



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

# Bahrain Telecom Pricing International Benchmarking

April 2017



## Disclaimer

- ☞ This benchmarking report contains information collected by an independent consultant commissioned by the Telecommunications Regulatory Authority in Bahrain in accordance with the provisions of the Telecommunications Law. This report fulfills the requirement to undertake research and publish information as set out in Article 54 of the Law. It also fulfills the requirements of Article 25 of the Law to provide information to the Regulator as set out in the Individual Licenses granted to the Operators mentioned in this report.
- ☞ This report is not a binding legal document and also does not contain legal, commercial, financial, technical or other advice.
- ☞ The Telecommunications Regulatory Authority in Bahrain does not make any representations or warranties, either express or implied, that:
  - ☞ the information is free from inaccuracies, errors or omissions;
  - ☞ the information is exhaustive;
  - ☞ the information is of merchantable quality and fitness for any particular purpose.
- ☞ TRA, including its officers, board members, employees, agents and contractors, is not liable for:
  - ☞ any inaccuracy, error or omission in the information contained in this document; nor
  - ☞ any loss, damage, cost or expense whether direct, indirect, consequential or special, incurred by, or arising by reason of, any person using or relying on the information and whether caused by reason of any inaccuracy, error, omission or misrepresentation in the information or otherwise.
- ☞ The Telecommunications Regulatory Authority is not bound by it, nor does it necessarily set out the Authority's final or definitive position on particular matters. To the extent that there might be any inconsistency between the contents of this document and the due exercise by it of its functions and powers, and the carrying out by it of its duties and the achievement of relevant objectives under law, such contents are without prejudice to the legal position of the Authority. Inappropriate reliance ought not therefore to be placed on the contents of this document.



## Contents of this report

Report overview	4
PSTN basket results for GCC countries, including time series	5
Mobile basket results for GCC countries, including time series	8
Fixed broadband results for GCC countries, including time series	11
Mobile broadband results for GCC countries, including time series	14
Leased line results for GCC countries, including time series	17
Aggregate residential basket analysis	19
Aggregate business basket analysis	21
Summary of findings	23
Acronyms used in the context of this report	24
Appendix: Summary of findings based on “old” CPL values	26



## Report overview

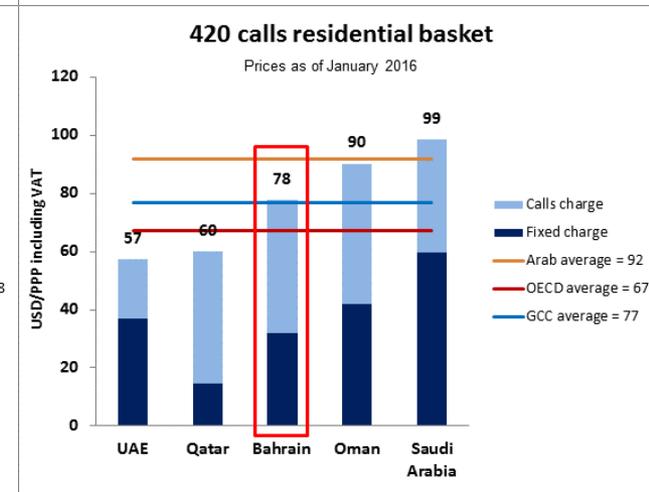
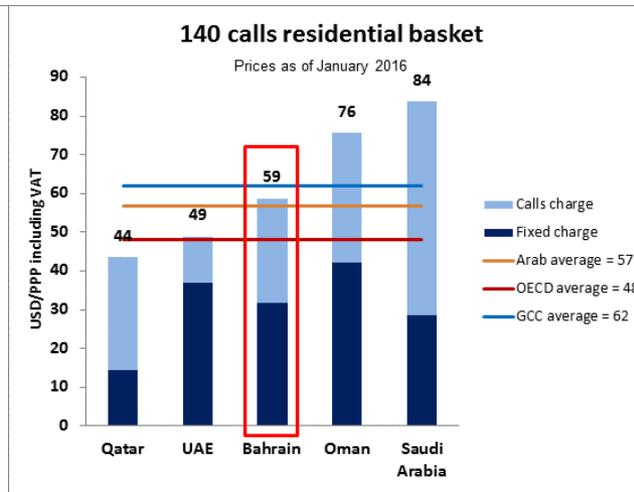
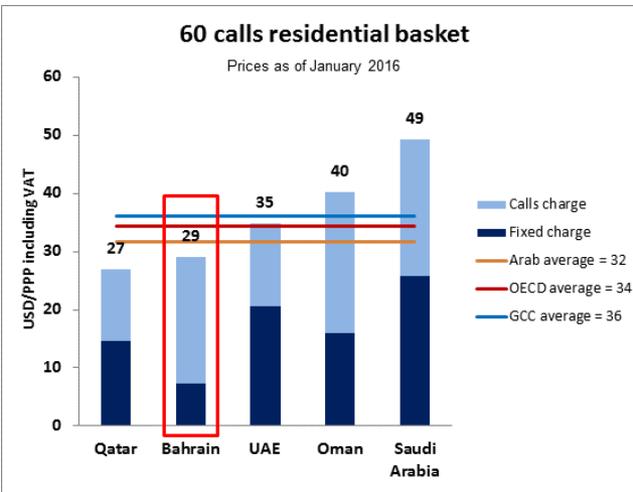
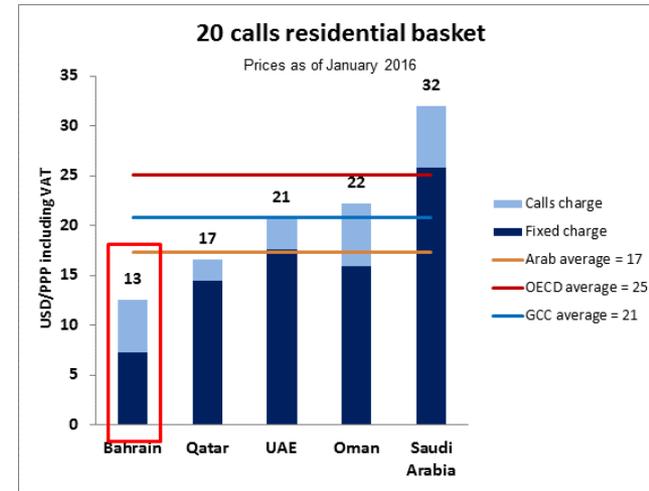
- 📡 This report focusses specifically on Bahrain retail prices for telecommunications services in compared to GCC countries\*, Arab average and OECD average.
- 📡 The services covered in this report are the same as the services covered in the main AREGNET report, namely:
  - 📡 Fixed voice (PSTN)
  - 📡 Mobile telephony
  - 📡 Fixed Broadband
  - 📡 Mobile Broadband
  - 📡 Leased lines
- 📡 In addition, aggregate analyses have been included, to illustrate the likely total costs faced by consumers and businesses separately who subscribe to a number of communications services. In this analysis, 3 types of user have been defined for consumers; with low usage, medium usage and high usage, and 2 types of user for businesses; medium and high usage.
- 📡 All the results contained in the report are derived directly from data from the main AREGNET study, which is based on OECD methodologies, and which uses data gathered in January 2016.
- 📡 References to both GCC and Arab averages are included, for comparison. Where relevant the OECD average is also shown
- 📡 The results are shown in US\$/PPP. Please note that there have been significant changes in the PPP values due to change in the World Bank “Comparative Price Levels” changing from 2012 to 2014. See the methodology document mentioned below.
- 📡 An overview of the study methodology, as well as a description of the baskets considered within each service can be found in a separate document\*\*

\* Data for Kuwait is only available for mobile services

\*\* AREGNET Price Benchmarking Methodology 2016

## PSTN residential baskets

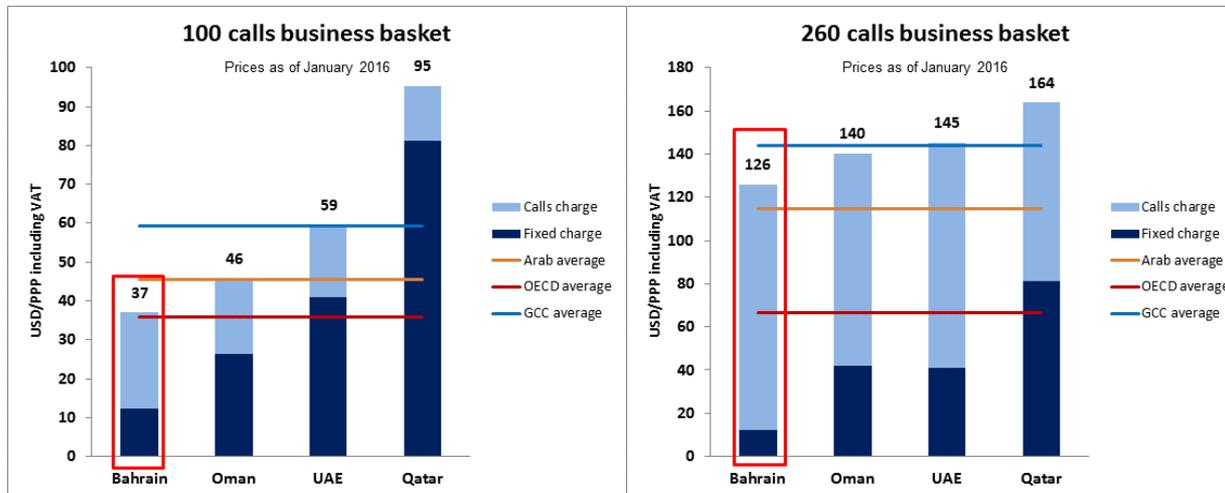
- Bahrain has the lowest fixed charge for residential telephone lines, for most baskets, and relatively high calling charges, and is the cheapest GCC country for low usage, while the ranking moves towards the middle of the GCC countries as usage increases.
- The Batelco tariff with unlimited on-net calls benefits higher usage baskets. Many of the other GCC countries already have lower or “free” fixed line calls.



As in the main benchmarking report Mauritania is excluded from the Arab average.

## PSTN business baskets

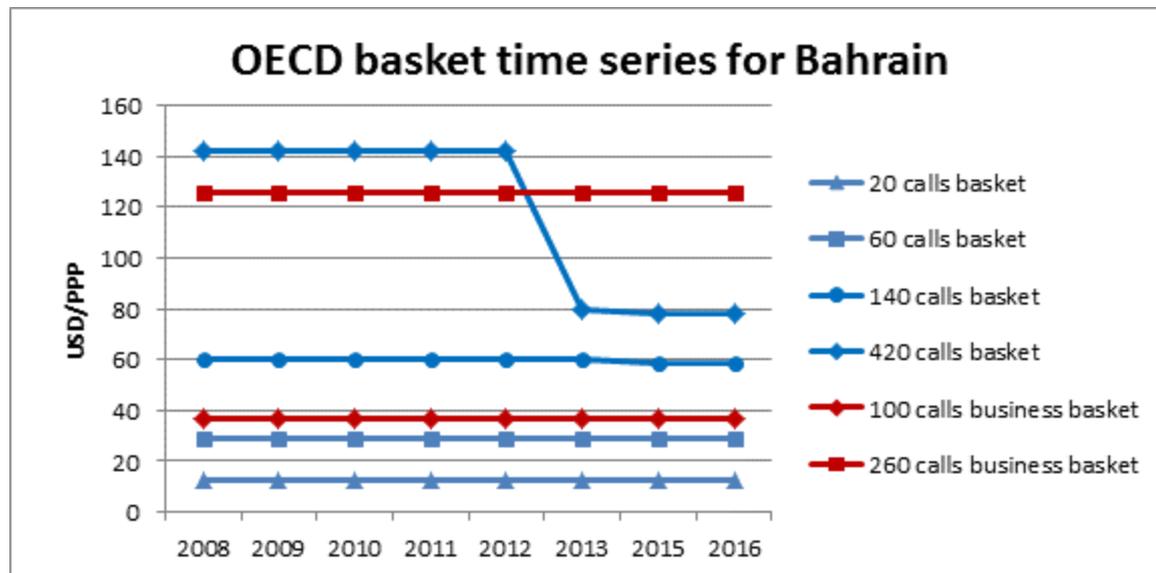
- 📞 Bahrain has the lowest fixed charge for business telephone lines, and relatively high calling charges (especially for domestic fixed-to-fixed calls).
- 📞 Bahrain is performing well for low usage, e.g. for the low call basket (100 calls).
- 📞 Bahrain is also the most competitive country among the GCC for the high call basket (260 calls).
- 📞 Usage charges will escalate faster with usage in Bahrain than in the other countries, meaning that for usage above approx. 500 calls Bahrain will be more expensive than some of the other countries.
- 📞 Little has changed since last update, except for price increases in UAE.



As in the main benchmarking report Mauritania is excluded from the Arab average.

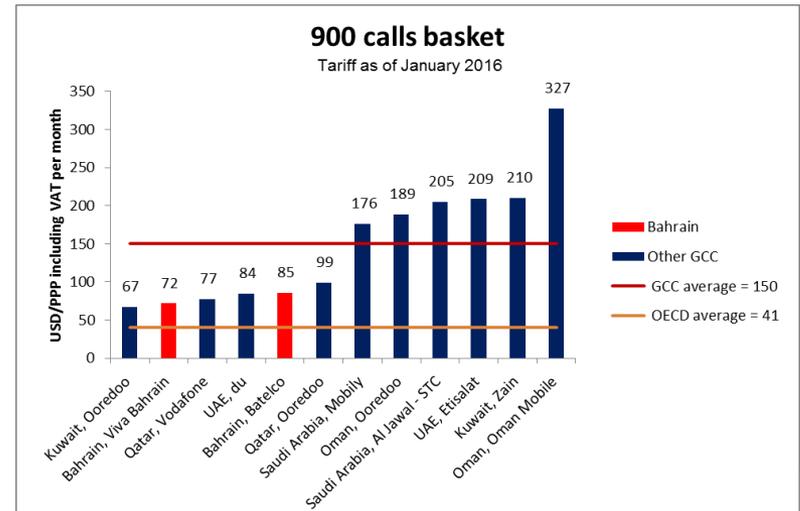
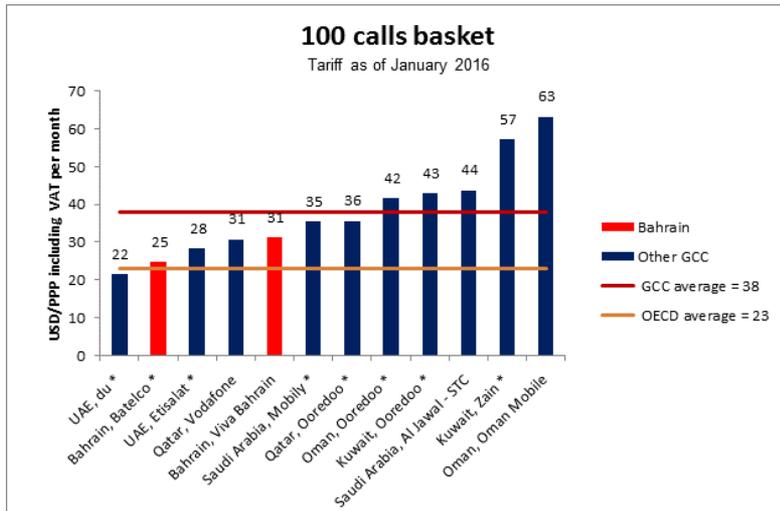
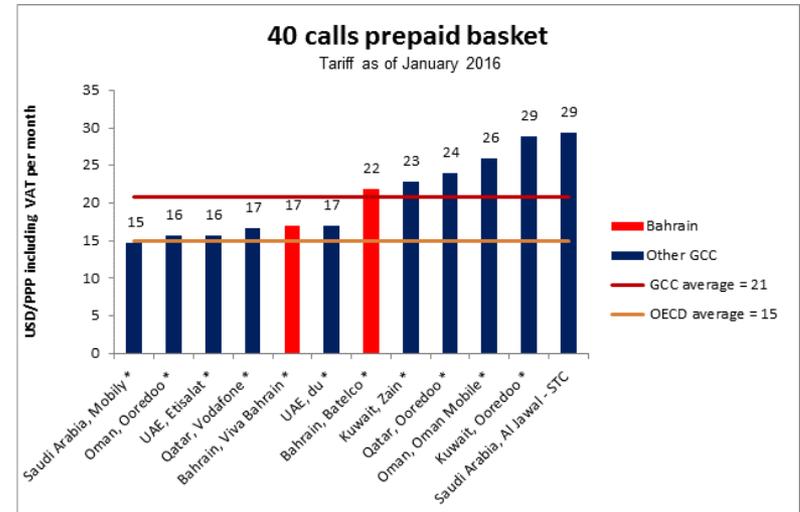
## PSTN baskets results time series for Bahrain

- ❗ PSTN pricing in Bahrain has been static since 2008 for most users. The introduction of an unlimited calling option for residential customers has resulted in a sharp fall in costs in 2013 for the high usage residential basket.
- ❗ Prices have remained competitive during this time, compared to other GCC countries.



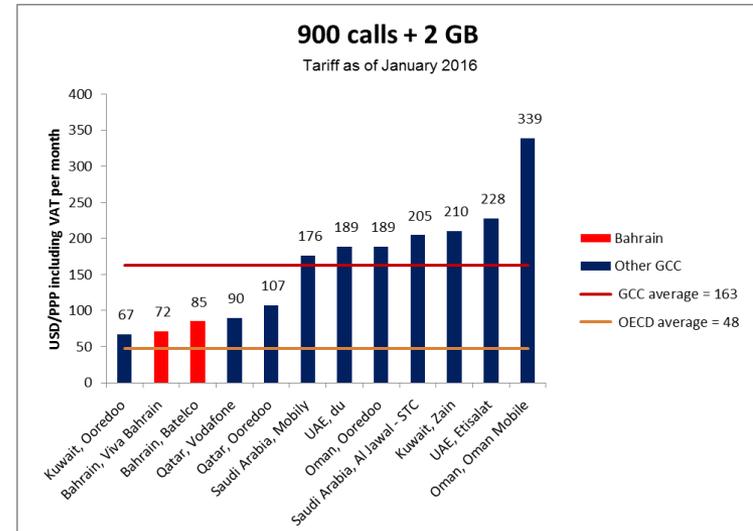
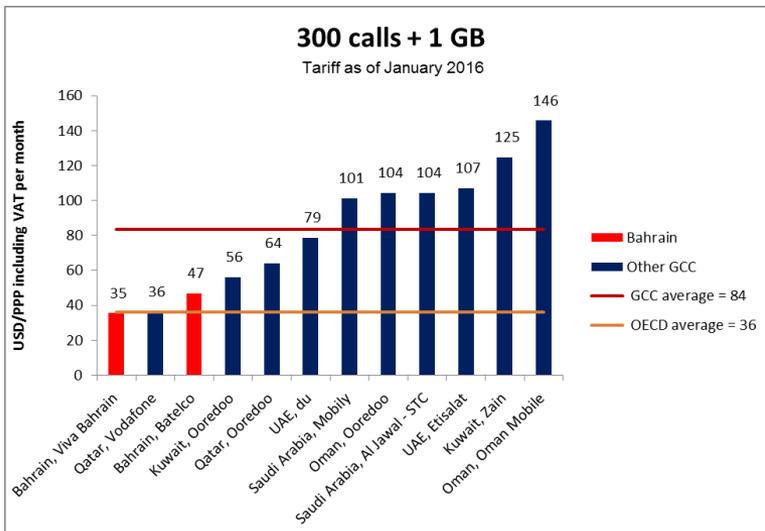
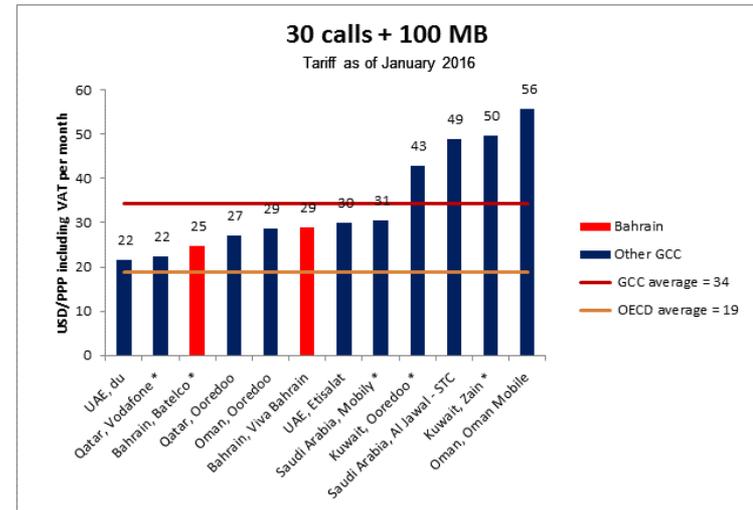
## Mobile baskets without data

- Bahraini operators typically lie below the GCC average across the mobile baskets.
- Bahrain, and in general, most of the GCC providers are much closer to the OECD average for lower usage baskets. For higher usage baskets, Bahrain and the providers in GCC countries are significantly above the OECD average.



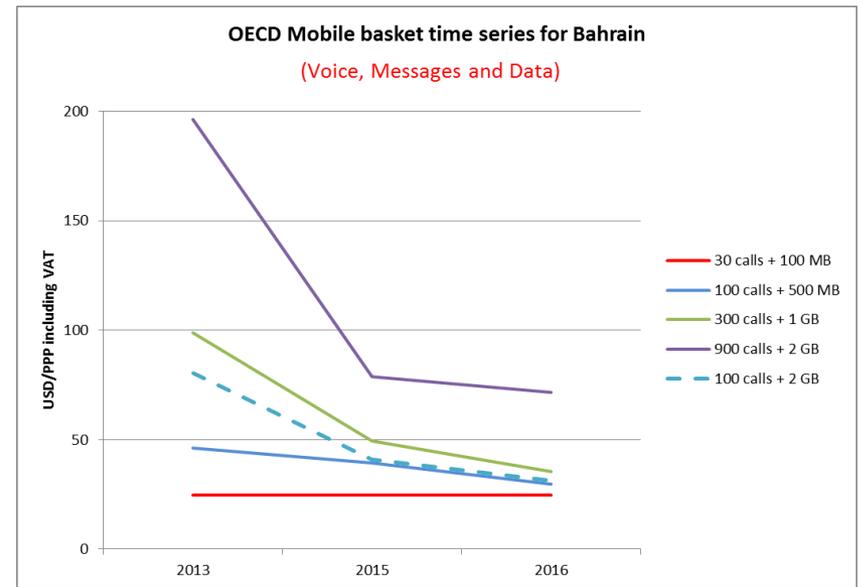
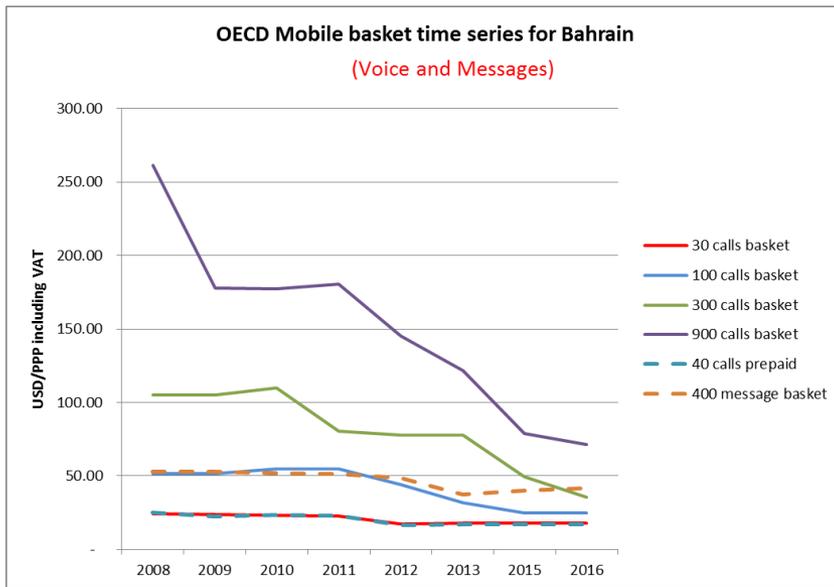
## Mobile baskets with data

- Bahraini operators typically lie close to the OECD average for mobile baskets that include data
- Prices in Bahrain compare favourably with the prices in other GCC countries.
- Prices in Bahrain have gone down since the last update, especially for higher usage.



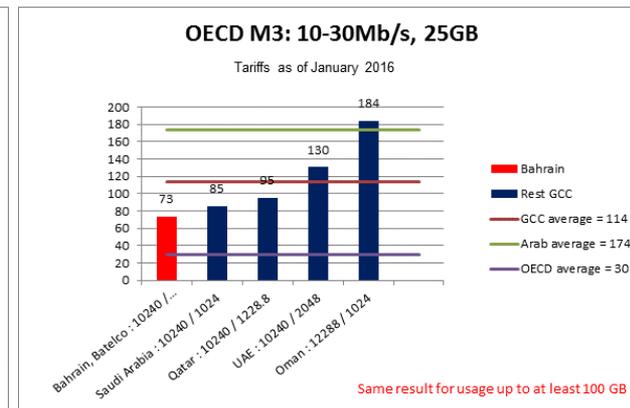
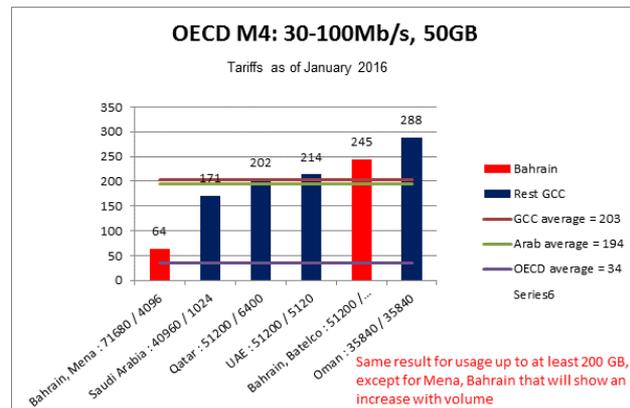
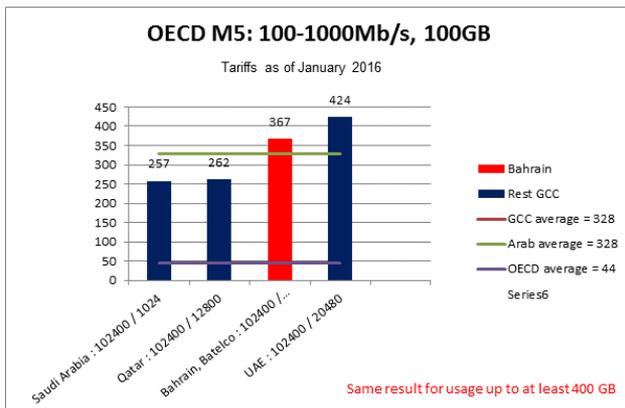
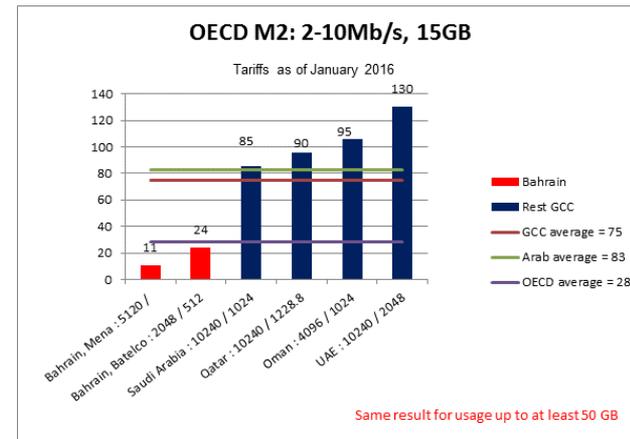
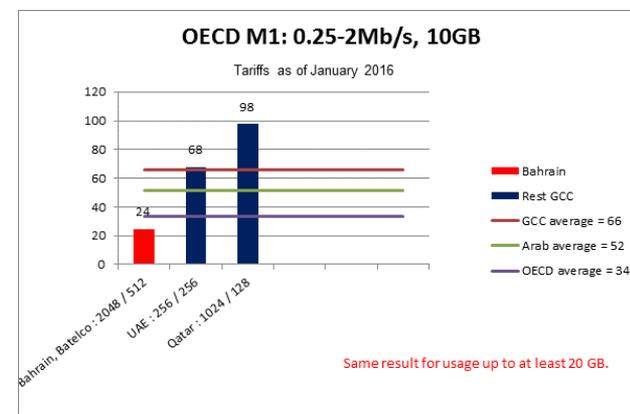
## Mobile baskets results time series for Bahrain

- 📶 Mobile prices in Bahrain have fallen up to 28% on average between 2015 and 2016 and up to 60% over the last five years.
- 📶 For mobile baskets that include data, mobile prices in Bahrain have fallen up to 29% on average between 2015 and 2016 and up to 64% over the last three years.



# Fixed broadband baskets, residential tariffs

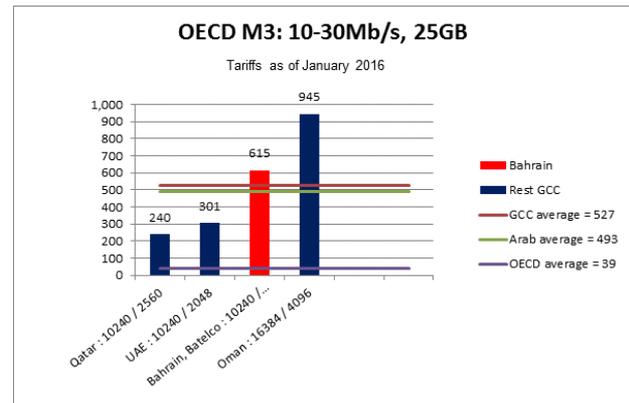
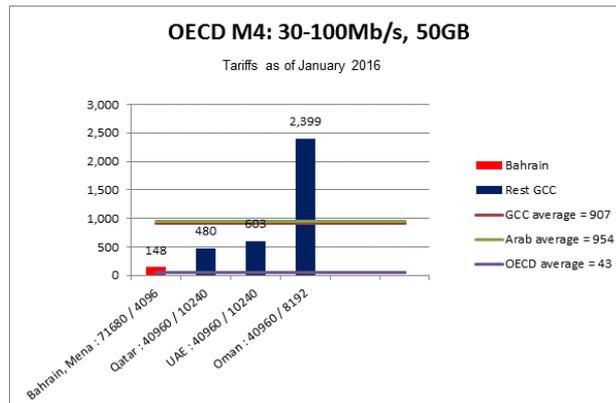
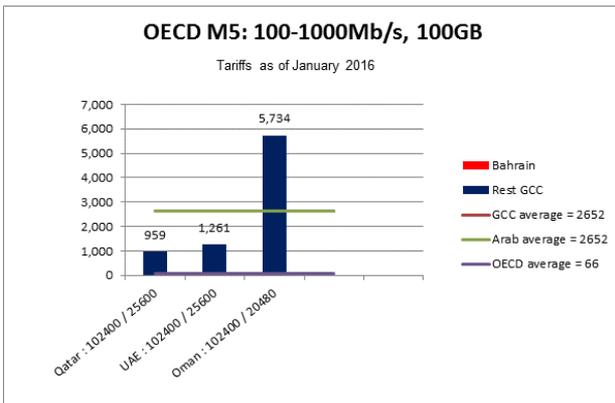
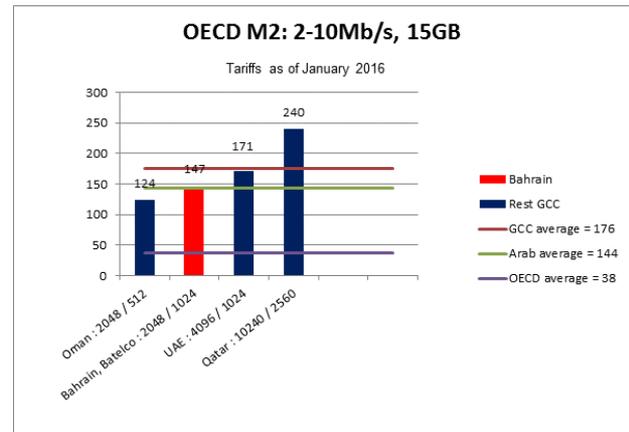
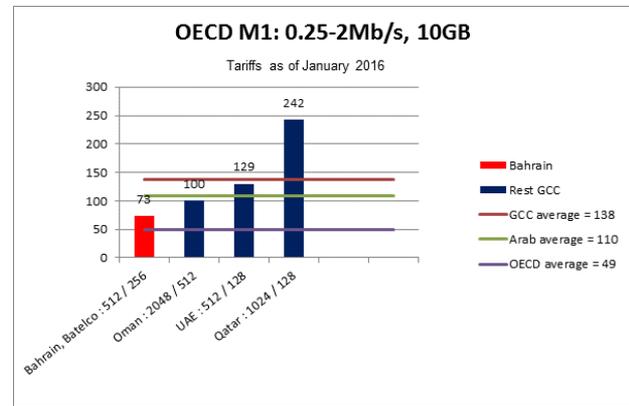
- OECD basket structure has changed, now included specific speed ranges.
- The position of Bahrain varies, depending on the speed of the basket, and the provider.
- For the higher speed basket (>10 Mb/s), the cost for Batelco rises dramatically.
- For all speed ranges but one, the results do not vary with data volume. For 30-100 Mb/s the cost for Mena (Bahrain) services vary significantly with usage.
- The OECD average is significantly lower than both the GCC and Arab averages, particularly for the high speed basket
- The results shown, including average results are for medium usage baskets.
- OECD Medium baskets are used (M1-M5), with increasing speed and usage requirements.





## Fixed broadband baskets, business tariffs

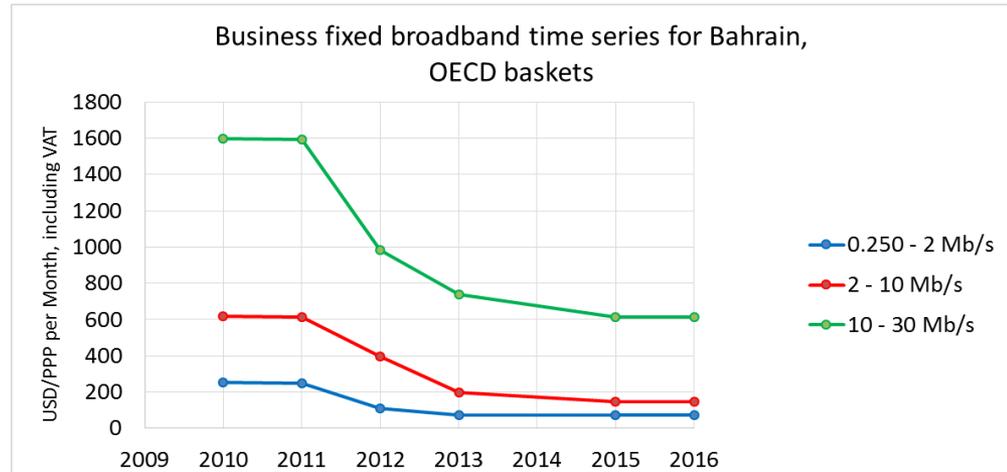
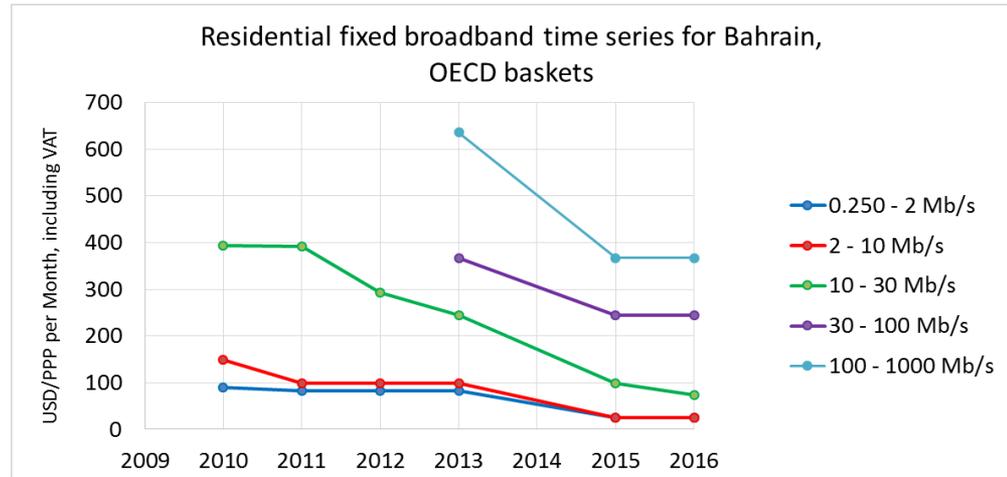
- Similar to the residential tariff basket results, the position of Bahrain varies depending on the provider and the speed of the basket
- The prices for Batelco services increase with speed range
- Due to the nominal speed offered by Mena for their services based on LTE network, these will only appear in the 30-100 Mb/s range, at a very competitive price.
- In general, there is a fundamental difference between prices for business services in Arab and OECD countries.
- The results shown, including average results are for medium usage
- OECD Medium baskets are used (M1-M5), with increasing speed and usage requirements.



Note: Mena services have a nominal speed in the 60-70 Mb/s range. Actual experienced speed may be lower.

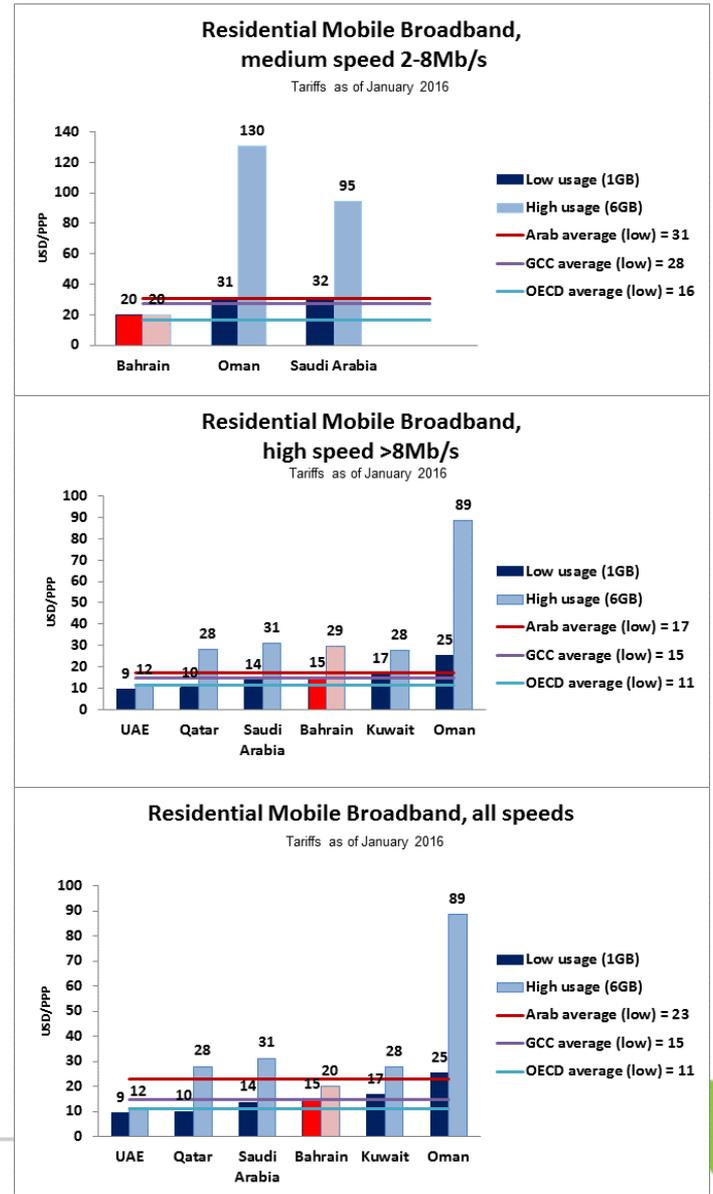
## Fixed broadband baskets results time series for Bahrain

- Residential fixed broadband prices in Bahrain have fallen dramatically across all speed ranges.
  - Up to 25% between 2015 and 2016, and up to 81% over the last five years.
  - There is a fundamental difference in offers from Batelco, which are mainly distinguished by speed, and offers from Mena, which are mainly distinguished by data allowance.
  
- Business fixed broadband prices in Bahrain have fallen significantly since the last update.
  - On average a drop of 0% in the last 7 months, and 76% since 2011.



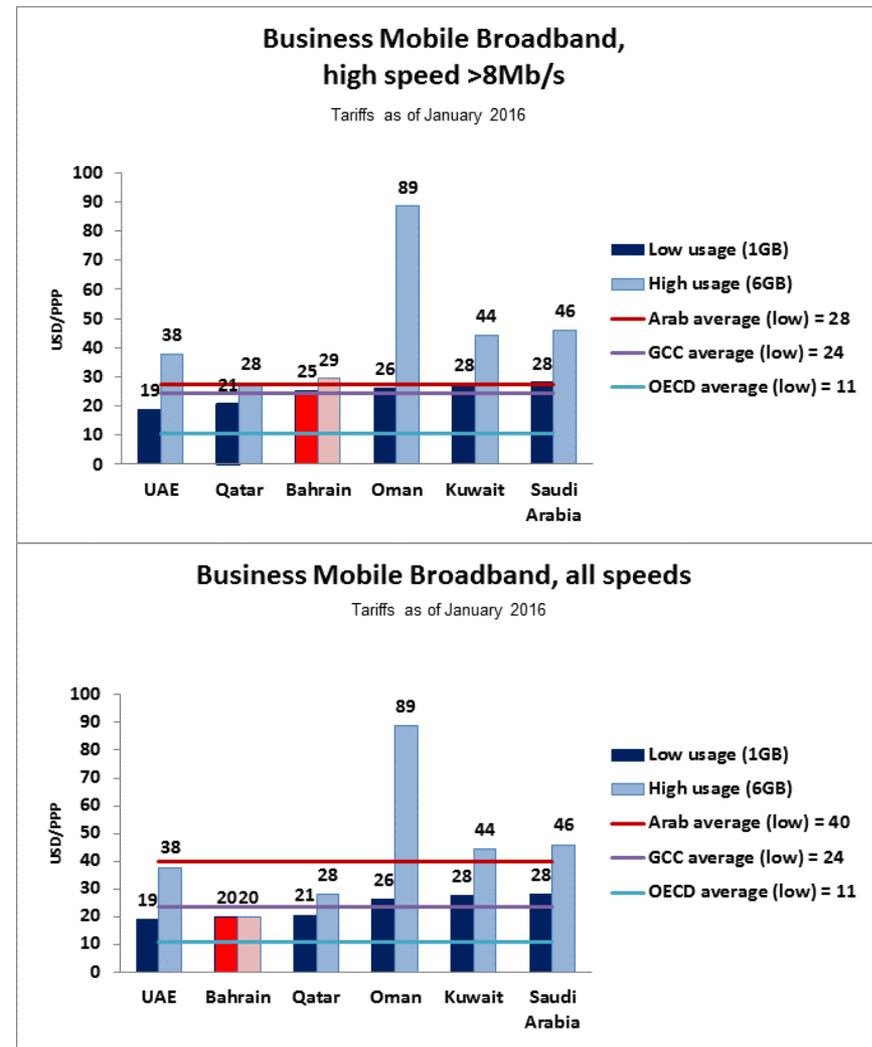
## Mobile broadband baskets, residential tariffs

- At the medium speed (2-8 Mb/s), Bahrain is the cheapest of GCC for low usage and high usage. Price for high usage is now same as for low usage.
- For the high speed (>8 Mb/s) baskets, Bahrain is the fourth cheapest of the GCC countries for low usage, and fourth for high usage.
- When all speeds are considered, Bahrain is the fourth cheapest for low usage and second for high usage, and is on par with several other GCC countries.
- The OECD average is lower than the Arab average and the GCC average. When all service speeds are considered, the average cost of mobile broadband in GCC countries is on par with OECD average.
- Bahrain typically compares favorably against the OECD average at all speeds and usage levels.



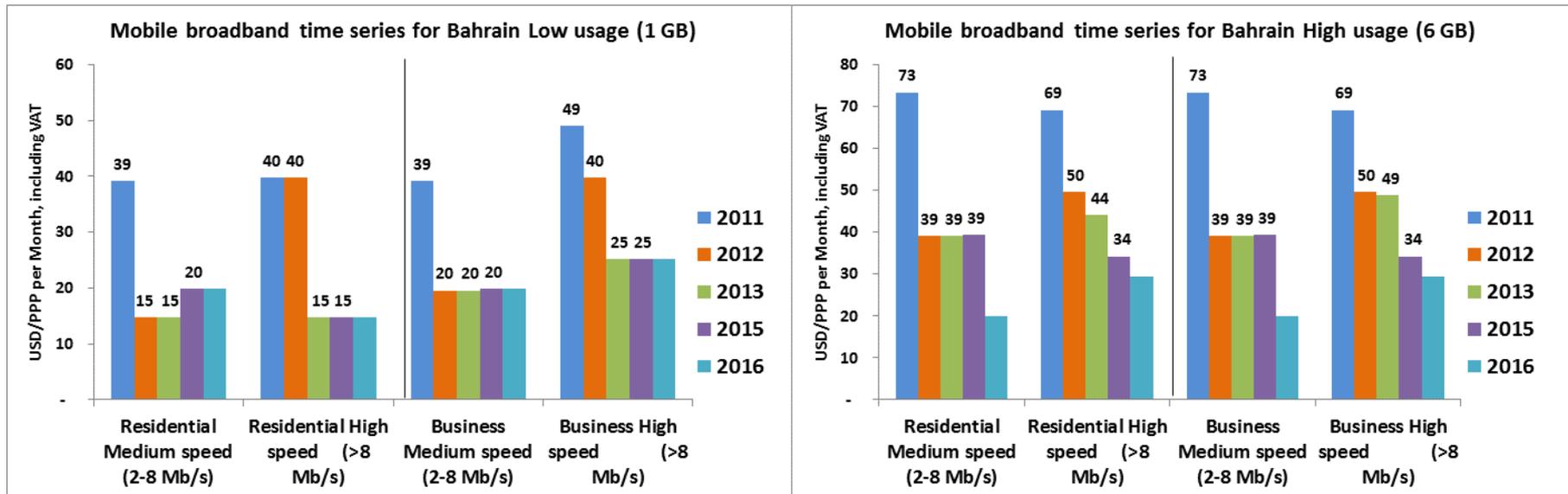
## Mobile broadband baskets, business tariffs

- Bahrain is generally very competitive among the GCC countries for mobile broadband.
- For the high speed basket, low usage, Bahrain is the third cheapest country, but improves in the rankings for high usage.
- When all speeds are considered, Bahrain is the second cheapest country for low usage, and the cheapest for high usage.
- Bahrain has the lowest cost increase from low to high usage for the high speed services. However, this difference is a result of a switch from one provider to another, and cannot be easily realized by a real user.



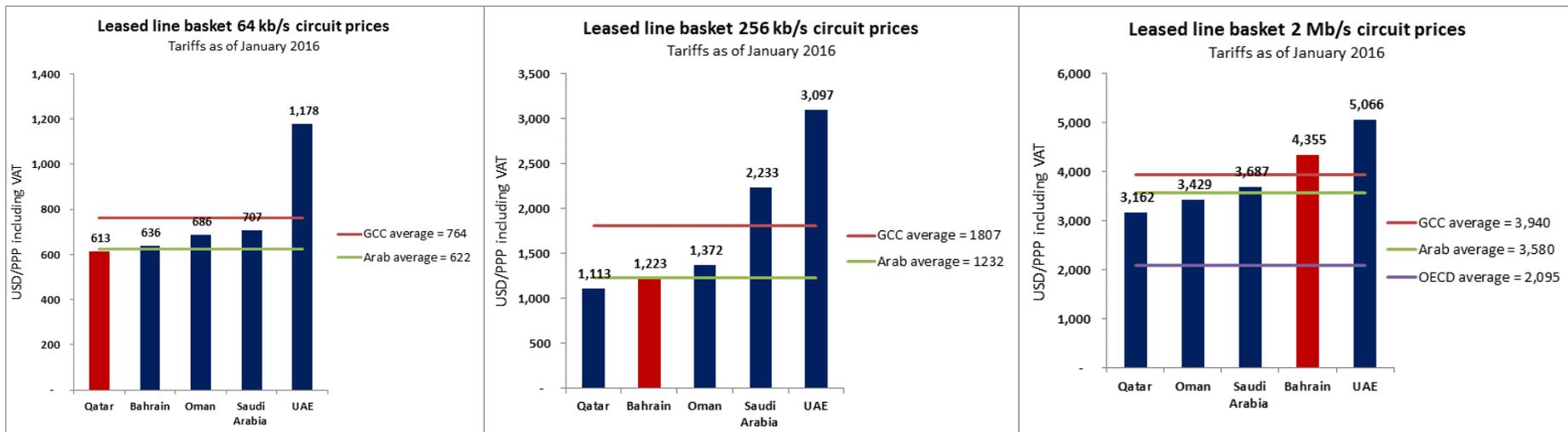
## Mobile broadband baskets results time series for Bahrain

- 📶 Mobile broadband prices in Bahrain have fallen up to 50% on average between 2015 and 2016 and up to 73% over the last five years.
- 📶 The lowest price services generally cost about half of what they did four years ago.
- 📶 The cheapest high usage services have reduced in price since last update.



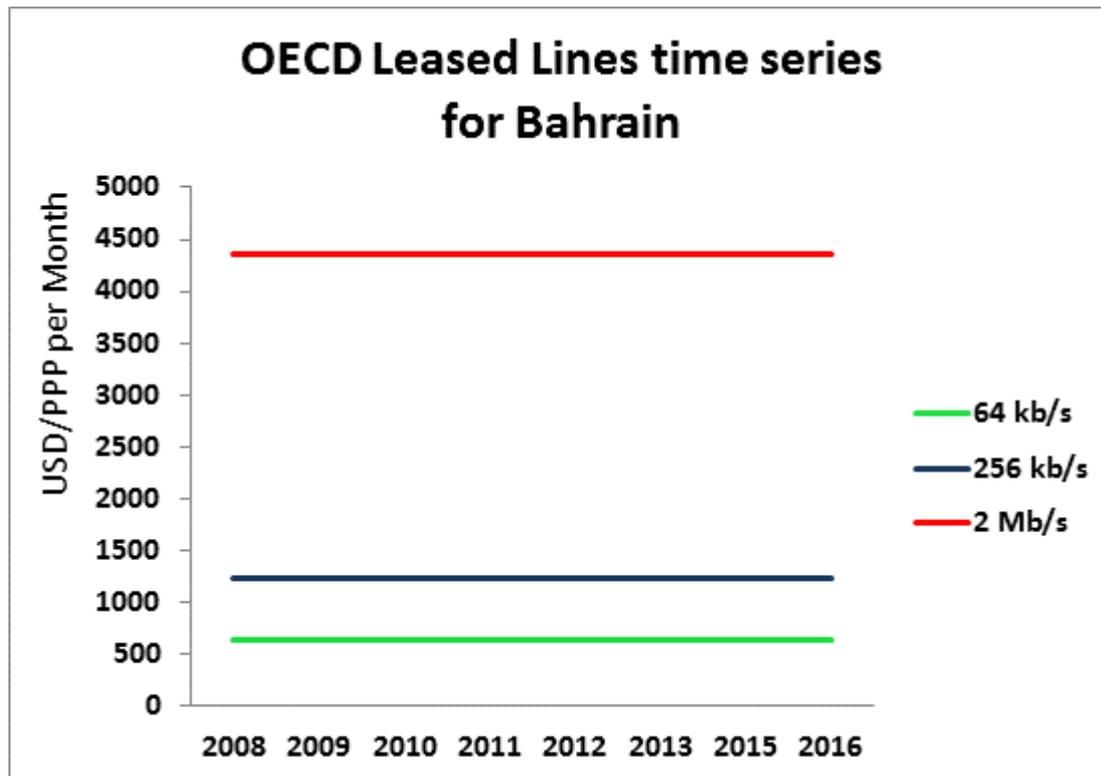
## Leased line baskets

- 📶 The position of Bahrain among its peers varies, depending on the speed of the circuit
- 📶 For the 64 Kb/s basket, Bahrain is the cheapest of the GCC countries.
- 📶 For the 256 kb/s basket, Bahrain is the second cheapest amongst the GCC countries.
- 📶 For the 2 Mb/s basket, Bahrain is the second most expensive of the GCC countries.
- 📶 Prices for circuits above 2 Mb/s are not available for Bahrain



## Leased lines baskets results time series for Bahrain

- As is the case in most of the GCC countries, the prices for leased lines in Bahrain have not changed since first Arab Price Benchmarking Study in 2008
- A similar trend has been observed in many OECD countries



## Residential aggregate basket analysis

A simple aggregation of services for residential use has been constructed, based on three separate usage profiles, as follows:

Low user: low usage across fixed and mobile voice, and with a requirement for only basic fixed broadband

PSTN	Mobile voice	Fixed broadband
20 calls	30 calls + 100MB	L2: 2-10Mb/s, 5GB

Medium: a user who makes modest use of fixed and mobile voice and broadband services

PSTN	Mobile voice	Fixed broadband	Mobile broadband
60 calls	100 calls + 500MB	L3: 10-30Mb/s, 10GB	all speeds, low usage

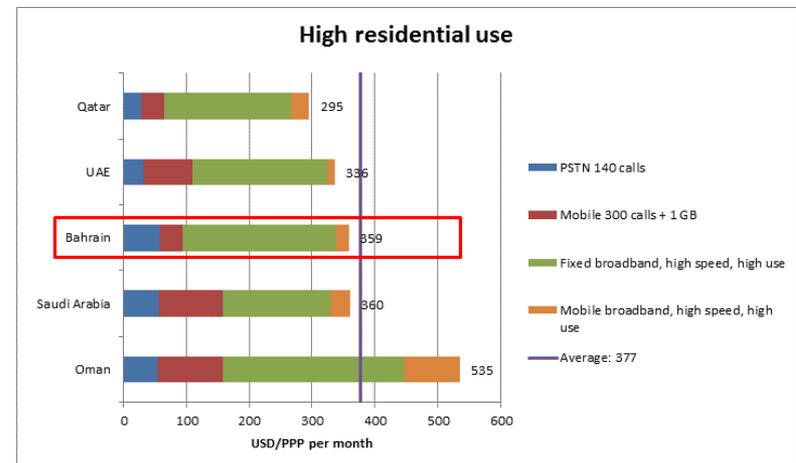
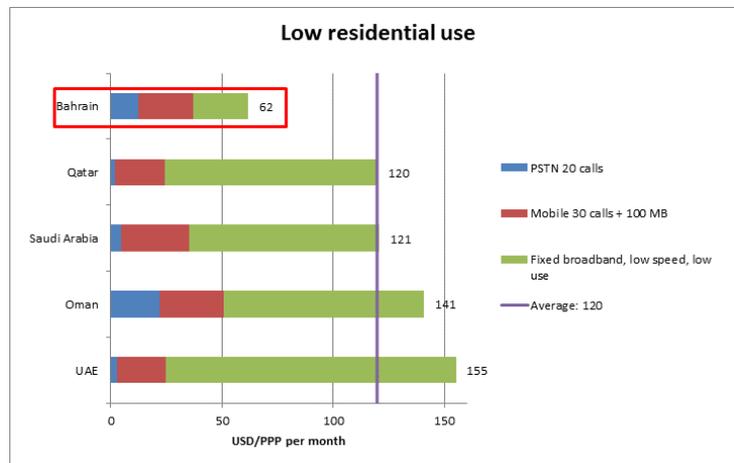
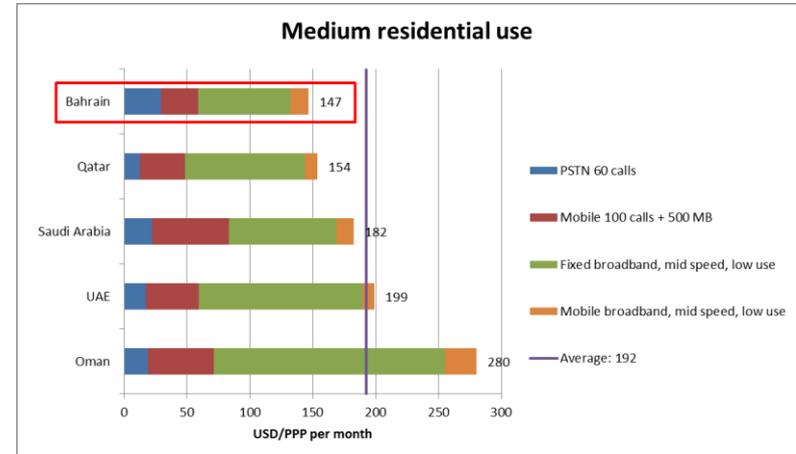
High: a more intensive user, with high use of services, and with a requirement for higher broadband speeds than a medium user

PSTN	Mobile voice	Fixed broadband	Mobile broadband
140 calls	300 calls + 1GB	H4: 30-100Mb/s, 200GB	all speeds, high usage

Each user profile has been costed by taking the result for each individual service basket, and summing to produce a total cost. This is a relatively simplistic method for considering multiple service use, however, it provides an indication of likely overall costs that different types of users will face.

## Residential aggregate basket results

- Bahrain is the cheapest country in the GCC for the low usage aggregate basket.
- This position changes when usage increases.



## Business aggregate basket analysis

Similar to the approach for residential use, a simple aggregation of services has been constructed for business use, based on two separate usage profiles, as follows:

Medium: a user who makes modest use of fixed and mobile voice and broadband services

PSTN	Mobile voice	Fixed broadband	Mobile broadband
100 calls (business)	100 calls + 500MB	L2: 2-10Mb/s, 5GB	all speeds, low usage

High: a more intensive user, with high use of services, and with a requirement for higher broadband speeds than a medium user

PSTN	Mobile voice	Fixed broadband	Mobile broadband
260 calls (business)	300 calls + 1GB	M3: 10-30Mb/s, 25GB	all speeds, high usage

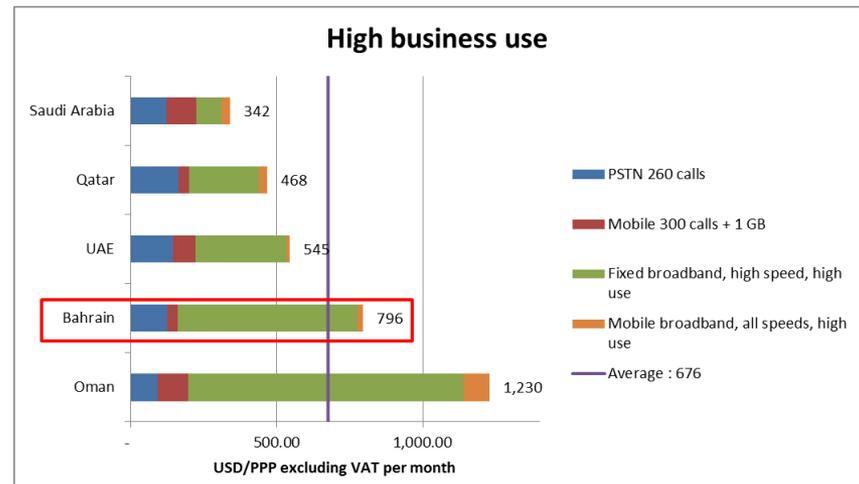
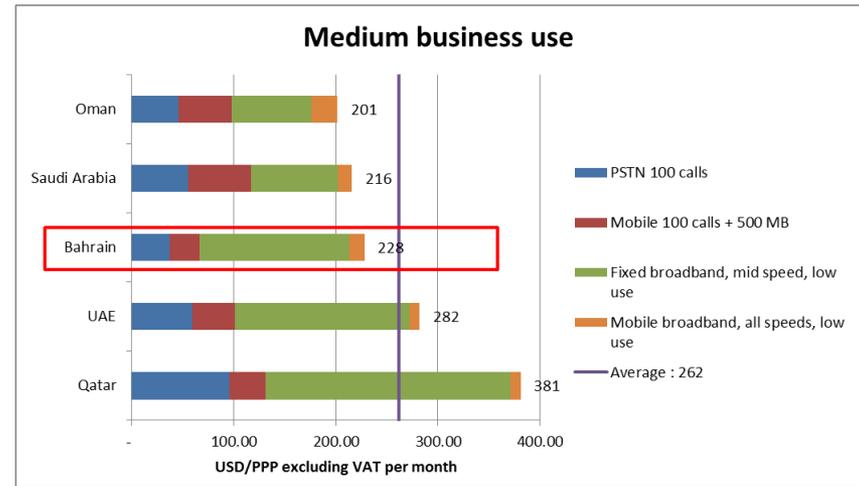
The business profiles are similar to the residential profiles but use the business baskets (and business pricing) for fixed voice, and business pricing for fixed broadband. As many business users will use residential services for mobile, the results used for mobile voice and broadband services consider both business and residential offerings.

Each user profile has been costed by taking the result for each individual service basket, and summing to produce a total cost. This is a relatively simplistic method for considering multiple service use, however, it provides an indication of likely overall costs that different types of users will face.

As there are no business-specific fixed plans published for Saudi Arabia, residential services have been used, to ensure it is not entirely excluded from the aggregate analysis.

## Business aggregate basket results

- For medium business use, Bahrain is ranking in the middle of the GCC countries.
- For high business use, Bahrain is the second most expensive country in the GCC, below Oman, but just above the GCC average.
- Due to some business tariffs not being published in Saudi Arabia these gaps have been replaced by residential services, which tend to be cheaper than business services.



Results include any adjustment due to reduced cost where the fixed broadband offer includes fixed voice service.

## 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			*

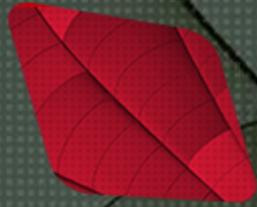
Better than ...	
On par with ...	
More expensive than ...	

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



## Acronyms used in the context of this report

- 📡 OECD: Organisation of Economic Co-operation and Development
- 📡 OECD countries: Australia, Austria, Belgium, Canada, Chile, Czech Rep., Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Rep., Slovenia, Spain, Sweden, Switzerland, Turkey, UK, USA
- 📡 AREGNET: Arab Regulators Network.
- 📡 AREGNET member countries: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, UAE, Yemen
- 📡 PPP: Purchasing Power Parity, exchange rates adjusted for the purchasing power of consumers in each country. Used in international comparisons to adjust for market differences.
- 📡 Service: A telecommunications service
- 📡 Basket: A theoretical usage profile describing the usage volumes across different types of calls and/or different kinds of usage. The basket includes all important elements of the service, including fixed cost elements.
- 📡 Tariff: The description of all the end user prices related to a service
- 📡 Tariff element: The part of a tariff describing the price(s) for a single type of call or service component.
- 📡 Basket calculation: The process where the Basket is applied to the individual tariff in order to calculate the cost of the individual tariff elements and the overall cost.
- 📡 Basket result: The cost of using the service as described in the Basket.
- 📡 Re-balancing: The process through which the prices are changed so that individual Tariff elements will cover their own cost, and not subsidise other Tariff elements.





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

# Bahrain Telecom Pricing

International Benchmarking  
“Old” PPP results summary

April 2017

## Summary of findings, using 2012 PPP values

	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			*

Note: The World Bank has changed their PPP methodology in 2011. The main 2016 report uses the PPPs based on the new methodology. This produces different results versus OECD countries than in previous reports. Please see main report for more details.

Better than ...	
On par with ...	
More expensive than ...	

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