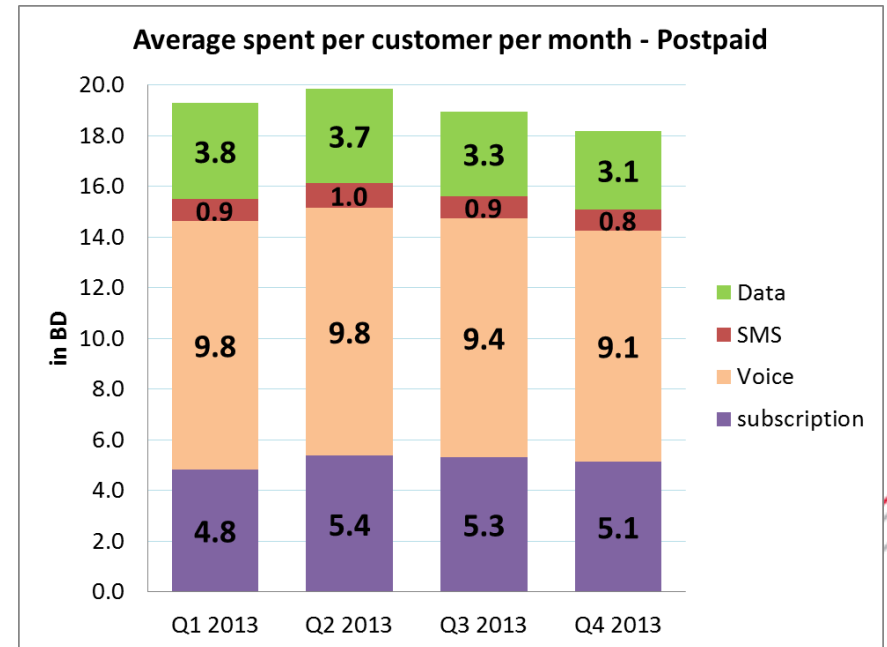
Note: Data revenues include only the revenue generated from the data added to the voice (bundled, add-on and pay per use).

# Average spend per subscriber per month

- ▶ The average monthly spend per subscriber for voice is about BD3.8 for prepaid and BD9.1 for postpaid subscribers in Q4 2013.
- ▶ The average monthly spend per subscriber for data is about BD1 for prepaid and BD3.1 for postpaid subscribers in Q4 2013.



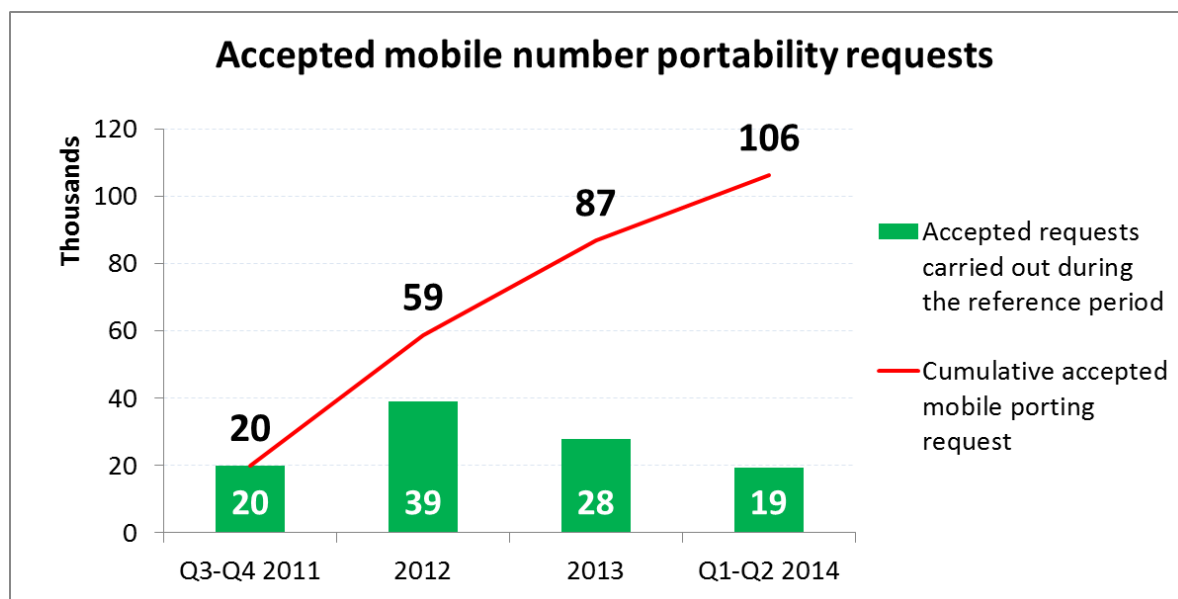
Source: TRA analysis based on operators data



Source: TRA analysis based on operators data

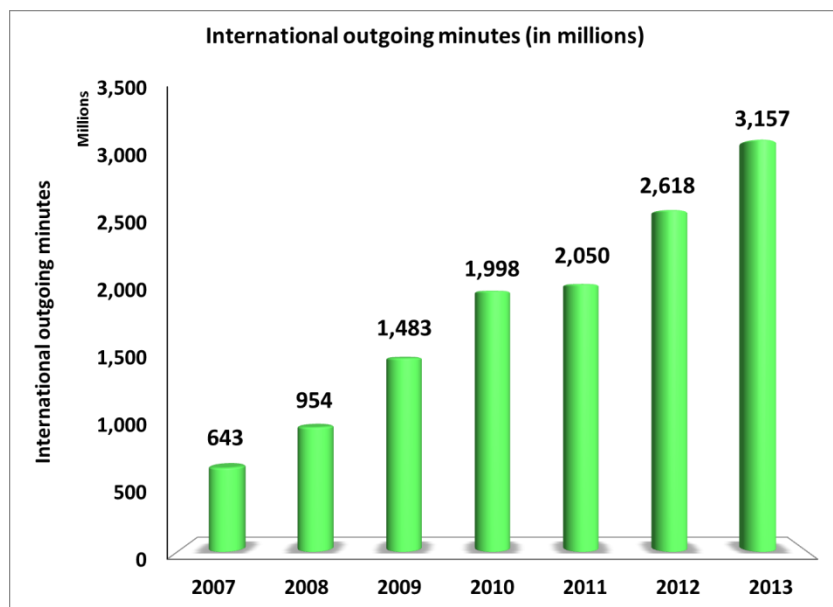
# Mobile Number Portability

- ▶ Since the introduction of number portability in July 2011, the volume of mobile numbers successfully ported has gradually increased. By the end of June 2014, a total of approximately 106,000 mobile numbers had been ported successfully.
- ▶ This represents 4.4% of the mobile customer base at the end of June 2014.



Source: TRA analysis based on operators data

# International Outgoing minutes



Source: TRA analysis based on operators data.

- ▶ The volume of international outgoing minutes grew by 21% between 2012 and 2013.
- ▶ While the traffic volume increased by 21% between 2012 and 2013, there was only 0.5% increase in international calls revenue between 2012 and 2013, indicating ongoing competitive pressure on pricing.

**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.

## International outgoing minutes

Minutes (in millions)	2009	2010	2011	2012	2013	Growth 2012 – 2013
GCC <sup>1</sup>	131.00	193.00	108.30	123.60	124.3	1%
Zone 2	1,128.00	1,570.00	1,713.80	2,236.0	2,763.0	24%
Zone 3	83.30	84.00	53.30	87.10	82.5	-5%
Zone 4	140.70	151.00	174.60	170.90	187.0	9%
<b>Total</b>	<b>1,483.00</b>	<b>1,998.00</b>	<b>2,050.00</b>	<b>2,617.60</b>	<b>3,156.8</b>	<b>21%</b>

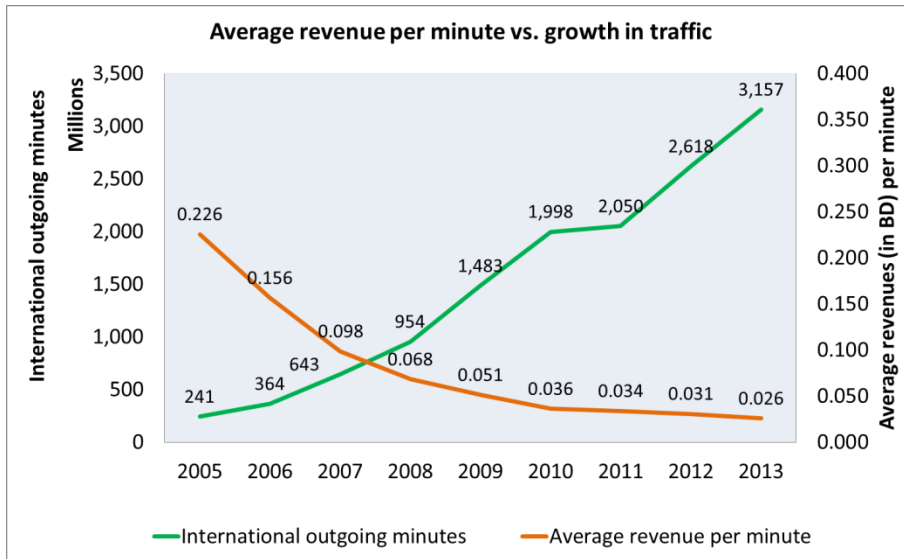
Source: TRA analysis based on operators data.

## International calls revenue

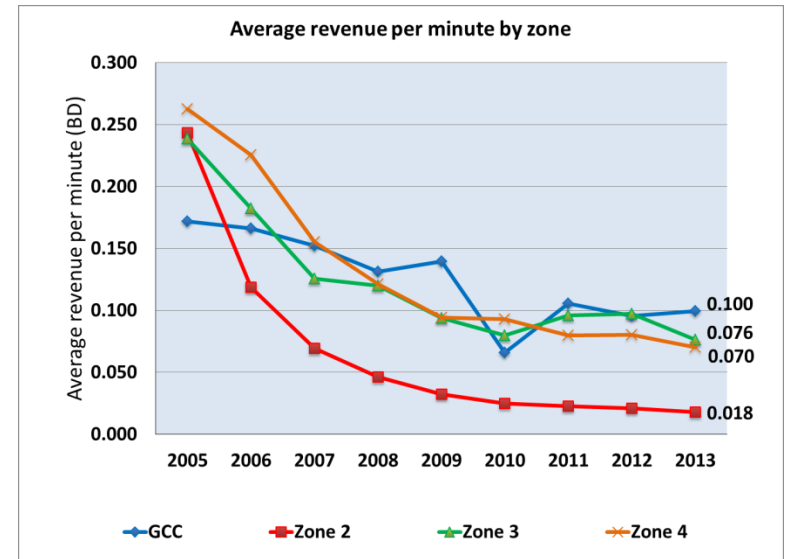
Revenues (BD in millions)	2008	2009	2010	2011	2012	2013	Growth 2012 – 2013
GCC	13.93	18.30	12.70	11.40	11.8	12.4	5%
Zone 2	31.56	36.50	38.80	38.80	46.5	49.2	6%
Zone 3	6.36	7.80	6.70	5.10	8.5	6.3	-26%
Zone 4	13.13	13.20	13.90	13.90	13.7	13.09	-5%
<b>Total</b>	<b>65.00</b>	<b>75.80</b>	<b>72.10</b>	<b>69.20</b>	<b>80.5</b>	<b>80.9</b>	<b>0.5%</b>

Source: TRA analysis based on operators data.

# Price elasticity



Source: TRA analysis based on operators data.



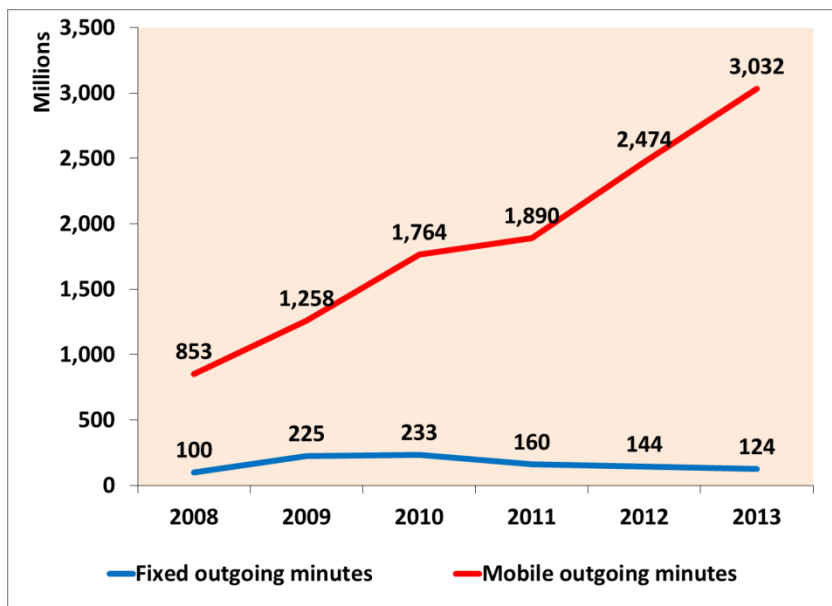
Source: TRA analysis based on operators data.

- The average revenue per minute for international calls has fallen by 88% over the last eight years, with a particularly large fall observed for zone 2.



# International Outgoing minutes

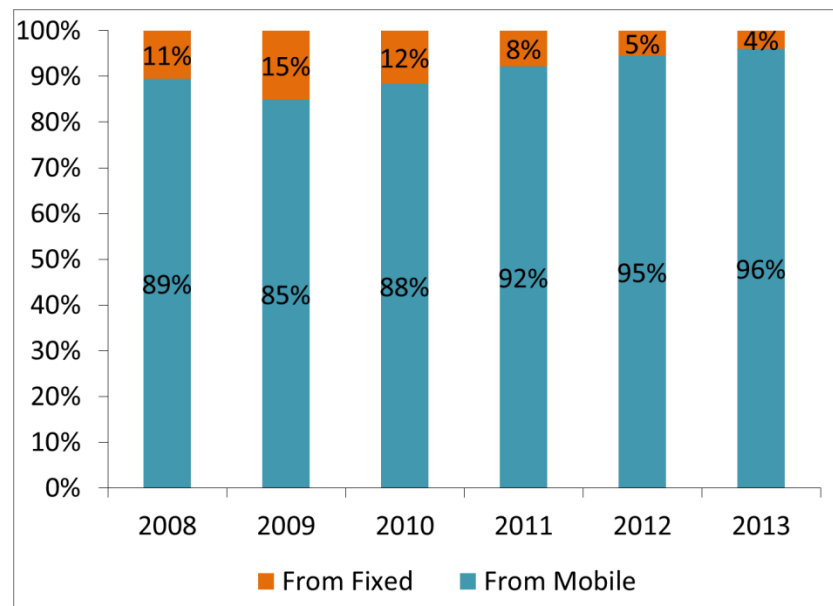
- ▶ International outgoing minutes originated on mobile<sup>1</sup> grew by 23% between 2012 and 2013 while the minutes originated on fixed fell by 14%.



Source: TRA analysis based on operators data.

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

- ▶ International outgoing minutes originated on mobile represented 96% of the total international outgoing minutes in 2013.

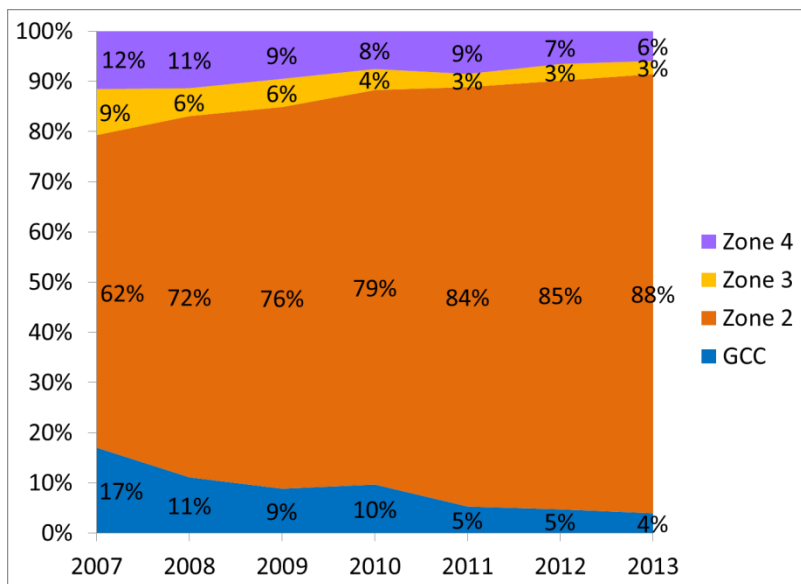


Source: TRA analysis based on operators data.

# International traffic vs. revenues by destination called

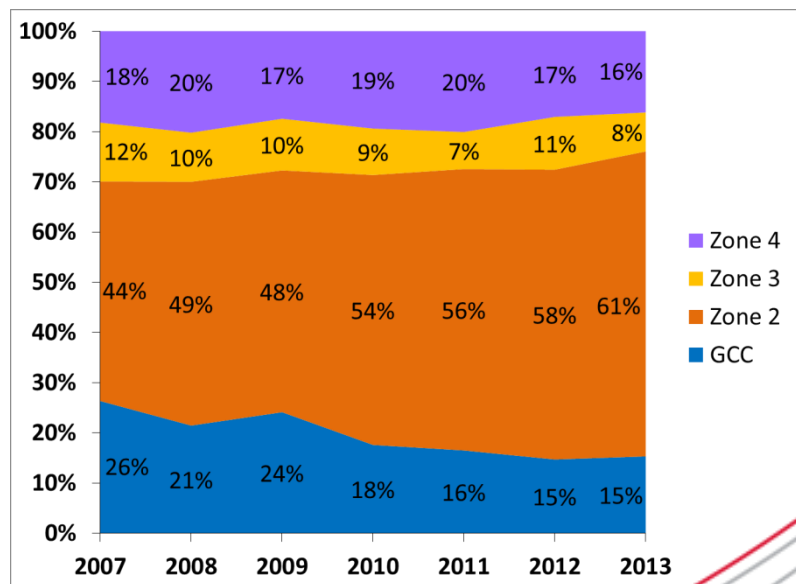
- The average revenue per minute earned from calls to South Asian countries (Zone 2) continues to be relatively low

88% of total international calls **minutes** were made to South Asian countries in 2013



Source: TRA analysis based on operators data.

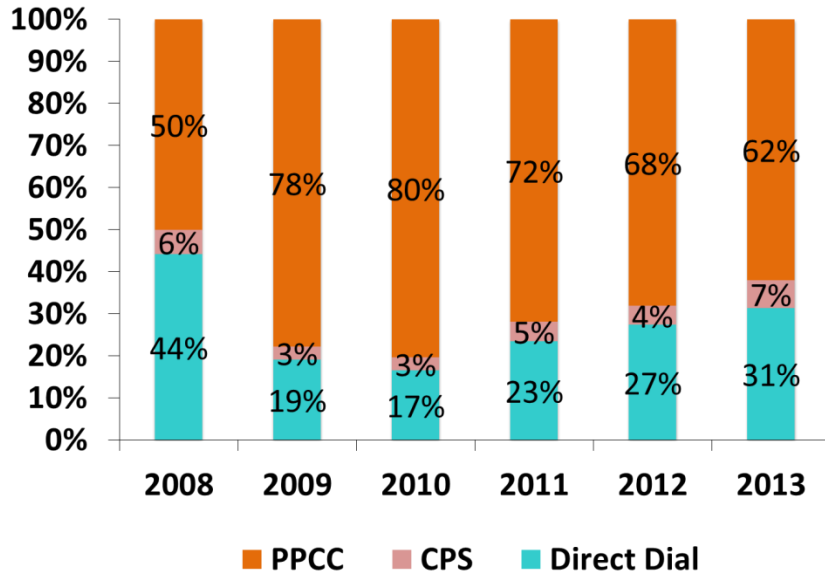
61% of international **revenues** were generated from calls to South Asian countries in 2013



Source: TRA analysis based on operators data.

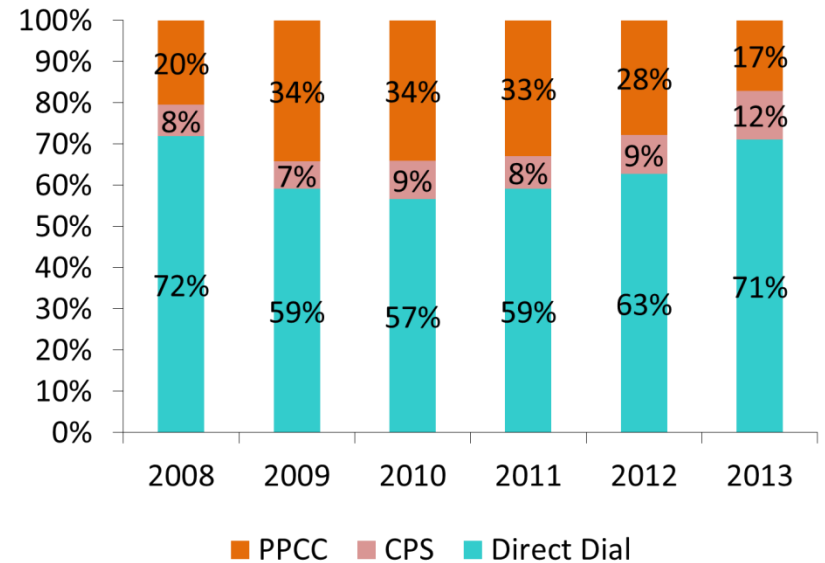
# Distribution of international outgoing minutes/revenues by access type - Fixed telephony

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



Source: TRA analysis based on operators data.

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

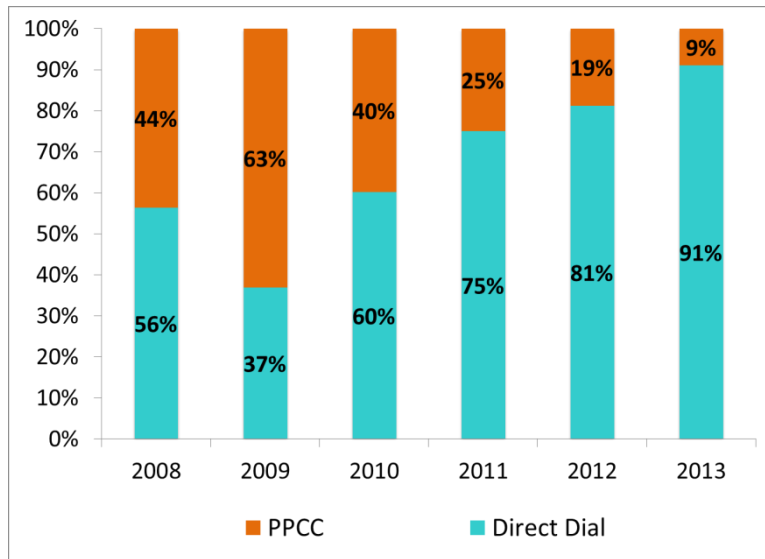


Source: TRA analysis based on operators data.

- ▶ Although traffic originated from fixed lines using prepaid calling cards represented 62% of international fixed line traffic in 2013, it represented only 17% of revenues.

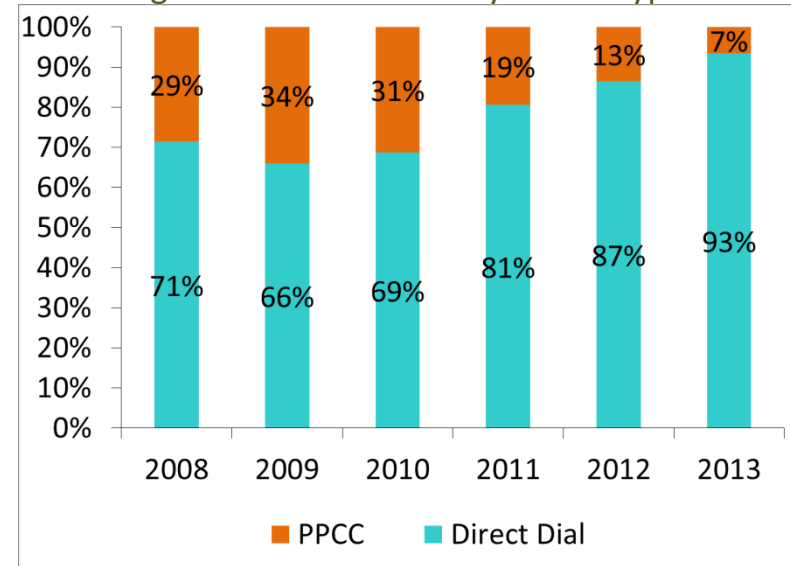
# Distribution of international outgoing minutes/revenues by access type - Mobile

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



Source: TRA analysis based on operators data.

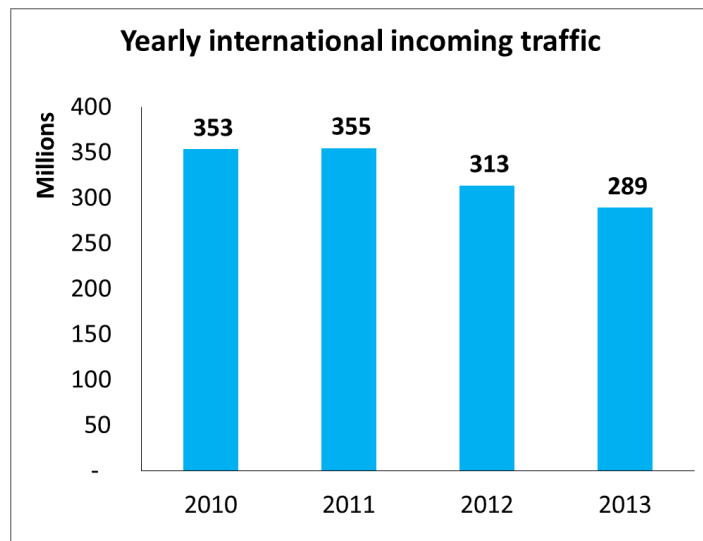
Distribution of international **revenues** originated from mobile by access type



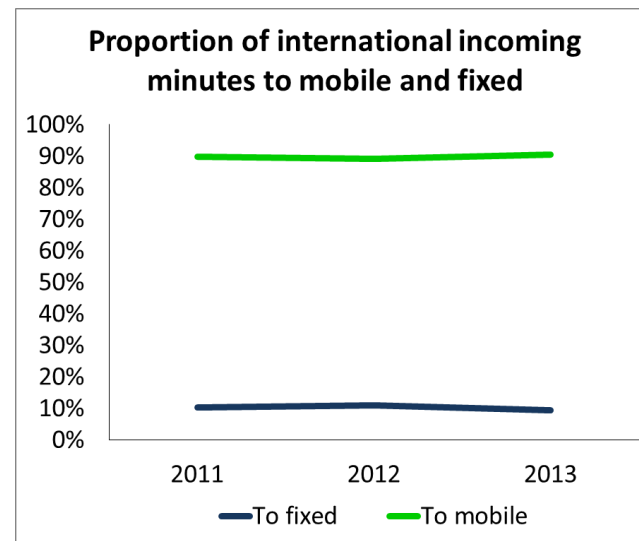
Source: TRA analysis based on operators data.

- ▶ In 2013, international direct dial traffic originated from mobile represented 91% of the total traffic, up from 81% in 2012 and 75% in 2011. The pricing of mobile-originated international direct dial services has become much more competitive in recent years.

# International incoming call minutes



Source: TRA analysis based on operators data.

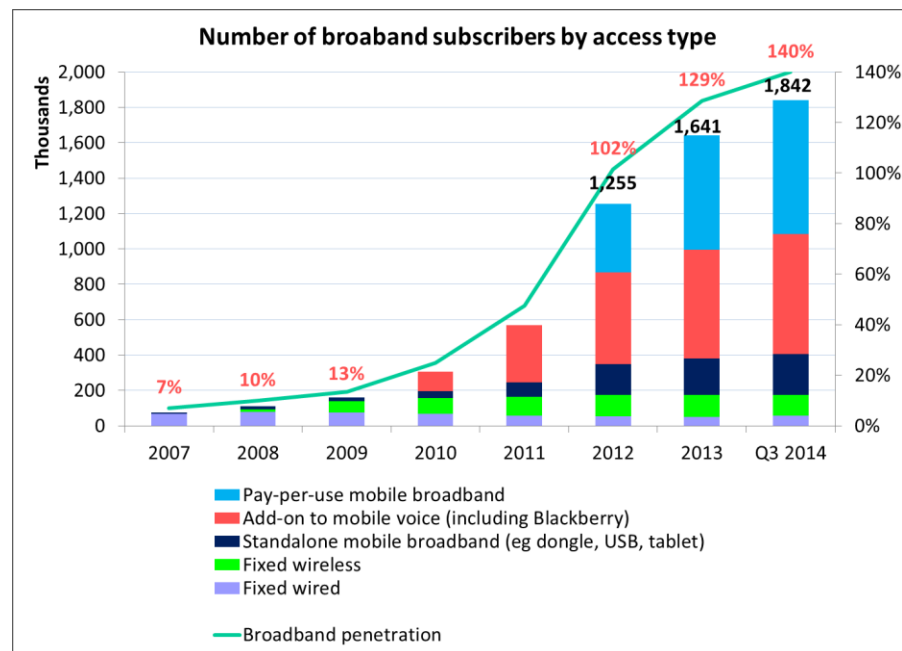


Source: TRA analysis based on operators data.

- ▶ In 2013, the total volume of international incoming minutes was 289 million minutes, compared to 313 million in 2012 (↓7.6%).
- ▶ About 90% of international incoming calls were made to mobile.

# Broadband services

- ▶ At the end of Q3 2014, there were approximately 1.84 million broadband subscriptions compared to 1.64 million in 2013 (12% growth), representing a broadband penetration of 140%.
- ▶ Growth in broadband services moderated during 2013 and the first half of 2014 compared to 2012. Mobile broadband subscriptions have continued to drive overall broadband growth



Source: TRA analysis based on operators data. Note that comprehensive Pay-per-use figures are not available for 2011 and earlier.

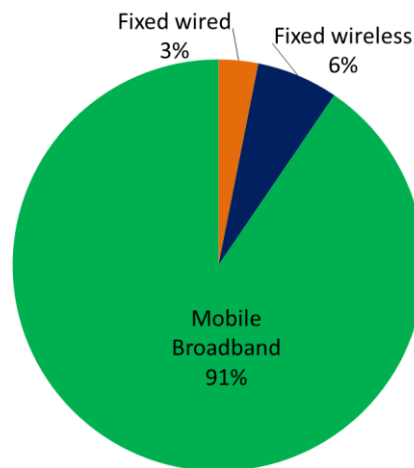
## Note

As noted in previous editions of this report, the new number of mobile 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 44). Comprehensive Pay-per-use figures are not available for 2011 and earlier.

# Broadband services

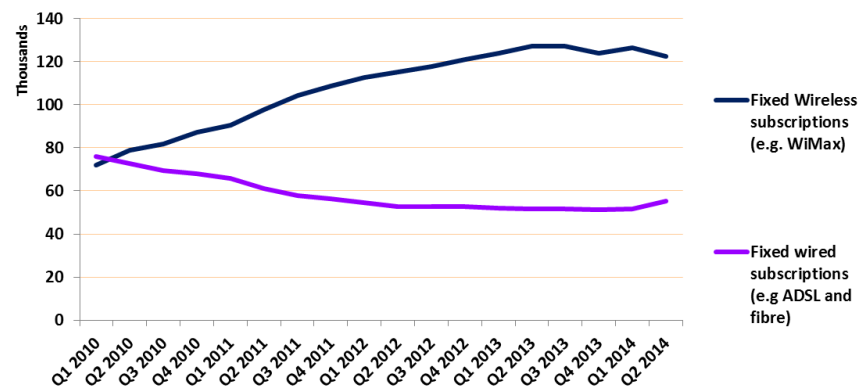
- ▶ Majority of broadband subscribers were mobile broadband subscribers:
  - ▶ mobile broadband subscribers represented about 91% of broadband subscribers at the end of Q3 2014.
  - ▶ Fixed wired broadband (e.g. ADSL and fibre) subscriptions have started to increase after a long decline, and this is a result of the deregulation of the residential broadband market (and the attractive pricing introduced by Batelco as a result).

Proportion of broadband subscribers by access type at the end of Q3 2014



Source: TRA analysis based on operators data

Number of fixed broadband subscriptions



Source: TRA analysis based on operators data

# Fixed broadband subscriptions

- ▶ At the end of 2013
- ▶ Residential subscribers represented 93% of fixed broadband subscriptions.

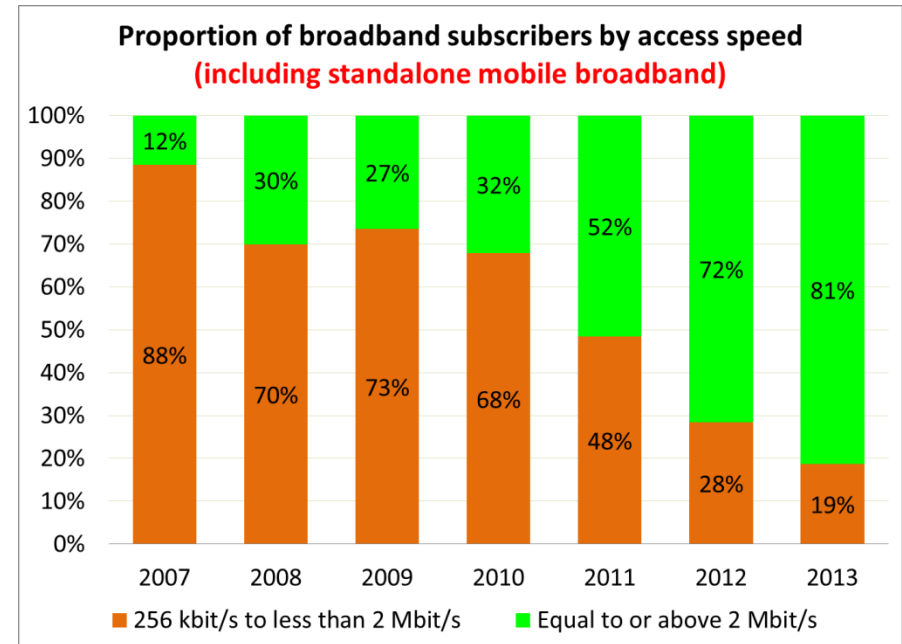
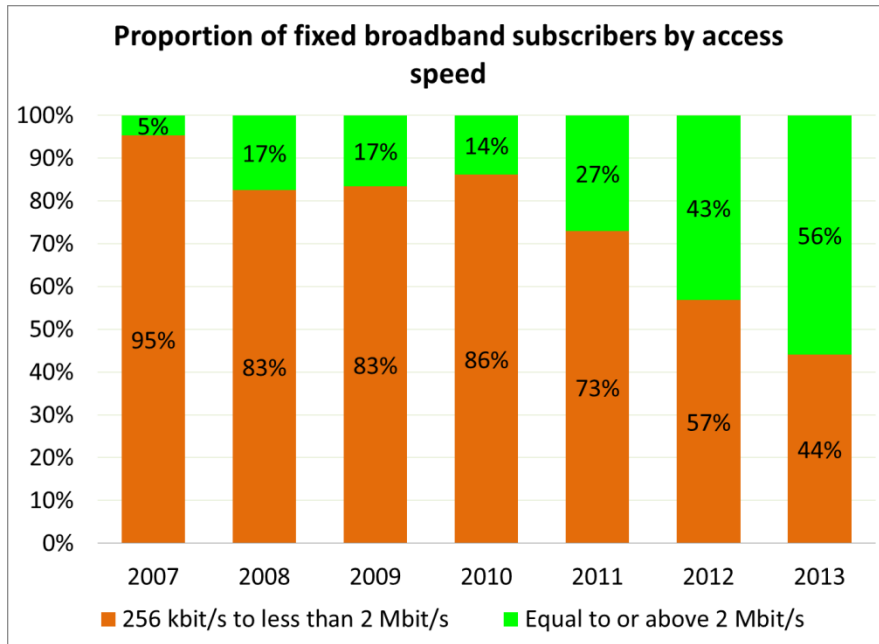
Fixed broadband (e.g. ADSL, fiber, WiMax)	2010	2011	2012	2013
Residential	144,929	153,878	162,012	163,023
Non Residential	9,943	10,981	11,729	12,773
Total	154,872	164,859	173,741	175,796

Source: TRA analysis based on operators data



# Proportion of broadband subscribers by access speed

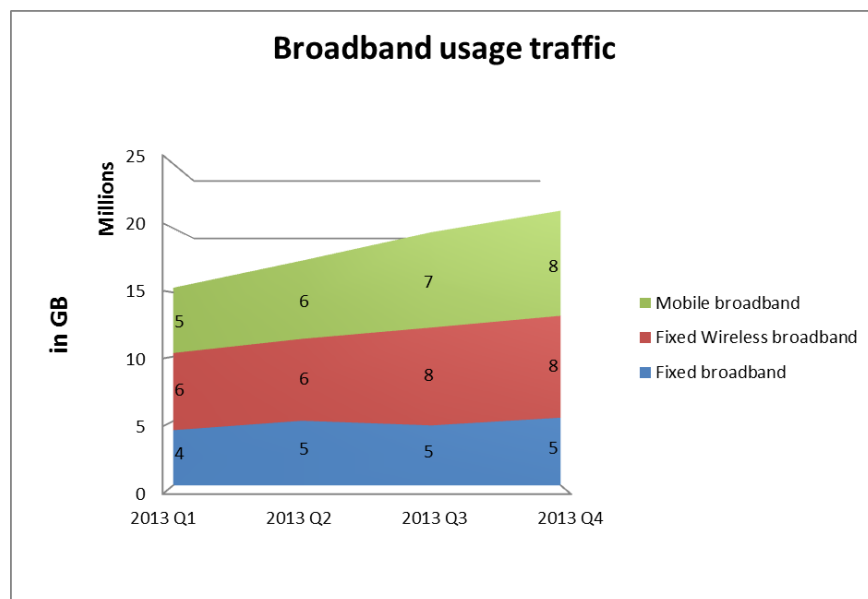
- ▶ About 56% of fixed (wired and wireless) broadband subscribers at the end of 2013 were on plans with advertised speeds of 2Mbps and above compared to only 14% in 2010.
- ▶ When standalone mobile broadband subscribers are included, the proportion of broadband subscribers on plans with advertised speeds of at least 2Mbps increases to 81% in 2013 compared to 32% in 2010.



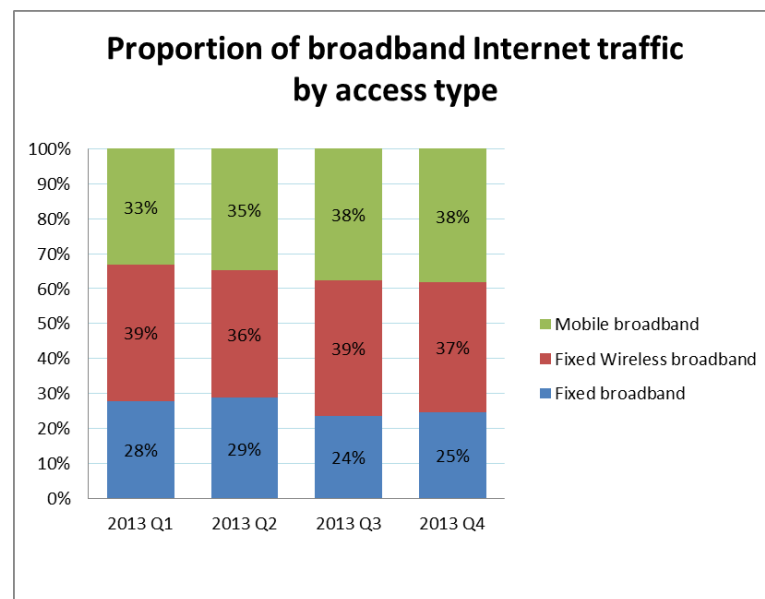
Source: TRA analysis based on operators data

# Broadband usage

- ▶ In 2013, total broadband usage reached about 74 million GB.
- ▶ Fixed wireless broadband generated 26% of the total usage followed by fixed wired 38% and mobile broadband 36%.
- ▶ The quarterly usage increased from 15 million GB in Q1 2013 to 21 million GB in Q4 2013.



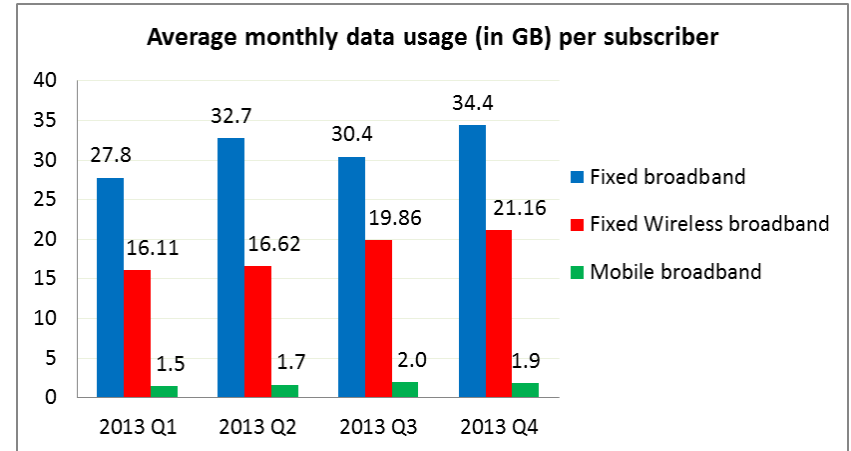
Source: TRA analysis based on operators data



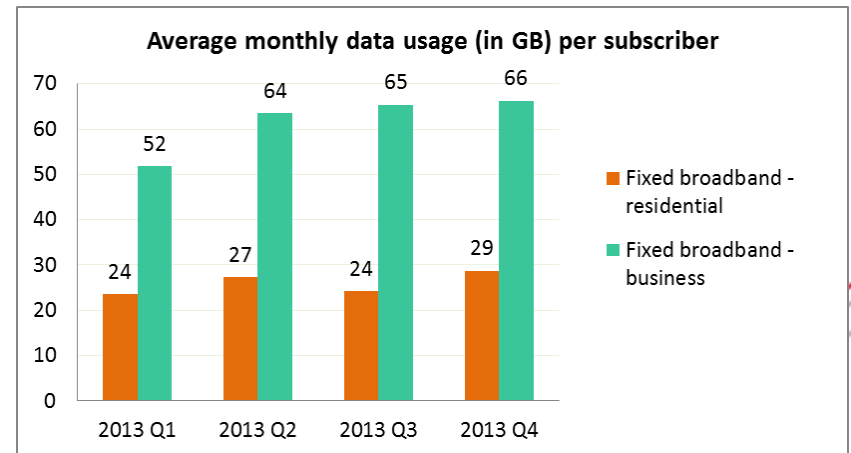
Source: TRA analysis based on operators data

# Average usage (in GB) per broadband subscription

- ▶ The average usage (in GB) per subscriber per month varies based on the the broadband access type.
- ▶ Fixed broadband subscribers generated the highest average monthly usage followed by Wireless subscribers and lowest usage is 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 represent almost double of the average usage of fixed broadband residential subscribers.



Source: TRA analysis based on operators data



Source: TRA analysis based on operators data

# Broadband revenue

▶ Although the number of broadband subscribers increased by dramatically in 2012 and 2013 compared to 2011, broadband revenues have remained stable in the last couple of years due to price reductions. Based on the 2013 Price Benchmarking Study of telecoms services in Arab countries, fixed broadband prices in Bahrain have fallen by up to 38% between 2012 and 2013. Also, mobile broadband prices in Bahrain declined by up to 63% between 2012 and 2013.

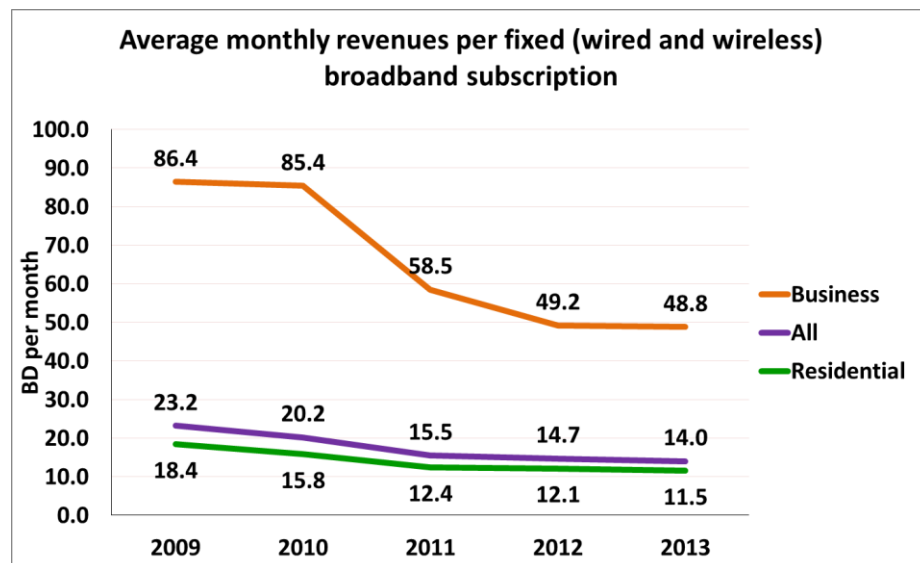
▶ The reduction in broadband prices resulted in a drop in ARPU by 44% for Business and 37% for Residential between 2009 and 2013.

## Broadband revenue

Revenue (BD in million)	2009	2010	2011	2012	2013	Growth 2012 – 2013
Residential	24	28.97	30.5	31.5	34.5	9%
Business	8.5	9.95	8.1	6.97	7.03	1%
<b>Total</b>	<b>32.5</b>	<b>38.92</b>	<b>38.6</b>	<b>38.5</b>	<b>41.53</b>	<b>8%</b>

Source: TRA analysis based on operators data

Note: Broadband revenues include fixed (wired and wireless) and standalone mobile broadband



Source: TRA analysis based on operators data

# Leased lines

## Number of domestic leased lines

Leased line speed	2010	2011	2012	2013
Analogue	1132	962	931	903
x < 64 kbps and less	110	114	86	72
64 kbps ≤ x < 512 kbps	954	707	666	607
512 kbps ≤ x < 1024 kbps	286	308	277	268
1024 kbps ≤ x < 2048 kbps	233	313	231	211
2 Mbps ≤ x < 45 Mbps	794	1,026	1,059	1,261
45 Mbps ≤ x < 155 Mbps	48	57	64	93
155 Mbps ≤ x < 622 Mbps	1	1	2	3
x ≥ 622 Mbps	2	2	1	1
<b>Total</b>	<b>3,560</b>	<b>3,490</b>	<b>3,317</b>	<b>3,419</b>

Source: TRA analysis based on operators data

► The total number of domestic leased lines has been stable in recent years, although there has been some growth in higher speed services.

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

## Number of International Leased Lines

Destinations	Speed	2010	2011	2012	2013
Zone 1	Analogue and Speeds lower than 64Kbps	6	0	0	0
	x < 1 Mbps	113	101	86	71
	1Mbps ≤ x < 2 Mbps	5	7	6	4
	2 Mbps ≤ x < 45 Mbps	35	31	22	15
	45 Mbps ≤ x < 155 Mbps	10	13	11	4
	155 Mbps ≤ x < 622 Mbps	6	9	7	8
	x ≥ 622 Mbps	4	4	3	8
	<b>Total</b>	<b>179</b>	<b>165</b>	<b>135</b>	<b>110</b>
Zone 2	Analogue and Speeds lower than 64Kbps	2	0	0	0
	x < 1 Mbps	13	13	10	9
	1Mbps ≤ x < 2 Mbps	0	1	1	0
	2 Mbps ≤ x < 45 Mbps	10	6	5	3
	45 Mbps ≤ x < 155 Mbps	0	0	0	0
	155 Mbps ≤ x < 622 Mbps	1	3	3	1
	x ≥ 622 Mbps	2	3	1	2
	<b>Total</b>	<b>28</b>	<b>26</b>	<b>20</b>	<b>15</b>
Zone 3	Analogue and Speeds lower than 64Kbps	1	0	0	0
	x < 1 Mbps	44	38	18	11
	1Mbps ≤ x < 2 Mbps	1	1	1	1
	2 Mbps ≤ x < 45 Mbps	10	9	6	3
	45 Mbps ≤ x < 155 Mbps	2	4	3	2
	155 Mbps ≤ x < 622 Mbps	3	3	5	1
	x ≥ 622 Mbps	2	1	2	1
	<b>Total</b>	<b>63</b>	<b>56</b>	<b>35</b>	<b>19</b>
<b>Grand total</b>		<b>270</b>	<b>247</b>	<b>190</b>	<b>144</b>

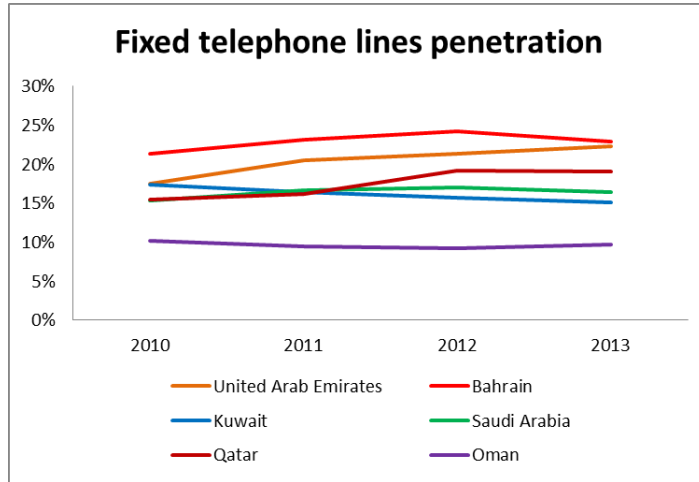
Source: TRA analysis based on operators data.

## Leased Lines revenues

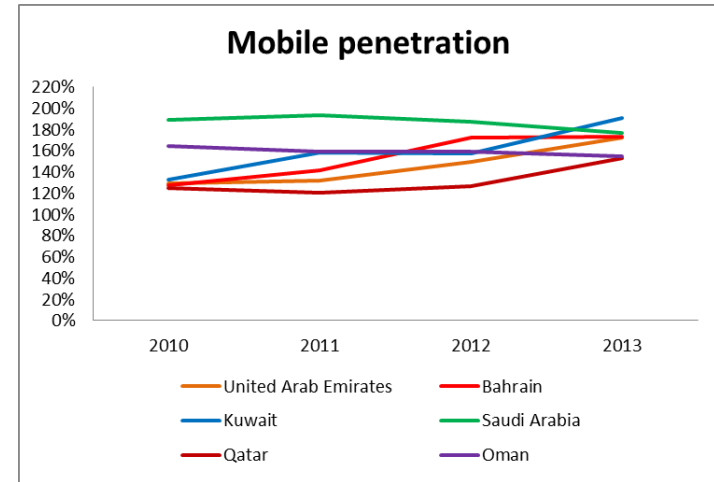
in BD million	2010	2011	2012	2013
Domestic	15.3	17.7	18.03	17.4
International	29.6	27.9	23.3	22
Other data	1.6	3.2	4.3	6.4
<b>Total</b>	<b>46.5</b>	<b>48.8</b>	<b>45.6</b>	<b>45.8</b>

# Benchmarking of telecoms service penetration rates with GCC countries

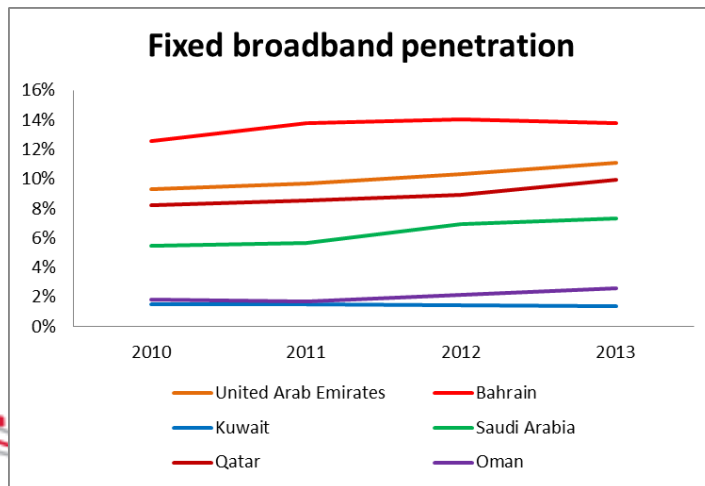
Bahrain compares well with other GCC countries in terms of telecom services penetration.



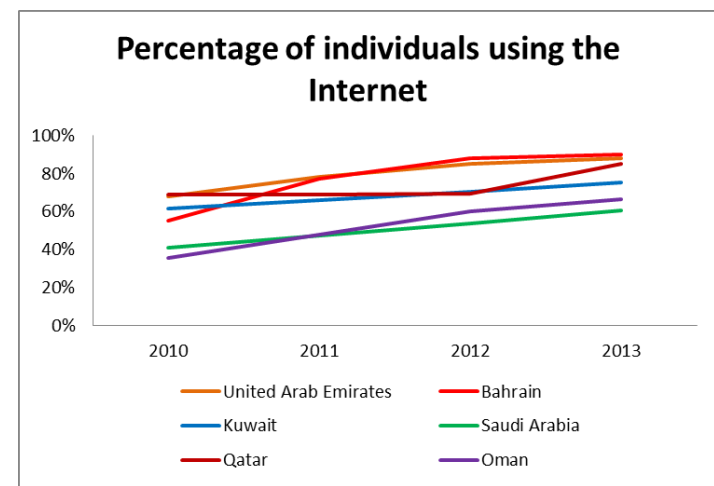
Source: International telecommunication Union (ITU) and TRA analysis



Source: International telecommunication Union (ITU) and TRA analysis



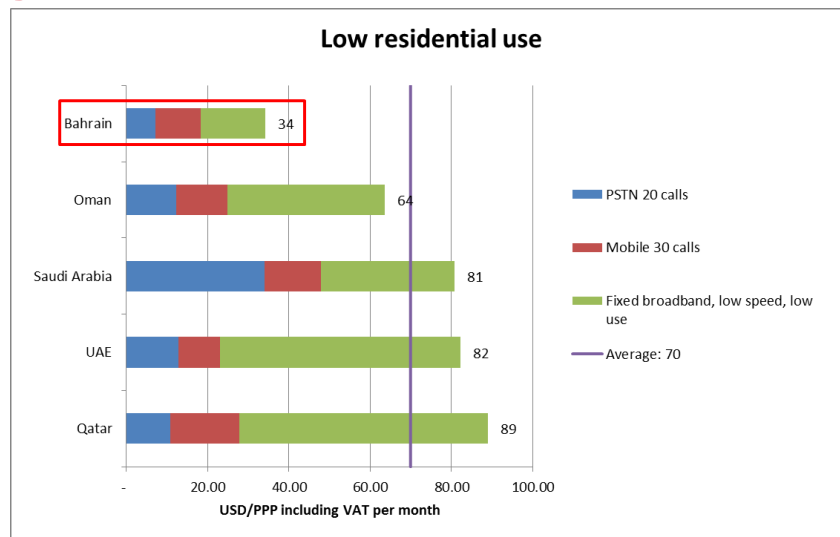
Source: International telecommunication Union (ITU) and TRA analysis



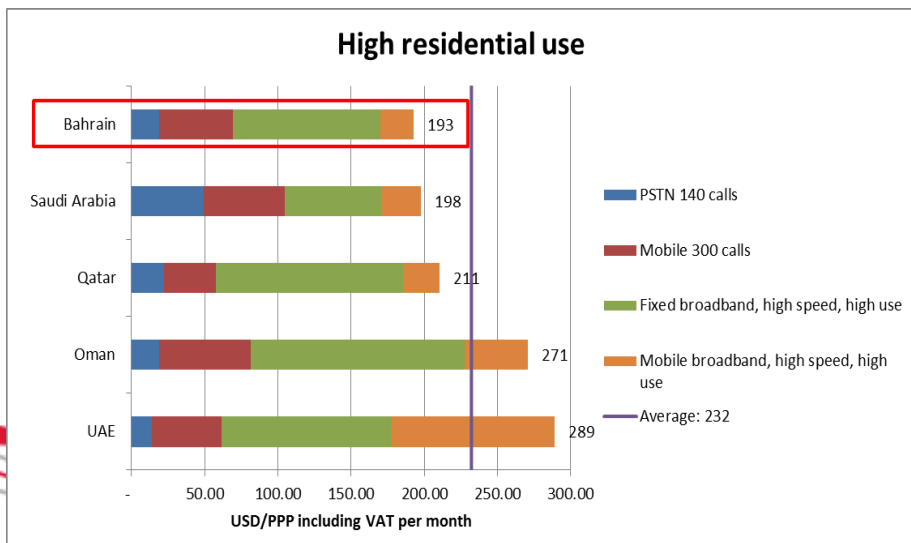
Source: International telecommunication Union (ITU) and TRA analysis

# Retail telecom price benchmarking

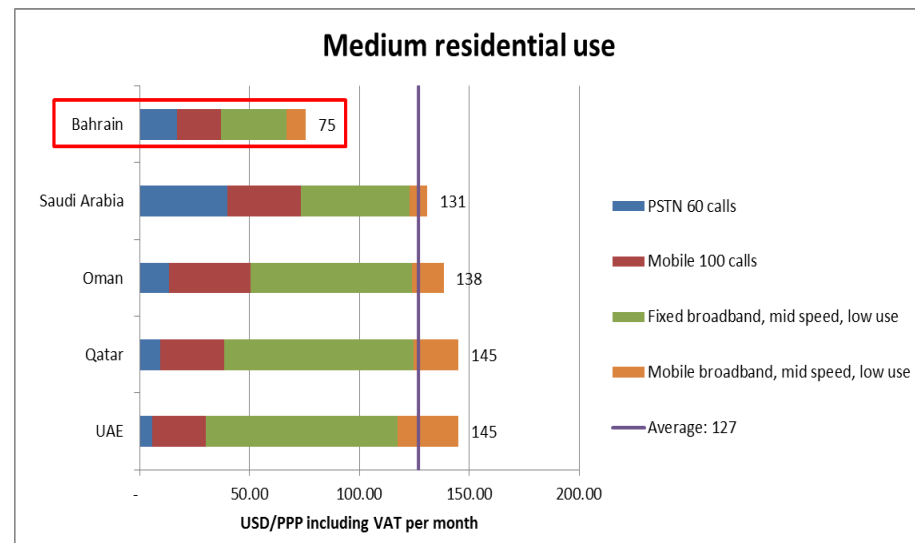
- ▶ Bahrain performs well compared to other GCC countries in terms of competitive retail prices for residential consumers across all usage baskets:
- ▶ For low and medium usage levels, Bahrain compares very favourably to its GCC counterparts
- ▶ For high usage, Bahrain enjoyed the lowest retail prices in the GCC (an improvement compared to 2012, when Bahrain was the second most expensive GCC country)



Source: Retail Price Benchmarking for Arab countries for 2013






























Source: Retail Price Benchmarking for Arab countries for 2013



Source: Retail Price Benchmarking for Arab countries for 2013

# Summary of findings

	Bahrain results compared to GCC averages	Bahrain results compared to Arab averages	Bahrain results compared to OECD averages
PSTN (Low usage)			
PSTN (High usage)			
Mobile (Low usage)			
Mobile (High usage)			
Fixed broadband (Low speed)			
Fixed broadband (High speed)			
Mobile broadband (Low usage)			
Mobile broadband (High usage)			
Leased lines			 *

Better than ...



On par with ...



More expensive than ...



Note: Results based on residential and business baskets.

\* Only 2 Mb/s speed can be compared with the OECD data.

Source: Retail Price Benchmarking for Arab countries for 2013

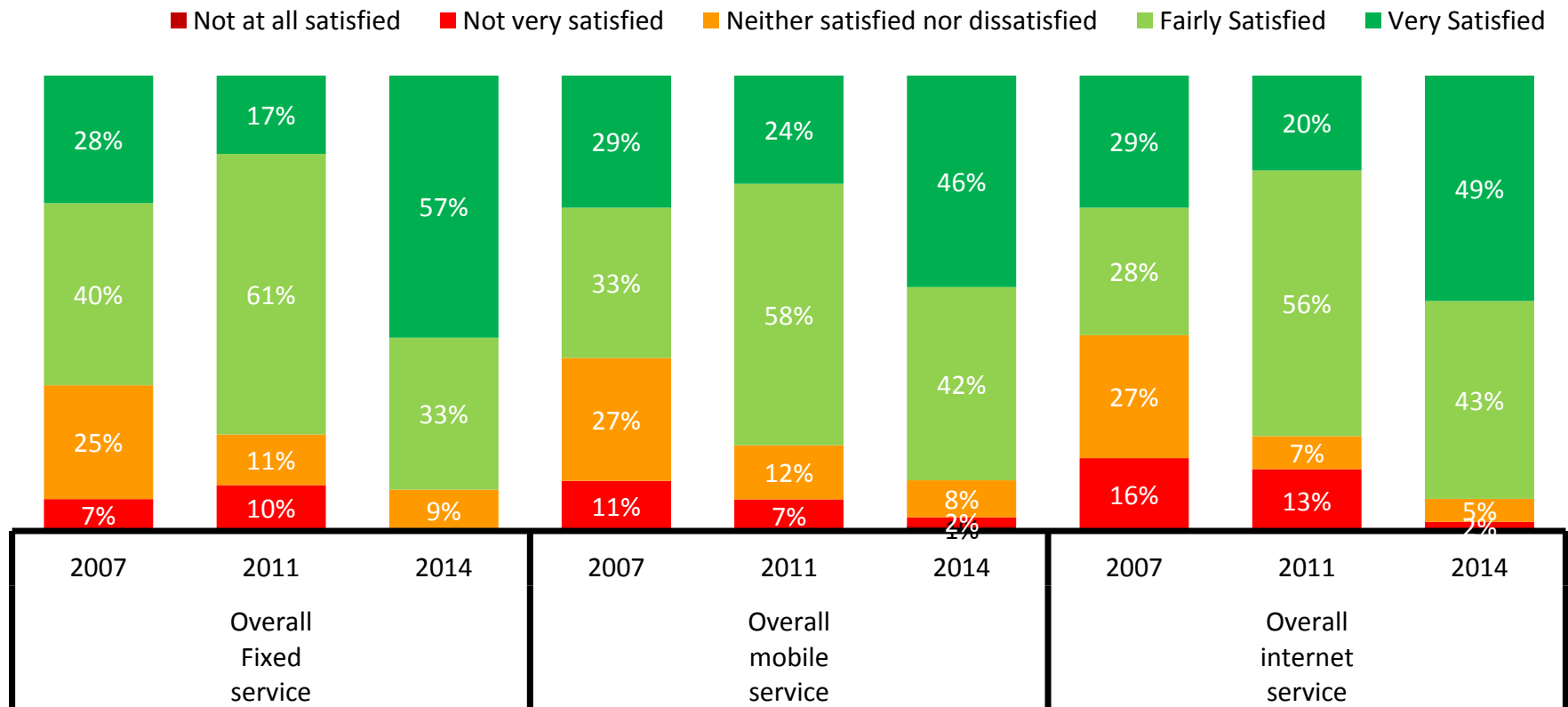


هيئة تنظيم الاتصالات  
Telecommunications Regulatory Authority



# Satisfaction towards telecommunications services

- Overall satisfaction towards telecom services has improved compared to 2011 (in particular the % of people said they are Very Satisfied with the telecom services).



Source: Draft of 2014 Telecommunications Market Research in Bahrain

# List of Acronyms

ADSL	Asymmetric Digital Subscriber Line
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..!

