



# 2013 Telecommunications Retail Price Benchmarking Report for Arab Countries

Report from the AREGNET Price Benchmarking Study

April 2014

# Acknowledgements

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Teligen wishes to thank:

- The AREGNET members for feedback and support in the collection of tariff information and to TRA Bahrain for commissioning and coordinating the study on behalf of AREGNET
- The operators who have contributed with additional tariff information

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# Background to the study and basket context

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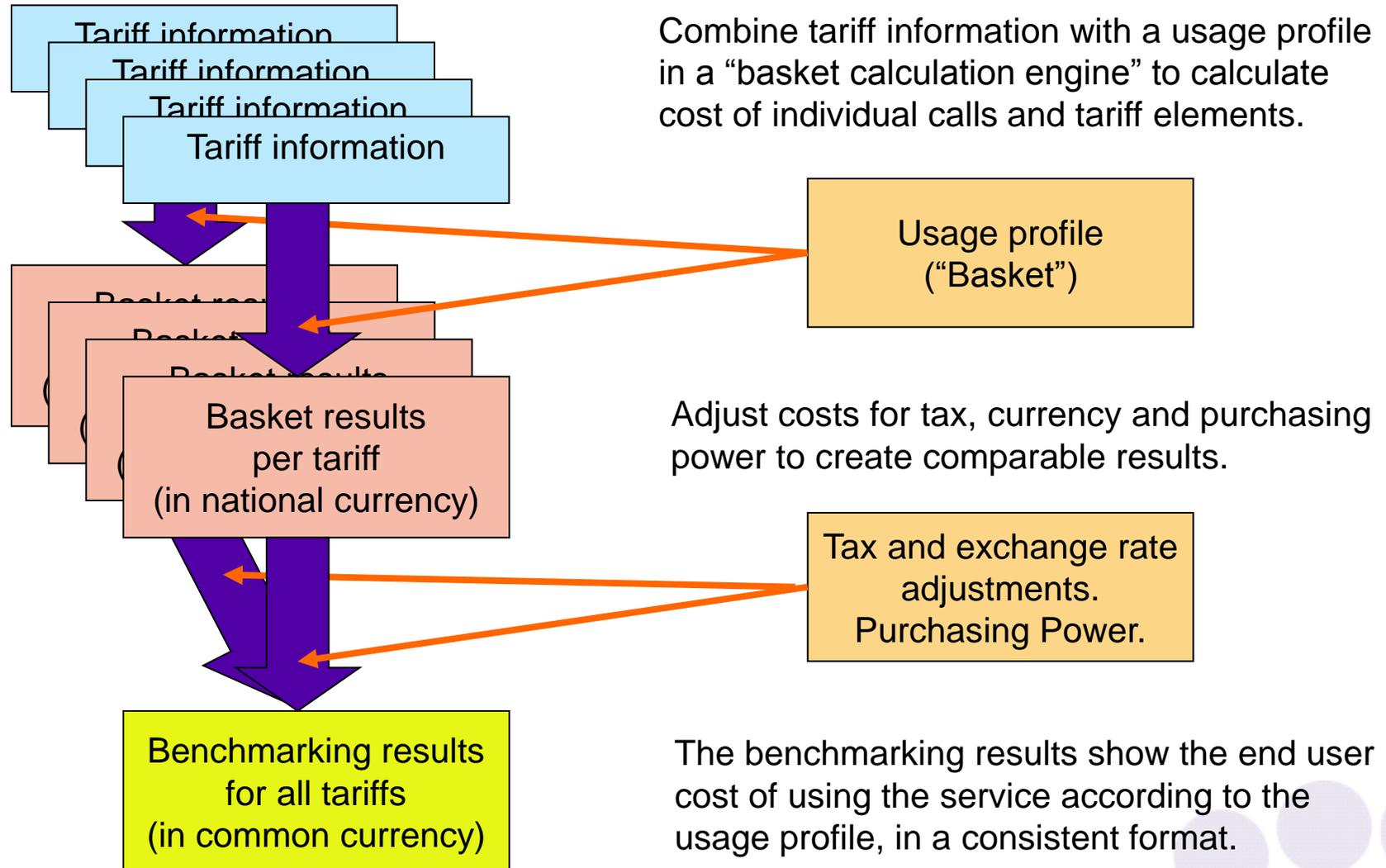
- The benchmarking study was originally initiated by TRA Bahrain in 2008 and updated in 2009, 2010, 2011 and 2012. This update for 2013 was commissioned by TRA Bahrain on behalf of AREGNET.
- In increasingly competitive markets it is important for regulators to be able to track the evolution of prices and analyze the impact of price changes and competition on the effective prices paid by consumers.
- This study allows Arab countries to compare the price levels within and between countries, and also to compare with the OECD countries. To enable such comparisons, this study shows the cost of purchasing 'baskets' of telecommunications services. Additionally, time series data is presented, showing how the cost of such baskets has changed in each country over the period from 2008 to 2013.
- The benchmarking covers the following services:
  - Fixed voice (PSTN) (OECD basket equivalent)
  - Mobile telephony (OECD basket equivalent)
  - Leased Lines (OECD basket equivalent)
  - Broadband ADSL (OECD basket equivalent)
  - Mobile broadband Teligen's T-Wireless basket
  - Call cost for specific types of calls
- The methodologies for fixed and mobile telephony, leased lines and fixed broadband are identical to the OECD Price Benchmarking baskets from 2010, with minor changes. A separate document explaining the methodology used in this study is available.
  - The OECD adopted a new set of Mobile Broadband baskets in 2012, and these are used for the analysis of the mobile broadband services.
  - The mobile voice baskets were also extended to incorporate handset data, and results for these new baskets are covered in this report.
- The data was collected in November 2013 by Teligen from public sources on the Internet, and was subsequently passed to national regulators for comments and checking.

# Comparative Price Level (CPL) and Purchasing Power Parity (PPP)

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- The data presented in the report is presented using purchasing power parities (PPPs), which are used to incorporate both the financial differences between exchange rates, and the differences in the state of the economies as seen through the purchasing power of the citizens in each country.
- In order to create an up to date PPP conversion factor, published Comparative Price Level (CPL) data is used
  - This is described in more depth on page 180 of this report
- The CPL data used for this study has been obtained from the World Bank
- In earlier updates to this study, World Bank CPL data from 2005 was used, as this was the most recent available at the time the updates were prepared.
- The World Bank CPL data also contained some gaps i.e. data for some countries was not available, so assumptions were made as to the likely CPL values for these countries
- For this report, new World Bank CPL data – which is now available for 2012 – has been used
  - The new CPL data addresses some of the gaps and assumptions, and allows for more up-to-date PPP values.
- The PPP values have been applied retrospectively to any historic data presented in this report
  - This is to ensure that any changes observed in the time series are as a result of changes to tariffs
- The output from this report will not necessarily be comparable with previous reports, due to the changes in CPL that have occurred.

# Price benchmarking with “Baskets”



# **PSTN 2013 basket results (using OECD 2010 baskets)**

## Fixed voice (PSTN) data issues

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- Due to lack of published data, and lack of feedback, no data is available for:
  - Comoros
  - Iraq
  - Kuwait
- Part of data is missing for:
  - Yemen (no prices for national calls and fixed line)
  - No business tariffs are available for PSTN in Sudan
- For Syria, calls to mobile are assumed to cost the same as calls to fixed (website does not indicate any differentiation)
- The analysis covers up to 88 tariffs from the incumbent operators in 18 countries



# Fixed voice (PSTN) baskets, 2010 version

- Six different basket definitions:
  - Defined by number of calls per month
  - Residential: 20, 60, 140 and 420 calls per month
  - Business: 100 and 260 calls per month

Calls per month	Total calls	Call distribution			
		Fixed to fixed Local	Fixed to fixed National	Fixed to mobile	International
20 calls basket	20	61%	20%	17%	2%
60 calls basket	60	60%	15%	21%	4%
140 calls basket	140	58%	15%	23%	4%
420 calls basket	420	73%	17%	8%	2%
100 calls business basket	100	48%	19%	30%	3%
260 calls business basket	260	43%	23%	25%	9%

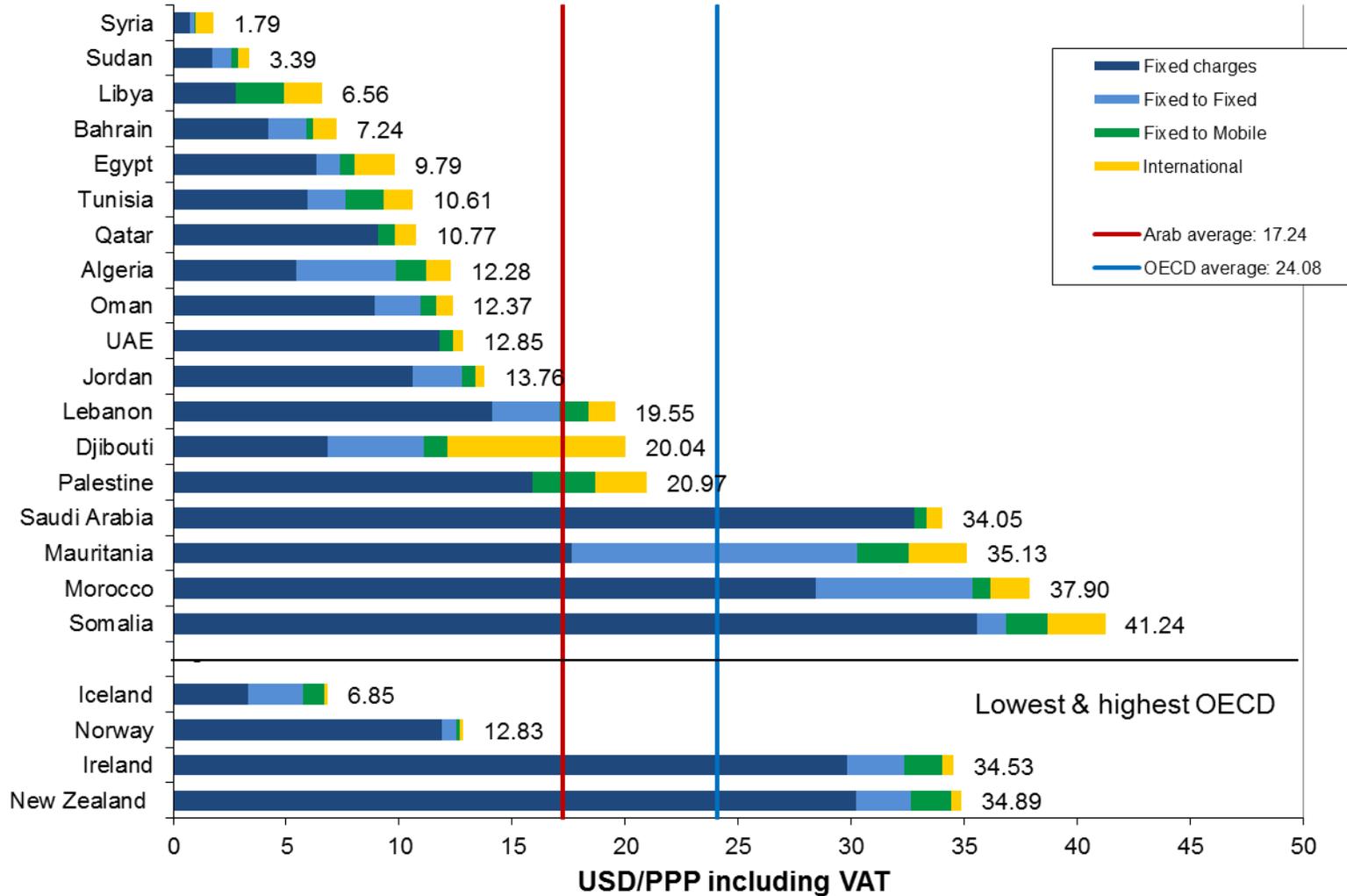
- Tariffs from the incumbent operator in each country
  - Several tariff packages can be covered for each operator
  - The results show the lowest cost option for each operator
- Tariff information included in basket calculation:
  - Fixed charges for installation and rental
  - Usage charges covering local through to national calls, calls to mobiles, and international calls to other AREGNET countries plus a few other destinations



# 20 calls/month, Residential based on 2010 OECD PSTN basket

## 20 calls residential basket

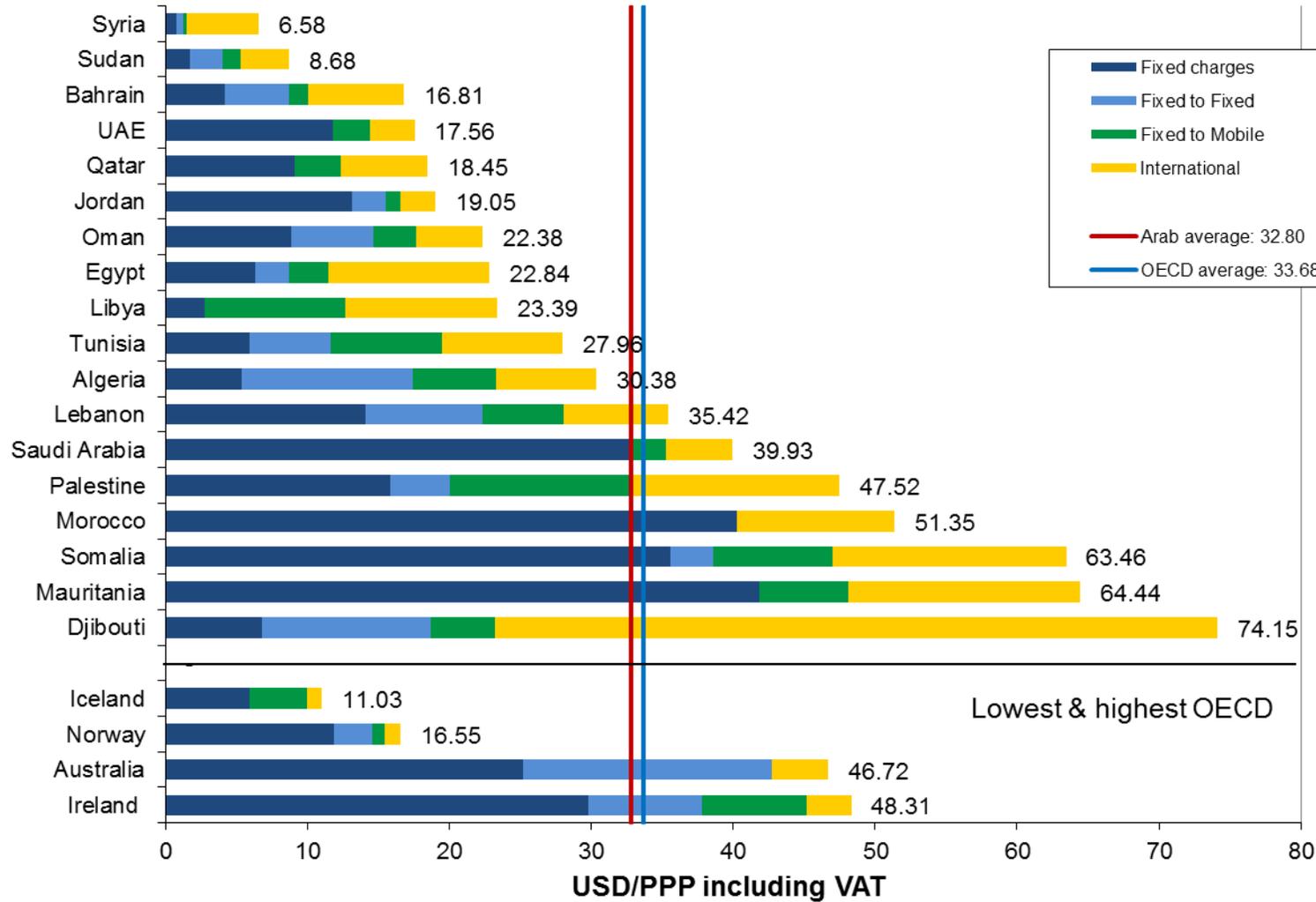
Tariffs as of November 2013



# 60 calls/month, Residential based on 2010 OECD PSTN basket

## 60 calls residential basket

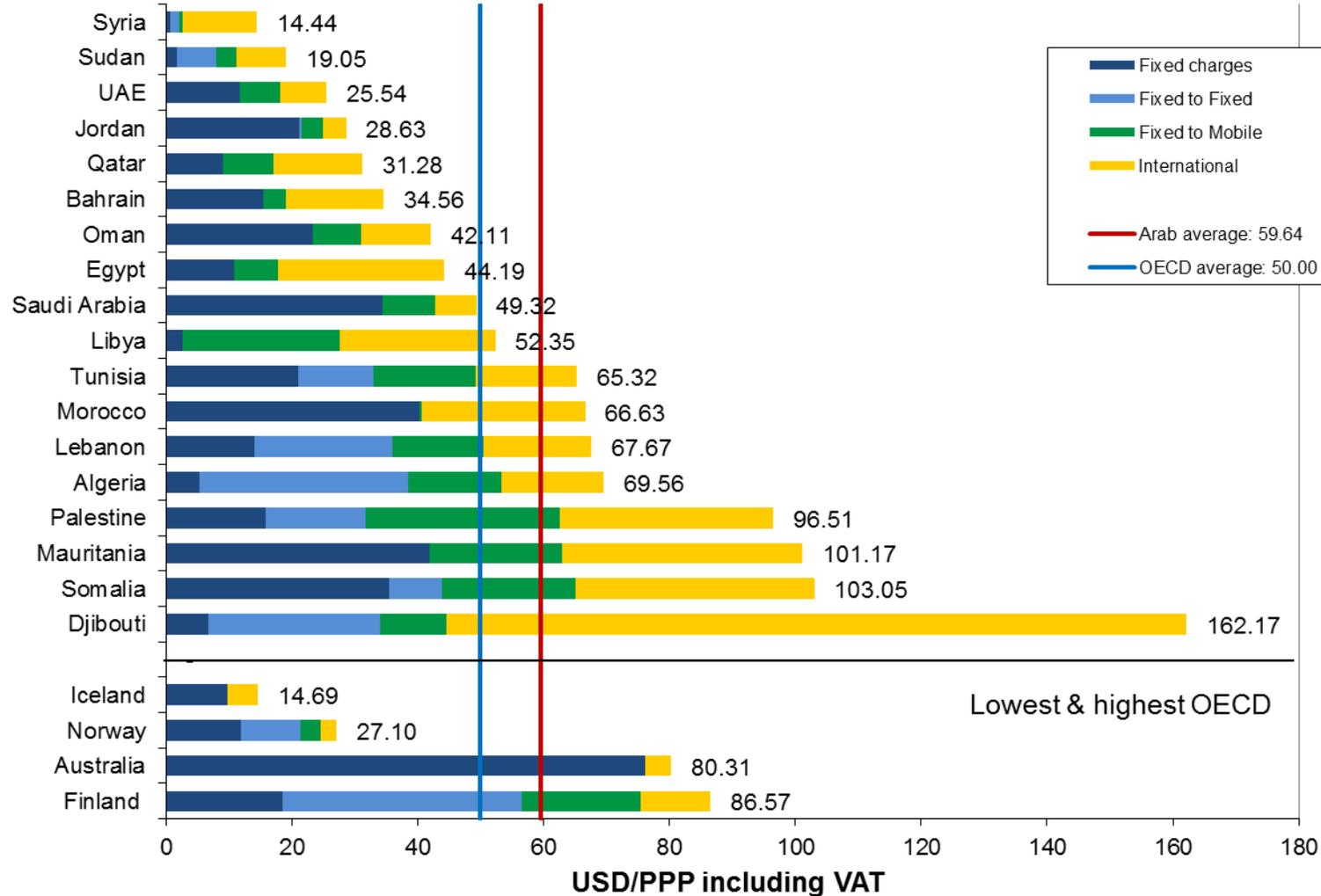
Tariffs as of November 2013



# 140 calls/month, Residential based on 2010 OECD PSTN basket

## 140 calls residential basket

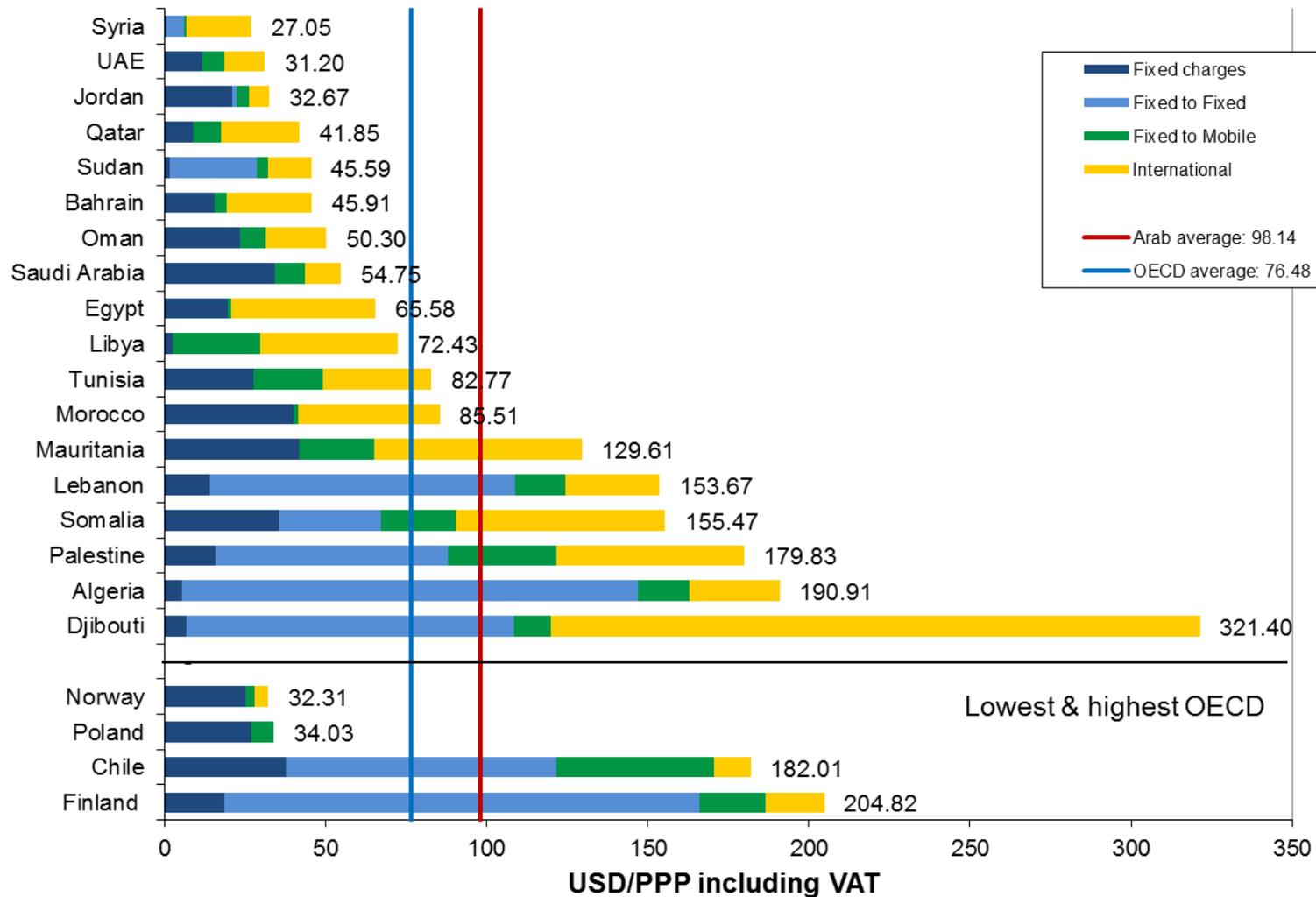
Tariffs as of November 2013



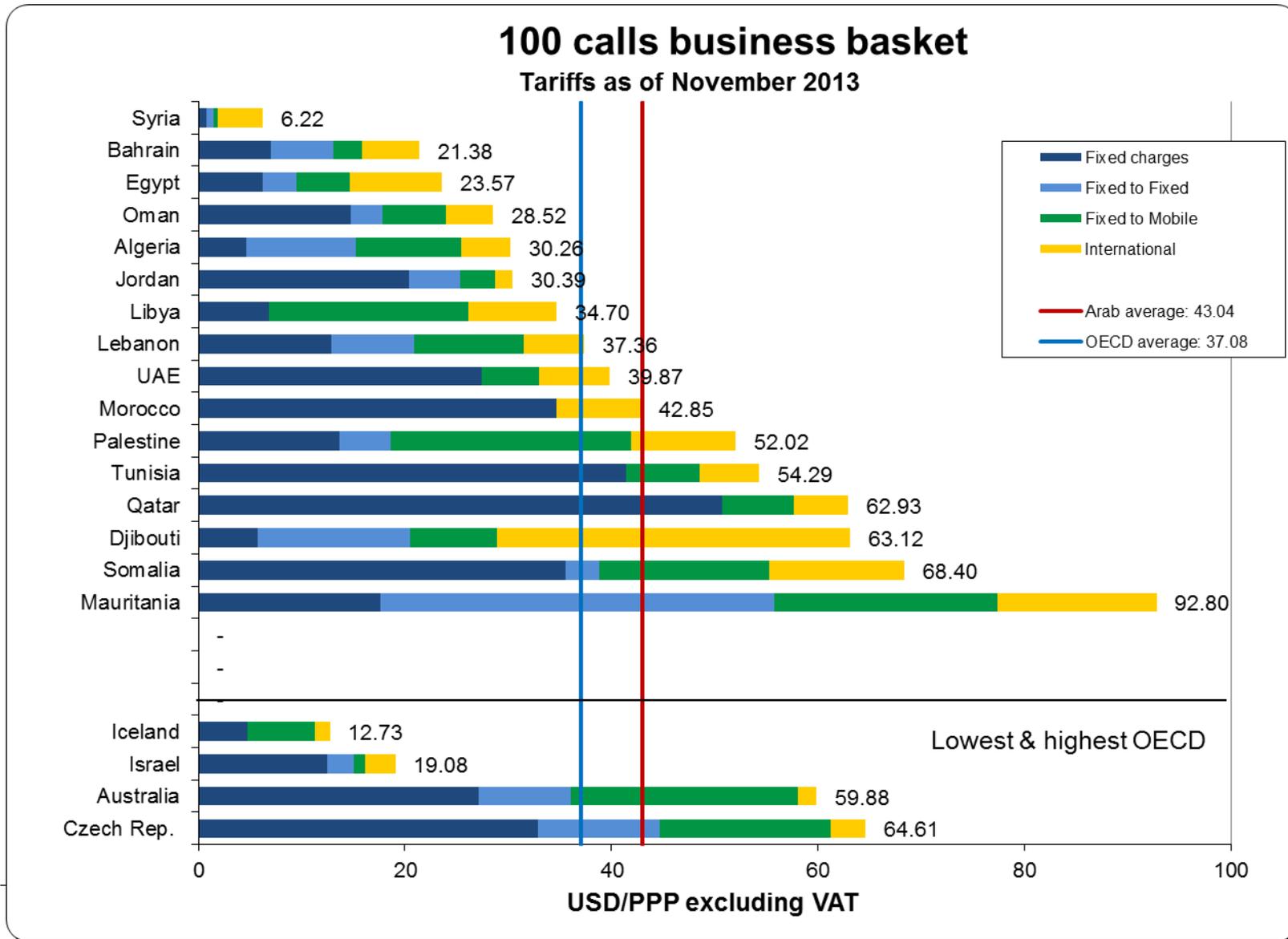
# 420 calls/month, Residential based on 2010 OECD PSTN basket

## 420 calls residential basket

Tariffs as of November 2013



# 100 calls/month, Business based on 2010 OECD PSTN basket

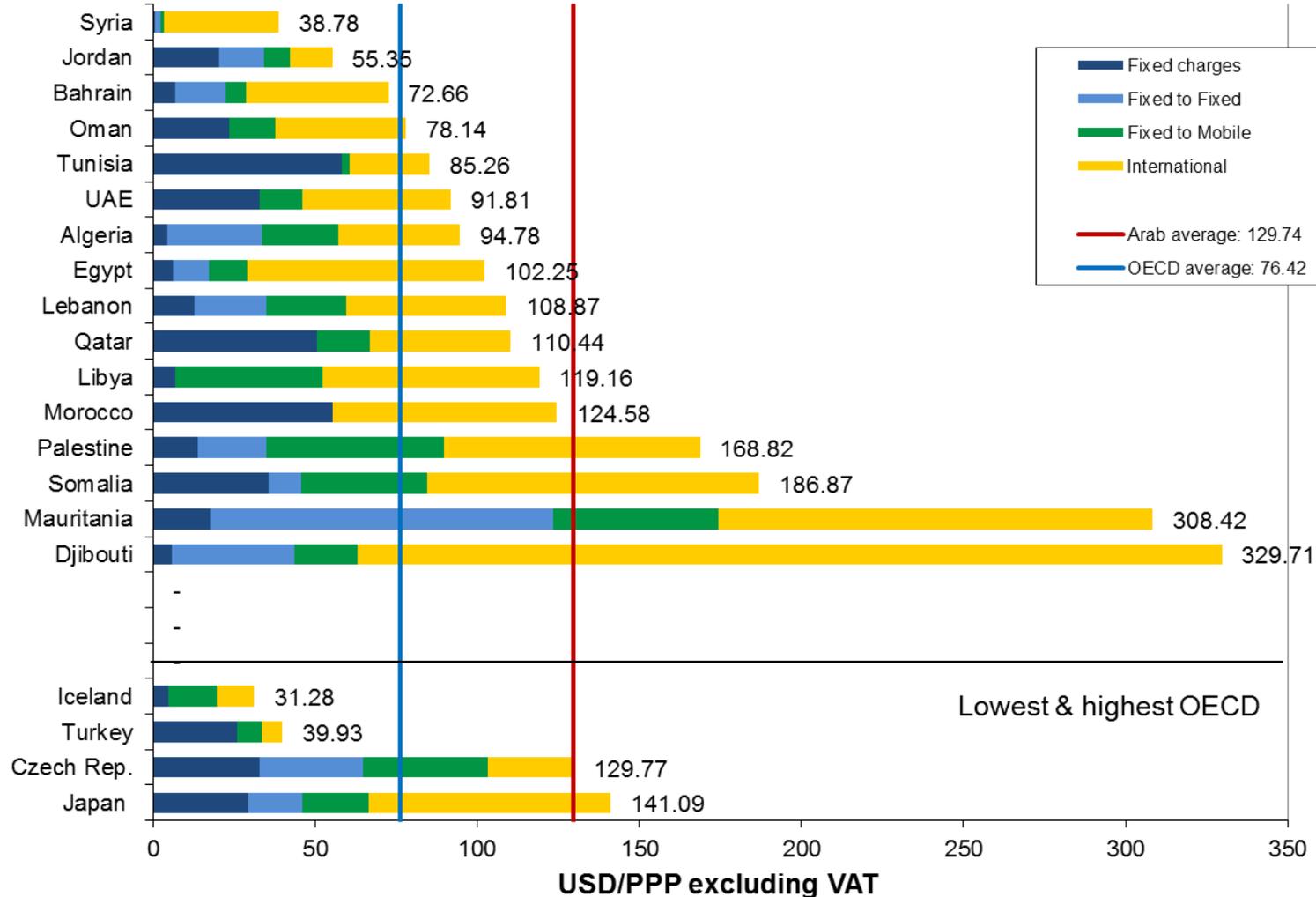


There are no business tariffs for Sudan.



# 260 calls/month, Business based on 2010 OECD PSTN basket

**260 calls business basket**  
Tariffs as of November 2013



There are no business tariffs for Sudan.



# Observations from PSTN basket results

- The cheapest countries throughout are : (\*)
  - Syria, Sudan, Egypt, Jordan and Bahrain
    - The exact order of these may vary with usage level,
    - This list is based on average ranking across all six baskets, residential and business
    - Syria is consistently the cheapest across all baskets, while Sudan, which has no prices for business services, ranks fairly cheaply if we consider residential only services, while Djibouti, Mauritania, Morocco, Palestine and Somalia are consistently among the most expensive.
- Of these cheapest countries, most fall below the OECD average across all the residential baskets, and often significantly so.
- Costs for the business baskets in the Arab countries tend to be above the OECD average, particularly for the highest usage business basket. For the lower usage residential baskets, the Arab average is below the OECD average
- Generally the Arab countries in North Africa are more expensive than the Arab countries in the Middle East.
- As in previous years, the price range for the Arab countries (cheapest to most expensive) is wider than for the OECD countries
  - An increased number of Arab countries are now cheaper than the cheapest OECD country, partly due to price reductions, but also partly due to the updated CPLs which have favoured the Arab countries.. On all baskets, there is at least one Arab country (and sometimes two or three) that are cheaper than the cheapest OECD country. Syria, Jordan, and UAE all feature in this regard.
  - The most expensive Arab country is more expensive than the most expensive OECD country, and significantly so for higher usage baskets
- A number of Arab countries continue to have fixed costs well below the OECD countries, causing the usage element to dominate. This makes the overall cost grow quicker with increasing usage, something that will discourage growth in usage. In some Arab countries, however, both fixed and usage costs are much higher than OECD countries.
- Even where fixed costs are significantly lower, the overall cost of using the service is higher in the Arab countries than in the OECD countries.
- There remains a clear lack of rebalancing in several Arab countries, where the usage revenue covers a significant portion of the fixed line cost for the operators. Notably, some countries appear to have restructured their fixed line plans, with more focus on upfront charges with increased allowances or reduced/free local and national calls. Bahrain, Jordan and UAE are examples where this has happened, and as a result are much more in line, and at times cheaper than many OECD countries.
- International calls remain significantly more expensive than in OECD countries

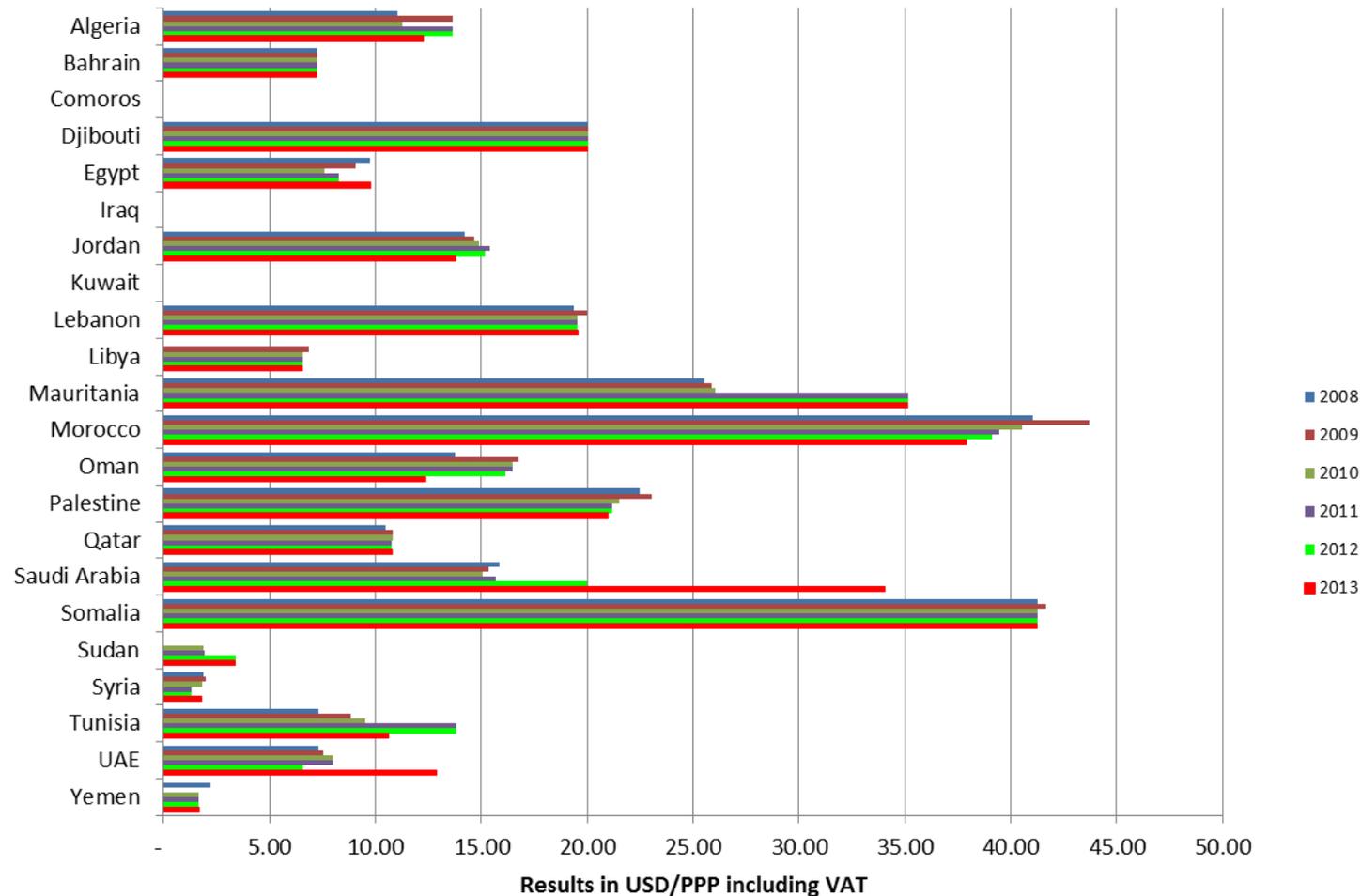


\* Countries with gaps in the tariff information are not considered.

# **PSTN time series analysis (using OECD 2010 baskets)**

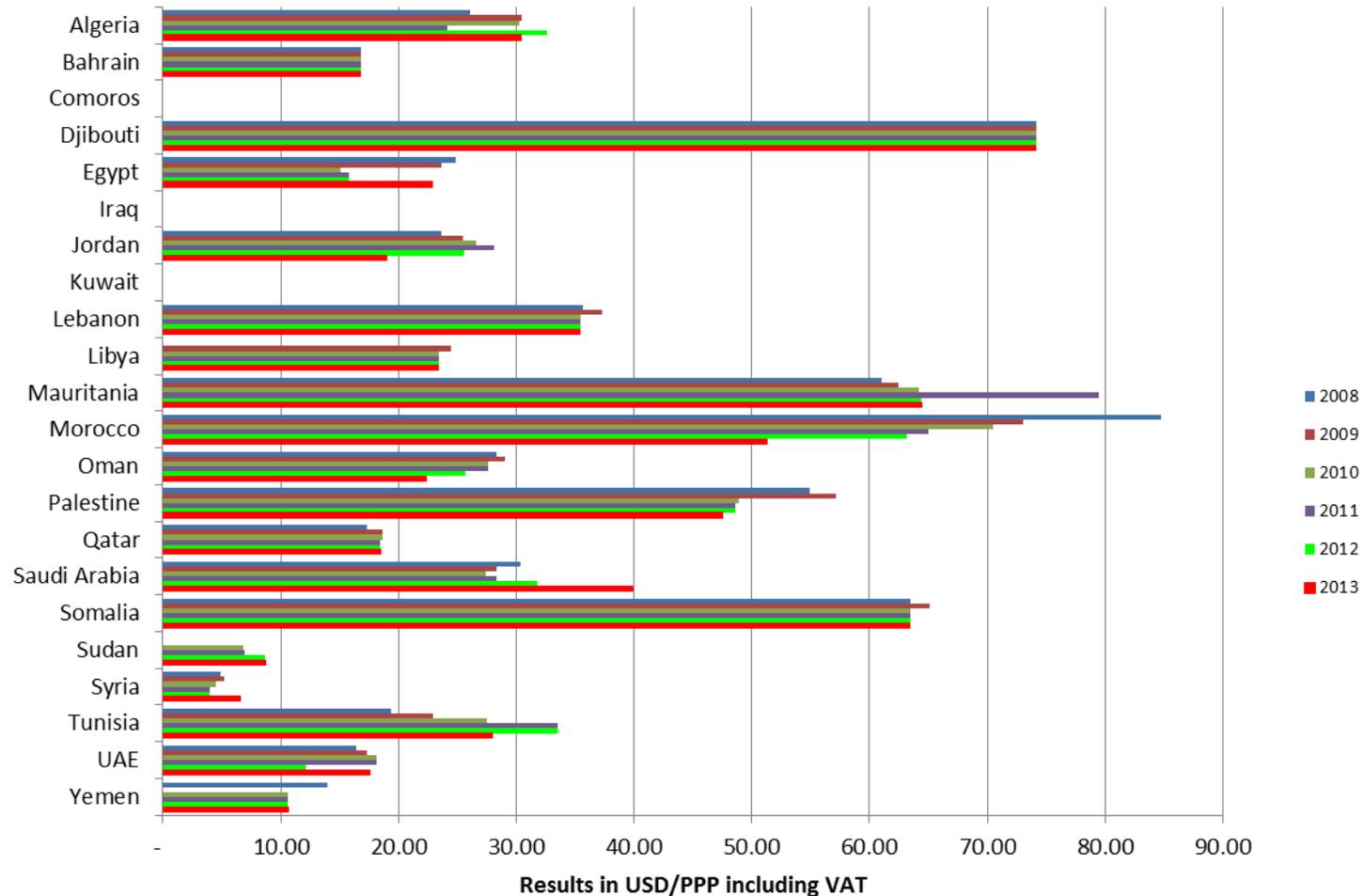
# 2010 OECD PSTN baskets time series, 20 calls/month, residential

**Total results for PSTN - OECD 20 calls 2010 basket, tariffs 2008-2013**



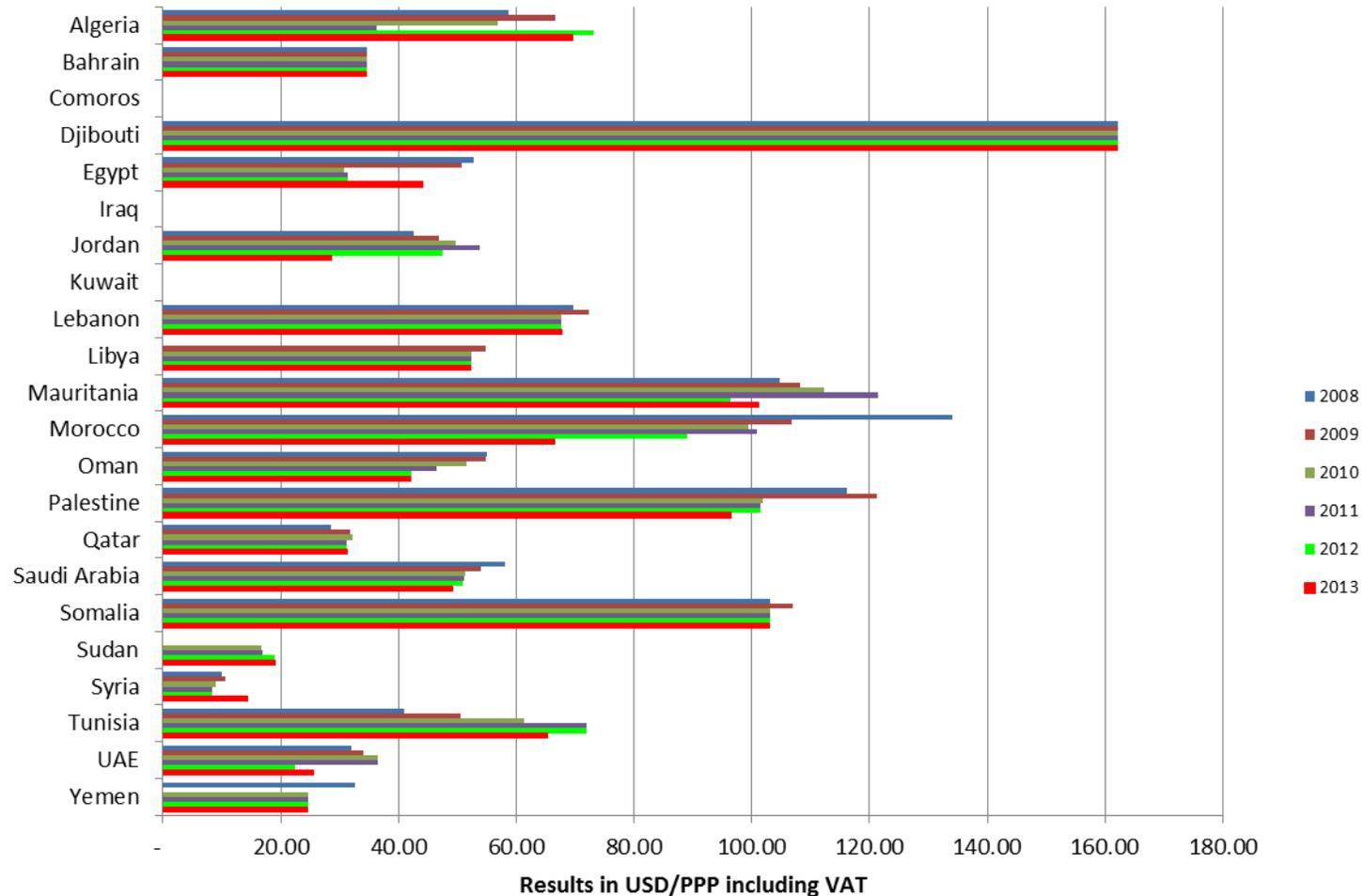
# 2010 OECD PSTN baskets time series, 60 calls/month, residential

**Total results for PSTN - OECD 60 calls 2010 basket, tariffs 2008-2013**



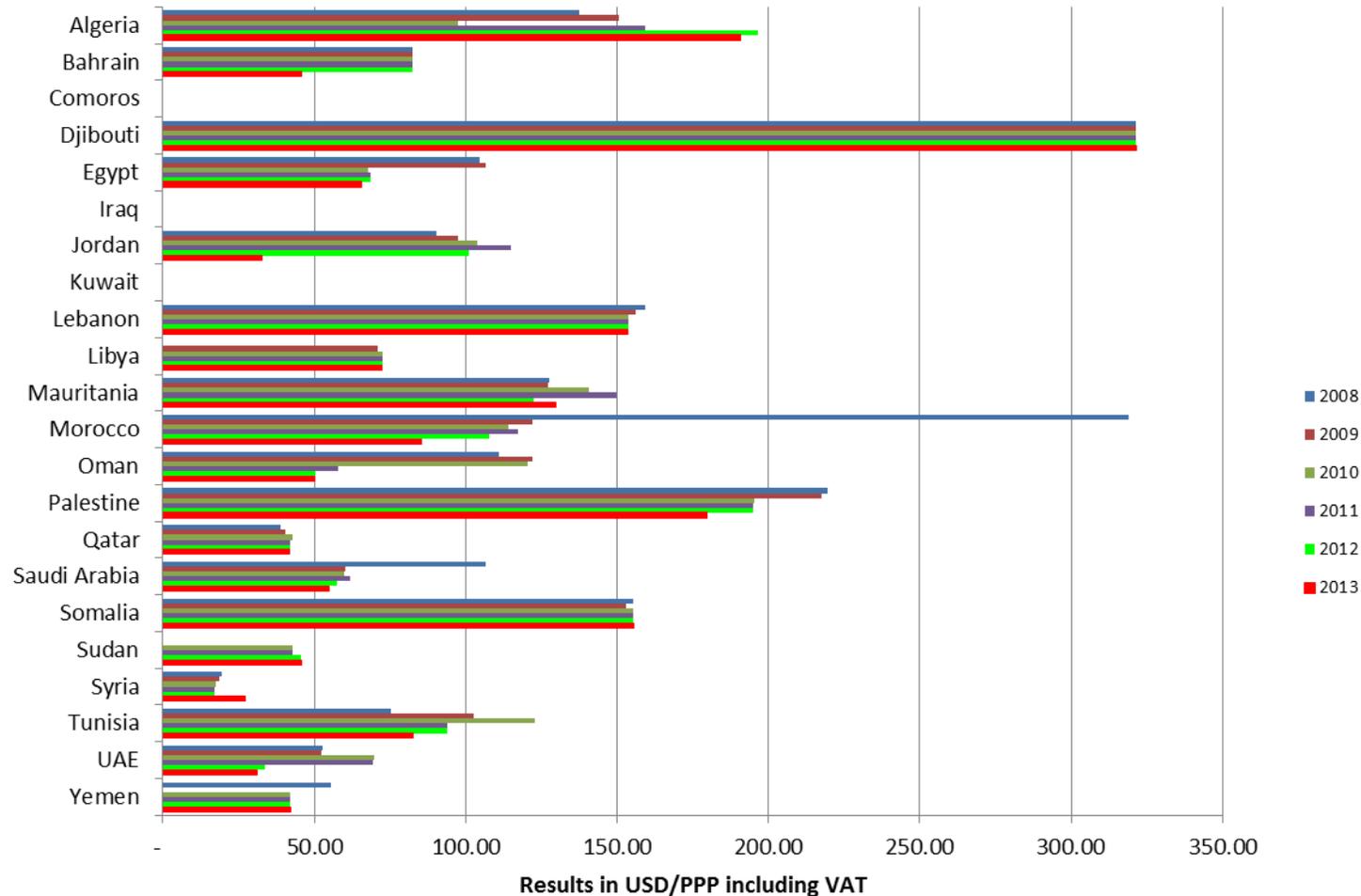
# 2010 OECD PSTN baskets time series, 140 calls/month, residential

**Total results for PSTN - OECD 140 calls 2010 basket, tariffs 2008-2013**



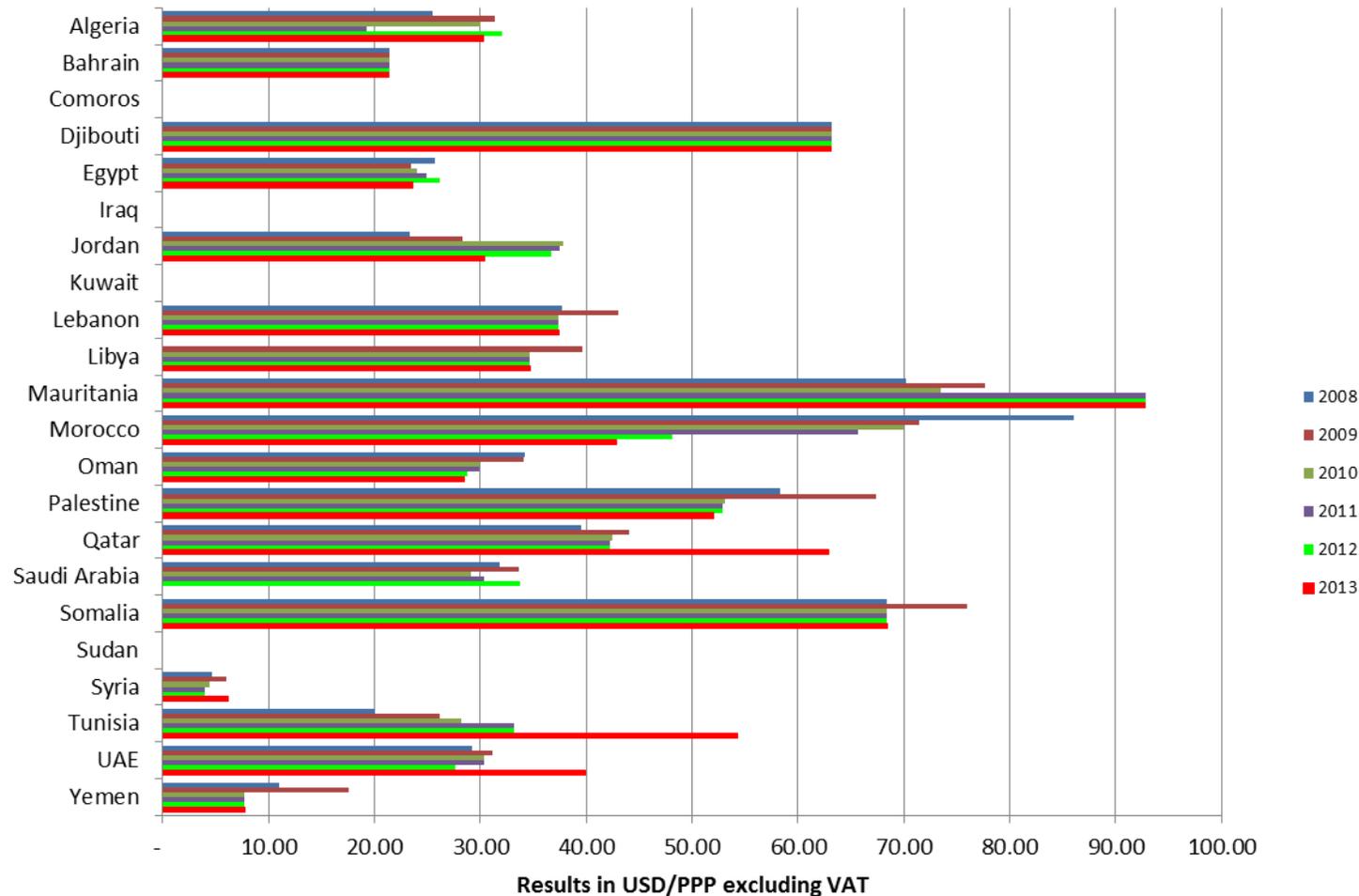
# 2010 OECD PSTN baskets time series, 420 calls/month, residential

**Total results for PSTN - OECD 420 calls 2010 basket, tariffs 2008-2013**



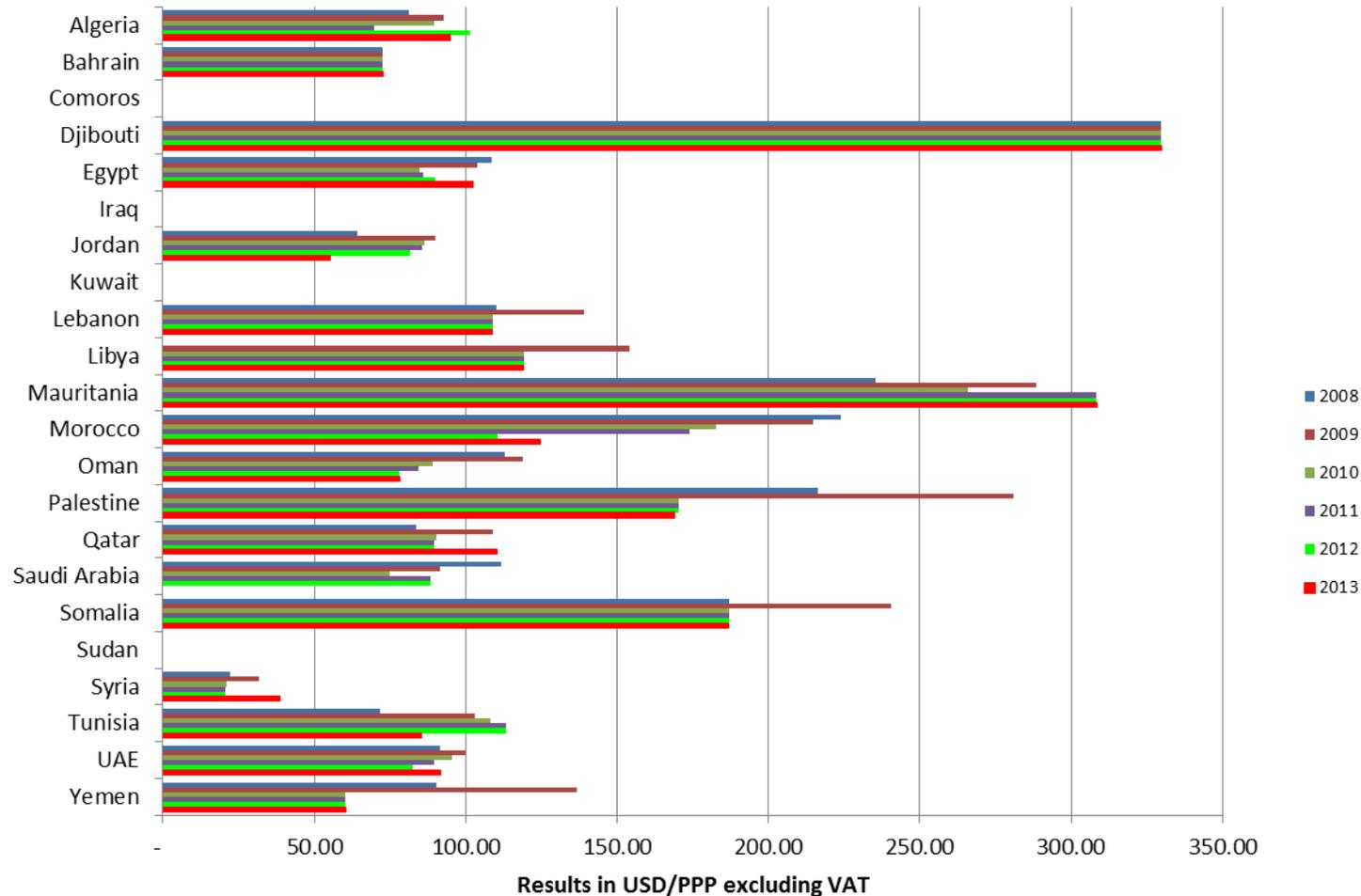
# 2010 OECD PSTN baskets time series, 100 calls/month, business

**Total results for PSTN - OECD 100 calls business 2010 basket, tariffs 2008-2013**



# 2010 OECD PSTN baskets time series, 260 calls/month, business

**Total results for PSTN - OECD 260 calls business 2010 basket, tariffs 2008-2013**



# Observations from PSTN time series results

- There were price changes in just over a half of the Arab countries since 2012, and while many were fairly modest, some had a substantial impact on some baskets.
  - Most notable changes were seen in Algeria, Bahrain, Jordan, Morocco and UAE
- Notable price changes 2012 - 2013:
  - Algeria: reduction in monthly rental by 20%, resulting in a general overall reduction of costs, most notably for lower use baskets.
  - Bahrain: introduction of an unlimited calls option for residential users, which resulted in a significant cost reduction for the high use basket
  - Egypt: introduction of a range of services (Bundle Kalamy) which include allowances and/or free calls to fixed lines, resulting in a small reduction in costs for the highest usage baskets, but corresponding increase for lower and mid-use baskets due to higher initial rental, which has increased by 25% since the previous update, and a change to how international calls are charged, resulting in an effective increase for calls abroad.
  - Jordan: introduction of new packages (Alo Fixed), which include free calls to fixed lines, plus a reduction in the cost of calls to mobile and for international calls, overall resulting in a reduction in costs, which is particularly significant for higher use baskets.
  - Morocco: introduction of a number of new options, incorporating allowances for fixed and mobile calls, resulting in a reduction in costs across all residential baskets
  - Oman: Introduction of a starter package, aimed at consumers with lower usage, resulting in a reduction in costs for the lower use baskets.
  - Qatar: Increase in monthly rental for business services, resulting in an increase in costs for both business baskets
  - Saudi Arabia: Removal of Hatif 45 packages, and introduction of a new Jood package for friends and family, with higher initial rental, but free local and national calls, resulting in an increase in costs for lower use baskets, and a small decrease for higher use.
  - Syria: An increase in basic rental, and international call charges, resulting in an increase across all baskets
  - Tunisia: Reclassification of low cost business and residential service into residential only, resulting in effective increase in business pricing.
  - UAE: Revised offers for both residential and business services, with higher rental, but free and reduced call charges which result in higher costs for low and mid usage, but that are more favourable for very high usage only.
- Average costs across the baskets have climbed slightly for lower use baskets in the Arab countries, and fallen in the higher use baskets. By contrast, OECD averages have remained broadly static across all usage levels.



\* Countries with gaps in the tariff information are not considered.

Price change analysis is based on prices in national currency for each country.

# PSTN ranking tables, 2008-2013

# PSTN 20 calls residential basket ranking

Total results for PSTN OECD 20 calls residential basket, tariffs 2008-2013  
Results in USD/PPP including VAT

	2008	2009	2010	2011	2012	2013
Algeria	11.02	13.64	11.29	13.61	13.61	12.28
Bahrain	7.24	7.24	7.24	7.24	7.24	7.24
Comoros						
Djibouti	20.04	20.04	20.04	20.04	20.04	20.04
Egypt	9.72	9.08	7.56	8.25	8.25	9.79
Iraq						
Jordan	14.19	14.68	14.87	15.42	15.18	13.76
Kuwait						
Lebanon	19.33	20.00	19.55	19.55	19.55	19.55
Libya		6.85	6.56	6.56	6.56	6.56
Mauritania	25.52	25.89	26.04	35.13	35.13	35.13
Morocco	41.02	43.70	40.52	39.43	39.13	37.90
Oman	13.76	16.75	16.44	16.44	16.15	12.37
Palestine	22.46	23.03	21.50	21.16	21.16	20.97
Qatar	10.48	10.81	10.83	10.77	10.77	10.77
Saudi Arabia	15.88	15.33	15.07	15.67	19.99	34.05
Somalia	41.24	41.69	41.24	41.24	41.24	41.24
Sudan			1.87	1.92	3.39	3.39
Syria	1.87	1.95	1.80	1.32	1.32	1.79
Tunisia	7.29	8.81	9.51	13.79	13.79	10.61
UAE	7.33	7.56	7.98	7.98	6.58	12.85
Yemen						

Ranking for PSTN OECD 20 calls residential basket

	2008	2009	2010	2011	2012	2013
Algeria	7	8	9	8	8	8
Bahrain	2	3	4	4	5	4
Comoros	-	-	-	-	-	-
Djibouti	12	13	14	14	14	13
Egypt	5	6	5	6	6	5
Iraq	-	-	-	-	-	-
Jordan	9	9	10	10	10	11
Kuwait	-	-	-	-	-	-
Lebanon	11	12	13	13	12	12
Libya	-	2	3	3	3	3
Mauritania	14	15	16	16	16	16
Morocco	15	17	17	17	17	17
Oman	8	11	12	12	11	9
Palestine	13	14	15	15	15	14
Qatar	6	7	8	7	7	7
Saudi Arabia	10	10	11	11	13	15
Somalia	16	16	18	18	18	18
Sudan	-	-	2	2	2	2
Syria	1	1	1	1	1	1
Tunisia	3	5	7	9	9	6
UAE	4	4	6	5	4	10
Yemen	-	-	-	-	-	-

Least expensive  
Most expensive

Arab average	16.77	16.89	15.55	16.42	16.62	17.24
OECD average	N/A	N/A	24.67	24.32	24.15	24.08

Below Arab average  
Above Arab average

Comparable OECD data is not available for 2008 and 2009

OECD average data is based on the exchange rate and comparative price level adjustment prevailing at the time of the update.



# PSTN 60 calls residential basket ranking

Total results for PSTN OECD 60 calls residential basket, tariffs 2008-2013  
Results in USD/PPP including VAT

	2008	2009	2010	2011	2012	2013
Algeria	26.09	30.42	30.31	24.18	32.63	30.38
Bahrain	16.81	16.81	16.81	16.81	16.81	16.81
Comoros						
Djibouti	74.15	74.15	74.15	74.15	74.15	74.15
Egypt	24.84	23.60	15.09	15.78	15.78	22.84
Iraq						
Jordan	23.60	25.49	26.64	28.17	25.55	19.05
Kuwait						
Lebanon	35.67	37.32	35.42	35.42	35.42	35.42
Libya		24.44	23.39	23.39	23.39	23.39
Mauritania	61.03	62.49	64.24	79.49	64.44	64.44
Morocco	84.79	73.01	70.47	65.01	63.14	51.35
Oman	28.31	29.04	27.63	27.63	25.68	22.38
Palestine	54.97	57.13	48.89	48.56	48.56	47.52
Qatar	17.28	18.64	18.69	18.45	18.45	18.45
Saudi Arabia	30.37	28.32	27.38	28.35	31.83	39.93
Somalia	63.46	65.08	63.46	63.46	63.46	63.46
Sudan			6.88	6.93	8.68	8.68
Syria	4.92	5.21	4.43	3.95	3.95	6.58
Tunisia	19.34	22.92	27.53	33.54	33.54	27.96
UAE	16.44	17.34	18.11	18.11	12.10	17.56
Yemen						

Arab average	36.38	35.97	33.31	33.97	33.20	32.80
OECD average	N/A	N/A	37.01	35.10	34.30	33.68

■ Below Arab average  
■ Above Arab average

Comparable OECD data is not available for 2008 and 2009

OECD average data is based on the exchange rate and comparative price level adjustment prevailing at the time of the update.

Ranking for PSTN OECD 60 calls residential basket

	2008	2009	2010	2011	2012	2013
Algeria	8	11	12	8	11	11
Bahrain	3	2	4	4	5	3
Comoros	-	-	-	-	-	-
Djibouti	15	17	18	17	18	18
Egypt	7	6	3	3	4	8
Iraq	-	-	-	-	-	-
Jordan	6	8	8	10	8	6
Kuwait	-	-	-	-	-	-
Lebanon	11	12	13	13	13	12
Libya	-	7	7	7	7	9
Mauritania	13	14	16	18	17	17
Morocco	16	16	17	16	15	15
Oman	9	10	11	9	9	7
Palestine	12	13	14	14	14	14
Qatar	4	4	6	6	6	5
Saudi Arabia	10	9	9	11	10	13
Somalia	14	15	15	15	16	16
Sudan	-	-	2	2	2	2
Syria	1	1	1	1	1	1
Tunisia	5	5	10	12	12	10
UAE	2	3	5	5	3	4
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



# PSTN 140 calls residential basket ranking

Total results for PSTN OECD 140 calls residential basket, tariffs 2008-2013  
Results in USD/PPP including VAT

	2008	2009	2010	2011	2012	2013
Algeria	58.71	66.62	56.76	36.18	73.24	69.56
Bahrain	34.66	34.66	34.66	34.66	34.66	34.56
Comoros						
Djibouti	162.17	162.17	162.17	162.17	162.17	162.17
Egypt	52.80	50.74	30.73	31.42	31.42	44.19
Iraq						
Jordan	42.56	46.96	49.66	53.83	47.52	28.63
Kuwait						
Lebanon	69.68	72.36	67.67	67.67	67.67	67.67
Libya		54.85	52.35	52.35	52.35	52.35
Mauritania	104.65	108.18	112.29	121.37	96.33	101.17
Morocco	134.08	106.76	99.43	100.97	89.10	66.63
Oman	55.07	54.85	51.54	46.49	42.11	42.11
Palestine	116.16	121.33	101.82	101.48	101.48	96.51
Qatar	28.51	31.89	32.12	31.28	31.28	31.28
Saudi Arabia	58.03	53.99	51.42	51.16	50.85	49.32
Somalia	103.05	106.89	103.05	103.05	103.05	103.05
Sudan			16.80	16.85	19.05	19.05
Syria	9.98	10.67	8.91	8.43	8.43	14.44
Tunisia	41.02	50.55	61.28	71.88	71.88	65.32
UAE	31.95	34.10	36.47	36.47	22.38	25.54
Yemen						

Arab average	68.94	68.68	62.73	62.65	61.39	59.64
OECD average	N/A	N/A	59.61	55.96	51.10	50.00

■ Below Arab average  
■ Above Arab average

Comparable OECD data is not available for 2008 and 2009

OECD average data is based on the exchange rate and comparative price level adjustment prevailing at the time of the update.

Ranking for PSTN OECD 140 calls residential basket

	2008	2009	2010	2011	2012	2013
Algeria	10	11	11	6	13	14
Bahrain	4	4	5	5	6	6
Comoros	-	-	-	-	-	-
Djibouti	16	17	18	18	18	18
Egypt	7	7	3	4	5	8
Iraq	-	-	-	-	-	-
Jordan	6	5	7	11	8	4
Kuwait	-	-	-	-	-	-
Lebanon	11	12	13	12	11	13
Libya	-	9	10	10	10	10
Mauritania	13	15	17	17	15	16
Morocco	15	13	14	14	14	12
Oman	8	9	9	8	7	7
Palestine	14	16	15	15	16	15
Qatar	2	2	4	3	4	5
Saudi Arabia	9	8	8	9	9	9
Somalia	12	14	16	16	17	17
Sudan	-	-	2	2	2	2
Syria	1	1	1	1	1	1
Tunisia	5	6	12	13	12	11
UAE	3	3	6	7	3	3
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



# PSTN 420 calls residential basket ranking

Total results for PSTN residential OECD 420 calls basket, tariffs 2008-2013  
Results in USD/PPP including VAT

	2008	2009	2010	2011	2012	2013
Algeria	137.34	150.54	97.54	159.33	196.40	190.91
Bahrain	82.23	82.23	82.23	82.23	82.23	45.91
Comoros						
Djibouti	321.40	321.40	321.40	321.40	321.40	321.40
Egypt	104.54	106.52	67.86	68.55	68.55	65.58
Iraq						
Jordan	90.20	97.64	103.96	114.86	100.86	32.67
Kuwait						
Lebanon	159.10	156.16	153.67	153.67	153.67	153.67
Libya		70.88	72.43	72.43	72.43	72.43
Mauritania	127.74	127.20	140.48	149.81	122.60	129.61
Morocco	318.83	121.88	114.05	117.25	107.64	85.51
Oman	111.08	122.11	120.28	58.02	50.30	50.30
Palestine	219.42	217.35	195.34	195.01	195.01	179.83
Qatar	38.95	40.42	42.80	41.85	41.85	41.85
Saudi Arabia	106.48	60.38	59.65	61.95	57.38	54.75
Somalia	155.47	153.09	155.47	155.47	155.47	155.47
Sudan			42.78	42.83	45.59	45.59
Syria	19.25	18.79	17.35	16.86	16.86	27.05
Tunisia	75.40	102.69	123.02	94.01	94.01	82.77
UAE	52.63	52.25	69.88	69.29	33.80	31.20
Yemen						

Arab average	132.50	117.74	110.01	109.71	106.45	98.14
OECD average	N/A	N/A	101.78	89.15	76.26	76.48

- Below Arab average
- Above Arab average

Comparable OECD data is not available for 2008 and 2009

OECD average data is based on the exchange rate and comparative price level adjustment prevailing at the time of the update.

Ranking for PSTN OECD 420 calls residential basket

	2008	2009	2010	2011	2012	2013
Algeria	11	13	9	16	17	17
Bahrain	5	6	8	9	9	6
Comoros	-	-	-	-	-	-
Djibouti	16	17	18	18	18	18
Egypt	7	9	5	6	7	9
Iraq	-	-	-	-	-	-
Jordan	6	7	10	11	11	3
Kuwait	-	-	-	-	-	-
Lebanon	13	15	15	14	14	14
Libya	-	5	7	8	8	10
Mauritania	10	12	14	13	13	13
Morocco	15	10	11	12	12	12
Oman	9	11	12	4	5	7
Palestine	14	16	17	17	16	16
Qatar	2	2	3	2	3	4
Saudi Arabia	8	4	4	5	6	8
Somalia	12	14	16	15	15	15
Sudan	-	-	2	3	4	5
Syria	1	1	1	1	1	1
Tunisia	4	8	13	10	10	11
UAE	3	3	6	7	2	2
Yemen	-	-	-	-	-	-

- Least expensive
- Most expensive



# PSTN 100 calls business basket ranking

Total results for PSTN OECD 100 calls business basket, tariffs 2008-2013  
Results in USD/PPP excluding VAT

	2008	2009	2010	2011	2012	2013
Algeria	25.46	31.31	30.01	19.26	32.00	30.26
Bahrain	21.38	21.38	21.38	21.38	21.38	21.38
Comoros						
Djibouti	63.12	63.12	63.12	63.12	63.12	63.12
Egypt	25.67	23.42	23.98	24.89	26.15	23.57
Iraq						
Jordan	23.37	28.30	37.86	37.43	36.65	30.39
Kuwait						
Lebanon	37.76	43.01	37.36	37.36	37.36	37.36
Libya		39.66	34.70	34.70	34.70	34.70
Mauritania	70.15	77.65	73.48	92.80	92.80	92.80
Morocco	86.02	71.39	69.95	65.66	48.14	42.85
Oman	34.19	34.11	29.94	29.94	28.81	28.52
Palestine	58.27	67.41	53.12	52.84	52.84	52.02
Qatar	39.48	44.02	42.50	42.21	42.21	62.93
Saudi Arabia	31.82	33.57	29.06	30.39	33.71	
Somalia	68.40	76.01	68.40	68.40	68.40	68.40
Sudan						
Syria	4.67	6.03	4.43	3.95	3.95	6.22
Tunisia	20.04	26.12	28.18	33.16	33.16	54.29
UAE	29.22	31.09	30.40	30.40	27.62	39.87
Yemen						

Arab average	39.94	42.21	39.87	40.46	40.18	43.04
OECD average	N/A	N/A	41.78	39.69	37.57	37.08

■ Below Arab average  
■ Above Arab average

Comparable OECD data is not available for 2008 and 2009

OECD average data is based on the exchange rate and comparative price level adjustment prevailing at the time of the update.

Ranking for PSTN OECD 100 calls business basket

	2008	2009	2010	2011	2012	2013
Algeria	5	7	7	2	6	5
Bahrain	3	2	2	3	2	2
Comoros	-	-	-	-	-	-
Djibouti	13	13	14	14	15	14
Egypt	6	3	3	4	3	3
Iraq	-	-	-	-	-	-
Jordan	4	5	11	11	10	6
Kuwait	-	-	-	-	-	-
Lebanon	10	11	10	10	11	8
Libya	-	10	9	9	9	7
Mauritania	15	17	17	17	17	16
Morocco	16	15	16	15	13	10
Oman	9	9	6	5	5	4
Palestine	12	14	13	13	14	11
Qatar	11	12	12	12	12	13
Saudi Arabia	8	8	5	6	8	-
Somalia	14	16	15	16	16	15
Sudan	-	-	-	-	-	-
Syria	1	1	1	1	1	1
Tunisia	2	4	4	8	7	12
UAE	7	6	8	7	4	9
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



# PSTN 260 calls business basket ranking

Total results for PSTN OECD 260 calls business basket, tariffs 2008-2013  
Results in USD/PPP excluding VAT

	2008	2009	2010	2011	2012	2013
Algeria	81.12	92.86	89.52	69.91	101.58	94.78
Bahrain	72.66	72.66	72.66	72.66	72.66	72.66
Comoros						
Djibouti	329.71	329.71	329.71	329.71	329.71	329.71
Egypt	108.48	103.92	84.98	85.90	89.80	102.25
Iraq						
Jordan	64.35	89.97	86.22	85.79	81.65	55.35
Kuwait						
Lebanon	110.10	139.03	108.87	108.87	108.87	108.87
Libya		154.23	119.16	119.16	119.16	119.16
Mauritania	235.31	288.29	265.73	308.42	308.42	308.42
Morocco	224.04	214.88	182.78	173.79	110.74	124.58
Oman	113.00	118.81	89.22	84.33	78.14	78.14
Palestine	216.35	280.96	170.54	170.25	170.25	168.82
Qatar	83.50	109.13	90.24	89.71	89.71	110.44
Saudi Arabia	111.89	91.47	74.78	88.53	88.53	
Somalia	186.87	240.62	186.87	186.87	186.87	186.87
Sudan						
Syria	22.16	31.73	21.19	20.70	20.70	38.78
Tunisia	71.71	102.96	108.02	113.50	113.50	85.26
UAE	91.40	99.92	95.52	89.69	82.56	91.81
Yemen						

Arab average	132.67	150.66	128.00	129.28	126.64	129.74
OECD average	N/A	N/A	86.49	80.33	75.69	76.42

■ Below Arab average  
■ Above Arab average

Comparable OECD data is not available for 2008 and 2009

OECD average data is based on the exchange rate and comparative price level adjustment prevailing at the time of the update.

Ranking for PSTN OECD 260 calls business basket

	2008	2009	2010	2011	2012	2013
Algeria	5	5	7	2	9	7
Bahrain	4	2	2	3	2	3
Comoros	-	-	-	-	-	-
Djibouti	16	17	17	17	17	16
Egypt	8	8	4	6	8	8
Iraq	-	-	-	-	-	-
Jordan	2	3	5	5	4	2
Kuwait	-	-	-	-	-	-
Lebanon	9	11	11	10	10	9
Libya	-	12	12	12	13	11
Mauritania	15	16	16	16	16	15
Morocco	14	13	14	14	11	12
Oman	11	10	6	4	3	4
Palestine	13	15	13	13	14	13
Qatar	6	9	8	9	7	10
Saudi Arabia	10	4	3	7	6	-
Somalia	12	14	15	15	15	14
Sudan	-	-	-	-	-	-
Syria	1	1	1	1	1	1
Tunisia	3	7	10	11	12	5
UAE	7	6	9	8	5	6
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



# Mobile basket 2013 results (using OECD 2010 baskets)

# Mobile tariff data issues

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- No tariff information available for:
  - Djibouti, Somalia
  - Only pre-paid for Libya, Comoros
  - One operator only for Comoros
- Part of tariff information missing for:
  - Kuwait (international call prices for Zain)
- Otherwise two operators are covered for each country
- A total of 743 tariff packages covered for 39 operators in 19 countries
- The OECD results do not include international calls as these are not part of the OECD basket definitions. The “Arab average w/o int'l” line shows the equivalent average without international, based on the Arab basket result, for comparison



## OECD mobile baskets 2010

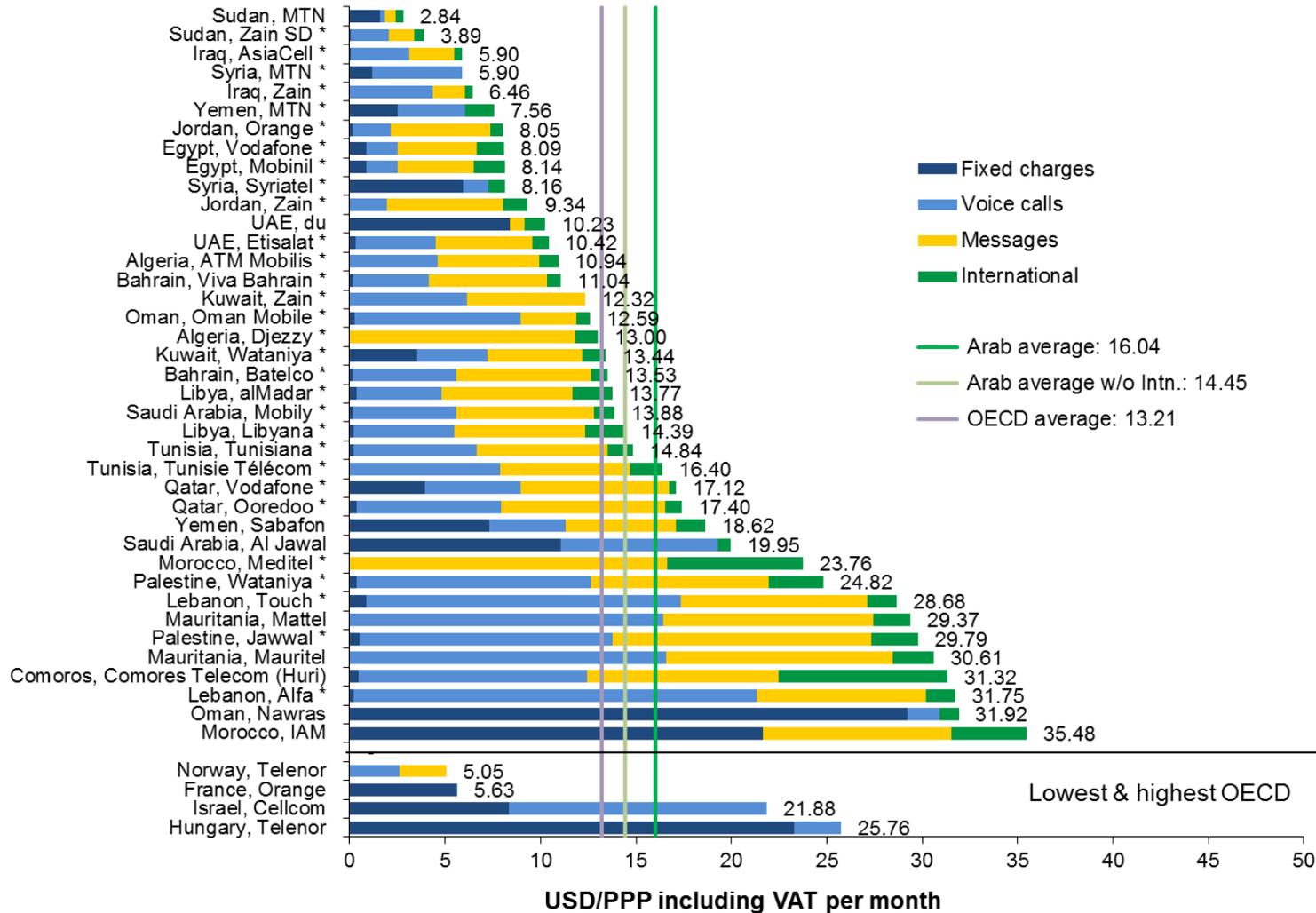
- The OECD adopted new baskets for mobile in March 2010. The key information about the basket definitions is shown below.
  - The following 6 pages show the results using the new basket definitions
  - Tariff elements used are the same as for previous results
  - New baskets include a new way of calculating call costs, and also include the capability to cover “Selective discounts”
  - Pre- and Post-paid tariffs are included for all baskets
  - Handset data baskets included (introduced 2013)

Basket	Calls/month	Call distribution				SMS	Data MB
		To fixed	Mobile On	Mobile Off	Voicemail		
30 calls basket	30	16%	55%	25%	4%	100	0
100 calls basket	100	17%	52%	28%	3%	140	0
300 calls basket	300	14%	46%	37%	3%	225	0
900 calls basket	900	14%	55%	28%	3%	350	0
40 calls prepaid basket	40	14%	64%	18%	4%	60	0
400 messages basket	8	8%	55%	25%	12%	400	0
30 calls + 100 MB	30	16%	55%	25%	4%	100	100
100 calls + 500 MB	100	17%	52%	28%	3%	140	500
300 calls + 1 GB	300	14%	46%	37%	3%	225	1000
900 calls + 2 GB	900	14%	55%	28%	3%	350	2000
100 calls + 2 GB	100	14%	52%	28%	3%	140	2000



# 30 calls/month basket result based on 2010 OECD mobile basket

**30 calls basket**  
Tariffs as of November 2013



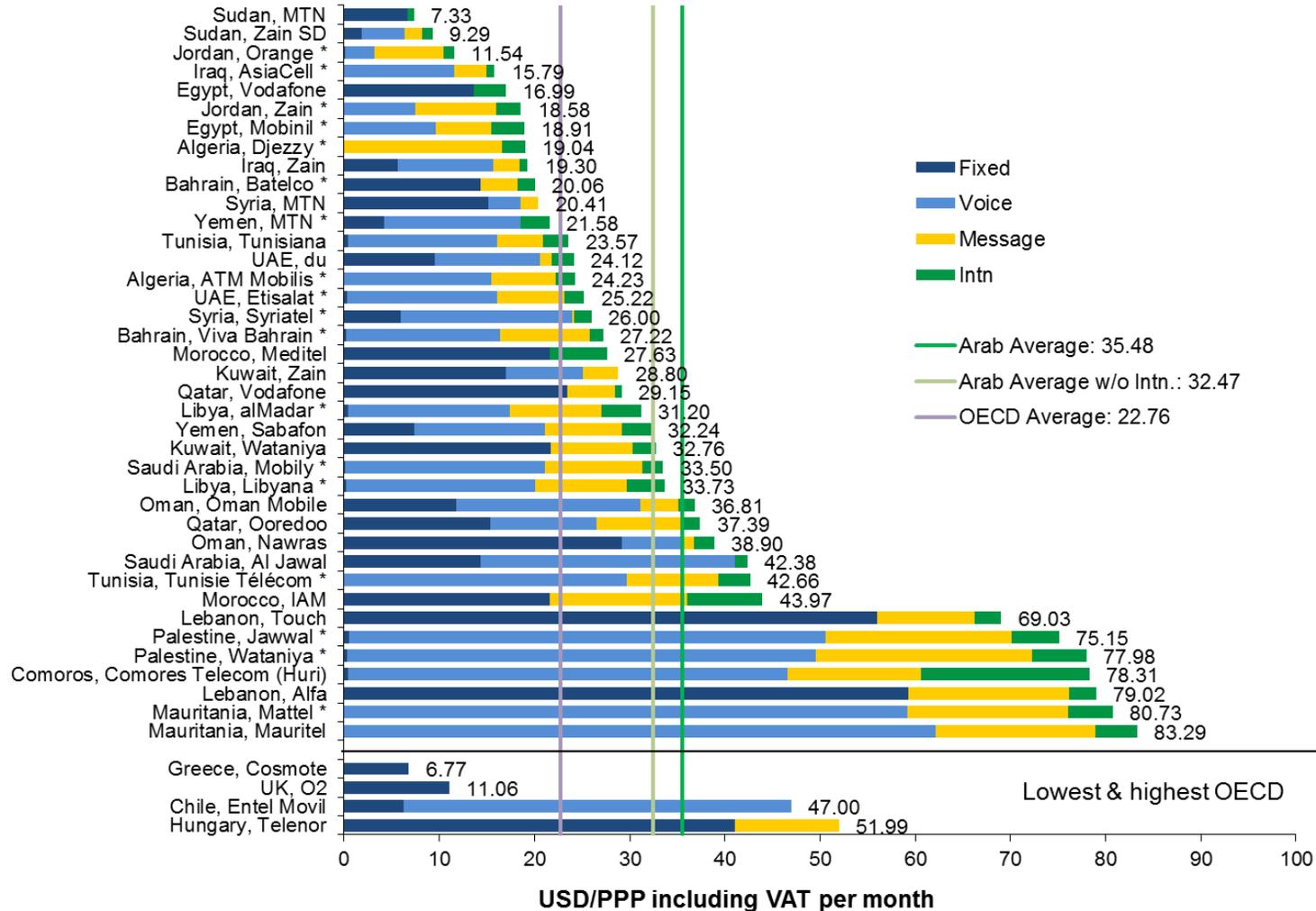
Please note:  
No data for Djibouti and Somalia.  
No international data for Zain, Kuwait.  
Selective discounts included.

\* marks pre-paid tariffs.



# 100 calls/month basket result based on 2010 OECD mobile basket

**100 calls basket**  
Tariffs as of November 2013



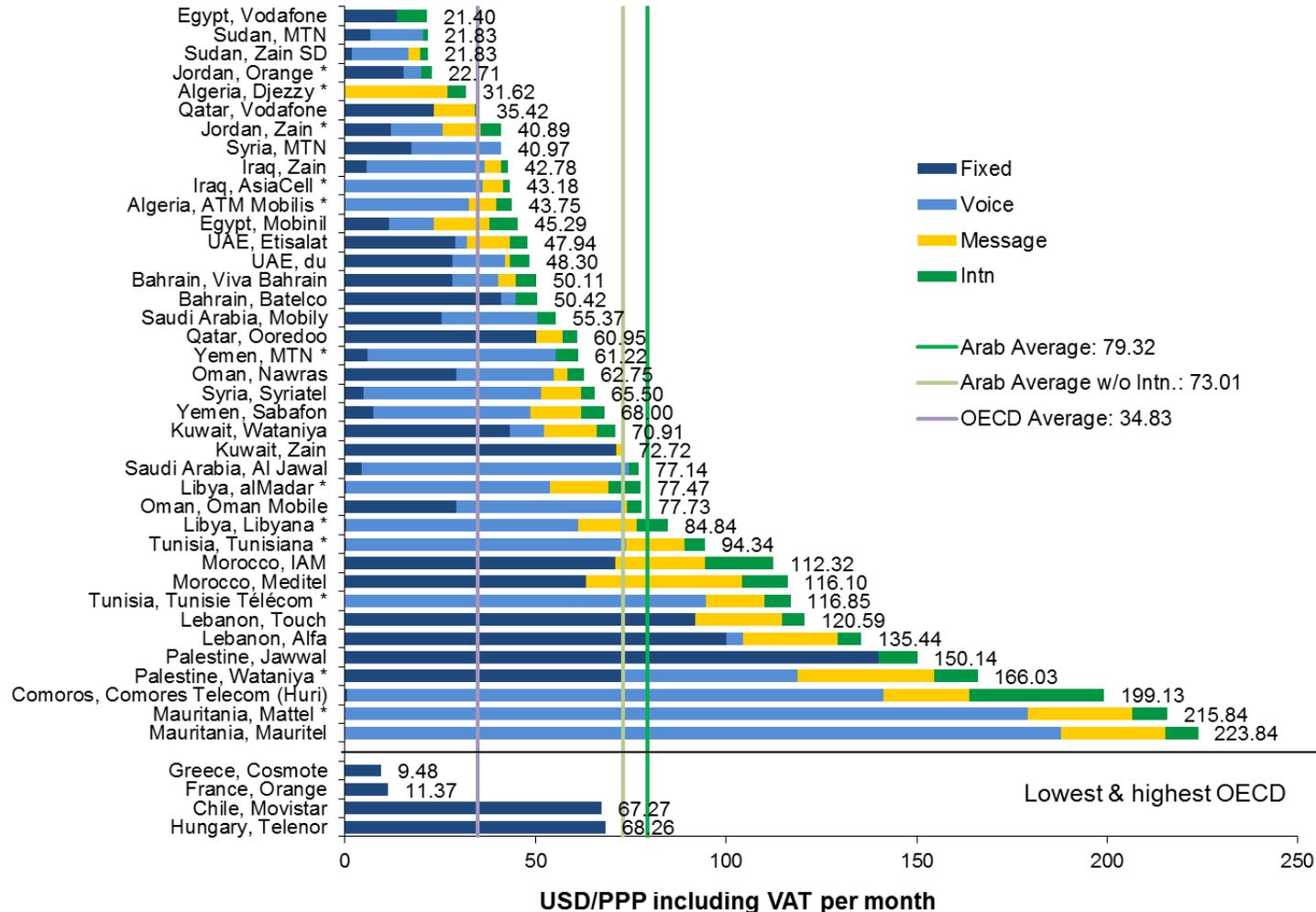
Please note:  
No data for Djibouti and Somalia.  
No international data for Zain, Kuwait.  
Selective discounts included.

\* marks pre-paid tariffs.



# 300 calls/month basket result based on 2010 OECD mobile basket

**300 calls basket**  
Tariffs as of November 2013



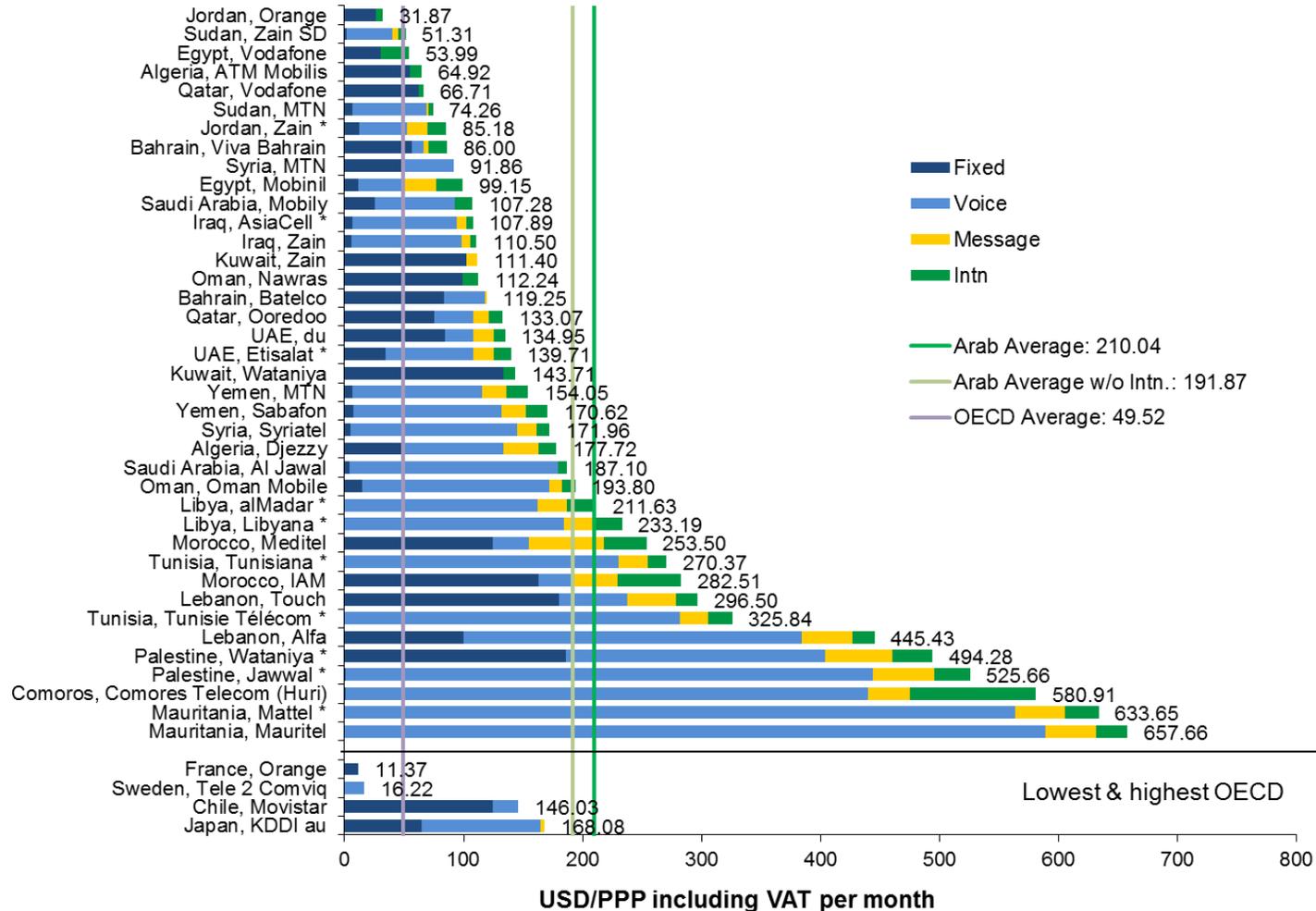
Please note:  
No data for Djibouti and Somalia.  
No international data for Zain, Kuwait.  
Selective discounts included.

\* marks pre-paid tariffs.



# 900 calls/month basket result based on 2010 OECD mobile basket

**900 calls basket**  
Tariffs as of November 2013



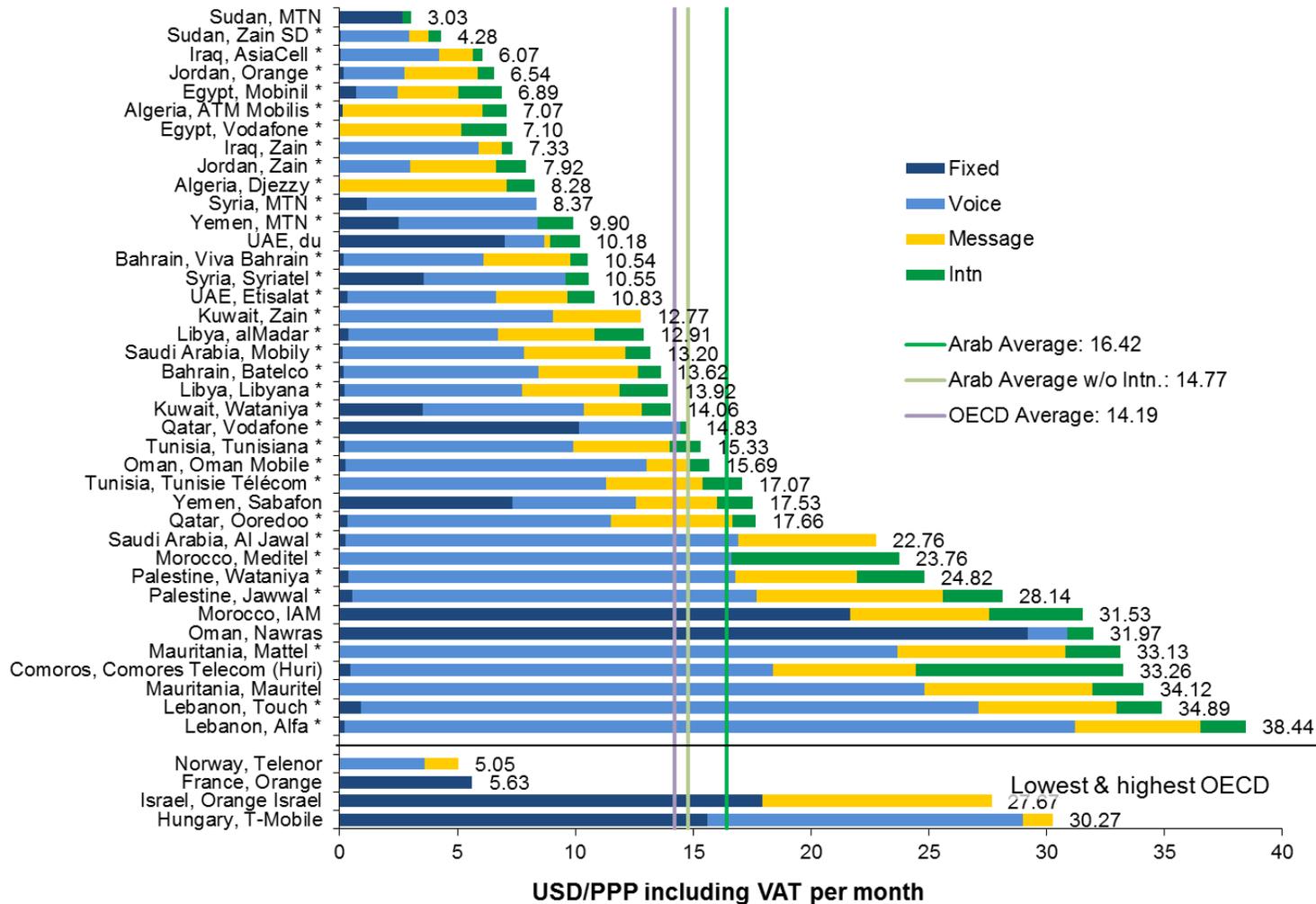
Please note:  
No data for Djibouti and Somalia.  
No international data for Zain, Kuwait.  
Selective discounts included.

\* marks pre-paid tariffs.



# 40 calls/month prepaid basket result based on 2010 OECD mobile basket

40 calls prepaid basket  
Tariffs as of November 2013



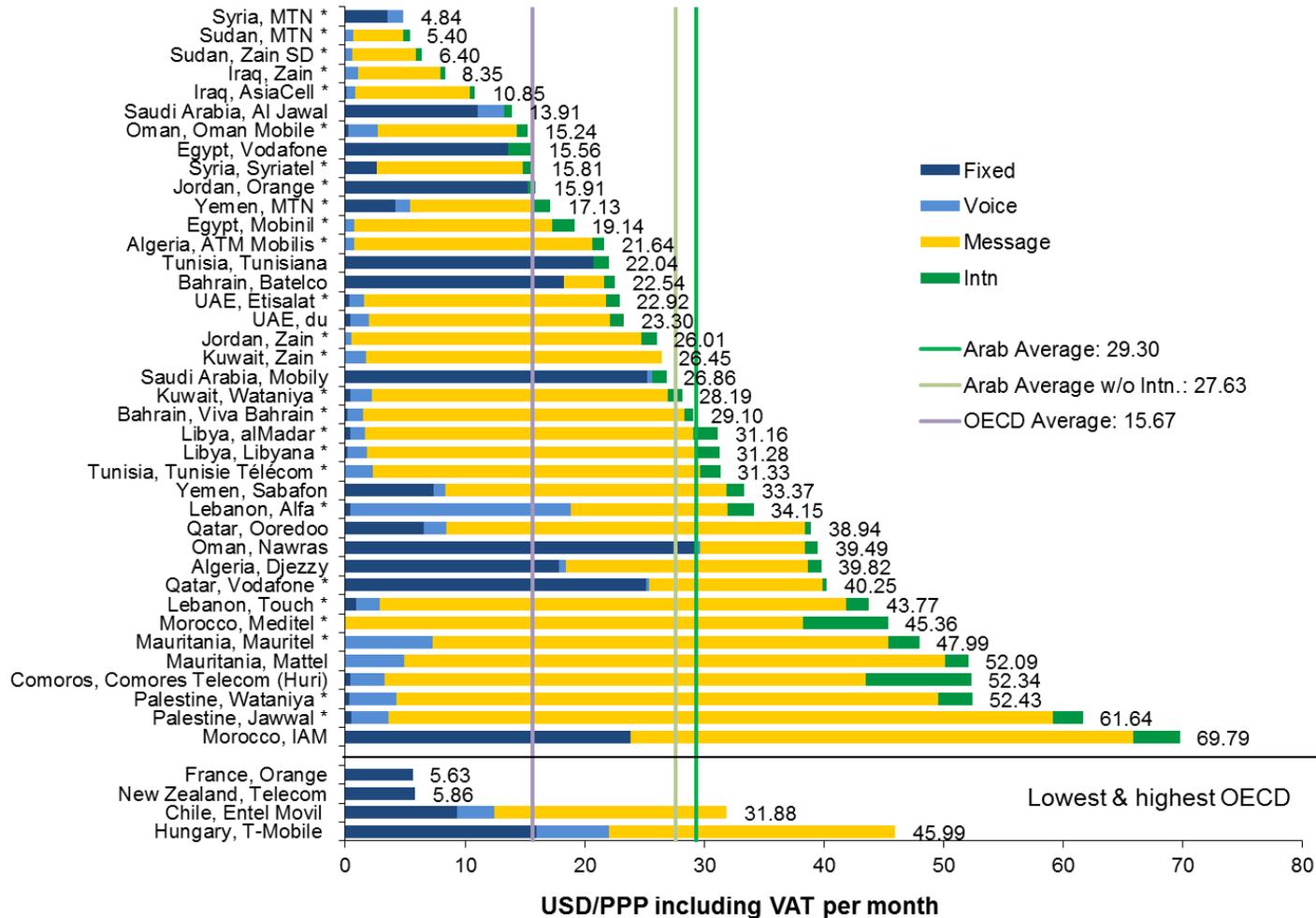
Please note:  
 No data for Djibouti and Somalia.  
 No international data for Zain, Kuwait.  
 Selective discounts included.  
 \* marks pre-paid tariffs.



# 400 messages/month basket result based on 2010 OECD mobile basket

## 400 messages basket

Tariffs as of November 2013



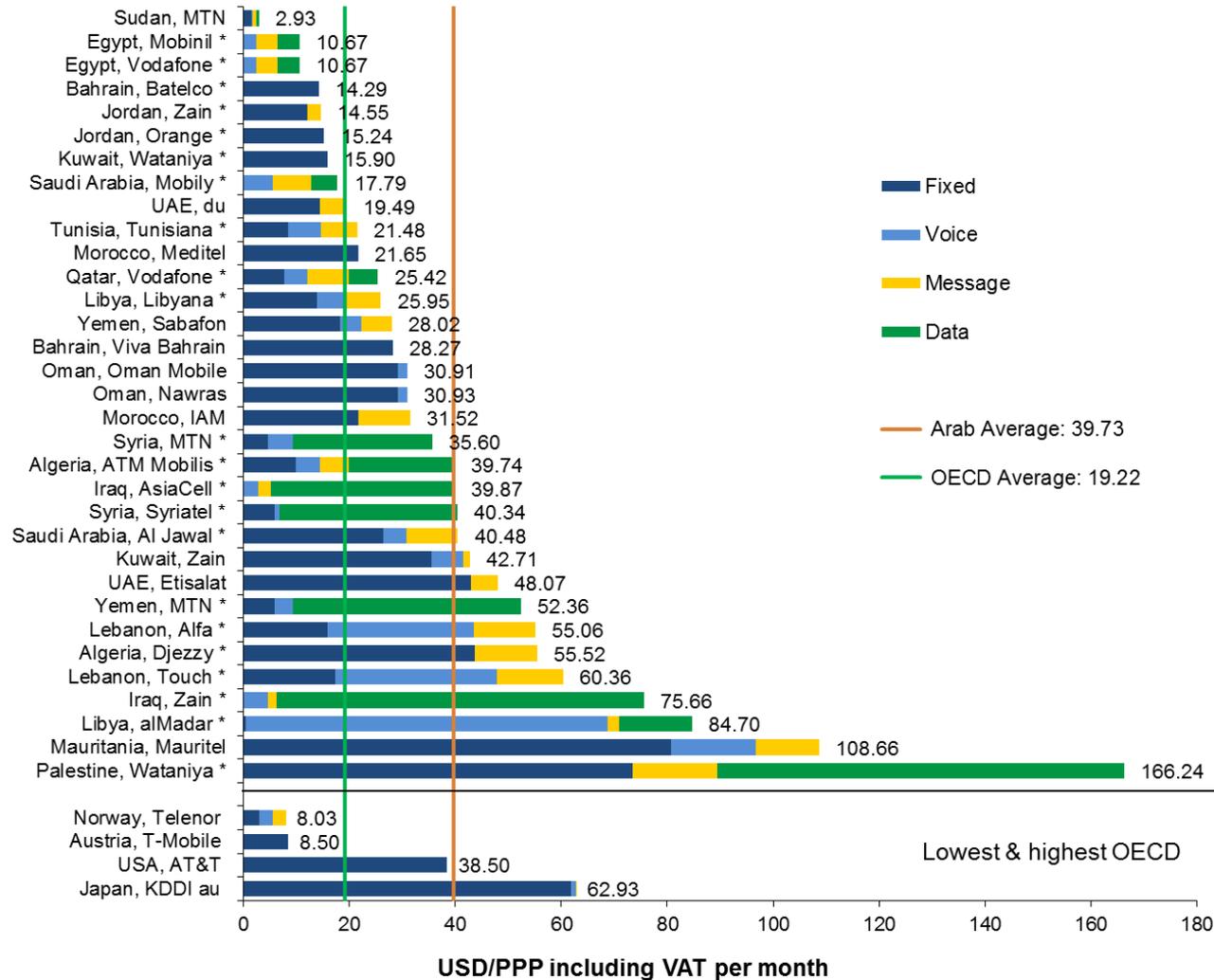
Please note:  
 No data for Djibouti and Somalia.  
 No international data for Zain, Kuwait.  
 Selective discounts included.

\* marks pre-paid tariffs.



# 30 calls and 100 MB/month basket result based on 2010 OECD mobile basket

**30 calls + 100 MB**  
Tariffs as of November 2013



Please note:  
No data for Djibouti and Somalia.  
Selective discounts included.

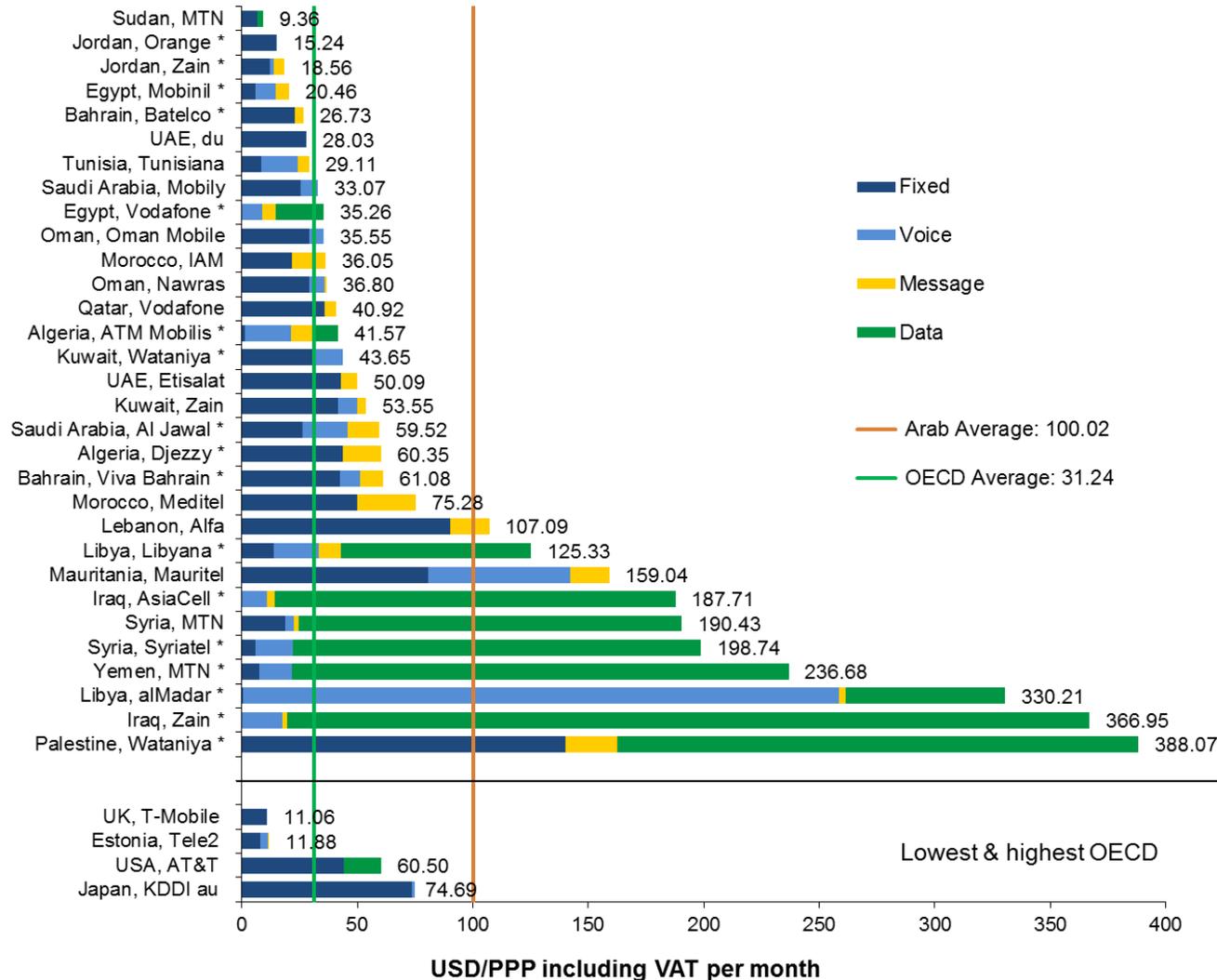
\* marks pre-paid tariffs.

The data charges shown on the graph refer to overage charges only. Fixed data charges may be embedded in the monthly fixed charges.



# 100 calls and 500 MB/month basket result based on 2010 OECD mobile basket

100 calls + 500 MB basket  
Tariffs as of November



Please note:  
No data for Djibouti and Somalia.  
Selective discounts included.

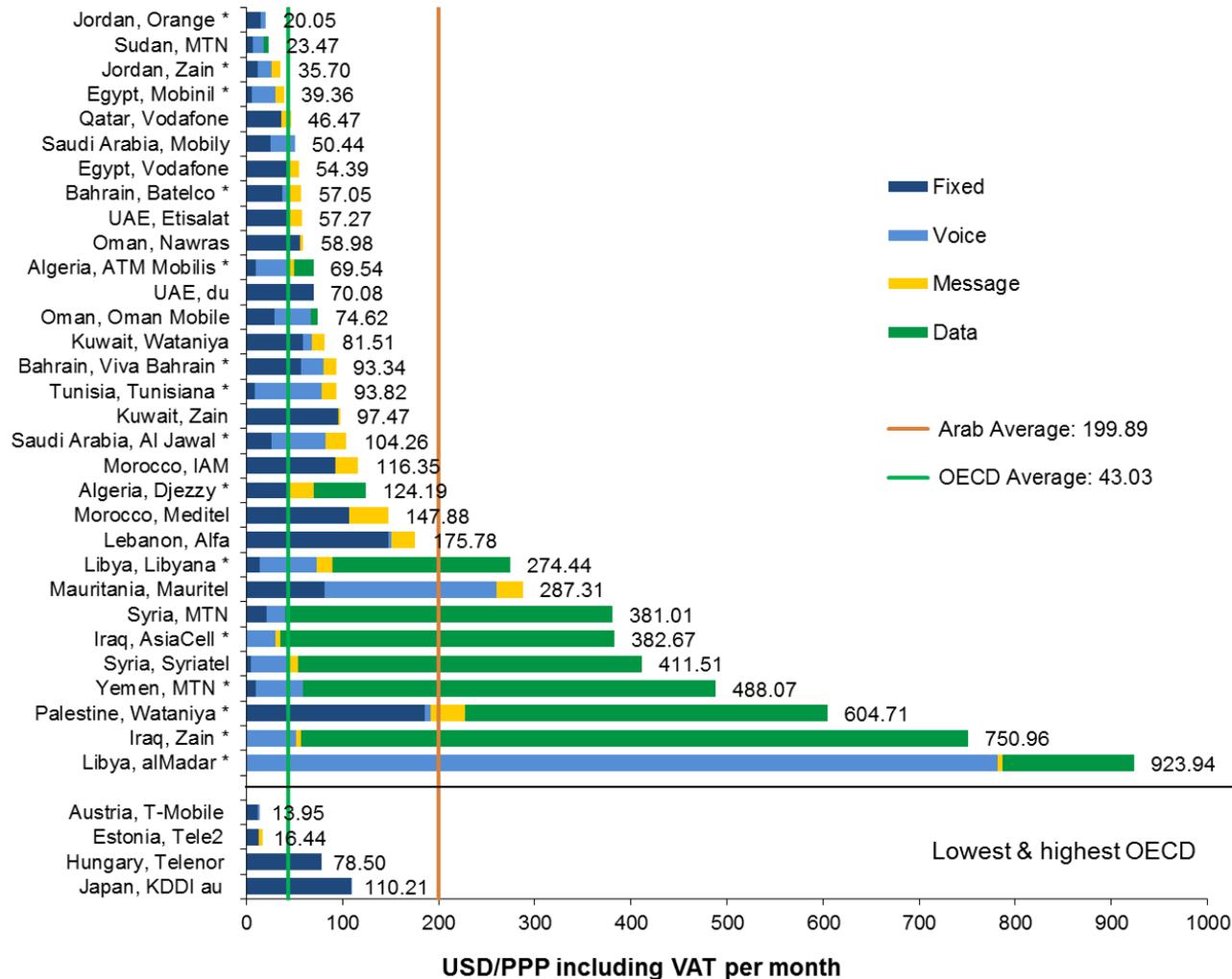
\* marks pre-paid tariffs.

The data charges shown on the graph refer to overage charges only. Fixed data charges may be embedded in the monthly fixed charges.



# 300 calls and 1 GB/month basket result based on 2010 OECD mobile basket

300 calls + 1 GB basket  
Tariffs as of November 2013



Please note:  
No data for Djibouti and Somalia.  
Selective discounts included.

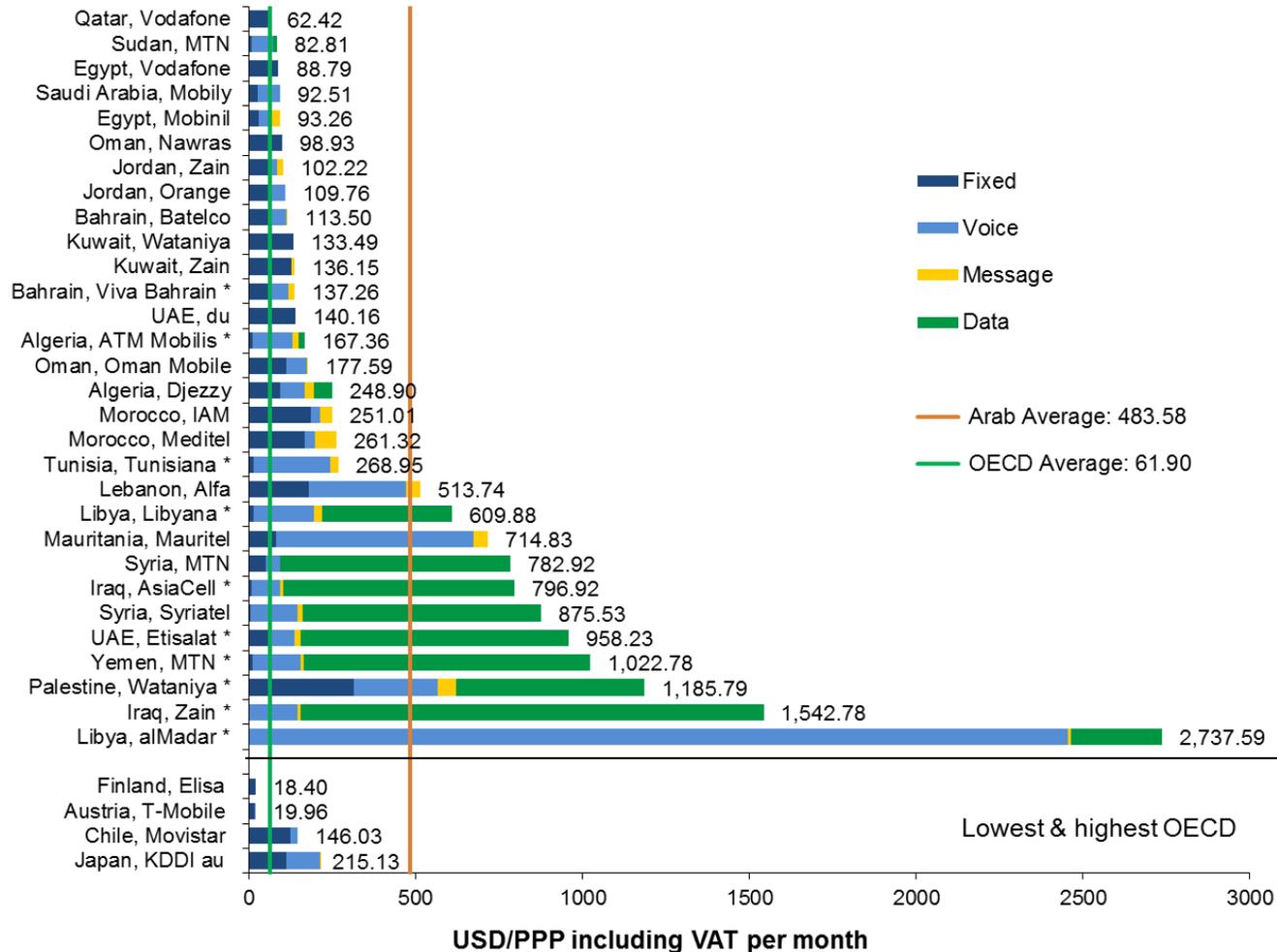
\* marks pre-paid tariffs.

The data charges shown on the graph refer to overage charges only. Fixed data charges may be embedded in the monthly fixed charges.



# 900 calls and 2 GB/month basket result based on 2010 OECD mobile basket

**900 calls + 2 GB basket**  
Tariffs as of November 2013



Please note:  
No data for Djibouti and Somalia.  
Selective discounts included.

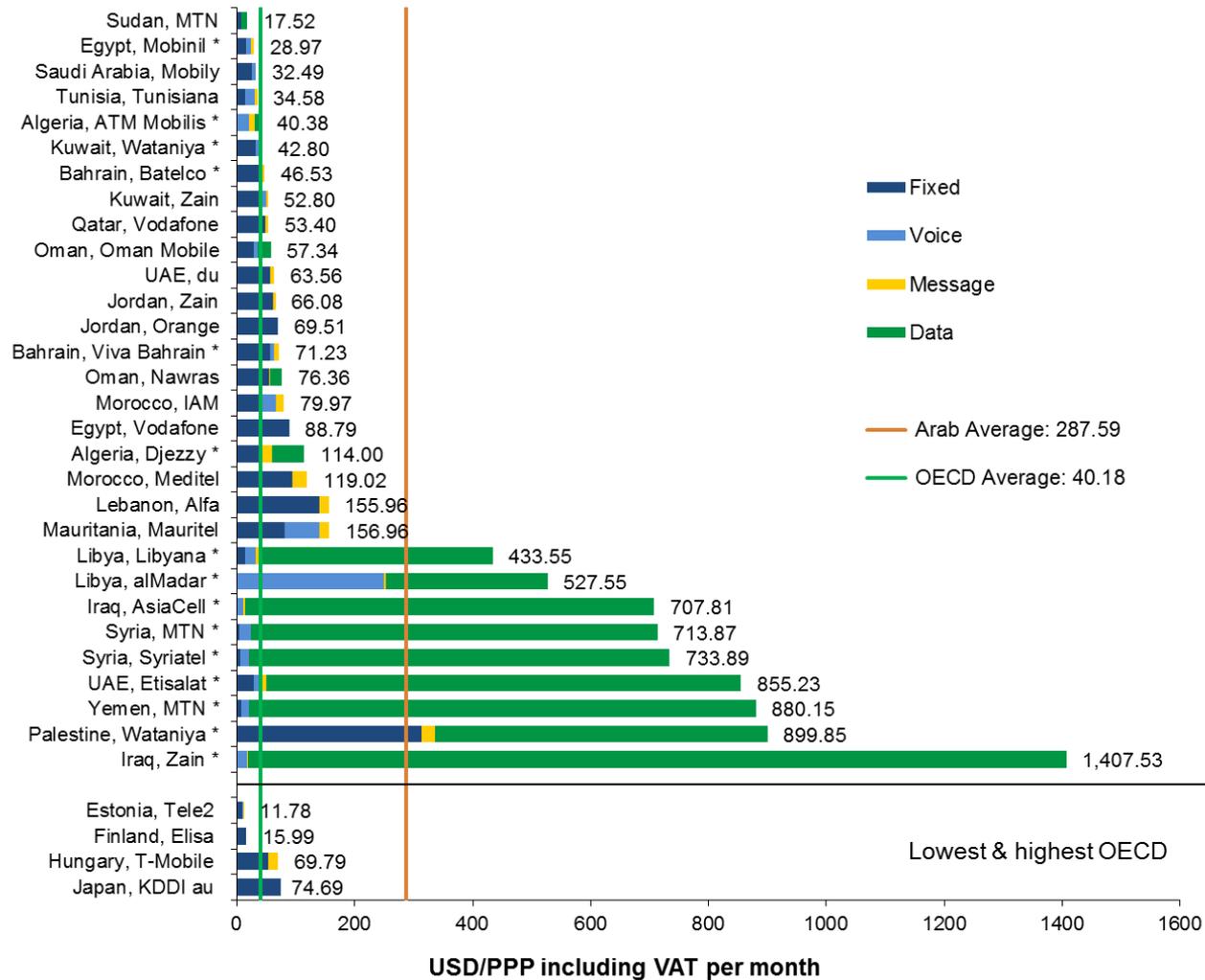
\* marks pre-paid tariffs.

The data charges shown on the graph refer to overage charges only. Fixed data charges may be embedded in the monthly fixed charges.



# 100 calls and 2 GB/month basket result based on 2010 OECD mobile basket

100 calls + 2 GB basket  
Tariffs as of November 2013



Please note:  
No data for Djibouti and Somalia.  
Selective discounts included.

\* marks pre-paid tariffs.

The data charges shown on the graph refer to overage charges only. Fixed data charges may be embedded in the monthly fixed charges.



# Observations from mobile basket results

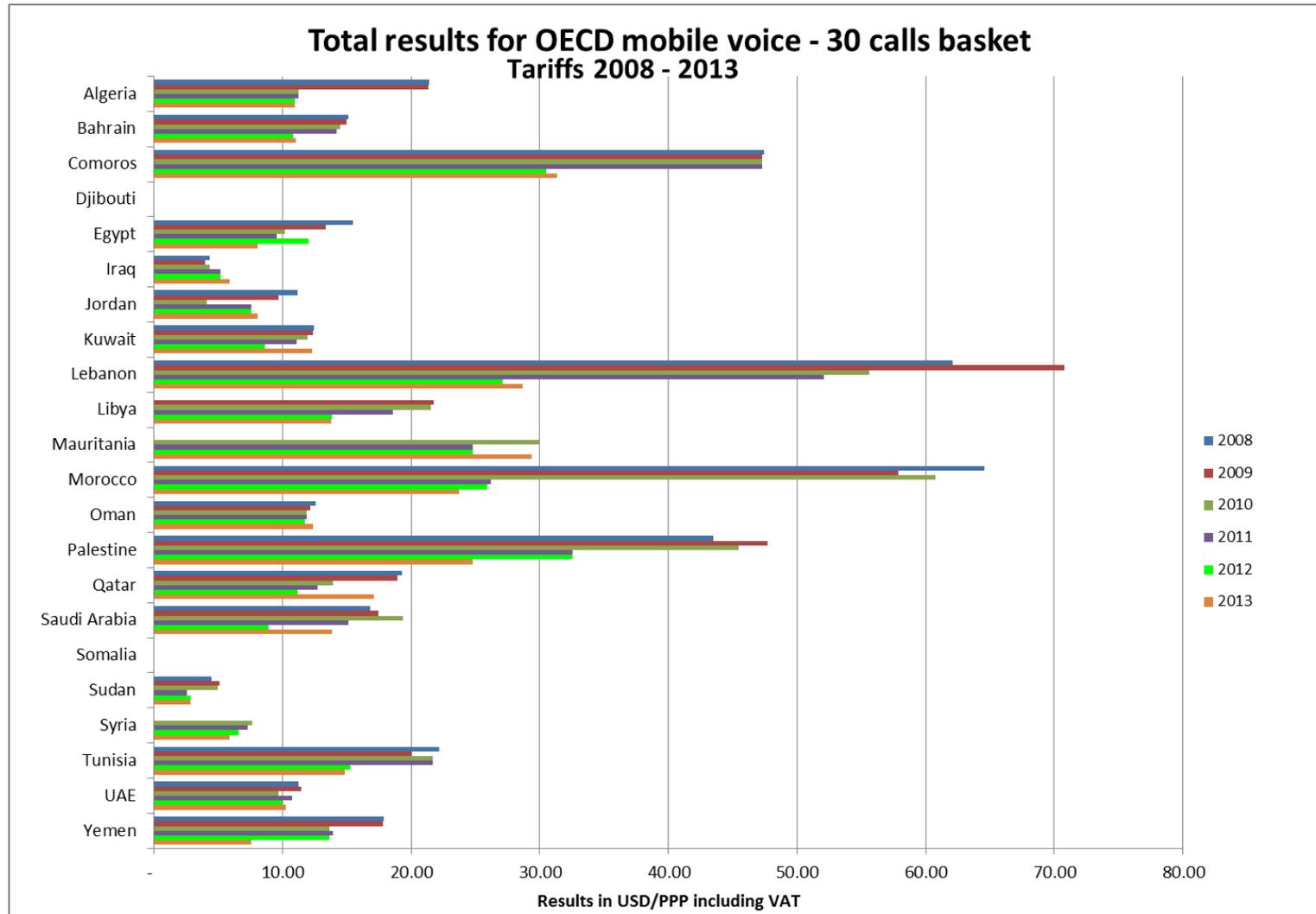
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- The cheapest countries throughout are :
  - Sudan, Jordan, Egypt, Iraq and Syria
    - The exact order of these may vary with usage level
    - With the exception of the 400 messages basket, where Jordan ranks 7<sup>th</sup>, Jordan is consistently in the top 5 for all baskets, while Sudan is either cheapest or second cheapest.
  - The cheapest countries for mobile are more likely to have the best PSTN results
- For the 30 calls basket, and 40 calls prepaid basket, around half of the Arab countries have price levels below the OECD average.
- For medium to high usage (the 300 and 900 call baskets, and to a lesser extent, the 100 call basket), as well as the 400 messages basket, most Arab countries are above the OECD average
- The average result across all mobile baskets for the Arab countries is consistently higher than the OECD average. In some cases it is more than double, most notably the 300, 900 calls basket (while the 400 messages basket is almost double). For low and mid usage, the averages are much more on par
- Baskets which incorporate handset data (new for this year) show a broad variation in price across the Arab providers – the difference becoming more marked for baskets with higher data requirements.
- Similar to the voice baskets, the Arab average for the data baskets is typically much higher than the OECD one, although this is skewed by particularly expensive countries at the upper end.
- Where data costs are shown on the graph, these refer to overage charges, rather than data bought in a ‘block’. Where overage charges are higher, the indication is that there is a limited range of data options, and mobile handset data services are much less well established, and are geared only towards very modest use. Over time, these costs should fall significantly, as mobile data use becomes more commonplace.
- For both low and high data usage, several countries are much more on par with the OECD average, with countries of note being; Sudan, Bahrain, Jordan, Egypt and Kuwait.
- The number of tariff packages offered by the Arab operators has increased steadily, with the average number of packages per operator increasing from 10.9 in 2011, to 15.6 in 2012 and 19.1 in 2013. While this is a notable increase, it is still some way behind the OECD average of 47 packages per operator

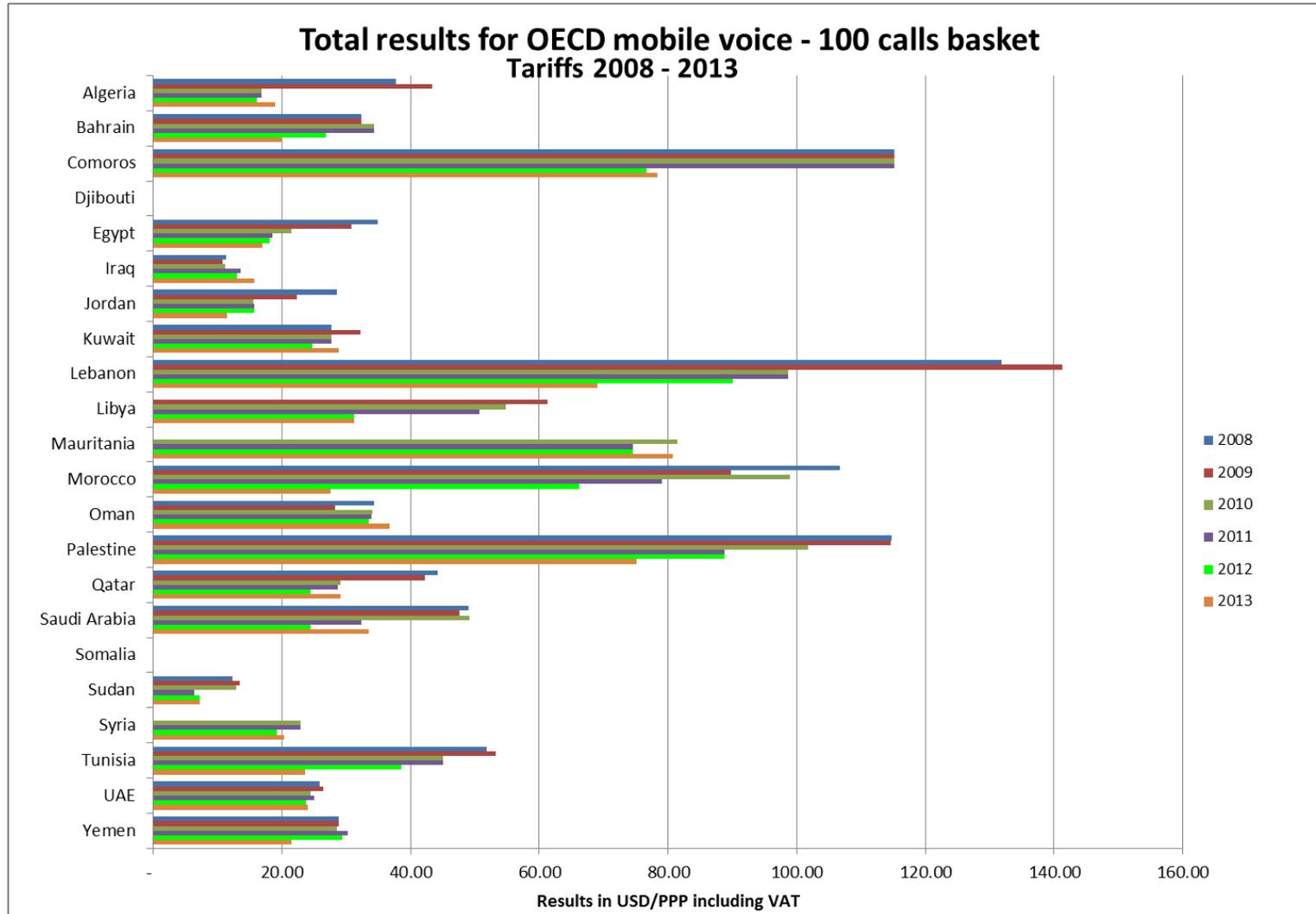


# Mobile time series analysis (using OECD 2010 baskets)

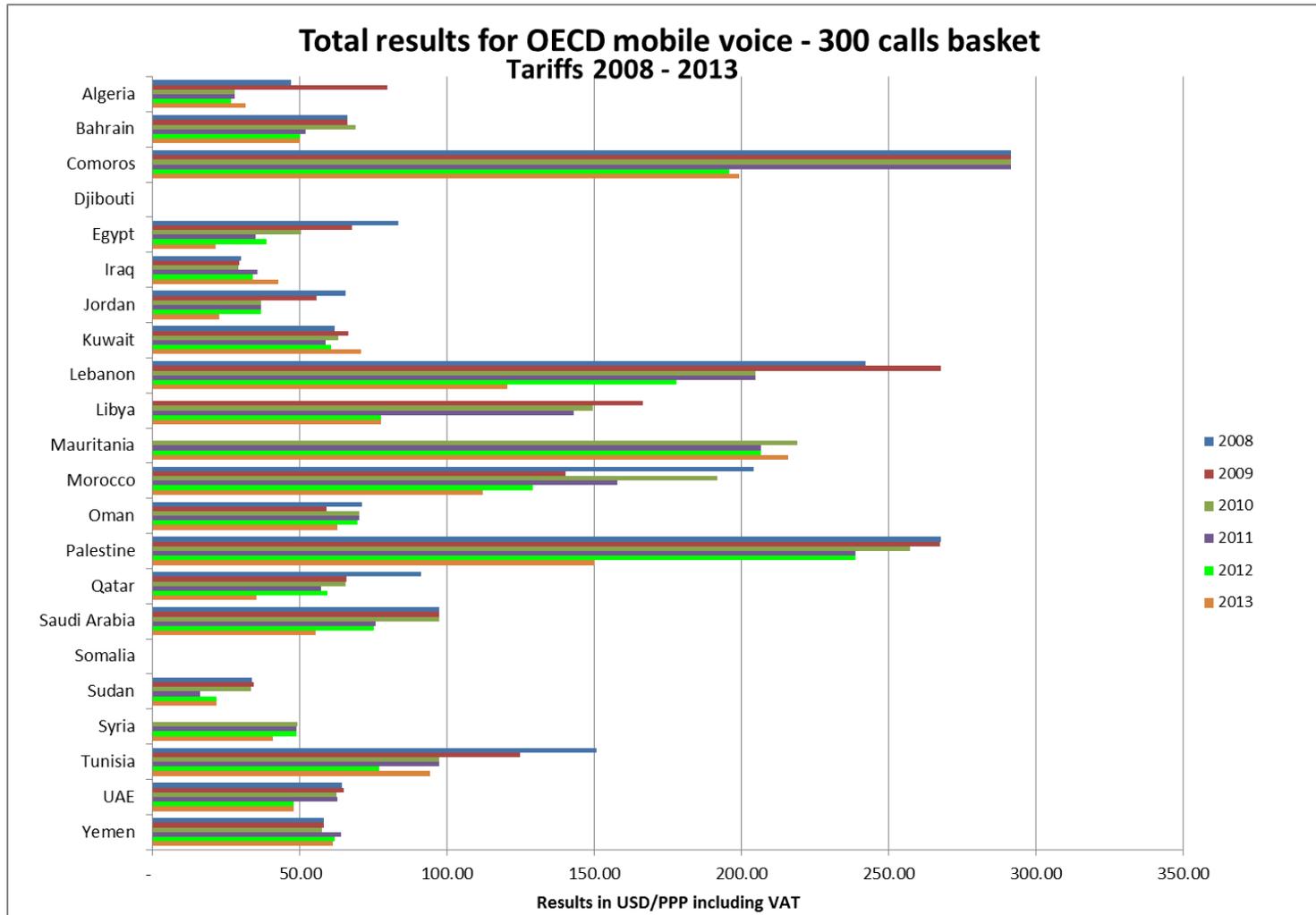
# 2010 OECD mobile baskets time series, 30 calls/month



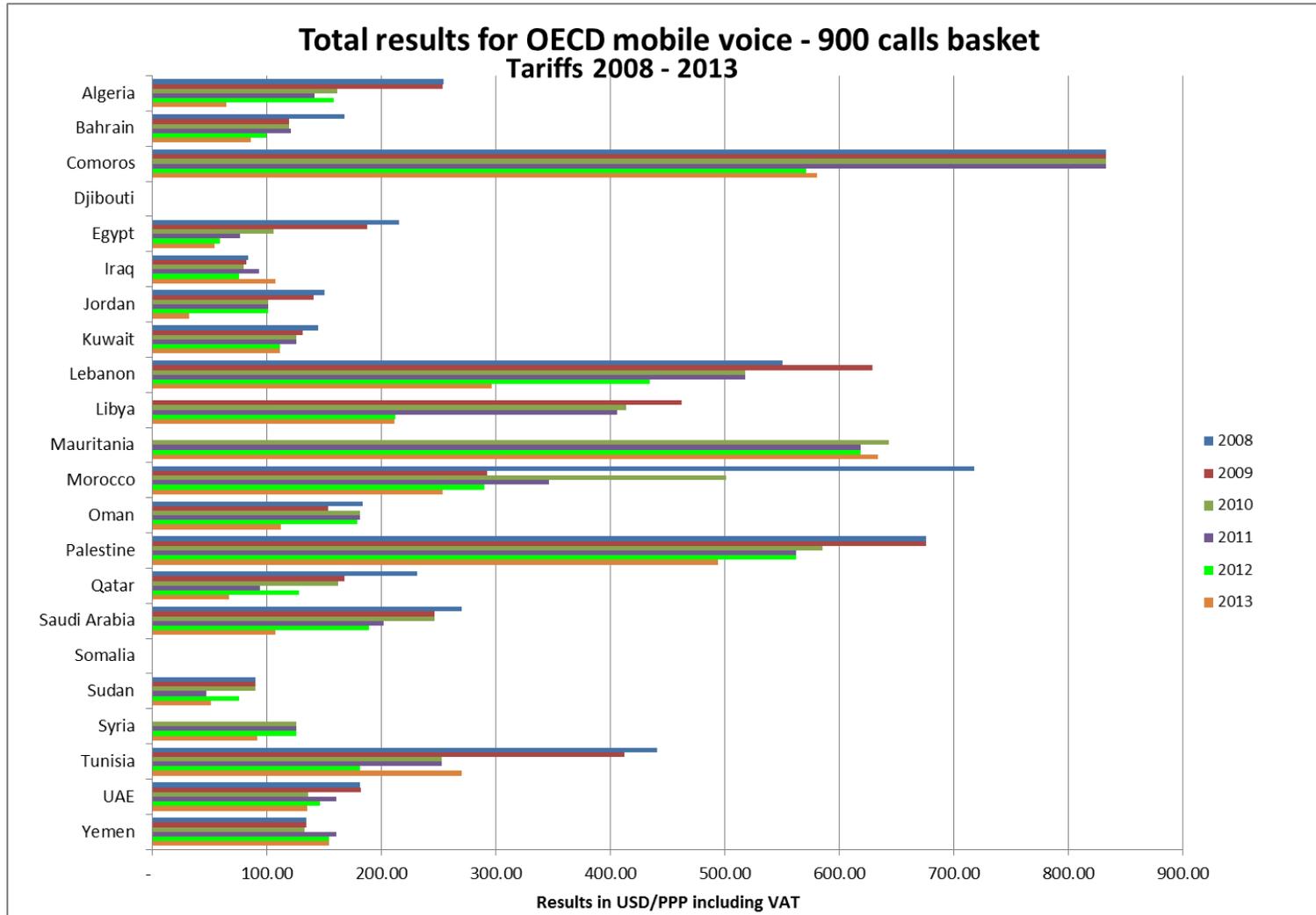
# 2010 OECD mobile baskets time series, 100 calls/month



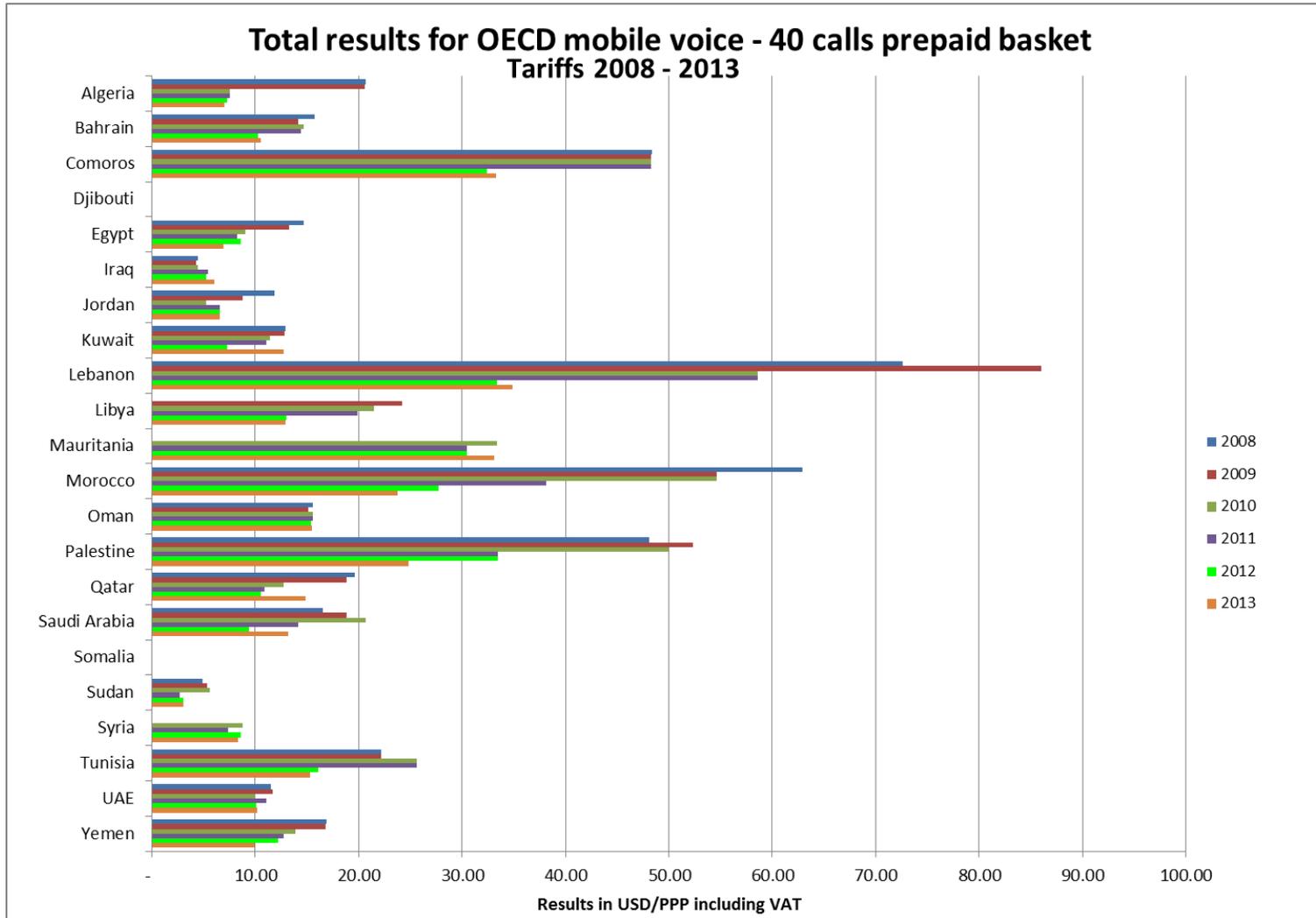
# 2010 OECD mobile baskets time series, 300 calls/month



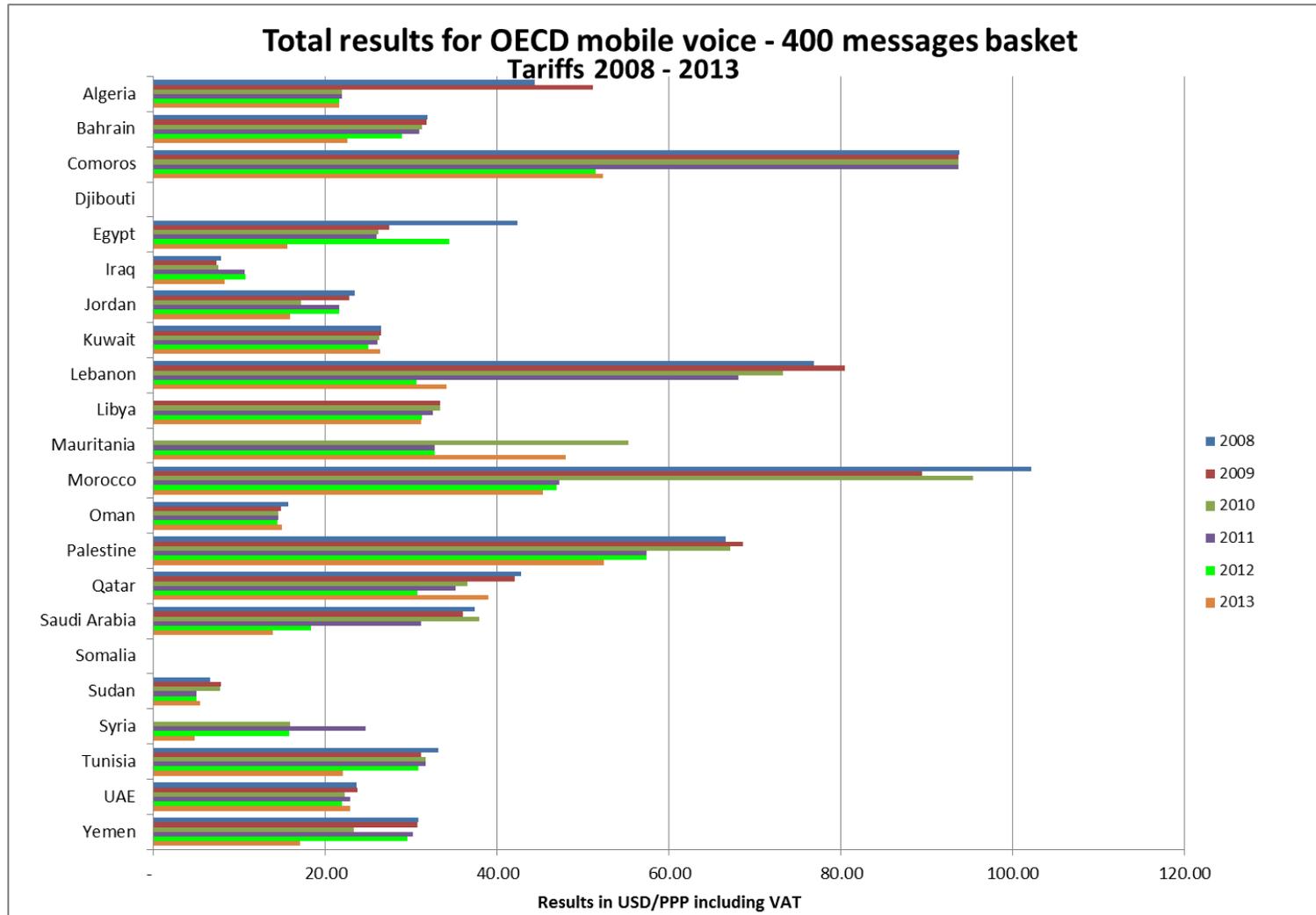
# 2010 OECD mobile baskets time series, 900 calls/month



# 2010 OECD mobile baskets time series, 40 calls/month prepaid



# 2010 OECD mobile baskets time series, 400 messages/month



# Observations from mobile time series results

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- The majority of operators across the Arab countries changed and extended their mobile tariff offerings; the average number of packages offered in the Arab countries now stands at just over 19 per operator - an increase of 22% since 2012.
- Most operators introduced new pre- and/or post-paid packages, alongside existing offers. In some cases, the number of new plans was very substantial
  - 4G services are increasingly being rolled out across a number of Arab countries, which has contributed to this.
- Many countries experienced decreases across some or all of the baskets, some of which were very substantial. A handful of countries remained static over the previous year, while some countries experienced increases across a number of baskets.
- The changes are as a result of a number of factors, such as packages no longer being available, and being replaced by alternate packages, either from the same or other operators, or as a result of a rebalancing of tariff elements in the packages – with the overall impact being a fall in prices.
- The average cost of lower usage baskets (30 calls, 40 calls prepaid) increased very slightly (by 1%), while the cost across all other baskets fell, on average, overall by 10%. By contrast, the overall decrease in OECD countries on average was 16%.
- Even though prices are falling, there is a clear increase in more functional 4G services in many Arab countries.

*Note: Mobile voice with handset data is not covered in the time series this year*



# Mobile ranking tables, 2008-2013

# Mobile OECD 30 calls/month basket ranking

Total results for OECD mobile voice 30 calls basket  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	21.38	21.32	11.24	11.24	10.94	10.94
Bahrain	15.13	15.02	14.47	14.22	10.79	11.04
Comoros	47.43	47.33	47.33	47.33	30.48	31.32
Djibouti						
Egypt	15.51	13.38	10.20	9.55	12.01	8.09
Iraq	4.36	4.00	4.34	5.22	5.18	5.90
Jordan	11.21	9.67	4.14	7.55	7.55	8.05
Kuwait	12.44	12.38	11.93	11.14	8.67	12.32
Lebanon	62.11	70.76	55.64	52.12	27.15	28.68
Libya		21.73	21.53	18.61	13.83	13.77
Mauritania			29.92	24.81	24.81	29.37
Morocco	64.60	57.89	60.78	26.21	25.89	23.76
Oman	12.62	12.17	11.89	11.87	11.71	12.59
Palestine	43.48	47.69	45.45	32.53	32.53	24.82
Qatar	19.33	18.92	13.95	12.73	11.20	17.12
Saudi Arabia	16.80	17.45	19.36	15.16	8.93	13.88
Somalia						
Sudan	4.45	5.09	5.00	2.56	2.84	2.84
Syria			7.63	7.33	6.58	5.90
Tunisia	22.22	20.04	21.70	21.70	15.31	14.84
UAE	11.22	11.46	9.71	10.76	9.99	10.23
Yemen	17.92	17.84	13.66	13.94	13.67	7.56

Arab average	23.66	23.56	20.99	17.83	14.50	14.65
OECD average	N/A	N/A	16.64	14.99	14.35	13.21

Below Arab average  
Above Arab average

Ranking for OECD mobile 30 calls basket

	2008	2009	2010	2011	2012	2013
Algeria	12	13	7	8	9	8
Bahrain	7	8	12	12	8	9
Comoros	15	15	18	19	19	20
Djibouti	-	-	-	-	-	-
Egypt	8	7	6	5	12	6
Iraq	1	1	2	2	2	2
Jordan	3	3	1	4	4	5
Kuwait	5	6	9	7	5	10
Lebanon	16	18	19	20	18	18
Libya	-	14	14	14	14	12
Mauritania	-	-	16	16	16	19
Morocco	17	17	20	17	17	16
Oman	6	5	8	9	11	11
Palestine	14	16	17	18	20	17
Qatar	11	11	11	10	10	15
Saudi Arabia	9	9	13	13	6	13
Somalia	-	-	-	-	-	-
Sudan	2	2	3	1	1	1
Syria	-	-	4	3	3	2
Tunisia	13	12	15	15	15	14
UAE	4	4	5	6	7	7
Yemen	10	10	10	11	13	4

Least expensive  
Most expensive

Note: The year on year results and averages are based on lowest cost per country, and will not be the same as the average across all carriers and countries  
Comparable OECD data is not available for 2008 and 2009



# Mobile OECD 100 calls/month basket ranking

Total results for OECD mobile voice 100 calls basket  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	37.68	43.43	16.80	16.80	16.19	19.04
Bahrain	32.37	32.38	34.34	34.34	26.89	20.06
Comoros	115.23	115.13	115.13	115.13	76.63	78.31
Djibouti						
Egypt	34.89	30.78	21.52	18.60	18.17	16.99
Iraq	11.30	10.83	11.20	13.68	13.04	15.79
Jordan	28.54	22.30	15.52	15.72	15.72	11.54
Kuwait	27.67	32.25	27.78	27.78	24.78	28.80
Lebanon	131.80	141.30	98.67	98.67	90.05	69.03
Libya		61.24	54.78	50.70	31.31	31.20
Mauritania			81.46	74.50	74.50	80.73
Morocco	106.73	89.75	98.94	79.15	66.21	27.63
Oman	34.42	28.25	34.02	33.94	33.48	36.81
Palestine	114.74	114.67	101.81	88.89	88.89	75.15
Qatar	44.27	42.23	29.12	28.75	24.42	29.15
Saudi Arabia	48.99	47.58	49.20	32.41	24.54	33.50
Somalia						
Sudan	12.29	13.54	12.90	6.39	7.33	7.33
Syria			22.97	22.95	19.30	20.41
Tunisia	51.86	53.30	45.01	45.01	38.64	23.57
UAE	25.94	26.42	24.43	25.09	23.83	24.12
Yemen	28.91	28.83	28.54	30.27	29.45	21.58

Arab average	52.21	51.90	46.21	42.94	37.17	33.54
OECD average	N/A	N/A	31.60	27.78	26.34	22.76

Below Arab average  
Above Arab average

Ranking for OECD mobile 100 calls basket

	2008	2009	2010	2011	2012	2013
Algeria	10	11	4	4	4	5
Bahrain	7	9	12	13	11	6
Comoros	16	17	20	20	18	19
Djibouti	-	-	-	-	-	-
Egypt	9	7	5	5	5	4
Iraq	1	1	1	2	2	3
Jordan	5	3	3	3	3	2
Kuwait	4	8	8	8	10	12
Lebanon	17	18	17	19	20	17
Libya	-	14	15	15	13	14
Mauritania	-	-	16	16	17	20
Morocco	14	15	18	17	16	11
Oman	8	5	11	12	14	16
Palestine	15	16	19	18	19	18
Qatar	11	10	10	9	8	13
Saudi Arabia	12	12	14	11	9	15
Somalia	-	-	-	-	-	-
Sudan	2	2	2	1	1	1
Syria	-	-	6	6	6	7
Tunisia	13	13	13	14	15	9
UAE	3	4	7	7	7	10
Yemen	6	6	9	10	12	8

Least expensive  
Most expensive



Note: The year on year results and averages are based on lowest cost per country, and will not be the same as the average across all carriers and countries  
Comparable OECD data is not available for 2008 and 2009

# Mobile OECD 300 calls/month basket ranking

Total results for OECD mobile voice 300 calls basket  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	46.91	79.71	27.85	27.85	26.64	31.62
Bahrain	66.13	66.22	68.98	51.95	50.10	50.11
Comoros	291.54	291.44	291.44	291.44	195.77	199.13
Djibouti						
Egypt	83.42	67.84	50.56	34.98	38.82	21.40
Iraq	30.22	29.40	29.14	35.74	34.05	42.78
Jordan	65.68	55.75	36.78	36.98	36.98	22.71
Kuwait	61.93	66.40	63.16	58.79	60.67	70.91
Lebanon	242.10	267.70	204.76	204.76	178.03	120.59
Libya		166.50	149.62	143.15	77.70	77.47
Mauritania			218.87	206.50	206.50	215.84
Morocco	204.29	140.40	191.84	157.90	129.16	112.32
Oman	71.21	59.01	70.35	70.27	69.59	62.75
Palestine	267.63	267.55	257.14	238.66	238.66	150.14
Qatar	91.09	65.77	65.62	57.33	59.39	35.42
Saudi Arabia	97.36	97.33	97.33	75.67	75.18	55.37
Somalia						
Sudan	33.75	34.43	33.40	16.34	21.83	21.83
Syria			49.20	49.04	49.04	40.97
Tunisia	150.65	124.90	97.31	97.31	76.86	94.34
UAE	64.47	64.95	62.42	62.74	47.95	47.94
Yemen	58.31	58.23	57.66	64.04	61.84	61.22

Arab average	113.33	111.31	106.17	99.07	86.74	76.74
OECD average	N/A	N/A	63.91	55.87	47.26	34.83

Below Arab average  
 Above Arab average

Ranking for OECD mobile 300 calls basket

	2008	2009	2010	2011	2012	2013
Algeria	3	11	1	2	2	4
Bahrain	8	8	11	7	8	9
Comoros	17	18	20	20	18	19
Djibouti	-	-	-	-	-	-
Egypt	10	10	6	3	5	1
Iraq	1	1	2	4	3	7
Jordan	7	3	4	5	4	3
Kuwait	5	9	9	9	10	13
Lebanon	15	17	17	17	17	17
Libya	-	15	15	15	15	14
Mauritania	-	-	18	18	19	20
Morocco	14	14	16	16	16	16
Oman	9	5	12	12	12	12
Palestine	16	16	19	19	20	18
Qatar	11	7	10	8	9	5
Saudi Arabia	12	12	14	13	13	10
Somalia	-	-	-	-	-	-
Sudan	2	2	3	1	1	2
Syria	-	-	5	6	7	6
Tunisia	13	13	13	14	14	15
UAE	6	6	8	10	6	8
Yemen	4	4	7	11	11	11

Least expensive  
 Most expensive



Note: The year on year results and averages are based on lowest cost per country, and will not be the same as the average across all carriers and countries  
 Comparable OECD data is not available for 2008 and 2009

# Mobile OECD 900 calls/month basket ranking

Total results for OECD mobile voice 900 calls basket  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	254.56	253.95	161.74	141.75	158.09	64.92
Bahrain	167.70	119.72	119.33	121.01	99.50	86.00
Comoros	833.10	833.00	833.00	833.00	570.80	580.91
Djibouti						
Egypt	215.30	187.85	105.63	76.87	58.98	53.99
Iraq	84.04	82.35	80.14	93.60	76.14	107.89
Jordan	150.36	141.01	101.04	101.24	101.24	31.87
Kuwait	144.91	131.27	125.73	125.72	111.40	111.40
Lebanon	550.77	628.55	517.74	517.74	434.55	296.50
Libya		462.16	413.94	405.67	212.32	211.63
Mauritania			643.39	618.76	618.76	633.65
Morocco	717.81	292.09	501.39	346.72	290.39	253.50
Oman	183.63	153.43	181.13	181.03	179.01	112.24
Palestine	675.75	675.68	585.04	562.31	562.31	494.28
Qatar	231.09	167.47	162.36	94.02	128.39	66.71
Saudi Arabia	270.30	246.44	246.44	202.24	188.91	107.28
Somalia						
Sudan	90.00	90.00	90.00	47.28	76.08	51.31
Syria			125.88	125.72	125.72	91.86
Tunisia	440.49	411.93	252.78	252.78	180.99	270.37
UAE	181.59	182.07	135.89	161.03	146.66	134.95
Yemen	134.34	134.27	132.56	160.65	154.05	154.05

Arab average	313.28	288.51	275.76	258.46	223.71	195.77
OECD average	N/A	N/A	132.20	107.81	86.22	49.52

Below Arab average  
Above Arab average

Ranking for OECD mobile 900 calls basket

	2008	2009	2010	2011	2012	2013
Algeria	11	12	10	9	11	4
Bahrain	6	3	5	6	4	6
Comoros	17	18	20	20	19	19
Djibouti	-	-	-	-	-	-
Egypt	9	10	4	2	1	3
Iraq	1	1	1	3	3	9
Jordan	5	6	3	5	5	1
Kuwait	4	4	6	7	6	10
Lebanon	14	16	17	17	17	17
Libya	-	15	15	16	15	14
Mauritania	-	-	19	19	20	20
Morocco	16	13	16	15	16	15
Oman	8	7	12	12	12	11
Palestine	15	17	18	18	18	18
Qatar	10	8	11	4	8	5
Saudi Arabia	12	11	13	13	14	8
Somalia	-	-	-	-	-	-
Sudan	2	2	2	1	2	2
Syria	-	-	7	7	7	7
Tunisia	13	14	14	14	13	16
UAE	7	9	9	11	9	12
Yemen	3	5	8	10	10	13

Least expensive  
Most expensive



Note: The year on year results and averages are based on lowest cost per country, and will not be the same as the average across all carriers and countries  
Comparable OECD data is not available for 2008 and 2009

# Mobile OECD 40 calls/month prepaid basket ranking

Total results for OECD mobile voice 40 calls prepaid basket  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	20.67	20.61	7.54	7.54	7.24	7.07
Bahrain	15.71	14.15	14.64	14.42	10.29	10.54
Comoros	48.39	48.29	48.29	48.29	32.42	33.26
Djibouti						
Egypt	14.67	13.25	9.00	8.29	8.58	6.89
Iraq	4.49	4.24	4.47	5.39	5.27	6.07
Jordan	11.86	8.80	5.28	6.57	6.57	6.54
Kuwait	12.93	12.87	11.45	11.04	7.30	12.77
Lebanon	72.64	86.03	58.60	58.60	33.34	34.89
Libya		24.25	21.50	19.87	12.97	12.91
Mauritania			33.34	30.44	30.44	33.13
Morocco	62.93	54.59	54.59	38.14	27.76	23.76
Oman	15.56	15.08	15.56	15.56	15.39	15.69
Palestine	48.13	52.35	49.99	33.49	33.49	24.82
Qatar	19.61	18.80	12.71	10.92	10.53	14.83
Saudi Arabia	16.53	18.86	20.72	14.18	9.39	13.20
Somalia						
Sudan	4.93	5.35	5.56	2.65	3.03	3.03
Syria			8.80	7.36	8.57	8.37
Tunisia	22.22	22.13	25.58	25.58	16.08	15.33
UAE	11.49	11.72	9.98	11.03	10.09	10.18
Yemen	16.84	16.77	13.87	12.73	12.18	9.90

Arab average	24.68	24.90	21.57	19.10	15.05	15.16
OECD average	N/A	N/A	16.72	15.49	14.94	14.19

Below Arab average  
Above Arab average

Ranking for OECD mobile 40 calls prepaid basket

	2008	2009	2010	2011	2012	2013
Algeria	12	12	4	5	4	5
Bahrain	8	7	11	12	10	9
Comoros	15	15	17	19	18	19
Djibouti	-	-	-	-	-	-
Egypt	6	6	6	6	7	4
Iraq	1	1	1	2	2	2
Jordan	4	3	2	3	3	3
Kuwait	5	5	8	9	5	10
Lebanon	17	18	20	20	19	20
Libya	-	14	14	14	13	11
Mauritania	-	-	16	16	17	18
Morocco	16	17	19	18	16	16
Oman	7	8	12	13	14	15
Palestine	14	16	18	17	20	17
Qatar	11	10	9	7	11	13
Saudi Arabia	9	11	13	11	8	12
Somalia	-	-	-	-	-	-
Sudan	2	2	3	1	1	1
Syria	-	-	5	4	6	6
Tunisia	13	13	15	15	15	14
UAE	3	4	7	8	9	8
Yemen	10	9	10	10	12	7

Least expensive  
Most expensive



Note: The year on year results and averages are based on lowest cost per country, and will not be the same as the average across all carriers and countries  
Comparable OECD data is not available for 2008 and 2009

# Mobile OECD 400 messages/month basket ranking

Total results for OECD mobile voice 400 messages basket  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	44.38	51.18	21.95	21.95	21.64	21.64
Bahrain	31.89	31.77	31.23	30.98	28.91	22.54
Comoros	93.84	93.74	93.74	93.74	51.49	52.34
Djibouti						
Egypt	42.43	27.43	26.17	26.03	34.41	15.56
Iraq	7.86	7.39	7.59	10.64	10.71	8.35
Jordan	23.47	22.85	17.24	21.66	21.66	15.91
Kuwait	26.53	26.47	26.32	26.09	25.06	26.45
Lebanon	76.88	80.47	73.31	68.07	30.64	34.15
Libya		33.39	33.42	32.56	31.22	31.16
Mauritania			55.25	32.70	32.70	47.99
Morocco	102.20	89.47	95.42	47.20	46.89	45.36
Oman	15.69	14.87	14.58	14.58	14.42	15.24
Palestine	66.59	68.66	67.18	57.39	57.39	52.43
Qatar	42.80	42.05	36.56	35.22	30.78	38.94
Saudi Arabia	37.41	36.00	37.91	31.12	18.31	13.91
Somalia						
Sudan	6.62	7.92	7.75	5.00	5.01	5.40
Syria			15.88	24.72	15.82	4.84
Tunisia	33.13	31.12	31.70	31.70	30.88	22.04
UAE	23.62	23.78	22.22	22.88	21.91	22.92
Yemen	30.82	30.74	23.28	30.17	29.62	17.13

Arab average	41.54	39.96	36.94	33.22	27.97	25.72
OECD average	N/A	N/A	22.93	18.17	16.02	15.67

■ Below Arab average  
■ Above Arab average

Ranking for OECD mobile 400 messages basket

	2008	2009	2010	2011	2012	2013
Algeria	13	14	6	5	6	9
Bahrain	8	10	11	11	10	11
Comoros	16	18	19	20	19	19
Djibouti	-	-	-	-	-	-
Egypt	11	7	9	8	17	6
Iraq	2	1	1	2	2	3
Jordan	4	4	5	4	7	7
Kuwait	6	6	10	9	9	13
Lebanon	15	16	18	19	12	15
Libya	-	11	13	14	15	14
Mauritania	-	-	16	15	16	18
Morocco	17	17	20	17	18	17
Oman	3	3	3	3	3	5
Palestine	14	15	17	18	20	20
Qatar	12	13	14	16	13	16
Saudi Arabia	10	12	15	12	5	4
Somalia	-	-	-	-	-	-
Sudan	1	2	2	1	1	2
Syria	-	-	4	7	4	1
Tunisia	9	9	12	13	14	10
UAE	5	5	7	6	8	12
Yemen	7	8	8	10	11	8

■ Least expensive  
■ Most expensive



Note: The year on year results and averages are based on lowest cost per country, and will not be the same as the average across all carriers and countries  
Comparable OECD data is not available for 2008 and 2009

# Leased line basket 2013 results (using OECD 2010 baskets)

# Leased line basket, as defined by the OECD (2010 version of OECD baskets)

- Prices for 2 Mb/s and 34 Mb/s national circuits
- 6 specific distances are used:
  - 2 km, 20 km, 50 km, 100 km, 200 km and 500 km
- Each distance is weighted in order to calculate a **weighted average price for one circuit** as follows:

National Distance	2km	20km	50km	100km	200km	500km	Total
64 kb/s	50%	18%	6%	8%	10%	8%	100%
2 Mb/s	50%	18%	6%	8%	10%	8%	100%
34 Mb/s	42%	18%	15%	9%	8%	8%	100%

- The 2 bitrates are calculated and reported separately.
- Where the distances in the basket go beyond the country borders, the weights of those distances are attributed to the longest available tariff zone.
  - For example: In Bahrain a 2 Mb/s circuit costs BD 890 regardless of distance. The longest possible circuit distance in Bahrain is approximately 50 km. But the weights for 100 km (8%), 200 km (10%) and 500 km (8%) are still applied to this price as the price for the longest possible circuit in order to cover 100%.
  - This may bias the results for small countries with distance-sensitive prices in the sense that a relatively higher proportion of the circuits will be at maximum cost
  - Small countries with no distance pricing will be favoured by this scheme.
- For the Arab country price benchmarking three more bitrates are added, to the extent they are offered in the countries concerned:
  - 64 kb/s (formerly used in the OECD 2006 baskets) and 256 kb/s in order to cover a wider range of services relevant for the region, and 155 Mb/s to show the potential for future development.
    - The calculations for these speeds use the same weighted average price as for 2 Mb/s and 34 Mb/s respectively



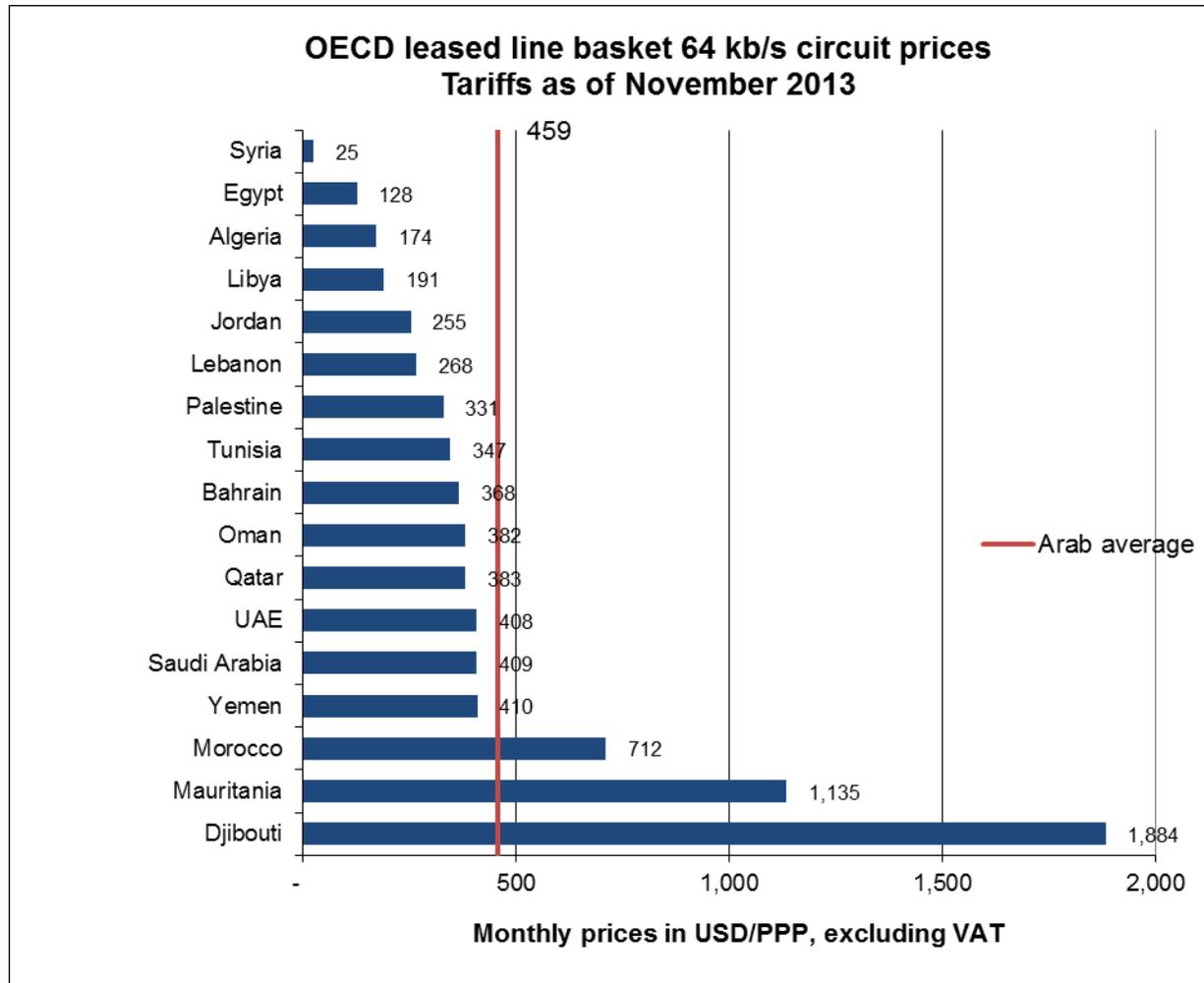
# Leased line data issues

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- No price data available for:
  - Comoros
  - Iraq
  - Kuwait
  - Somalia
- Other countries may have data missing for specific bitrates



# 64 kb/s OECD leased line basket results

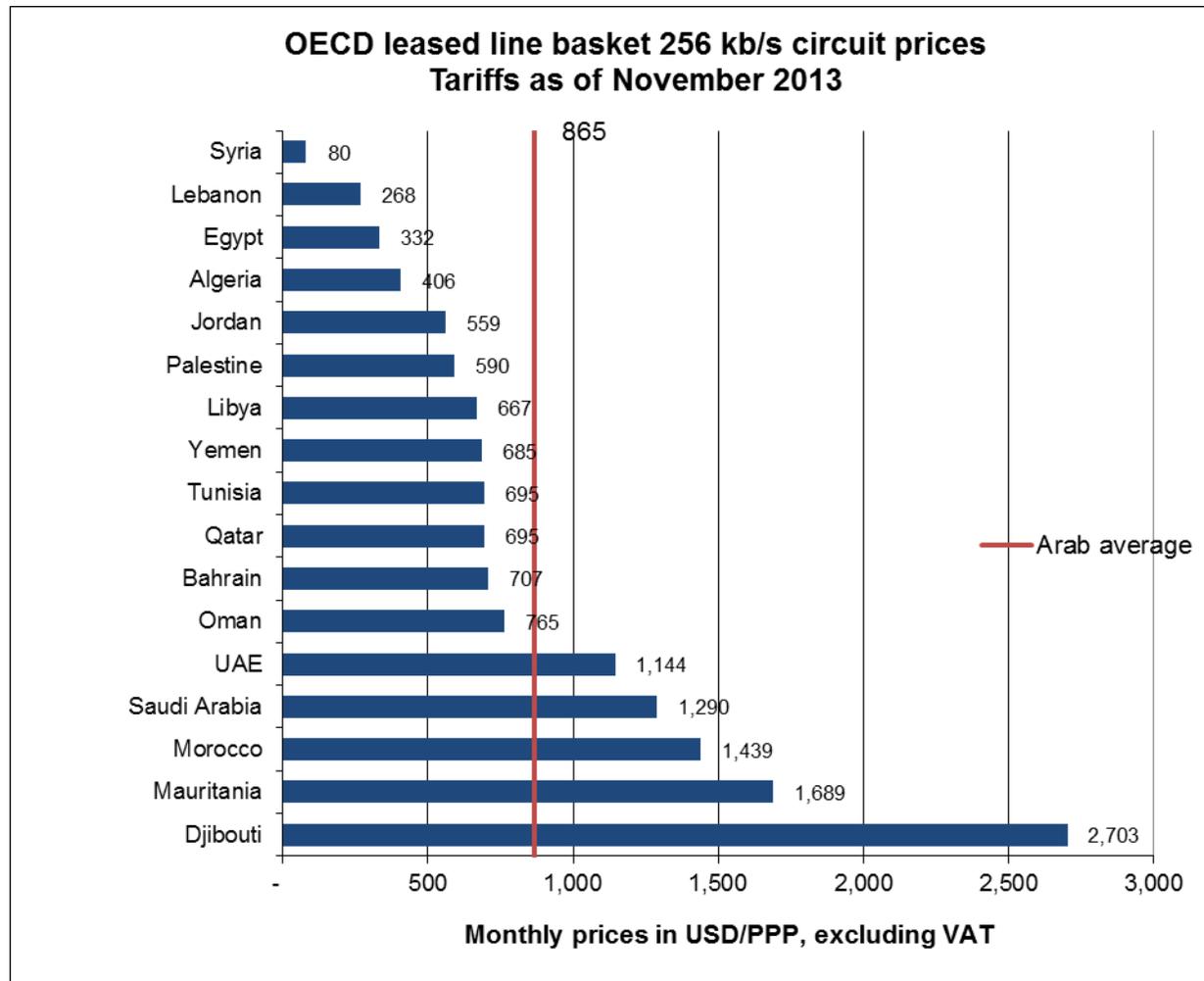


The 64 kb/s basket is no longer covered within the OECD baskets, however the standard 2010 methodology has been applied to 64 kb/s circuits for the Arab countries



Note: No equivalent OECD data exists.

# 256kb/s OECD leased line basket results

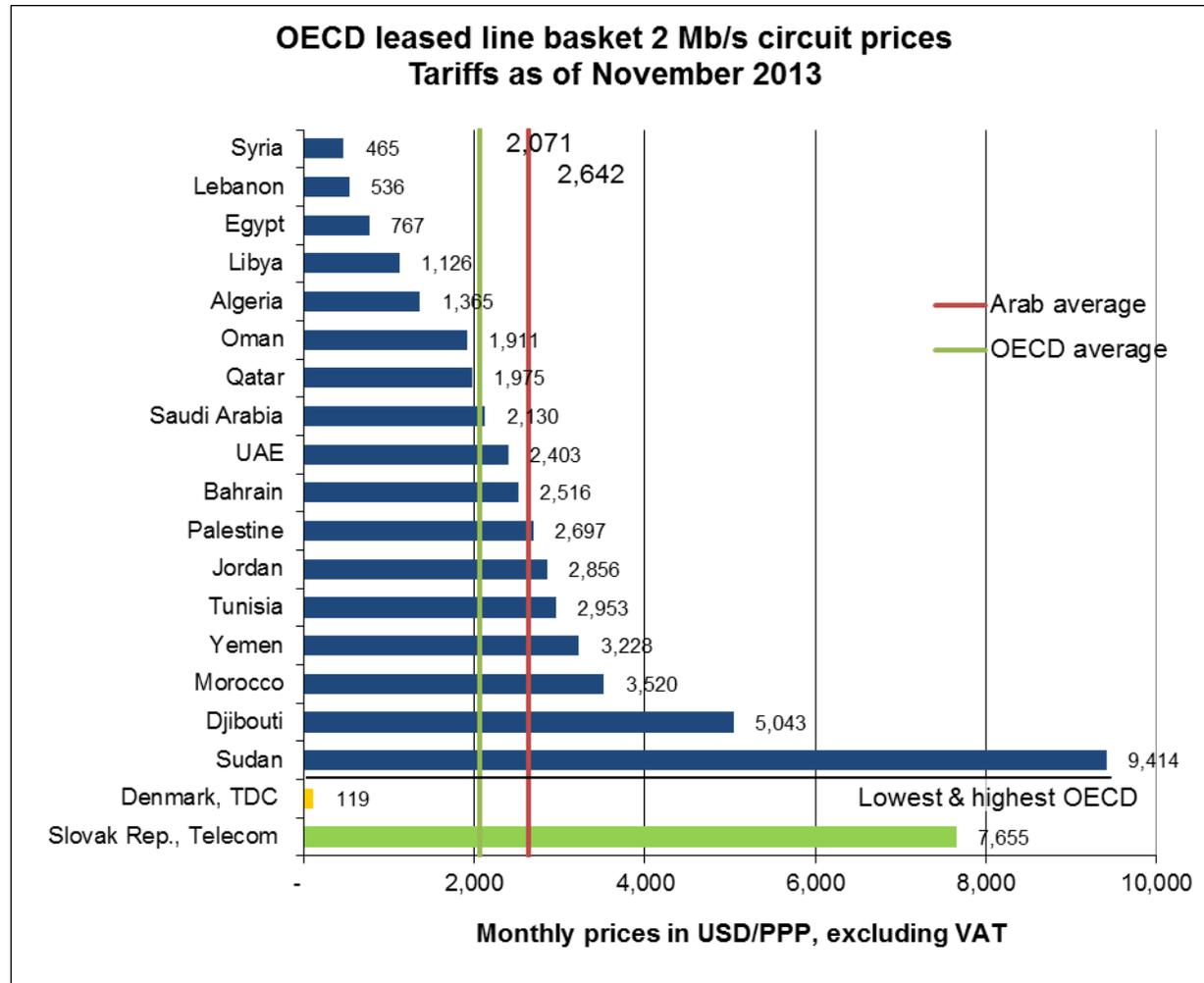


The OECD basket does not cover 256 kb/s, however the standard 2010 methodology has been applied to 256 kb/s circuits for the Arab countries



Note: No equivalent OECD data exists.

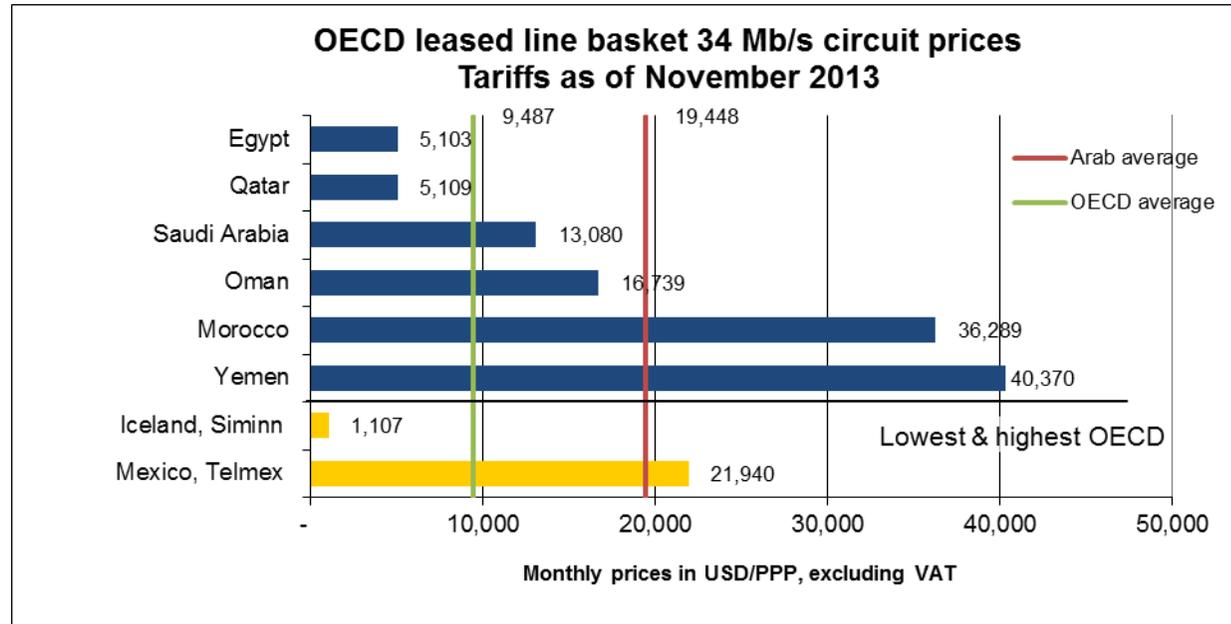
## 2 Mb/s OECD leased line basket results



The OECD data shown represents the lowest and highest prices found in OECD countries, and the average across all 34 OECD countries.



# 34 Mb/s OECD leased line basket results

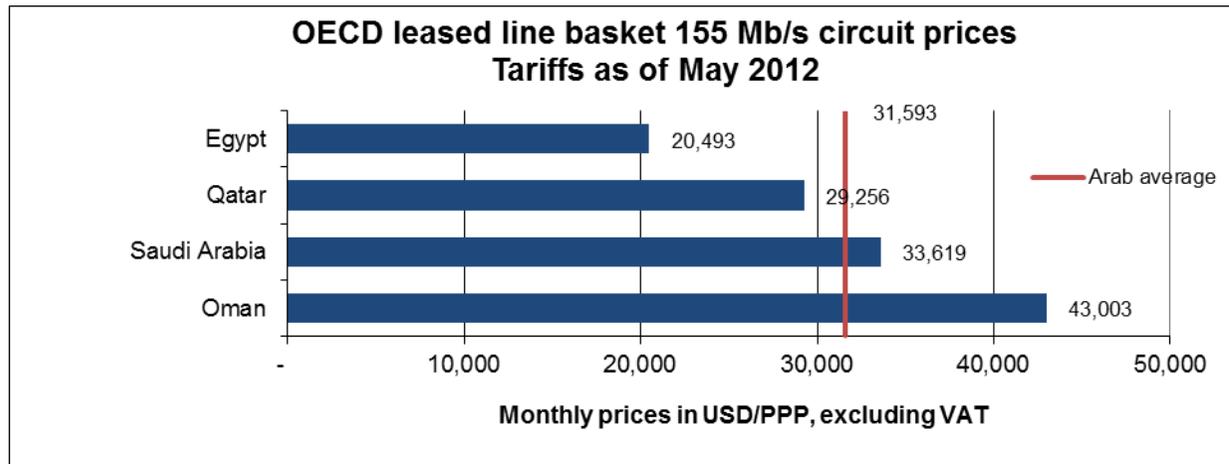


The OECD data shown represents the lowest and highest prices found in OECD countries, and the average across all 34 OECD countries.

Only a few of the Arab countries publish these prices. The service may still be offered, though.



# 155 Mb/s OECD leased line basket results



Only a few of the Arab countries publish these prices. The service may still be offered, though.

The OECD basket does not cover 155 Mb/s, however the standard 2010 methodology has been applied to 155 Mb/s circuits for the Arab countries

Note: No equivalent OECD data exists.



# Observations from leased line results

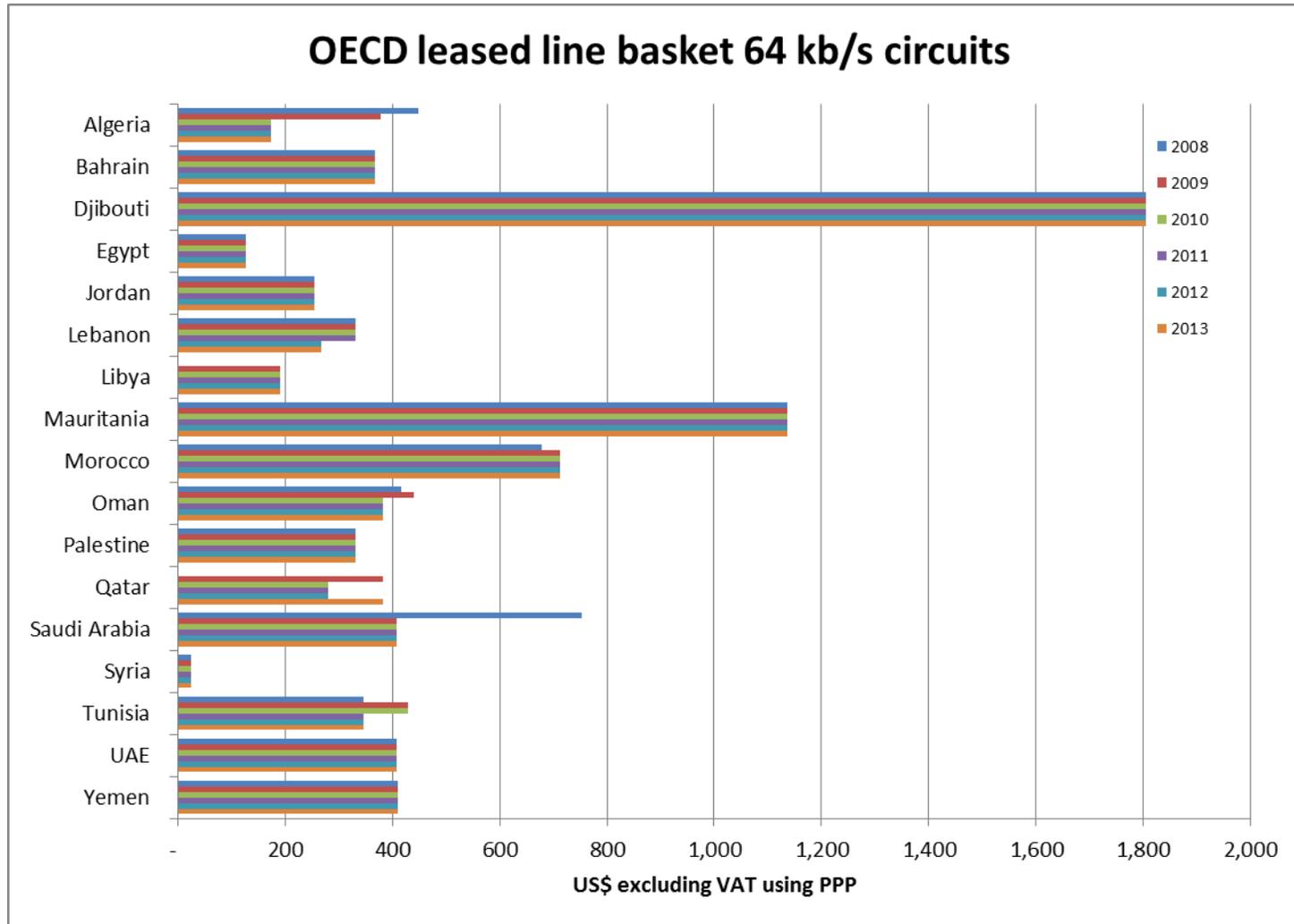
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- Algeria, Egypt, Libya, Lebanon and Syria have the lowest prices for National Leased Lines.
  - The price ranking may vary with product
- For 34 Mb/s and 155 Mb/s a lot of the prices are not available in the public domain, and have not been included.
  - For 34 Mb/s, prices are only available from 6 countries, and for 155 Mb/s, from 4 countries.
- As in previous year, the prices in Djibouti and Mauritania for 64 kb/s and 256 kb/s, remain very high.
- For 2 Mb/s, most of the Arab countries have prices below the most expensive OECD country
  - However, all Arab countries are significantly more expensive than the OECD “best-in-class” (Denmark) at this speed
  - 7 of the 17 Arab countries (around 60%) are below the OECD average, which is a marked improvement on 2012.
- Although the 34 Mb/s average for the Arab countries is considerably higher than the OECD average at this speed, - more than double – this is as a result of particularly high circuit costs in Yemen and, to a lesser extent, Morocco
  - 2 of the 6 Arab countries analysed are well below the OECD average cost
  - All are considerably more expensive than the OECD “best-in-class” at this speed, however
- Many of the Arab countries are quite small in size and this price comparison may give advantage to the tariff structure used in these small countries.
  - i.e. the reality may be not be as favourable as shown here.

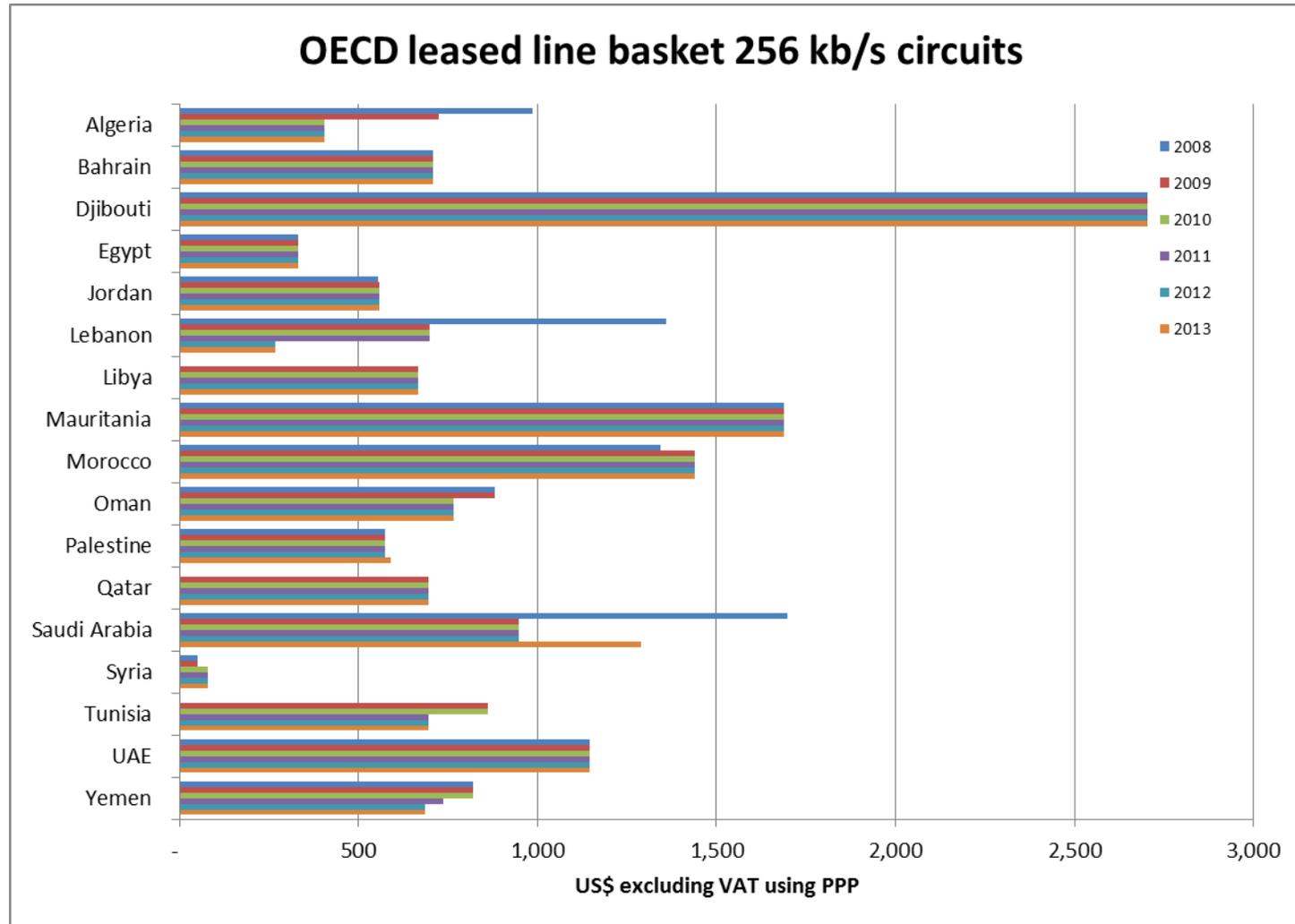


# Leased line time series analysis (using OECD 2010 baskets)

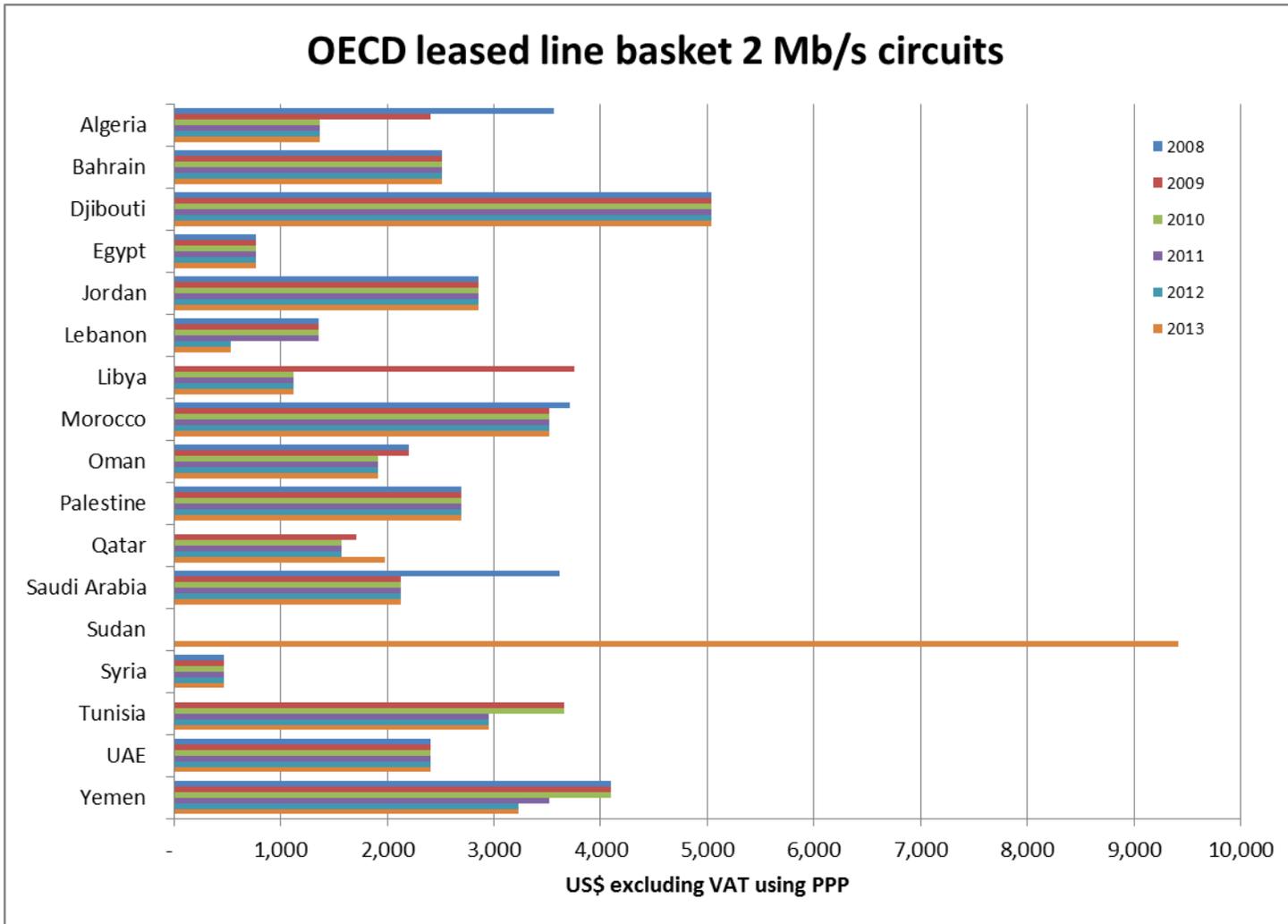
# 2010 OECD leased line baskets time series, 64 kb/s



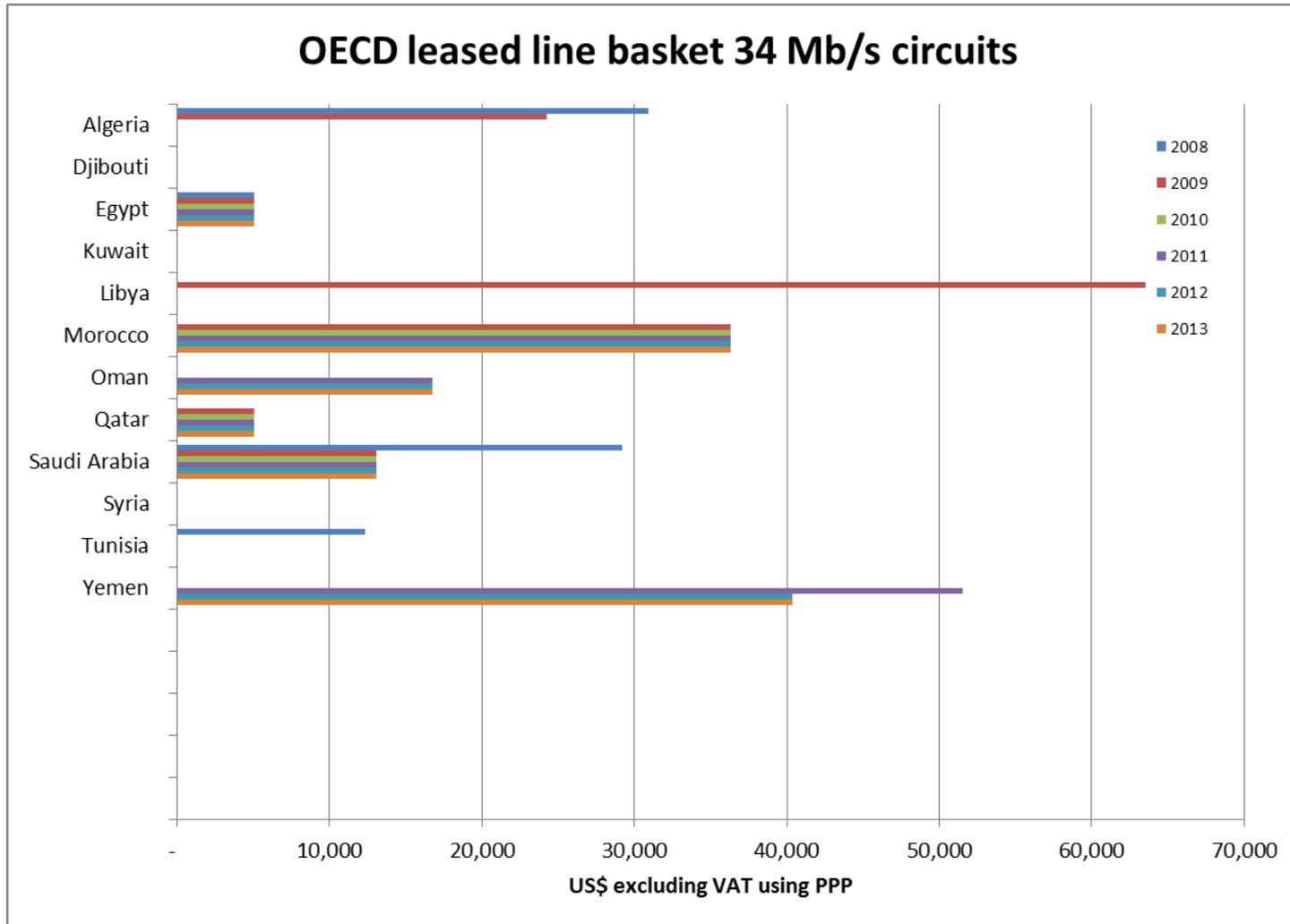
# 2010 OECD leased line baskets time series, 256 kb/s



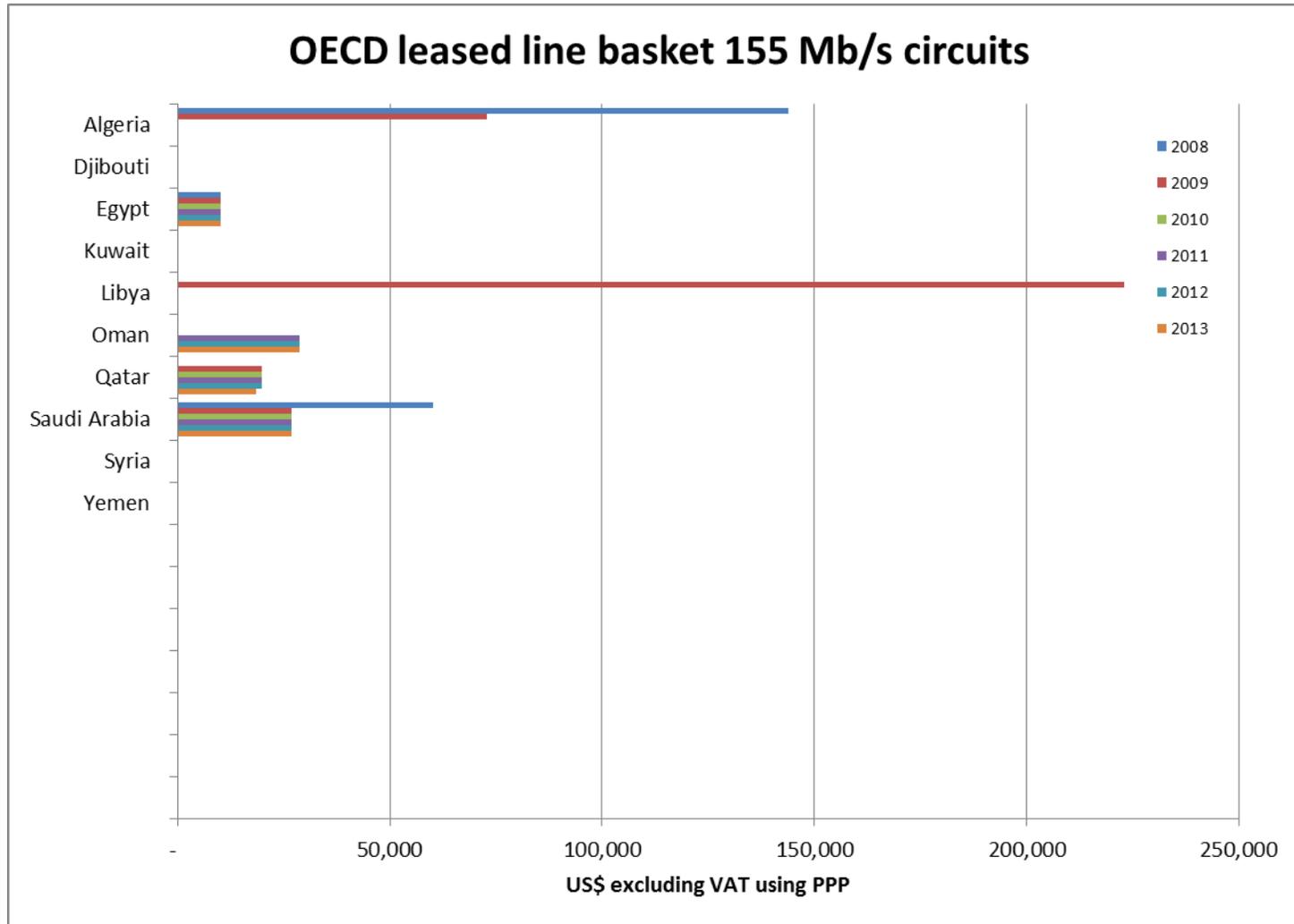
# 2010 OECD leased line baskets time series, 2 Mb/s



# 2010 OECD leased line baskets time series, 34 Mb/s



# 2010 OECD leased line baskets time series, 155 Mb/s



# Observations from leased line time series results

- Leased line prices have been generally stable, with no change to most of the operator prices.
- Price changes occurred in only three countries between 2012 and 2013:
  - Qatar: 64 kb/s and 2 Mb/s circuit prices were increased
  - Palestine: 256 kb/s circuit prices were increased
  - Morocco: 34 Mb/s circuit prices were increased
- In addition, Sudan published pricing for 2 Mb/s circuits
  - Sudan pricing is significantly higher than pricing in other Arab countries
- The Arab average has risen for 64 kb/s, 256 kb/s, 2 Mb/s and 34 Mb/s circuits, as a result of the price changes mentioned above.
- The large increase in the 2Mb/s average prices was as a result of the inclusion of pricing for Sudan in 2013, which is much higher than in other countries.
- The table below summarizes the changes seen from 2012 to 2013, as well as from 2011 to 2012. The table on the right shows the calculation without the 2013 2Mb/s result for Sudan, which distorts the results significantly.

Percentage change 2011/12 and 2012/13 including Sudan

	2011-2012	2012-2013
64 kb/s	-0.9%	1.4%
256 kb/s	-3.2%	2.5%
2 Mb/s	-3.1%	20.5%
34 Mb/s	-8.7%	0.0%
155 Mb/s	0.0%	-1.5%

Percentage change 2011/12 and 2012/13 excluding Sudan

	2011-2012	2012-2013
64 kb/s	-0.9%	1.4%
256 kb/s	-3.2%	2.5%
2 Mb/s	-3.1%	1.2%
34 Mb/s	-8.7%	0.0%
155 Mb/s	0.0%	-1.5%



# Leased line ranking tables, 2008-2013

# OECD leased line basket 64 kb/s ranking

Total results for OECD 64 kb/s leased line basket  
Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	449	379	174	174	174	174
Bahrain	368	368	368	368	368	368
Comoros						
Djibouti	1,884	1,884	1,884	1,884	1,884	1,884
Egypt	128	128	128	128	128	128
Iraq						
Jordan	255	255	255	255	255	255
Kuwait						
Lebanon	332	332	332	332	268	268
Libya		191	191	191	191	191
Mauritania	1,135	1,135	1,135	1,135	1,135	1,135
Morocco	679	712	712	712	712	712
Oman	417	440	382	382	382	382
Palestine	331	331	331	331	331	331
Qatar		383	281	281	281	383
Saudi Arabia	754	409	409	409	409	409
Somalia						
Sudan						
Syria	25	25	25	25	25	25
Tunisia	347	431	431	347	347	347
UAE	408	408	408	408	408	408
Yemen	410	410	410	410	410	410

Arab average	528	483	462	457	453	459
OECD average	N/A	N/A	N/A	N/A	N/A	N/A

Below Arab average  
 Above Arab average

Ranking for OECD 64 kb/s leased line basket

	2008	2009	2010	2011	2012	2013
Algeria	11	8	3	3	3	3
Bahrain	7	7	9	10	10	9
Comoros	-	-	-	-	-	-
Djibouti	15	17	17	17	17	17
Egypt	2	2	2	2	2	2
Iraq	-	-	-	-	-	-
Jordan	3	4	5	5	5	5
Kuwait	-	-	-	-	-	-
Lebanon	5	6	8	8	6	6
Libya	-	3	4	4	4	4
Mauritania	14	16	16	16	16	16
Morocco	12	15	15	15	15	15
Oman	10	14	10	11	11	10
Palestine	4	5	7	7	8	7
Qatar	-	9	6	6	7	11
Saudi Arabia	13	11	12	13	13	13
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	1	1	1	1	1	1
Tunisia	6	13	14	9	9	8
UAE	8	10	11	12	12	12
Yemen	9	12	13	14	14	14

Least expensive  
 Most expensive



Comparable OECD data is not available

# OECD leased line basket 256 kb/s ranking

Total results for OECD 256 kb/s leased line basket  
Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	985	724	406	406	406	406
Bahrain	707	707	707	707	707	707
Comoros						
Djibouti	2,703	2,703	2,703	2,703	2,703	2,703
Egypt	332	332	332	332	332	332
Iraq						
Jordan	556	559	559	559	559	559
Kuwait						
Lebanon	1,361	697	697	697	268	268
Libya		667	667	667	667	667
Mauritania	1,689	1,689	1,689	1,689	1,689	1,689
Morocco	1,343	1,439	1,439	1,439	1,439	1,439
Oman	881	881	765	765	765	765
Palestine	573	573	573	573	573	590
Qatar		695	695	695	695	695
Saudi Arabia	1,698	948	948	948	948	1,290
Somalia						
Sudan						
Syria	51	51	80	80	80	80
Tunisia		861	861	695	695	695
UAE	1,144	1,144	1,144	1,144	1,144	1,144
Yemen	819	819	819	737	685	685

Arab average	1,060	911	887	873	844	866
OECD average	N/A	N/A	N/A	N/A	N/A	N/A

Below Arab average  
 Above Arab average

Ranking for OECD 256 kb/s leased line basket

	2008	2009	2010	2011	2012	2013
Algeria	8	9	3	3	4	4
Bahrain	5	8	9	10	11	11
Comoros	-	-	-	-	-	-
Djibouti	14	17	17	17	17	17
Egypt	2	2	2	2	3	3
Iraq	-	-	-	-	-	-
Jordan	3	3	4	4	5	5
Kuwait	-	-	-	-	-	-
Lebanon	11	7	8	9	2	2
Libya	-	5	6	6	7	7
Mauritania	12	16	16	16	16	16
Morocco	10	15	15	15	15	15
Oman	7	12	10	12	12	12
Palestine	4	4	5	5	6	6
Qatar	-	6	7	7	9	9
Saudi Arabia	13	13	13	13	13	14
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	1	1	1	1	1	1
Tunisia	-	11	12	7	9	9
UAE	9	14	14	14	14	13
Yemen	6	10	11	11	8	8

Least expensive  
 Most expensive



Comparable OECD data is not available

# OECD leased line basket 2 Mb/s ranking

## Total results for OECD 2 Mb/s leased line basket

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	3,562	2,403	1,365	1,365	1,365	1,365
Bahrain	2,516	2,516	2,516	2,516	2,516	2,516
Comoros						
Djibouti	5,043	5,043	5,043	5,043	5,043	5,043
Egypt	767	767	767	767	767	767
Iraq						
Jordan	2,856	2,856	2,856	2,856	2,856	2,856
Kuwait						
Lebanon	1,361	1,361	1,361	1,361	536	536
Libya		3,754	1,126	1,126	1,126	1,126
Mauritania						
Morocco	3,715	3,520	3,520	3,520	3,520	3,520
Oman	2,202	2,202	1,911	1,911	1,911	1,911
Palestine	2,697	2,697	2,697	2,697	2,697	2,697
Qatar		1,706	1,571	1,571	1,571	1,975
Saudi Arabia	3,617	2,130	2,130	2,130	2,130	2,130
Somalia						
Sudan						9,414
Syria	465	465	465	465	465	465
Tunisia		3,659	3,659	2,953	2,953	2,953
UAE	2,403	2,403	2,403	2,403	2,403	2,403
Yemen	4,096	4,096	4,096	3,523	3,228	3,228

Arab average	2,715	2,599	2,343	2,263	2,193	2,641
OECD average	N/A	N/A	1,811	1,783	2,039	2,071

■ Below Arab average  
■ Above Arab average

When the 2013 2 Mb/s result for Sudan is removed, the Arab average for 2013 falls to 2218.

Comparable OECD data is not available for 2008 and 2009

## Ranking for OECD 2 Mb/s leased line basket

	2008	2009	2010	2011	2012	2013
Algeria	9	7	5	5	5	5
Bahrain	6	9	10	10	10	10
Comoros	-	-	-	-	-	-
Djibouti	13	16	16	16	16	16
Egypt	2	2	2	2	3	3
Iraq	-	-	-	-	-	-
Jordan	8	11	12	12	12	12
Kuwait	-	-	-	-	-	-
Lebanon	3	3	4	4	2	2
Libya	-	14	3	3	4	4
Mauritania	-	-	-	-	-	-
Morocco	11	12	13	14	15	15
Oman	4	6	7	7	7	6
Palestine	7	10	11	11	11	11
Qatar	-	4	6	6	6	7
Saudi Arabia	10	5	8	8	8	8
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	17
Syria	1	1	1	1	1	1
Tunisia	-	13	14	13	13	13
UAE	5	7	9	9	9	9
Yemen	12	15	15	15	14	14

■ Least expensive  
■ Most expensive



# OECD leased line basket 34 Mb/s ranking

Total results for OECD 34 Mb/s leased line basket  
Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	30,949	24,261				
Bahrain						
Comoros						
Djibouti						
Egypt	5,103	5,103	5,103	5,103	5,103	5,103
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya		64,952				
Mauritania						
Morocco	36,341	36,341	36,341	36,341	36,341	36,289
Oman				16,739	16,739	16,739
Palestine						
Qatar		5,109	5,109	5,109	5,109	5,109
Saudi Arabia	29,204	13,080	13,080	13,080	13,080	13,080
Somalia						
Sudan						
Syria						
Tunisia	12,312					
UAE						
Yemen				51,511	40,370	40,370

Arab average	19,392	24,808	14,908	21,314	19,457	19,448
OECD average	N/A	N/A	10,343	9,568	10,400	9,487

■ Below Arab average  
■ Above Arab average

Ranking for OECD 34 Mb/s leased line basket

	2008	2009	2010	2011	2012	2013
Algeria	4	4	-	-	-	-
Bahrain	-	-	-	-	-	-
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	1	1	1	1	1	1
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	6	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	5	4	5	5	5
Oman	-	-	-	4	4	4
Palestine	-	-	-	-	-	-
Qatar	-	2	2	2	2	2
Saudi Arabia	3	3	3	3	3	3
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	2	-	-	-	-	-
UAE	-	-	-	-	-	-
Yemen	-	-	-	6	6	6

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008 and 2009

# OECD leased line basket 155 Mb/s ranking

Total results for OECD 155 Mb/s leased line basket  
Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	143,822	72,782				
Bahrain						
Comoros						
Djibouti						
Egypt	10,206	10,206	10,206	10,206	10,206	10,206
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya		223,094				
Mauritania						
Morocco						
Oman				28,784	28,784	28,784
Palestine						
Qatar		19,929	19,929	19,929	19,929	18,613
Saudi Arabia	60,100	26,719	26,719	26,719	26,719	26,719
Somalia						
Sudan						
Syria						
Tunisia						
UAE						
Yemen						

Arab average	71,376	70,546	18,951	21,410	21,410	21,081
OECD average	N/A	N/A	N/A	N/A	N/A	N/A

■ Below Arab average  
■ Above Arab average

Ranking for OECD 155 Mb/s leased line basket

	2008	2009	2010	2011	2012	2013
Algeria	3	4	-	-	-	-
Bahrain	-	-	-	-	-	-
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	1	1	1	1	1	1
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	5	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	4	4	4
Palestine	-	-	-	-	-	-
Qatar	-	2	2	2	2	2
Saudi Arabia	2	3	3	3	3	3
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	-	-	-	-
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available

# Fixed broadband basket 2013 results (using OECD 2010 baskets)

# Fixed broadband basket methodology

- Research covering 263 fixed broadband service offerings from the incumbent ISP\* in 19 Arab countries
- Costs are derived using the OECD broadband basket methodology, and are presented for the OECD low speed (> 256 kb/s) and medium speed (>2.5 Mb/s) plus three high speed baskets (>15 Mb/s, >30Mb/s, >45Mb/s) separately, and define the minimum speed requirement for each basket. The two very high speed baskets are new for this year's analysis as there are more providers offering services in these categories.
  - As of November 2013, 8 of the 19 Arab countries had broadband services >15 Mb/s
  - Costs shown are for both residential and business services
- Total monthly cost calculated based on two usage profiles, which are dependent on the speed of service, as shown below :

		Minimum speed of service				
		>0.25 Mb/s	>2.5 Mb/s	>15 Mb/s	>30 Mb/s	>45 Mb/s
Low usage	Data usage/month	2GB	6GB	11GB	14GB	18GB
	Hours/Month	10 Hrs	15 Hrs	20 Hrs	25 Hrs	30 Hrs
High usage	Data usage/month	6GB	18GB	33GB	42GB	54GB
	Hours/Month	30 Hrs	45 Hrs	60 Hrs	75 Hrs	90 Hrs

- The OECD data shown refer to the incumbent ISP\* fixed broadband services in the 34 OECD countries
- Tariff data cover the cheapest form of installation, amortized over three years, modem cost (if applicable), monthly rental, usage allowances and any usage charges. Additional information on speed, web-space, email addresses, penalties with excess usage, and contract term duration is also included in the basic data and presented along with the cost results.
  - To the extent this information is published by the provider
  - Please also see the document on “AREGNET Price Benchmarking Methodology



\* Incumbent ISP will normally mean the ISP owned by the incumbent operator in the country.

# Fixed broadband data issues

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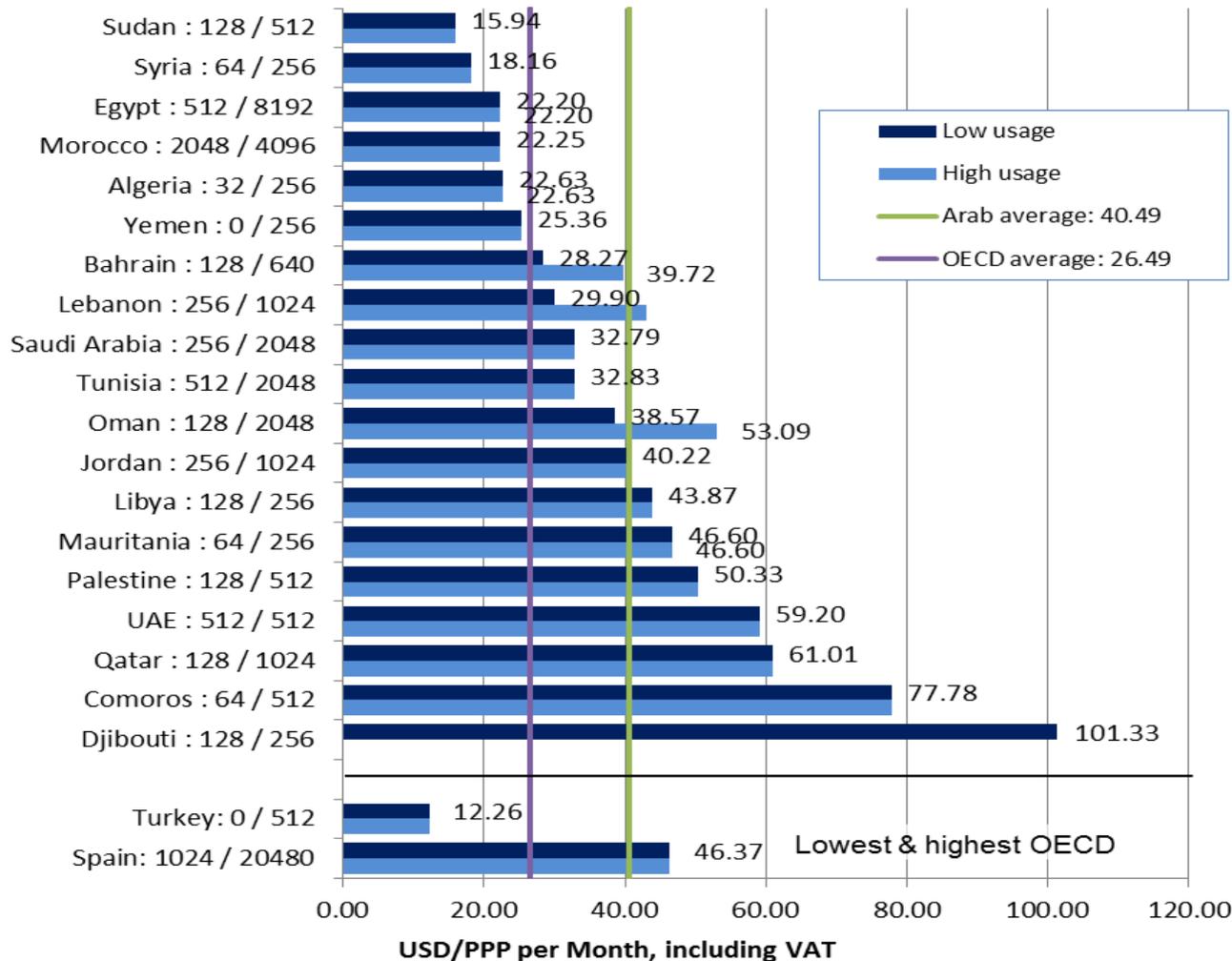
- Price data is not available for broadband services in:
  - Iraq
  - Kuwait
  - Somalia
- Speeds have continued to increase, with only one operator, Mauritel in Mauritania having an offering below 256 kb/s. Maximum speeds have increased dramatically.
  - Speeds above 2 Mb/s are available in 18 of the 19 countries. Only Libya has broadband speeds not exceeding 2 Mb/s (only 256 kb/s is available)
  - Advertised maximum download speeds of 8 Mb/s, 16 Mb/s and even 40 Mb/s are much more commonplace.
  - Average speed across the Arab countries up from 6.79 Mb/s in 2012 to 21.9 Mb/s in 2013

Note: the average speed is a simple average across the packages, and does not take into account the distribution of customers across available plans. Information on customer distribution is not available, and hence a weighted average is not possible.



# Residential fixed broadband low speed OECD 2010 basket > 256 kb/s

Residential fixed broadband >256 kb/s OECD low & high use  
Tariffs as of November 2013

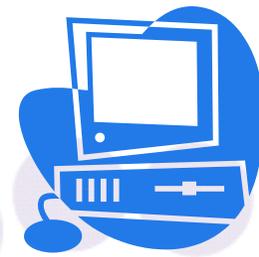


Total monthly cost calculated based on two usage baskets:

**Low usage:** 2 GB and 10 hours per month, in 60 minute sessions.

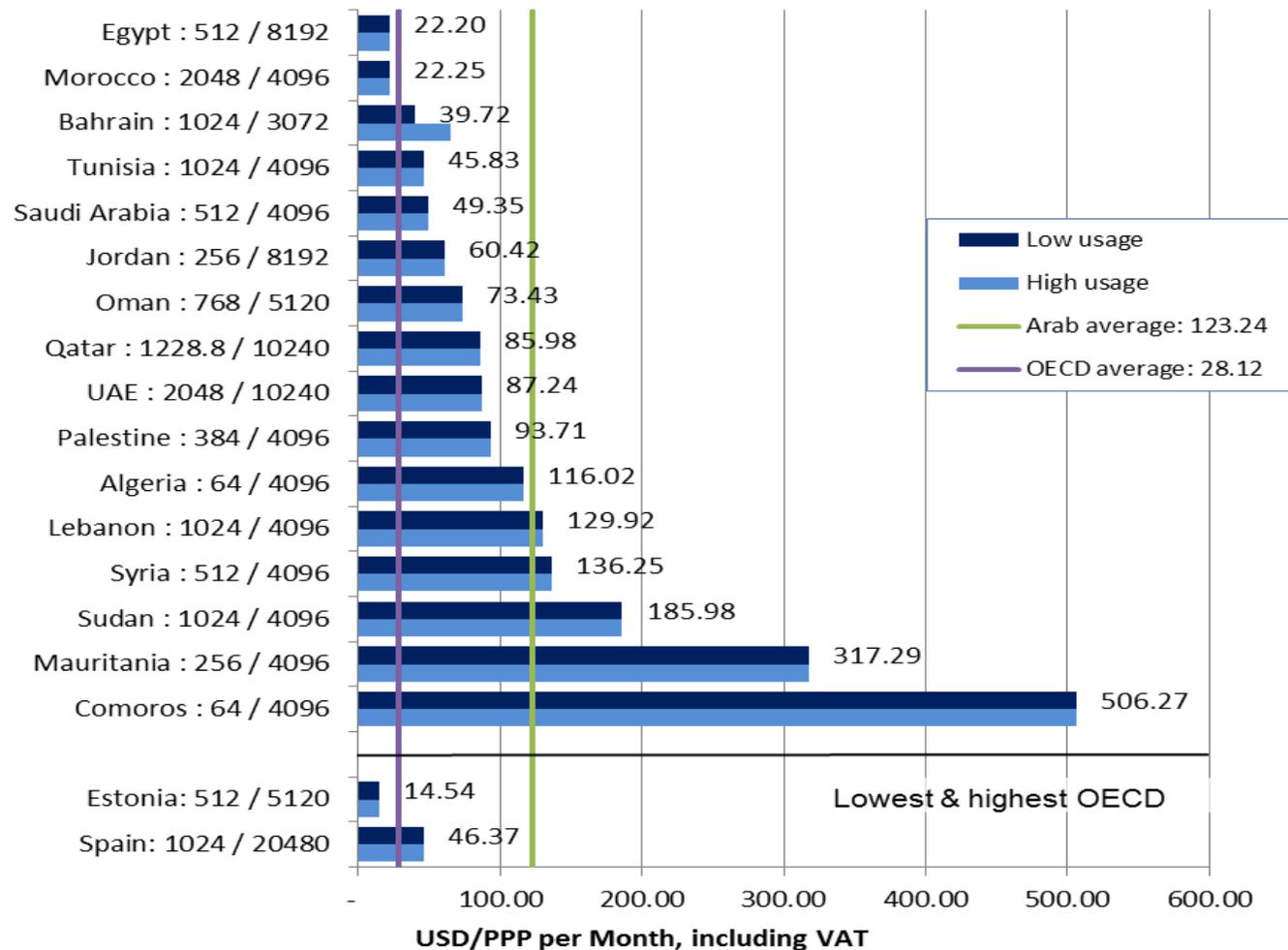
**High usage:** 6 GB and 30 hours per month, in 60 minute sessions.

Average lines are based on the low usage results.



# Residential fixed broadband medium speed OECD 2010 basket > 2.5 Mb/s

Residential fixed broadband >2.5 Mb/s OECD low & high use  
Tariffs as of November 2013



Total monthly cost calculated based on two usage baskets:

**Low usage:** 6 GB and 15 hours per month, in 60 minute sessions.

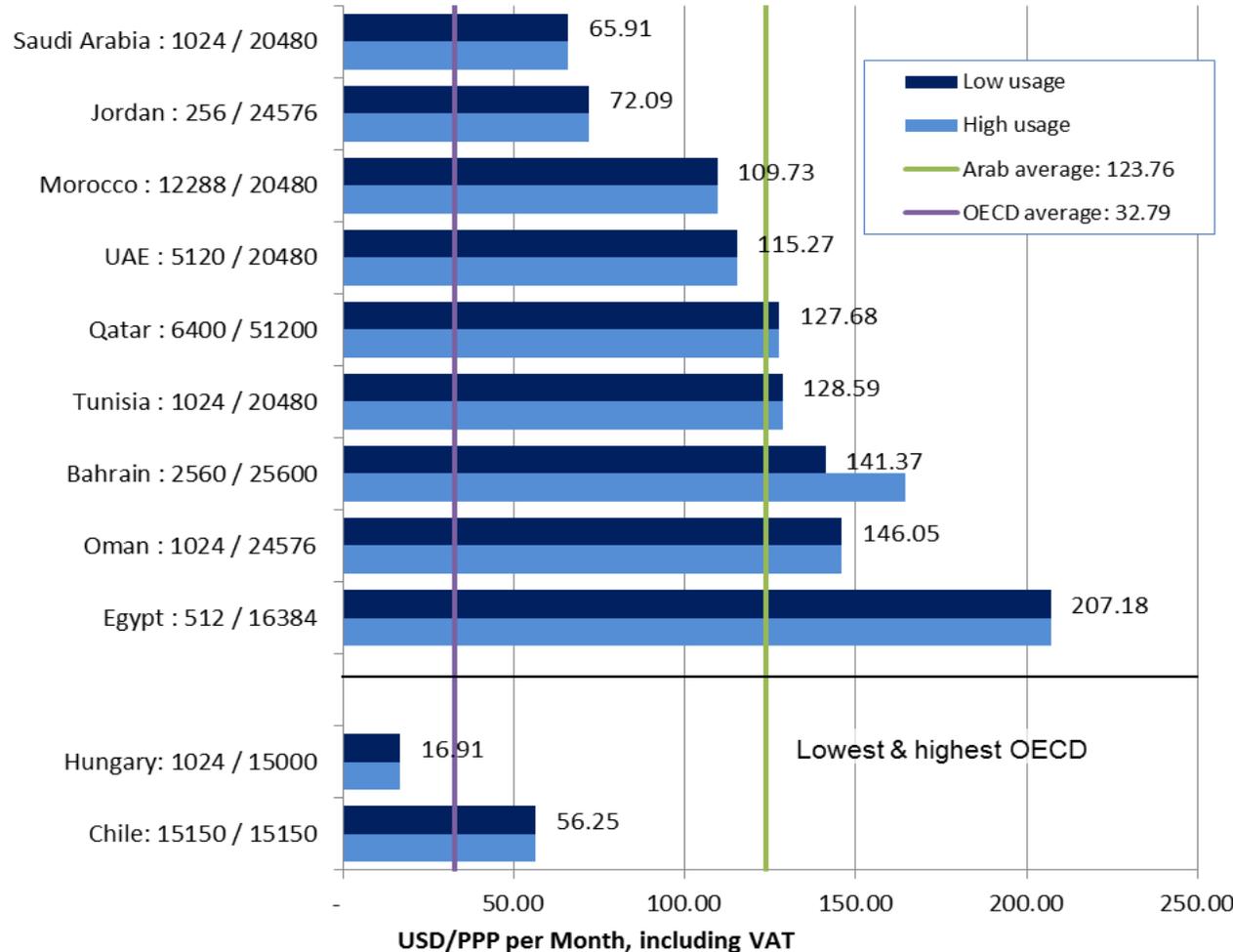
**High usage:** 18 GB and 45 hours per month, in 60 minute sessions.

Average lines are based on the low usage results.



# Residential fixed broadband high speed OECD 2010 basket > 15 Mb/s

Residential fixed broadband >15 Mb/s OECD low & high use  
Tariffs as of November 2013



Total monthly cost calculated based on two usage baskets:

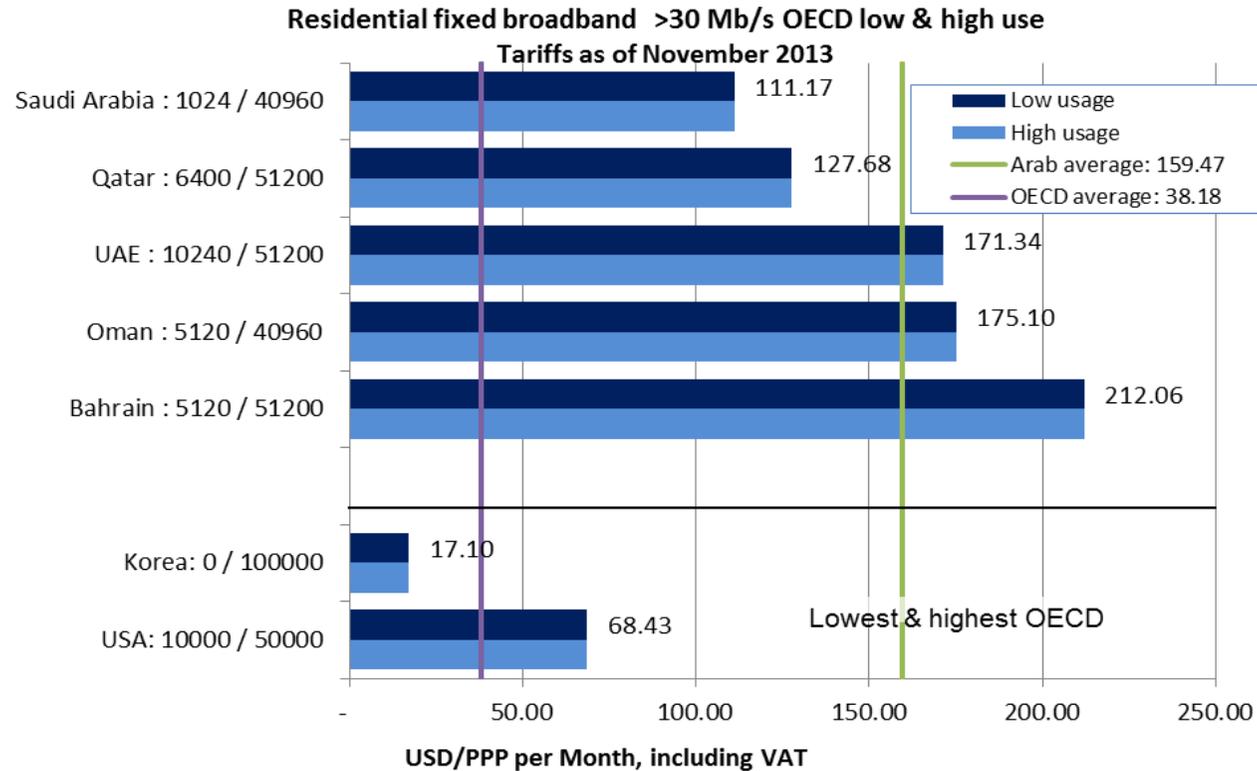
**Low usage:** 11 GB and 20 hours per month, in 60 minute sessions.

**High usage:** 33 GB and 60 hours per month, in 60 minute sessions.

Average lines are based on the low usage results.



# Residential fixed broadband high speed OECD 2010 basket > 30 Mb/s



Total monthly cost calculated based on two usage baskets:

**Low usage:** 14 GB and 25 hours per month, in 60 minute sessions.

**High usage:** 42 GB and 75 hours per month, in 60 minute sessions.

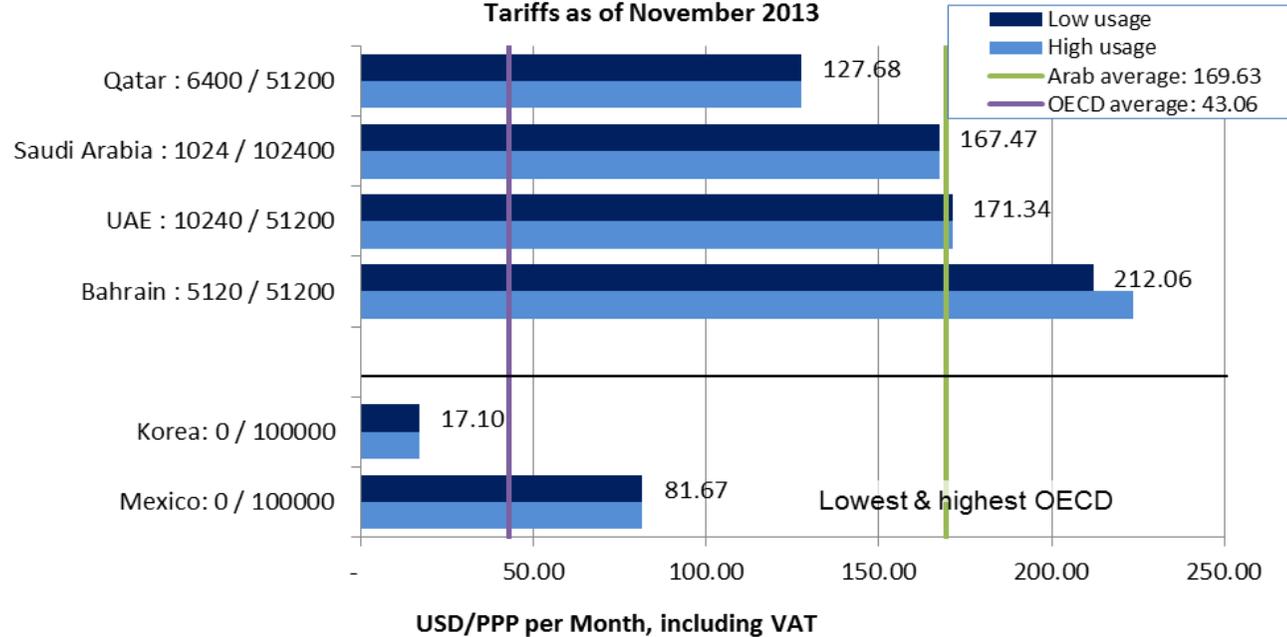
Broadband services >30 Mb/s are only available in 5 of the study countries.

Average lines are based on the low usage results



# Residential fixed broadband high speed OECD 2010 basket > 45 Mb/s

Residential fixed broadband >45 Mb/s OECD low & high use  
Tariffs as of November 2013



Total monthly cost calculated based on two usage baskets:

**Low usage:** 18 GB and 30 hours per month, in 60 minute sessions.

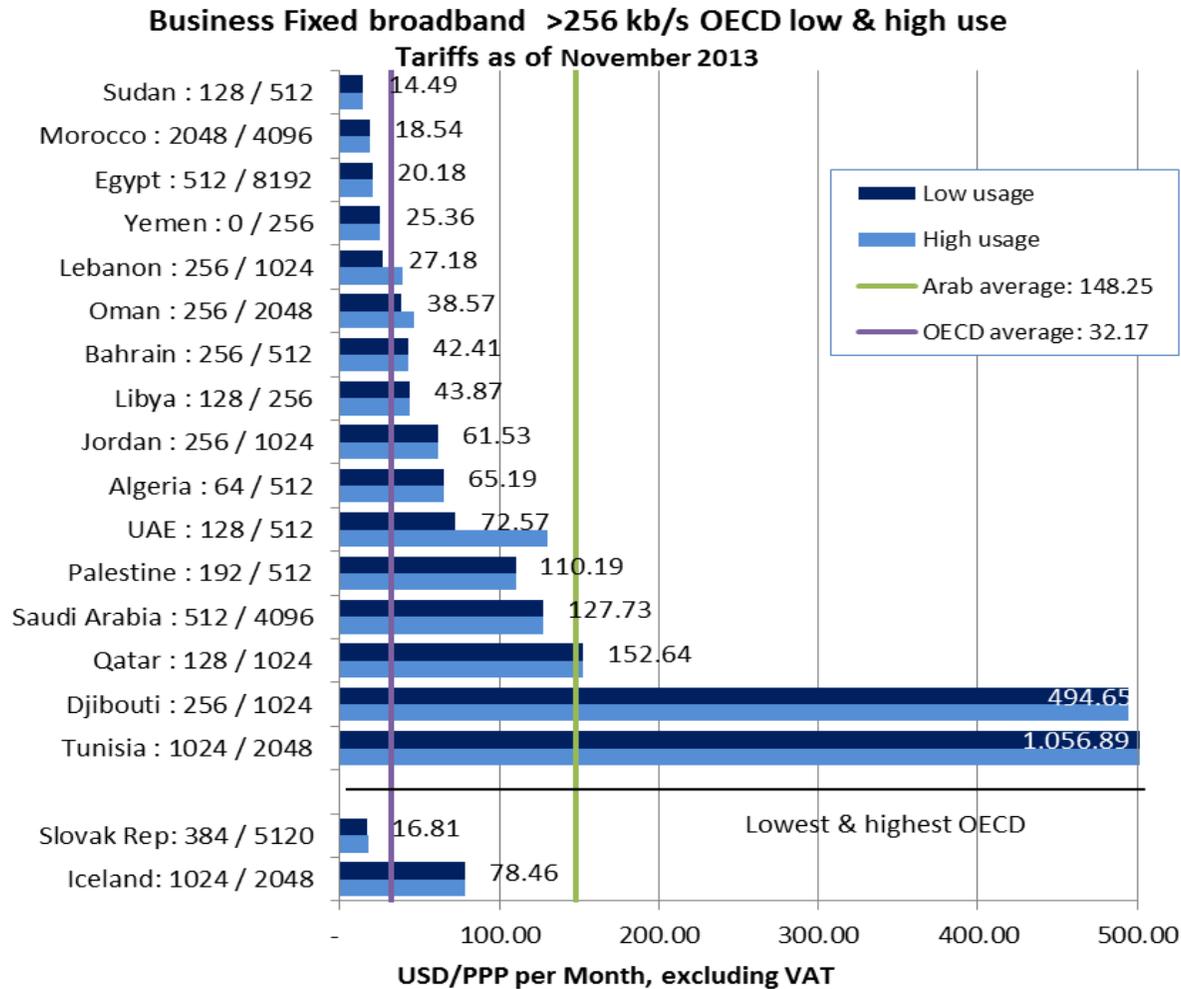
**High usage:** 54 GB and 90 hours per month, in 60 minute sessions.

Broadband services >30 Mb/s are only available in 5 of the study countries.

Average lines are based on the low usage results



# Business fixed broadband low speed OECD 2010 basket > 256 kb/s



Total monthly cost calculated based on two usage baskets:

**Low usage:** 2 GB and 10 hours per month, in 60 minute sessions.

**High usage:** 6 GB and 30 hours per month, in 60 minute sessions.

Note that the horizontal axis has been manually adjusted, and the bar for Tunisia is not shown fully, as this would make the other results difficult to read

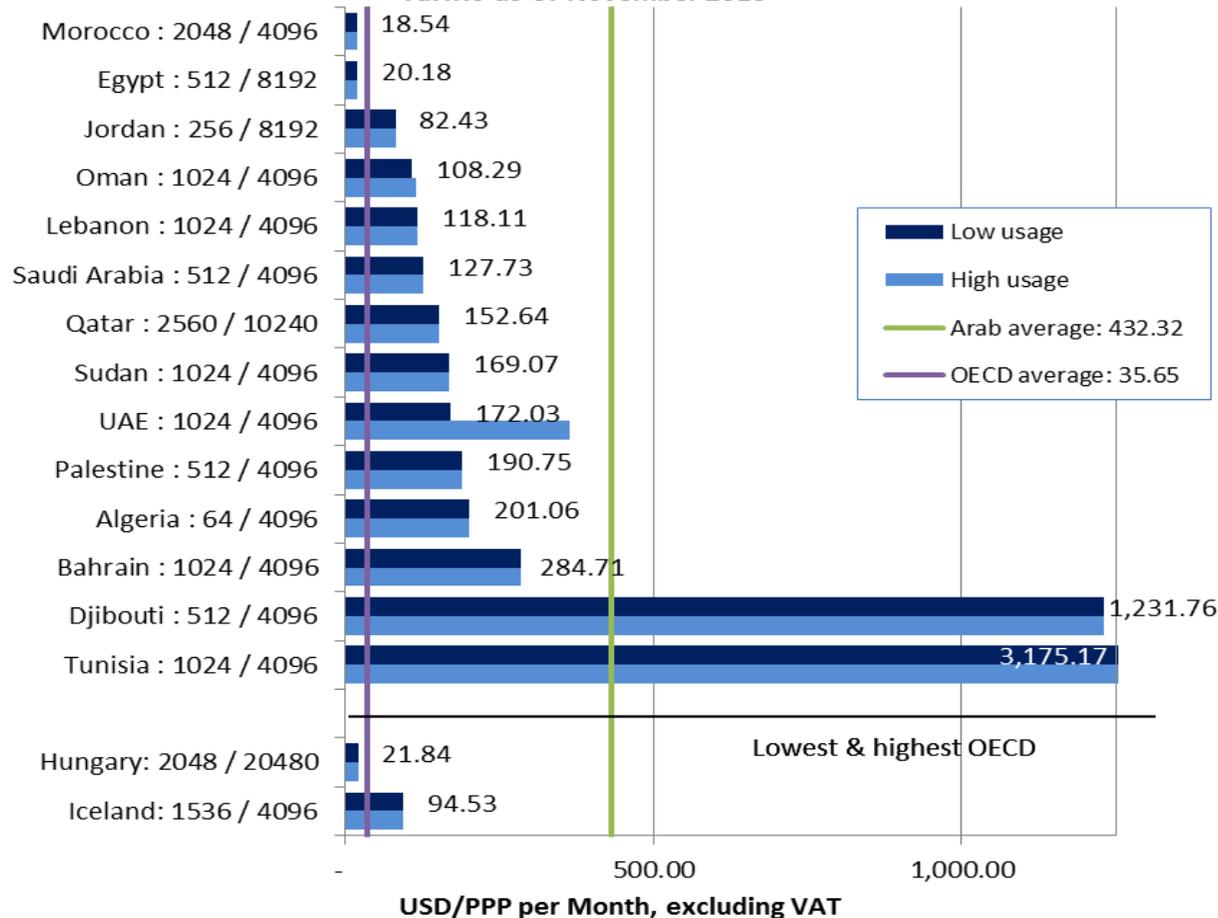
Average lines are based on the low usage results.



# Business fixed broadband medium speed OECD 2010 basket > 2.5 Mb/s

## Business fixed broadband >2.5 Mb/s OECD low & high use

Tariffs as of November 2013



Total monthly cost calculated based on two usage baskets:

**Low usage:** 6 GB and 15 hours per month, in 60 minute sessions.

**High usage:** 18 GB and 45 hours per month, in 60 minute sessions.

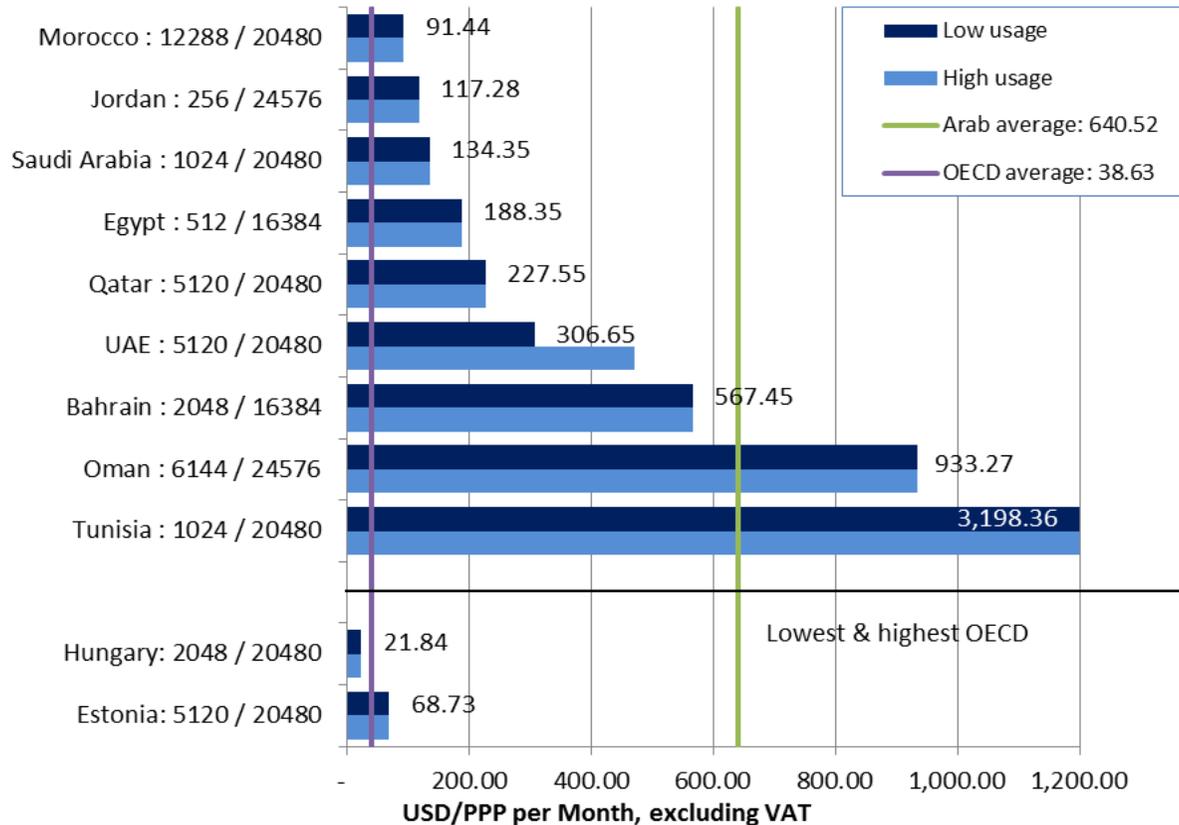
Note that the horizontal axis has been manually adjusted, and the bar for Tunisia is not shown fully, as this would make the other results difficult to read

Average lines are based on the low usage results.



# Business fixed broadband high speed OECD 2010 basket > 15 Mb/s

Business fixed broadband >15 Mb/s OECD low & high use  
Tariffs as of November 2013



Total monthly cost calculated based on two usage baskets:

**Low usage:** 11 GB and 20 hours per month, in 60 minute sessions.

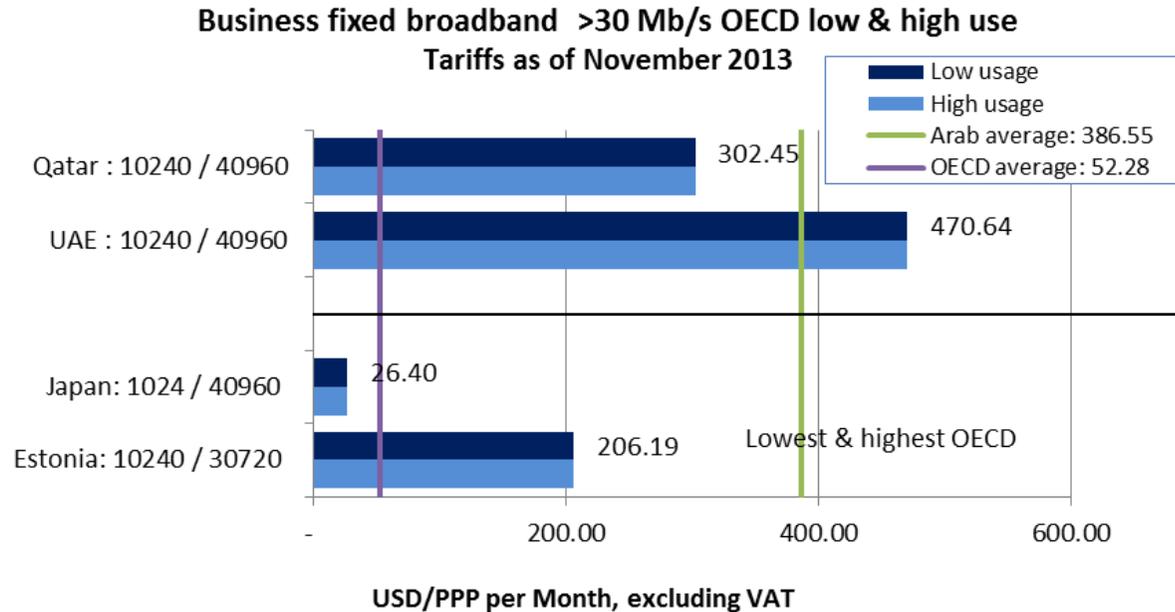
**High usage:** 33 GB and 60 hours per month, in 60 minute sessions.

Note that the horizontal axis has been manually adjusted, and the bar for Tunisia is not shown fully, as this would make the other results difficult to read

Average lines are based on the low usage results.



# Business fixed broadband high speed OECD 2010 basket > 30 Mb/s



Total monthly cost calculated based on two usage baskets:

**Low usage:** 14 GB and 25 hours per month, in 60 minute sessions.

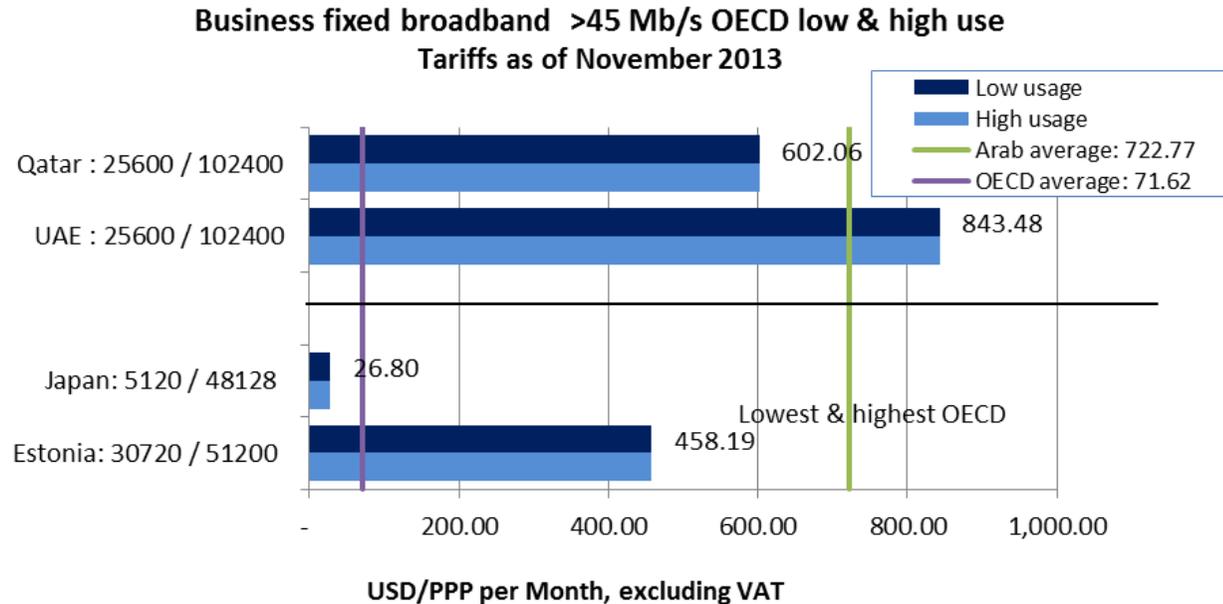
**High usage:** 42 GB and 75 hours per month, in 60 minute sessions.

Business broadband services >30 Mb/s are only available in 2 of the study countries.

Average lines are based on the low usage results



# Business fixed broadband high speed OECD 2010 basket > 45 Mb/s



Total monthly cost calculated based on two usage baskets:

**Low usage:** 18 GB and 30 hours per month, in 60 minute sessions.

**High usage:** 54 GB and 90 hours per month, in 60 minute sessions.

Business broadband services >45 Mb/s are only available in 5 of the study countries.

Average lines are based on the low usage results



# Observations from fixed broadband basket results

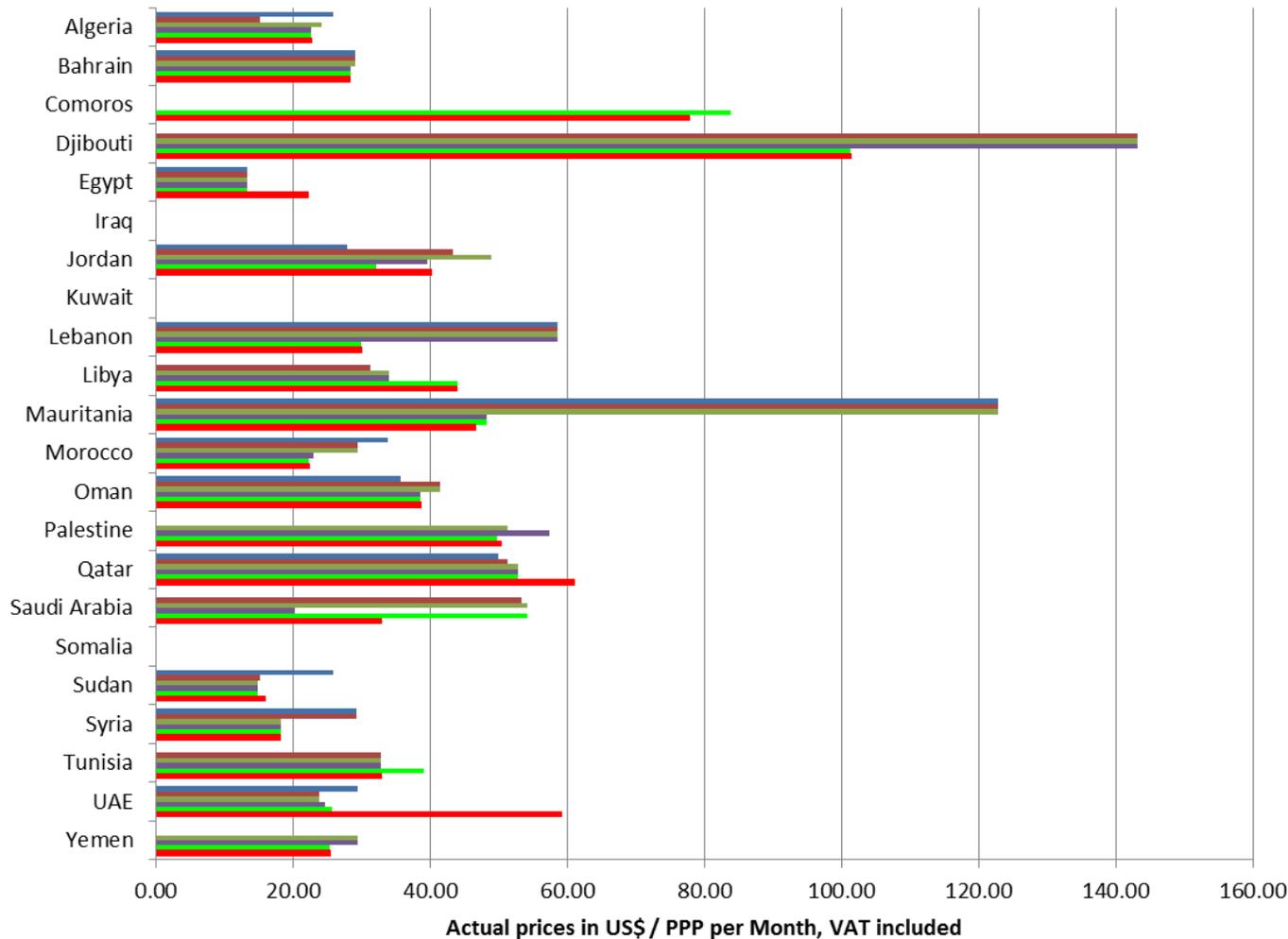
- There is a large variation in ranking according to the speed of service. For lower speed residential services, Sudan, Morocco and Egypt are among the cheapest, while for higher speed services, Saudi Arabia and Qatar and UAE are more prominent.
- For lower speed business services, it is a similar picture. Only Qatar and UAE offer business services above 30 Mb/s.
- Speeds of 4 Mb/s and above are now offered in 17 of the countries (15 in 2012):
  - Algerian, Bahrain, Comoros, Djibouti, Egypt, Jordan, Lebanon, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, UAE.
  - There continues to be a wide variation in prices between countries
- Six Arab countries are below the OECD average for the low speed basket for residential services (a significant uplift from the one last year).
  - And at least one or two are more on par with the cheapest OECD country, however around half remain on par with, or are more expensive than the most expensive OECD country (Spain)
  - Business services show a similar picture
- All Arab countries within the 2.5 Mb/s medium speed basket with the exception of Egypt and Morocco are more expensive than the OECD average for both residential and business broadband.
  - 17 operators now offer services at or above 2.5 Mb/s, compared to 14 in 2012
  - The Arab average residential cost is 4.4 times higher than the average OECD cost, compared to 5.7 times in 2012.. For business services, this is 12 times, compared to 18 times in 2012.
  - The residential figure continues to be skewed by particularly high costs in Mauritania and Comoros. For business services, the Arab average is heavily skewed by the Djibouti and Tunisian costs.
- 9 operators offer both residential and business services above 15 Mb/s
  - All are more expensive than the OECD average cost for this basket, and by some considerable way and are more expensive than the most expensive OECD operator
- 5 operators offer residential services at 30 Mb/s or above, while 4 offer services at or above 45 Mb/s. All countries are more expensive than the most expensive OECD operator.
  - 2 operators offer business services at both 30 Mb/s and 45 Mb/s or above, but again, these are more expensive than the most expensive OECD operator, and by some considerable way.
- Usage based charges are still prevalent, and appear in offers across 8 of the Arab countries. In spite of this, usage-based charges have had limited impact on the basket results, and flat rate services have featured as the cheapest. In many OECD countries, usage-based charges often only apply for a very few ISPs, and at quite high levels of usage.



# Fixed broadband time series analysis (2010 version of OECD baskets)

# 2010 OECD fixed broadband time series, residential low usage, low speed >256 kb/s basket

## Fixed Broadband >0.25 Mb/s / 10 hours / 2 GB per month.



**Low usage:** 2 GB and 10 hours per month, in 60 minute sessions.

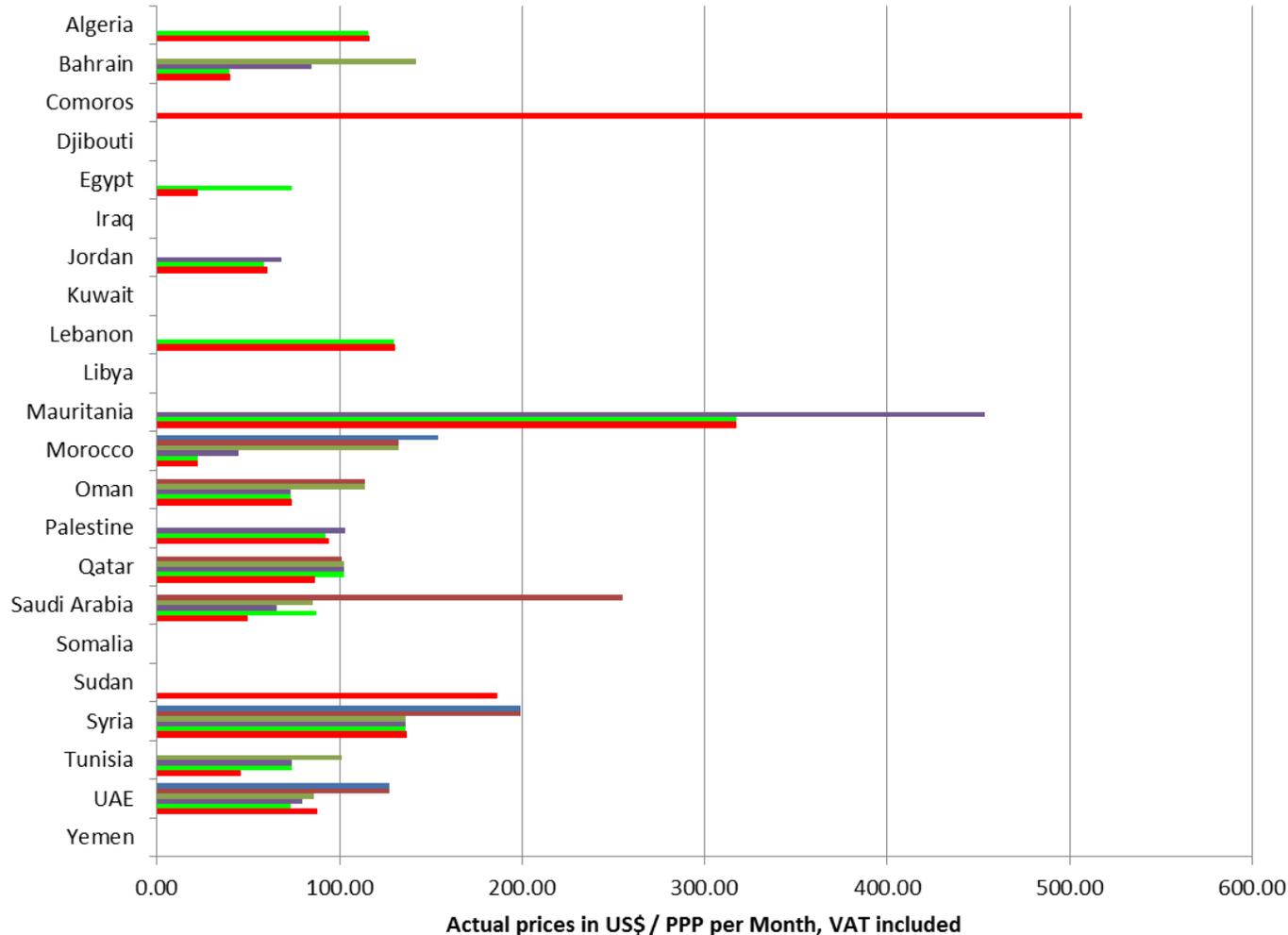
Note that the data for Comoros (2011), Djibouti (2008) and Yemen (2008 and 2009) is not shown, as this would make the other results difficult to read.

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013



# 2010 OECD fixed broadband time series, residential low usage, medium speed >2.5 Mb/s basket

## Fixed Broadband >2.5 Mb/s / 15 hours / 6 GB per month.

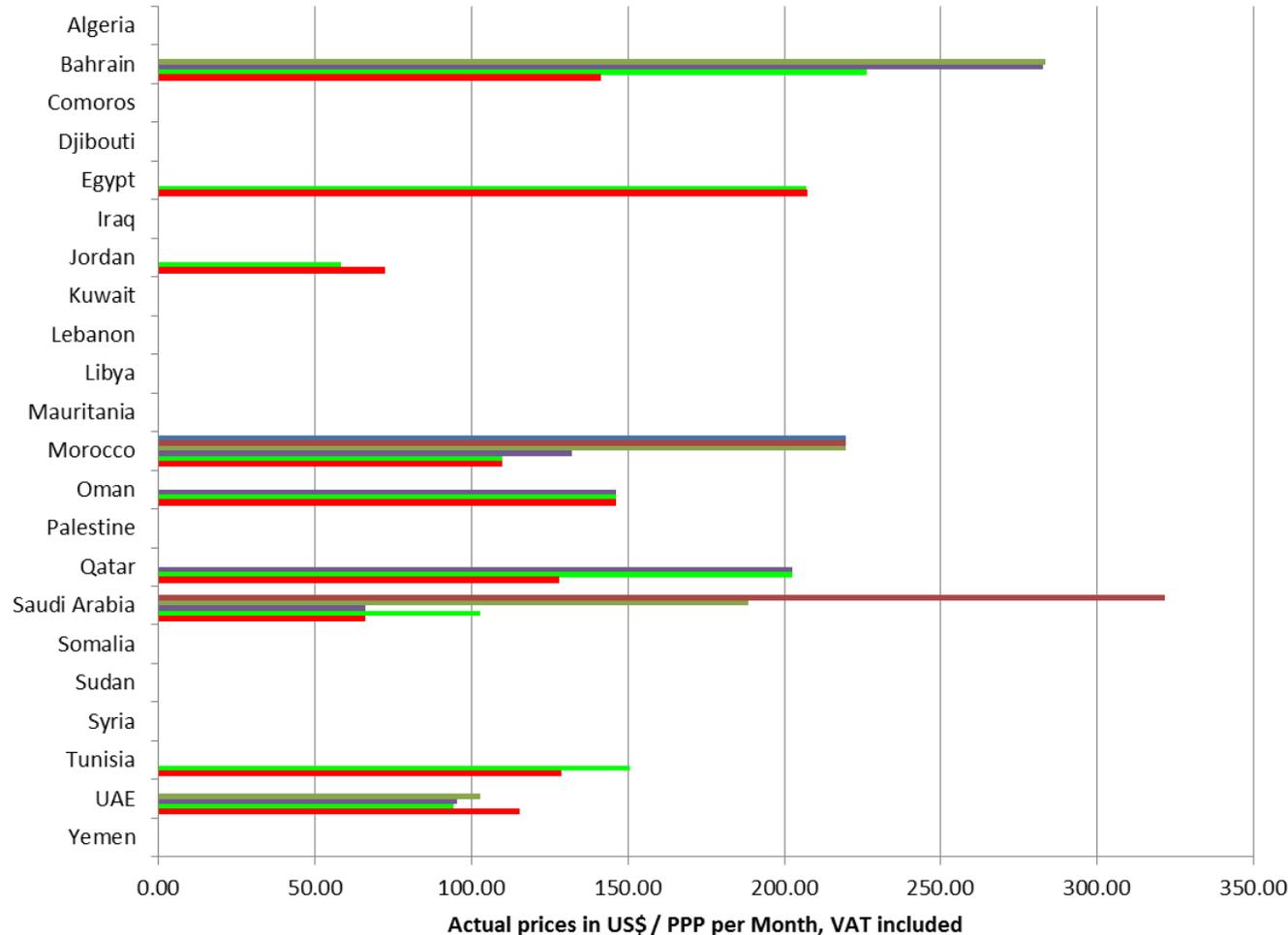


**Low usage:** 6 GB and 15 hours per month, in 60 minute sessions.



# 2010 OECD fixed broadband time series, residential low usage, high speed >15 Mb/s basket

Fixed Broadband >15 Mb/s / 20 hours / 11 GB per month.

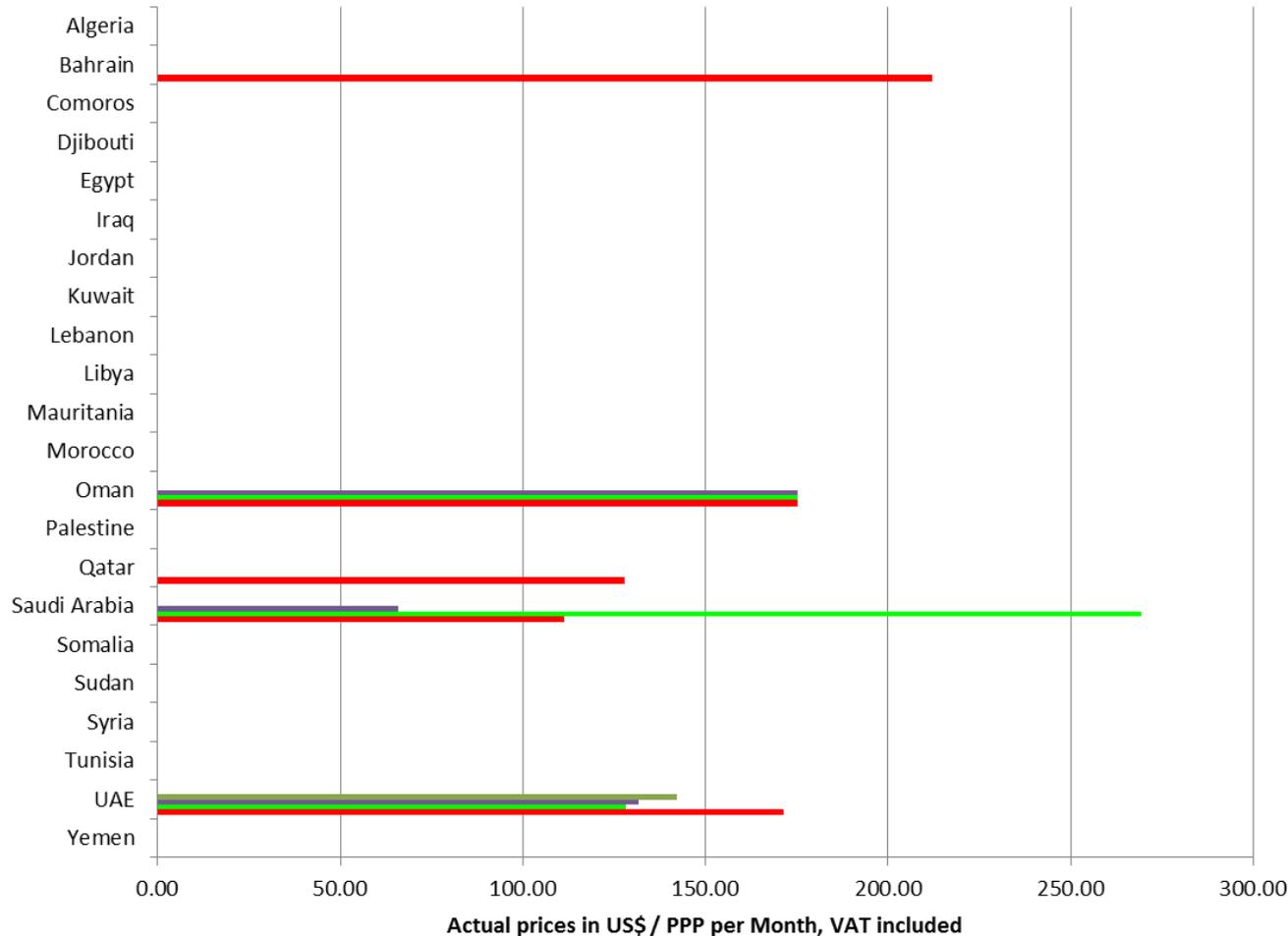


**Low usage:** 11 GB and 20 hours per month, in 60 minute sessions.



# 2010 OECD fixed broadband time series, residential low usage, high speed >30 Mb/s basket

Fixed Broadband >30 Mb/s / 25 hours / 14 GB per month.



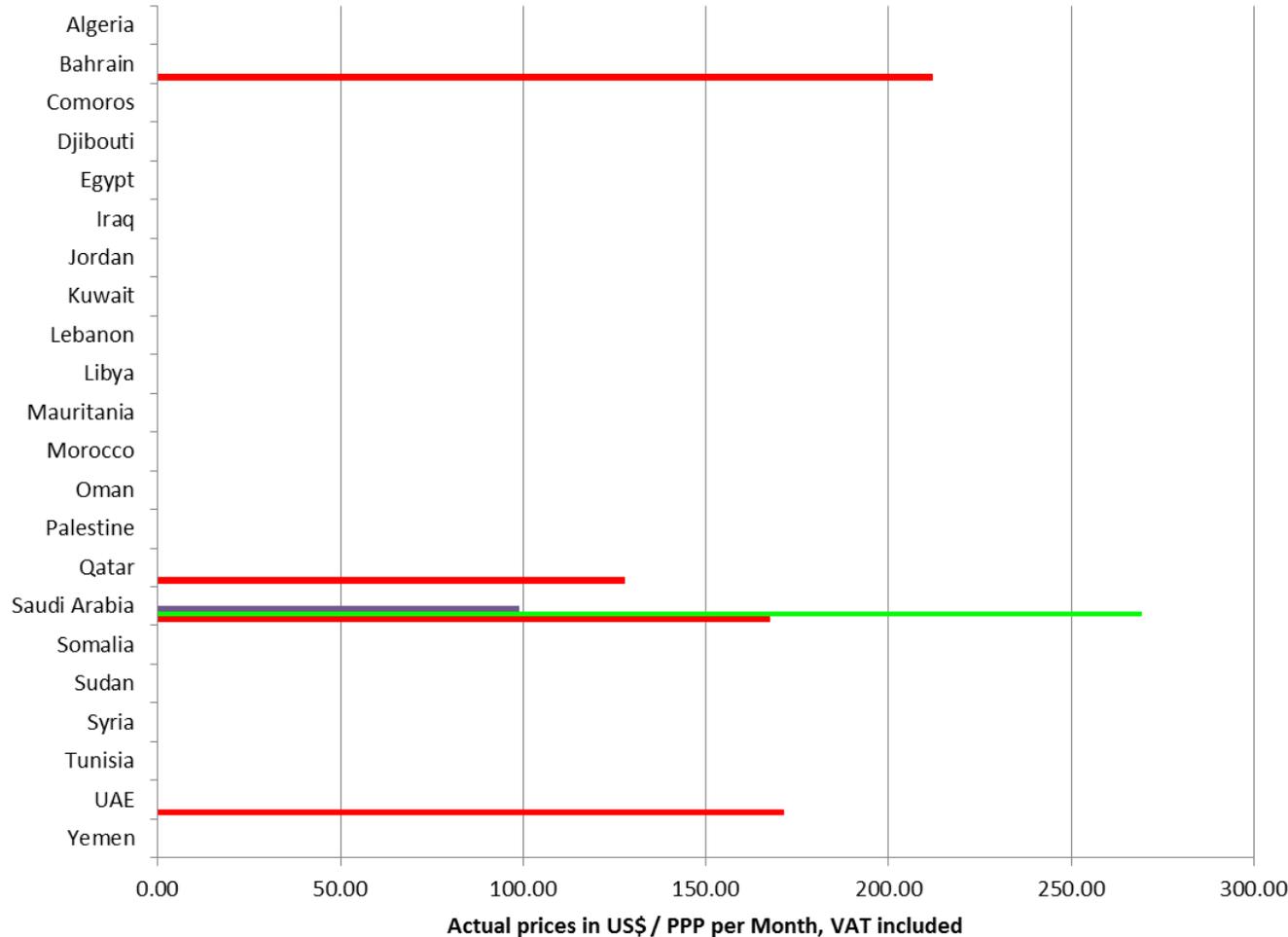
**Low usage:** 14 GB and 25 hours per month, in 60 minute sessions.

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013



# 2010 OECD fixed broadband time series, residential low usage, high speed >45 Mb/s basket

Fixed Broadband >45 Mb/s / 30 hours / 18 GB per month.

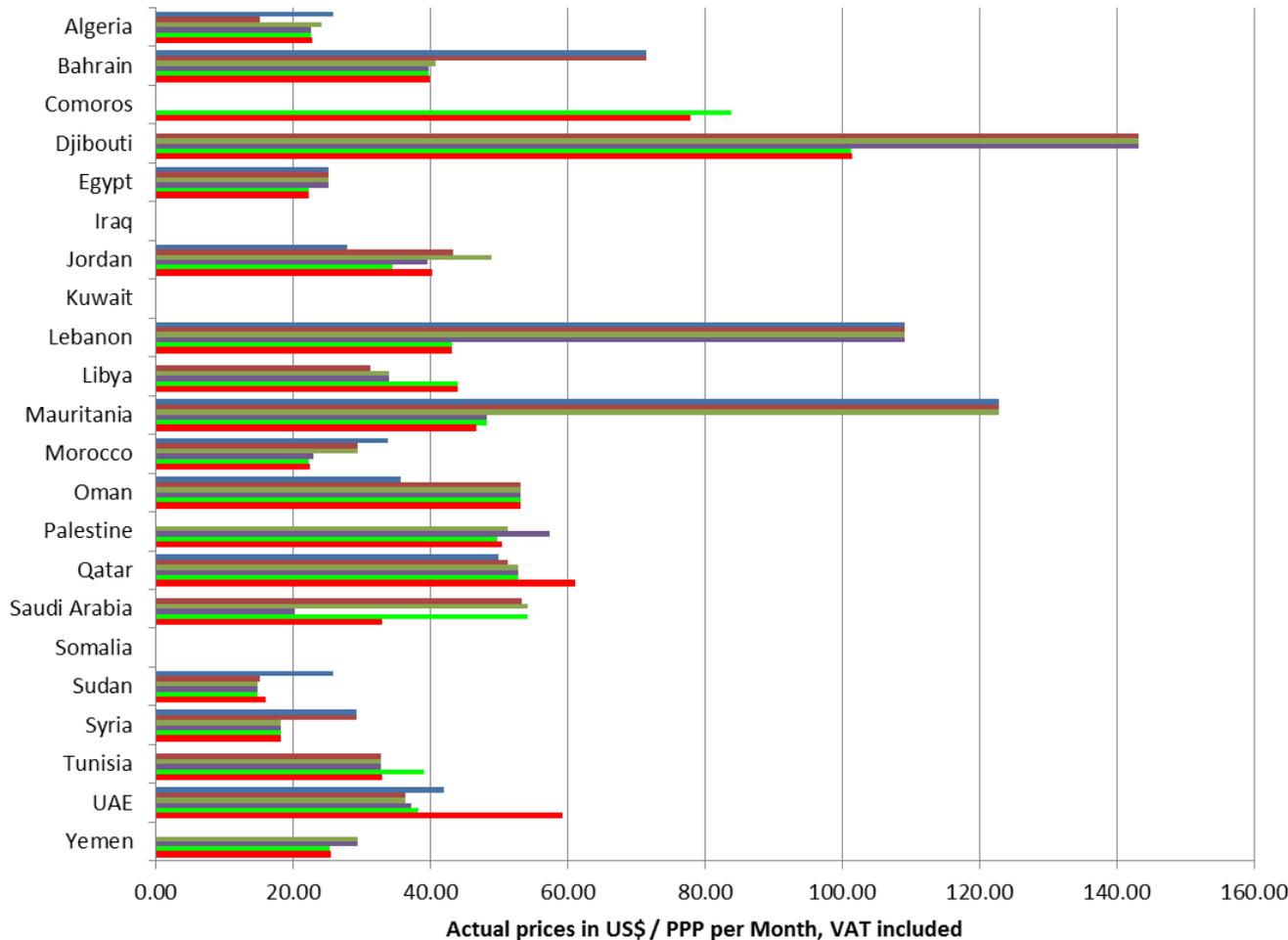


**Low usage:** 18 GB and 30 hours per month, in 60 minute sessions.



# 2010 OECD fixed broadband time series, residential high usage, low speed >256 kb/s basket

## Fixed Broadband >0.25 Mb/s / 30 hours / 6 GB per month.



**High usage:** 6 GB and 30 hours per month, in 60 minute sessions.

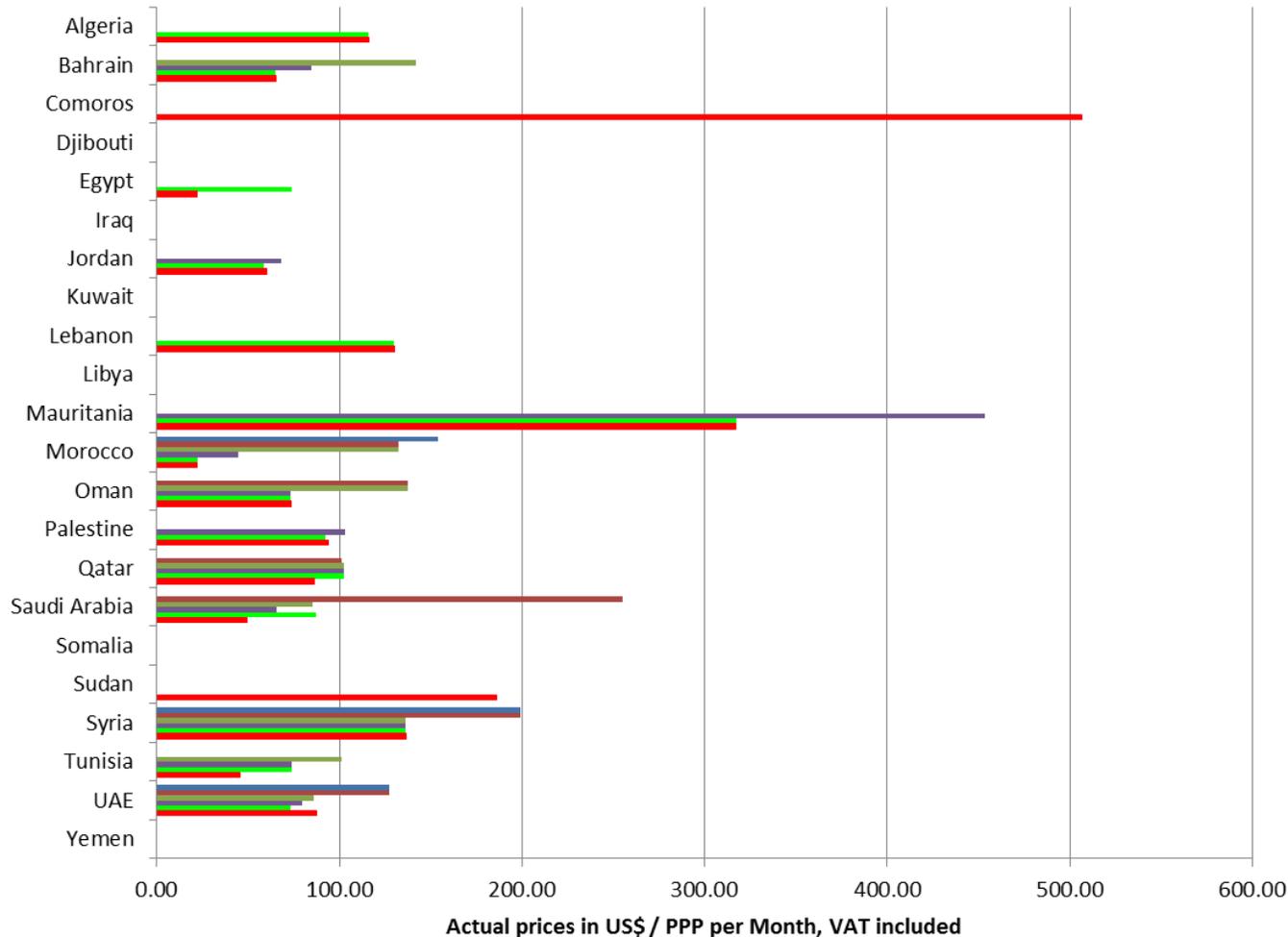
Note that the bars for Comoros (2011), Djibouti (2008) and Yemen (2008 and 2009) are not shown, as this would make the other results difficult to read.

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013



# 2010 OECD fixed broadband time series, residential high usage, medium speed >2.5 Mb/s basket

Fixed Broadband >2.5 Mb/s / 45 hours / 18 GB per month.



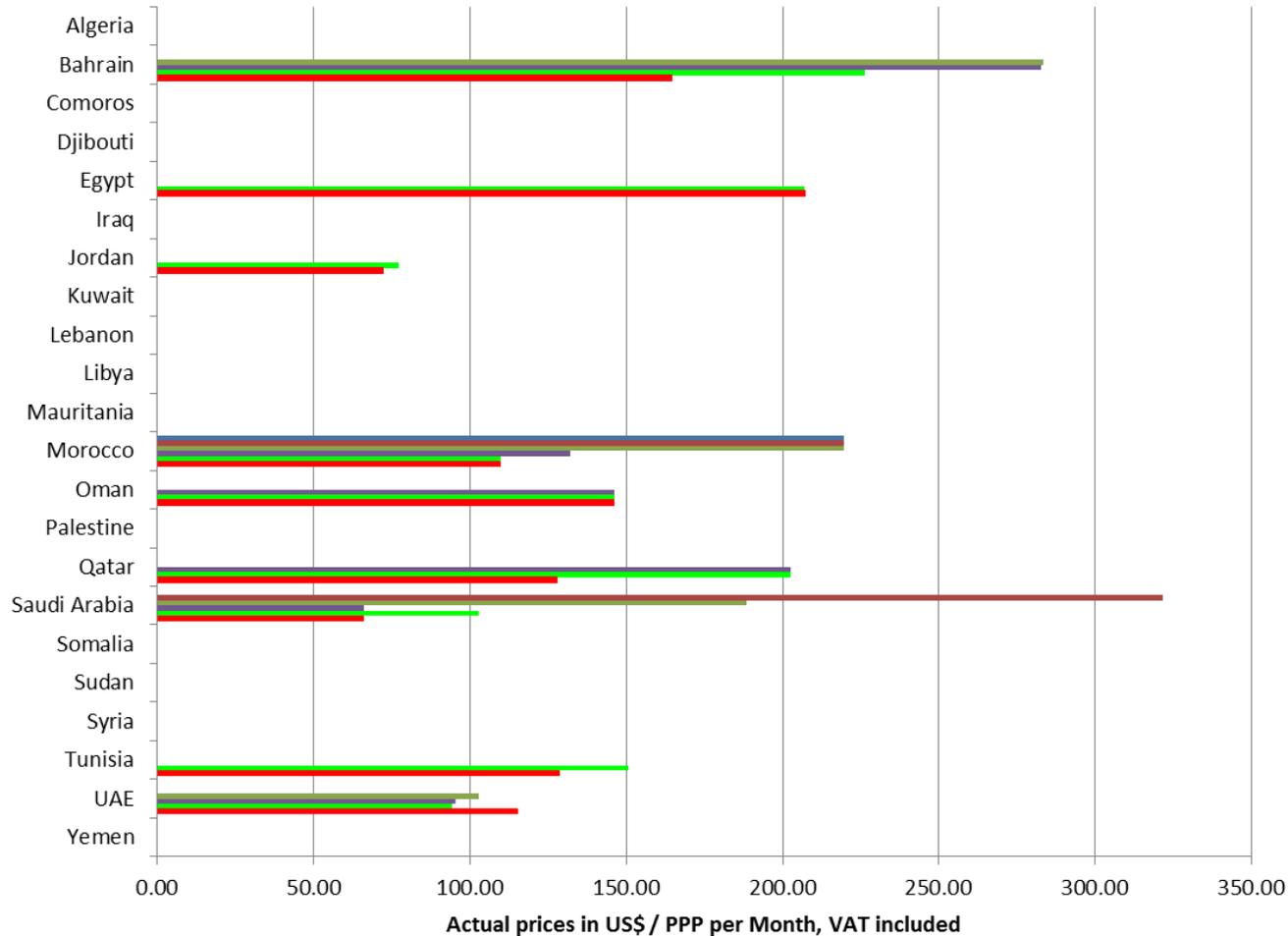
High usage: 18 GB and 45 hours per month, in 60 minute sessions.

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013



# 2010 OECD fixed broadband time series, residential high usage, high speed >15 Mb/s basket

Fixed Broadband >15 Mb/s / 60 hours / 33 GB per month.



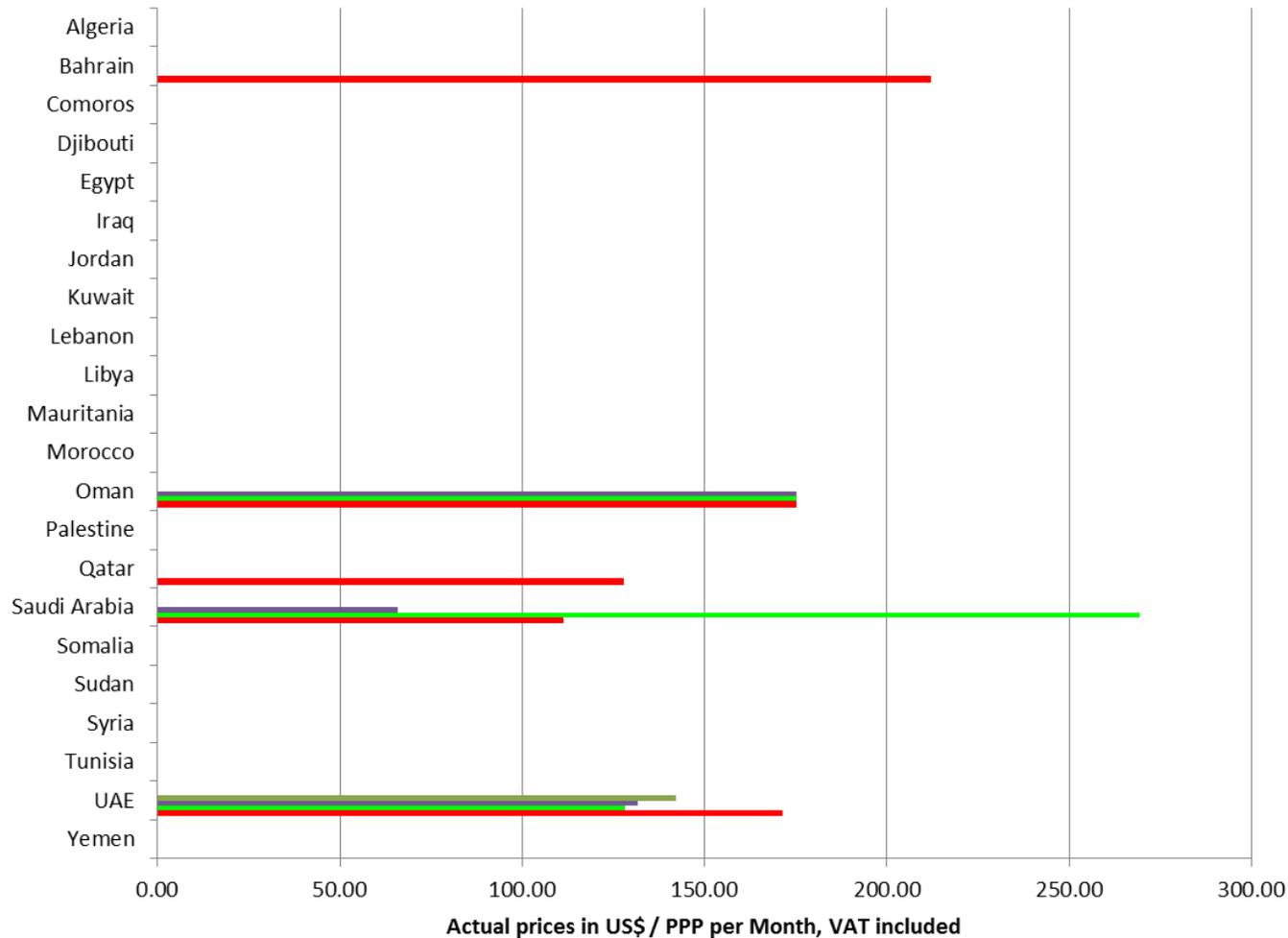
**High usage:** 33 GB and 60 hours per month, in 60 minute sessions.

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013



# 2010 OECD fixed broadband time series, residential high usage, high speed >30 Mb/s basket

## Fixed Broadband >30 Mb/s / 75 hours / 42 GB per month.

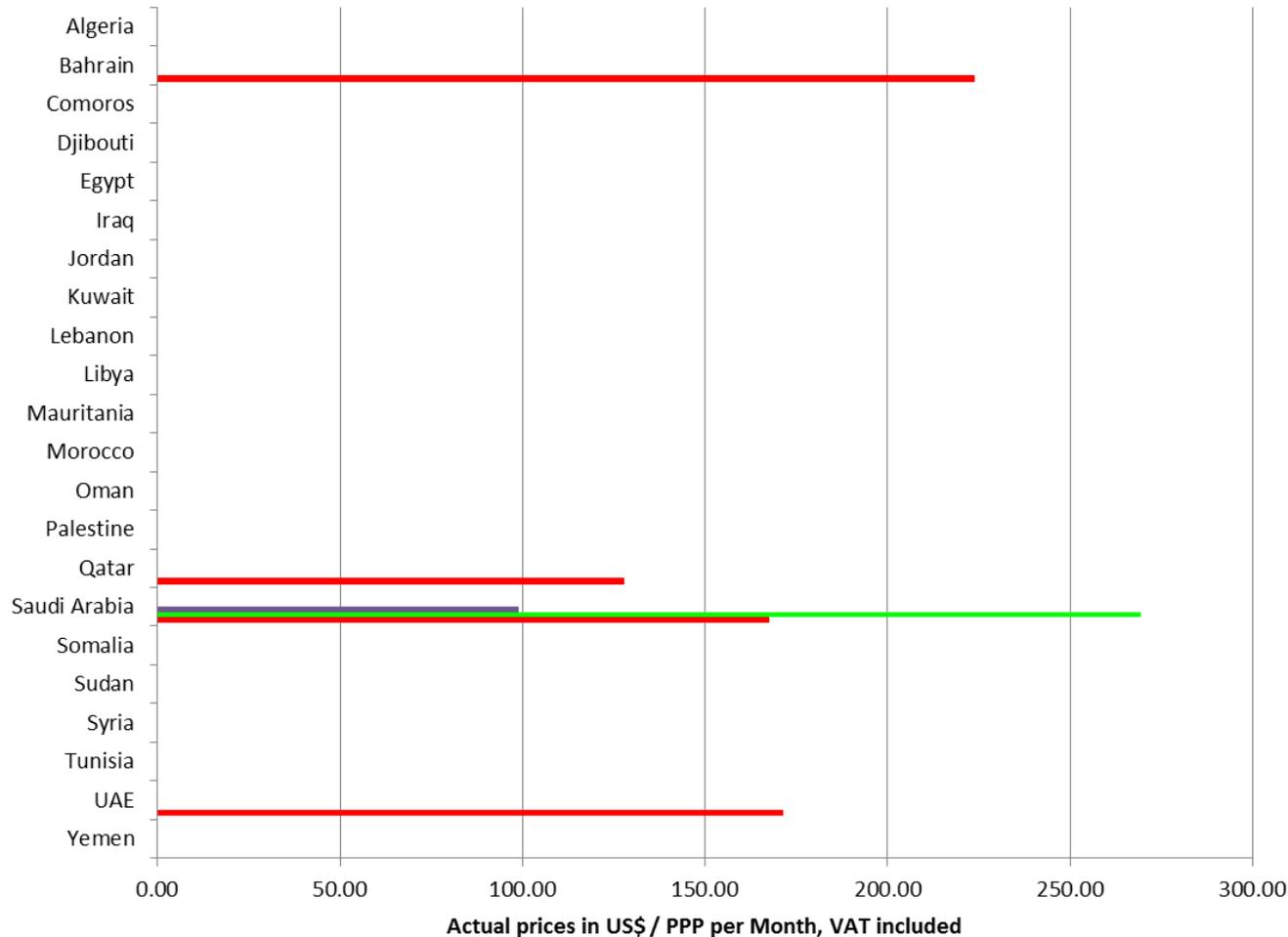


**High usage:** 42 GB and 75 hours per month, in 60 minute sessions.



# 2010 OECD fixed broadband time series, residential high usage, high speed >45 Mb/s basket

Fixed Broadband >45 Mb/s / 90 hours / 54 GB per month.



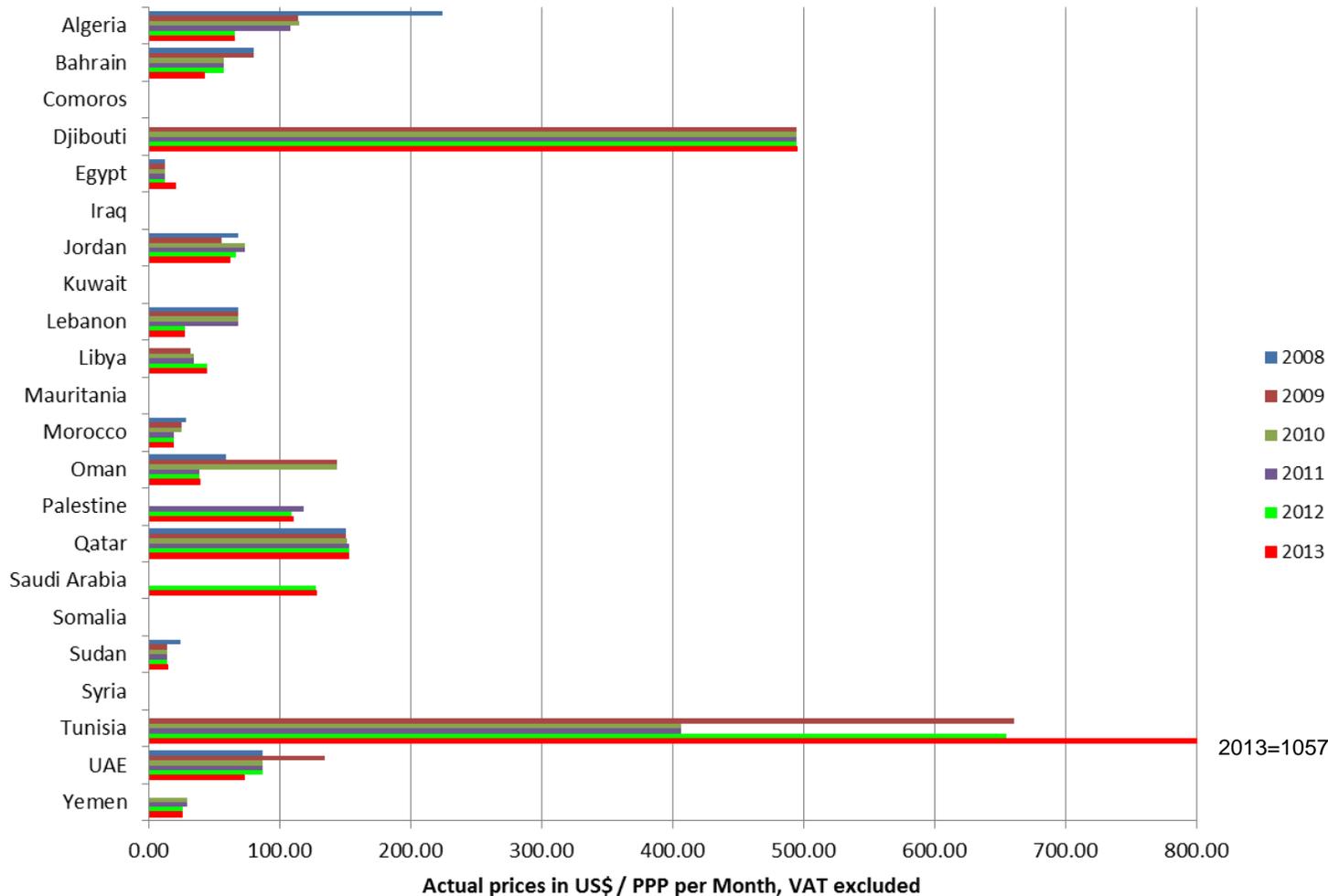
**High usage:** 54 GB and 90 hours per month, in 60 minute sessions.

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013



# 2010 OECD fixed broadband time series, business low usage, low speed >256 kb/s basket

## Fixed Broadband >0.25 Mb/s / 10 hours / 2 GB per month.



**Low usage:** 2 GB and 10 hours per month, in 60 minute sessions.

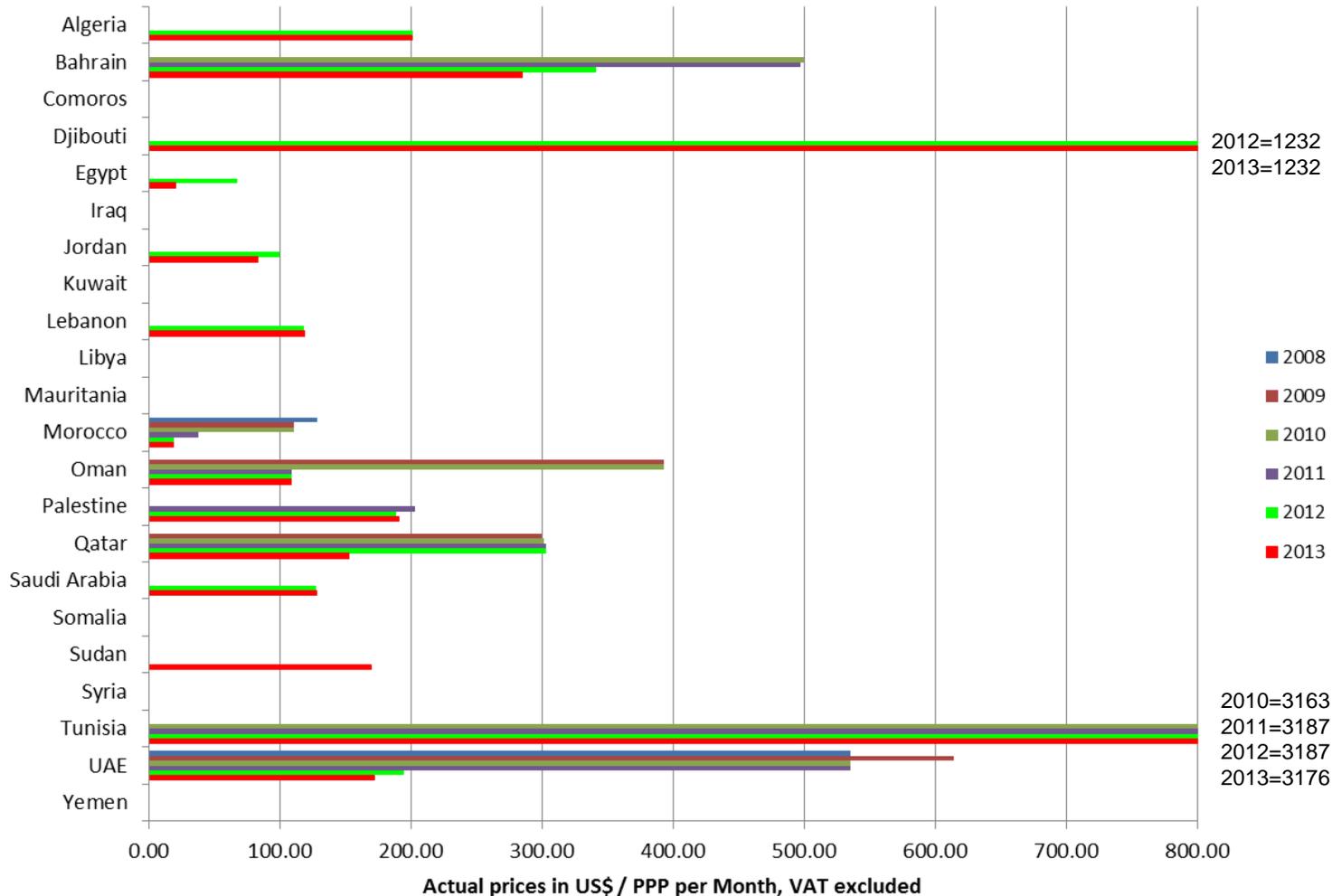
Note that the bars for Djibouti (2008) and Yemen (2008 and 2009) are not shown, as this would make the other results difficult to read.

Note that the horizontal axis has been manually adjusted, and the bar for Tunisia (2013) is not shown fully, as this would make the other results difficult to read.



# 2010 OECD fixed broadband time series, business low usage, medium speed >2.5 Mb/s basket

## Fixed Broadband >2.5 Mb/s / 15 hours / 6 GB per month.



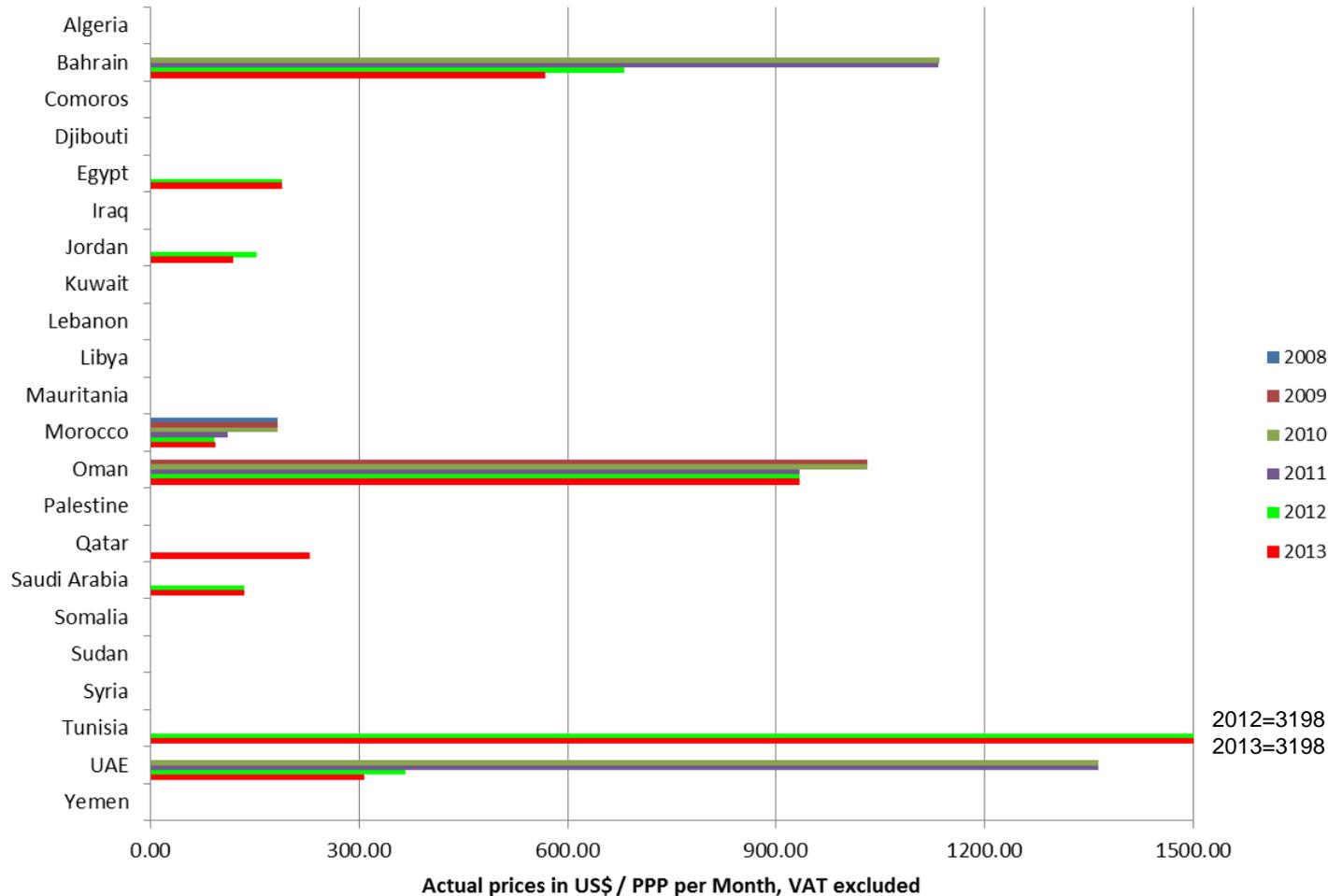
**Low usage:** 6 GB and 15 hours per month, in 60 minute sessions.

Note that the horizontal axis has been manually adjusted, and the bars for Djibouti (2012, 2013) and Tunisia (2010, 2011, 2012, 2013) are not shown fully, as this would make the other results difficult to read.



# 2010 OECD fixed broadband time series, business low usage, high speed >15 Mb/s basket

## Fixed Broadband >15 Mb/s / 20 hours / 11 GB per month.



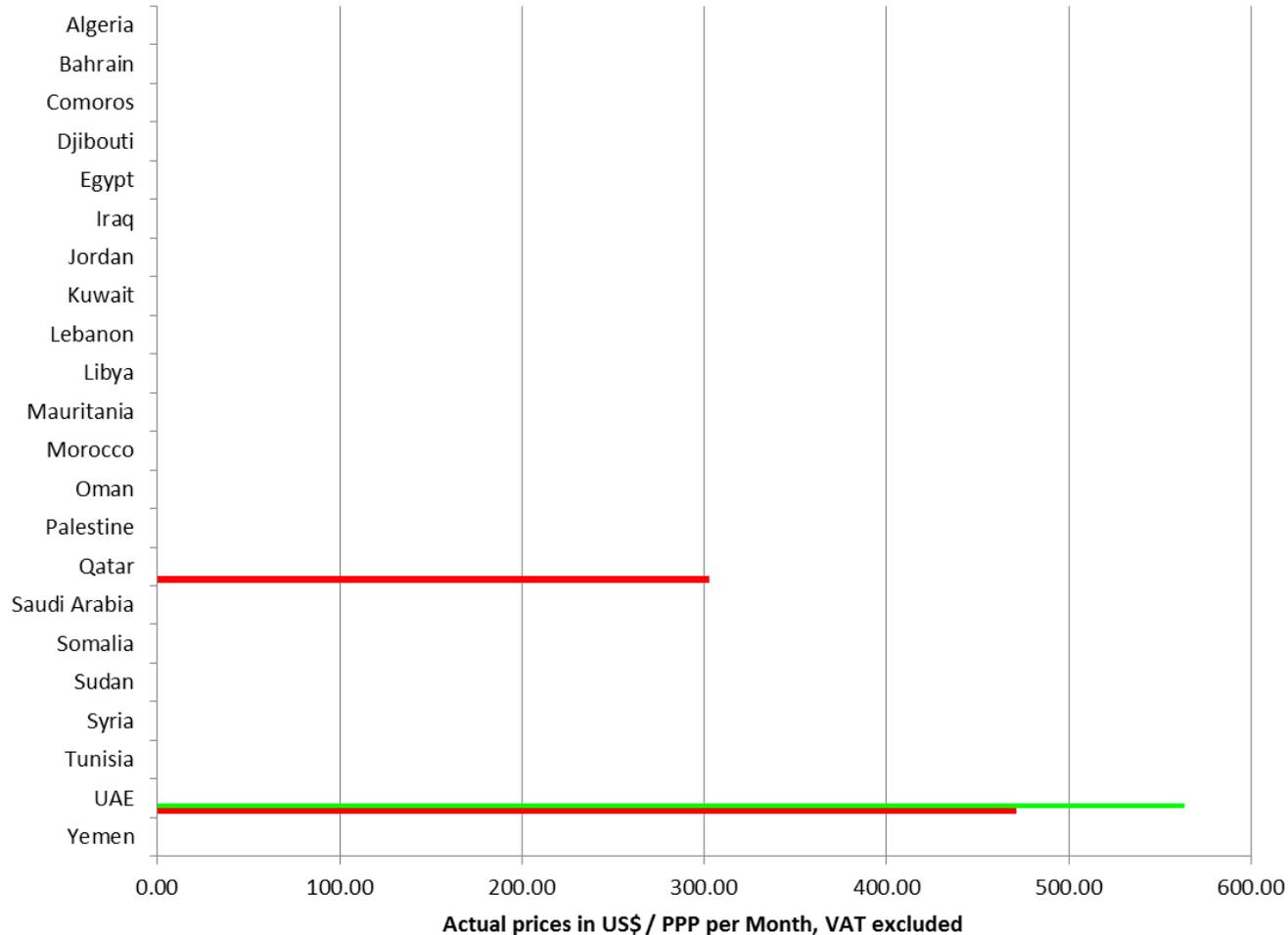
**Low usage:** 11 GB and 20 hours per month, in 60 minute sessions.

Note that the horizontal axis has been manually adjusted, and the bars for Tunisia (2012, 2013) are not shown fully, as this would make the other results difficult to read.



# 2010 OECD fixed broadband time series, business low usage, high speed >30 Mb/s basket

Fixed Broadband >30 Mb/s / 25 hours / 14 GB per month.

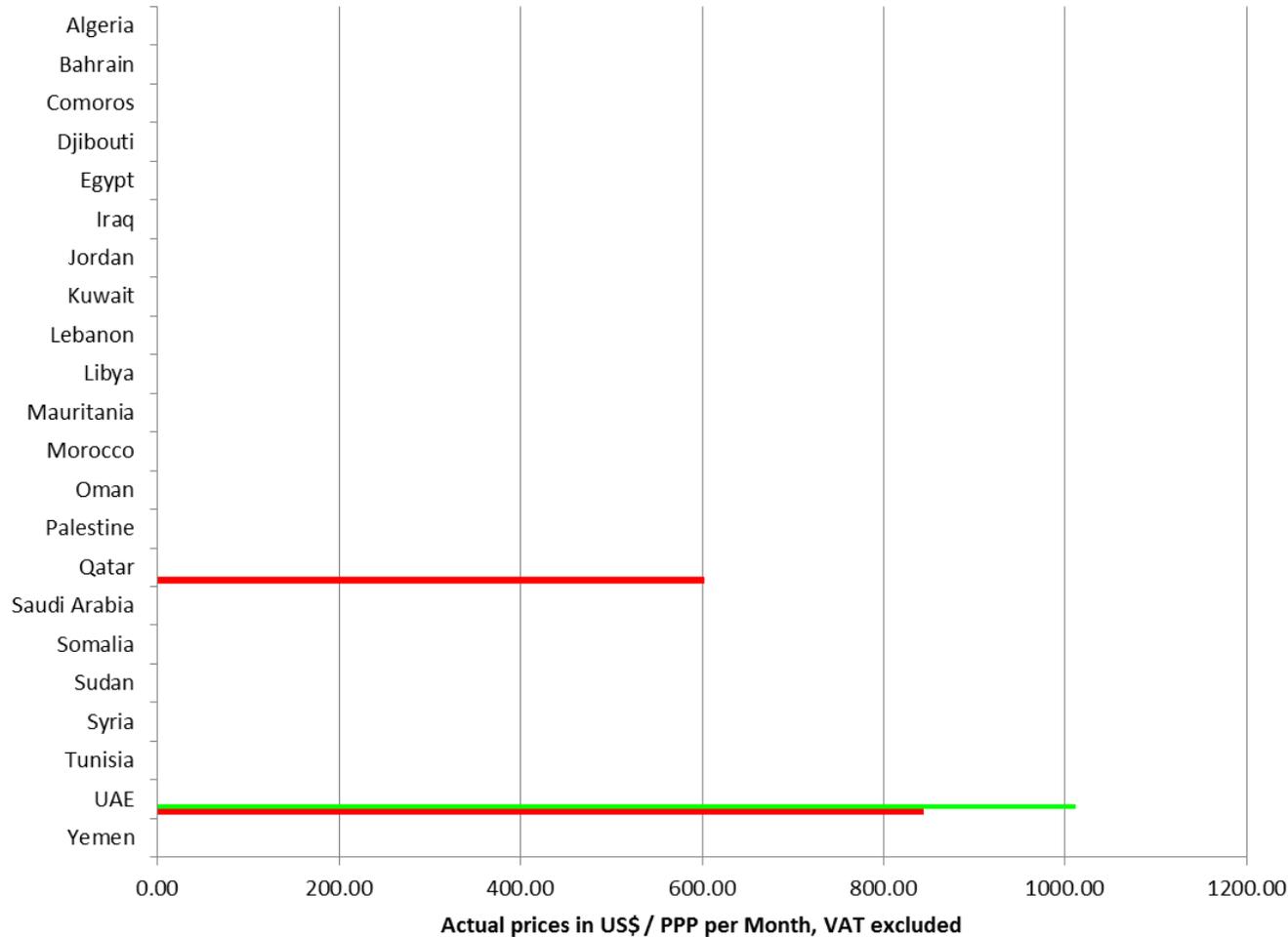


**Low usage:** 14 GB and 25 hours per month, in 60 minute sessions.



# 2010 OECD fixed broadband time series, business low usage, high speed >45 Mb/s basket

**Fixed Broadband >45 Mb/s / 30 hours / 18 GB per month.**

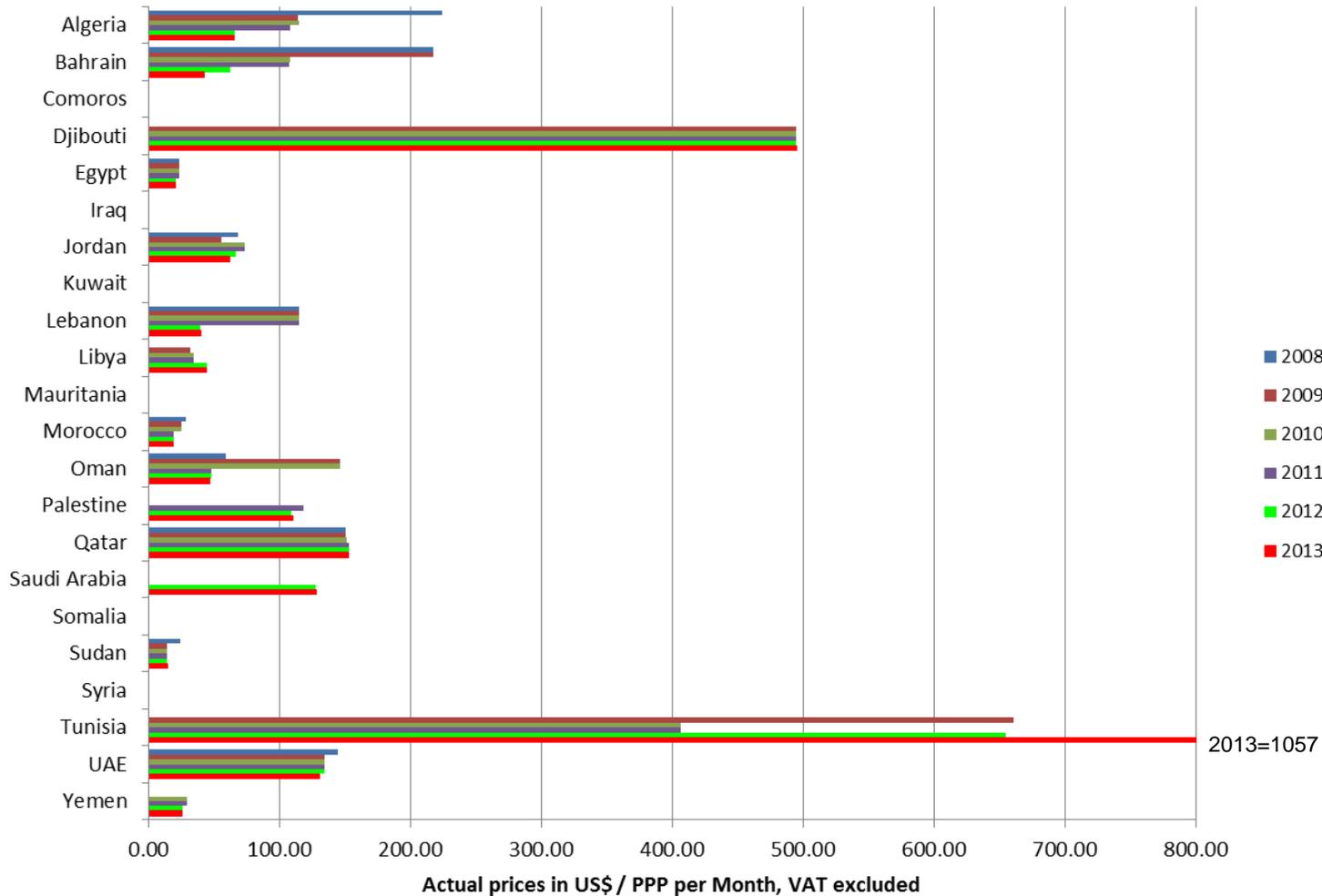


**Low usage:** 18 GB and 30 hours per month, in 60 minute sessions.



# 2010 OECD fixed broadband time series, business high usage, low speed >256 kb/s basket

## Fixed Broadband >0.25 Mb/s / 30 hours / 6 GB per month.



**High usage:** 6 GB and 30 hours per month, in 60 minute sessions.

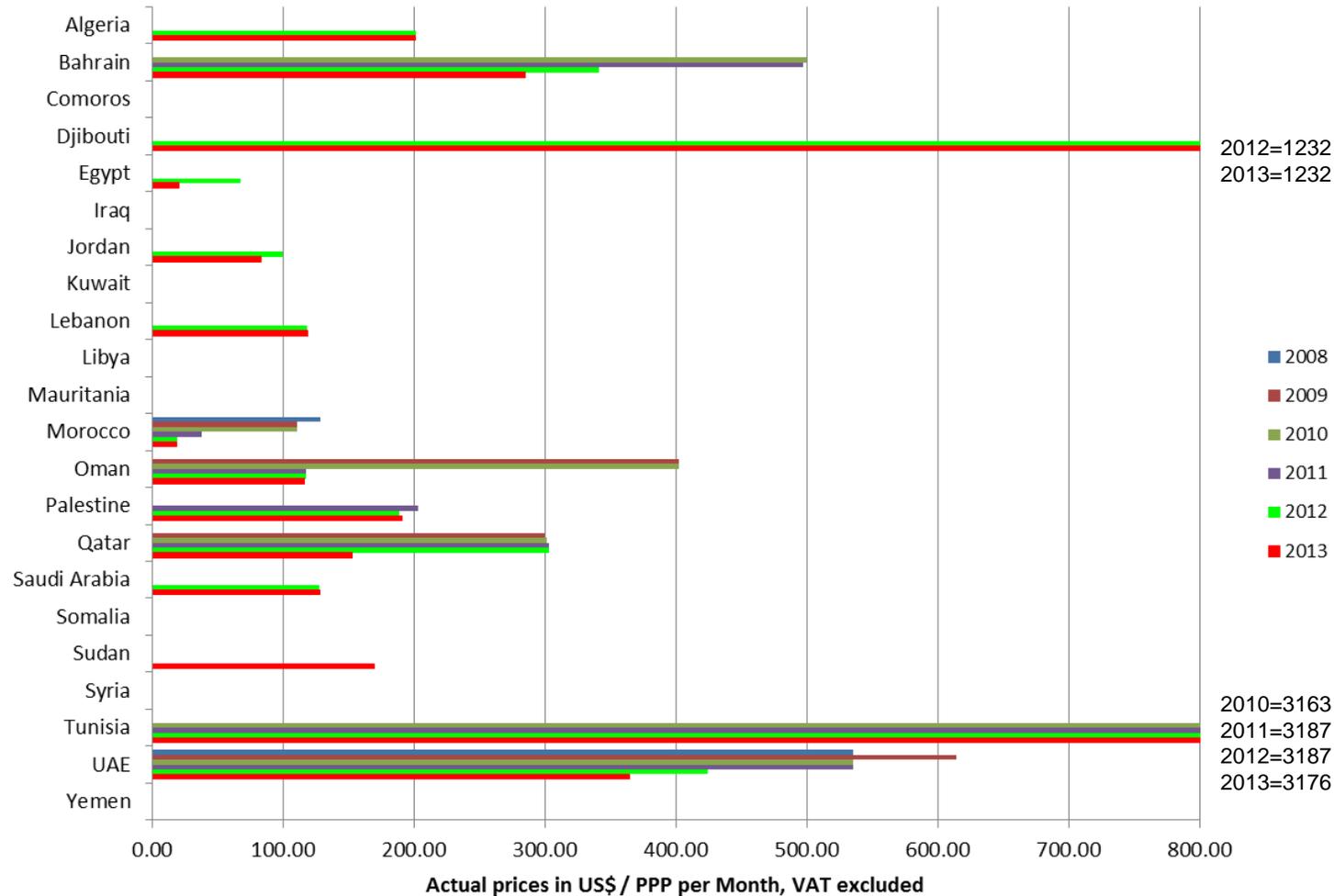
Note that the bars for Djibouti (2008) and Yemen (2008 and 2009) are not shown, as this would make the other results difficult to read.

Note that the horizontal axis has been manually adjusted, and the bar for Tunisia (2013) is not shown fully, as this would make the other results difficult to read.



# 2010 OECD fixed broadband time series, business high usage, medium speed >2.5 Mb/s basket

## Fixed Broadband >2.5 Mb/s / 45 hours / 18 GB per month.



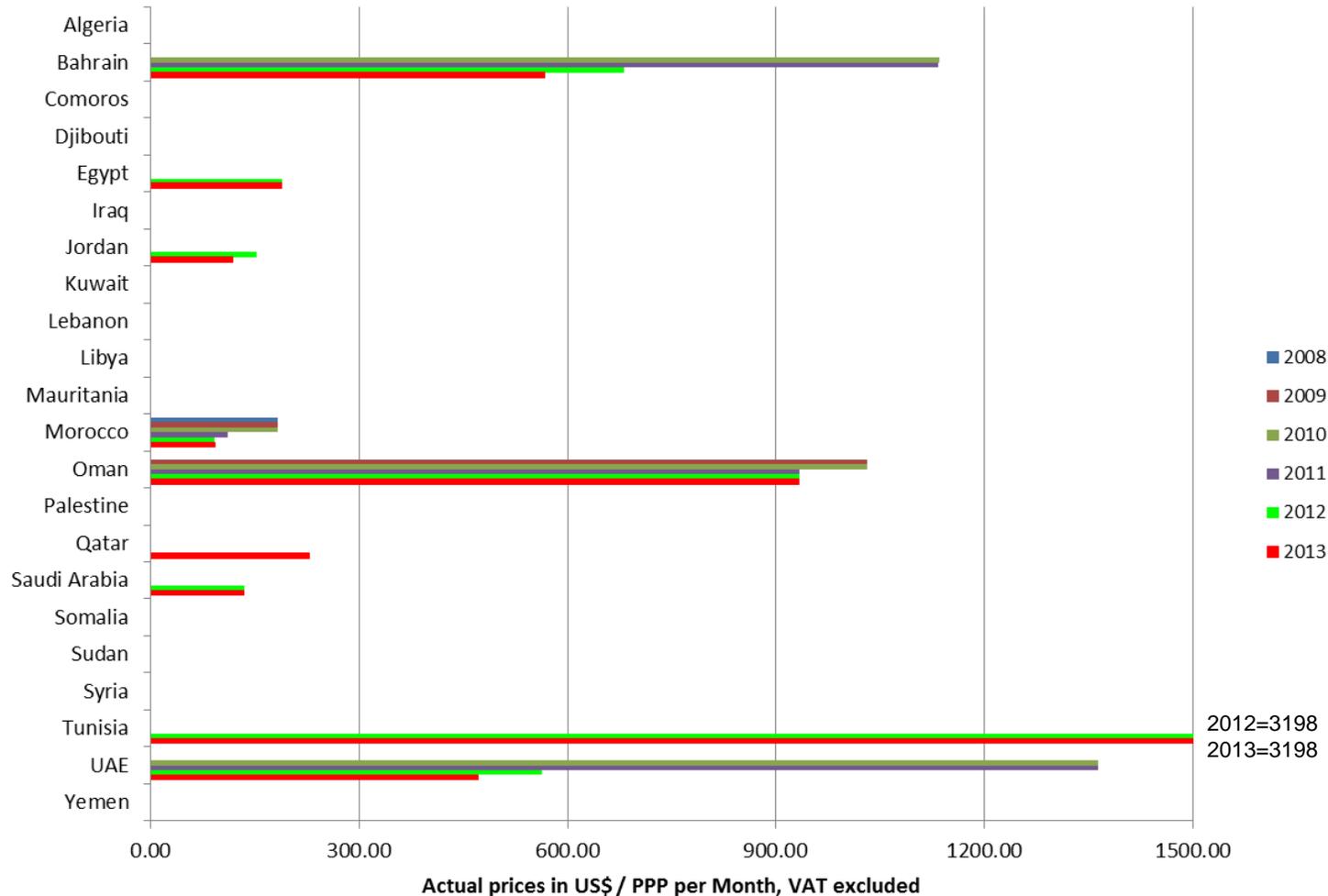
**High usage:** 18 GB and 45 hours per month, in 60 minute sessions.

Note that the horizontal axis has been manually adjusted, and the bars for Djibouti (2012, 2013) and Tunisia (2010, 2011, 2012, 2013) are not shown fully, as this would make the other results difficult to read



# 2010 OECD fixed broadband time series, business high usage, high speed >15 Mb/s basket

## Fixed Broadband >15 Mb/s / 60 hours / 33 GB per month.



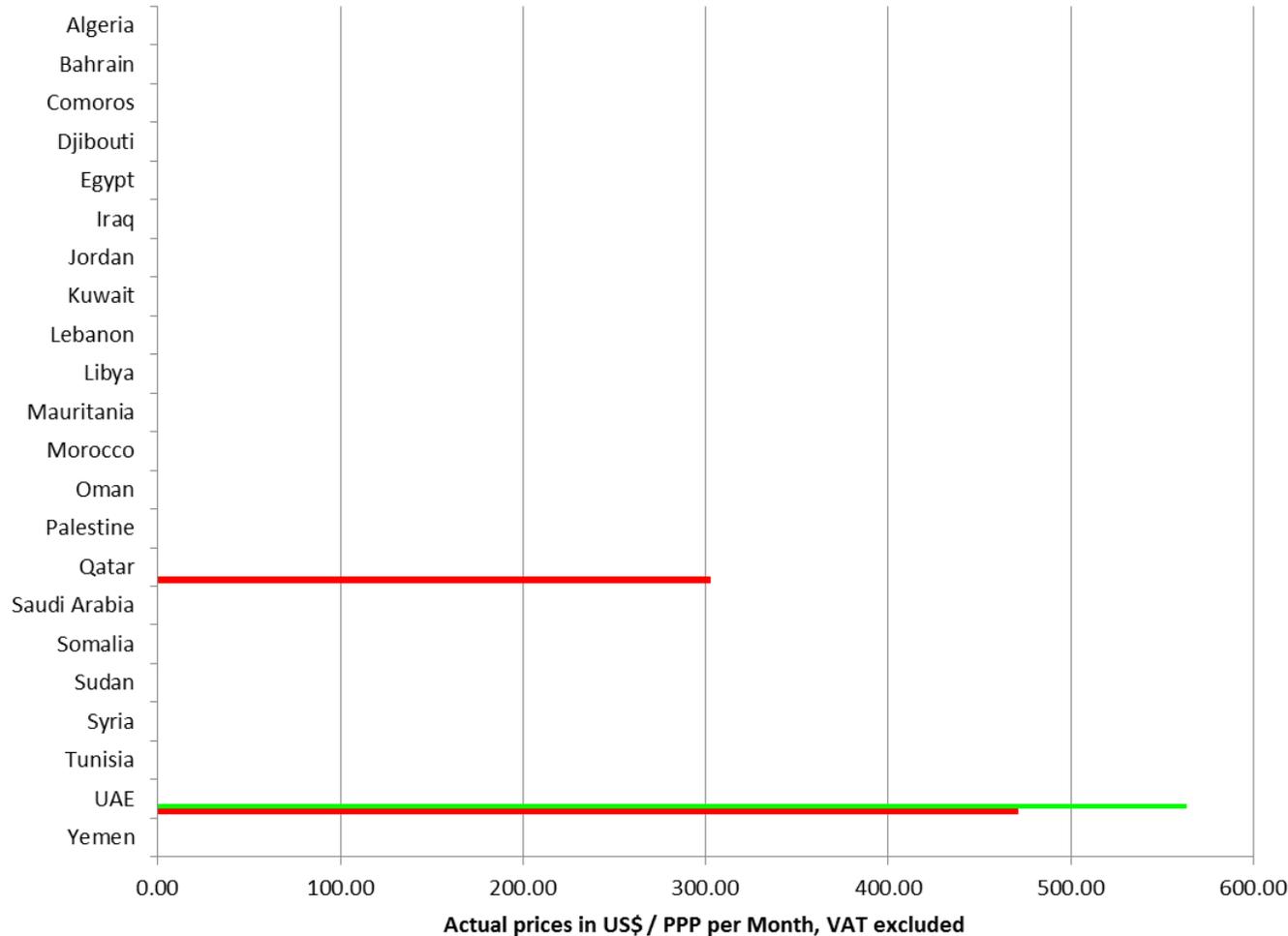
**High usage:** 33 GB and 60 hours per month, in 60 minute sessions.

Note that the horizontal axis has been manually adjusted, and the bars for Tunisia (2012, 2013) are not shown fully, as this would make the other results difficult to read.



# 2010 OECD fixed broadband time series, business high usage, high speed >30 Mb/s basket

Fixed Broadband >30 Mb/s / 75 hours / 42 GB per month.

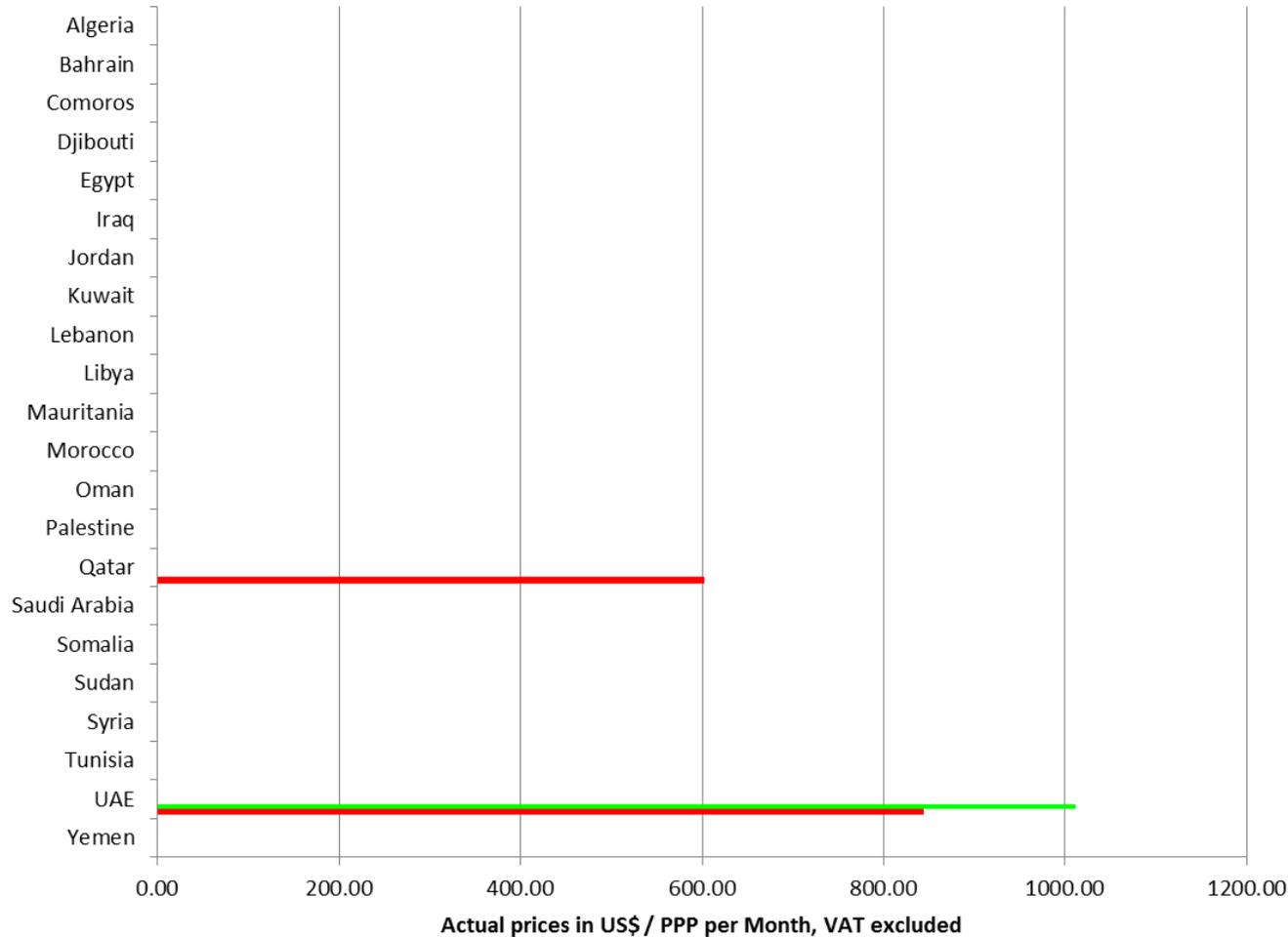


**High usage:** 42 GB and 75 hours per month, in 60 minute sessions.



# 2010 OECD fixed broadband time series, business high usage, high speed >45 Mb/s basket

**Fixed Broadband >45 Mb/s / 90 hours / 54 GB per month.**



**High usage:** 54 GB and 90 hours per month, in 60 minute sessions.

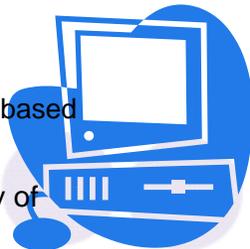


# Fixed broadband ranking tables, 2008-2013

# Observations from fixed broadband time series results

- There were price changes in a number of Arab countries. The more notable changes are:
  - Bahrain: Introduction of competitively priced, higher speed offers, resulting in a reduction in the cost of the high speed (>15Mbps) basket.
  - Comoros: Change in packages, combined with a reduction in rental for some offers, resulting in a reduction of the low speed residential basket
  - Egypt: Removal of some lower speed packages, and a reduction in rental of higher speed ones, resulting in an increase in the cost for the low speed basket, and a decrease in cost for the medium speed one (both business and residential)
  - Jordan: Introduction of new residential and business plans and speeds, resulting in an overall increase in costs
  - Qatar: An extensive overhaul of residential and business offerings, including the introduction of higher speed services, including a number of fibre-based services, coupled with price increases for low speeds, resulting in an increase in costs for the low speed baskets, and a significant decrease in costs for the high speed ones.
  - Saudi Arabia: Introduction of higher speed services, prices at the same level as previously lower priced speeds, resulting in an effective price decrease.
  - Tunisia: Removal of some lower speed packages and a reduction in rental for higher speed ones, resulting in a cost reduction across all relevant baskets, with greater reductions for higher speed baskets.
  - UAE: Change in residential offerings, with removal of all but two standalone lower speed offerings, and a change in the speeds of the range of double and triple play services, coupled with a price increase in these services, resulting in an overall increase across all baskets.
- Prices of both residential and business broadband services in Arab countries have continued to fall over the past year
  - The overall average decrease across the baskets for residential services was 8%, while the decrease for business services was 12%
- Data shown covers both residential and business prices separately. Prices for business services are typically much higher than residential services, and generally less available, although the number of business services available has shown a marked increase since 2012.
  - The average business basket result is 466 USD, compared to 123 USD for residential services, almost 4 times as much. (based on low usage calculations only)
- Around 20% of providers have seen price reductions in some way, while a similar number have seen price increases. Many of these changes are as a result of the introduction of new packages, and removal of lower speed services. Around half of the providers did not introduce any changes that had any measurable impact on the basket results.

Price change analysis is based on prices in national currency for each country.



# Fixed broadband OECD residential low usage, low speed >256 kb/s basket ranking

Total results for OECD low usage low speed residential broadband basket, >256 kb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	25.83	15.12	24.06	22.63	22.63	22.63
Bahrain	29.06	29.06	29.06	28.27	28.27	28.27
Comoros					83.82	77.78
Djibouti		143.10	143.10	143.10	101.33	101.33
Egypt	13.32	13.32	13.32	13.32	13.32	22.20
Iraq						
Jordan	27.87	43.22	48.94	39.53	32.01	40.22
Kuwait						
Lebanon	58.48	58.48	58.48	58.48	29.90	29.90
Libya		31.28	33.95	33.95	43.87	43.87
Mauritania	122.77	122.77	122.77	48.22	48.22	46.60
Morocco	33.80	29.42	29.42	22.86	22.25	22.25
Oman	35.67	41.48	41.48	38.57	38.57	38.57
Palestine			51.24	57.28	49.68	50.33
Qatar	49.94	51.32	52.77	52.77	52.77	61.01
Saudi Arabia		53.21	54.13	20.24	54.13	32.79
Somalia						
Sudan	25.83	15.16	14.83	14.83	14.83	15.94
Syria	29.21	29.21	18.16	18.16	18.16	18.16
Tunisia		32.83	32.83	32.83	38.99	32.83
UAE	29.37	23.77	23.77	24.54	25.57	59.20
Yemen			29.36	29.36	25.36	25.36

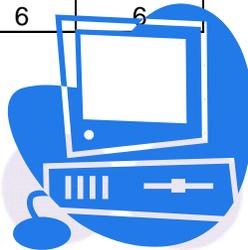
Arab average	40.10	45.80	45.65	38.83	39.14	40.49
OECD average	N/A	N/A	N/A	23.19	24.40	26.49

■ Below Arab average  
■ Above Arab average

Ranking for OECD low usage low speed residential broadband basket, >256 kb/s

	2008	2009	2010	2011	2012	2013
Algeria	3	2	5	5	5	5
Bahrain	5	5	6	8	8	7
Comoros	-	-	-	-	18	18
Djibouti	-	16	18	18	19	19
Egypt	1	1	1	1	1	3
Iraq	-	-	-	-	-	-
Jordan	4	11	12	13	10	12
Kuwait	-	-	-	-	-	-
Lebanon	11	14	16	17	9	8
Libya	-	8	10	11	13	13
Mauritania	12	15	17	14	14	14
Morocco	8	7	8	6	4	4
Oman	9	10	11	12	11	11
Palestine	-	-	13	16	15	15
Qatar	10	12	14	15	16	17
Saudi Arabia	-	13	15	4	17	9
Somalia	-	-	-	-	-	-
Sudan	2	3	2	2	2	1
Syria	6	6	3	3	3	2
Tunisia	-	9	9	10	12	10
UAE	7	4	4	7	7	16
Yemen	-	-	7	9	6	6

■ Least expensive  
■ Most expensive



# Fixed broadband OECD residential low usage, medium speed >2.5 Mb/s basket ranking

Total results for OECD low usage medium speed residential broadband basket, >2.5 Mb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria					116.02	116.02
Bahrain			142.16	84.82	39.72	39.72
Comoros						506.27
Djibouti						
Egypt					73.99	22.20
Iraq						
Jordan				67.94	58.35	60.42
Kuwait						
Lebanon					129.92	129.92
Libya						
Mauritania				453.70	317.29	317.29
Morocco	154.08	132.21	132.21	44.73	22.25	22.25
Oman		114.10	114.10	73.43	73.43	73.43
Palestine				103.03	92.50	93.71
Qatar		101.25	102.71	102.71	102.71	85.98
Saudi Arabia		255.24	85.59	65.91	87.25	49.35
Somalia						
Sudan						185.98
Syria	199.08	199.08	136.25	136.25	136.25	136.25
Tunisia			101.23	73.87	73.87	45.83
UAE	127.49	127.49	86.06	79.40	73.35	87.24
Yemen						

Arab average	160.21	154.89	112.54	116.89	99.78	123.24
OECD average	N/A	N/A	N/A	27.79	27.00	28.12

■ Below Arab average  
■ Above Arab average

Ranking for OECD low usage medium speed residential broadband basket, >2.5 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	11	11
Bahrain	-	-	8	7	2	3
Comoros	-	-	-	-	-	16
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	7	1
Iraq	-	-	-	-	-	-
Jordan	-	-	-	3	3	6
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	12	12
Libya	-	-	-	-	-	-
Mauritania	-	-	-	11	14	15
Morocco	2	4	6	1	1	2
Oman	-	2	5	4	5	7
Palestine	-	-	-	9	9	10
Qatar	-	1	4	8	10	8
Saudi Arabia	-	6	1	2	8	5
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	14
Syria	3	5	7	10	13	13
Tunisia	-	-	3	5	6	4
UAE	1	3	2	6	4	9
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD residential low usage, high speed >15 Mb/s basket ranking

Total results for OECD low usage high speed residential broadband basket, >15 Mb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain			283.53	282.74	226.19	141.37
Comoros						
Djibouti						
Egypt					207.18	207.18
Iraq						
Jordan					58.35	72.09
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco	219.69	219.69	219.69	132.21	109.73	109.73
Oman				146.05	146.05	146.05
Palestine						
Qatar				202.58	202.58	127.68
Saudi Arabia		321.47	188.59	65.91	102.82	65.91
Somalia						
Sudan						
Syria						
Tunisia					150.48	128.59
UAE			102.88	95.38	94.10	115.27
Yemen						

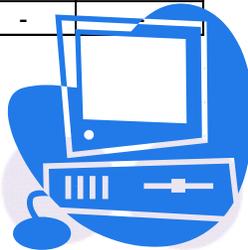
Arab average	219.69	270.58	198.67	154.15	144.16	123.76
OECD average	N/A	N/A	N/A	38.91	33.40	32.79

■ Below Arab average  
■ Above Arab average

Ranking for OECD low usage high speed residential broadband basket, >15 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	4	6	9	7
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	8	9
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	1	2
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	1	1	3	3	4	3
Oman	-	-	-	4	5	8
Palestine	-	-	-	-	-	-
Qatar	-	-	-	5	7	5
Saudi Arabia	-	2	2	1	3	1
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	6	6
UAE	-	-	1	2	2	4
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD residential low usage, high speed >30 Mb/s basket ranking

Total results for OECD low usage high speed residential broadband basket, >30 Mb/s  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						212.06
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman				175.10	175.10	175.10
Palestine						
Qatar						127.68
Saudi Arabia				65.91	269.40	111.17
Somalia						
Sudan						
Syria						
Tunisia						
UAE			142.13	131.82	128.11	171.34
Yemen						

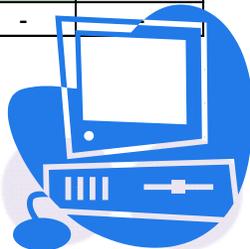
Arab average	N/A	N/A	142.13	124.28	190.87	159.47
OECD average	N/A	N/A	N/A	49.69	38.71	38.18

■ Below Arab average  
■ Above Arab average

Ranking for OECD low usage high speed residential broadband basket, >30 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	5
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	3	2	4
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	2
Saudi Arabia	-	-	-	1	3	1
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	1	2	1	3
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD residential low usage, high speed >45 Mb/s basket ranking

Total results for OECD low usage high speed residential broadband basket, >45 Mb/s  
Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						212.06
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman						
Palestine						
Qatar						127.68
Saudi Arabia				99.03	269.40	167.47
Somalia						
Sudan						
Syria						
Tunisia						
UAE						171.34
Yemen						

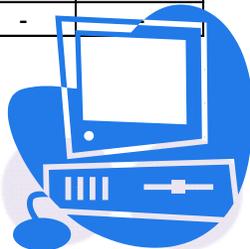
Arab average	N/A	N/A	N/A	99.03	269.40	169.63
OECD average	N/A	N/A	N/A	57.07	46.96	43.06

Below Arab average  
 Above Arab average

Ranking for OECD low usage high speed residential broadband basket, >45 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	4
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	-	-	-
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	1
Saudi Arabia	-	-	-	1	1	2
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	-	-	-	3
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD residential high usage, low speed >256 kb/s basket ranking

Total results for OECD high usage low speed residential broadband basket, >256 kb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	25.83	15.12	24.06	22.63	22.63	22.63
Bahrain	71.47	71.47	40.64	39.72	39.72	39.72
Comoros					83.82	77.78
Djibouti		143.10	143.10	143.10	101.33	101.33
Egypt	25.16	25.16	25.16	25.16	22.20	22.20
Iraq						
Jordan	27.87	43.22	48.94	39.53	34.50	40.22
Kuwait						
Lebanon	109.13	109.13	109.13	109.13	43.09	43.09
Libya		31.28	33.95	33.95	43.87	43.87
Mauritania	122.77	122.77	122.77	48.22	48.22	46.60
Morocco	33.80	29.42	29.42	22.86	22.25	22.25
Oman	35.67	53.09	53.09	53.09	53.09	53.09
Palestine			51.24	57.28	49.68	50.33
Qatar	49.94	51.32	52.77	52.77	52.77	61.01
Saudi Arabia		53.21	54.13	20.24	54.13	32.79
Somalia						
Sudan	25.83	15.16	14.83	14.83	14.83	15.94
Syria	29.21	29.21	18.16	18.16	18.16	18.16
Tunisia		32.83	32.83	32.83	38.99	32.83
UAE	41.95	36.34	36.34	37.12	38.14	59.20
Yemen			29.36	29.36	25.36	25.36

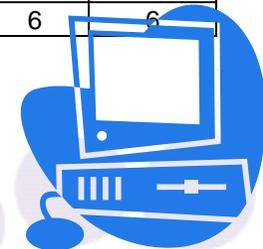
Arab average	49.88	53.87	51.11	44.44	42.46	42.55
OECD average	N/A	N/A	N/A	24.02	25.25	26.73

■ Below Arab average  
■ Above Arab average

Ranking for OECD high usage low speed residential broadband basket, >256 kb/s

	2008	2009	2010	2011	2012	2013
Algeria	3	1	3	4	5	5
Bahrain	10	13	10	12	10	9
Comoros	-	-	-	-	18	18
Djibouti	-	16	18	18	19	19
Egypt	1	3	4	6	3	3
Iraq	-	-	-	-	-	-
Jordan	4	9	11	11	7	10
Kuwait	-	-	-	-	-	-
Lebanon	11	14	16	17	11	11
Libya	-	6	8	9	12	12
Mauritania	12	15	17	13	13	13
Morocco	6	5	6	5	4	4
Oman	7	11	14	15	16	15
Palestine	-	-	12	16	14	14
Qatar	9	10	13	14	15	17
Saudi Arabia	-	12	15	3	17	7
Somalia	-	-	-	-	-	-
Sudan	2	2	1	1	1	1
Syria	5	4	2	2	2	2
Tunisia	-	7	7	8	9	8
UAE	8	8	9	10	8	16
Yemen	-	-	5	7	6	6

■ Least expensive  
■ Most expensive



# Fixed broadband OECD residential high usage, medium speed >2.5 Mb/s basket ranking

Total results for OECD high usage medium speed residential broadband basket, >2.5 Mb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria					116.02	116.02
Bahrain			142.16	84.82	65.23	65.23
Comoros						506.27
Djibouti						
Egypt					73.99	22.20
Iraq						
Jordan				67.94	58.35	60.42
Kuwait						
Lebanon					129.92	129.92
Libya						
Mauritania				453.70	317.29	317.29
Morocco	154.08	132.21	132.21	44.73	22.25	22.25
Oman		137.34	137.34	73.43	73.43	73.43
Palestine				103.03	92.50	93.71
Qatar		101.25	102.71	102.71	102.71	85.98
Saudi Arabia		255.24	85.59	65.91	87.25	49.35
Somalia						
Sudan						185.98
Syria	199.08	199.08	136.25	136.25	136.25	136.25
Tunisia			101.23	73.87	73.87	45.83
UAE	127.49	127.49	86.06	79.40	73.35	87.24
Yemen						

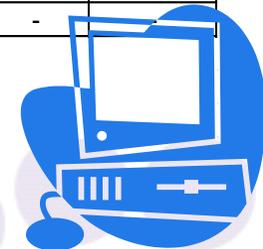
Arab average	160.21	158.77	115.44	116.89	101.60	124.83
OECD average	N/A	N/A	N/A	28.33	28.07	28.63

■ Below Arab average  
■ Above Arab average

Ranking for OECD high usage medium speed residential broadband basket, >2.5 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	11	11
Bahrain	-	-	8	7	3	6
Comoros	-	-	-	-	-	16
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	7	1
Iraq	-	-	-	-	-	-
Jordan	-	-	-	3	2	5
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	12	12
Libya	-	-	-	-	-	-
Mauritania	-	-	-	11	14	15
Morocco	2	3	5	1	1	2
Oman	-	4	7	4	5	7
Palestine	-	-	-	9	9	10
Qatar	-	1	4	8	10	8
Saudi Arabia	-	6	1	2	8	4
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	14
Syria	3	5	6	10	13	13
Tunisia	-	-	3	5	6	3
UAE	1	2	2	6	4	9
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD residential high usage, high speed >15 Mb/s basket ranking

Total results for OECD high usage high speed residential broadband basket, >15 Mb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain			283.53	282.74	226.19	164.53
Comoros						
Djibouti						
Egypt					207.18	207.18
Iraq						
Jordan					77.16	72.09
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco	219.69	219.69	219.69	132.21	109.73	109.73
Oman				146.05	146.05	146.05
Palestine						
Qatar				202.58	202.58	127.68
Saudi Arabia		321.47	188.59	65.91	102.82	65.91
Somalia						
Sudan						
Syria						
Tunisia					150.48	128.59
UAE			102.88	95.38	94.10	115.27
Yemen						

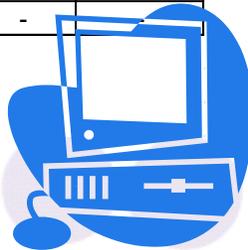
Arab average	219.69	270.58	198.67	154.15	146.25	126.34
OECD average	N/A	N/A	N/A	39.13	33.93	33.21

■ Below Arab average  
■ Above Arab average

Ranking for OECD high usage high speed residential broadband basket, >15 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	4	6	9	8
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	8	9
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	1	2
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	1	1	3	3	4	3
Oman	-	-	-	4	5	7
Palestine	-	-	-	-	-	-
Qatar	-	-	-	5	7	5
Saudi Arabia	-	2	2	1	3	1
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	6	6
UAE	-	-	1	2	2	4
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD residential high usage, high speed >30 Mb/s basket ranking

Total results for OECD high usage high speed residential broadband basket, >30 Mb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						212.06
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman				175.10	175.10	175.10
Palestine						
Qatar						127.68
Saudi Arabia				65.91	269.40	111.17
Somalia						
Sudan						
Syria						
Tunisia						
UAE			142.13	131.82	128.11	171.34
Yemen						

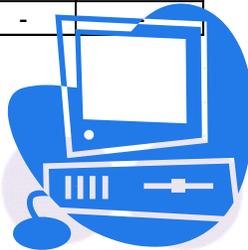
Arab average	N/A	N/A	142.13	124.28	190.87	159.47
OECD average	N/A	N/A	N/A	50.00	39.00	38.18

■ Below Arab average  
■ Above Arab average

Ranking for OECD high usage high speed residential broadband basket, >30 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	5
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	3	2	4
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	2
Saudi Arabia	-	-	-	1	3	1
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	1	2	1	3
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD residential high usage, high speed >45 Mb/s basket ranking

Total results for OECD high usage high speed residential broadband basket, >45 Mb/s

Results in USD/PPP including VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						223.64
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman						
Palestine						
Qatar						127.68
Saudi Arabia				99.03	269.40	167.47
Somalia						
Sudan						
Syria						
Tunisia						
UAE						171.34
Yemen						

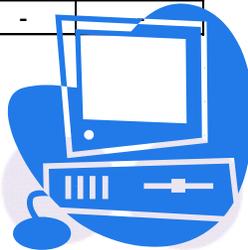
Arab average	N/A	N/A	N/A	99.03	269.40	172.53
OECD average	N/A	N/A	N/A	57.10	47.13	43.12

■ Below Arab average  
■ Above Arab average

Ranking for OECD high usage high speed residential broadband basket, >45 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	4
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	-	-	-
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	1
Saudi Arabia	-	-	-	1	1	2
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	-	-	-	3
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD business low usage, low speed >256 kb/s basket ranking

Total results for OECD low usage low speed business broadband basket, >256 kb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	224.17	113.97	114.92	107.58	65.19	65.19
Bahrain	79.95	79.95	57.33	56.55	56.55	42.41
Comoros						
Djibouti		494.65	494.65	494.65	494.65	494.65
Egypt	12.11	12.11	12.11	12.11	12.11	20.18
Iraq						
Jordan	67.58	55.58	73.01	73.01	66.05	61.53
Kuwait						
Lebanon	68.15	68.15	68.15	68.15	27.18	27.18
Libya		31.28	33.95	33.95	43.87	43.87
Mauritania						
Morocco	28.16	24.52	24.52	18.88	19.05	18.54
Oman	58.90	143.15	143.15	38.57	38.57	38.57
Palestine				117.85	108.77	110.19
Qatar	149.81	149.81	151.19	152.64	152.64	152.64
Saudi Arabia					127.73	127.73
Somalia						
Sudan	23.48	13.78	13.48	13.48	13.48	14.49
Syria						
Tunisia		660.50	406.10	406.10	654.70	1056.89
UAE	86.59	134.25	86.59	86.59	86.59	72.57
Yemen			29.36	29.36	25.36	25.36

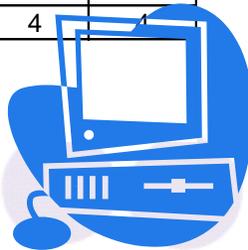
Arab average	79.89	152.44	122.04	113.97	124.53	148.25
OECD average	N/A	N/A	N/A	29.06	27.83	32.17

Below Arab average  
 Above Arab average

Ranking for OECD low usage low speed business broadband basket, >256 kb/s

	2008	2009	2010	2011	2012	2013
Algeria	10	8	10	11	9	10
Bahrain	7	7	6	7	8	7
Comoros	-	-	-	-	-	-
Djibouti	-	12	14	15	15	15
Egypt	1	1	1	1	1	3
Iraq	-	-	-	-	-	-
Jordan	5	5	8	9	10	9
Kuwait	-	-	-	-	-	-
Lebanon	6	6	7	8	5	5
Libya	-	4	5	5	7	8
Mauritania	-	-	-	-	-	-
Morocco	3	3	3	3	3	2
Oman	4	10	11	6	6	6
Palestine	-	-	-	12	12	12
Qatar	9	11	12	13	14	14
Saudi Arabia	-	-	-	-	13	13
Somalia	-	-	-	-	-	-
Sudan	2	2	2	2	2	1
Syria	-	-	-	-	-	-
Tunisia	-	13	13	14	16	16
UAE	8	9	9	10	11	11
Yemen	-	-	4	4	4	4

Least expensive  
 Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD business low usage, medium speed >2.5 Mb/s basket ranking

Total results for OECD low usage medium speed business broadband basket, >2.5 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria					201.06	201.06
Bahrain			499.51	496.76	341.26	284.71
Comoros						
Djibouti					1231.76	1231.76
Egypt					67.27	20.18
Iraq						
Jordan					99.15	82.43
Kuwait						
Lebanon					118.11	118.11
Libya						
Mauritania						
Morocco	128.40	110.17	110.14	37.11	19.05	18.54
Oman		392.96	392.96	108.29	108.29	108.29
Palestine				203.04	188.28	190.75
Qatar		299.61	300.99	302.45	302.45	152.64
Saudi Arabia					127.73	127.73
Somalia						
Sudan						169.07
Syria						
Tunisia			3162.82	3186.76	3186.76	3175.17
UAE	535.12	613.61	535.12	535.12	194.46	172.03
Yemen						

Arab average	331.76	354.09	833.59	695.65	475.82	432.32
OECD average	N/A	N/A	N/A	32.64	31.75	35.65

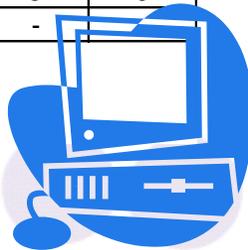
Below Arab average  
 Above Arab average

Ranking for OECD low usage medium speed business broadband basket, >2.5 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	9	11
Bahrain	-	-	4	5	11	12
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	12	13
Egypt	-	-	-	-	2	2
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	3	3
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	5	5
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	1	1	1	1	1	1
Oman	-	3	3	2	4	4
Palestine	-	-	-	3	7	10
Qatar	-	2	2	4	10	7
Saudi Arabia	-	-	-	-	6	6
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	8
Syria	-	-	-	-	-	-
Tunisia	-	-	6	7	13	14
UAE	2	4	5	6	8	9
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive

Comparable OECD data is not available for 2008, 2009 and 2010



# Fixed broadband OECD business low usage, high speed >15 Mb/s basket ranking

Total results for OECD low usage high speed business broadband basket, >15 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain			1135.68	1132.94	680.55	567.45
Comoros						
Djibouti						
Egypt					188.35	188.35
Iraq						
Jordan					151.41	117.28
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco	183.07	183.07	183.07	110.01	91.95	91.44
Oman		1032.04	1032.04	933.27	933.27	933.27
Palestine						
Qatar						227.55
Saudi Arabia					134.35	134.35
Somalia						
Sudan						
Syria						
Tunisia					3198.36	3198.36
UAE			1363.49	1363.49	366.92	306.65
Yemen						

Arab average	183.07	607.55	928.57	884.93	718.14	640.52
OECD average	N/A	N/A	N/A	44.64	39.50	38.63

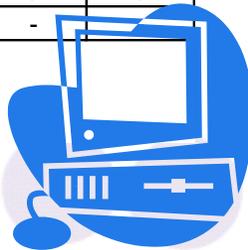
Below Arab average  
 Above Arab average

Ranking for OECD low usage high speed business broadband basket, >15 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	3	3	6	7
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	4	4
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	3	2
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	1	1	1	1	1	1
Oman	-	2	2	2	7	8
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	5
Saudi Arabia	-	-	-	-	2	3
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	8	9
UAE	-	-	4	4	5	6
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive

Comparable OECD data is not available for 2008, 2009 and 2010



# Fixed broadband OECD business low usage, high speed >30 Mb/s basket ranking

Total results for OECD low usage high speed business broadband basket, >30 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman						
Palestine						
Qatar						302.45
Saudi Arabia						
Somalia						
Sudan						
Syria						
Tunisia						
UAE					563.15	470.64
Yemen						

Arab average	N/A	N/A	N/A	N/A	563.15	386.55
OECD average	N/A	N/A	N/A	82.26	56.71	52.28

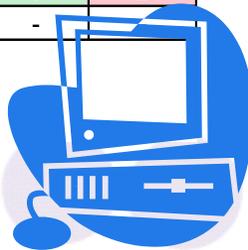
Below Arab average  
 Above Arab average

Ranking for OECD low usage high speed business broadband basket, >30 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	-	-	-
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	1
Saudi Arabia	-	-	-	-	-	-
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	-	-	1	2
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive

Comparable OECD data is not available for 2008, 2009 and 2010



# Fixed broadband OECD business low usage, high speed >45 Mb/s basket ranking

Total results for OECD low usage high speed business broadband basket, >45 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman						
Palestine						
Qatar						602.06
Saudi Arabia						
Somalia						
Sudan						
Syria						
Tunisia						
UAE					1011.68	843.48
Yemen						

Arab average	N/A	N/A	N/A	N/A	1,011.68	722.77
OECD average	N/A	N/A	N/A	87.01	76.65	71.62

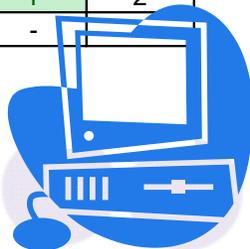
Below Arab average  
 Above Arab average

Ranking for OECD low usage high speed business broadband basket, >45 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	-	-	-
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	1
Saudi Arabia	-	-	-	-	-	-
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	-	-	1	2
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive

Comparable OECD data is not available for 2008, 2009 and 2010



# Fixed broadband OECD business high usage, low speed >256 kb/s basket ranking

Total results for OECD high usage low speed business broadband basket, >256 kb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria	224.17	113.97	114.92	107.58	65.19	65.19
Bahrain	216.77	216.77	108.00	107.22	62.20	42.41
Comoros						
Djibouti		494.65	494.65	494.65	494.65	494.65
Egypt	22.87	22.87	22.87	22.87	20.18	20.18
Iraq						
Jordan	67.58	55.58	73.01	73.01	66.05	61.53
Kuwait						
Lebanon	114.19	114.19	114.19	114.19	39.17	39.17
Libya		31.28	33.95	33.95	43.87	43.87
Mauritania						
Morocco	28.16	24.52	24.52	18.88	19.05	18.54
Oman	58.90	146.05	146.05	47.28	47.28	46.41
Palestine				117.85	108.77	110.19
Qatar	149.81	149.81	151.19	152.64	152.64	152.64
Saudi Arabia					127.73	127.73
Somalia						
Sudan	23.48	13.78	13.48	13.48	13.48	14.49
Syria						
Tunisia		660.50	406.10	406.10	654.70	1056.89
UAE	144.00	134.25	134.25	134.25	134.25	129.99
Yemen			29.36	29.36	25.36	25.36

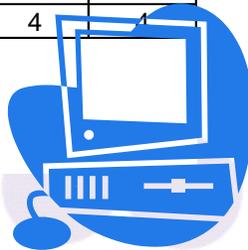
Arab average	104.99	167.56	133.32	124.89	129.66	153.08
OECD average	N/A	N/A	N/A	29.73	28.30	32.72

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Ranking for OECD high usage low speed business broadband basket, >256 kb/s

	2008	2009	2010	2011	2012	2013
Algeria	10	6	9	9	9	10
Bahrain	9	11	7	8	8	6
Comoros	-	-	-	-	-	-
Djibouti	-	12	14	15	15	15
Egypt	1	2	2	3	3	3
Iraq	-	-	-	-	-	-
Jordan	5	5	6	7	10	9
Kuwait	-	-	-	-	-	-
Lebanon	6	7	8	10	5	5
Libya	-	4	5	5	6	7
Mauritania	-	-	-	-	-	-
Morocco	3	3	3	2	2	2
Oman	4	9	11	6	7	8
Palestine	-	-	-	11	11	11
Qatar	8	10	12	13	14	14
Saudi Arabia	-	-	-	-	12	12
Somalia	-	-	-	-	-	-
Sudan	2	1	1	1	1	1
Syria	-	-	-	-	-	-
Tunisia	-	13	13	14	16	16
UAE	7	8	10	12	13	13
Yemen	-	-	4	4	4	4

<span style="background-color: #d9ead3; border: 1px solid #000; display: inline-block; width: 15px; height: 10px;"></span> Least expensive
<span style="background-color: #f4cccc; border: 1px solid #000; display: inline-block; width: 15px; height: 10px;"></span> Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD business high usage, medium speed >2.5 Mb/s basket ranking

Total results for OECD high usage medium speed business broadband basket, >2.5 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria					201.06	201.06
Bahrain			499.51	496.76	341.26	284.71
Comoros						
Djibouti					1231.76	1231.76
Egypt					67.27	20.18
Iraq						
Jordan					99.15	82.43
Kuwait						
Lebanon					118.11	118.11
Libya						
Mauritania						
Morocco	128.40	110.17	110.14	37.11	19.05	18.54
Oman		401.68	401.68	117.00	117.00	116.13
Palestine				203.04	188.28	190.75
Qatar		299.61	300.99	302.45	302.45	152.64
Saudi Arabia					127.73	127.73
Somalia						
Sudan						169.07
Syria						
Tunisia			3162.82	3186.76	3186.76	3175.17
UAE	535.12	613.61	535.12	535.12	424.33	364.06
Yemen						

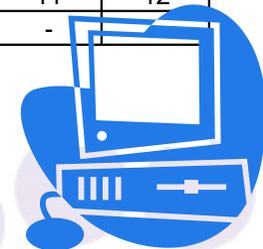
Arab average	331.76	356.27	835.04	696.89	494.17	446.60
OECD average	N/A	N/A	N/A	34.09	32.64	36.29

■ Below Arab average  
■ Above Arab average

Ranking for OECD high usage medium speed business broadband basket, >2.5 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	8	10
Bahrain	-	-	4	5	10	11
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	12	13
Egypt	-	-	-	-	2	2
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	3	3
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	5	5
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	1	1	1	1	1	1
Oman	-	3	3	2	4	4
Palestine	-	-	-	3	7	9
Qatar	-	2	2	4	9	7
Saudi Arabia	-	-	-	-	6	6
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	8
Syria	-	-	-	-	-	-
Tunisia	-	-	6	7	13	14
UAE	2	4	5	6	11	12
Yemen	-	-	-	-	-	-

■ Least expensive  
■ Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD business high usage, high speed >15 Mb/s basket ranking

Total results for OECD high usage high speed business broadband basket, >15 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain			1135.68	1132.94	680.55	567.45
Comoros						
Djibouti						
Egypt					188.35	188.35
Iraq						
Jordan					151.41	117.28
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco	183.07	183.07	183.07	110.01	91.95	91.44
Oman		1032.04	1032.04	933.27	933.27	933.27
Palestine						
Qatar						227.55
Saudi Arabia					134.35	134.35
Somalia						
Sudan						
Syria						
Tunisia					3198.36	3198.36
UAE			1363.49	1363.49	563.15	470.64
Yemen						

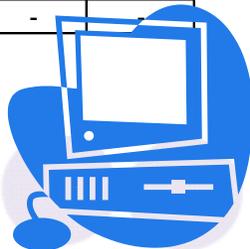
Arab average	183.07	607.55	928.57	884.93	742.67	658.74
OECD average	N/A	N/A	N/A	45.26	40.44	38.95

Below Arab average  
 Above Arab average

Ranking for OECD high usage high speed business broadband basket, >15 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	3	3	6	7
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	4	4
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	3	2
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	1	1	1	1	1	1
Oman	-	2	2	2	7	8
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	5
Saudi Arabia	-	-	-	-	2	3
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	8	9
UAE	-	-	4	4	5	6
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Fixed broadband OECD business high usage, high speed >30 Mb/s basket ranking

Total results for OECD high usage high speed business broadband basket, >30 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman						
Palestine						
Qatar						302.45
Saudi Arabia						
Somalia						
Sudan						
Syria						
Tunisia						
UAE					563.15	470.64
Yemen						

Arab average	N/A	N/A	N/A	N/A	563.15	386.55
OECD average	N/A	N/A	N/A	83.40	57.34	52.84

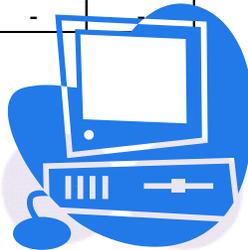
Below Arab average  
 Above Arab average

Ranking for OECD high usage high speed business broadband basket, >30 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	-	-	-
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	1
Saudi Arabia	-	-	-	-	-	-
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	-	-	1	2
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive

Comparable OECD data is not available for 2008, 2009 and 2010



# Fixed broadband OECD business high usage, high speed >45 Mb/s basket ranking

Total results for OECD high usage high speed business broadband basket, >45 Mb/s

Results in USD/PPP excluding VAT, lowest per country

	2008	2009	2010	2011	2012	2013
Algeria						
Bahrain						
Comoros						
Djibouti						
Egypt						
Iraq						
Jordan						
Kuwait						
Lebanon						
Libya						
Mauritania						
Morocco						
Oman						
Palestine						
Qatar						602.06
Saudi Arabia						
Somalia						
Sudan						
Syria						
Tunisia						
UAE					1011.68	843.48
Yemen						

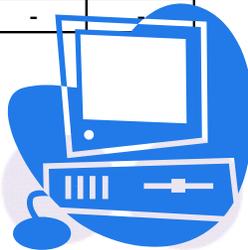
Arab average	N/A	N/A	N/A	N/A	1,011.68	722.77
OECD average	N/A	N/A	N/A	87.01	78.89	72.01

Below Arab average  
 Above Arab average

Ranking for OECD high usage high speed business broadband basket, >45 Mb/s

	2008	2009	2010	2011	2012	2013
Algeria	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-
Comoros	-	-	-	-	-	-
Djibouti	-	-	-	-	-	-
Egypt	-	-	-	-	-	-
Iraq	-	-	-	-	-	-
Jordan	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-
Libya	-	-	-	-	-	-
Mauritania	-	-	-	-	-	-
Morocco	-	-	-	-	-	-
Oman	-	-	-	-	-	-
Palestine	-	-	-	-	-	-
Qatar	-	-	-	-	-	1
Saudi Arabia	-	-	-	-	-	-
Somalia	-	-	-	-	-	-
Sudan	-	-	-	-	-	-
Syria	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-
UAE	-	-	-	-	1	2
Yemen	-	-	-	-	-	-

Least expensive  
 Most expensive



Comparable OECD data is not available for 2008, 2009 and 2010

# Mobile broadband basket 2013 results

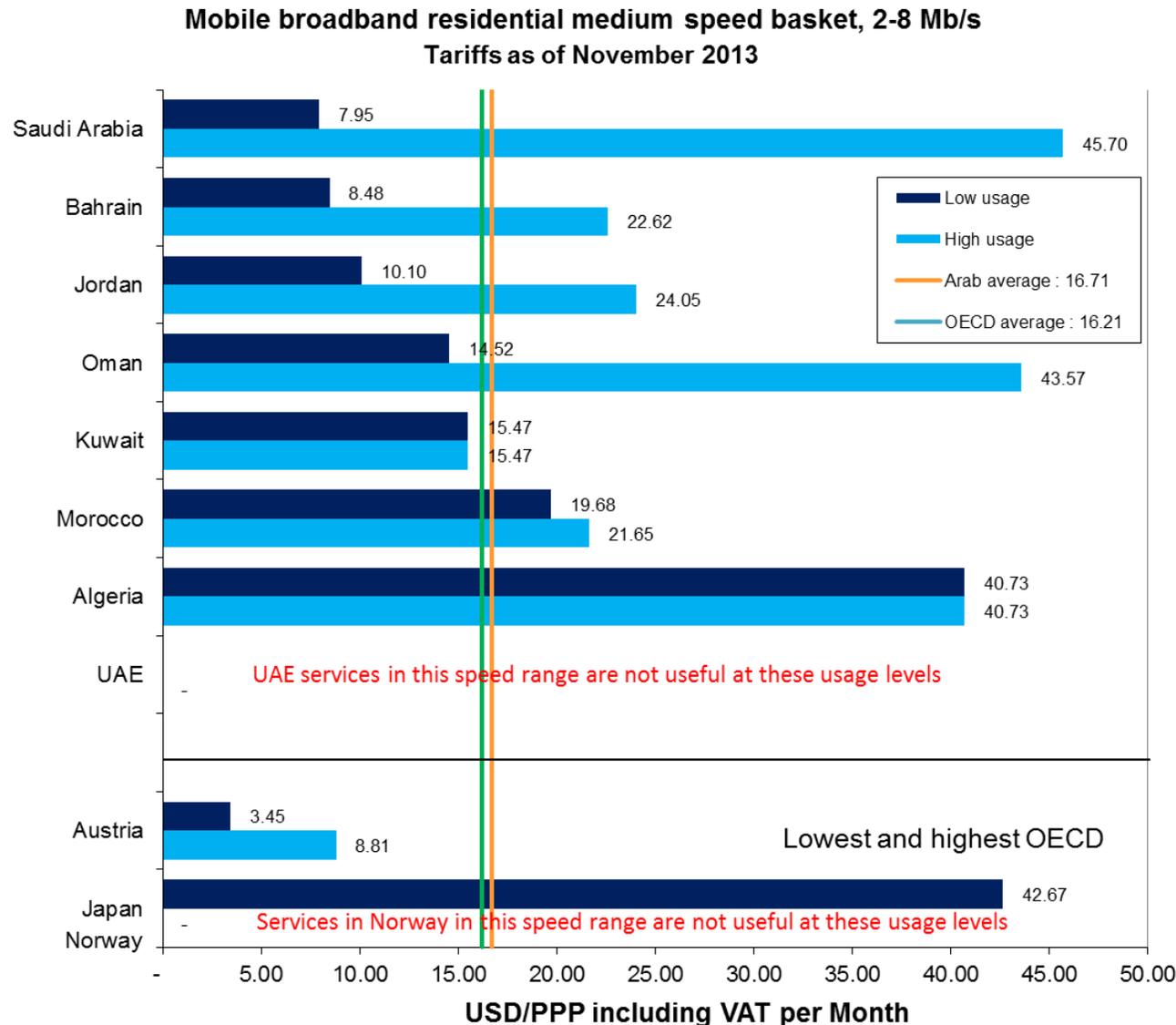
# Mobile broadband data issues

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- Data collected refers to dedicated mobile broadband packages (i.e. not mobile broadband bundled with or added to mobile voice packages)
- No data was available for: Libya, Mauritania, Palestine, Somalia, and Yemen
- For countries where data was available, up to two operators were considered
- Total monthly cost calculated based on two usage baskets from the modified OECD baskets:
  - **Low usage:** 1 GB and 5 hours per month.
  - **High usage:** 6 GB and 30 hours per month.
  - Please note that the OECD baskets do not consider time (i.e. hours of usage). This has been added to avoid exclusion of any time related tariffs in this study.
- Two speeds were considered for each usage level:
  - **Medium speed:** 2-8 Mb/s
  - **High speed:** >8 Mb/s
  - Please note that the OECD baskets do not distinguish on speed, but rather includes all speeds above 256 Kb/s. The two speed ranges were included to be able to analyse developments in mobile broadband speeds.
- In addition, a calculation has been included for the same low and high usage levels, for both business and residential services, but not taking into account any speed limitations,
- This captures tariffs which are published but without any download speed information, and which would otherwise not have been considered for the analysis
  - This calculation is especially important for this update, as there are a lot more mobile broadband offers in the market, many of which do not specify the speed of service.
- Results were compared to the recent OECD results covering 34 OECD countries, using the same usage baskets described above
  - The new OECD baskets for mobile broadband were adopted in June 2012



# Residential medium speed mobile broadband (2-8 Mb/s)



**Low usage:** 1 GB and 5 hours per month over 15 days  
**High usage:** 6 GB and 30 hours over 30 days

Mobile broadband is much more likely to vary with usage than fixed broadband

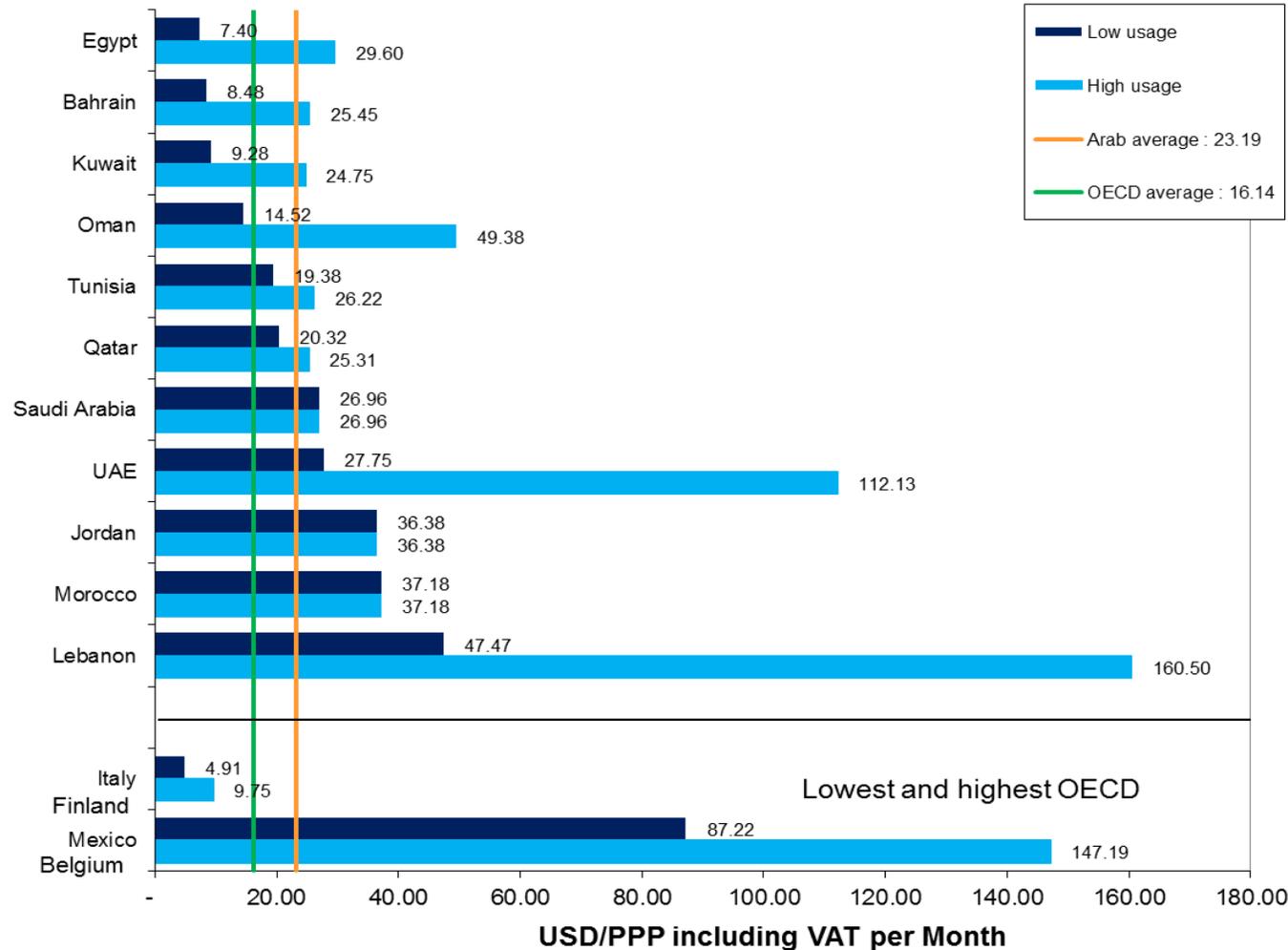
Average lines are based on low usage results

UAE results have been excluded as the costs for service in this speed range are very high, and distort the overall results



# Residential high speed mobile broadband (>8 Mb/s)

Mobile broadband residential high speed basket, >8 Mb/s  
Tariffs as of November 2013



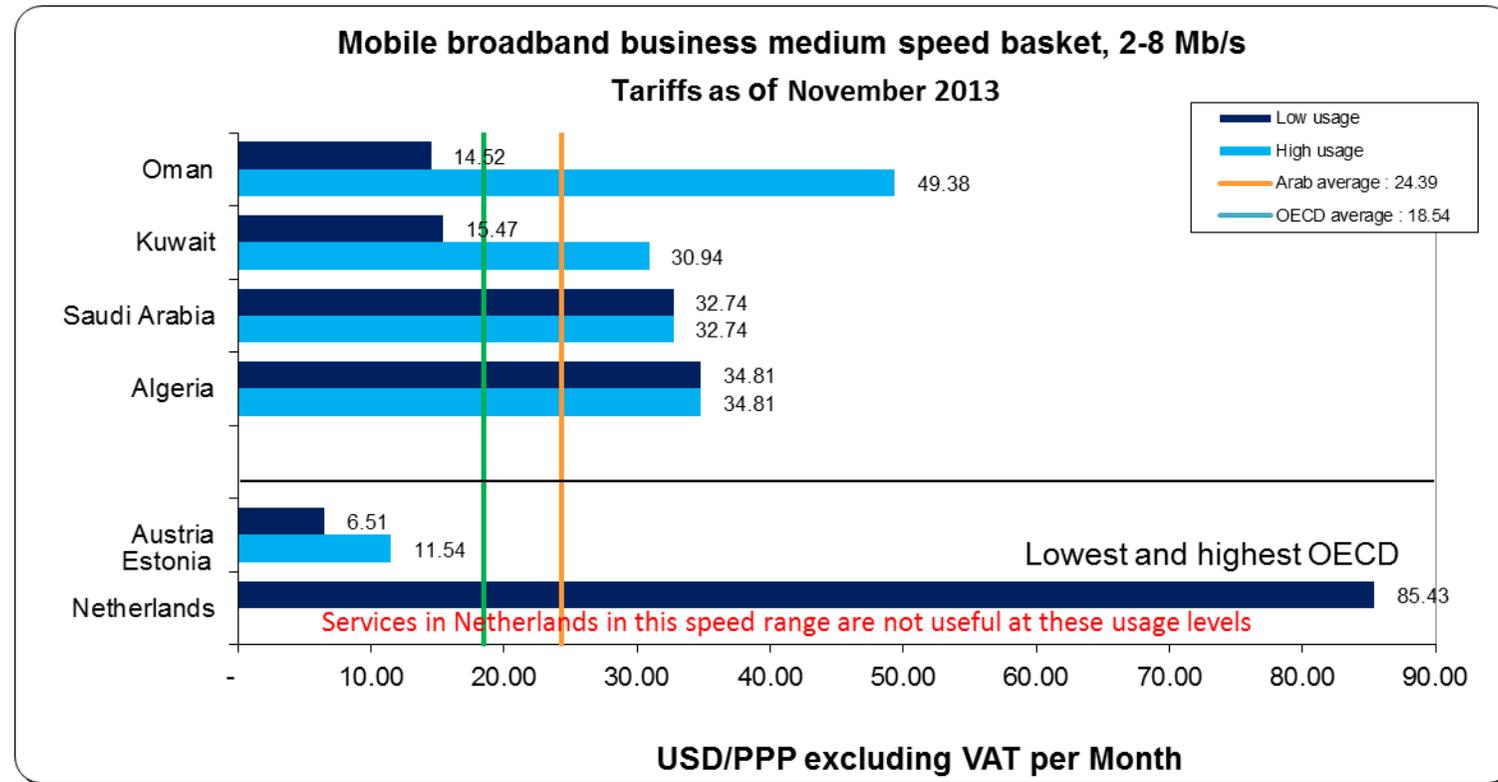
**Low usage:** 1 GB and 5 hours per month over 15 days  
**High usage:** 6 GB and 30 hours over 30 days

Fewer Arab providers offer speeds above 8 Mb/s

Average lines are based on low usage results



# Business medium speed mobile broadband (2-8 Mb/s)



**Low usage:** 1 GB and 5 hours per month over 15 days  
**High usage:** 6 GB and 30 hours over 30 days

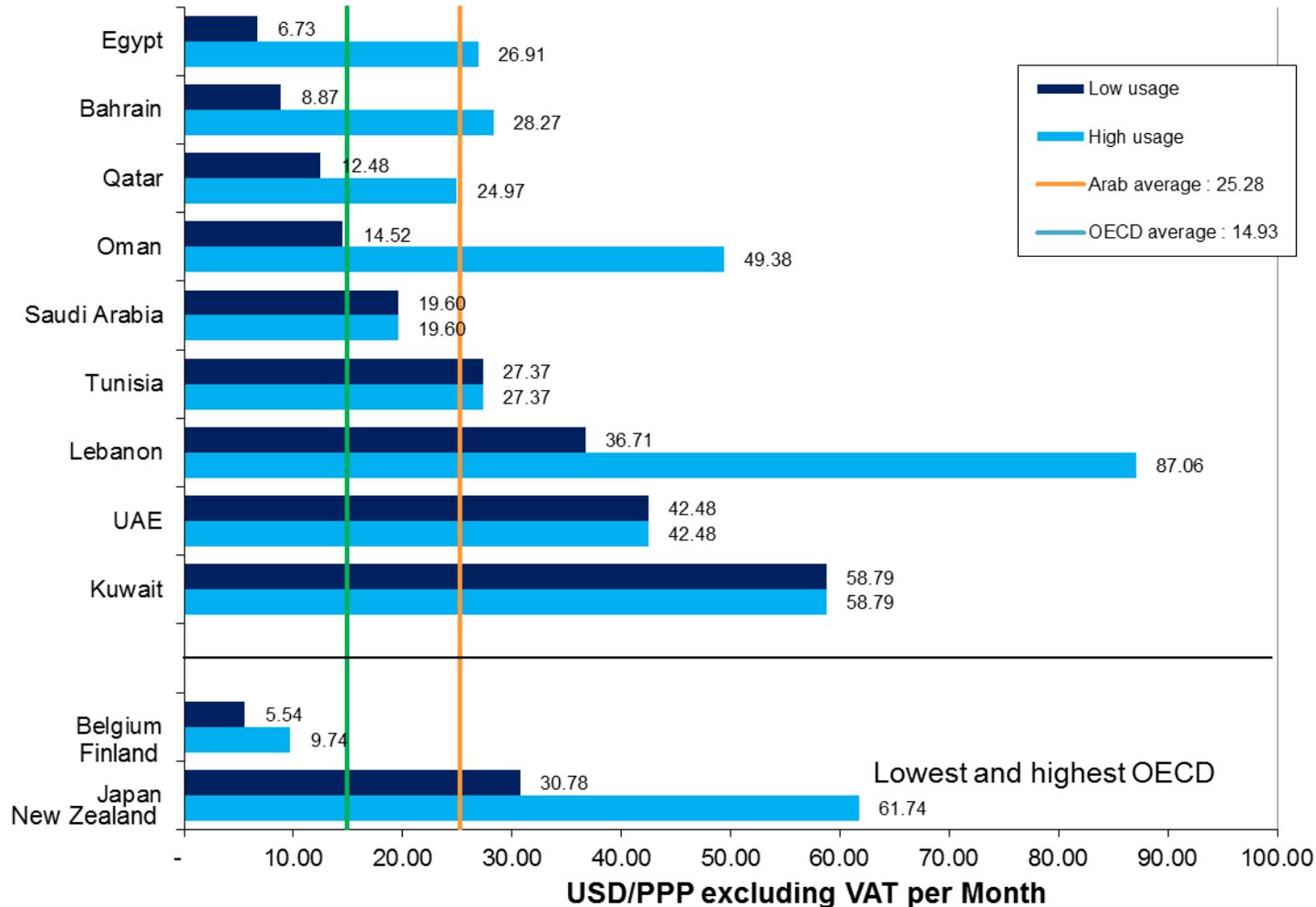
Mobile broadband is much more likely to vary with usage than fixed broadband

Average lines are based on low usage results



# Business high speed mobile broadband (>8 Mb/s)

Mobile broadband business high speed basket, > 8Mb/s  
Tariffs as of November 2013



**Low usage:** 1 GB and 5 hours per month over 15 days  
**High usage:** 6 GB and 30 hours over 30 days

Fewer Arab providers offer speeds above 8 Mb/s

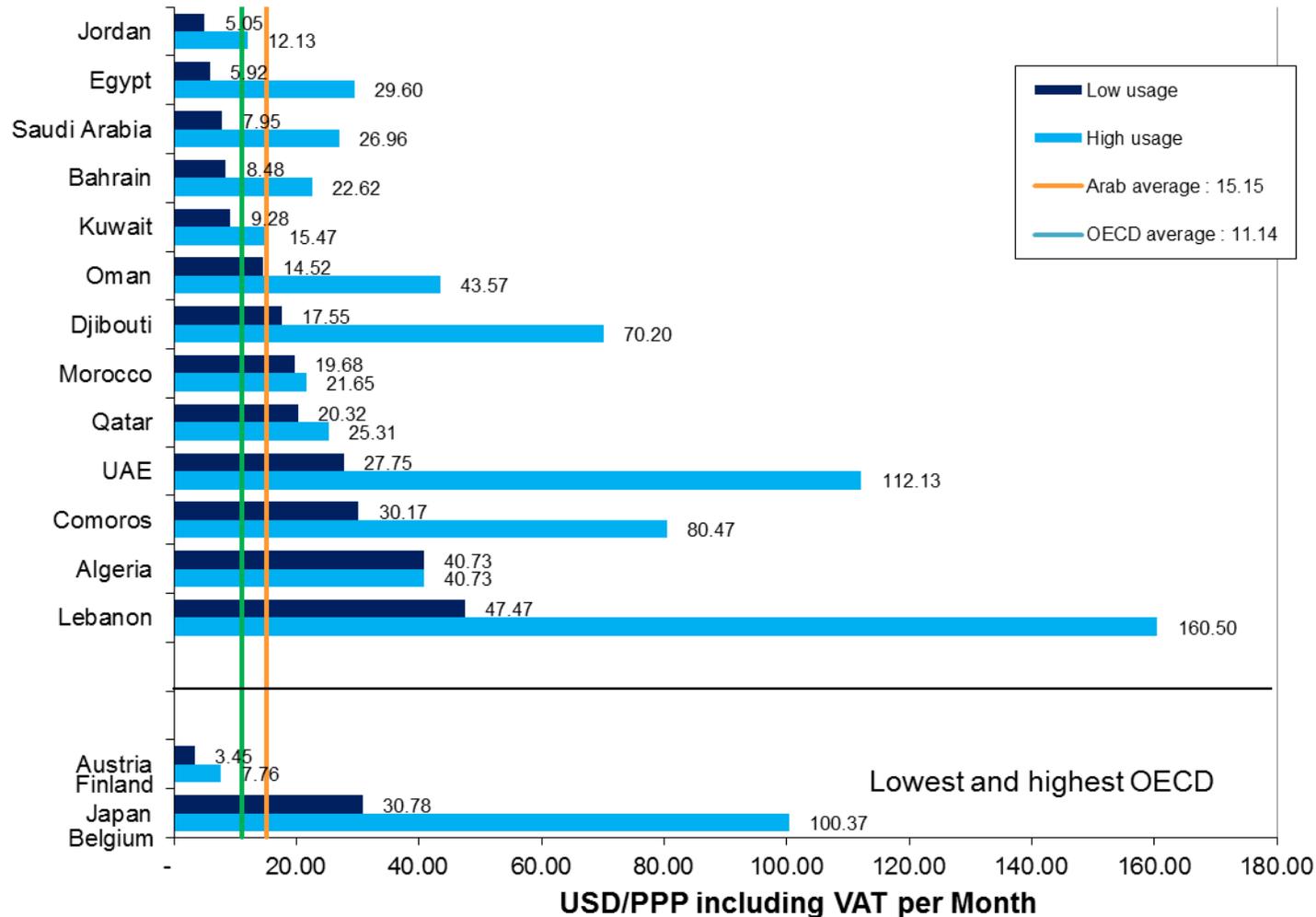
Mobile broadband is much more likely to vary with usage than fixed broadband

Average lines are based on low usage results



# Residential mobile broadband all speeds

Mobile broadband residential all speeds  
Tariffs as of November 2013



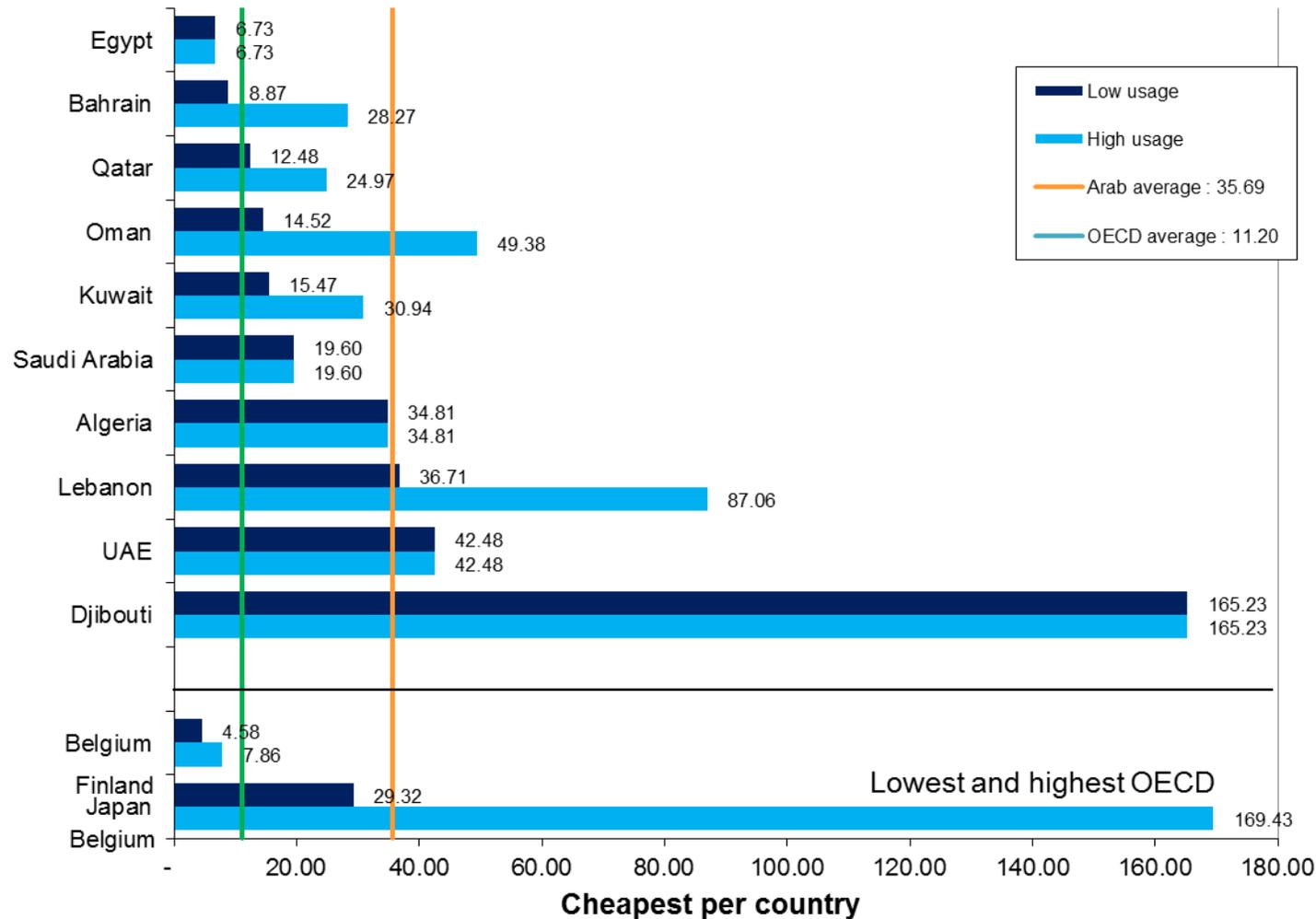
**Low usage:** 1 GB and 5 hours per month over 15 days  
**High usage:** 6 GB and 30 hours over 30 days

Average lines are based on low usage results



# Business mobile broadband all speeds

Mobile broadband business all speeds  
Tariffs as of November 2013



**Low usage:** 1 GB and 5 hours per month over 15 days  
**High usage:** 6 GB and 30 hours over 30 days

Average lines are based on low usage results



# Advertised download speeds - summary

		Download speed Mb/s	
		Minimum	Maximum
Algeria	ATM Mobilis	3.6	3.6
Algeria	Djezzy	3.6	3.6
Algeria	Nedjma	N/A	N/A
Bahrain	Batelco	42	150
Bahrain	Zain BH	5	100
Bahrain	VIVA	21	42
Comoros	Comoros Telecom	N/A	N/A
Djibouti	Djibouti Telecom	0.5	0.5
Egypt	Mobinil	N/A	N/A
Egypt	Etisalat	N/A	N/A
Egypt	Vodafone	42	42
Iraq	AsiaCell	N/A	N/A
Jordan	Orange	7.2	7.2
Jordan	Zain	7.2	42
Jordan	Umniah	N/A	N/A
Kuwait	Wataniya	N/A	N/A
Kuwait	Zain	7.2	21.6
Kuwait	VIVA	42	42
Lebanon	Alfa	28.8	150
Lebanon	Touch	21.6	150
Morocco	Meditel	7.2	14.4
Morocco	Marocc Telecom (IAM)	7.2	14.4
Morocco	Inwi	7.2	7.2
Oman	Nawras	7.2	42
Oman	Omantel	3.6	3.6
Qatar	Vodafone	21	21
Qatar	Ooredoo	21	21
Saudi Arabia	Mobily	0.5	42
Saudi Arabia	Saudi Telecom	7.2	7.2
Saudi Arabia	Zain	100	100
Sudan	Sudani	7.2	7.2
Syria	Syriatel	7.2	7.2
Tunisia	Tunisie Telecom	21	42
Tunisia	Orange	7.2	42
UAE	du	21.6	100
UAE	Etisalat	7.2	100

- The table shows a summary of advertised download speeds for each operator offering mobile broadband services
- Values are shown for the minimum and maximum offered speed, for published offers.
- In some cases, download speeds are not published for offered services. Where this occurs for all offers from an operator, this is indicated by N/A in the table.
- The shadings in the cells indicate the speed relative to the maximum value overall (150Mb/s, which is offered by Batelco in Bahrain, and Alfa and Touch in Lebanon)
- A number of countries already offer very high speed services – driven by the rollout of 4G services



# Observations from mobile broadband basket results

- Mobile broadband services are increasingly available in the Arab countries – only five countries did not have any mobile broadband services offerings at the time of data collection (although in countries where services are available, not all providers have offerings).
  - The average advertised download speed based on the number of plans is just over 34 Mb/s, up from just over 11 Mb/s in 2012, largely as a result of the introduction of 4G services.
  - Higher speeds are much more commonplace in some countries than last year, with speeds in excess of 7.2 Mb/s available in ten of the Arab countries.
  - Very low speeds of < 1Mb/s have all but disappeared in the Arab countries. Only Djibouti still offers a low speed – 0.5 Mb/s – service (which was also available last year).
- Saudi Arabia is the cheapest country for residential broadband services at low usage, but falls down the rankings for the mid-speed basket at high usage, due to the impact of usage charges. Jordan and Bahrain are competitively positioned for mid-speed, low usage residential offerings, but, similar to Saudi Arabia, are impacted by high usage charges.
- For business services, Egypt, Bahrain and Qatar are competitively positioned for services over 8 Mb/s, for both low and high usage. Mid-speed business offerings are limited (only four countries have offerings in this category), with Kuwait being the cheapest (for low usage).
- There is much more parity between Arab and OECD averages, compared to last year, and over half of the Arab countries fall below the OECD average for both mid and high speed residential services. For high speed business services, this figure is just under half, while for mid speed services, Kuwait and Oman fall below the OECD average.
- A similar picture for the cheapest providers emerges when we consider all service speeds,
- The average cost of mobile broadband services for both residential and business customers in the Arab countries compared to the OECD average is shown in the table below. It excludes medium speed (2-8 Mb/s) results for UAE, which are clearly not created for the level of usage applied in this analysis, and appear very expensive in comparison with most other offers. Generally, pricing across the Arab countries is on parity with OECD averages. The higher value for business when looking at all speeds is as a result of the very low speed offering from Djibouti Telecom, which is particularly expensive.

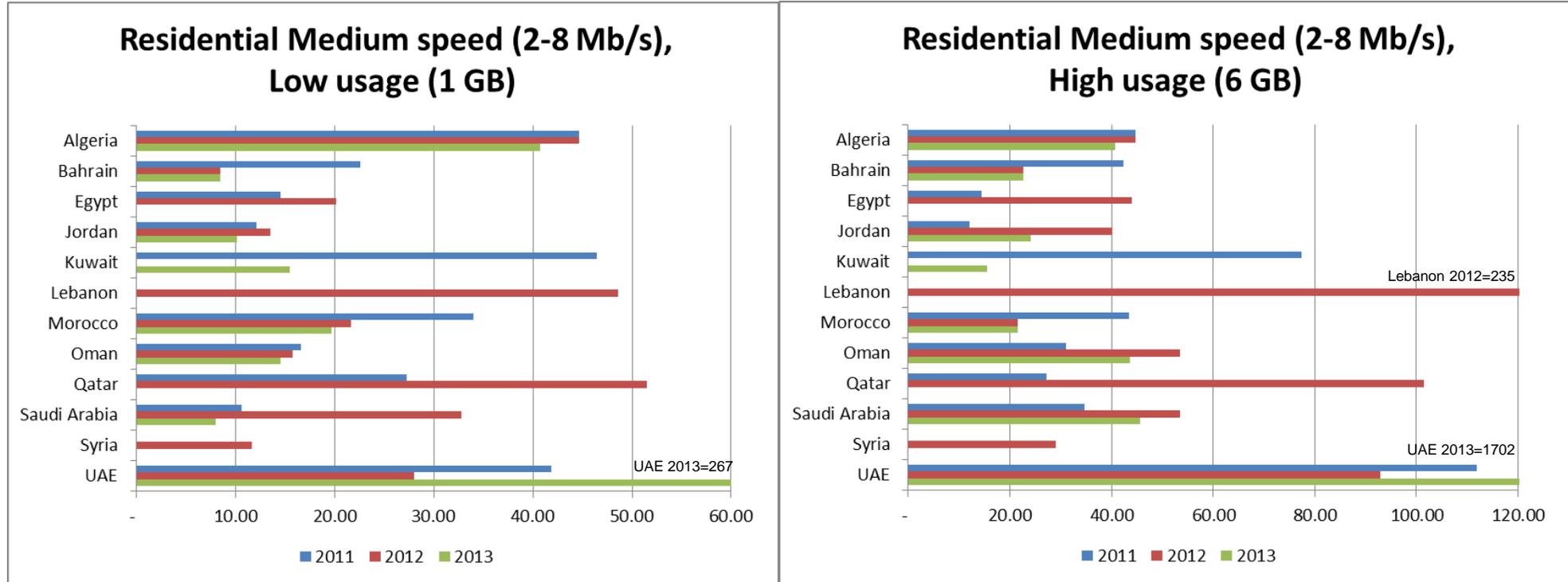
**Arab/OECD average**

	Low usage		High usage		Low usage	High usage
	2-8 Mb/s	>8 Mb/s	2-8 Mb/s	>8 Mb/s	All speeds	All speeds
<b>Arab/OECD residential</b>	1.03	1.44	0.44	1.48	1.36	1.18
<b>Arab/OECD business</b>	1.32	1.69	0.54	1.35	3.19	1.69



# Mobile broadband time series, 2011-2013

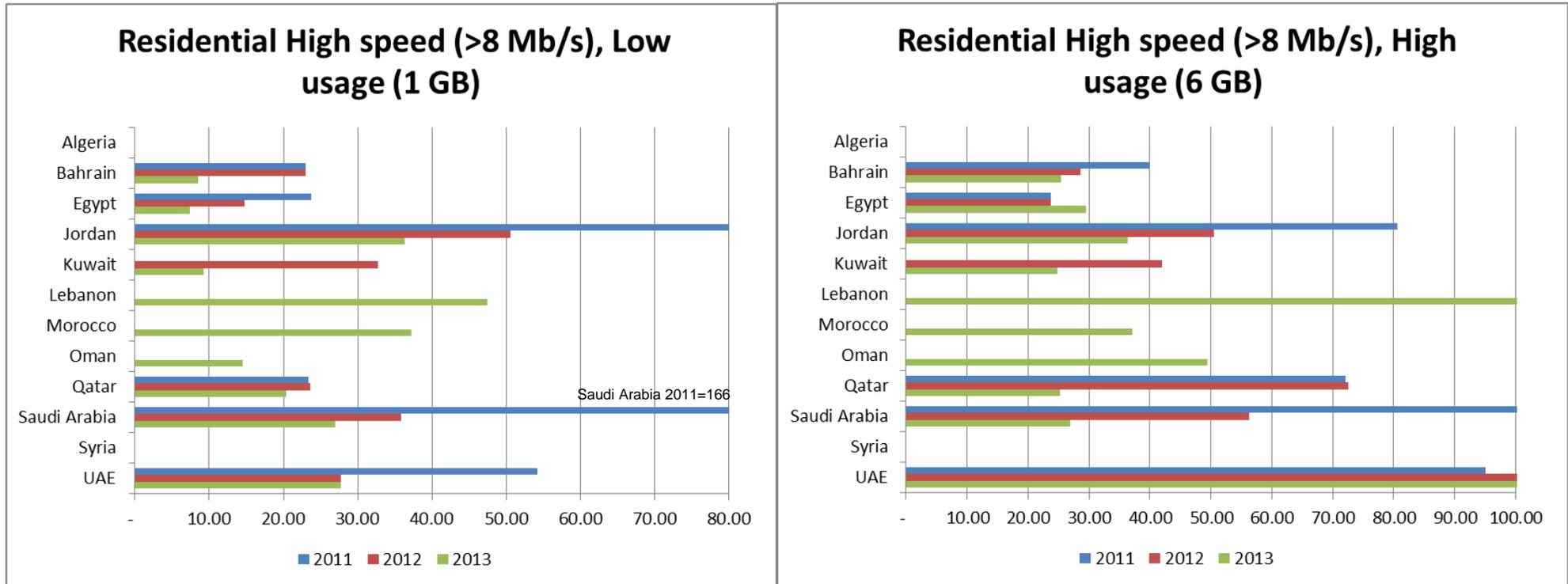
# Residential Mobile Broadband, Medium speed time series



Note: the bars for Lebanon in 2012 and UAE in 2013 are not shown fully, as this would make the other results difficult to read,



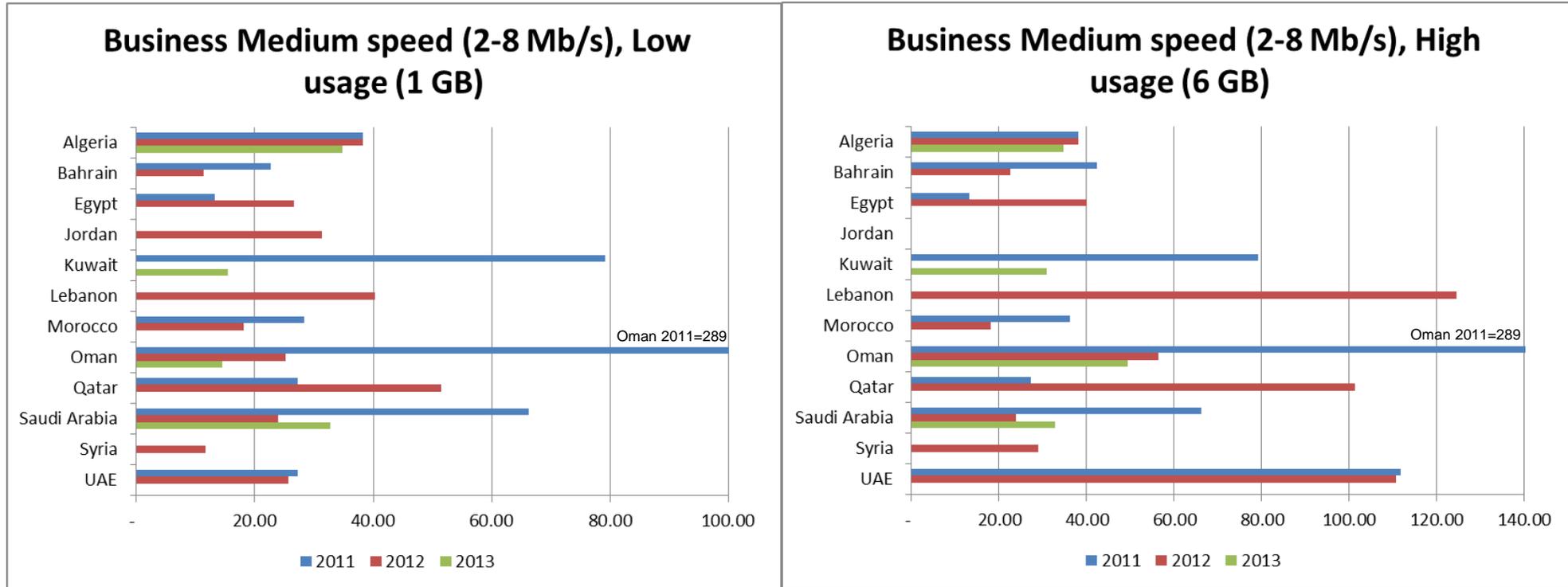
# Residential Mobile Broadband, High speed time series



Note: the bar for Saudi Arabia in 2011 is not shown fully, as this would make the other results difficult to read,



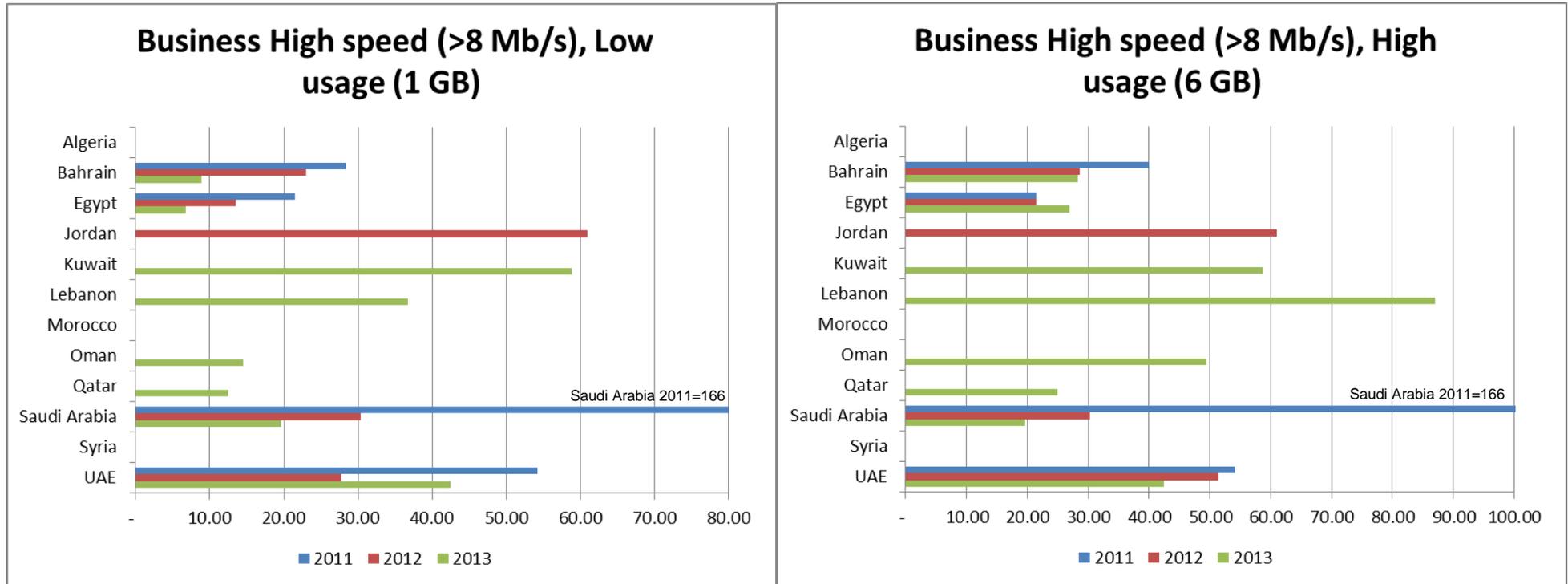
# Business Mobile Broadband, Medium speed time series



Note: the bar for Oman in 2011 is not shown fully, as this would make the other results difficult to read,



# Business Mobile Broadband, High speed time series



Note: the bar for Saudi Arabia in 2011 is not shown fully, as this would make the other results difficult to read,



# Observations from mobile broadband time series results

- In addition to more providers and countries for this year, there were price and service changes from most of the Arab providers:
  - Algeria: Change in top up charges, with a number of reductions, resulting in a cost reduction across the baskets. Introduction of offers from Nedjma.
  - Bahrain: Introduction of new packages, including various prepaid, and 4G service offerings. Change in service offerings, including wider range of unlimited packages (with FUP and throttling)
  - Egypt: Wider range of offers, including more unlimited offers. Introduction of 4G services from Vodafone.
  - Jordan: Larger number of offerings from all providers, with new offerings, increased allowances, and introduction of 42 Mb/s services (from Zain)
  - Kuwait: Offers available from three main providers, including 4G services from VIVA.
  - Lebanon: Increased range of offers, and speed uplift on all services (minimum advertised download speed is now 21.6 Mb/s, compared to 7.2 Mb/s in 2012. Highest speed available is 150 Mb/s. Increase in service speeds.
  - Morocco: Increased in number of offers available, including offers from Inwi. Changes to some packages, including allowance changes, plus removal of some lower speed services, with higher speed services being offered at same cost as previously available lower speed offerings.
  - Oman: Extended range of offers, including wider range of allowances, and introduction of 4G services.
  - Qatar: New post-paid offers from Vodafone, with all services offered at 21 Mb/s (last year one pre-paid offer only, at 7.2 Mb/s). Removal of prepaid offers by Ooredoo (Qtel), and change in allowances and monthly rental for 2 of the 3 remaining post-paid offers.
  - Saudi Arabia: Significant increase in number of services offered, including 4G 100 Mb/s services from Zain, and wider range of 4G offers from Mobily. 4G offers are available from Saudi Telecom, but the pricing is not specified.
  - Syria: Number of offers up from 6 to 15. Speeds doubled from 3.6 Mb/s to 7.2 Mb/s. Changes to rentals and increases in allowances.
  - UAE: Etisalat unchanged, but increased number of offers from du, including 100 Mb/s offers, and pre-paid plans.
- Prices in Arab countries have continued to fall significantly, for both residential and business services.



# Mobile broadband ranking tables, 2013

# Residential medium speed mobile broadband (2-8 Mb/s) ranking

	Residential Medium speed (2-8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria	44.71	44.71	40.73	44.71	44.71	40.73
Bahrain	22.62	8.48	8.48	42.41	22.62	22.62
Egypt	14.50	20.13		14.50	44.10	
Jordan	12.13	13.47	10.10	12.13	40.22	24.05
Kuwait	46.41		15.47	77.36		15.47
Lebanon		48.62			235.22	
Morocco	34.01	21.65	19.68	43.52	21.65	21.65
Oman	16.54	15.73	14.52	31.07	53.50	43.57
Qatar	27.21	51.49		27.21	101.42	
Saudi Arabia	10.61	32.79	7.95	34.73	53.47	45.70
Syria		11.63			29.09	
UAE	41.82	28.03	267.15	111.90	92.94	
Average	27.06	26.98	48.01	43.95	67.17	30.54

Below average  
Above average

	Residential Medium speed (2-8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria	9	9	7	8	6	5
Bahrain	5	1	2	6	2	3
Egypt	3	5		2	5	
Jordan	2	3	3	1	4	4
Kuwait	10		5	9		1
Lebanon		10			11	
Morocco	7	6	6	7	1	2
Oman	4	4	4	4	8	6
Qatar	6	11		3	10	
Saudi Arabia	1	8	1	5	7	7
Syria		2			3	
UAE	8	7	8	10	9	

Lowest price  
Highest price

Note: UAE has been removed for 2013 for low speed usage, as it does not have a meaningful offer (e.g. high usage monthly cost is 1702 USD for 6GB), and is distorting the average.



# Residential high speed mobile broadband (>8 Mb/s) ranking

	Residential High speed (>8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria						
Bahrain	23.01	23.01	8.48	39.98	28.67	25.45
Egypt	23.68	14.80	7.40	23.68	23.68	29.60
Jordan	80.63	50.52	36.38	80.63	50.52	36.38
Kuwait		32.66	9.28		41.95	24.75
Lebanon			47.47			160.50
Morocco			37.18			37.18
Oman			14.52			49.38
Qatar	23.30	23.65	20.32	72.17	72.52	25.31
Saudi Arabia	165.59	35.88	26.96	165.59	56.23	26.96
Syria						
UAE	54.15	27.75	27.75	95.03	125.87	112.13

Average	61.73	29.75	23.57	79.51	57.06	52.76
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Below average  
Above average

	Residential High speed (>8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria						
Bahrain	1	2	2	2	2	3
Egypt	3	1	1	1	1	5
Jordan	5	7	8	4	4	6
Kuwait		5	3		3	1
Lebanon			10			10
Morocco			9			7
Oman			4			8
Qatar	2	3	5	3	6	2
Saudi Arabia	6	6	6	6	5	4
Syria						
UAE	4	4	7	5	7	9

Lowest price  
Highest price



# Business medium speed mobile broadband (2-8 Mb/s) ranking

	Business Medium speed (2-8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria	38.21	38.21	34.81	38.21	38.21	34.81
Bahrain	22.62	11.31		42.41	22.62	
Egypt	13.18	26.64		13.18	40.09	
Jordan		31.36				
Kuwait	79.16		15.47	79.16		30.94
Lebanon		40.28			124.62	
Morocco	28.34	18.04		36.27	18.04	
Oman	289.12	25.15	14.52	289.12	56.40	49.38
Qatar	27.21	51.49		27.21	101.42	
Saudi Arabia	66.24	23.95	32.74	66.24	23.95	32.74
Syria		11.63			29.09	
UAE	27.29	25.70		111.90	110.73	
Average	65.71	27.61	24.39	78.19	56.52	36.97

Below average  
Above average

	Business Medium speed (2-8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria	6	9	4	4	5	3
Bahrain	2	1		5	2	
Egypt	1	7		1	6	
Jordan		8				
Kuwait	8		2	7		1
Lebanon		10			10	
Morocco	5	3		3	1	
Oman	9	5	1	9	7	4
Qatar	3	11		2	8	
Saudi Arabia	7	4	3	6	3	2
Syria		2			4	
UAE	4	6		8	9	

Lowest price  
Highest price



# Business high speed mobile broadband (>8 Mb/s) ranking

	Business High speed (>8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria						
Bahrain	28.35	23.01	8.87	39.98	28.67	28.27
Egypt	21.53	13.45	6.73	21.53	21.53	26.91
Jordan		60.97			60.97	
Kuwait			58.79			58.79
Lebanon			36.71			87.06
Morocco						
Oman			14.52			49.38
Qatar			12.48			24.97
Saudi Arabia	165.59	30.36	19.60	165.59	30.36	19.60
Syria						
UAE	54.16	27.75	42.48	54.16	51.39	42.48
Average	67.41	31.11	25.02	70.31	38.58	42.18

Below average  
Above average

	Business High speed (>8 Mb/s)					
	Low usage (1 GB)			High usage (6 GB)		
	2011	2012	2013	2011	2012	2013
Algeria						
Bahrain	2	2	2	2	2	4
Egypt	1	1	1	1	1	3
Jordan		5			5	
Kuwait			8			7
Lebanon			6			8
Morocco						
Oman			4			6
Qatar			3			2
Saudi Arabia	4	4	5	4	3	1
Syria						
UAE	3	3	7	3	4	5

Lowest price  
Highest price



# PSTN call cost comparison

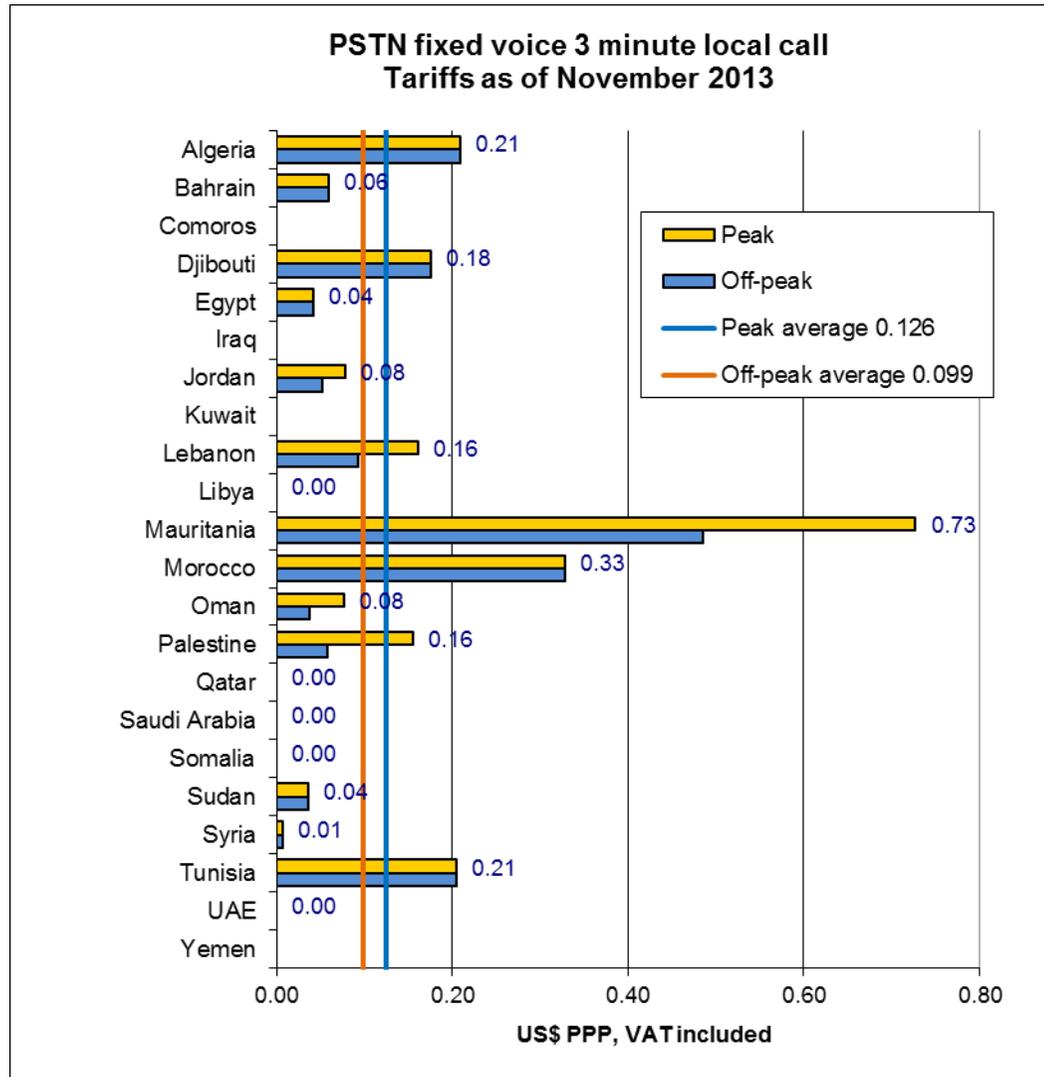
# Call cost comparison data issues

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- The comparison of call cost is based on the actual cost of a 3 minute call.
- Costs are compared for local calls, national calls, F2M calls and calls to the USA
  - At peak and off-peak times
  - Off-peak meaning the lowest possible cost period
- These comparisons have a much simpler methodology than the basket comparisons shown elsewhere in this report, and will reflect the costs for specific call types.
- The results are presented with countries in alphabetical order as a ranking of these results is not necessarily useful.
  - Services with for example free calls (zero cost per call) may still have a higher total cost to the end user



# Local call comparison

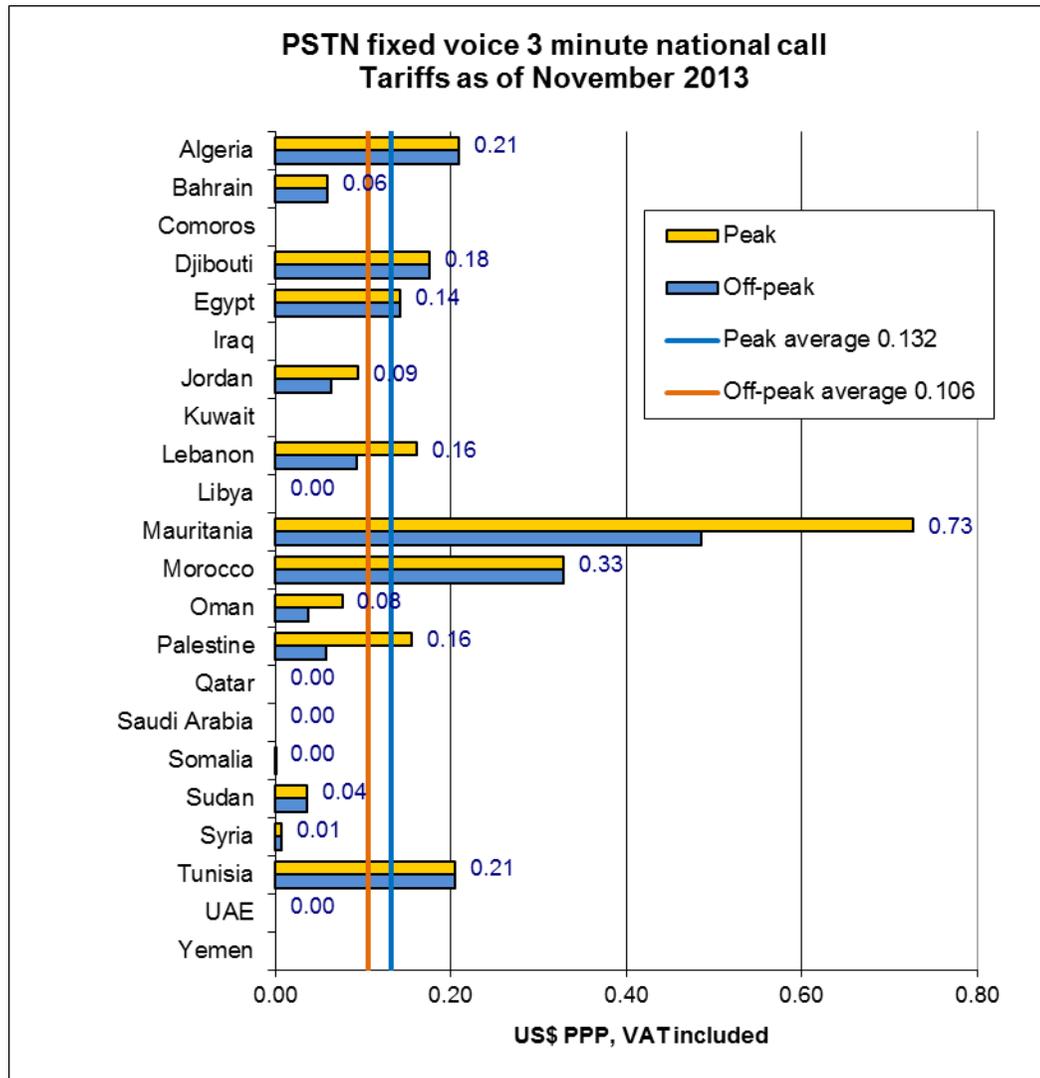


Many of the countries continue to have the same prices for peak and off peak calls.

Entries with call cost of 0.00 have free calling included in the monthly rental.



# National call comparison



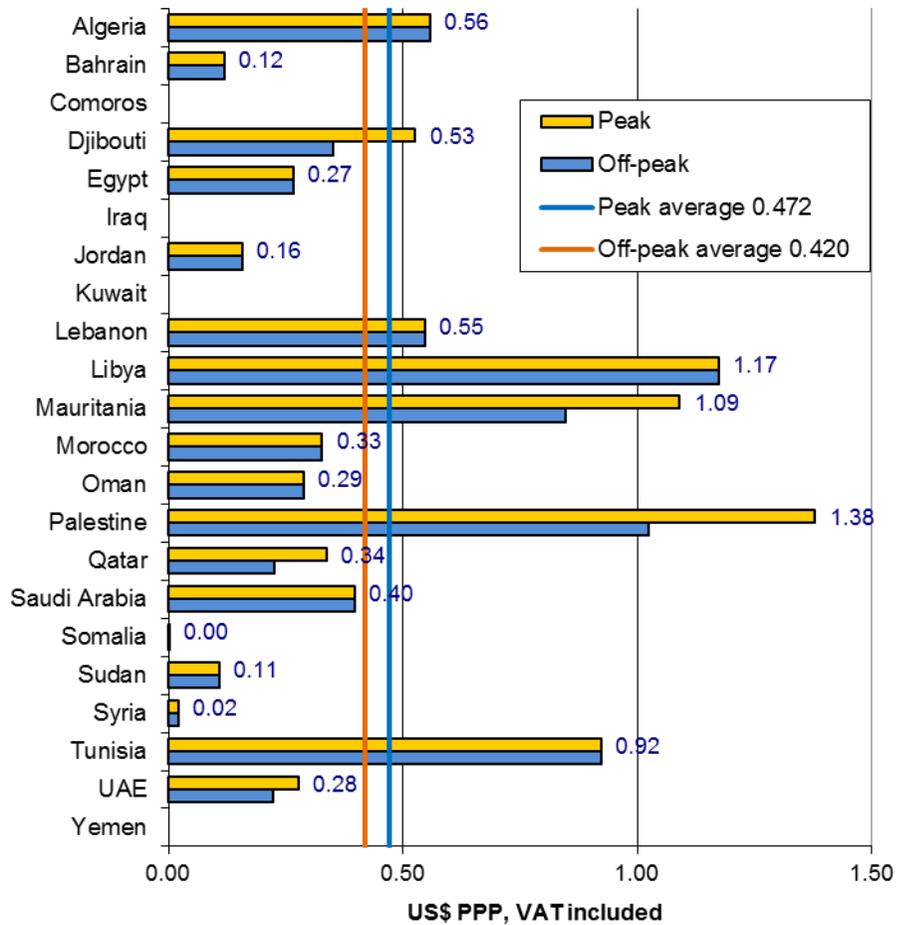
Similar to local calls, many of the countries continue to have the same prices for peak and off peak calls.

Entries with call cost of 0.00 have free calling included in the monthly rental.



# Fixed to mobile (F2M) call comparison

PSTN fixed voice 3 minute call fixed to mobile  
Tariffs as of November 2013

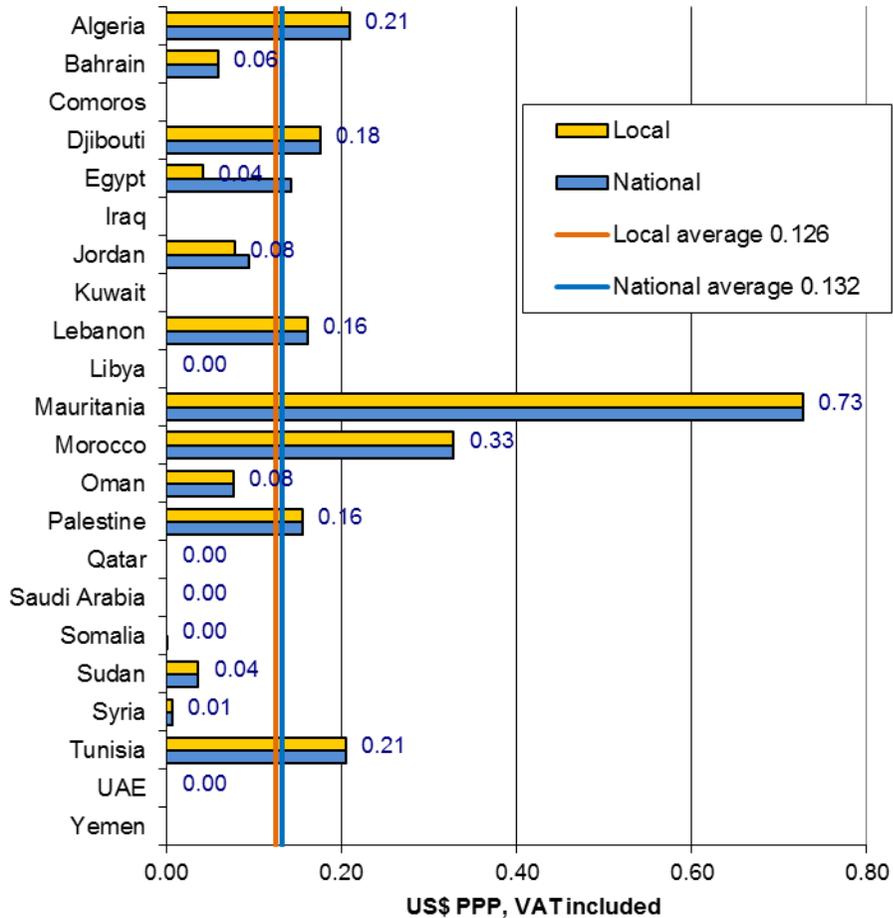


Entries with call cost of 0.00 have free calling included in the monthly rental.



# Local vs. national PSTN

**PSTN fixed voice 3 minute local vs. national call (peak )  
Tariffs as of November 2013**

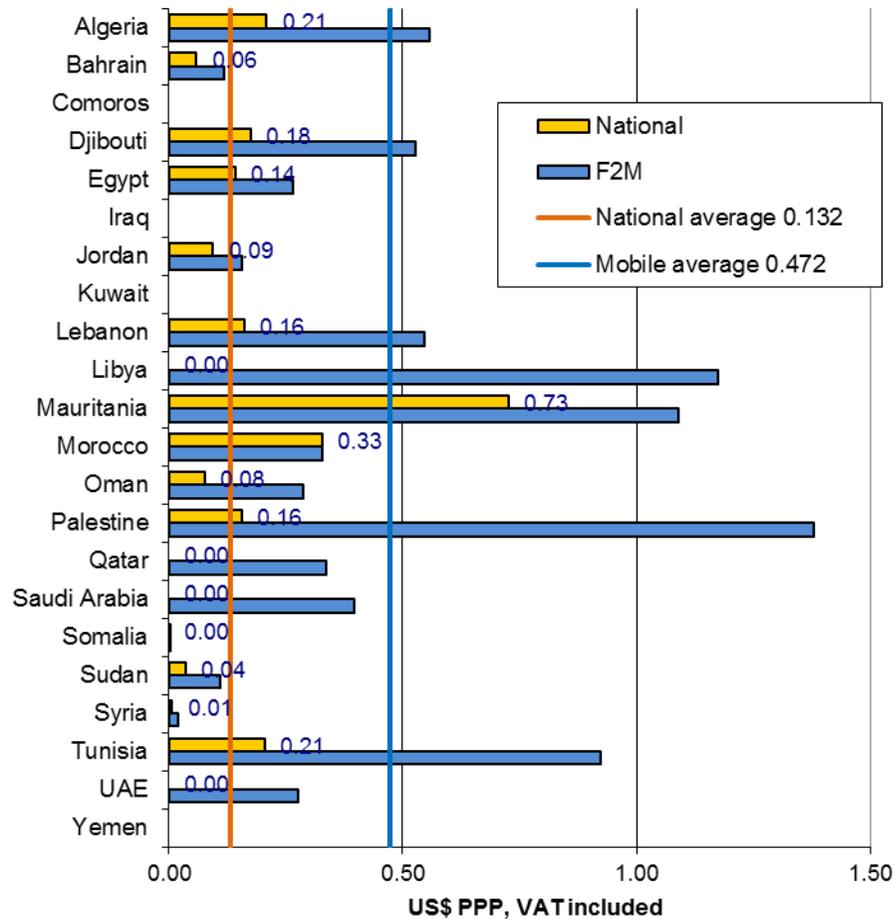


In many countries, there is no difference between local and national call costs.



# National PSTN vs. fixed-to-mobile (F2M)

PSTN 3 minute national vs. F2M call (peak)  
Tariffs as of November 2013

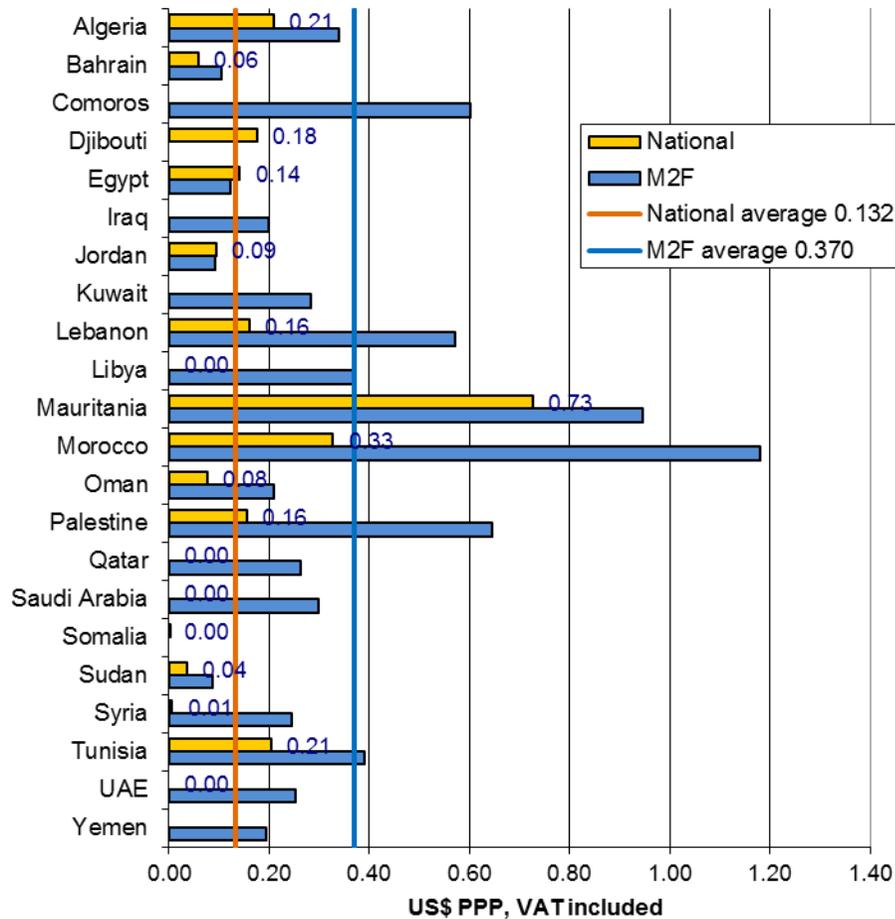


The ratio of national to fixed to mobile charges varies dramatically across the Arab countries, with fixed to mobile calls being on average 3.6 times more expensive than national calls.



# National PSTN vs. mobile-to-fixed (M2F)

PSTN 3 minute national vs. M2F call (peak)  
Tariffs as of November 2013



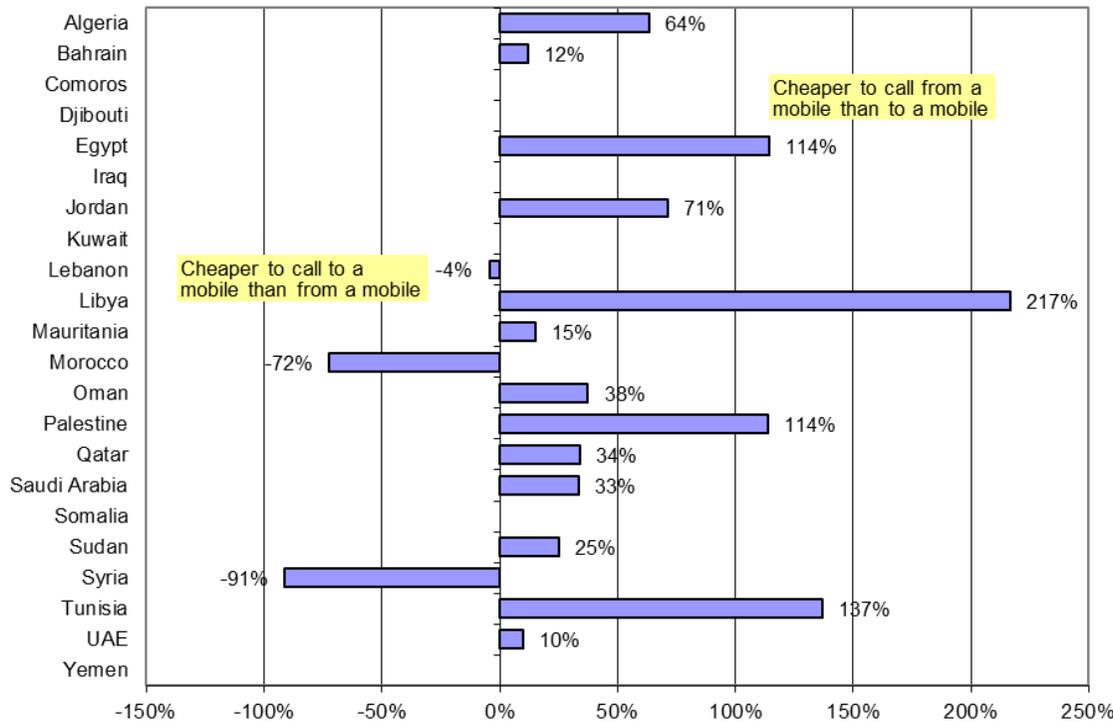
The ratio of national to mobile-to-fixed varies dramatically across the Arab countries, with fixed to mobile calls being on average 2.8 times more expensive than national calls. Mobile to fixed calls are generally cheaper than fixed-to-mobile calls.



# Making and receiving calls to/from mobile

The relationship between prices of calls to a mobile phone and from a mobile phone varies a lot between countries, but calling from mobile to fixed is generally cheaper, often significantly, than calling from fixed to mobile.

**PSTN fixed voice call prices (peak time) to and from mobile phones  
Tariffs as of November 2013**

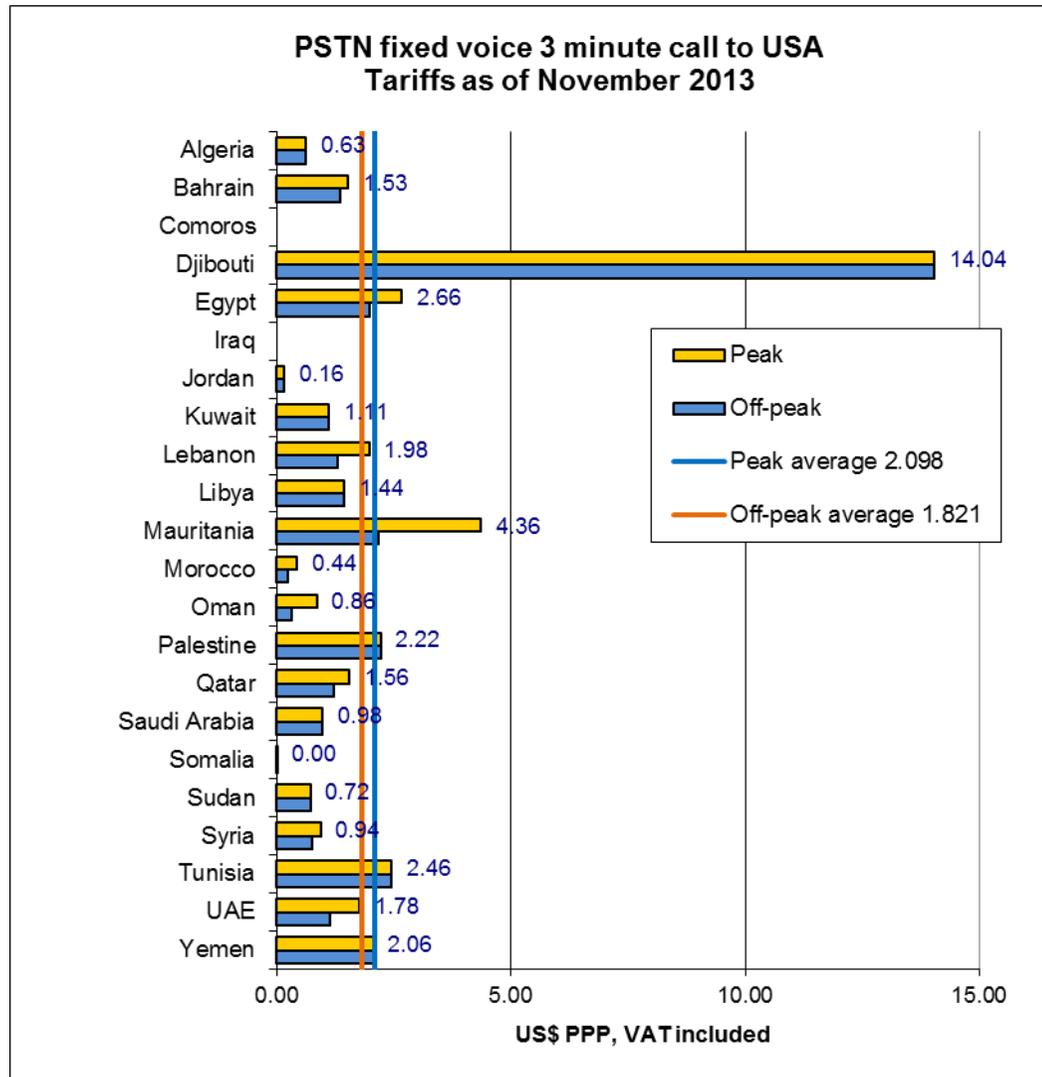


2013 To/From mobile		
	Peak	Off-peak
Algeria	64%	64%
Bahrain	12%	12%
Comoros		
Djibouti		
Egypt	114%	114%
Iraq		
Jordan	71%	71%
Kuwait		
Lebanon	-4%	18%
Libya	217%	217%
Mauritania	15%	-10%
Morocco	-72%	-67%
Oman	38%	38%
Palestine	114%	59%
Qatar	34%	-3%
Saudi Arabia	33%	33%
Somalia		
Sudan	25%	25%
Syria	-91%	-90%
Tunisia	137%	137%
UAE	10%	-12%
Yemen		
Average	0	0

+ means F2M higher than M2F  
- means F2M lower than M2F



# International call comparison (call to USA)

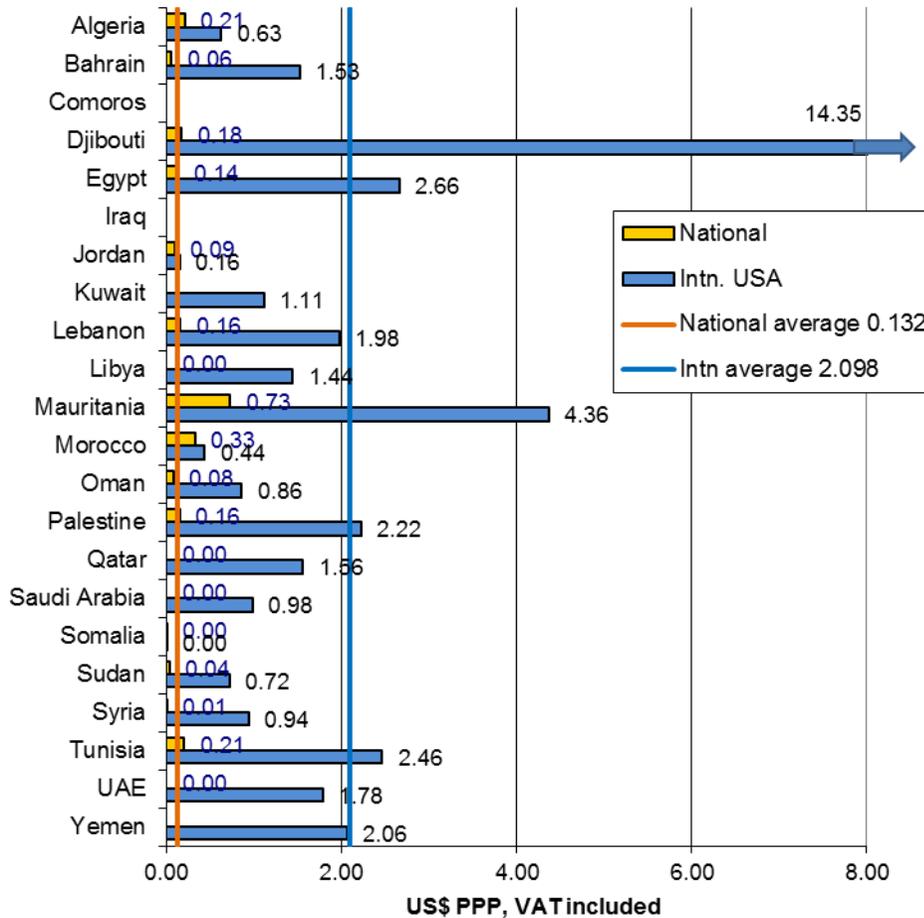


In many countries, there is no or little difference between peak and off-peak calling internationally (to the USA)



# National vs. international to USA

**PSTN fixed voice 3 minute National vs. International (peak)  
Tariffs as of November 2013**



International calls (to the USA) are significantly more expensive than national calls in the Arab countries – on average just under 16 times more expensive



## Call costs 2012 - 2013

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- There have not been many changes in call charges 2012 – 2013 for any of the countries covered:
  - Local calls: Decrease registered in Morocco (peak and off-peak), and in Palestine (off-peak only)
  - National calls: Decrease registered in Morocco (peak and off-peak), and in Palestine (off-peak only)
  - Fixed to mobile: Decrease registered in Jordan and Morocco, and an increase registered in UAE.
  - International (to USA): Decreases in Algeria, Jordan, Morocco, Saudi Arabia; decreases in Sudan; increases in Palestine, Syria, Tunisia



## Observations from the call cost comparison

---

- Prices of calls vary considerably between countries
- Around half of the countries do not differentiate between peak and off-peak calling for local, national calls, calls to mobile or for international calls (to the USA)
- Similar to 2012, in some countries the local and/or national calls are “free”, i.e. included in the monthly rental.
  - Libya, Qatar, Somalia and UAE
- In some countries there are several tariff options available, with different call charges and fixed charges. This analysis is based on the so called “basic” packages.
- International call prices remain very high relative to national call prices, with little change from 2012, and indicate that rebalancing of call charges has still not taken place in many countries in the region



# Summary of main findings from the benchmarking study (1)

---

- Fixed voice telephony
  - Costs for the business baskets in the Arab countries tend to be above the OECD average, particularly for the highest usage business basket. For the lower usage residential baskets, the Arab average is below the OECD average.
  - As in previous years, the price range for the Arab countries (cheapest to most expensive) is wider than for the OECD countries. Generally the Arab countries in North Africa are more expensive than the Arab countries in the Middle East.
  - A number of Arab countries continue to have fixed costs well below the OECD countries, causing the usage element to dominate. This makes the overall cost grow quicker with increasing usage, something that will discourage growth in usage.
  - There remains a clear lack of rebalancing in several Arab countries, where the usage revenue covers a significant portion of the fixed line cost for the operators. Notably, however, some countries appear to have rebalanced, and are much more in line. International calls remain significantly more expensive than in OECD countries
- Mobile telephony
  - Price levels in many Arab countries continue to compare reasonably well with OECD countries, especially for low and medium usage
  - Prices are fairly uniform throughout the region, although costs in some countries and for some operators are very high, most notably in Comoros Iraq, Lebanon, Mauritania and Palestine
  - The average cost of lower usage baskets (30 calls, 40 calls prepaid) increased very slightly (by 1%), while the cost across all other baskets fell, on average, overall by 10%. By contrast, the overall decrease in OECD countries on average was 16%.
  - Baskets including handset data, which have been included this year for the first time, show that, for both low and high data requirements, a handful of Arab countries are on par with the OECD average, but the variation across the Arab countries is wide, and for some countries, data costs are very high, particularly for high usage. The high cost of data in these markets indicates that they are only geared to very modest data use. As with voice only, the average Arab result is typically higher than the OECD average

# Summary of main findings from the benchmarking study (2)

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- **Leased Lines**
  - Prices for high speed circuits are generally higher than in OECD countries, with very little change since 2012
  - There continues to be a wide spread of prices between the Arab countries
- **Fixed Broadband**
  - Price levels in the Arab countries have fallen since the last update, with more countries falling below the average OECD cost, and more countries on par with the OECD for low speed services. Higher speed services continue to be more expensive than the OECD average, although the gap is narrowing, and the average Arab cost is skewed by very expensive countries at the upper end.
  - Higher speed services are much more prevalent. 17 countries offer services of 2.5 Mb/s or above, and 5 countries offer services in excess of 30 Mb/s. The average speed of services across the Arab countries is now 21.9 Mb/s (based on the number of plans), up from 6.79 Mb/s in 2012.
  - Usage based charges are still prevalent, and appear in offers across 8 of the Arab countries, but these seem to have had limited impact on the basket results when high usage baskets are considered.
- **Mobile broadband**
  - Mobile broadband services are much more widely available across the Arab countries, with offerings advertised in all but 5 of the study countries.
  - Average advertised download speed is just over 34 Mb/s, up from just over 11 Mb/s in 2012, largely as a result of the introduction of 4G services. Higher speeds are much more commonplace in some countries than last year, with speeds in excess of 7.2 Mb/s available in ten of the Arab countries
  - There is much more parity between Arab and OECD averages, compared to last year, with over half of the Arab countries below the OECD average for both mid and high speed residential services. For high speed business services, this figure is just under half, although all but one country is more expensive than the OECD average for mid speed business services.
  - If the small number of countries where mobile broadband costs are very high (and not really a viable user option) are excluded from the average, the cost of mobile broadband in the Arab is on par with or even less than the OECD average.
- Generally prices in Arab countries have gone down, but since prices have gone down in other parts of the world as well the gap between prices in Arab countries and prices in OECD countries remains, although there is a narrowing in some areas, as new services appear.

## Summary overview

<b>Fixed voice</b>	The Arab average is lower usage residential baskets is below the OECD average. Arab business baskets cost are typically above the OECD average, particularly for the highest usage business basket. Generally the Arab countries in North Africa are more expensive than the Arab countries in the Middle East
<b>Mobile voice</b>	Price levels in many Arab countries continue to compare reasonably well with OECD countries, especially for low and medium usage. Prices are fairly uniform throughout the region, although costs in some countries and for some operators are very high. Baskets including handset data, are on par with the OECD average for a handful of Arab countries. In several Arab countries, data costs are very high indicating these markets are only geared to very modest data use. In general, costs have fallen by around 10% since the last study, compared to a 16% fall across the OECD.
<b>Leased lines</b>	Prices for high speed circuits are generally higher than in OECD countries, with very little change since 2012. The wide spread of prices between Arab countries remains wide.
<b>Fixed broadband</b>	Price levels in the Arab countries have fallen since the last update, with more countries falling below the average OECD cost, and more countries on par with the OECD for low speed services. Higher speed services continue to be more expensive than the OECD average, but the gap is narrowing, and the average Arab cost is skewed by very expensive countries at the upper end. Higher speed services are much more prevalent, with 17 countries offering services of 2.5 Mb/s or above, and 5 countries offer services in excess of 30 Mb/s.
<b>Mobile broadband</b>	Mobile broadband services are much more widely available across the Arab countries, with offerings in all but 5 of the study countries. Average advertised download speed is just over 34 Mb/s, up from just over 11 Mb/s in 2012, mainly due to the introduction of 4G services, and speeds in excess of 7.2 Mb/s are available in ten of the Arab countries. There is much more parity between Arab and OECD averages, compared to last year, with over half of the Arab countries below the OECD average for both mid and high speed residential services. If the small number of countries where mobile broadband costs are very high (and not really a viable user option) are excluded from the average, the cost of mobile broadband in the Arab is on par with or even less than the OECD average.

# Appendix

# Exchange rates and VAT

## Exchange rates and VAT

Country	VAT	Exchange rate into US\$	Exchange rate into BHD	PPP rate into US\$
Algeria	17.0%	0.01258	0.00472	0.0199
Bahrain	0.0%	2.66610	1.00000	2.8274
Comoros	0.0%	0.00276	0.00104	0.0040
Djibouti	19.0%	0.00572	0.00215	0.0117
Egypt	10.0%	0.14570	0.05465	0.2960
Iraq	0.0%	0.00087	0.00033	0.0006
Jordan	16.0%	1.41660	0.53134	1.7421
Kuwait	0.0%	3.54200	1.32853	3.0943
Lebanon	10.0%	0.00067	0.00025	0.0010
Libya	0.0%	0.81890	0.30715	1.3733
Mauritania	0.0%	0.00349	0.00131	0.0081
Morocco	20.0%	0.12160	0.04561	0.2187
Oman	0.0%	2.60400	0.97671	2.9049
Palestine	<b>16.0%</b>	0.28450	0.10671	0.6393
Qatar	0.0%	0.27490	0.10311	0.2497
Saudi Arabia	0.0%	0.26670	0.10003	0.3312
Somalia	0.0%	0.00085	0.00032	0.0028
Sudan	10.0%	0.17650	0.06620	0.2415
Syria	0.0%	0.00716	0.00268	0.0116
Tunisia	18.0%	0.60150	0.22561	1.3680
UAE	0.0%	0.27230	0.10213	0.2803
Yemen	0.0%	0.00466	0.00175	0.0076
USA	10.0%	1.00000	0.37508	1.0000

VAT rate shown for Jordan is rate applied to businesses.  
Rate for residential users is 8%

VAT rate for Palestine has increased since the previous study from 14.5% to 16%

Exchange rates taken from the Oanda web service on the 30 November 2013  
PPPs are based on World Bank CPL data in 2012 (latest available).

# Purchasing Power Parities (PPP)

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- PPPs are used to incorporate not only the financial differences between exchange rates, but also the differences in the state of the economies as seen through the purchasing power of the citizens in each country.
  - PPPs are based on an assessment of the price levels for a corresponding basket of goods and services in each country. i.e. how much the same basket costs in different countries.
  - PPPs are normally stated based on the US\$ or some other reference currency, e.g. Euro. This study uses the US\$ PPPs calculated by the World Bank.
- In order to update these values the Comparative Price Level (CPL) is used. CPL is the relationship between the PPP and the reference market exchange rate at the time the PPP was calculated.
  - CPL is used together with updated, i.e. current, exchange rates to produce an “updated” PPP value.
  - $CPL = \text{Rate}_{\text{PPP}} / \text{Rate}_{\text{Reference}}$
  - $\text{PPP}_{\text{Current}} = \text{Rate}_{\text{Market}} * CPL$
- The advantage of using PPPs is that the results reflect the price differences as seen by the end users in each country based on their income and other costs.

## Acronyms used in the context of this report

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- 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
- VAT: Value Added Tax, a consumption tax system used in most European countries and some Arab countries.
- 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.
- CPL: Comparative Price level. The relative factor between market exchange rates and PPP. Used to calculate the PPPs from current market exchange rates.
- 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.