

Telecommunications Retail Price Benchmarking for Arab Countries 2019



Report from the AREGNET Price Benchmarking Study

Final – January 2020

STRATEGYANALYTICS
TELIGEN TARIFF & BENCHMARKING



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

- The benchmarking study was originally initiated by TRA Bahrain in 2008 and has been updated on approximately an annual basis since then. This update for 2019 was commissioned by TRA Bahrain.
- 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 2015 to 2019.
- The benchmarking covers the following services:
 - Fixed voice (PSTN) (OECD basket equivalent)
 - Mobile telephony (OECD basket equivalent)
 - Broadband ADSL (OECD basket equivalent)
 - Mobile broadband (OECD basket equivalent)

Leased line basket results have been omitted from this update. Leased line services are increasingly less relevant, and the OECD is likely to remove tracking of this service soon
- The basket methodologies used are identical to the OECD Price Benchmarking baskets from 2017, with minor changes. A separate document detailing the methodology used in this study is available.
- The data was collected in May/June 2019 by Teligen from public sources on the Internet, and was subsequently passed to national regulators for comments and checking.



2019 STUDY OVERVIEW

- The 2019 AREGNET study results are presented in this report. As in previous years, the study benchmarks fixed and mobile voice and data services across the 22 AREGNET countries
- In terms of data collection and verification:
 - Data was collected directly from operator websites over the period May/June 2019
 - Country data files and draft results in local currencies were prepared and distributed to AREGNET members for review
 - Following receipt of comments, system files were finalised and reports prepared
- The 2019 update includes some important changes:
 - The methodology used is based on the 2017 OECD basket revisions. Full details of the OECD 2017 methodology are available, but key changes include:
 - Removal of international calls from fixed voice baskets
 - Revision of mobile baskets, with sets of baskets focusing on low and high data usage separately, with increased data usage in the high data usage category
 - Revision of speed categories for fixed broadband services, including removal of upper speed limit within individual baskets
 - Revision of data usage within mobile broadband services. Note, previous AREGNET studies have used custom Teligen baskets which were applied for legacy reasons, however, the OECD 2017 baskets will be used from hereon.
 - Leased line basket results have been omitted from this update. Leased line services are increasingly less relevant, and the OECD is likely to remove tracking of this service soon.



NOTES TO THE RESULTS

- Due to the change in baskets, results in this update are not necessarily comparable to previous reports
- For time series comparison, however, the new baskets have been applied retrospectively, to produce historic results based on the current (new) baskets.
- As with previous updates, exchange rate and CPL (comparative price level) current data is applied retrospectively to historic data, so that changes to time series reflect changes to tariffs only, and are not impacted by changes in either exchange rates or CPLs.
- Feedback, where received, has been taken into account in the production of these results

COMPARATIVE PRICE LEVEL (CPL) AND PURCHASING POWER PARITY (PPP)

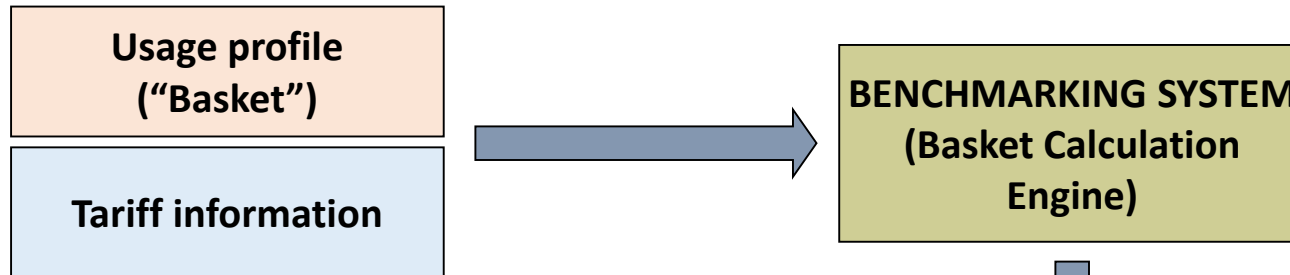


- The data presented in the report is presented using purchasing power parities (PPPs), which are used to incorporate both the financial differences between exchange rates, and the differences in the state of the economies as seen through the purchasing power of the citizens in each country.
- In order to create an up to date PPP conversion factor, published Comparative Price Level (CPL) data is used
 - This is described in more depth on pages **148 and 149**, in the appendix of this report.
- The CPL data used for this study has been obtained from the World Bank, and is based on **2018** data.
- The World Bank CPL data also contained some gaps i.e. data for Palestine and Somalia was not available, so assumptions were made as to the likely CPL values for these countries
- 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 and not to exchange rates and CPL values.

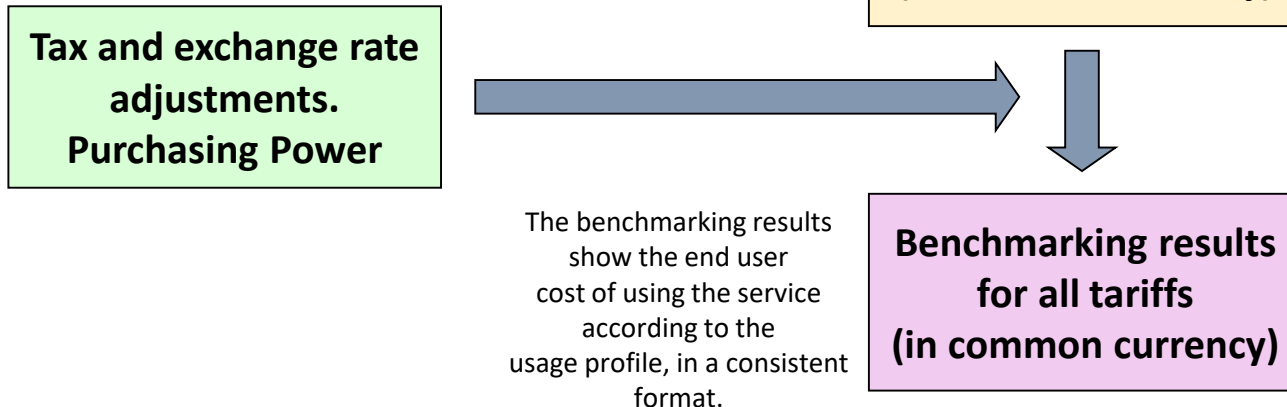


PRICE BENCHMARKING WITH TELECOMS BASKETS

Combine tariff information with a usage profile in a “basket calculation engine” to calculate cost of individual calls and tariff elements.



Adjust costs for tax, currency and purchasing power to create comparable results.





PSTN BASKET RESULTS 2019



FIXED VOICE (PSTN) DATA ISSUES

- Due to lack of published data, and lack of feedback, only partial (or no) data is available (and no results are included) for:
 - Iraq
 - Libya
 - Somalia
 - Syria
 - Yemen
- Business tariffs are not published (and no business results are included) for:
 - Algeria
 - Egypt
 - Libya
 - Somalia
 - Sudan
 - Syria
 - Yemen
- The analysis covers up to 119 tariffs from the incumbent operators in 18 countries





FIXED VOICE (PSTN) BASKETS, OECD 2017 DEFINITIONS

- 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

		Call distribution		
Calls per month	Total	Fixed to fixed	Fixed to fixed	Fixed to mobile
	calls	Local	National	
20 calls basket	20	61%	20%	19%
60 calls basket	60	60%	15%	25%
140 calls basket	140	58%	15%	27%
420 calls basket	420	73%	17%	10%
100 calls business basket	100	48%	19%	33%
260 calls business basket	260	43%	23%	34%

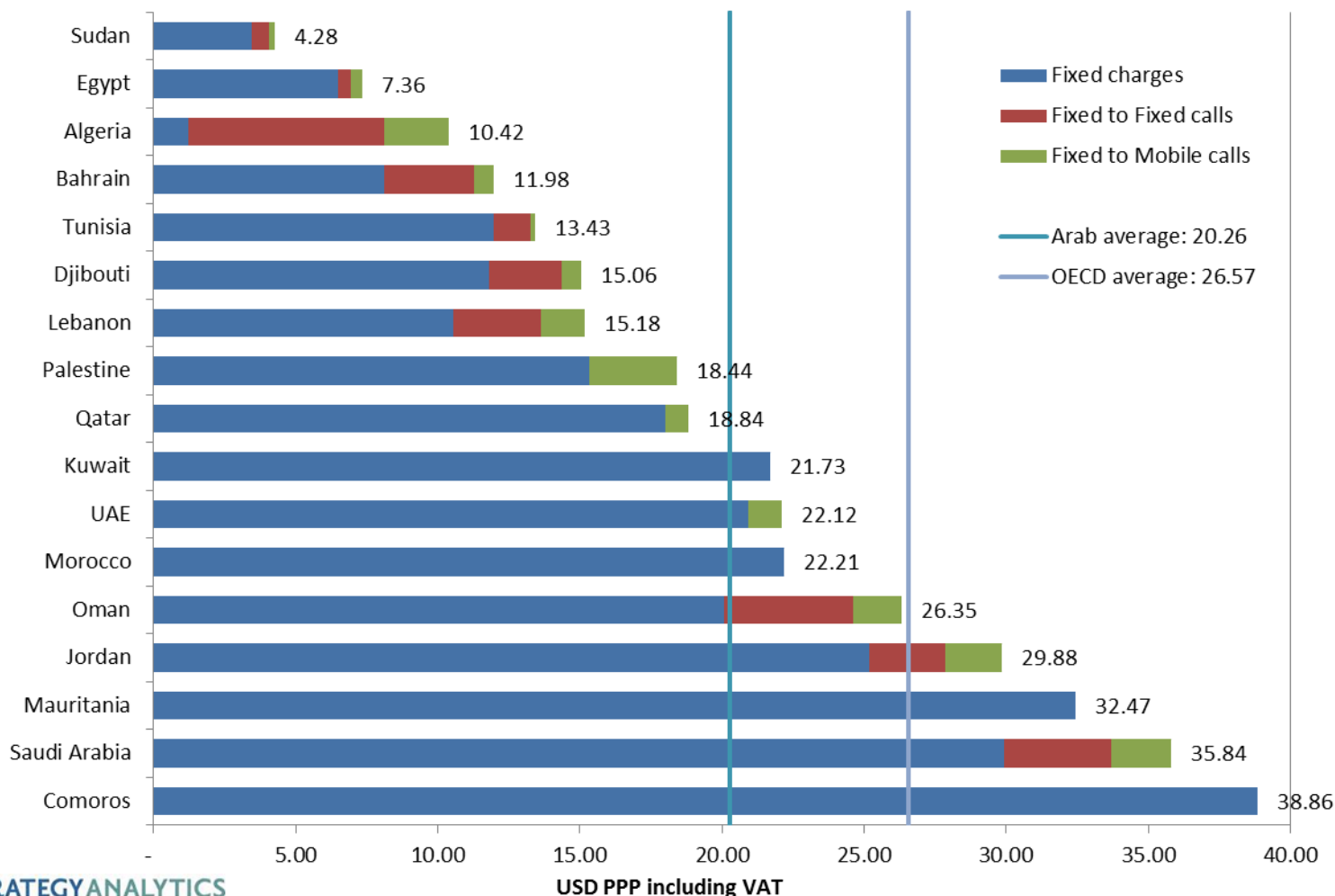
- Tariffs from the incumbent operator in each country
 - Several tariff packages can be covered for each operator
 - The results show the lowest cost option for each operator
- Tariff information included in basket calculation:
 - Fixed charges for installation (depreciated over the service life) and monthly rental. These are shown on the following charts as **Fixed charges**
 - Usage charges covering local through to national calls and calls to mobiles. These are shown on the following charts as **Fixed to Fixed calls** and **Fixed to Mobile calls**.
 - International calls are now **no longer** part of the OECD methodology and have been excluded from the baskets



20 CALLS/MONTH, RESIDENTIAL BASED ON 2017 OECD FIXED VOICE BASKET



AREGNET Fixed Voice Price Benchmarking 2019
OECD 2017: 20 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

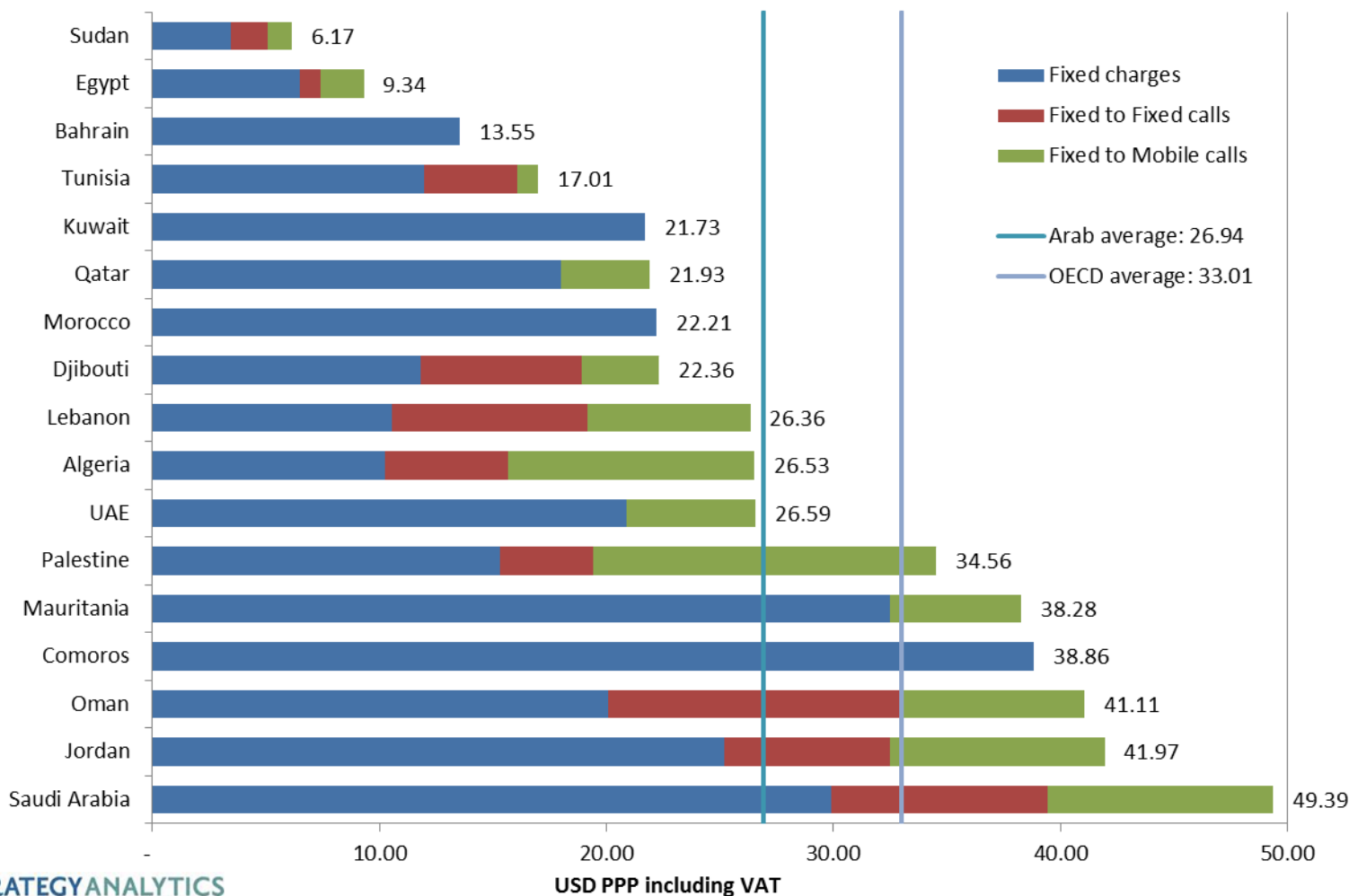
For information on what is included in Fixed charges, Fixed to Fixed calls and Fixed to Mobile calls, please see page 11



60 CALLS/MONTH, RESIDENTIAL BASED ON 2017 OECD FIXED VOICE BASKET



AREGNET Fixed Voice Price Benchmarking 2019
OECD 2017: 60 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

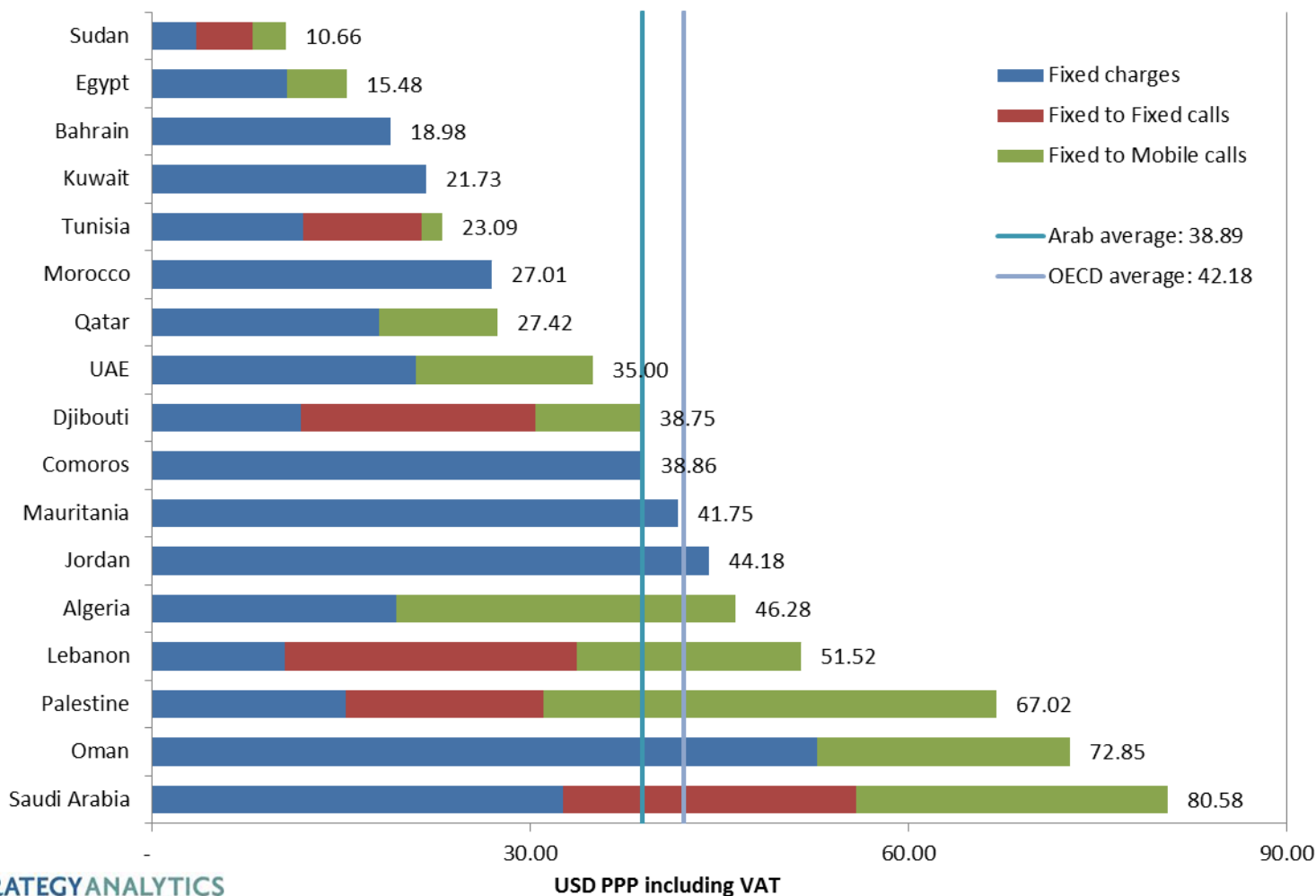
For information on what is included in Fixed charges, Fixed to Fixed calls and Fixed to Mobile calls, please see page 11



140 CALLS/MONTH, RESIDENTIAL BASED ON 2017 OECD FIXED VOICE BASKET



AREGNET Fixed Voice Price Benchmarking 2019
OECD 2017: 140 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

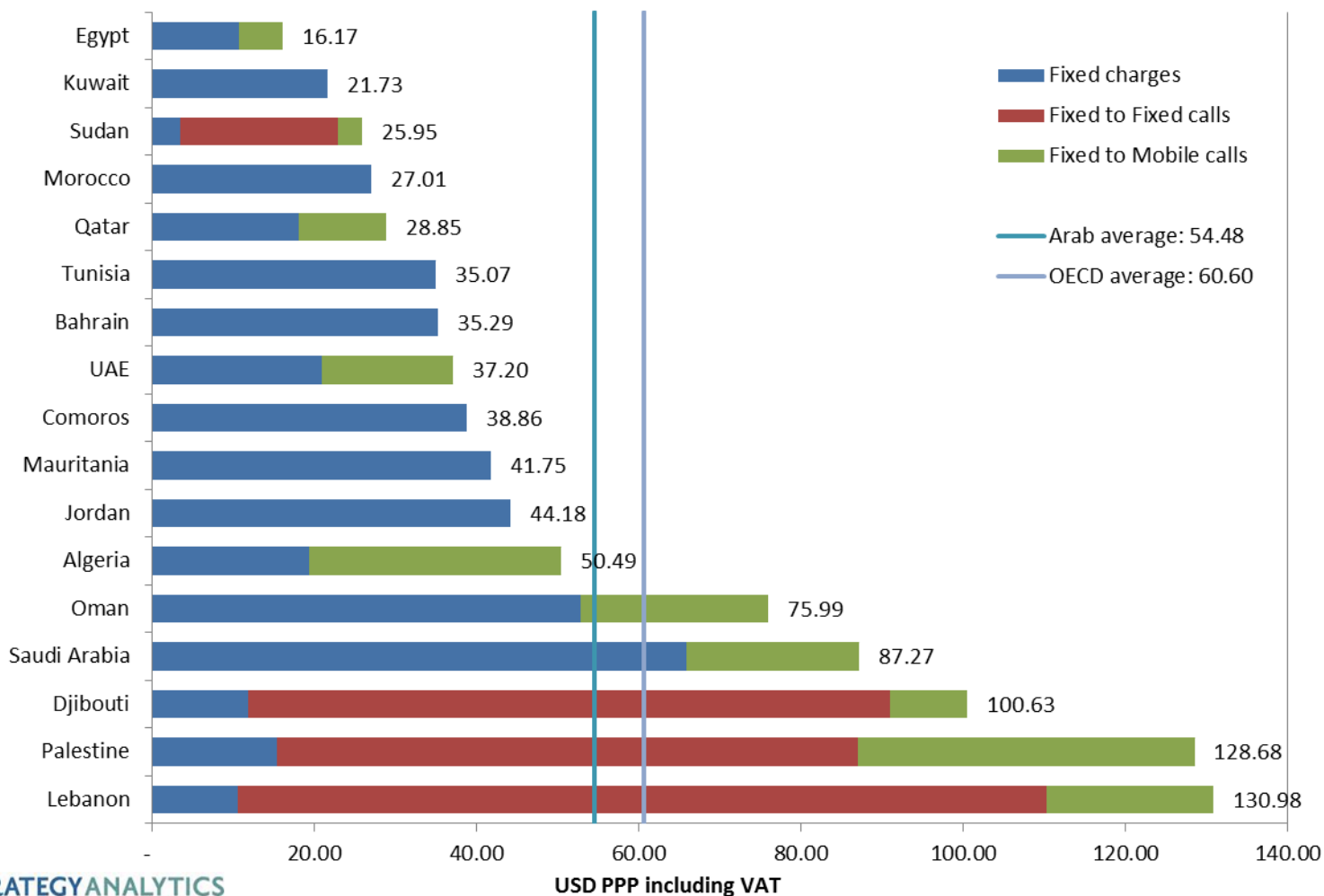
For information
on what is
included in
Fixed charges,
Fixed to Fixed
calls and Fixed
to Mobile calls,
please see page
11



420 CALLS/MONTH, RESIDENTIAL BASED ON 2017 OECD FIXED VOICE BASKET



AREGNET Fixed Voice Price Benchmarking 2019
OECD 2017: 420 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

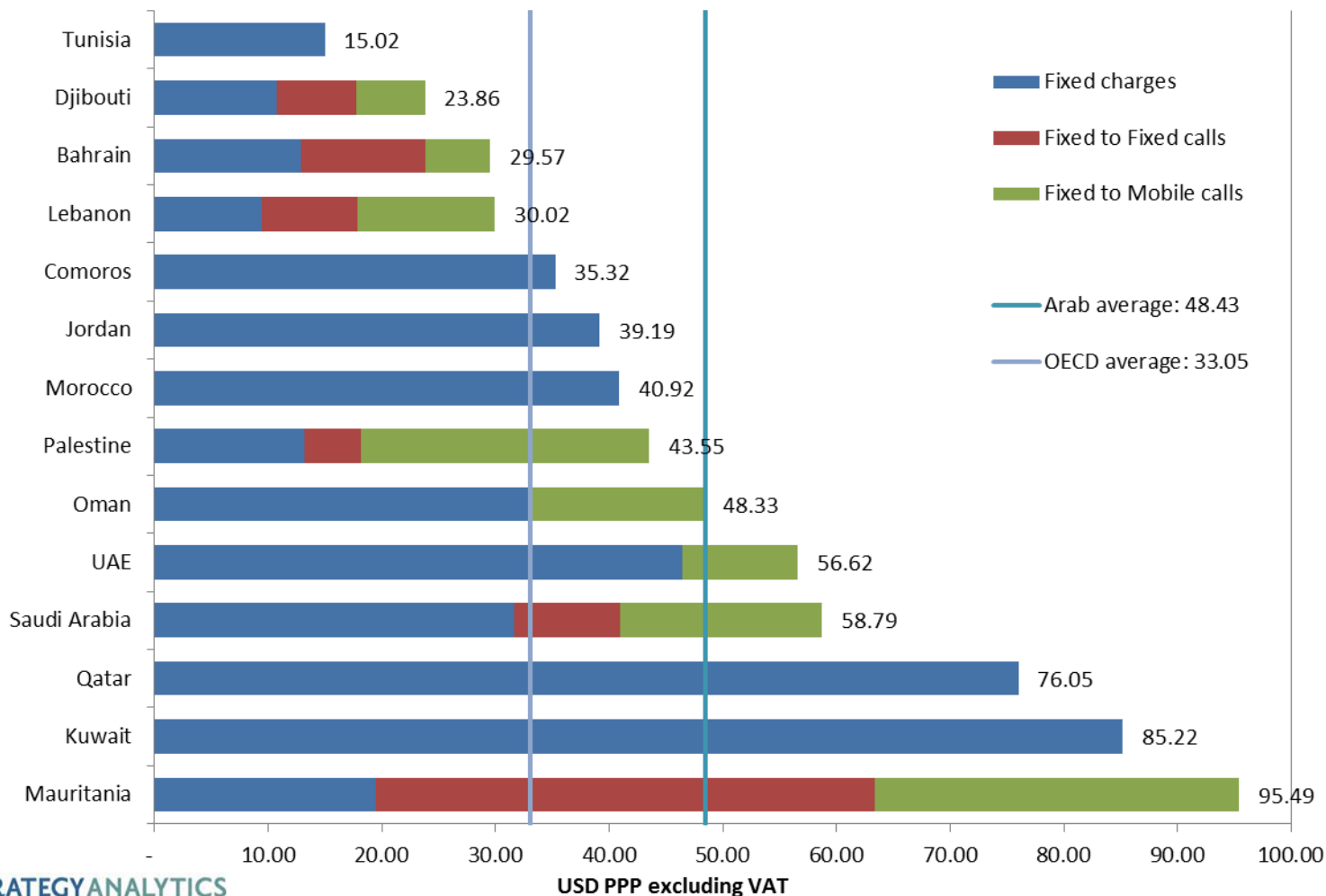
For information on what is included in Fixed charges, Fixed to Fixed calls and Fixed to Mobile calls, please see page 11



100 CALLS/MONTH, BUSINESS BASED ON 2017 OECD FIXED VOICE BASKET



AREGNET Fixed Voice Price Benchmarking 2019
OECD 2017: 100 calls Business



No data for:

- Algeria
- Egypt
- Iraq
- Lebanon
- Libya
- Somalia
- Sudan
- Syria
- Yemen

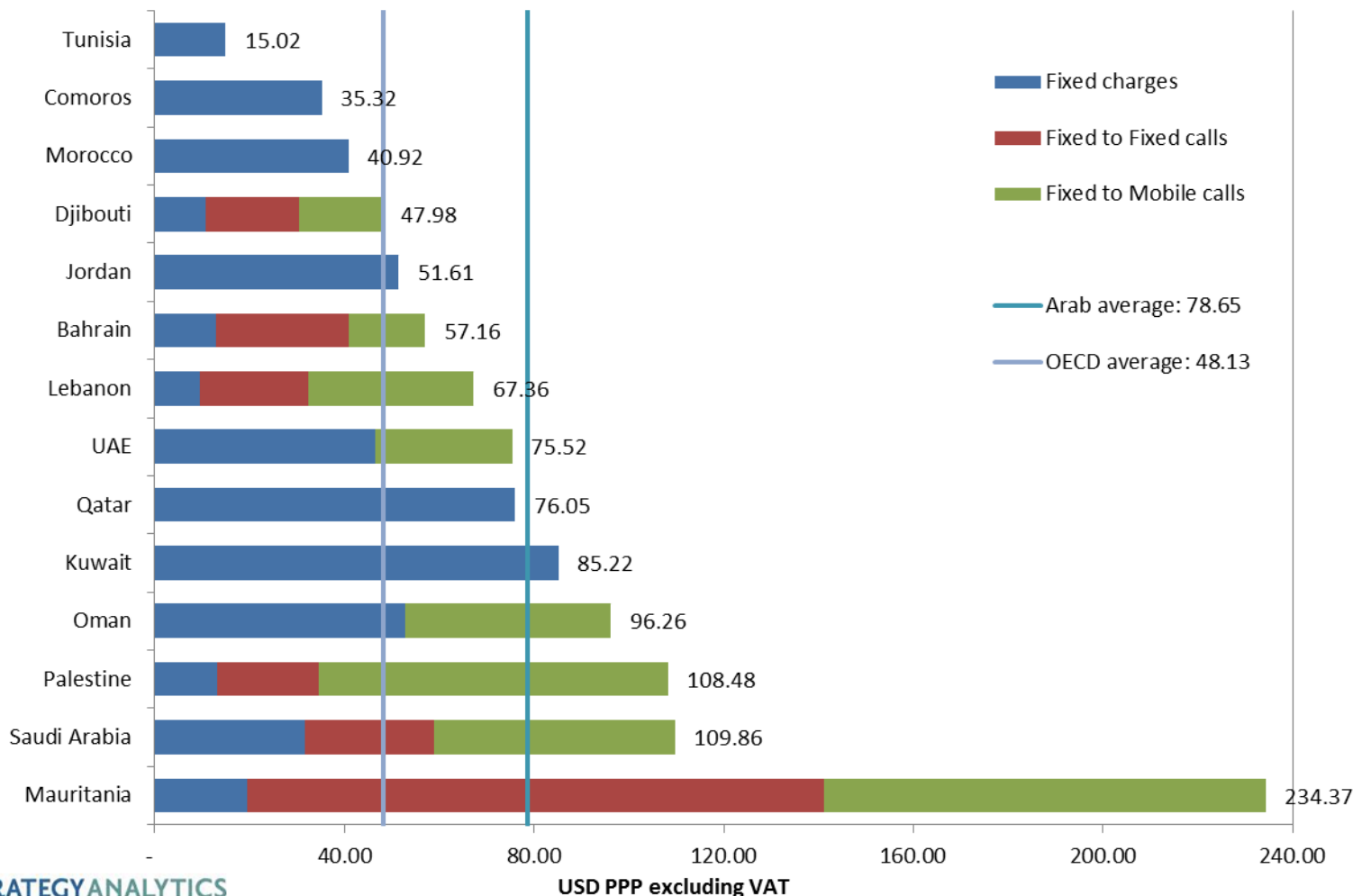
For information
on what is
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Fixed to Fixed
calls and Fixed
to Mobile calls,
please see page
11



260 CALLS/MONTH, BUSINESS BASED ON 2017 OECD FIXED VOICE BASKET



AREGNET Fixed Voice Price Benchmarking 2019
OECD 2017: 260 calls Business



No data for:

- Algeria
- Egypt
- Iraq
- Lebanon
- Libya
- Somalia
- Sudan
- Syria
- Yemen

For information
on what is
included in
Fixed charges,
Fixed to Fixed
calls and Fixed
to Mobile calls,
please see page
11



OBSERVATIONS FROM FIXED VOICE BASKET RESULTS



- The cheapest and most expensive countries throughout are : (*)

	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
20 calls residential	Sudan	Egypt	Algeria	Comoros	Saudi Arabia	Mauritania
60 calls residential	Sudan	Egypt	Bahrain	Saudi Arabia	Jordan	Oman
140 calls residential	Sudan	Egypt	Bahrain	Saudi Arabia	Oman	Palestine
420 calls residential	Egypt	Kuwait	Sudan	Lebanon	Palestine	Djibouti
100 calls business	Tunisia	Djibouti	Bahrain	Mauritania	Kuwait	Qatar
260 calls business	Tunisia	Comoros	Morocco	Mauritania	Saudi Arabia	Palestine

- Comparison between OECD and Arab averages are shown on the following slide, however, the following can be observed:
 - For residential services, most countries are either below the OECD average, or are on par with it., and the Arab average is consistently below that of the OECD average. Consequently, at this level of usage, the Arab average is below that of the OECD, typically by around USD PPP 4-6 , or between 8-25% cheaper.
 - For business services, most countries are above the OECD average, and the Arab average is consistently higher than that of the OECD - 45% for the 100 calls basket and 64% for the 260 calls basket.
- As in previous years, a number of the Arab countries in North Africa are cheaper than those in the Middle East, although as usage increases, operators in the Middle East become comparatively more competitive.
- Sudan, Egypt and Bahrain feature consistently among the cheapest for the residential baskets, while Tunisia, Djibouti and Comoros feature for the business baskets. In terms of the most expensive, Saudi Arabia, Oman and Jordan and Lebanon among the most expensive countries for the residential baskets, while for business, Mauritania, Kuwait and Saudi Arabia feature.
- 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.
- In the GCC countries, Bahrain, Saudi Arabia and UAE have now applied 5% VAT to residential telecoms services

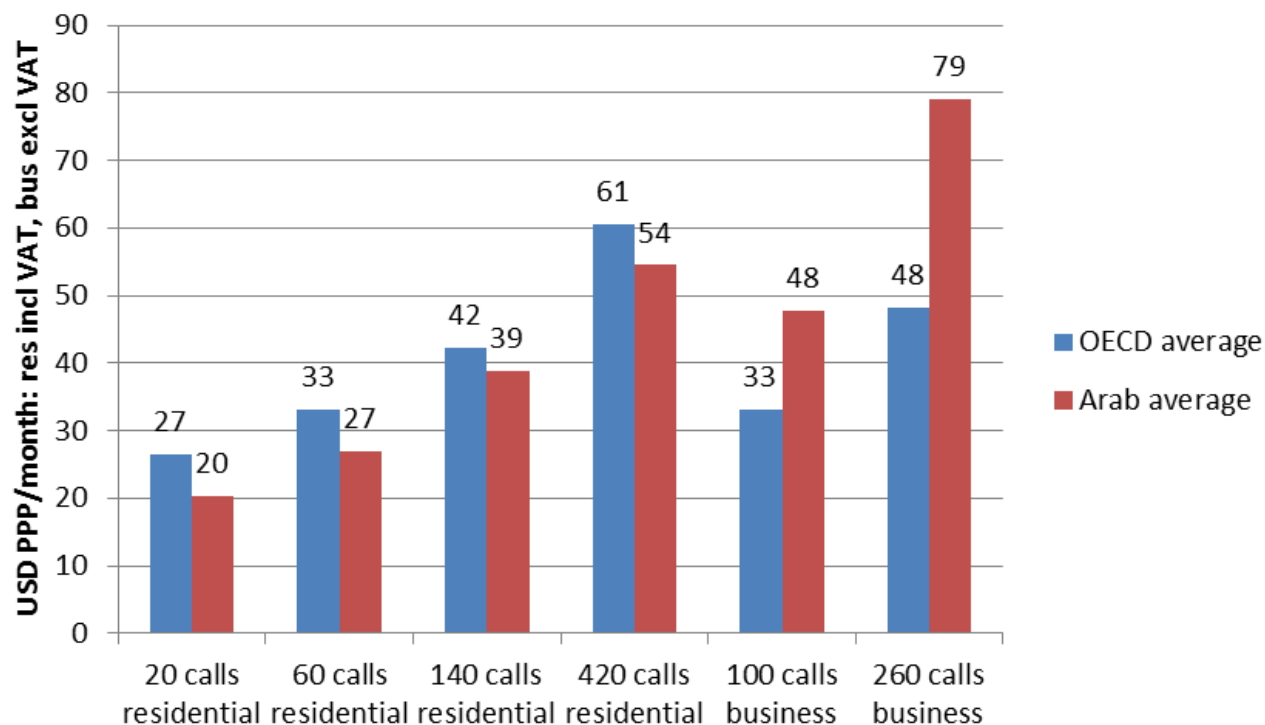
** Countries with gaps in the tariff information are not considered.*





COMPARISON OF OECD AND ARAB AVERAGES

Arab and OECD average comparisons for OECD fixed voice baskets



- For residential baskets, the Arab average is consistently lower than the OECD average
- For both business baskets, the Arab average is more expensive than the OECD average, with lower usage Arab businesses paying on average 45% more, and higher usage businesses paying around 64% more.





FIXED VOICE TIME SERIES ANALYSIS AND RANKING TABLES 2015-2019

2017 OECD FIXED VOICE BASKETS RANKING, 20 CALLS/MONTH, RESIDENTIAL



Results for Fixed Voice: OECD 2017: 20 calls Residential basket, 2015-2019
Results in USD PPP including VAT

	2015	2016	2017	2018	2019
Algeria	17.37	17.37	10.25	10.42	10.42
Bahrain	11.41	11.41	11.41	11.41	11.98
Comoros			35.32	38.86	38.86
Djibouti			15.06	15.06	15.06
Egypt	1.96	1.91	5.42	5.42	7.36
Jordan	22.80	22.80	26.27	26.27	29.88
Kuwait				25.26	21.73
Lebanon	15.04	15.04	15.04	15.18	15.18
Libya					
Mauritania	33.07	33.07	32.85	26.58	32.47
Morocco	41.05	42.48	22.21	22.21	22.21
Oman	26.35	26.35	26.35	26.35	26.35
Palestine	18.88	18.88	18.88	18.88	18.44
Qatar	18.84	18.84	18.84	18.84	18.84
Saudi Arabia	34.13	34.13	34.13	35.84	35.84
Somalia					
Sudan	1.70	1.70	4.12	4.28	4.28
Syria	1.79	2.02	2.02		
Tunisia	8.89	10.65	11.80	11.80	13.43
UAE	19.63	21.06	21.06	22.11	22.12
Yemen					

Arab average	17.53	17.83	17.70	19.02	20.26
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	7	7	4	3	3
Bahrain	5	5	5	4	4
Comoros	-	-	17	17	17
Djibouti	-	-	8	6	6
Egypt	3	2	3	2	2
Jordan	11	11	13	13	14
Kuwait	-	-	-	12	10
Lebanon	6	6	7	7	7
Libya	-	-	-	-	-
Mauritania	13	13	15	15	15
Morocco	15	15	12	11	12
Oman	12	12	14	14	13
Palestine	9	9	10	9	8
Qatar	8	8	9	8	9
Saudi Arabi	14	14	16	16	16
Somalia	-	-	-	-	-
Sudan	1	1	2	1	1
Syria	2	3	1	-	-
Tunisia	4	4	6	5	5
UAE	10	10	11	10	11
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



2017 OECD FIXED VOICE BASKETS RANKING, 60 CALLS/MONTH, RESIDENTIAL



Results for Fixed Voice: OECD 2017: 60 calls Residential basket, 2015-2019

Results in USD PPP including VAT

	2015	2016	2017	2018	2019
Algeria	37.41	37.41	26.08	26.53	26.53
Bahrain	12.90	12.90	12.90	12.90	13.55
Comoros			35.32	38.86	38.86
Djibouti			22.36	22.36	22.36
Egypt	6.20	5.63	8.29	8.29	9.34
Jordan	36.04	36.04	38.37	38.37	41.97
Kuwait				25.26	21.73
Lebanon	26.13	26.13	26.13	26.36	26.36
Libya					
Mauritania	54.08	54.08	39.70	39.70	38.28
Morocco	47.46	47.46	22.21	22.21	22.21
Oman	41.11	41.11	41.11	41.11	41.11
Palestine	35.00	35.00	35.00	35.00	34.56
Qatar	21.93	21.93	21.93	21.93	21.93
Saudi Arabia	47.04	47.04	47.04	49.39	49.39
Somalia					
Sudan	3.24	3.24	5.94	6.17	6.17
Syria	4.10	4.74	4.74		
Tunisia	17.65	15.09	16.07	16.07	17.01
UAE	23.83	25.26	25.26	26.52	26.59
Yemen					

Arab average	27.22	27.15	24.99	26.58	26.94
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	Below Arab average
	Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	11	11	10	11	10
Bahrain	4	4	4	3	3
Comoros	-	-	13	14	14
Djibouti	-	-	8	7	8
Egypt	3	3	3	2	2
Jordan	10	10	14	13	16
Kuwait	-	-	-	8	5
Lebanon	8	8	11	9	9
Libya	-	-	-	-	-
Mauritania	15	15	15	15	13
Morocco	14	14	7	6	7
Oman	12	12	16	16	15
Palestine	9	9	12	12	12
Qatar	6	6	6	5	6
Saudi Arabi	13	13	17	17	17
Somalia	-	-	-	-	-
Sudan	1	1	2	1	1
Syria	2	2	1	-	-
Tunisia	5	5	5	4	4
UAE	7	7	9	10	11
Yemen	-	-	-	-	-

	Least expensive
	Most expensive



2017 OECD FIXED VOICE BASKETS RANKING, 140 CALLS/MONTH, RESIDENTIAL



Results for Fixed Voice: OECD 2017: 140 calls Residential basket, 2015-2019

Results in USD PPP including VAT

	2015	2016	2017	2018	2019
Algeria	85.48	85.48	51.12	46.28	46.28
Bahrain	18.08	18.08	18.08	18.08	18.98
Comoros			35.32	38.86	38.86
Djibouti			38.75	38.75	38.75
Egypt	16.34	15.25	13.38	13.38	15.48
Jordan	36.04	36.04	40.58	40.58	44.18
Kuwait				25.26	21.73
Lebanon	51.05	51.05	51.05	51.52	51.52
Libya					
Mauritania	54.74	54.74	54.74	54.74	41.75
Morocco	47.46	47.46	27.01	27.01	27.01
Oman	72.85	72.85	72.85	72.85	72.85
Palestine	67.46	67.46	67.46	67.46	67.02
Qatar	27.42	27.42	27.42	27.42	27.42
Saudi Arabia	76.75	76.75	76.75	80.58	80.58
Somalia					
Sudan	6.89	6.89	10.26	10.66	10.66
Syria	9.52	10.85	10.85		
Tunisia	25.29	20.99	21.30	21.30	23.09
UAE	31.73	33.15	33.15	34.81	35.00
Yemen					

Arab average	42.13	41.96	38.72	39.80	38.89
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	Below Arab average
	Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	15	15	13	12	13
Bahrain	4	4	4	3	3
Comoros	-	-	9	10	10
Djibouti	-	-	10	9	9
Egypt	3	3	3	2	2
Jordan	8	8	11	11	12
Kuwait	-	-	-	5	4
Lebanon	10	10	12	13	14
Libya	-	-	-	-	-
Mauritania	11	11	14	14	11
Morocco	9	9	6	6	6
Oman	13	13	16	16	16
Palestine	12	12	15	15	15
Qatar	6	6	7	7	7
Saudi Arabi	14	14	17	17	17
Somalia	-	-	-	-	-
Sudan	1	1	1	1	1
Syria	2	2	2	-	-
Tunisia	5	5	5	4	5
UAE	7	7	8	8	8
Yemen	-	-	-	-	-

	Least expensive
	Most expensive



2017 OECD FIXED VOICE BASKETS RANKING, 420 CALLS/MONTH, RESIDENTIAL



Results for Fixed Voice: OECD 2017: 420 calls Residential basket, 2015-2019
Results in USD PPP including VAT

	2015	2016	2017	2018	2019
Algeria	255.72	255.72	95.17	50.49	50.49
Bahrain	33.61	33.61	33.61	33.61	35.29
Comoros			35.32	38.86	38.86
Djibouti			100.63	100.63	100.63
Egypt	20.33	19.91	20.41	20.41	16.17
Jordan	36.04	36.04	40.58	40.58	44.18
Kuwait				25.26	21.73
Lebanon	129.80	129.80	129.80	130.98	130.98
Libya					
Mauritania	54.74	54.74	54.74	54.74	41.75
Morocco	47.46	47.46	27.01	27.01	27.01
Oman	75.99	75.99	75.99	75.99	75.99
Palestine	129.12	129.12	129.12	129.12	128.68
Qatar	28.85	28.85	28.85	28.85	28.85
Saudi Arabia	83.12	83.12	83.12	87.27	87.27
Somalia					
Sudan	19.35	19.35	24.99	25.95	25.95
Syria	20.13	21.64	21.64		
Tunisia	35.07	35.07	35.07	35.07	35.07
UAE	33.80	35.22	35.22	36.98	37.20
Yemen					

Arab average	66.08	66.24	56.97	55.33	54.48
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	Below Arab average
	Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	15	15	14	11	12
Bahrain	5	5	6	6	7
Comoros	-	-	9	9	9
Djibouti	-	-	15	15	15
Egypt	3	2	1	1	1
Jordan	8	8	10	10	11
Kuwait	-	-	-	2	2
Lebanon	14	14	17	17	17
Libya	-	-	-	-	-
Mauritania	10	10	11	12	10
Morocco	9	9	4	4	4
Oman	11	11	12	13	13
Palestine	13	13	16	16	16
Qatar	4	4	5	5	5
Saudi Arabi	12	12	13	14	14
Somalia	-	-	-	-	-
Sudan	1	1	3	3	3
Syria	2	3	2	-	-
Tunisia	7	6	7	7	6
UAE	6	7	8	8	8
Yemen	-	-	-	-	-

	Least expensive
	Most expensive



2017 OECD FIXED VOICE BASKETS RANKING, 100 CALLS/MONTH, BUSINESS



Results for Fixed Voice: OECD 2017: 100 calls Businesss basket, 2015-2019
Results in USD PPP excluding VAT

	2015	2016	2017	2018	2019
Algeria	44.46	44.46	33.37		
Bahrain	29.57	29.57	29.57	29.57	29.57
Comoros			35.32	35.32	35.32
Djibouti			22.05	23.86	23.86
Egypt	17.22	17.22			
Jordan	61.06	40.36	40.36	41.26	39.19
Kuwait					85.22
Lebanon	30.02	30.02	30.02	30.02	30.02
Libya					
Mauritania	161.21	161.21	95.49	95.49	95.49
Morocco	40.92	40.92	40.92	40.92	40.92
Oman	48.33	48.33	48.33	48.33	48.33
Palestine	43.92	43.92	43.92	43.92	43.55
Qatar	108.38	108.38	108.38	108.38	76.05
Saudi Arabia			58.79	58.79	58.79
Somalia					
Sudan					
Syria	6.32	7.44	7.44		
Tunisia	45.37	43.63	19.92	19.92	15.02
UAE	56.49	56.49	70.71	56.49	56.62
Yemen					

Arab average	52.47	50.95	45.37	48.11	48.43
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	7	9	6	-	-
Bahrain	3	3	4	3	3
Comoros	-	-	7	5	5
Djibouti	-	-	3	2	2
Egypt	2	2	-	-	-
Jordan	11	5	8	7	6
Kuwait	-	-	-	-	13
Lebanon	4	4	5	4	4
Libya	-	-	-	-	-
Mauritania	13	13	14	12	14
Morocco	5	6	9	6	7
Oman	9	10	11	9	9
Palestine	6	8	10	8	8
Qatar	12	12	15	13	12
Saudi Arabi	-	-	12	11	11
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	1	1	1	-	-
Tunisia	8	7	2	1	1
UAE	10	11	13	10	10
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



2017 OECD FIXED VOICE BASKETS RANKING, 260 CALLS/MONTH, BUSINESS



Results for Fixed Voice: OECD 2017: 260 calls Business basket, 2015-2019

Results in USD PPP excluding VAT

	2015	2016	2017	2018	2019
Algeria	112.20	112.20	65.31		
Bahrain	57.16	57.16	57.16	57.16	57.16
Comoros			35.32	35.32	35.32
Djibouti			44.35	47.98	47.98
Egypt	34.06	34.06			
Jordan	106.65	52.78	52.78	53.68	51.61
Kuwait					85.22
Lebanon	67.36	67.36	67.36	67.36	67.36
Libya					
Mauritania	411.51	411.51	234.37	234.37	234.37
Morocco	40.92	40.92	40.92	40.92	40.92
Oman	96.26	96.26	96.26	96.26	96.26
Palestine	108.85	108.85	108.85	108.85	108.48
Qatar	122.63	122.63	122.63	122.63	76.05
Saudi Arabia			109.86	109.86	109.86
Somalia					
Sudan					
Syria	17.51	20.54	20.54		
Tunisia	59.69	57.14	19.92	19.92	15.02
UAE	75.14	75.14	89.37	75.14	75.52
Yemen					

Arab average	100.79	96.98	79.13	83.61	78.65
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	11	11	8	-	-
Bahrain	4	6	7	6	6
Comoros	-	-	3	2	2
Djibouti	-	-	5	4	4
Egypt	2	2	-	-	-
Jordan	9	4	6	5	5
Kuwait	-	-	-	-	10
Lebanon	6	7	9	7	7
Libya	-	-	-	-	-
Mauritania	13	13	15	13	14
Morocco	3	3	4	3	3
Oman	8	9	11	9	11
Palestine	10	10	12	10	12
Qatar	12	12	14	12	9
Saudi Arabi	-	-	13	11	13
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	1	1	2	-	-
Tunisia	5	5	1	1	1
UAE	7	8	10	8	8
Yemen	-	-	-	-	-

 Least expensive
 Most expensive





OBSERVATIONS FROM FIXED VOICE TIME SERIES RESULTS

- As is typical with fixed voice, there were relatively few changes to prices since 2018, with most operators not making any changes to pricing.
- The impact of the changes was generally very small, and in some cases, did not have any effect on the basket results
- The most notable price changes 2018 - 2019:
 - Bahrain now includes VAT at 5% on residential tariffs, following agreement across GCC countries on a VAT framework treaty. Bahrain now joins both Saudi Arabia and UAE in the implementation of the tax. The remaining GCC countries have yet to implement VAT.
 - Egypt made some general changes to residential services. Basic rental increased from EGP15 to EGP20, as well as incorporating options in the service by default, which is less economic for lower usage but better for higher usage.
 - Qatar saw a large reduction in business prices, as a result of the publication of a new PSTN business tariff that includes a number of mobile minutes, as well as free fixed minutes.
 - Tunisia also increased rental prices.
 - For Jordan and Mauritania, some corrections were made to historic data, based on clarification of information.
- Average costs across all residential and business baskets have remained broadly static since last year, with only very small changes observed..
- In addition, over the period 2015-2019, the average price has not changed dramatically. Lower usage residential basket costs have shown small, gradual increases, and this is very typical, and often driven by increases in rental charges, with the biggest impact being seen for small usage baskets.

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





MOBILE BASKET RESULTS 2019



MOBILE TARIFF DATA ISSUES

- Tariff restrictions:
 - Only pre-paid for Comoros
 - One operator only for Comoros, Djibouti
 - No data for Somalia
- Otherwise two operators are covered for each country
- A total of 1090 tariff packages covered for 40 operators in 21 countries
- Results are presented for residential prepaid and postpaid offerings, in line with OECD methodology and in line with previous AREGNET studies
- The increase in data allowances across the OECD baskets for 2017 may result in very high costs for high data baskets in those countries where tariffs are not optimised for high levels of data use.





MOBILE VOICE AND DATA BASKETS, 2017 DEFINITIONS

- There are 12 baskets OECD baskets for mobile voice/mobile voice and data:
 - 2 baskets with no data
 - 5 baskets with lower data use
 - 5 baskets with higher data use
- Included in the OECD 2017 definitions are two unlimited voice baskets. Results for these have not been included due to the small number of providers that have unlimited offers.
- The 2017 baskets are shown in the table below.

Basket	Voice calls	SMS	Data (GB)
30 calls, no data	30	10	0
100 calls, no data	100	20	0
30 calls, 0.1 GB	30	20	0.1
100 calls, 0.5 GB	100	40	0.5
300 calls, 1 GB	300	80	1
900 calls, 2 GB	900	160	2
Unlimited voice, 5 GB	Unlimited	Unlimited	5
30 calls, 0.5 GB	30	10	0.5
100 calls, 2 GB	100	20	2
300 calls, 5 GB	300	40	5
900 calls, 10 GB	900	80	10
Unlimited voice, 20 GB	Unlimited	Unlimited	20

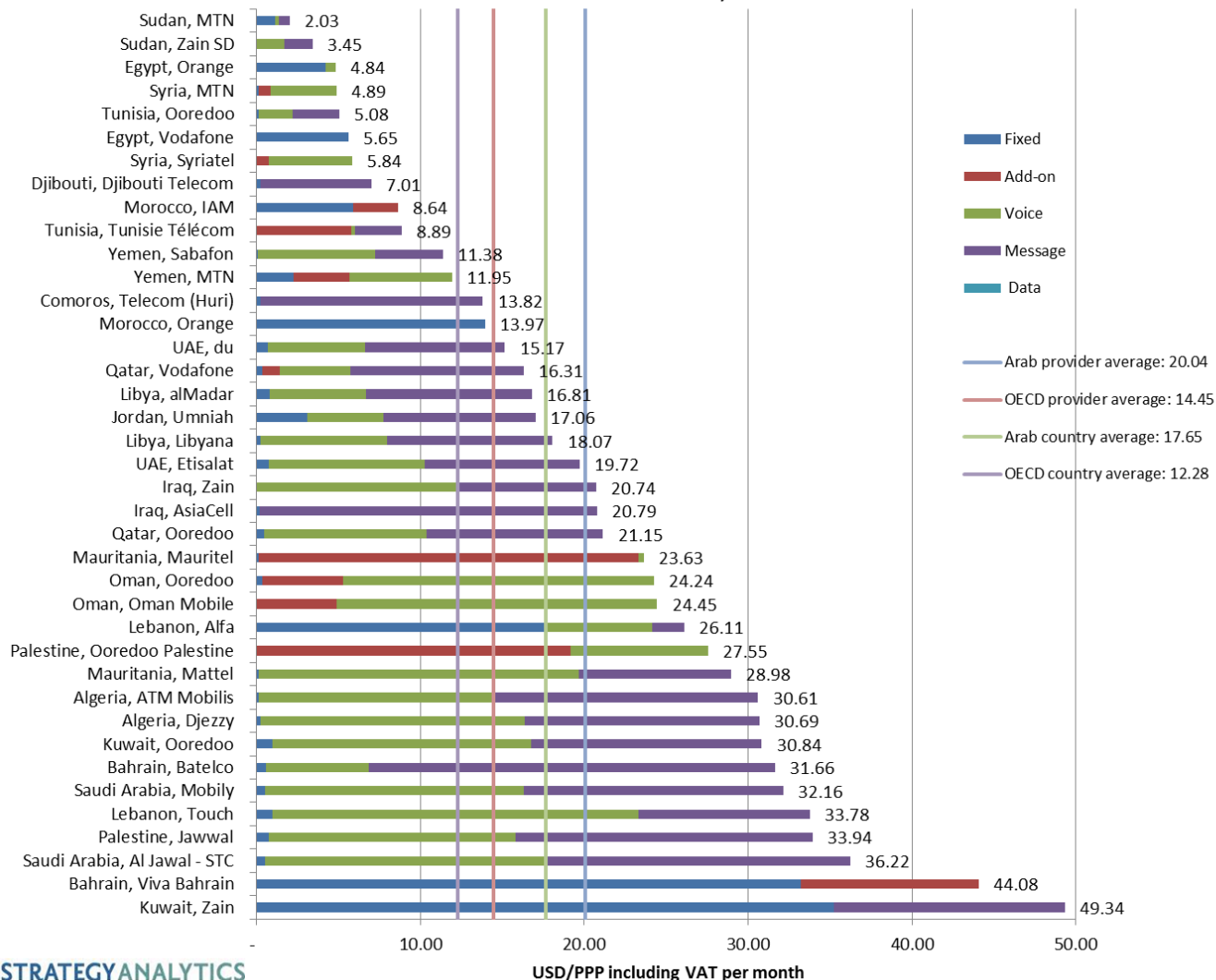


30 CALLS/MONTH NO DATA BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 30 calls, no data



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

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

33 provider results
are based on prepaid
tariffs

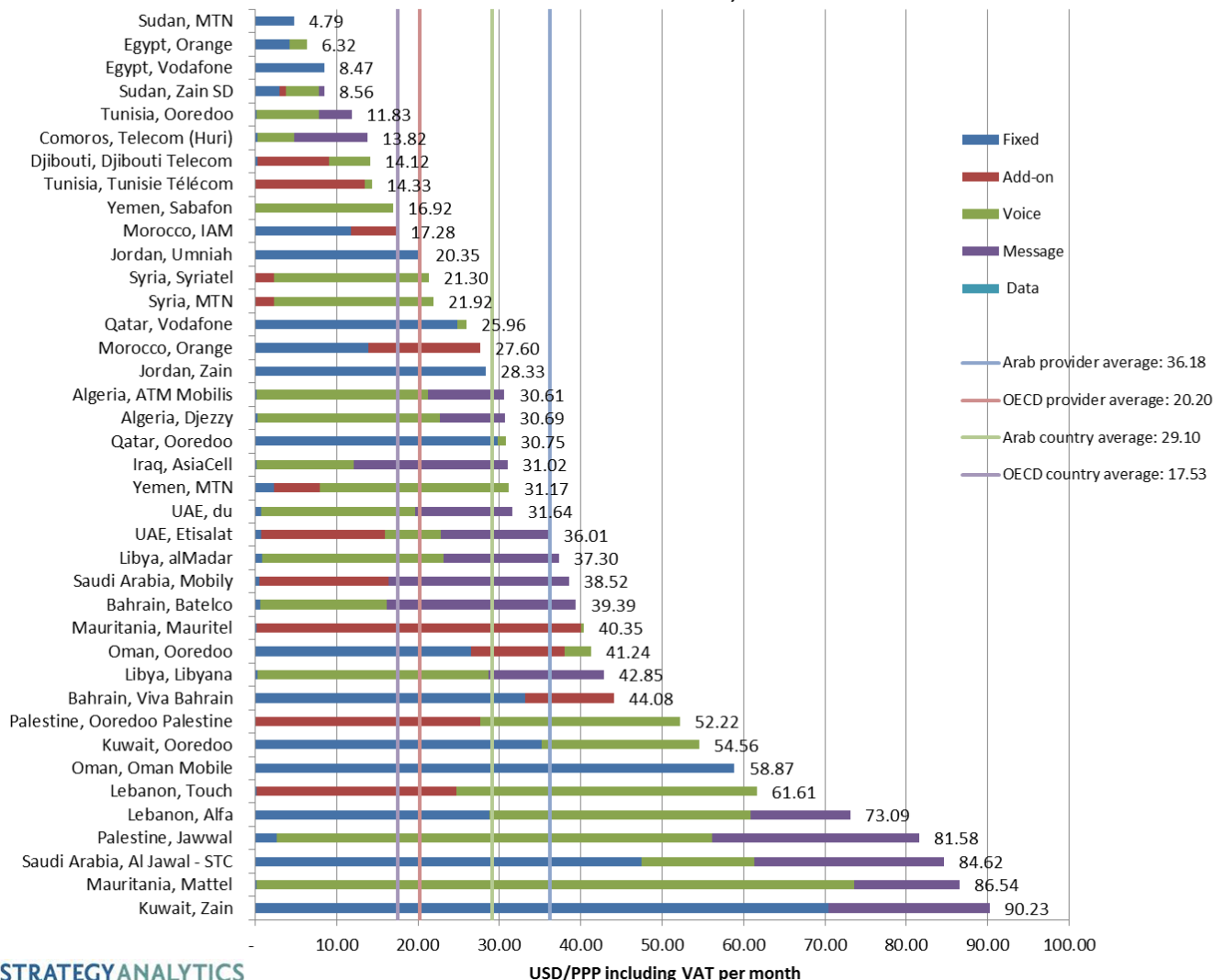


100 CALLS/MONTH NO DATA BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 100 calls, no data



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

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

29 provider results
are based on prepaid
tariffs

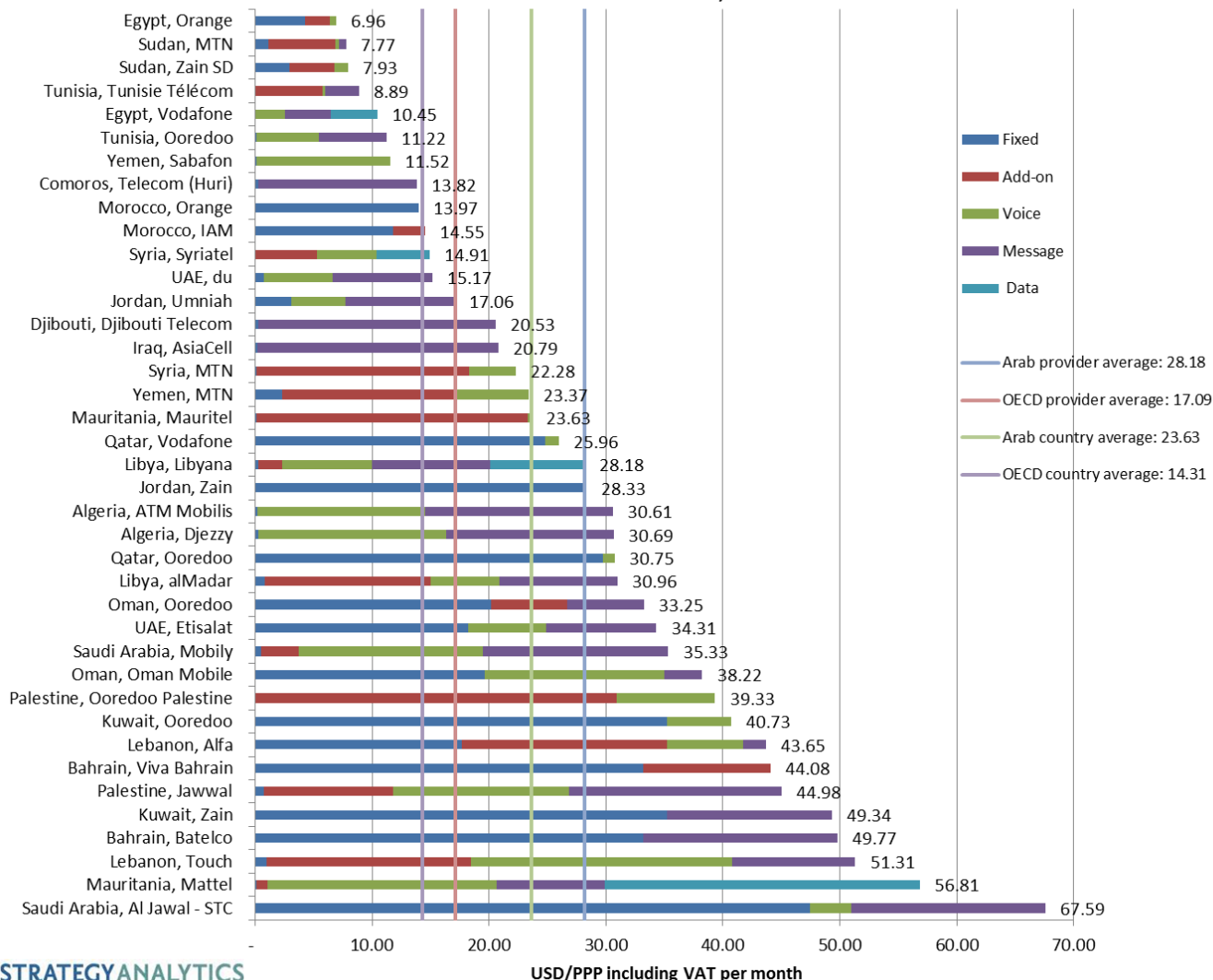


30 CALLS AND 0.1 GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 30 calls, 0.1 GB



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

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

32 provider results
are based on prepaid
tariffs

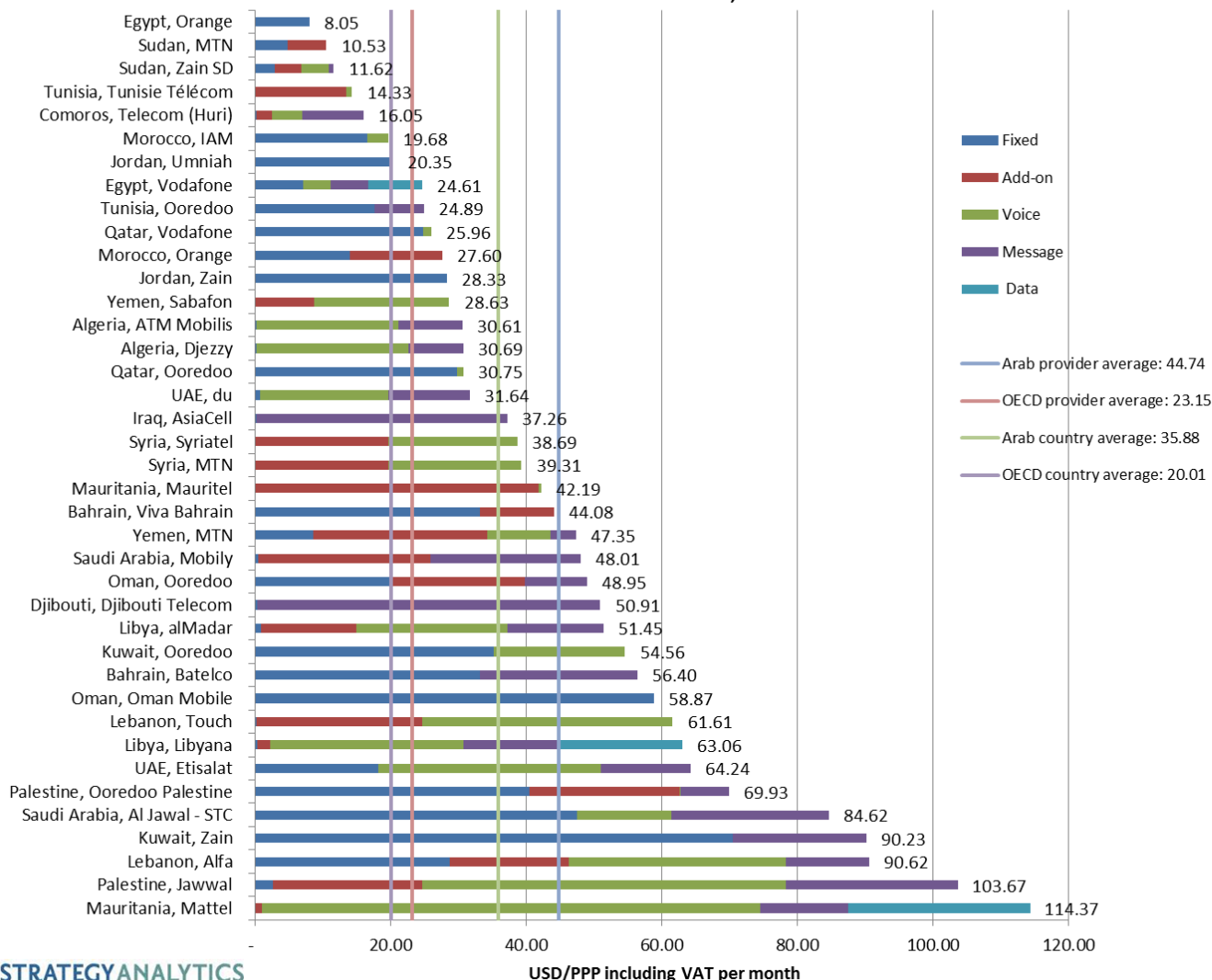


100 CALLS AND 0.5GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 100 calls, 0.5 GB



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

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

25 provider results
are based on prepaid
tariffs

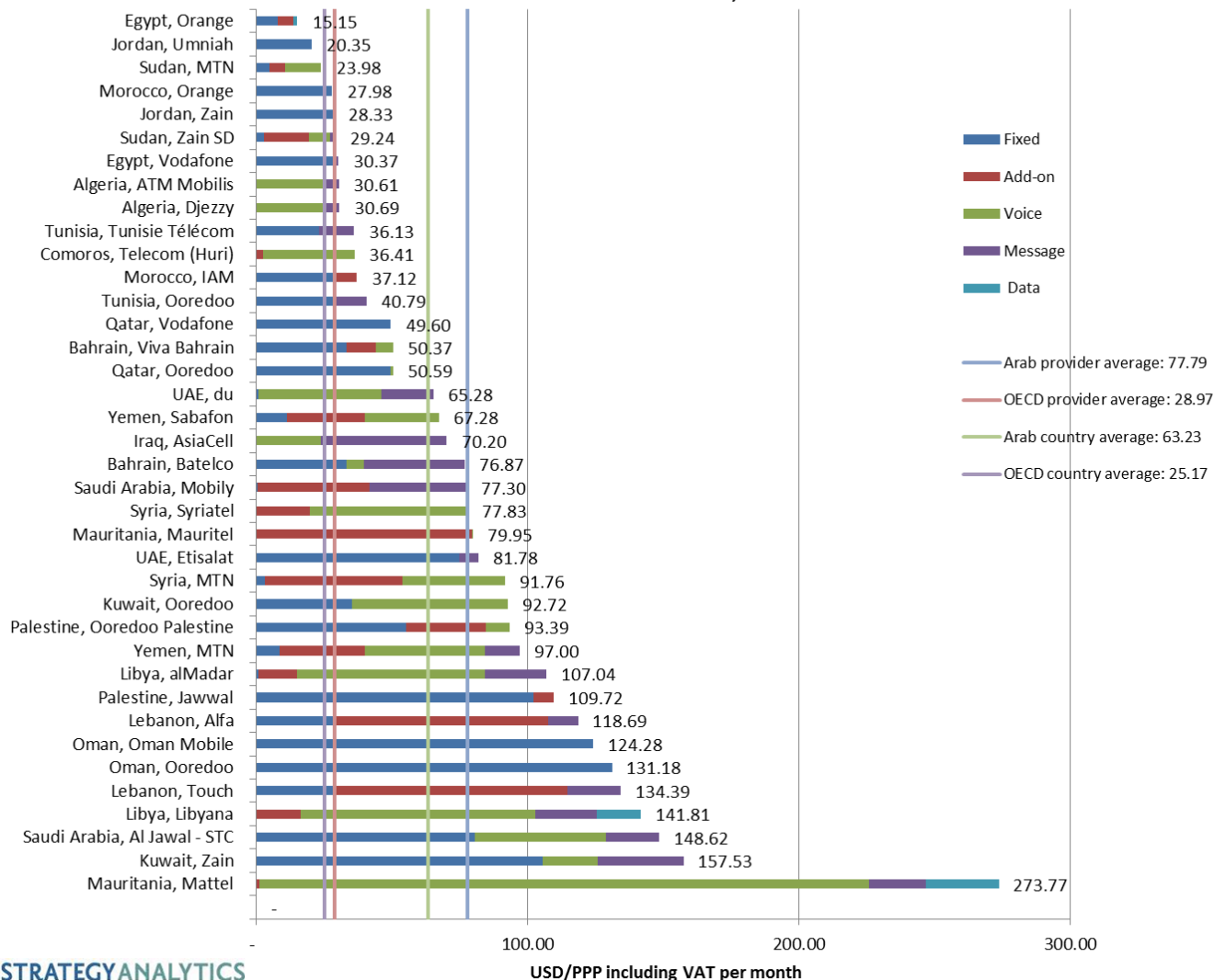


300 CALLS AND 1GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 300 calls, 1 GB



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

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

15 provider results
are based on prepaid
tariffs

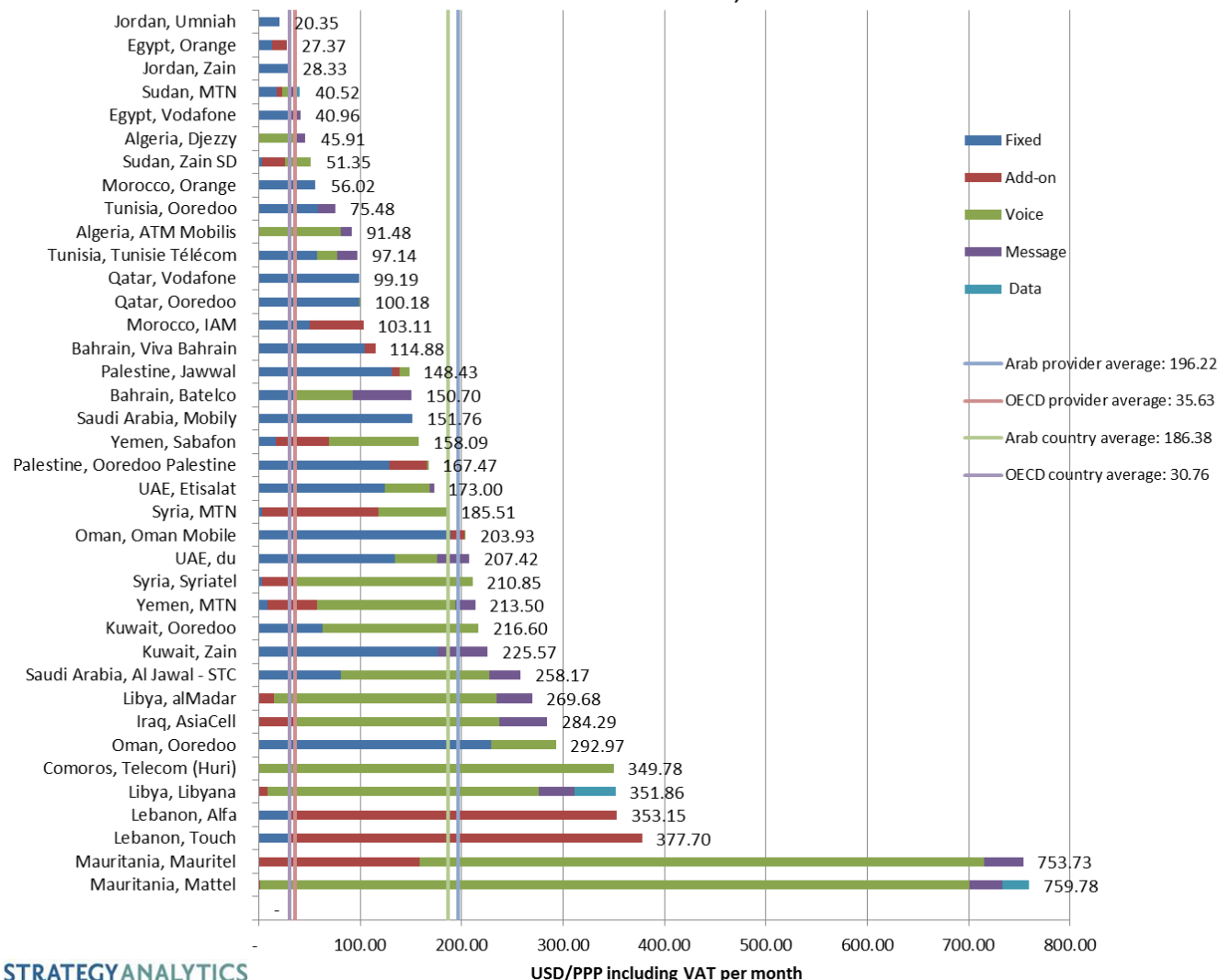


900 CALLS AND 2GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 900 calls, 2 GB



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

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

11 provider results
are based on prepaid
tariffs

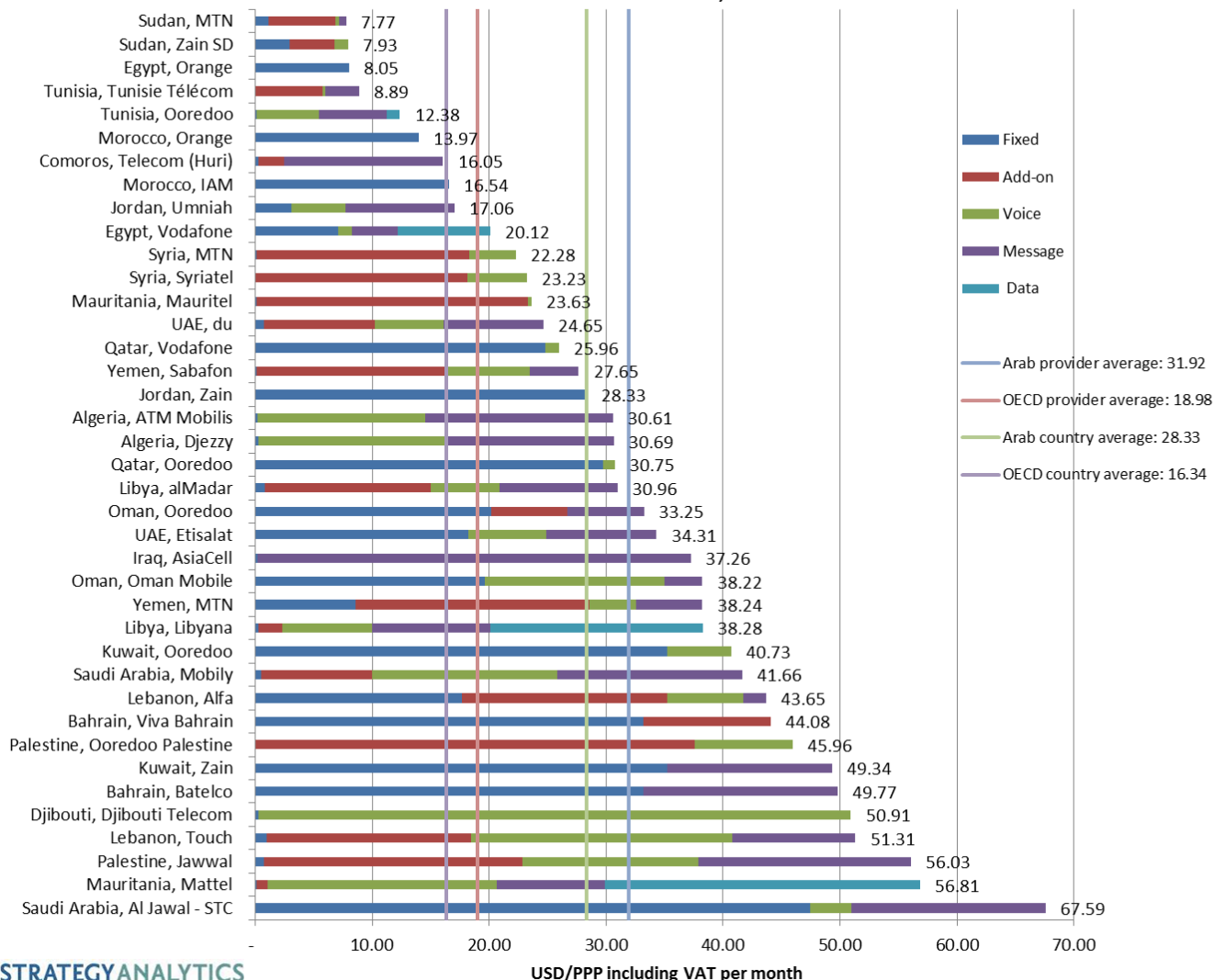


30 CALLS AND 0.5GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 30 calls, 0.5 GB



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

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

29 provider results
are based on prepaid
tariffs

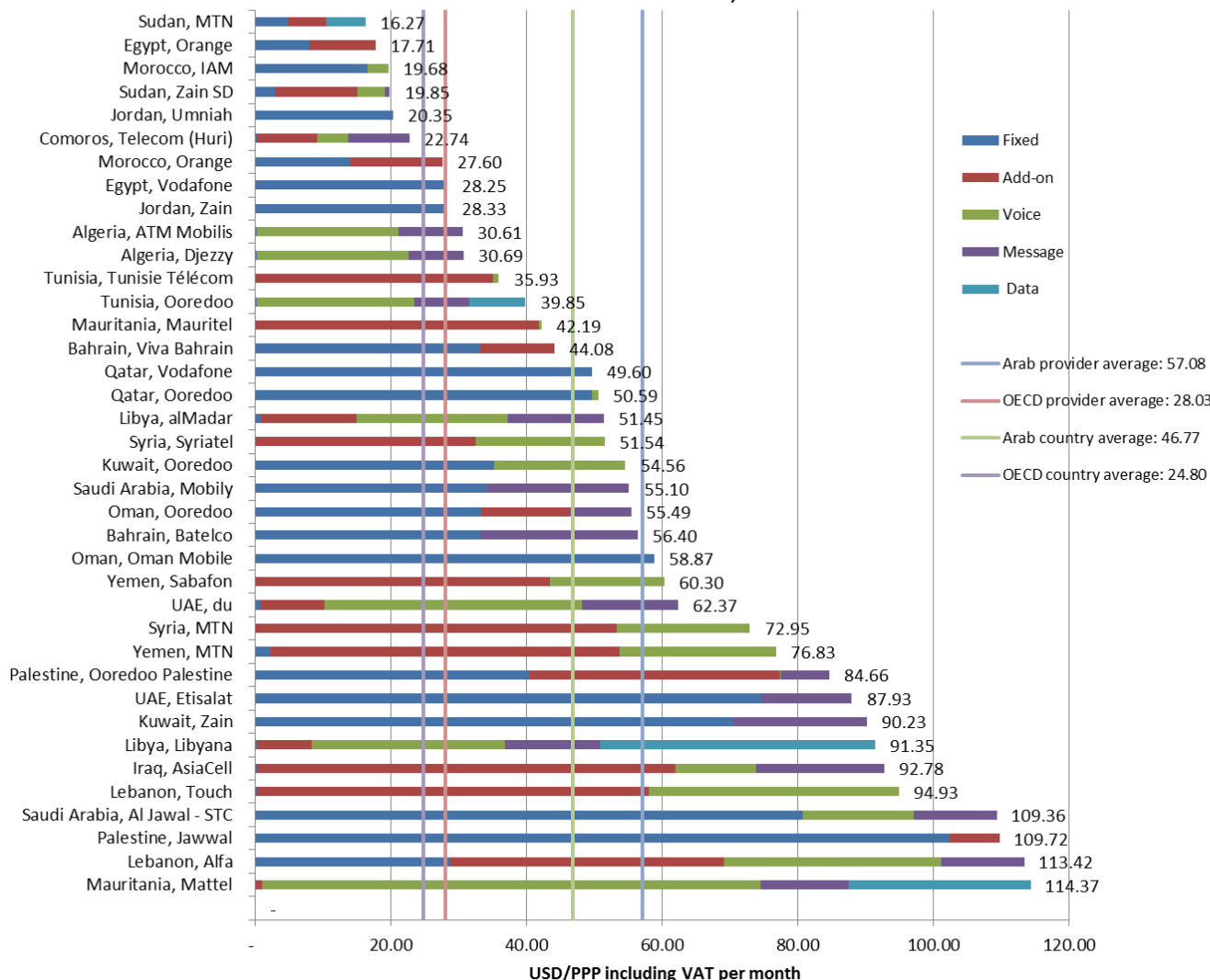


100 CALLS AND 2GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 100 calls, 2 GB



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

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

21 provider results
are based on prepaid
tariffs

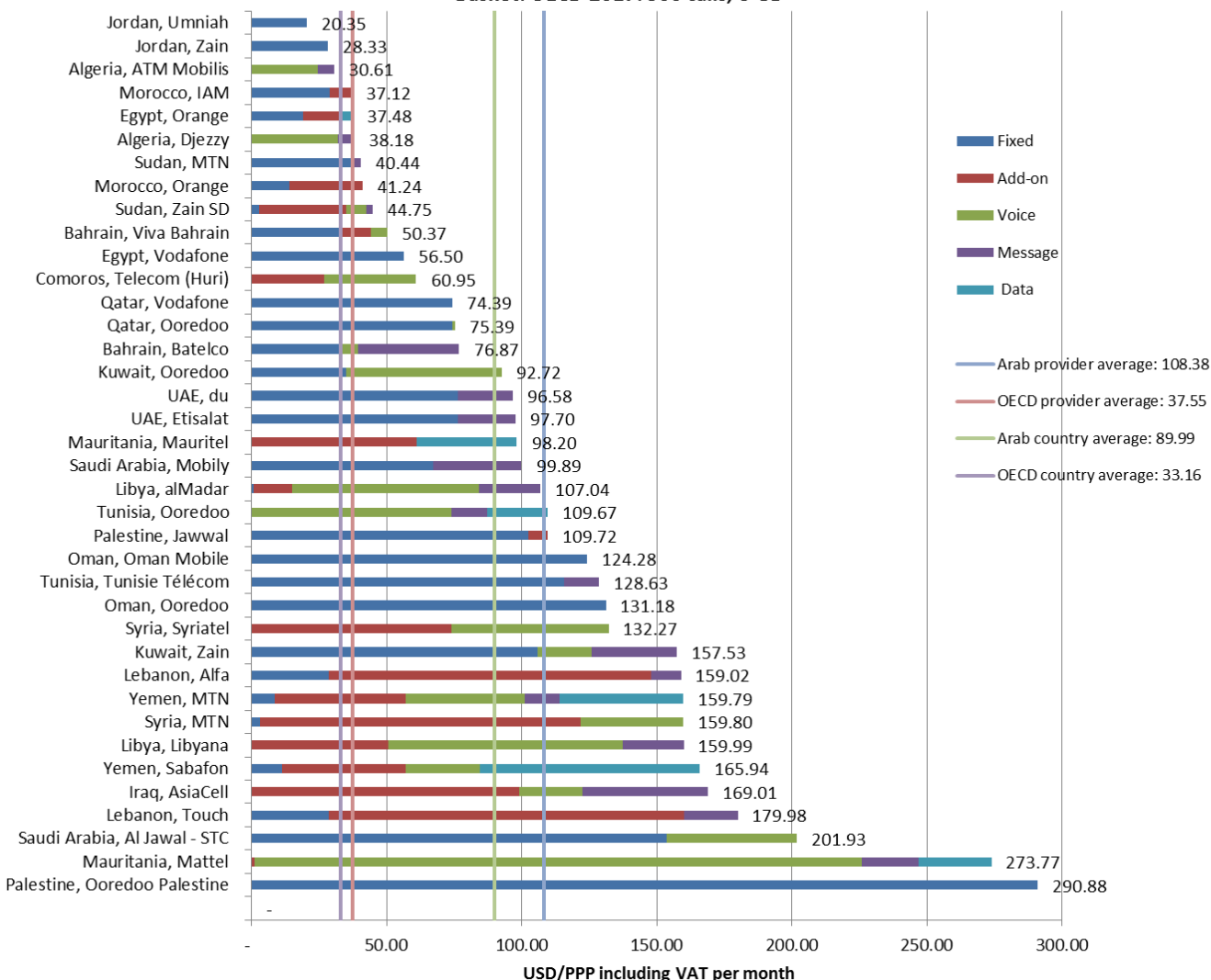


300 CALLS AND 5GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 300 calls, 5 GB



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

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

14 provider results
are based on prepaid
tariffs

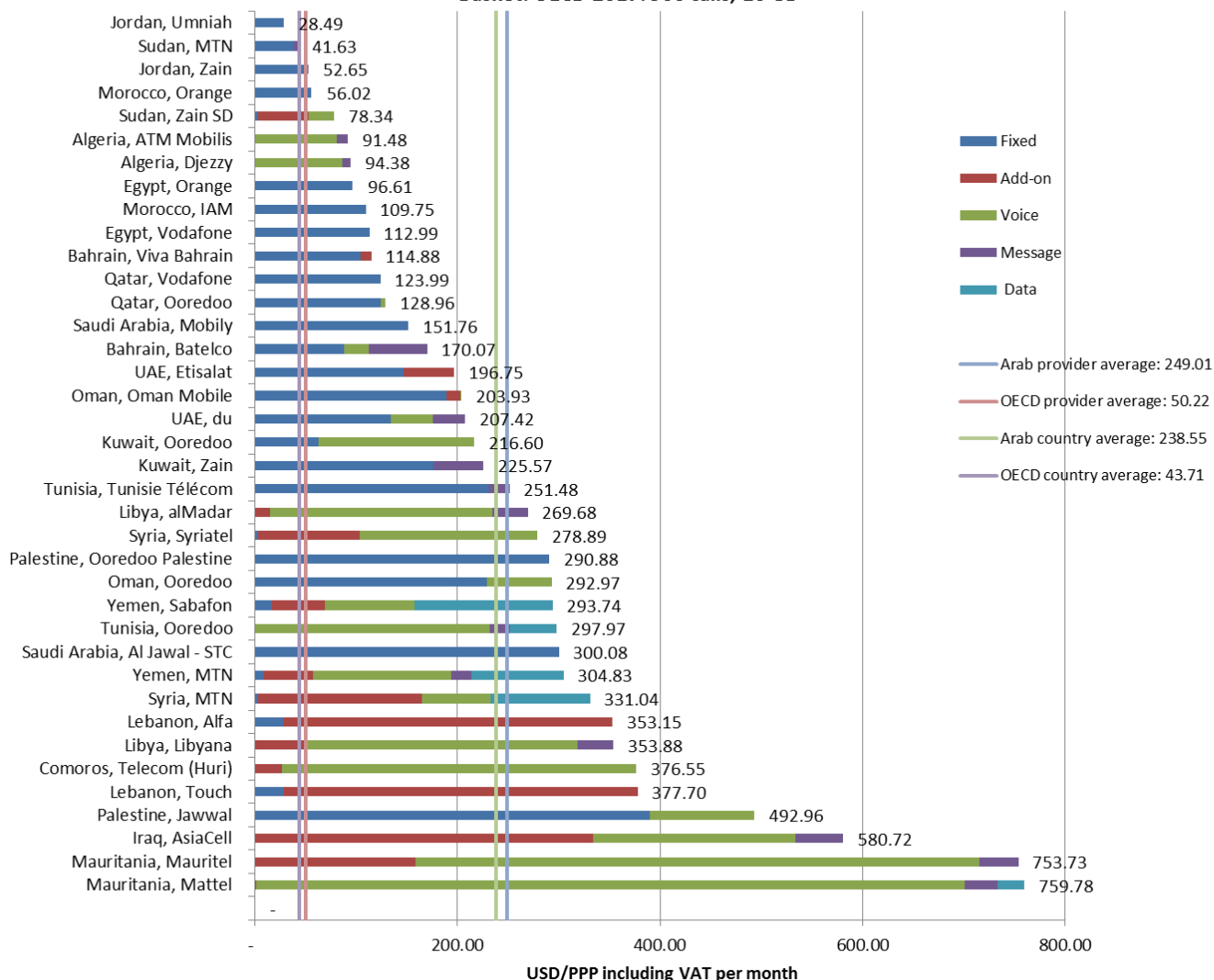


900 CALLS AND 10GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2019

Basket: OECD 2017: 900 calls, 10 GB



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

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

11 provider results
are based on prepaid
tariffs





OBSERVATIONS FROM MOBILE BASKET RESULTS

- The cheapest and most expensive countries, based on the cheapest result per country, are :

	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
30 calls no data	Sudan	Egypt	Syria	Saudi Arabia	Bahrain	Kuwait
100 calls no data	Sudan	Egypt	Tunisia	Lebanon	Kuwait	Palestine
30 calls, 0.1 GB	Egypt	Sudan	Tunisia	Bahrain	Lebanon	Kuwait
100 calls, 0.5 GB	Egypt	Sudan	Tunisia	Palestine	Lebanon	Kuwait
300 calls, 1 GB	Egypt	Jordan	Sudan	Oman	Lebanon	Libya
900 calls, 2 GB	Jordan	Egypt	Sudan	Mauritania	Lebanon	Comoros
30 calls, 0.5 GB	Sudan	Egypt	Tunisia	Djibouti	Palestine	Bahrain
100 calls, 2 GB	Sudan	Egypt	Morocco	Lebanon	Palestine	Iraq
300 calls, 5 GB	Jordan	Algeria	Morocco	Yemen	Lebanon	Iraq
900 calls, 10 GB	Jordan	Sudan	Morocco	Mauritania	Iraq	Comoros

- A comparison between the OECD and Arab averages is shown in the next slide, both per country and per provider
- There is a clear correlation between the size of the basket (in terms of number of calls and volume of data), and the extent to which countries fall below the OECD average. For smaller baskets, more countries fall below the OECD average. This number steadily declines as the number of calls and the data volume increases. The number of providers for which prepaid offers are the cheapest is at its highest for no and low data usage baskets, and declines as data usage increases.
- The average result for the Arab providers is consistently higher than the OECD provider average across all mobile voice baskets, and the larger the basket the greater the variation.
- Baskets which incorporate handset data show a broad variation in price across the Arab providers – the difference becoming more marked for baskets with higher data requirements, indicating that in a number of countries, high mobile data use is still prohibitively expensive, and consequently, mobile data use is probably more limited.
- Similar to the voice baskets, the Arab provider average for the data baskets is typically much higher than the OECD one
- Where data costs are shown on the graph, these refer to overage charges or data add-on packages, rather than data included in the basic voice tariff. Where overage charges are higher, this indicates 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, and operators offer more competitively priced tariffs with more data included.
- The average number of tariff packages offered by the Arab operators is up slightly from 24 per operator in 2018, to 27 per operator in 2019.





COMPARISON OF OECD AND ARAB AVERAGES

	OECD- USD PPP inc VAT/month		Arab countries - USD PPP inc VAT/month	
	Per country average	Per provider average	Per country average	Per provide average
30 calls no data	12.28	14.45	17.65	20.04
100 calls no data	17.53	20.20	29.10	36.18
30 calls, 0.1 GB	14.31	17.09	23.63	28.18
100 calls, 0.5 GB	20.01	23.15	35.88	44.74
300 calls, 1 GB	25.17	28.97	63.23	77.79
900 calls, 2 GB	30.76	35.63	186.38	196.22
30 calls, 0.5 GB	16.34	18.98	28.33	31.92
100 calls, 2 GB	24.80	28.03	46.77	57.08
300 calls, 5 GB	33.16	37.55	89.99	108.38
900 calls, 10 GB	43.71	50.22	238.55	249.01

- The Arab average is consistently higher than the OECD average, with higher usage baskets being significantly more expensive.
- This is true for both the per country and the per provider averages.

	% that Arab average is higer or lower than OECD average	
	Per country average	Per provider average
30 calls no data	44%	39%
100 calls	66%	79%
300 calls	65%	65%
900 calls	79%	93%
40 calls prepaid	151%	169%
400 messages	506%	451%
30 calls + 100 MB	73%	68%
100 calls + 500 MB	89%	104%
300 calls + 1 GB	171%	189%
900 calls + 2 GB	446%	396%





MOBILE TIME SERIES ANALYSIS AND RANKING TABLES 2015-2019

2017 OECD MOBILE BASKETS RANKING, 30 CALLS/MONTH NO DATA



Results for Mobile Voice and Data: OECD 2017: 30 calls, no data basket, 2015-2019 Ranking from cheapest to most expensive, 2015-2019
Results in USD/PPP including VAT per month

	2015	2016	2017	2018	2019
Algeria	9.66	12.91	15.39	30.61	30.61
Bahrain	18.95	18.95	31.63	31.63	31.66
Comoros	25.21	25.21	13.82	13.82	13.82
Djibouti				7.01	7.01
Egypt	4.87	4.87	4.87	4.84	4.84
Iraq	18.85	18.85	19.17	20.74	20.74
Jordan	12.42	14.42	14.42	16.35	17.06
Kuwait	28.37	28.37	30.84	29.51	30.84
Lebanon	33.43	33.47	33.47	33.78	26.11
Libya	11.46	11.46	17.53	17.53	16.81
Mauritania	24.21	28.57	22.26	24.45	23.63
Morocco	26.09	11.82	8.64	8.64	8.64
Oman	24.82	24.47	24.28	24.47	24.24
Palestine	22.31	22.30	19.18	27.55	27.55
Qatar	15.37	20.58	20.79	21.01	16.31
Saudi Arabia	18.09	18.09	18.09	18.09	32.16
Somalia					
Sudan	1.43	1.64	1.89	1.96	2.03
Syria	4.16	4.16	5.95	5.95	4.89
Tunisia	8.76	5.78	5.94	5.94	5.08
UAE	16.98	16.98	15.56	17.74	15.17
Yemen	8.91	8.91	11.85	11.38	11.38

Arab average	16.72	16.59	16.78	17.76	17.65
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	6	8	9	19	18
Bahrain	13	13	19	20	20
Comoros	17	17	7	8	8
Djibouti	-	-	-	5	5
Egypt	3	3	2	2	2
Iraq	12	12	13	13	13
Jordan	8	9	8	9	12
Kuwait	19	18	18	18	19
Lebanon	20	20	20	21	16
Libya	7	6	11	10	11
Mauritania	15	19	16	15	14
Morocco	18	7	5	6	6
Oman	16	16	17	16	15
Palestine	14	15	14	17	17
Qatar	9	14	15	14	10
Saudi Arabia	11	11	12	12	21
Somalia	-	-	-	-	-
Sudan	1	1	1	1	1
Syria	2	2	4	4	3
Tunisia	4	4	3	3	4
UAE	10	10	10	11	9
Yemen	5	5	6	7	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



2017 OECD MOBILE BASKETS RANKING, 100 CALLS/MONTH NO DATA



Results for Mobile Voice and Data: OECD 2017: 100 calls, no data basket, 2015-2019 Ranking from cheapest to most expensive, 2015-2019

Results in USD/PPP including VAT per month

	2015	2016	2017	2018	2019
Algeria	18.99	29.81	36.86	30.61	30.61
Bahrain	26.17	26.17	36.94	36.94	39.39
Comoros	67.70	67.70	22.87	22.87	13.82
Djibouti				14.12	14.12
Egypt	12.11	8.12	7.77	6.32	6.32
Iraq	41.06	41.06	41.03	41.16	31.02
Jordan	14.42	14.42	14.42	21.74	20.35
Kuwait	42.29	54.58	54.56	53.75	54.56
Lebanon	62.01	65.72	62.01	62.57	61.61
Libya	33.59	33.59	39.74	39.74	37.30
Mauritania	44.04	45.02	33.46	44.16	40.35
Morocco	26.60	23.64	17.28	17.28	17.28
Oman	71.78	54.00	42.04	42.22	41.24
Palestine	45.40	41.43	41.43	45.70	52.22
Qatar	34.87	43.95	45.24	45.24	25.96
Saudi Arabia	39.35	39.35	39.35	39.35	38.52
Somalia					
Sudan	3.90	3.90	4.61	4.79	4.79
Syria	14.02	14.02	21.92	21.92	21.30
Tunisia	17.50	17.34	16.77	16.77	11.83
UAE	28.49	32.25	32.25	34.15	31.64
Yemen	26.49	26.49	17.73	16.92	16.92

Arab average	33.54	34.13	31.41	31.35	29.10
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	6	9	11	10	11
Bahrain	7	7	12	12	16
Comoros	19	20	8	9	4
Djibouti	-	-	-	3	5
Egypt	2	2	2	2	2
Iraq	14	13	15	15	12
Jordan	4	4	3	7	8
Kuwait	15	18	19	20	20
Lebanon	18	19	20	21	21
Libya	11	11	14	14	14
Mauritania	16	16	10	17	17
Morocco	9	6	5	6	7
Oman	20	17	17	16	18
Palestine	17	14	16	19	19
Qatar	12	15	18	18	10
Saudi Arabia	13	12	13	13	15
Somalia	-	-	-	-	-
Sudan	1	1	1	1	1
Syria	3	3	7	8	9
Tunisia	5	5	4	4	3
UAE	10	10	9	11	13
Yemen	8	8	6	5	6

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



2017 OECD MOBILE BASKETS RANKING, 30 CALLS AND 0.1 GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 30 calls, 0.1 GB basket, 2015-2019
Results in USD/PPP including VAT per month

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	13.11	17.48	24.52	30.61	30.61
Bahrain	26.17	26.17	45.88	45.88	44.08
Comoros			13.82	13.82	13.82
Djibouti				20.53	20.53
Egypt	8.47	8.00	7.95	6.96	6.96
Iraq	18.85	18.85	23.79	23.79	20.79
Jordan	17.12	17.12	17.12	20.38	17.06
Kuwait	63.61	54.58	35.25	40.73	40.73
Lebanon	46.24	46.24	45.00	45.41	43.65
Libya	31.67	31.67	24.13	28.18	28.18
Mauritania	116.99	138.05	22.26	24.45	23.63
Morocco	26.60	11.82	13.37	13.37	13.97
Oman	24.82	24.47	24.28	24.47	33.25
Palestine	67.98	63.20	29.34	39.33	39.33
Qatar	22.81	28.02	28.11	28.11	25.96
Saudi Arabia	31.07	33.92	24.43	24.43	35.33
Somalia					
Sudan	1.75	1.96	2.27	2.35	7.77
Syria	9.10	9.82	11.88	11.88	14.91
Tunisia	23.12	9.97	8.27	8.27	8.89
UAE	24.44	30.73	17.74	17.74	15.17
Yemen	20.87	20.87	12.07	11.52	11.52

Arab average	31.30	31.21	21.57	22.96	23.63
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	4	7	15	17	15
Bahrain	12	11	20	21	21
Comoros	-	-	7	7	5
Djibouti	-	-	-	10	10
Egypt	2	2	2	2	1
Iraq	6	8	11	11	11
Jordan	5	6	8	9	9
Kuwait	17	17	18	19	19
Lebanon	16	16	19	20	20
Libya	15	14	12	16	14
Mauritania	19	19	10	13	12
Morocco	13	5	6	6	6
Oman	11	10	13	14	16
Palestine	18	18	17	18	18
Qatar	8	12	16	15	13
Saudi Arabia	14	15	14	12	17
Somalia	-	-	-	-	-
Sudan	1	1	1	1	2
Syria	3	3	4	5	7
Tunisia	9	4	3	3	3
UAE	10	13	9	8	8
Yemen	7	9	5	4	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



2017 OECD MOBILE BASKETS RANKING, 100 CALLS AND 0.5GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 100 calls, 0.5 GB basket, 2015-2019 Ranking from cheapest to most expensive, 2015-2019

Results in USD/PPP including VAT per month

	2015	2016	2017	2018	2019
Algeria	18.99	35.53	36.86	30.61	30.61
Bahrain	41.69	31.34	52.47	52.47	44.08
Comoros	-	-	22.87	22.87	16.05
Djibouti				50.91	50.91
Egypt	17.09	18.04	12.43	8.05	8.05
Iraq	55.86	55.86	62.78	62.78	37.26
Jordan	17.12	17.12	17.12	21.74	20.35
Kuwait	70.49	54.58	54.56	54.56	54.56
Lebanon	72.44	83.10	62.01	62.57	61.61
Libya	134.64	134.64	63.06	75.19	51.45
Mauritania	136.82	154.51	33.46	44.16	42.19
Morocco	26.60	27.01	18.80	19.24	19.68
Oman	72.10	54.00	42.04	42.22	48.95
Palestine	128.18	112.56	57.30	64.11	69.93
Qatar	59.66	53.87	50.80	50.80	25.96
Saudi Arabia	77.34	77.34	48.85	48.85	48.01
Somalia					
Sudan	5.50	5.50	6.50	6.75	10.53
Syria	30.64	30.64	37.42	37.42	38.69
Tunisia	23.12	17.34	16.77	16.77	14.33
UAE	50.84	47.42	48.15	34.15	31.64
Yemen	44.29	43.70	29.51	28.63	28.63

Arab average	57.02	55.48	38.69	39.76	35.88
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	5	9	9	8	9
Bahrain	9	8	15	16	14
Comoros	1	1	6	6	4
Djibouti	-	-	-	15	17
Egypt	3	5	2	2	1
Iraq	12	15	19	19	11
Jordan	4	3	4	5	6
Kuwait	14	14	16	17	19
Lebanon	16	17	18	18	20
Libya	19	19	20	21	18
Mauritania	20	20	8	12	13
Morocco	7	6	5	4	5
Oman	15	13	11	11	16
Palestine	18	18	17	20	21
Qatar	13	12	14	14	7
Saudi Arabia	17	16	13	13	15
Somalia	-	-	-	-	-
Sudan	2	2	1	1	2
Syria	8	7	10	10	12
Tunisia	6	4	3	3	3
UAE	11	11	12	9	10
Yemen	10	10	7	7	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



2017 OECD MOBILE BASKETS RANKING, 300 CALLS AND 1GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 300 calls, 1 GB basket, 2015-2019
Results in USD/PPP including VAT per month

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	56.87	63.92	53.48	53.48	30.61
Bahrain	52.47	48.52	52.47	52.47	50.37
Comoros	-	-	114.26	98.65	36.41
Djibouti				-	-
Egypt	24.42	25.97	19.91	15.15	15.15
Iraq	150.69	150.69	150.66	158.99	70.20
Jordan	19.27	19.27	18.02	23.60	20.35
Kuwait	92.32	71.47	92.72	92.72	92.72
Lebanon	168.72	168.72	133.18	134.39	118.69
Libya	301.60	301.60	139.79	141.81	107.04
Mauritania	268.92	317.32	71.53	247.21	79.95
Morocco	27.01	27.01	27.01	27.01	27.98
Oman	138.70	122.68	99.93	100.11	124.28
Palestine	210.70	218.68	96.14	127.02	93.39
Qatar	100.78	79.69	75.08	75.08	49.60
Saudi Arabia	120.88	103.59	100.38	98.93	77.30
Somalia					
Sudan	15.45	15.78	18.21	18.91	23.98
Syria	57.53	57.53	78.23	78.23	77.83
Tunisia	40.58	40.58	36.13	36.13	36.13
UAE	115.29	91.13	77.53	77.89	65.28
Yemen	90.04	90.04	79.34	77.16	67.28

Arab average	108.01	106.01	76.70	86.75	63.23
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	8	9	7	8	6
Bahrain	7	7	6	7	10
Comoros	1	1	17	14	8
Djibouti	-	-	-	1	1
Egypt	4	4	3	2	2
Iraq	16	16	20	20	13
Jordan	3	3	1	4	3
Kuwait	11	10	13	13	17
Lebanon	17	17	18	18	20
Libya	20	19	19	19	19
Mauritania	19	20	8	21	16
Morocco	5	5	4	5	5
Oman	15	15	15	16	21
Palestine	18	18	14	17	18
Qatar	12	11	9	9	9
Saudi Arabia	14	14	16	15	14
Somalia	-	-	-	-	-
Sudan	2	2	2	3	4
Syria	9	8	11	12	15
Tunisia	6	6	5	6	7
UAE	13	13	10	11	11
Yemen	10	12	12	10	12

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



2017 OECD MOBILE BASKETS RANKING, 900 CALLS AND 2GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 900 calls, 2 GB basket, 2015-2019
Results in USD/PPP including VAT per month

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	204.27	229.90	75.26	103.83	45.91
Bahrain	83.53	83.39	111.14	111.14	114.88
Comoros	-	-	373.21	391.14	349.78
Djibouti				-	-
Egypt	63.30	63.30	46.22	27.37	27.37
Iraq	519.77	469.75	519.77	519.77	284.29
Jordan	23.93	23.93	28.52	28.33	20.35
Kuwait	106.72	85.57	176.23	225.57	216.60
Lebanon	412.45	412.45	374.29	377.70	353.15
Libya	694.92	694.92	488.88	351.86	269.68
Mauritania	569.90	672.48	719.73	660.76	753.73
Morocco	54.28	54.28	54.28	54.28	56.02
Oman	222.75	316.16	222.75	222.75	203.93
Palestine	1,259.02	549.46	250.75	290.88	148.43
Qatar	123.99	123.99	123.99	123.99	99.19
Saudi Arabia	196.91	197.44	197.44	203.86	151.76
Somalia					
Sudan	38.80	38.69	52.72	37.07	40.52
Syria	142.07	142.07	205.93	205.93	185.51
Tunisia	115.62	71.54	75.48	75.48	75.48
UAE	226.38	215.61	161.92	164.76	173.00
Yemen	225.70	225.70	178.45	173.88	158.09

Arab average	278.12	245.82	221.85	217.52	186.38
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	12	14	5	7	5
Bahrain	6	7	7	8	9
Comoros	1	1	16	19	19
Djibouti	-	-	-	1	1
Egypt	5	5	2	2	3
Iraq	17	17	19	20	18
Jordan	2	2	1	3	2
Kuwait	7	8	10	15	16
Lebanon	16	16	17	18	20
Libya	19	20	18	17	17
Mauritania	18	19	20	21	21
Morocco	4	4	4	5	6
Oman	13	15	14	14	15
Palestine	20	18	15	16	10
Qatar	9	9	8	9	8
Saudi Arabia	11	11	12	12	11
Somalia	-	-	-	-	-
Sudan	3	3	3	4	4
Syria	10	10	13	13	14
Tunisia	8	6	6	6	7
UAE	15	12	9	10	13
Yemen	14	13	11	11	12

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



2017 OECD MOBILE BASKETS RANKING, 30 CALLS + 0.5GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 30 calls, 0.5 GB basket, 2015-2019
Results in USD/PPP including VAT per month

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	13.11	18.26	24.52	30.61	30.61
Bahrain	34.48	31.34	45.88	45.88	44.08
Comoros			22.87	22.87	16.05
Djibouti				50.91	50.91
Egypt	12.14	9.23	9.14	8.05	8.05
Iraq	42.20	42.20	42.20	42.20	37.26
Jordan	17.12	17.12	17.12	20.38	17.06
Kuwait	63.61	54.58	35.25	40.73	40.73
Lebanon	35.85	50.85	50.85	51.31	43.65
Libya	112.51	112.51	38.28	50.41	30.96
Mauritania	116.99	138.05	22.26	24.45	23.63
Morocco	26.60	25.46	13.37	13.37	13.97
Oman	24.82	24.47	24.28	24.47	33.25
Palestine	67.98	65.74	35.05	45.96	45.96
Qatar	40.17	45.38	28.11	28.11	25.96
Saudi Arabia	56.08	56.08	27.59	27.59	41.66
Somalia					
Sudan	3.02	3.24	3.78	3.92	7.77
Syria	20.77	20.77	22.63	22.63	22.28
Tunisia	23.12	17.34	8.27	8.27	8.89
UAE	47.42	34.06	28.61	24.44	24.65
Yemen	27.22	26.62	29.51	28.63	27.65

Arab average	41.33	41.75	26.48	29.29	28.33
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	3	5	10	14	12
Bahrain	10	10	19	17	19
Comoros	-	-	8	7	5
Djibouti	-	-	-	20	21
Egypt	2	2	3	2	2
Iraq	13	12	18	16	15
Jordan	4	3	5	5	6
Kuwait	16	15	16	15	16
Lebanon	11	14	20	21	18
Libya	18	18	17	19	13
Mauritania	19	19	6	9	8
Morocco	8	8	4	4	4
Oman	7	7	9	10	14
Palestine	17	17	15	18	20
Qatar	12	13	12	12	10
Saudi Arabia	15	16	11	11	17
Somalia	-	-	-	-	-
Sudan	1	1	1	1	1
Syria	5	6	7	6	7
Tunisia	6	4	2	3	3
UAE	14	11	13	8	9
Yemen	9	9	14	13	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



2017 OECD MOBILE BASKETS RANKING, 100 CALLS + 2GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 100 calls, 2 GB basket, 2015-2019
Results in USD/PPP including VAT per month

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	25.46	35.53	49.04	36.86	30.61
Bahrain	43.76	36.52	52.47	52.47	44.08
Comoros	-	-	30.41	28.41	22.74
Djibouti				-	-
Egypt	27.76	25.71	21.75	17.71	17.71
Iraq	92.92	92.92	99.83	99.83	65.86
Jordan	18.02	18.02	18.02	23.60	20.35
Kuwait	70.49	54.58	54.56	54.56	54.56
Lebanon	105.04	87.42	107.19	95.89	94.93
Libya	447.48	447.48	228.37	91.35	51.45
Mauritania	136.82	154.51	202.60	110.21	42.19
Morocco	27.28	27.28	18.80	19.24	19.68
Oman	104.81	73.62	103.76	58.87	55.49
Palestine	780.39	169.68	169.68	169.68	84.66
Qatar	84.46	83.63	66.73	75.08	49.60
Saudi Arabia	105.92	95.76	67.84	67.84	55.10
Somalia					
Sudan	9.10	8.98	12.34	12.81	16.27
Syria	36.31	36.31	43.09	43.09	51.54
Tunisia	57.81	57.81	38.87	28.42	35.93
UAE	94.88	47.42	71.13	34.15	62.37
Yemen	48.48	48.48	70.76	64.45	60.30

Arab average	121.96	84.30	76.36	59.23	46.77
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	4	6	8	9	7
Bahrain	8	8	9	11	10
Comoros	1	1	5	6	6
Djibouti	-	-	-	1	1
Egypt	6	4	4	3	3
Iraq	13	16	15	19	19
Jordan	3	3	2	5	5
Kuwait	11	11	10	12	14
Lebanon	16	15	17	18	21
Libya	19	20	20	17	12
Mauritania	18	18	19	20	9
Morocco	5	5	3	4	4
Oman	15	13	16	13	16
Palestine	20	19	18	21	20
Qatar	12	14	11	16	11
Saudi Arabia	17	17	12	15	15
Somalia	-	-	-	-	-
Sudan	2	2	1	2	2
Syria	7	7	7	10	13
Tunisia	10	12	6	7	8
UAE	14	9	14	8	18
Yemen	9	10	13	14	17

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



2017 OECD MOBILE BASKETS RANKING, 300 CALLS + 5GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 300 calls, 5 GB basket, 2015-2019
Results in USD/PPP including VAT per month

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	71.23	63.92	75.26	61.23	30.61
Bahrain	52.47	48.52	52.47	52.47	50.37
Comoros	-	-	163.52	98.65	60.95
Djibouti				-	-
Egypt	49.27	102.74	44.92	37.48	37.48
Iraq	273.21	242.38	279.85	245.45	158.99
Jordan	31.70	31.70	28.52	28.33	20.35
Kuwait	94.82	106.72	92.72	92.72	92.72
Lebanon	186.09	186.09	180.88	179.98	159.02
Libya	1,129.38	1,129.38	760.62	606.62	107.04
Mauritania	268.92	317.32	328.26	331.90	98.20
Morocco	104.48	62.47	40.64	40.64	37.12
Oman	138.70	196.23	138.70	124.28	124.28
Palestine	2,091.60	1,765.98	250.75	290.88	109.72
Qatar	123.99	113.84	94.67	109.80	74.39
Saudi Arabia	152.22	159.08	119.54	98.93	99.89
Somalia					
Sudan	28.53	30.60	33.68	34.97	40.44
Syria	76.43	76.43	97.13	97.13	132.27
Tunisia	115.62	115.62	109.67	115.62	109.67
UAE	116.20	91.13	77.53	91.98	96.58
Yemen	102.60	102.60	190.88	205.45	159.79

Arab average	274.08	260.14	158.01	147.23	89.99
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	6	6	6	7	3
Bahrain	5	4	5	6	7
Comoros	1	1	14	11	8
Djibouti	-	-	-	1	1
Egypt	4	10	4	4	5
Iraq	18	17	18	18	19
Jordan	3	3	1	2	2
Kuwait	8	11	8	9	10
Lebanon	16	15	15	16	20
Libya	19	19	20	21	14
Mauritania	17	18	19	20	12
Morocco	10	5	3	5	4
Oman	14	16	13	15	17
Palestine	20	20	17	19	16
Qatar	13	12	9	13	9
Saudi Arabia	15	14	12	12	13
Somalia	-	-	-	-	-
Sudan	2	2	2	3	6
Syria	7	7	10	10	18
Tunisia	11	13	11	14	15
UAE	12	8	7	8	11
Yemen	9	9	16	17	21

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



2017 OECD MOBILE BASKETS RANKING, 900 CALLS + 10GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 900 calls, 10 GB basket, 2015-2019 Ranking from cheapest to most expensive, 2015-2019
Results in USD/PPP including VAT per month

	2015	2016	2017	2018	2019
Algeria	204.27	229.90	75.26	103.83	91.48
Bahrain	83.53	83.39	132.00	132.00	114.88
Comoros	-	-	450.17	391.14	376.55
Djibouti				-	-
Egypt	143.22	169.49	112.99	96.61	96.61
Iraq	828.55	778.53	828.55	828.55	580.72
Jordan	111.84	117.45	40.39	40.39	28.49
Kuwait	211.47	211.47	176.23	225.57	216.60
Lebanon	447.21	447.21	374.29	377.70	353.15
Libya	2,350.48	2,350.48	1,730.55	1,576.56	269.68
Mauritania	569.90	672.48	719.73	731.83	753.73
Morocco	108.84	108.84	108.84	108.84	56.02
Oman	222.75	392.45	222.75	222.75	203.93
Palestine	4,003.72	5,107.41	250.75	290.88	290.88
Qatar	123.99	173.59	173.59	158.71	123.99
Saudi Arabia	240.80	253.41	234.76	241.09	151.76
Somalia					
Sudan	74.01	83.36	78.71	41.63	41.63
Syria	181.76	181.76	245.62	245.62	278.89
Tunisia	-	231.25	201.87	201.87	251.48
UAE	-	215.61	161.92	197.55	196.75
Yemen	250.81	250.81	369.79	396.15	293.74

Arab average	597.48	634.68	334.44	330.46	238.55
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	11	11	2	5	5
Bahrain	5	3	6	7	7
Comoros	1	1	17	17	19
Djibouti	-	-	-	1	1
Egypt	9	6	5	4	6
Iraq	18	18	19	20	20
Jordan	7	5	1	2	2
Kuwait	12	9	9	12	12
Lebanon	16	16	16	16	18
Libya	19	19	20	21	14
Mauritania	17	17	18	19	21
Morocco	6	4	4	6	4
Oman	13	15	11	11	11
Palestine	20	20	14	15	16
Qatar	8	7	8	8	8
Saudi Arabia	14	14	12	13	9
Somalia	-	-	-	-	-
Sudan	4	2	3	3	3
Syria	10	8	13	14	15
Tunisia	1	12	10	10	13
UAE	1	10	7	9	10
Yemen	15	13	15	18	17

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





OBSERVATIONS FROM MOBILE TIME SERIES RESULTS

- While there have been a mix of decreases and increases over the period 2018 to 2019, the predominant change is one of decreasing prices.
- In terms of the low usage baskets, both with and without data, the overall average was broadly unchanged, with many operators making no changes to tariffs at all. The change in the 30 calls basket from 2018 to 2019, for example, was less the USD PPP 1
- For baskets that included more data, the cost reductions were much more dramatic, as providers increased data allowances without accompanying large increases in costs. This is a trend that is evident across OECD countries as well.
- Most providers made changes to mobile pricing. Some of the changes that were observed include, but are not limited to the following:
 - Both ATM and Djezzy Algeria introduced new plans
 - Both Egyptian providers made numerous tariff changes, includes changes to top ups and allowances, and extension of data allowances
 - Jawwal in Palestine extended it Hala Plus range, and included additional data add-ons.
 - Ooredoo and Vodafone in Qatar introduced a range of Flex tariffs, which include a number of flex points that can be used across voice, SMS and data according to user requirements.
 - Mobily in Saudi Arabia overhauled its PAYG plans, and introduced new postpaid packages. Al Jawal introduced new Mofawtar plans.
 - Both Tunisie Télécom and Ooredoo in Tunisia made change to both pre and post paid offerings, with the introduction of new PAYG plans, and changes to monthly fees for postpaid.
- Many operators across the Arab countries have made at least some changes to their mobile tariff offerings since 2018, although there are also a number of providers that have made limited, if any change.
 - The average number of offerings per provider has increased slightly, from 26 to 24.
- Prepaid plans account for just under half of all plans, while a similar number of are voice and data plans. This is not a significant change since last year.





FIXED BROADBAND BASKET RESULTS 2019



FIXED BROADBAND BASKET METHODOLOGY

- Research covering 396 fixed broadband service offerings from the incumbent ISPs* in 21 Arab countries
- Costs are derived using the OECD broadband basket methodology, and are based on the baskets that were defined by OECD in 2017, which consider a number of speed ranges and usage levels (15 in total). The baskets are shown in the table below. As most ISPs in the Arab countries do not offer services in the highest speed category, results for these have not been included (greyed out in the table).
 - As of May/June 2019, only three of the Arab countries had broadband services >1000 Mb/s; Jordan, Qatar and UAE, and only for residential services. In OECD countries, the availability of very high speed services at 1G/s and above has improved over time, and is now offered in around 75% of member states.
 - Costs are shown separately for both residential and business services
- Total monthly cost calculated based on usage profiles, which are dependent on the speed of service, as shown below (12 of the total 15) :

Minimum Download Speed (Mb/s)	Low alternative data volume (GB/month)	Medium data volume (GB/month)	High alternative data volume (GB/month)
0.256	5	15	45
10	10	30	90
25	20	60	180
100	40	120	360
1000	100	300	900

The OECD data shown refer to the incumbent ISP* fixed broadband services in the 35 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

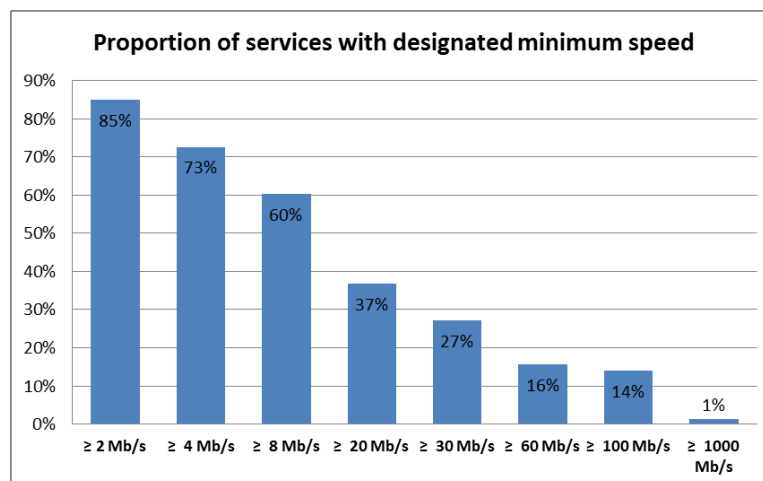
*** Incumbent ISP will normally mean the ISP owned by the incumbent operator in the country.**





FIXED BROADBAND DATA ISSUES

- Price data is not available for broadband services in Somalia
- Speeds have continued to increase, with no ISPs having offerings below 256 kb/s. Maximum speeds have continued to increase. As shown in the table below, 85% of services have a minimum advertised download speed of 2 Mb/s or above, and 37% are at speeds of at least 20 Mb/s.



- Speeds above 2 Mb/s are now available in 20 of the 21 countries covered. Prices for Iraq have been included this year, with services offered from 512 Kb/s to 2 Mb/s. Libya, which previously only had very low speed services, now offers broadband services from 2 Mb/s to 8 Mb/s.
- Average speed across the Arab countries have risen dramatically - up from 45.2 Mb/s in 2018 to 82.2 Mb/s in 2018

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.

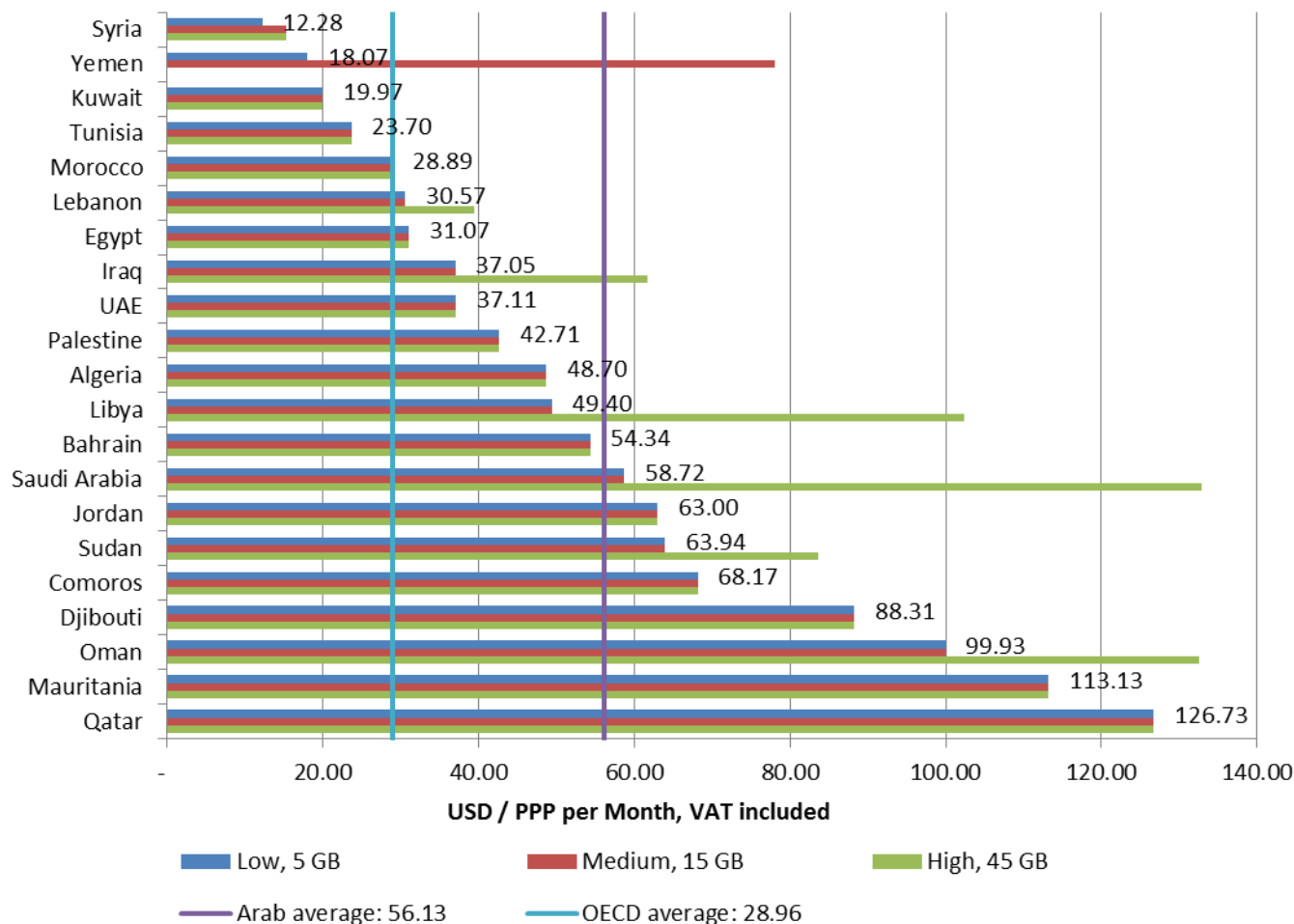


RESIDENTIAL FIXED BROADBAND VERY LOW SPEED OECD 2017 BASKET ≥ 0.25 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

OECD 2017: Residential Fixed Broadband ≥ 0.25 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 5 GB
Medium usage: 10 GB
High usage: 45 GB.

Average lines are based
on the medium usage
basket.

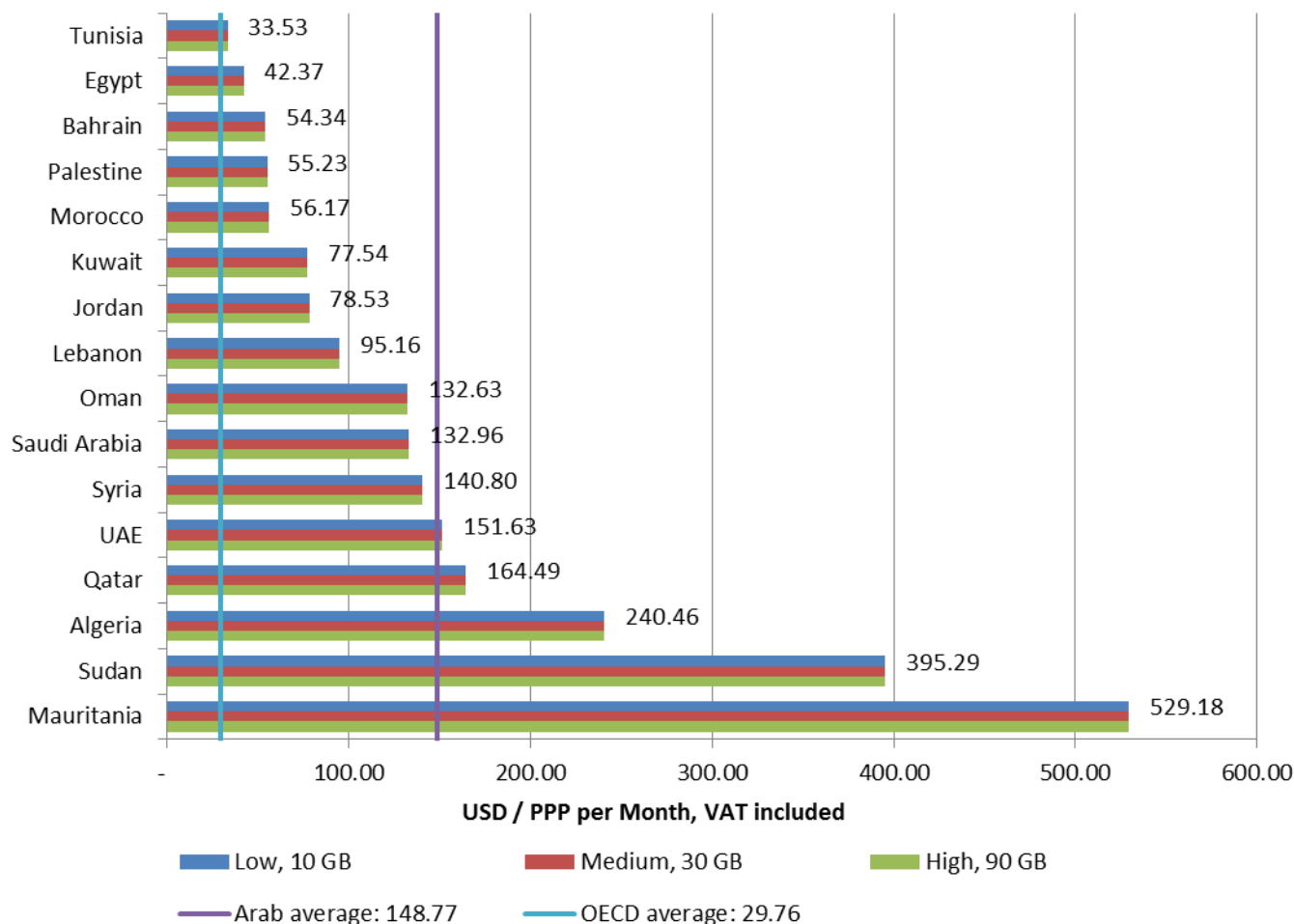


RESIDENTIAL FIXED BROADBAND LOW SPEED OECD 2017 BASKET ≥ 10 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

OECD 2017: Residential Fixed Broadband ≥ 10 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 10 GB
Medium usage: 30 GB
High usage: 90 GB.

Average lines are based
on the medium usage
basket.

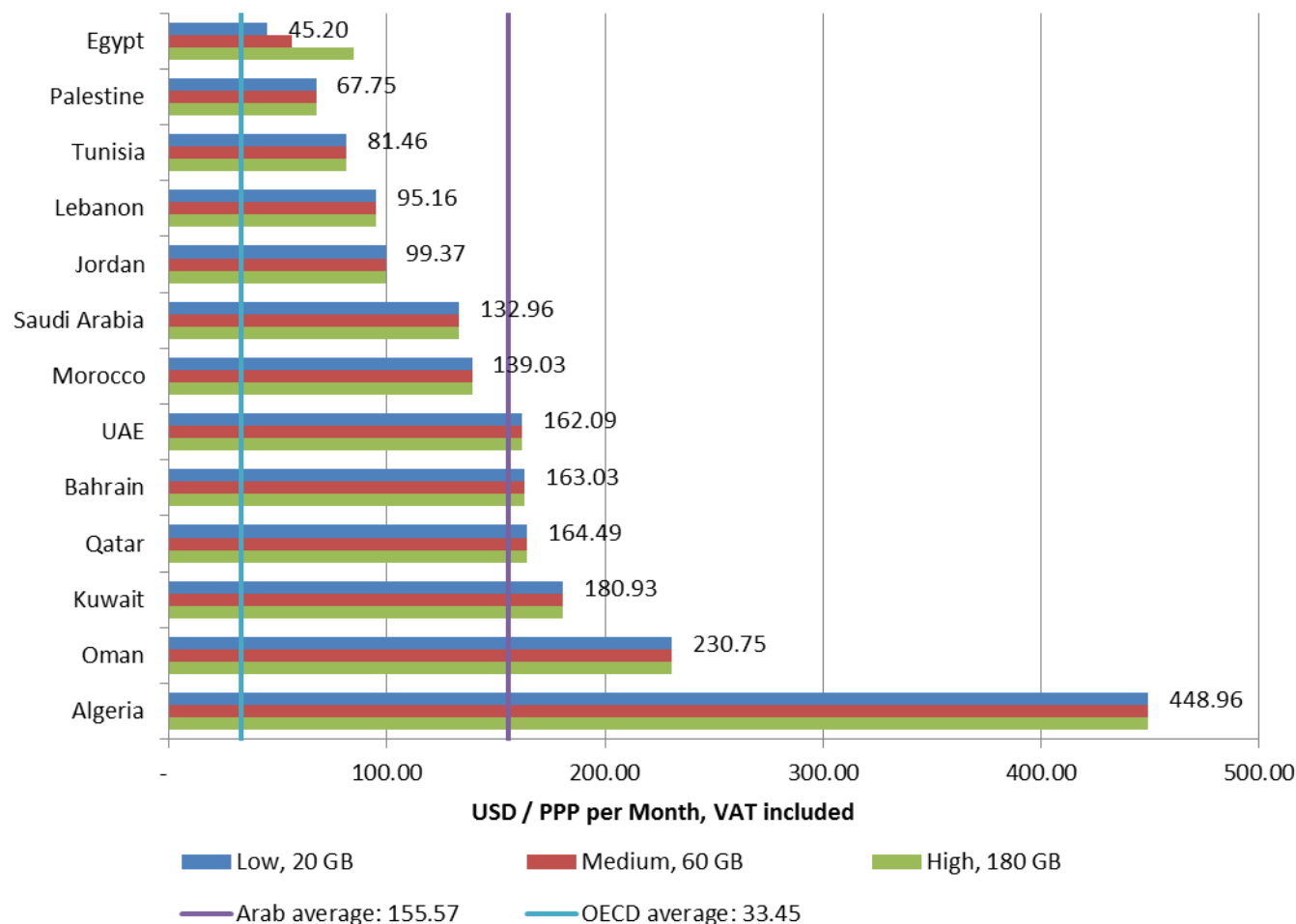


RESIDENTIAL FIXED BROADBAND MEDIUM SPEED OECD 2017 BASKET ≥ 25 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

OECD 2017: Residential Fixed Broadband ≥ 25 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 20 GB
Medium usage: 60 GB
High usage: 180 GB.

Average lines are based
on the medium usage
basket.

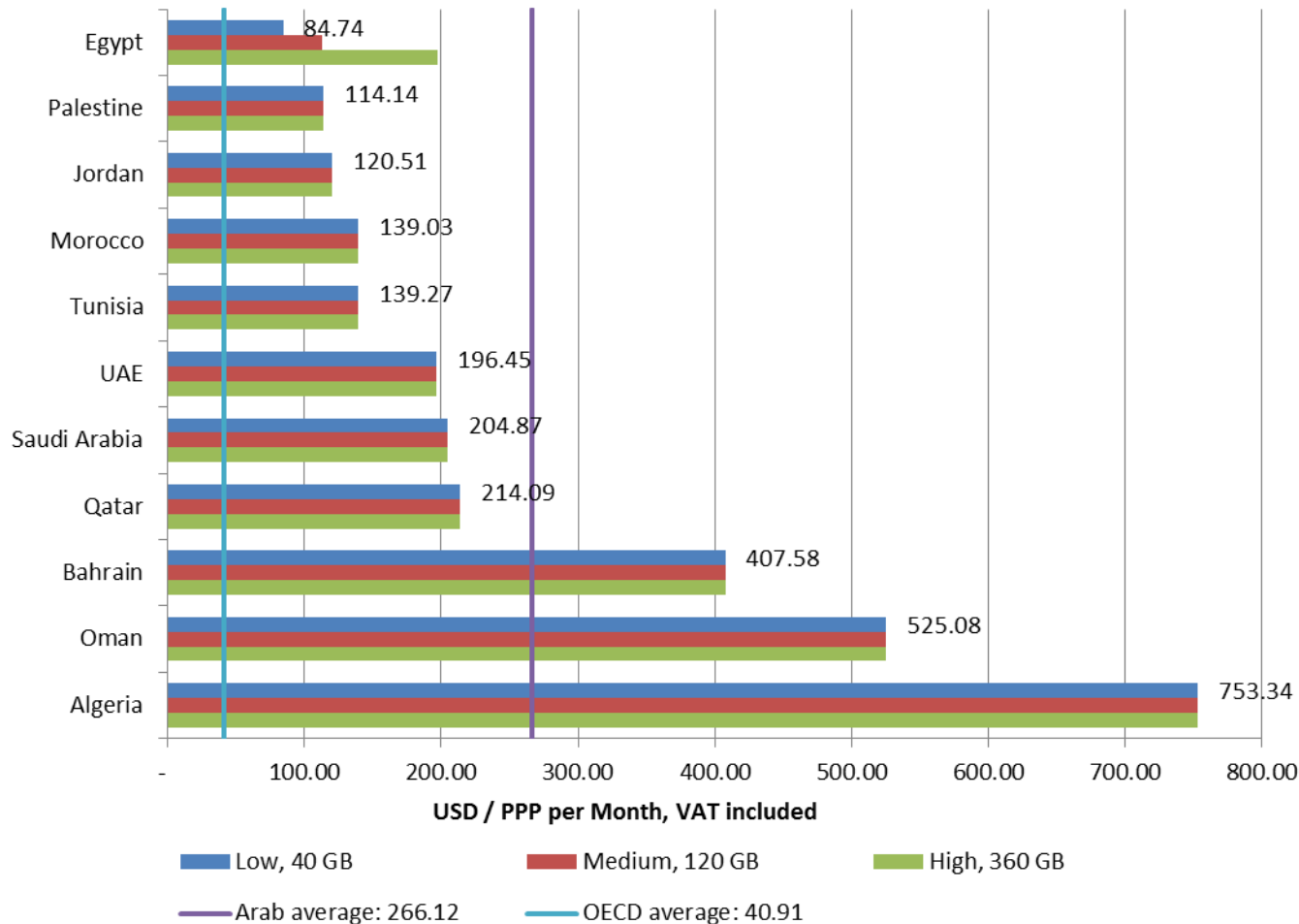


RESIDENTIAL FIXED BROADBAND HIGH SPEED OECD 2017 BASKET ≥ 100 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

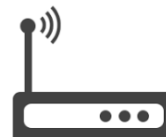
OECD 2017: Residential Fixed Broadband ≥ 100 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 40 GB
Medium usage: 120 GB
High usage: 360 GB.

Average lines are based
on the medium usage
basket.

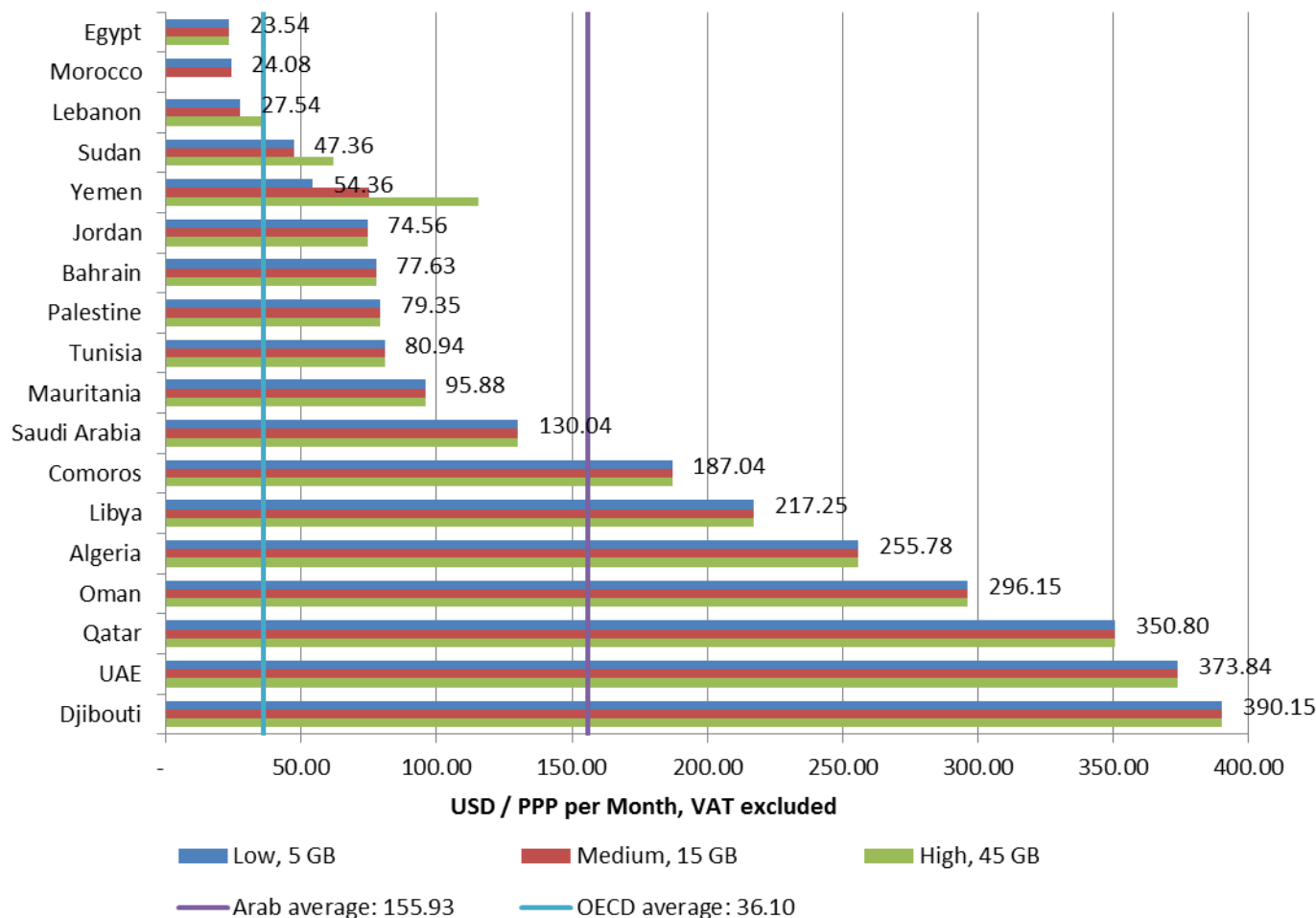


BUSINESS FIXED BROADBAND VERY LOW SPEED OECD 2017 BASKET ≥ 0.25 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

OECD 2017: Business Fixed Broadband ≥ 0.25 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 5 GB
Medium usage: 10 GB
High usage: 45 GB.

Average lines are based
on the medium usage
basket.

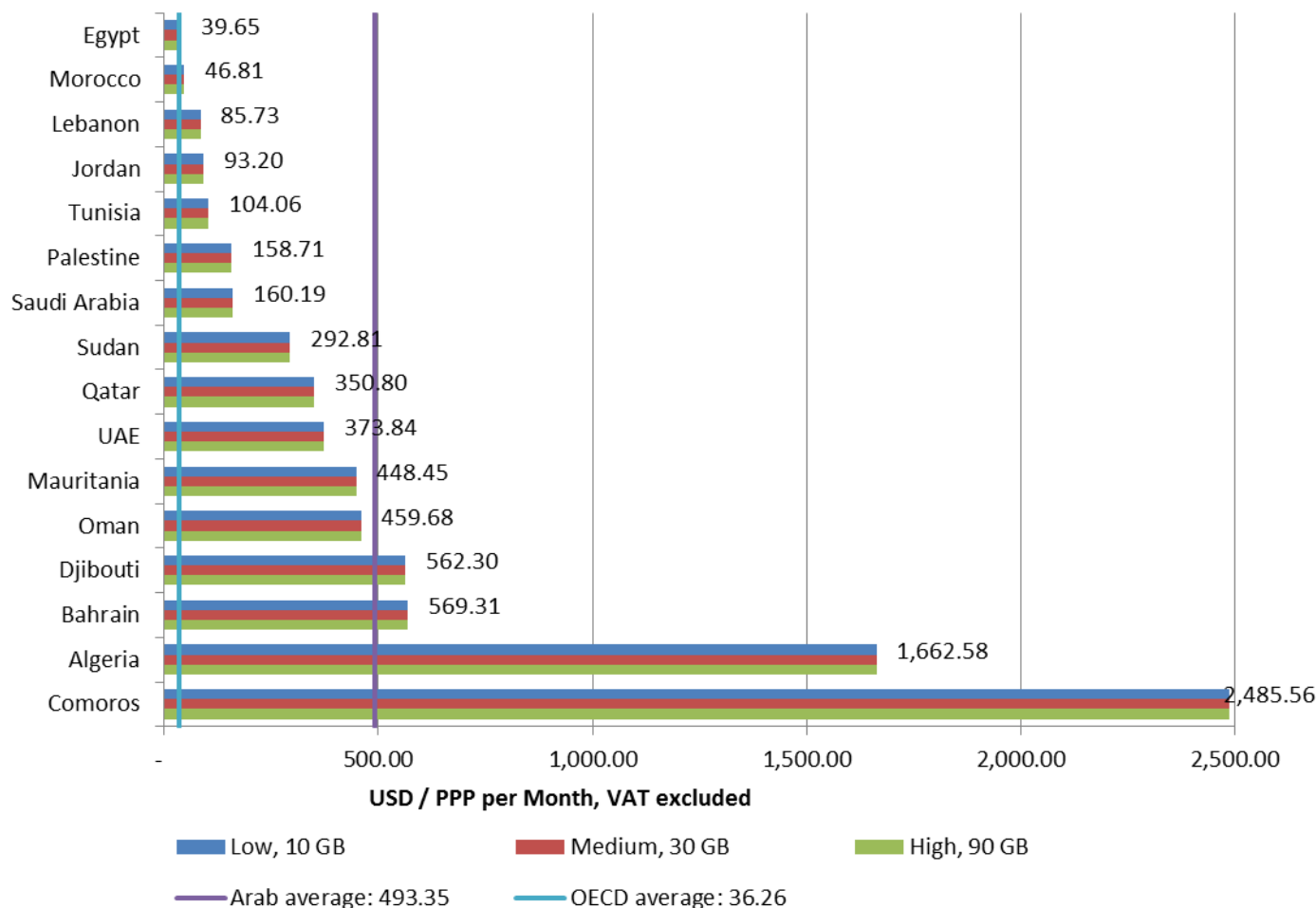


BUSINESS FIXED BROADBAND LOW SPEED OECD 2017 BASKET ≥ 10 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

OECD 2017: Business Fixed Broadband ≥ 10 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 10 GB
Medium usage: 30 GB
High usage: 90 GB.

Average lines are based
on the medium usage
basket.

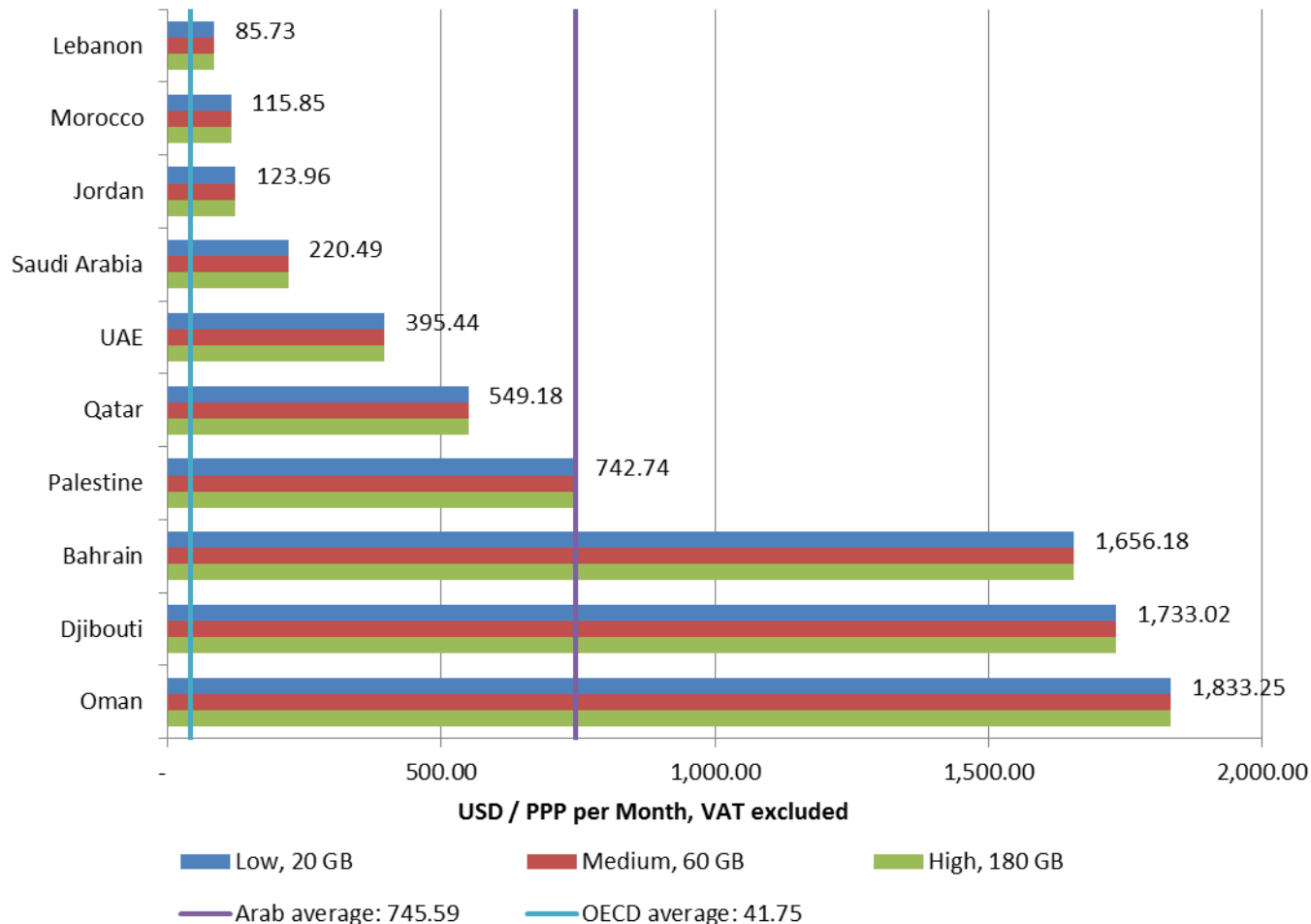


BUSINESS FIXED BROADBAND MEDIUM SPEED OECD 2017 BASKET ≥ 25 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

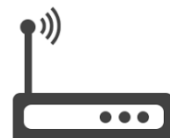
OECD 2017: Business Fixed Broadband ≥ 25 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 20 GB
Medium usage: 60 GB
High usage: 180 GB.

Average lines are based
on the medium usage
basket.



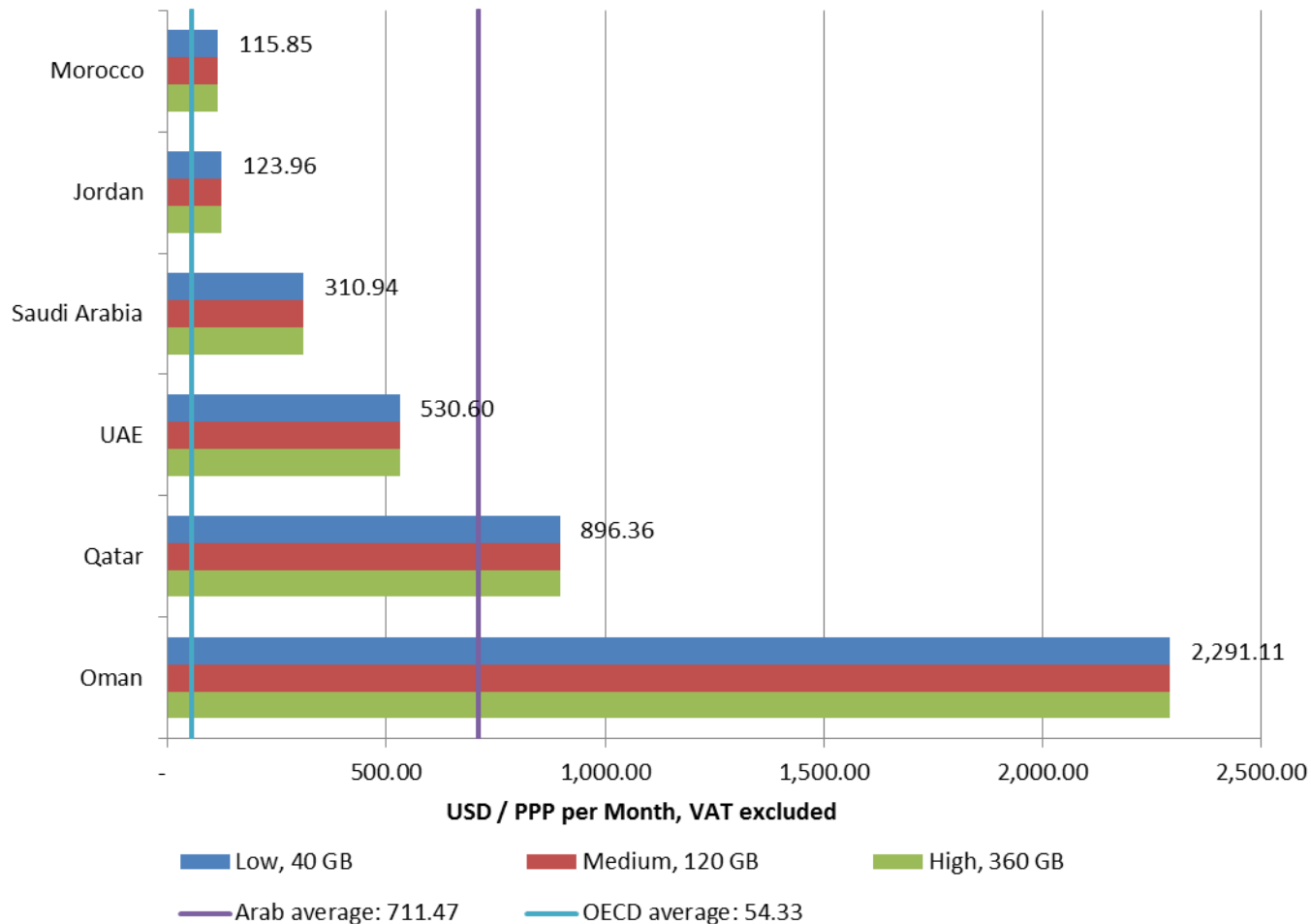
BUSINESS FIXED BROADBAND HIGH SPEED

OECD 2017 BASKET ≥ 100 MB/S



AREGNET Fixed Broadband Price Benchmarking 2019

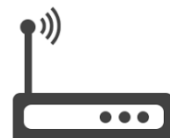
OECD 2017: Business Fixed Broadband ≥ 100 Mb/s, low, medium and high usage



Total monthly cost
calculated based on
three usage baskets:

Low usage: 40 GB
Medium usage: 120 GB
High usage: 360 GB.

Average lines are based
on the medium usage
basket.



OBSERVATIONS FROM FIXED BROADBAND BASKET RESULTS



- There is a large variation in ranking according to the speed of service, for residential, and to a lesser degree, business services. The side-by-side tables below shows the 3 cheapest and 3 most expensive countries for each of the 4 baskets considered for medium usage – residential and business (low and high usage may differ, but typically don't), as well as the Arab and OECD averages for each.

Residential-medium usage	Cheapest			Most expensive			Residential	USD PPP/month inc VAT	
	1st	2nd	3rd	1st	2nd	3rd		OECD average	Arab average
≥ 0.25 Mb/s / 15 GB	Syria	Kuwait	Tunisia	Qatar	Mauritania	Oman	≥ 0.25 Mb/s / 15 GB	28.96	56.13
≥ 10 Mb/s / 30 GB	Tunisia	Egypt	Bahrain	Mauritania	Sudan	Algeria	≥ 10 Mb/s / 30 GB	29.76	148.77
≥ 25 Mb/s / 60 GB	Egypt	Palestine	Tunisia	Algeria	Oman	Kuwait	≥ 25 Mb/s / 60 GB	33.45	155.57
≥ 100 Mb/s / 120 GB	Egypt	Palestine	Jordan	Algeria	Oman	Bahrain	≥ 100 Mb/s / 120 GB	40.91	266.12
Business-medium usage	Cheapest			Most expensive			Business	USD PPP/month excl VAT	
	1st	2nd	3rd	1st	2nd	3rd		OECD average	Arab average
≥ 0.25 Mb/s / 15 GB	Egypt	Morocco	Lebanon	Djibouti	UAE	Qatar	≥ 0.25 Mb/s / 15 GB	36.10	155.93
≥ 10 Mb/s / 30 GB	Egypt	Morocco	Lebanon	Comoros	Algeria	Bahrain	≥ 10 Mb/s / 30 GB	36.26	493.35
≥ 25 Mb/s / 60 GB	Lebanon	Morocco	Jordan	Oman	Djibouti	Bahrain	≥ 25 Mb/s / 60 GB	41.75	745.59
≥ 100 Mb/s / 120 GB	Morocco	Jordan	Saudi Arabia	Oman	Qatar	UAE	≥ 100 Mb/s / 120 GB	54.33	711.47

- Egypt features as one of the cheapest country for both residential and business services, across all speed up to 30 Mb/s (speeds above 30 Mb/s were not available in Egypt at the time of data collection). Syria, Bahrain, Palestine, Jordan and Tunisia are also among the cheapest for residential users. Egypt, Morocco, Lebanon, Jordan and Saudi Arabia are the cheapest countries for business broadband. Residential users in Algeria, Qatar, Oman, Mauritania and Kuwait, among others, face the most expensive costs for broadband, while for business users, Comoros, Algeria, Oman, Djibouti, Bahrain and UAE are among the most expensive.
- The number of Arab countries that are below the OECD average depends on the speed of service, and, for some countries, on the usage level. Generally, however, the greater the speed, the greater the variation in cost between the Arab countries and the OECD average.
- The Arab average residential cost is up to 6.5 times higher than the average OECD. For business services, the average is up to 17.9 times higher.
 - The residential figure continues to be skewed by particularly high costs in a number of countries, in particular, Algeria, Oman, Mauritania and Sudan. For business services, the Arab average is heavily skewed by a number of countries, including Comoros, Djibouti, Saudi Arabia, Algeria and Oman.
- Usage based charges are still prevalent, and appear in offers across 7 of the Arab countries, however, they have had limited impact on the basket results, and flat rate services have featured as the cheapest. There are also a number of services that include a limited monthly allowance only although some of these allowances can be very generous. In many OECD countries, usage-based charges often only apply for a very few ISPs.





FIXED BROADBAND TIME SERIES ANALYSIS AND RANKING TABLES 2015-2019

2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL ≥ 0.25 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 5 GB / ≥ 0.25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria	51.59	48.70	48.70	48.70	48.70
Bahrain	25.88	25.88	52.47	51.76	54.34
Comoros	82.54	86.26	68.17	68.17	68.17
Djibouti	87.70	111.80	88.03	88.31	88.31
Egypt	14.12	14.12	14.12	14.12	31.07
Iraq					37.05
Jordan	71.71	67.73	61.82	61.82	63.00
Kuwait				19.97	19.97
Lebanon	31.41	31.09	29.98	30.57	30.57
Libya	64.56	64.56	64.56	64.56	49.40
Mauritania	30.32	30.32	95.99	113.13	113.13
Morocco	27.76	28.45	27.76	27.76	28.89
Oman	111.19	113.01	99.93	99.93	99.93
Palestine	71.43	103.10	42.71	42.71	42.71
Qatar	118.45	118.45	143.83	136.65	126.73
Saudi Arabia	94.34	94.34	55.93	58.72	58.72
Somalia					
Sudan					63.94
Syria	4.96	5.38	9.16	9.16	12.28
Tunisia	27.75	27.75	28.33	30.76	23.70
UAE	97.53	76.44	77.09	37.11	37.11
Yemen	26.64	26.64	27.90	18.07	18.07

Arab average	57.77	59.67	57.58	53.79	53.13
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	9	9	8	10	11
Bahrain	3	3	9	11	13
Comoros	13	13	13	15	17
Djibouti	14	16	15	16	18
Egypt	2	2	2	2	7
Iraq	-	-	-	-	8
Jordan	12	11	11	13	15
Kuwait	-	-	-	4	3
Lebanon	8	8	6	6	6
Libya	10	10	12	14	12
Mauritania	7	7	16	18	20
Morocco	6	6	3	5	5
Oman	17	17	17	17	19
Palestine	11	15	7	9	10
Qatar	18	18	18	19	21
Saudi Arabia	15	14	10	12	14
Somalia	-	-	-	-	-
Sudan	-	-	-	-	16
Syria	1	1	1	1	1
Tunisia	5	5	5	7	4
UAE	16	12	14	8	9
Yemen	4	4	4	3	2

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL ≥ 0.25 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 15 GB / ≥ 0.25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria	51.59	48.70	48.70	48.70	48.70
Bahrain	25.88	25.88	52.47	51.76	54.34
Comoros	82.54	86.26	68.17	68.17	68.17
Djibouti	184.10	111.80	88.03	88.31	88.31
Egypt	14.12	14.12	26.84	26.84	31.07
Iraq					37.05
Jordan	100.07	95.49	61.82	61.82	63.00
Kuwait				19.97	19.97
Lebanon	31.41	31.09	29.98	30.57	30.57
Libya	64.56	64.56	64.56	64.56	49.40
Mauritania	30.32	30.32	95.99	113.13	113.13
Morocco	27.76	28.45	27.76	27.76	28.89
Oman	130.82	132.63	99.93	99.93	99.93
Palestine	71.43	103.10	42.71	42.71	42.71
Qatar	118.45	118.45	143.83	136.65	126.73
Saudi Arabia	94.34	94.34	55.93	58.72	58.72
Somalia					
Sudan					63.94
Syria	4.96	5.38	12.94	12.94	15.31
Tunisia	27.75	27.75	28.33	30.76	23.70
UAE	97.53	76.44	77.09	37.11	37.11
Yemen	26.64	26.64	81.72	78.01	78.01

Arab average	65.79	62.30	61.49	57.81	56.13
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	9	9	7	9	10
Bahrain	3	3	8	10	12
Comoros	12	12	12	14	16
Djibouti	18	16	15	16	18
Egypt	2	2	2	3	6
Iraq	-	-	-	-	7
Jordan	15	14	10	12	14
Kuwait	-	-	-	2	2
Lebanon	8	8	5	5	5
Libya	10	10	11	13	11
Mauritania	7	7	16	18	20
Morocco	6	6	3	4	4
Oman	17	18	17	17	19
Palestine	11	15	6	8	9
Qatar	16	17	18	19	21
Saudi Arabia	13	13	9	11	13
Somalia	-	-	-	-	-
Sudan	-	-	-	-	15
Syria	1	1	1	1	1
Tunisia	5	5	4	6	3
UAE	14	11	13	7	8
Yemen	4	4	14	15	17

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL ≥ 0.25 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 45 GB / ≥ 0.25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria	51.59	48.70	48.70	48.70	48.70
Bahrain	25.88	51.76	52.47	51.76	54.34
Comoros	82.54	86.26	68.17	68.17	68.17
Djibouti	907.13	111.80	88.03	88.31	88.31
Egypt	14.12	14.12	26.84	26.84	31.07
Iraq					61.76
Jordan	100.07	95.49	61.82	61.82	63.00
Kuwait				19.97	19.97
Lebanon	42.88	42.56	39.44	39.46	39.46
Libya	317.18	317.18	317.18	317.18	102.45
Mauritania	30.32	30.32	95.99	113.13	113.13
Morocco	27.76	28.45	27.76	27.76	28.89
Oman	130.82	132.63	132.63	132.63	132.63
Palestine	71.43	103.10	42.71	42.71	42.71
Qatar	118.45	118.45	143.83	136.65	126.73
Saudi Arabia	94.34	94.34	126.63	132.96	132.96
Somalia					
Sudan					83.65
Syria	4.96	5.38	12.94	12.94	15.31
Tunisia	27.75	27.75	28.33	30.76	23.70
UAE	97.53	76.44	77.09	37.11	37.11
Yemen	26.64	26.64	127.23		

Arab average	120.63	78.41	84.32	77.16	65.70
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	9	8	7	9	9
Bahrain	3	9	8	10	10
Comoros	11	11	10	12	13
Djibouti	18	15	12	13	15
Egypt	2	2	2	3	5
Iraq	-	-	-	-	11
Jordan	14	13	9	11	12
Kuwait	-	-	-	2	2
Lebanon	8	7	5	7	7
Libya	17	18	18	18	16
Mauritania	7	6	13	14	17
Morocco	6	5	3	4	4
Oman	16	17	16	15	19
Palestine	10	14	6	8	8
Qatar	15	16	17	17	18
Saudi Arabia	12	12	14	16	20
Somalia	-	-	-	-	-
Sudan	-	-	-	-	14
Syria	1	1	1	1	1
Tunisia	5	4	4	5	3
UAE	13	10	11	6	6
Yemen	4	3	15	-	-

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL ≥ 10 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 10 GB / ≥ 10 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria			240.46	240.46	240.46
Bahrain	103.51	77.63	52.47	51.76	54.34
Comoros					
Djibouti					
Egypt	197.73	197.73	45.20	45.20	42.37
Iraq					
Jordan	114.49	109.10	77.36	77.36	78.53
Kuwait				77.54	77.54
Lebanon				95.16	95.16
Libya					
Mauritania	364.34	364.34	429.92	529.18	529.18
Morocco	55.03	55.72	55.03	55.03	56.17
Oman	228.93	230.75	184.96	184.96	132.63
Palestine	161.27	168.63	55.23	55.23	55.23
Qatar	118.45	118.45	143.83	158.71	164.49
Saudi Arabia	94.34	94.34	126.63	132.96	132.96
Somalia					
Sudan					395.29
Syria			129.36	129.36	140.80
Tunisia	62.44	55.50	45.09	47.75	33.53
UAE	144.95	147.57	148.22	151.63	151.63
Yemen					

Arab average	149.59	147.25	133.37	135.49	148.77
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	12	14	14
Bahrain	4	3	3	3	3
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	9	9	2	1	2
Iraq	-	-	-	-	-
Jordan	5	5	6	6	7
Kuwait	-	-	-	7	6
Lebanon	-	-	-	8	8
Libya	-	-	-	-	-
Mauritania	11	11	13	15	16
Morocco	1	2	4	4	5
Oman	10	10	11	13	9
Palestine	8	8	5	5	4
Qatar	6	6	9	12	13
Saudi Arabia	3	4	7	10	10
Somalia	-	-	-	-	-
Sudan	-	-	-	-	15
Syria	-	-	8	9	11
Tunisia	2	1	1	2	1
UAE	7	7	10	11	12
Yemen	-	-	-	-	-

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL ≥ 10 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 30 GB / ≥ 10 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria			240.46	240.46	240.46
Bahrain	103.51	77.63	52.47	51.76	54.34
Comoros					
Djibouti					
Egypt	197.73	197.73	45.20	45.20	42.37
Iraq					
Jordan	114.49	109.10	77.36	77.36	78.53
Kuwait				77.54	77.54
Lebanon				95.16	95.16
Libya					
Mauritania	364.34	364.34	429.92	529.18	529.18
Morocco	55.03	55.72	55.03	55.03	56.17
Oman	228.93	230.75	184.96	184.96	132.63
Palestine	161.27	168.63	55.23	55.23	55.23
Qatar	118.45	118.45	143.83	158.71	164.49
Saudi Arabia	94.34	94.34	126.63	132.96	132.96
Somalia					
Sudan					395.29
Syria			129.36	129.36	140.80
Tunisia	62.44	55.50	45.09	47.75	33.53
UAE	144.95	147.57	148.22	151.63	151.63
Yemen					

Arab average	149.59	147.25	133.37	135.49	148.77
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	12	14	14
Bahrain	4	3	3	3	3
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	9	9	2	1	2
Iraq	-	-	-	-	-
Jordan	5	5	6	6	7
Kuwait	-	-	-	7	6
Lebanon	-	-	-	8	8
Libya	-	-	-	-	-
Mauritania	11	11	13	15	16
Morocco	1	2	4	4	5
Oman	10	10	11	13	9
Palestine	8	8	5	5	4
Qatar	6	6	9	12	13
Saudi Arabia	3	4	7	10	10
Somalia	-	-	-	-	-
Sudan	-	-	-	-	15
Syria	-	-	8	9	11
Tunisia	2	1	1	2	1
UAE	7	7	10	11	12
Yemen	-	-	-	-	-

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL >=10 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 90 GB / >=10 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria			240.46	240.46	240.46
Bahrain	103.51	77.63	62.83	51.76	54.34
Comoros					
Djibouti					
Egypt	197.73	197.73	45.20	45.20	42.37
Iraq					
Jordan	114.49	109.10	77.36	77.36	78.53
Kuwait				77.54	77.54
Lebanon				95.16	95.16
Libya					
Mauritania	364.34	364.34	429.92	529.18	529.18
Morocco	55.03	55.72	55.03	55.03	56.17
Oman	228.93	230.75	184.96	184.96	132.63
Palestine	161.27	168.63	55.23	55.23	55.23
Qatar	118.45	118.45	143.83	158.71	164.49
Saudi Arabia	94.34	94.34	126.63	132.96	132.96
Somalia					
Sudan					395.29
Syria			129.36	129.36	140.80
Tunisia	62.44	55.50	45.09	47.75	33.53
UAE	144.95	147.57	148.22	151.63	151.63
Yemen					

Arab average	149.59	147.25	134.16	135.49	148.77
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	12	14	14
Bahrain	4	3	5	3	3
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	9	9	2	1	2
Iraq	-	-	-	-	-
Jordan	5	5	6	6	7
Kuwait	-	-	-	7	6
Lebanon	-	-	-	8	8
Libya	-	-	-	-	-
Mauritania	11	11	13	15	16
Morocco	1	2	3	4	5
Oman	10	10	11	13	9
Palestine	8	8	4	5	4
Qatar	6	6	9	12	13
Saudi Arabia	3	4	7	10	10
Somalia	-	-	-	-	-
Sudan	-	-	-	-	15
Syria	-	-	8	9	11
Tunisia	2	1	1	2	1
UAE	7	7	10	11	12
Yemen	-	-	-	-	-

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL >=25 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 20 GB / >=25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria					448.96
Bahrain	181.14	181.14	155.99	104.23	163.03
Comoros					
Djibouti					
Egypt					45.20
Iraq					
Jordan	270.42	161.34	85.85	85.85	99.37
Kuwait				180.93	180.93
Lebanon				95.16	95.16
Libya					
Mauritania					
Morocco			137.14	137.14	139.03
Oman	359.75	361.56	230.75	230.75	230.75
Palestine		189.99	67.75	67.75	67.75
Qatar	168.05	168.05	193.43	208.30	164.49
Saudi Arabia	189.31	189.31	158.28	132.96	132.96
Somalia					
Sudan					
Syria					
Tunisia			110.37	110.48	81.46
UAE	287.22	242.42	243.06	162.09	162.09
Yemen					

Arab average	242.65	213.40	153.62	137.79	154.71
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	13
Bahrain	2	3	5	4	9
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	1
Iraq	-	-	-	-	-
Jordan	4	1	2	2	5
Kuwait	-	-	-	9	11
Lebanon	-	-	-	3	4
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	4	7	7
Oman	6	7	8	11	12
Palestine	-	5	1	1	2
Qatar	1	2	7	10	10
Saudi Arabia	3	4	6	6	6
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	3	5	3
UAE	5	6	9	8	8
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL >=25 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 60 GB / >=25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria					448.96
Bahrain	181.14	181.14	155.99	104.23	163.03
Comoros					
Djibouti					
Egypt					56.50
Iraq					
Jordan	270.42	161.34	85.85	85.85	99.37
Kuwait				180.93	180.93
Lebanon				95.16	95.16
Libya					
Mauritania					
Morocco			137.14	137.14	139.03
Oman	359.75	361.56	230.75	230.75	230.75
Palestine		189.99	67.75	67.75	67.75
Qatar	168.05	168.05	193.43	208.30	164.49
Saudi Arabia	189.31	189.31	158.28	132.96	132.96
Somalia					
Sudan					
Syria					
Tunisia			110.37	110.48	81.46
UAE	287.22	242.42	243.06	162.09	162.09
Yemen					

Arab average	242.65	213.40	153.62	137.79	155.57
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Below Arab average	
Above Arab average	

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	13
Bahrain	2	3	5	4	9
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	1
Iraq	-	-	-	-	-
Jordan	4	1	2	2	5
Kuwait	-	-	-	9	11
Lebanon	-	-	-	3	4
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	4	7	7
Oman	6	7	8	11	12
Palestine	-	5	1	1	2
Qatar	1	2	7	10	10
Saudi Arabia	3	4	6	6	6
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	3	5	3
UAE	5	6	9	8	8
Yemen	-	-	-	-	-

Least expensive	
Most expensive	



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL >=25 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 180 GB / >=25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria					448.96
Bahrain	181.14	181.14	155.99	130.11	163.03
Comoros					
Djibouti					
Egypt					84.74
Iraq					
Jordan	270.42	161.34	85.85	85.85	99.37
Kuwait				180.93	180.93
Lebanon				95.16	95.16
Libya					
Mauritania					
Morocco			137.14	137.14	139.03
Oman	359.75	361.56	230.75	230.75	230.75
Palestine		189.99	67.75	67.75	67.75
Qatar	168.05	168.05	193.43	208.30	164.49
Saudi Arabia	189.31	189.31	158.28	132.96	132.96
Somalia					
Sudan					
Syria					
Tunisia			110.37	110.48	81.46
UAE	287.22	242.42	243.06	162.09	162.09
Yemen					

Arab average	242.65	213.40	153.62	140.14	157.75
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	Below Arab average
	Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	13
Bahrain	2	3	5	5	9
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	3
Iraq	-	-	-	-	-
Jordan	4	1	2	2	5
Kuwait	-	-	-	9	11
Lebanon	-	-	-	3	4
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	4	7	7
Oman	6	7	8	11	12
Palestine	-	5	1	1	1
Qatar	1	2	7	10	10
Saudi Arabia	3	4	6	6	6
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	3	4	2
UAE	5	6	9	8	8
Yemen	-	-	-	-	-

	Least expensive
	Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL ≥ 100 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 40 GB / ≥ 100 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria					753.34
Bahrain	388.17	388.17	388.89	362.29	407.58
Comoros					
Djibouti					
Egypt					84.74
Iraq					
Jordan			121.37	121.37	120.51
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco			137.14	137.14	139.03
Oman			525.08	525.08	525.08
Palestine			114.14	114.14	114.14
Qatar	325.27	325.27	267.82	282.70	214.09
Saudi Arabia	284.28	284.28	253.25	265.92	204.87
Somalia					
Sudan					
Syria					
Tunisia			243.34	243.45	139.27
UAE	476.90	479.52	480.17	500.18	196.45
Yemen					

Arab average	368.65	369.31	281.24	283.59	263.55
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	Below Arab average
	Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	11
Bahrain	3	3	7	7	9
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	1
Iraq	-	-	-	-	-
Jordan	-	-	2	2	3
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	3	3	4
Oman	-	-	9	9	10
Palestine	-	-	1	1	2
Qatar	2	2	6	6	8
Saudi Arabia	1	1	5	5	7
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	4	4	5
UAE	4	4	8	8	6
Yemen	-	-	-	-	-

	Least expensive
	Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL >=100 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 120 GB / >=100 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria					753.34
Bahrain	388.17	388.17	388.89	362.29	407.58
Comoros					
Djibouti					
Egypt					112.99
Iraq					
Jordan			121.37	121.37	120.51
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco			137.14	137.14	139.03
Oman			525.08	525.08	525.08
Palestine			114.14	114.14	114.14
Qatar	325.27	325.27	267.82	282.70	214.09
Saudi Arabia	284.28	284.28	253.25	265.92	204.87
Somalia					
Sudan					
Syria					
Tunisia			243.34	243.45	139.27
UAE	476.90	479.52	480.17	500.18	196.45
Yemen					

Arab average	368.65	369.31	281.24	283.59	266.12
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	11
Bahrain	3	3	7	7	9
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	1
Iraq	-	-	-	-	-
Jordan	-	-	2	2	3
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	3	3	4
Oman	-	-	9	9	10
Palestine	-	-	1	1	2
Qatar	2	2	6	6	8
Saudi Arabia	1	1	5	5	7
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	4	4	5
UAE	4	4	8	8	6
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS RESIDENTIAL >=100 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 360 GB / >=100 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT included, Residential packages

	2015	2016	2017	2018	2019
Algeria					753.34
Bahrain	388.17	388.17	388.89	362.29	407.58
Comoros					
Djibouti					
Egypt					197.73
Iraq					
Jordan			121.37	121.37	120.51
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco			137.14	137.14	139.03
Oman			525.08	525.08	525.08
Palestine			114.14	114.14	114.14
Qatar	325.27	325.27	267.82	282.70	214.09
Saudi Arabia	284.28	284.28	253.25	265.92	204.87
Somalia					
Sudan					
Syria					
Tunisia			243.34	243.45	139.27
UAE	476.90	479.52	480.17	500.18	196.45
Yemen					

Arab average	368.65	369.31	281.24	283.59	273.83
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	11
Bahrain	3	3	7	7	9
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	6
Iraq	-	-	-	-	-
Jordan	-	-	2	2	2
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	3	3	3
Oman	-	-	9	9	10
Palestine	-	-	1	1	1
Qatar	2	2	6	6	8
Saudi Arabia	1	1	5	5	7
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	4	4	4
UAE	4	4	8	8	5
Yemen	-	-	-	-	-

Least expensive
Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=0.25 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 5 GB / >=0.25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria	281.80	260.15	260.15	255.78	255.78
Bahrain	77.63	77.63	77.63	77.63	77.63
Comoros			205.74	187.04	187.04
Djibouti	428.12	428.12	429.16	390.15	390.15
Egypt	19.26	12.84	12.84	12.39	23.54
Iraq					
Jordan		81.86	78.26	78.26	74.56
Kuwait					
Lebanon	28.56	28.27	27.25	27.54	27.54
Libya	64.56	64.56	64.56	64.56	217.25
Mauritania	46.92	46.92	81.35	95.88	95.88
Morocco	23.13	23.70	23.13	23.13	24.08
Oman	96.80	98.62	98.62	296.15	296.15
Palestine			79.35	79.35	79.35
Qatar	297.58	297.58	350.80	350.80	350.80
Saudi Arabia			136.55	130.04	130.04
Somalia					
Sudan					47.36
Syria					
Tunisia	901.93	91.34	91.34	91.34	80.94
UAE	168.69	146.48	171.33	373.84	373.84
Yemen		71.49	54.36	54.36	54.36

Arab average	202.92	123.54	131.91	152.25	154.79
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	9	12	15	13	14
Bahrain	6	7	6	6	7
Comoros	-	-	14	12	12
Djibouti	11	14	17	17	18
Egypt	1	1	1	1	1
Iraq	-	-	-	-	-
Jordan	-	8	7	7	6
Kuwait	-	-	-	-	-
Lebanon	3	3	3	3	3
Libya	5	5	5	5	13
Mauritania	4	4	9	10	10
Morocco	2	2	2	2	2
Oman	7	10	11	14	15
Palestine	-	-	8	8	8
Qatar	10	13	16	15	16
Saudi Arabia	-	-	12	11	11
Somalia	-	-	-	-	-
Sudan	-	-	-	-	4
Syria	-	-	-	-	-
Tunisia	12	9	10	9	9
UAE	8	11	13	16	17
Yemen	-	6	4	4	5

Least expensive
Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=0.25 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 15 GB / >=0.25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria	281.80	260.15	260.15	255.78	255.78
Bahrain	77.63	77.63	77.63	77.63	77.63
Comoros			205.74	187.04	187.04
Djibouti	428.12	428.12	429.16	390.15	390.15
Egypt	24.40	12.84	24.40	23.54	23.54
Iraq					
Jordan		81.86	78.26	78.26	74.56
Kuwait					
Lebanon	28.56	28.27	27.25	27.54	27.54
Libya	64.56	64.56	64.56	64.56	217.25
Mauritania	46.92	46.92	81.35	95.88	95.88
Morocco	23.13	23.70	23.13	23.13	24.08
Oman	153.71	155.53	155.53	296.15	296.15
Palestine			79.35	79.35	79.35
Qatar	297.58	297.58	350.80	350.80	350.80
Saudi Arabia			136.55	130.04	130.04
Somalia					
Sudan					47.36
Syria					
Tunisia	901.93	91.34	91.34	91.34	80.94
UAE	191.27	146.48	193.90	373.84	373.84
Yemen		71.49	74.90	74.90	74.90

Arab average	209.97	127.61	138.47	154.11	155.93
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	9	12	15	13	14
Bahrain	6	7	6	6	7
Comoros	-	-	14	12	12
Djibouti	11	14	17	17	18
Egypt	2	1	2	2	1
Iraq	-	-	-	-	-
Jordan	-	8	7	7	5
Kuwait	-	-	-	-	-
Lebanon	3	3	3	3	3
Libya	5	5	4	4	13
Mauritania	4	4	9	10	10
Morocco	1	2	1	1	2
Oman	7	11	12	14	15
Palestine	-	-	8	8	8
Qatar	10	13	16	15	16
Saudi Arabia	-	-	11	11	11
Somalia	-	-	-	-	-
Sudan	-	-	-	-	4
Syria	-	-	-	-	-
Tunisia	12	9	10	9	9
UAE	8	10	13	16	17
Yemen	-	6	5	5	6

 Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=0.25 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 45 GB / >=0.25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria	281.80	260.15	260.15	255.78	255.78
Bahrain	77.63	77.63	77.63	77.63	77.63
Comoros			205.74	187.04	187.04
Djibouti	428.12	428.12	429.16	390.15	390.15
Egypt	24.40	12.84	24.40	23.54	23.54
Iraq					
Jordan		81.86	78.26	78.26	74.56
Kuwait					
Lebanon	38.98	38.69	35.86	35.55	35.55
Libya	317.18	317.18	317.18	317.18	217.25
Mauritania	46.92	46.92	81.35	95.88	95.88
Morocco	23.13	23.70	23.13	23.13	24.08
Oman	294.34	296.15	296.15	296.15	296.15
Palestine			79.35	79.35	79.35
Qatar	297.58	297.58	350.80	350.80	350.80
Saudi Arabia			136.55	130.04	130.04
Somalia					
Sudan					61.96
Syria					
Tunisia	901.93	91.34	91.34	91.34	80.94
UAE	191.27	146.48	193.90	373.84	373.84
Yemen		71.49	115.67	115.67	115.67

Arab average	243.61	156.44	164.51	171.84	159.46
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	7	10	13	12	14
Bahrain	5	6	4	4	6
Comoros	-	-	12	11	12
Djibouti	11	14	17	17	18
Egypt	2	1	2	2	1
Iraq	-	-	-	-	-
Jordan	-	7	5	5	5
Kuwait	-	-	-	-	-
Lebanon	3	3	3	3	3
Libya	10	13	15	14	13
Mauritania	4	4	7	8	9
Morocco	1	2	1	1	2
Oman	8	11	14	13	15
Palestine	-	-	6	6	7
Qatar	9	12	16	15	16
Saudi Arabia	-	-	10	10	11
Somalia	-	-	-	-	-
Sudan	-	-	-	-	4
Syria	-	-	-	-	-
Tunisia	12	8	8	7	8
UAE	6	9	11	16	17
Yemen	-	5	9	9	10

 Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=10 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 10 GB / >=10 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria		1,691.00	1,691.00	1,662.58	1,662.58
Bahrain	650.54	650.54	569.31	569.31	569.31
Comoros			2,734.12	2,485.56	2,485.56
Djibouti		914.19	618.53	562.30	562.30
Egypt	179.76	179.76	41.09	39.65	39.65
Iraq					
Jordan		175.75	124.86	120.97	93.20
Kuwait					
Lebanon				85.73	85.73
Libya					
Mauritania	466.02	466.02	364.34	448.45	448.45
Morocco	45.86	46.44	45.86	45.86	46.81
Oman	1,183.89	1,185.71	1,185.71	459.68	459.68
Palestine			158.71	158.71	158.71
Qatar	297.58	297.58	350.80	350.80	350.80
Saudi Arabia			168.20	160.19	160.19
Somalia					
Sudan					292.81
Syria					
Tunisia	2,717.22	137.59	137.59	137.59	104.06
UAE	338.27	340.91	340.91	373.84	373.84
Yemen					

Arab average	734.89	553.23	609.36	510.75	493.35
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	11	13	14	15
Bahrain	6	8	10	13	14
Comoros	-	-	14	15	16
Djibouti	-	9	11	12	13
Egypt	2	4	1	1	1
Iraq	-	-	-	-	-
Jordan	-	3	3	4	4
Kuwait	-	-	-	-	-
Lebanon	-	-	-	3	3
Libya	-	-	-	-	-
Mauritania	5	7	9	10	11
Morocco	1	1	2	2	2
Oman	7	10	12	11	12
Palestine	-	-	5	6	6
Qatar	3	5	8	8	9
Saudi Arabia	-	-	6	7	7
Somalia	-	-	-	-	-
Sudan	-	-	-	-	8
Syria	-	-	-	-	-
Tunisia	8	2	4	5	5
UAE	4	6	7	9	10
Yemen	-	-	-	-	-

Least expensive
Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=10 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 30 GB / >=10 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria		1,691.00	1,691.00	1,662.58	1,662.58
Bahrain	650.54	650.54	569.31	569.31	569.31
Comoros			2,734.12	2,485.56	2,485.56
Djibouti		914.19	618.53	562.30	562.30
Egypt	179.76	179.76	41.09	39.65	39.65
Iraq					
Jordan		175.75	124.86	120.97	93.20
Kuwait					
Lebanon				85.73	85.73
Libya					
Mauritania	466.02	466.02	364.34	448.45	448.45
Morocco	45.86	46.44	45.86	45.86	46.81
Oman	1,183.89	1,185.71	1,185.71	459.68	459.68
Palestine			158.71	158.71	158.71
Qatar	297.58	297.58	350.80	350.80	350.80
Saudi Arabia			168.20	160.19	160.19
Somalia					
Sudan					292.81
Syria					
Tunisia	2,717.22	137.59	137.59	137.59	104.06
UAE	347.76	350.39	350.39	373.84	373.84
Yemen					

Arab average	736.08	554.09	610.04	510.75	493.35
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	11	13	14	15
Bahrain	6	8	10	13	14
Comoros	-	-	14	15	16
Djibouti	-	9	11	12	13
Egypt	2	4	1	1	1
Iraq	-	-	-	-	-
Jordan	-	3	3	4	4
Kuwait	-	-	-	-	-
Lebanon	-	-	-	3	3
Libya	-	-	-	-	-
Mauritania	5	7	9	10	11
Morocco	1	1	2	2	2
Oman	7	10	12	11	12
Palestine	-	-	5	6	6
Qatar	3	5	8	8	9
Saudi Arabia	-	-	6	7	7
Somalia	-	-	-	-	-
Sudan	-	-	-	-	8
Syria	-	-	-	-	-
Tunisia	8	2	4	5	5
UAE	4	6	7	9	10
Yemen	-	-	-	-	-

Least expensive
Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=10 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 90 GB / >=10 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria		1,691.00	1,691.00	1,662.58	1,662.58
Bahrain	650.54	650.54	569.31	569.31	569.31
Comoros			2,734.12	2,485.56	2,485.56
Djibouti		914.19	618.53	562.30	562.30
Egypt	179.76	179.76	41.09	39.65	39.65
Iraq					
Jordan		175.75	124.86	120.97	93.20
Kuwait					
Lebanon				85.73	85.73
Libya					
Mauritania	466.02	466.02	364.34	448.45	448.45
Morocco	45.86	46.44	45.86	45.86	46.81
Oman	1,183.89	1,185.71	1,185.71	459.68	459.68
Palestine			158.71	158.71	158.71
Qatar	297.58	297.58	350.80	350.80	350.80
Saudi Arabia			168.20	160.19	160.19
Somalia					
Sudan					292.81
Syria					
Tunisia	2,717.22	137.59	137.59	137.59	104.06
UAE	347.76	350.39	350.39	373.84	373.84
Yemen					

Arab average	736.08	554.09	610.04	510.75	493.35
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	11	13	14	15
Bahrain	6	8	10	13	14
Comoros	-	-	14	15	16
Djibouti	-	9	11	12	13
Egypt	2	4	1	1	1
Iraq	-	-	-	-	-
Jordan	-	3	3	4	4
Kuwait	-	-	-	-	-
Lebanon	-	-	-	3	3
Libya	-	-	-	-	-
Mauritania	5	7	9	10	11
Morocco	1	1	2	2	2
Oman	7	10	12	11	12
Palestine	-	-	5	6	6
Qatar	3	5	8	8	9
Saudi Arabia	-	-	6	7	7
Somalia	-	-	-	-	-
Sudan	-	-	-	-	8
Syria	-	-	-	-	-
Tunisia	8	2	4	5	5
UAE	4	6	7	9	10
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=25 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 20 GB / >=25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria					
Bahrain			1,656.18	1,656.18	1,656.18
Comoros					
Djibouti		2,230.62	1,754.71	1,733.02	1,733.02
Egypt					
Iraq					
Jordan		249.11	152.44	152.44	123.96
Kuwait					
Lebanon				85.73	85.73
Libya					
Mauritania					
Morocco			114.29	114.29	115.85
Oman	3,008.78	3,010.60	3,010.60	1,833.25	1,833.25
Palestine			742.74	742.74	742.74
Qatar	595.16	595.16	896.36	896.36	549.18
Saudi Arabia			231.52	220.49	220.49
Somalia					
Sudan					
Syria					
Tunisia					
UAE	679.71	682.34	682.34	395.44	395.44
Yemen					

Arab average	1427.88	1353.57	1026.80	782.99	745.59
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	-
Bahrain	-	-	7	8	8
Comoros	-	-	-	-	-
Djibouti	-	4	8	9	9
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	1	2	3	3
Kuwait	-	-	-	-	-
Lebanon	-	-	-	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	1	2	2
Oman	3	5	9	10	10
Palestine	-	-	5	6	7
Qatar	1	2	6	7	6
Saudi Arabia	-	-	3	4	4
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	3	4	5	5
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=25 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 60 GB / >=25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria					
Bahrain			1,656.18	1,656.18	1,656.18
Comoros					
Djibouti		2,230.62	1,754.71	1,733.02	1,733.02
Egypt					
Iraq					
Jordan		249.11	152.44	152.44	123.96
Kuwait					
Lebanon				85.73	85.73
Libya					
Mauritania					
Morocco			114.29	114.29	115.85
Oman	3,008.78	3,010.60	3,010.60	1,833.25	1,833.25
Palestine			742.74	742.74	742.74
Qatar	595.16	595.16	896.36	896.36	549.18
Saudi Arabia			231.52	220.49	220.49
Somalia					
Sudan					
Syria					
Tunisia					
UAE	679.71	682.34	682.34	395.44	395.44
Yemen					

Arab average	1427.88	1353.57	1026.80	782.99	745.59
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	-
Bahrain	-	-	7	8	8
Comoros	-	-	-	-	-
Djibouti	-	4	8	9	9
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	1	2	3	3
Kuwait	-	-	-	-	-
Lebanon	-	-	-	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	1	2	2
Oman	3	5	9	10	10
Palestine	-	-	5	6	7
Qatar	1	2	6	7	6
Saudi Arabia	-	-	3	4	4
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	3	4	5	5
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=25 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 180 GB / >=25 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria					
Bahrain			1,656.18	1,656.18	1,656.18
Comoros					
Djibouti		2,230.62	1,754.71	1,733.02	1,733.02
Egypt					
Iraq					
Jordan		249.11	152.44	152.44	123.96
Kuwait					
Lebanon				85.73	85.73
Libya					
Mauritania					
Morocco			114.29	114.29	115.85
Oman	3,008.78	3,010.60	3,010.60	1,833.25	1,833.25
Palestine			742.74	742.74	742.74
Qatar	595.16	595.16	896.36	896.36	549.18
Saudi Arabia			231.52	220.49	220.49
Somalia					
Sudan					
Syria					
Tunisia					
UAE	679.71	682.34	682.34	395.44	395.44
Yemen					

Arab average	1427.88	1353.57	1026.80	782.99	745.59
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	-
Bahrain	-	-	7	8	8
Comoros	-	-	-	-	-
Djibouti	-	4	8	9	9
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	1	2	3	3
Kuwait	-	-	-	-	-
Lebanon	-	-	-	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	1	2	2
Oman	3	5	9	10	10
Palestine	-	-	5	6	7
Qatar	1	2	6	7	6
Saudi Arabia	-	-	3	4	4
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	3	4	5	5
Yemen	-	-	-	-	-

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS ≥ 100 MB/S LOW USAGE



Results for Fixed Broadband: OECD Low 40 GB / ≥ 100 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria					
Bahrain					
Comoros					
Djibouti					
Egypt					
Iraq					
Jordan			214.57	152.44	123.96
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco			114.29	114.29	115.85
Oman	7,194.92	7,196.73	7,196.73	2,291.11	2,291.11
Palestine					
Qatar	1,190.31	1,190.31	896.36	896.36	896.36
Saudi Arabia			326.49	310.94	310.94
Somalia					
Sudan					
Syria					
Tunisia					
UAE	1,424.23	1,426.86	1,426.86	729.77	530.60
Yemen					

Arab average	3269.82	3271.30	1695.88	749.15	711.47
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	-
Bahrain	-	-	-	-	-
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	-	2	2	2
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	1	1	1
Oman	3	3	6	6	6
Palestine	-	-	-	-	-
Qatar	1	1	4	5	5
Saudi Arabia	-	-	3	3	3
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	2	5	4	4
Yemen	-	-	-	-	-

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=100 MB/S MEDIUM USAGE



Results for Fixed Broadband: OECD Medium 120 GB / >=100 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria					
Bahrain					
Comoros					
Djibouti					
Egypt					
Iraq					
Jordan			214.57	152.44	123.96
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco			114.29	114.29	115.85
Oman	7,194.92	7,196.73	7,196.73	2,291.11	2,291.11
Palestine					
Qatar	1,190.31	1,190.31	896.36	896.36	896.36
Saudi Arabia			326.49	310.94	310.94
Somalia					
Sudan					
Syria					
Tunisia					
UAE	1,424.23	1,426.86	1,426.86	729.77	530.60
Yemen					

Arab average	3269.82	3271.30	1695.88	749.15	711.47
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	-
Bahrain	-	-	-	-	-
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	-	2	2	2
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	1	1	1
Oman	3	3	6	6	6
Palestine	-	-	-	-	-
Qatar	1	1	4	5	5
Saudi Arabia	-	-	3	3	3
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	2	5	4	4
Yemen	-	-	-	-	-

Least expensive
 Most expensive



2017 OECD FIXED BROADBAND BASKET RANKINGS BUSINESS >=100 MB/S HIGH USAGE



Results for Fixed Broadband: OECD High 360 GB / >=100 Mb/s basket, 2015-2019

Results in USD / PPP per Month, VAT excluded, Business packages

	2015	2016	2017	2018	2019
Algeria					
Bahrain					
Comoros					
Djibouti					
Egypt					
Iraq					
Jordan			214.57	152.44	123.96
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco			114.29	114.29	115.85
Oman	7,194.92	7,196.73	7,196.73	2,291.11	2,291.11
Palestine					
Qatar	1,190.31	1,190.31	896.36	896.36	896.36
Saudi Arabia			326.49	310.94	310.94
Somalia					
Sudan					
Syria					
Tunisia					
UAE	1,424.23	1,426.86	1,426.86	729.77	530.60
Yemen					

Arab average	3269.82	3271.30	1695.88	749.15	711.47
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	-	-	-	-	-
Bahrain	-	-	-	-	-
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	-	2	2	2
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	1	1	1
Oman	3	3	6	6	6
Palestine	-	-	-	-	-
Qatar	1	1	4	5	5
Saudi Arabia	-	-	3	3	3
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	2	5	4	4
Yemen	-	-	-	-	-

 Least expensive
 Most expensive



OBSERVATIONS FROM FIXED BROADBAND TIME SERIES RESULTS



- The table below summarizes how the overall Arab average changed from 2018-2019. The picture is a mix of decreases and increases.

Change in overall average 2018-2019	Residential			Business		
	Low	Medium	High	Low	Medium	High
>= 0.25 Mb/s / 15 GB	↓	↓	↓	↑	↑	↓
>= 10 Mb/s / 30 GB	↑	↑	↑	↓	↓	↓
>= 25 Mb/s / 60 GB	↑	↑	↑	↓	↓	↓
>= 100 Mb/s / 120 GB	↓	↓	↓	↓	↓	↓

- The average speed has risen dramatically since the last report, up from 45 Mb/s in 2018 to 82 Mb/s in 2019), as providers have continued to roll out high speed broadband offerings. In spite of the dramatic increases in speeds, the averages, where they have increased, have not shown similar levels of increase, rather the increases are generally much lower. Notably, in the >= 100 Mbps basket, the overall average for both residential and business services has fallen. Averages can be dramatically impacted by the introduction of new countries, of course.
- Around half of all providers made some changes to prices since last year. Some of the changes include:
 - Algeria: New fibre plans were added, and the entry ADSL service is now 2 Mbps
 - Bahrain: Key change was inclusion of VAT to residential services (also relevant to other services)
 - Egypt: New plans were added for both residential and business services. In the previous update, the highest speed for residential services was 16Mbps and for business services 24 Mbps. For residential services, this is now 100 Mbps. In addition, the lowest speed available is now 5 Mbps, previously 1 Mbps. Plans with low allowances (10GB/month) are also no longer offered. The combination of these two factors has results in a significant hike in the cost for Egypt for the lowest speed, low usage basket.
 - LTE based services have been included this year for Iraq.
 - Jordan added a number of new plans, including a 1 Gbps plan
 - New plans have been added for Libya, with a speed increase on the previous year from 512 Kbps to 8 Mbps, and new residential fibre plans at 6 Mbps.
 - Changes to residential plans and speeds in Saudi Arabia, including increasing the speed of its bundled service offerings from 25 Mbps/50 Mbps/200 Mbps to 50 Mbps/100 Mbps/300 Mbps. Service rentals were also increased, but came with a 6 month reduced rental introductory promotion.
 - Tunisia added new plans
 - UAE made changes to both speeds and monthly speeds.





MOBILE BROADBAND BASKET RESULTS 2019



MOBILE BROADBAND BASKETS, 2017 DEFINITIONS

- There are 7 baskets OECD baskets for mobile broadband ranging from low to very high usage, and these are shown in the table below.

	Usage volume (GB/month)
0.5 GB basket	0.5
1 GB basket	1
2 GB basket	2
5 GB basket	5
10 GB basket	10
20 GB basket	20
50 GB basket	50

- There are also two special baskets which simulate short term usage

	Usage volume (GB/month)	Days of use per month
0.5 GB basket	0.5	15
1 GB basket	1	15

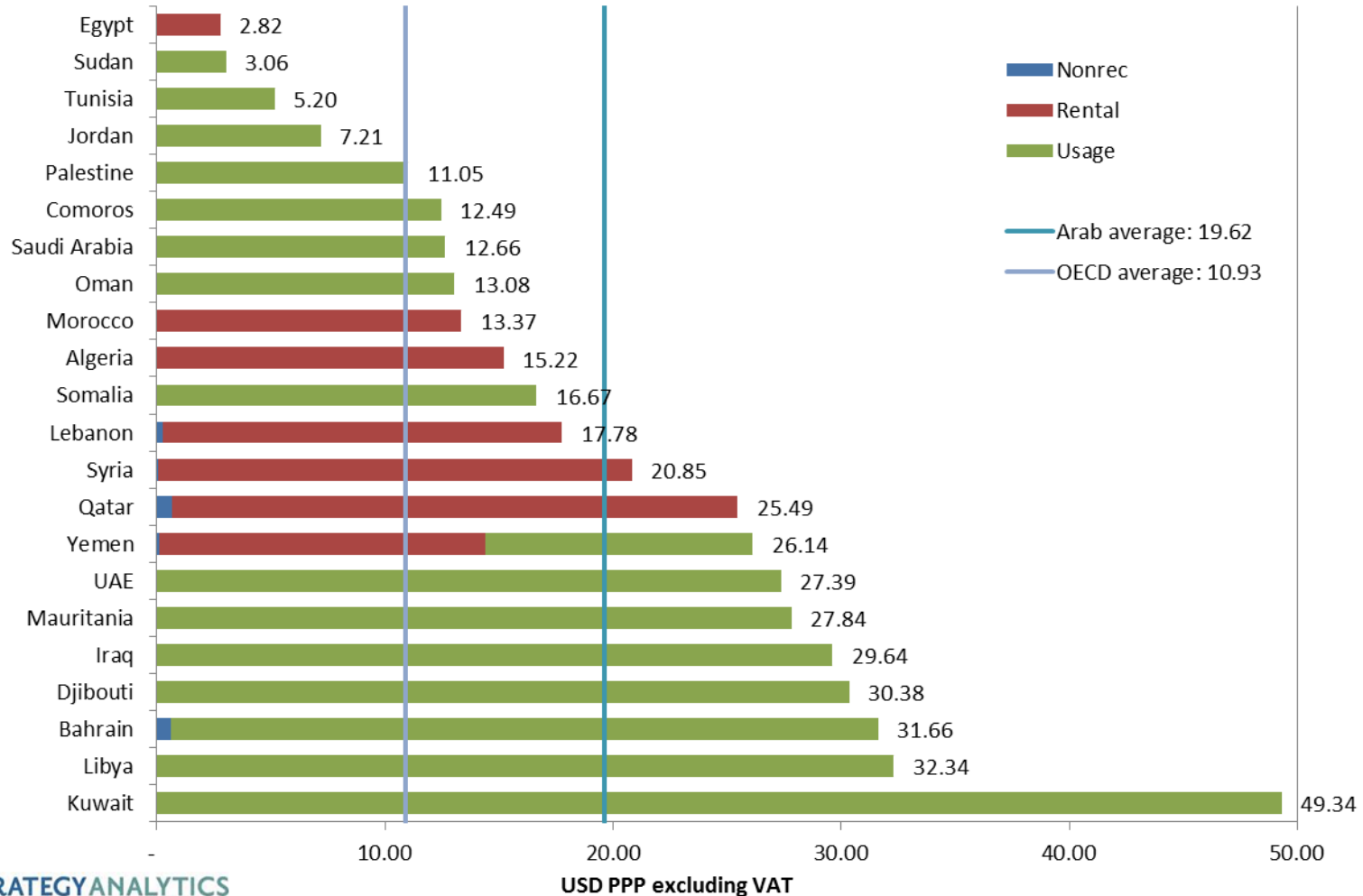
- In previous updates, proprietary baskets for mobile broadband have been used, however, for this and future reports, the analysis will be based on the OECD baskets.
- Data collected refers to dedicated mobile broadband packages (i.e. not mobile broadband bundled with or added to mobile voice packages) , and up to three operators are considered



RESIDENTIAL MOBILE BROADBAND OECD 2017 0.5GB BASKET



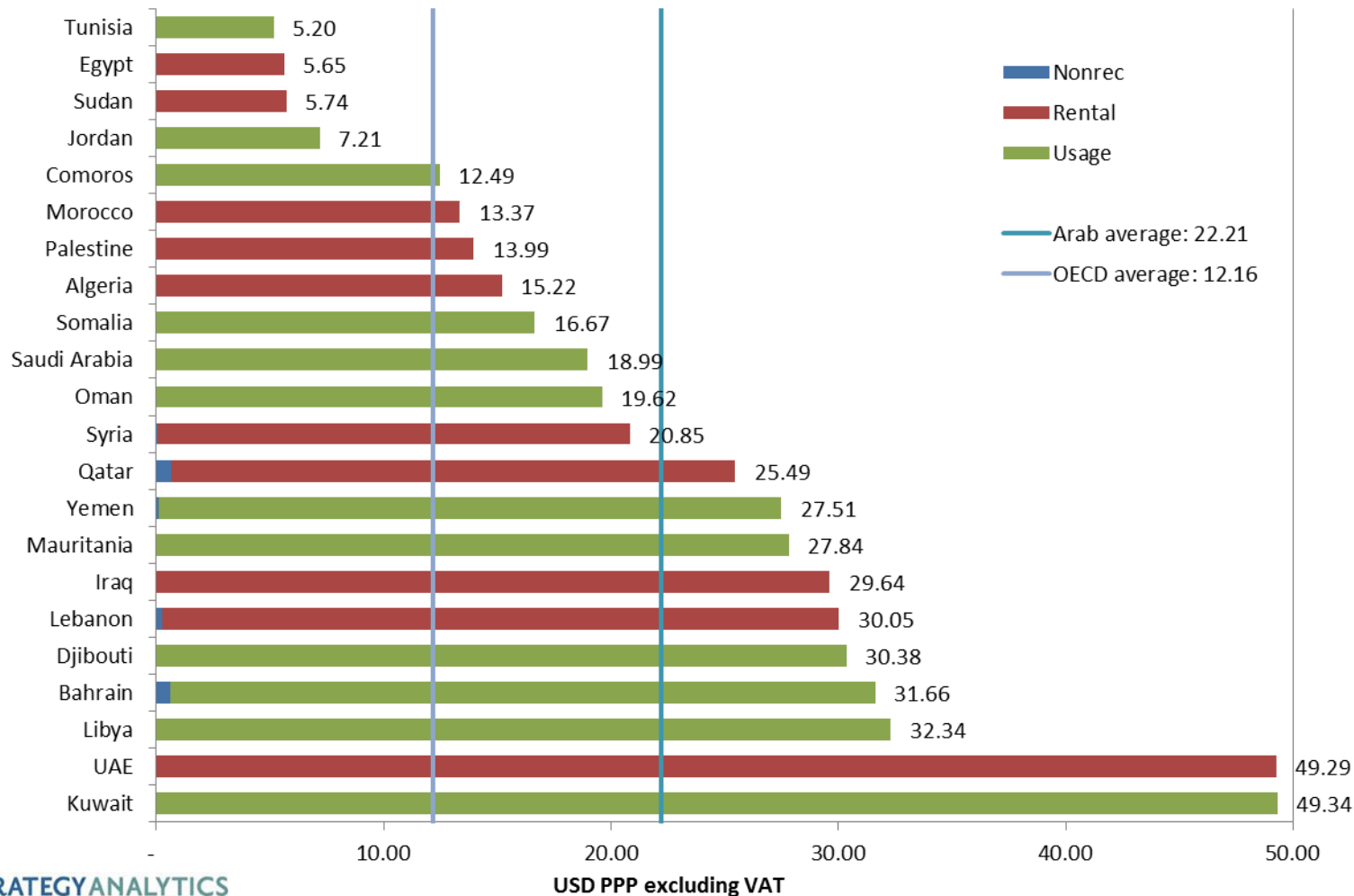
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 0.5 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 1GB BASKET



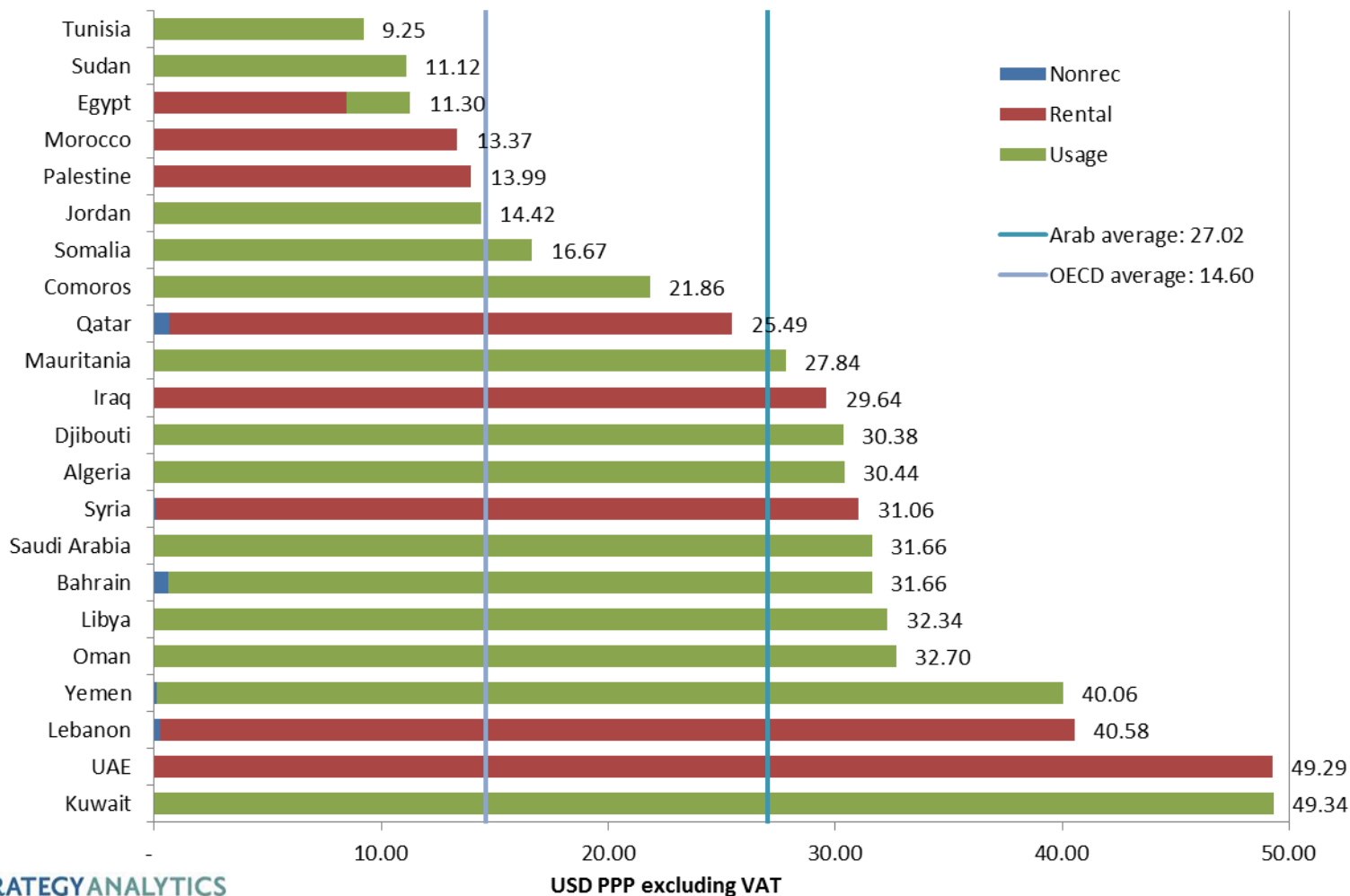
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 1 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 2GB BASKET



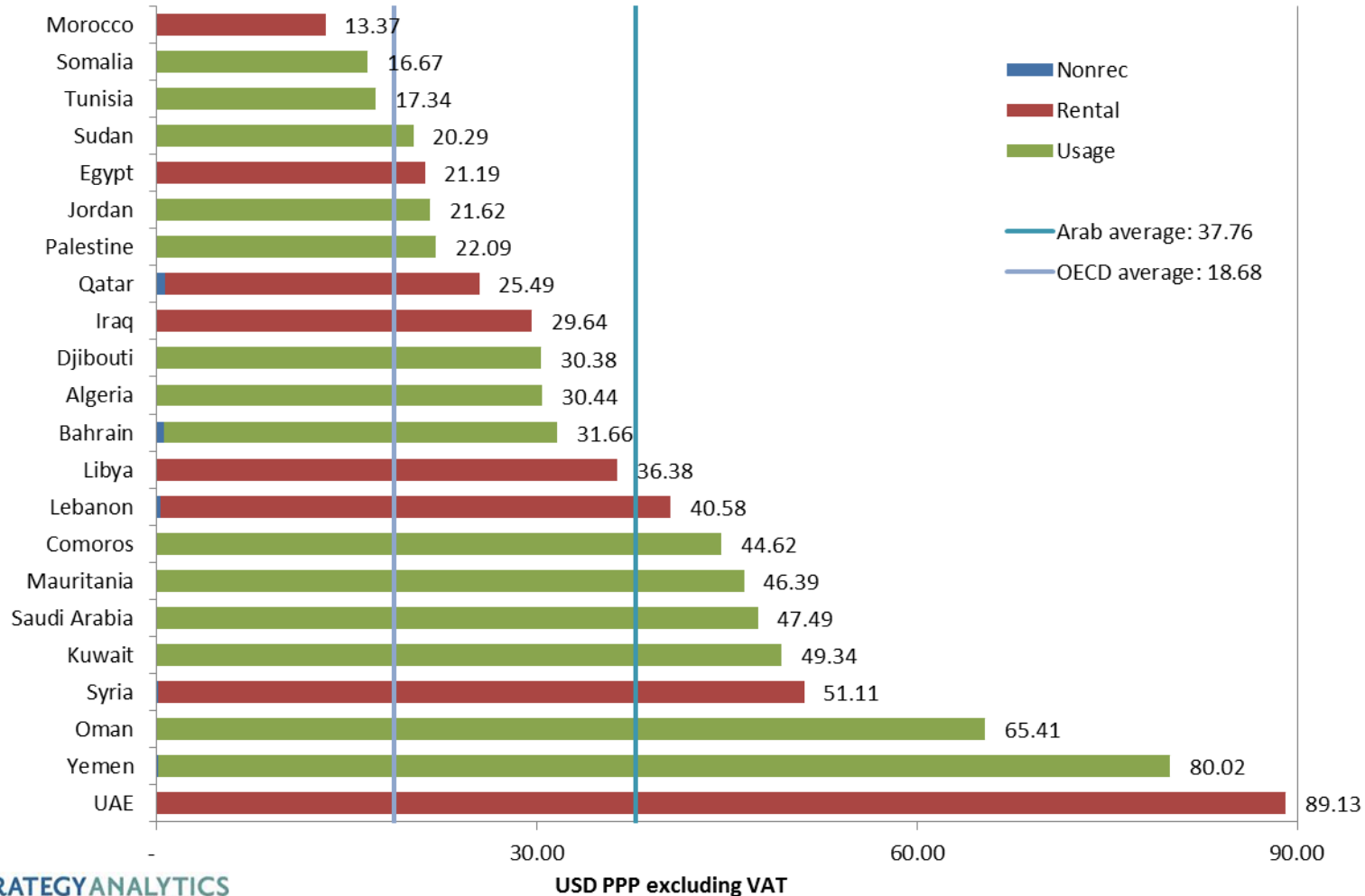
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 2 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 5GB BASKET



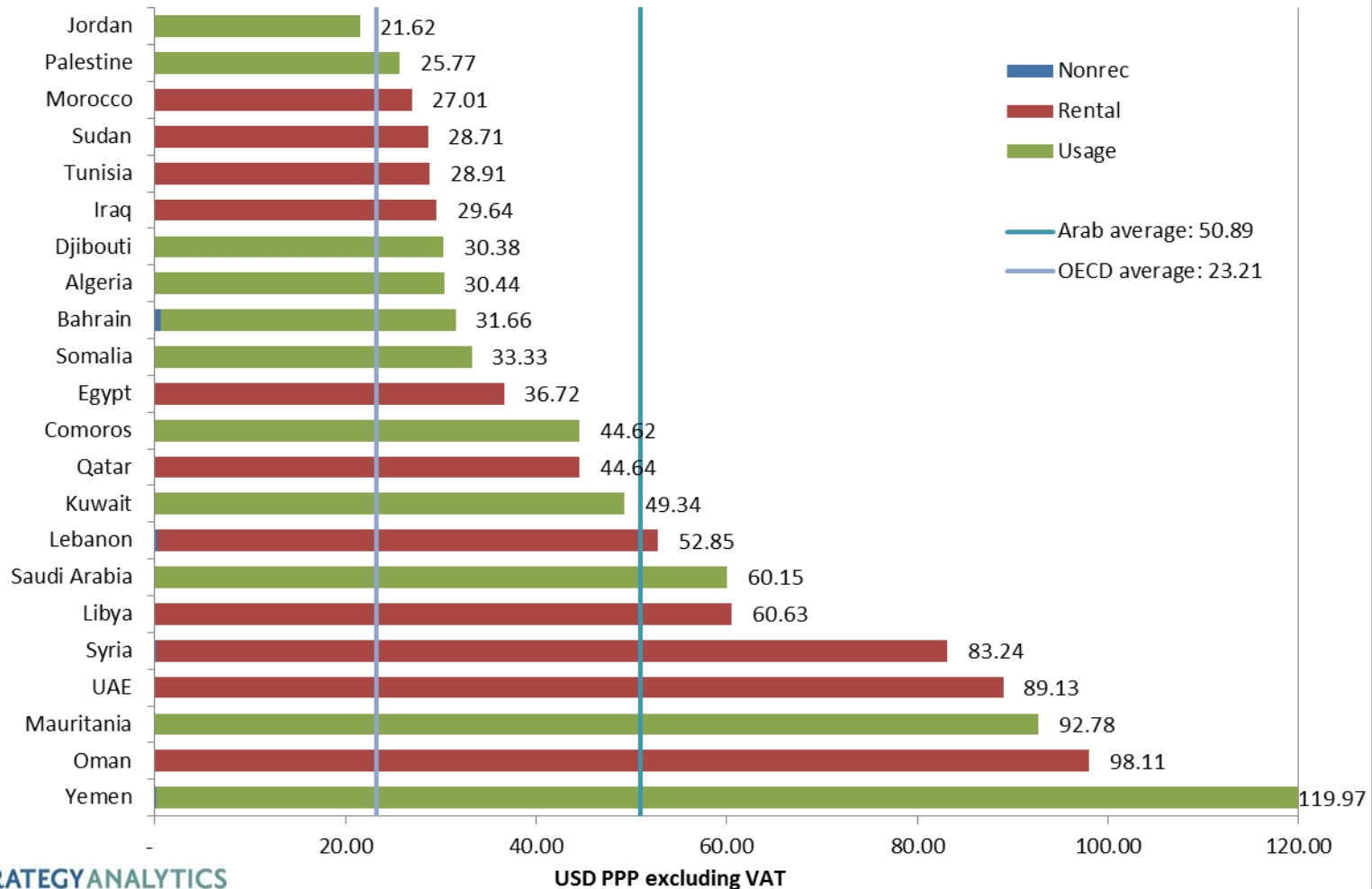
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 5 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 10GB BASKET



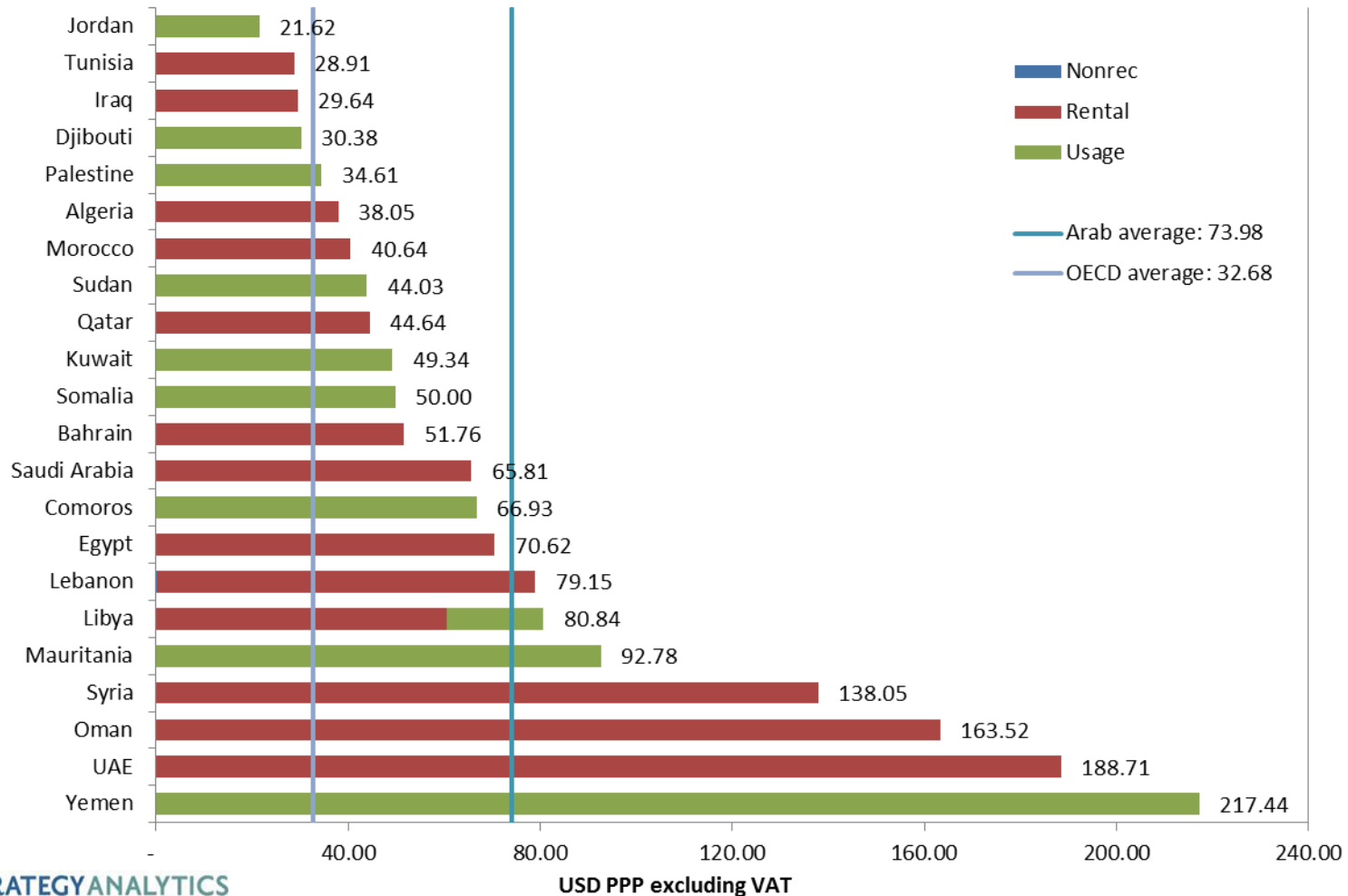
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 10 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 20GB BASKET



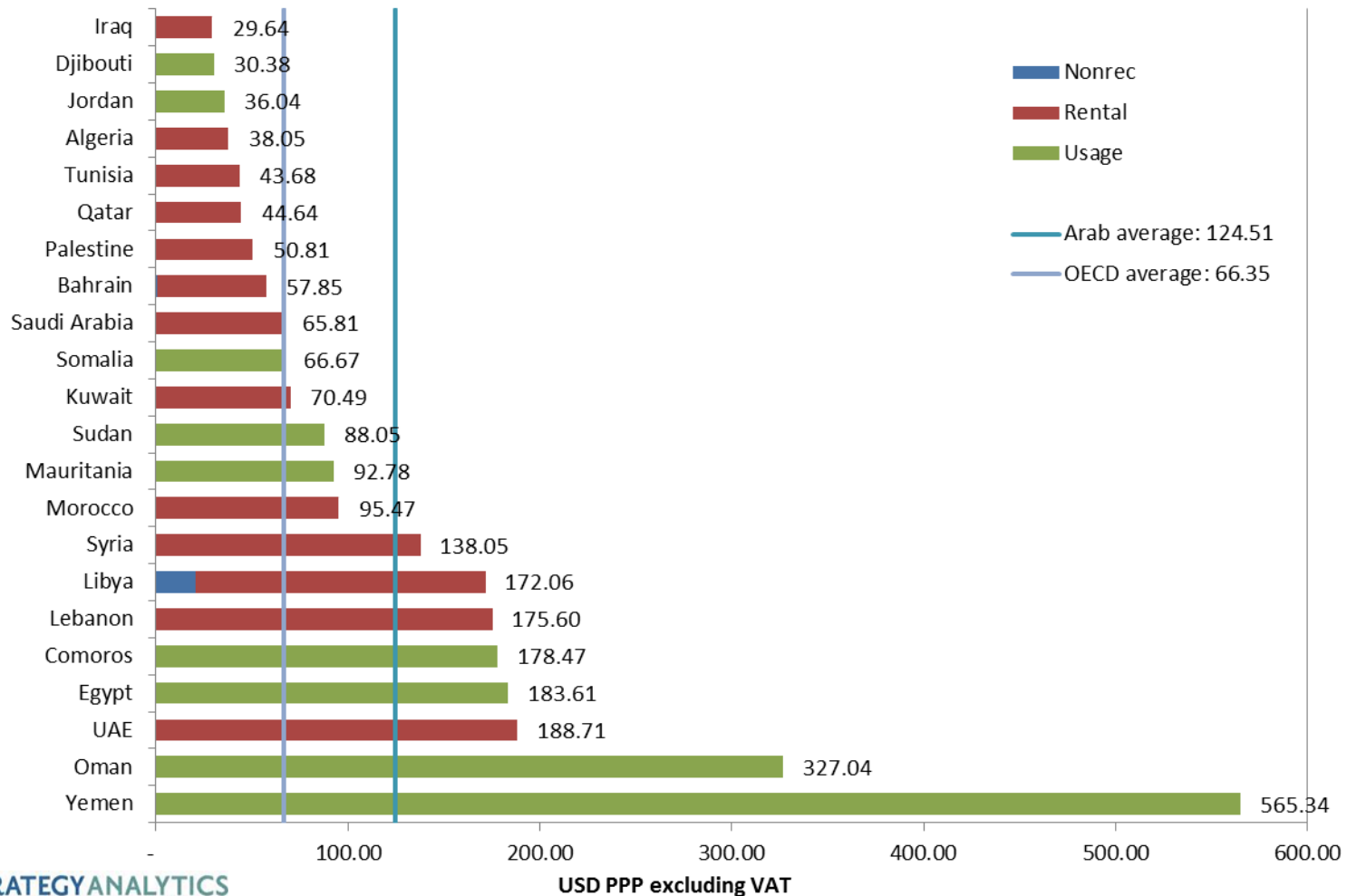
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 20 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 50GB BASKET



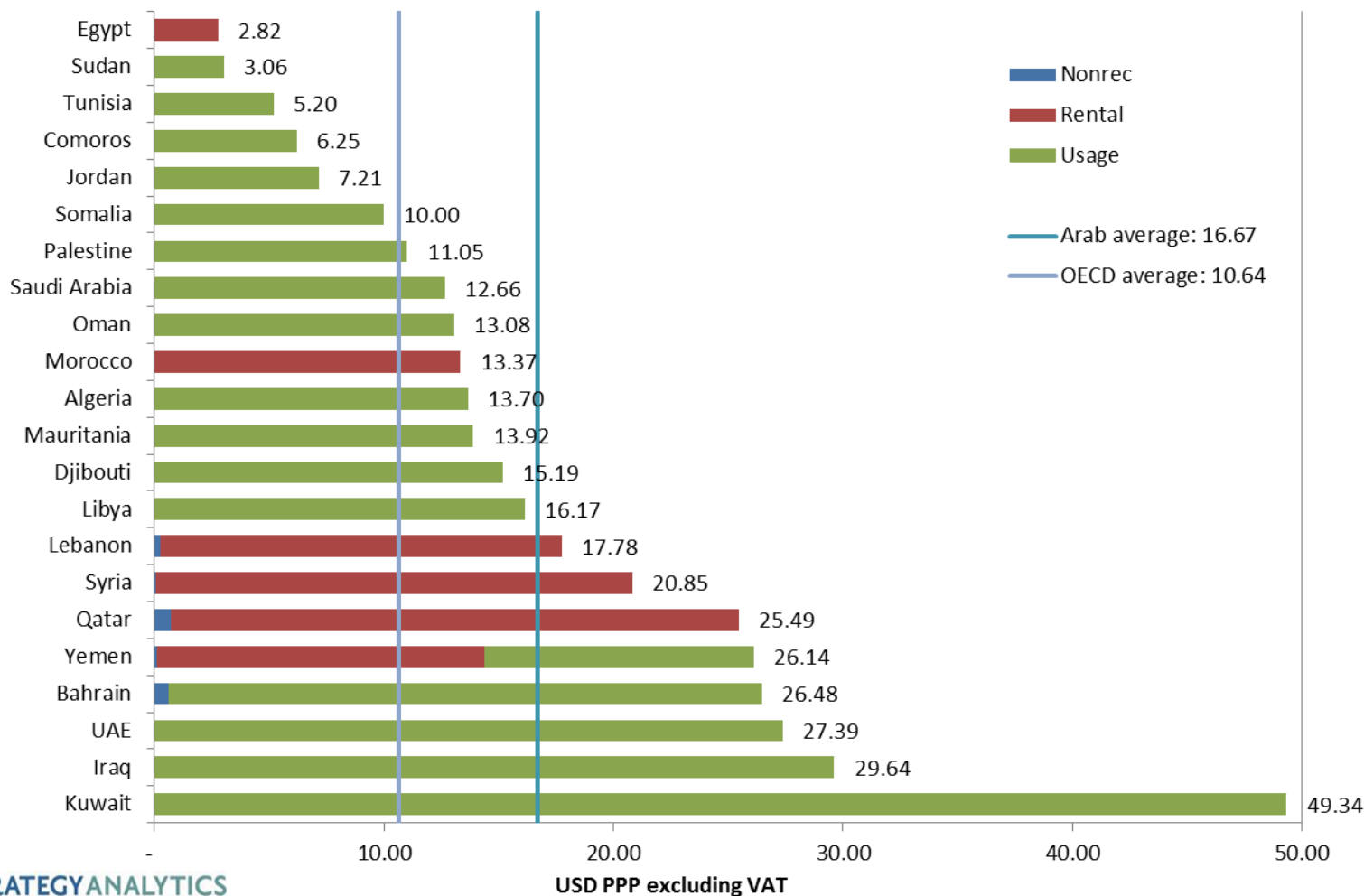
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 50 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 SHORT VALIDITY 0.5GB BASKET



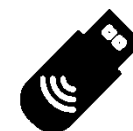
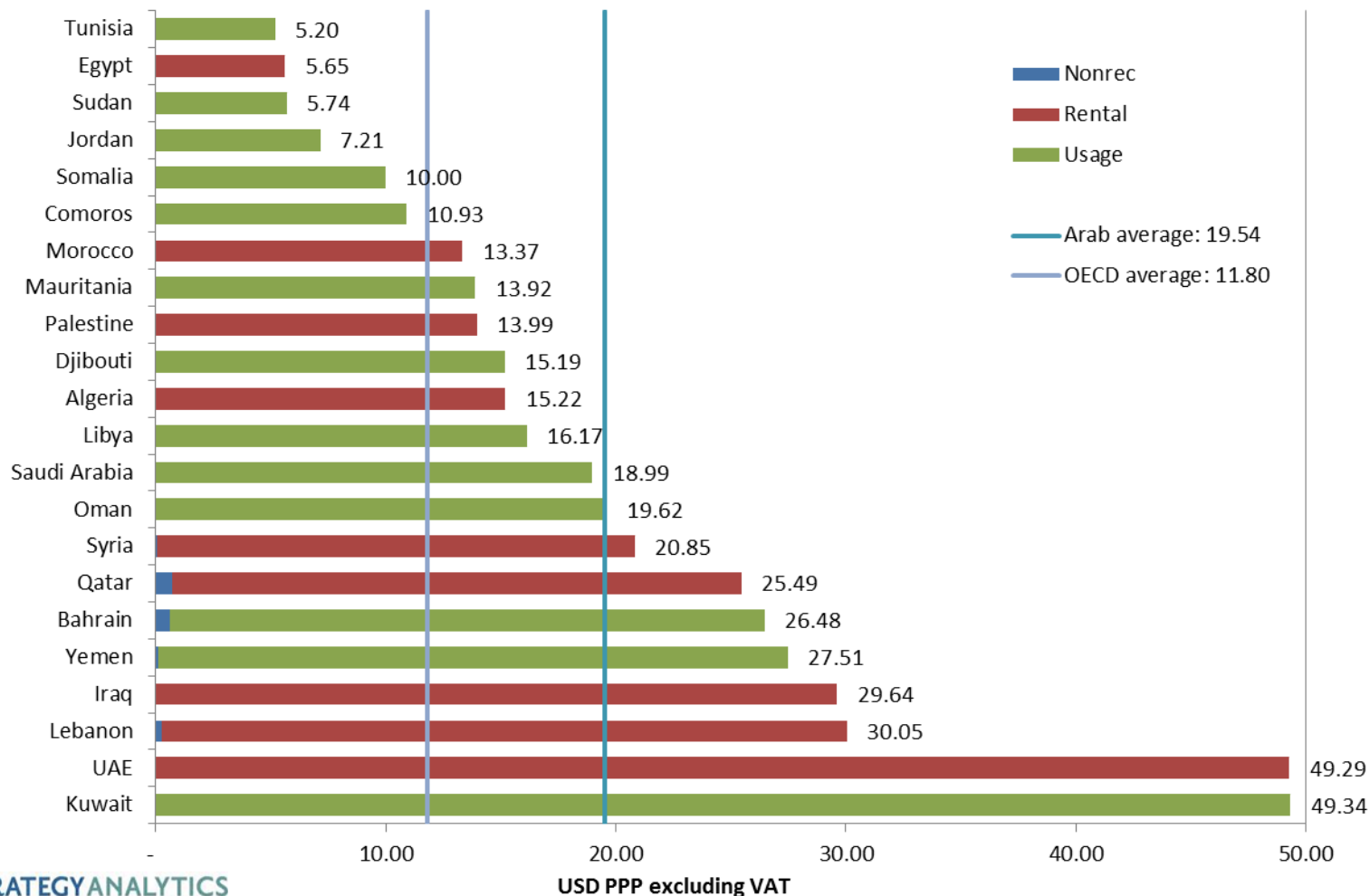
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 0.5 GB / 15 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 SHORT VALIDITY 1 GB BASKET



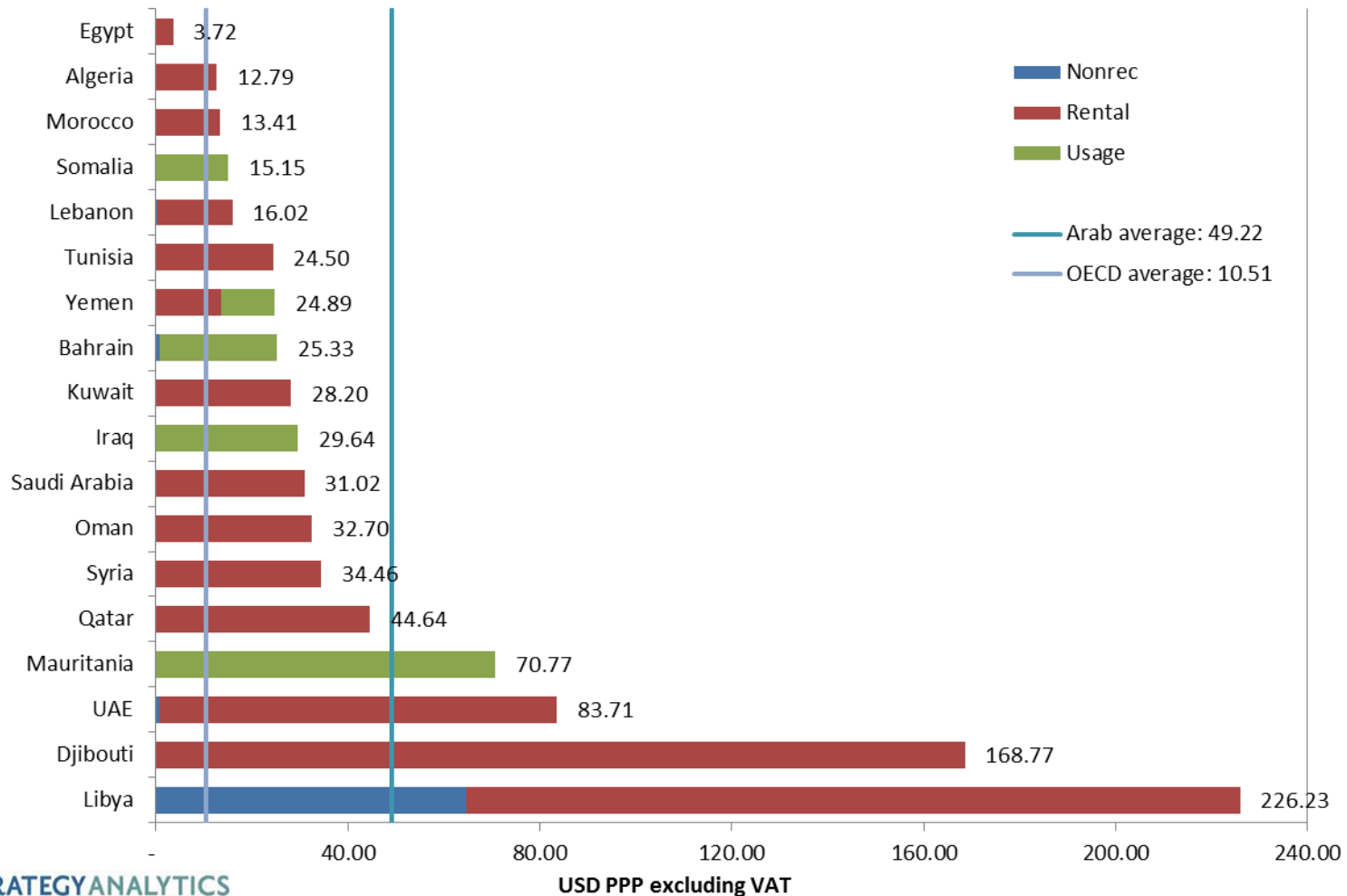
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 1 GB / 15 days per month, Residential



BUSINESS MOBILE BROADBAND OECD 2017 0.5GB BASKET



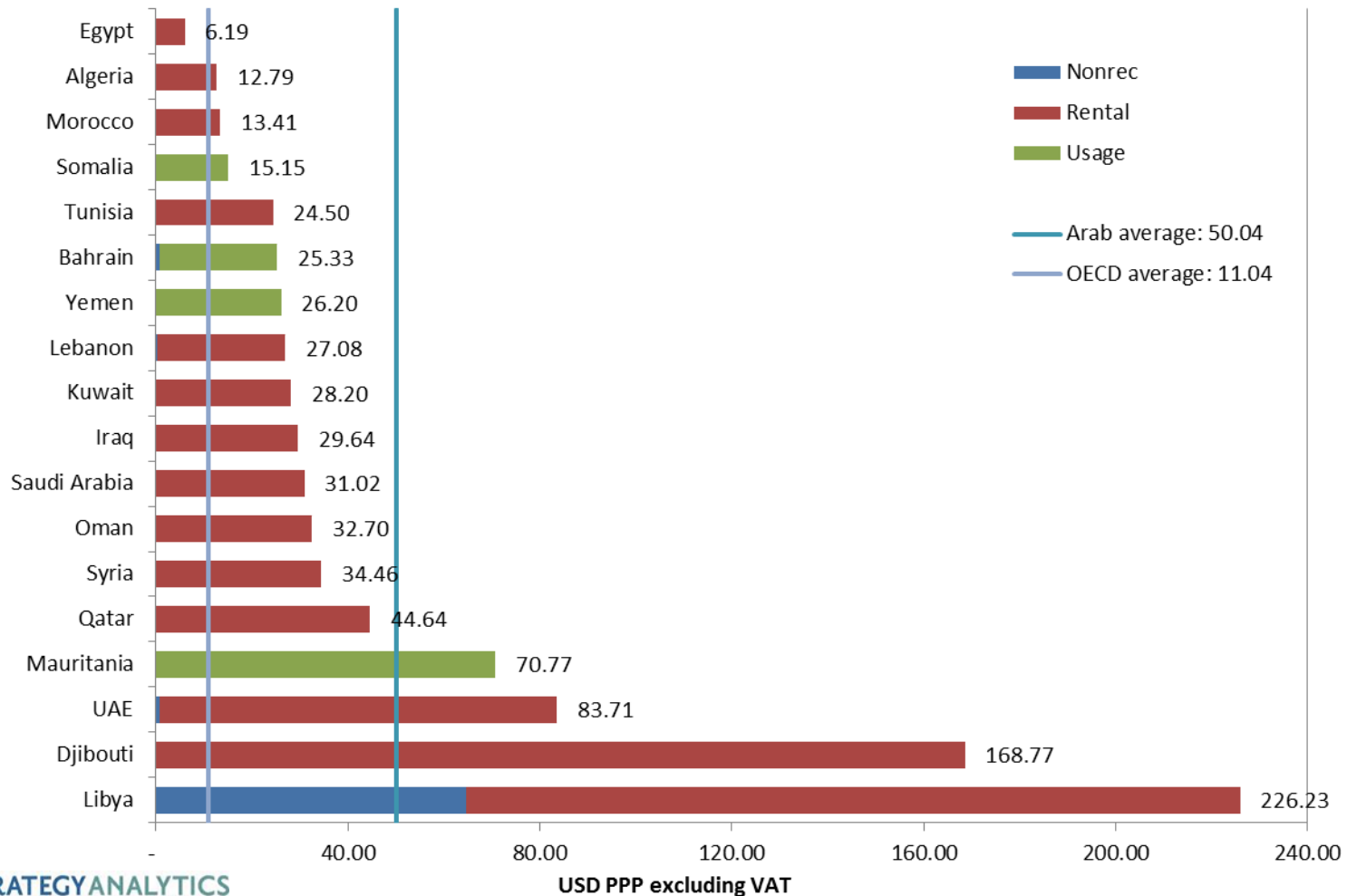
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 0.5 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 1GB BASKET



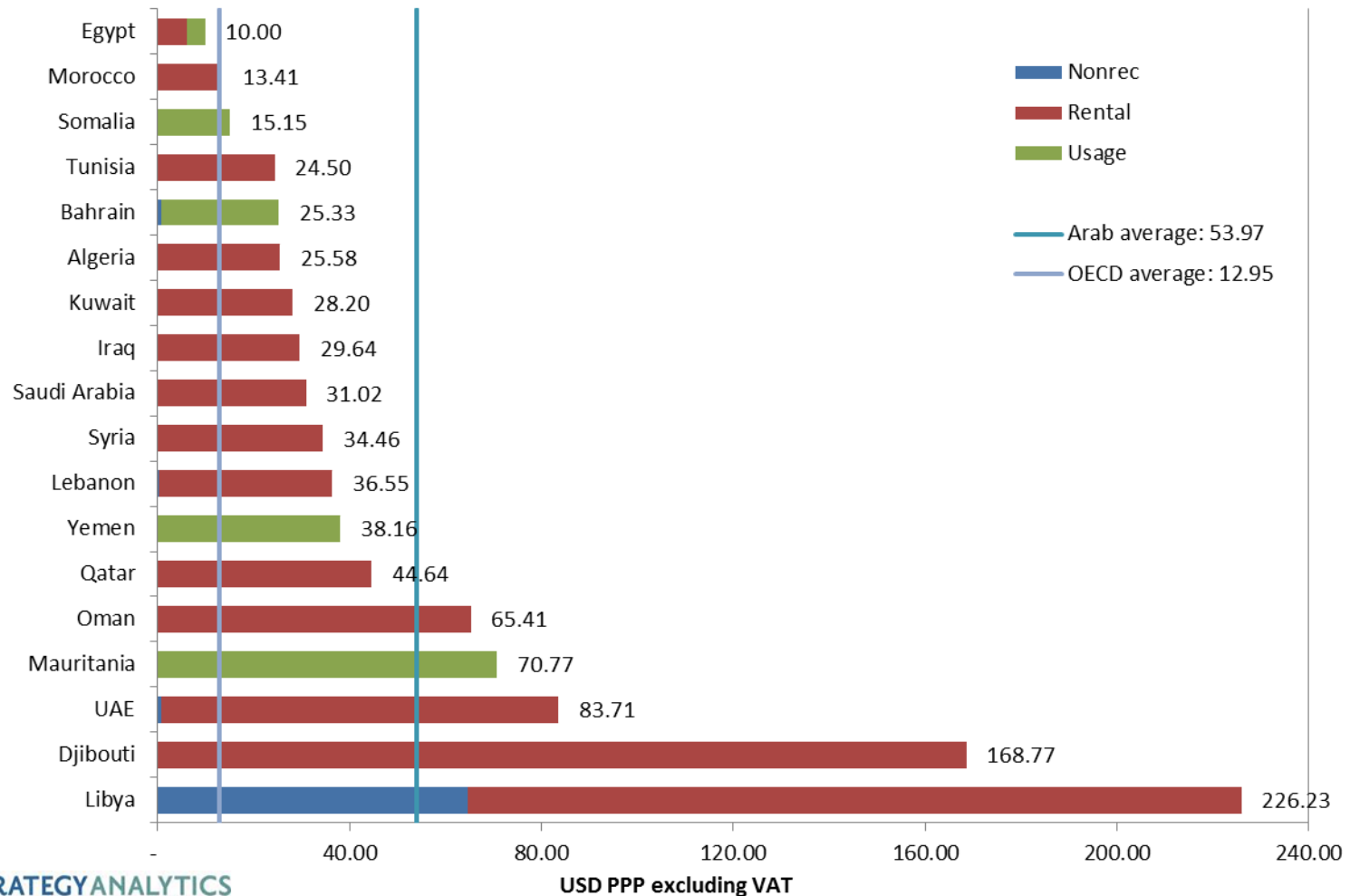
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 1 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 2GB BASKET



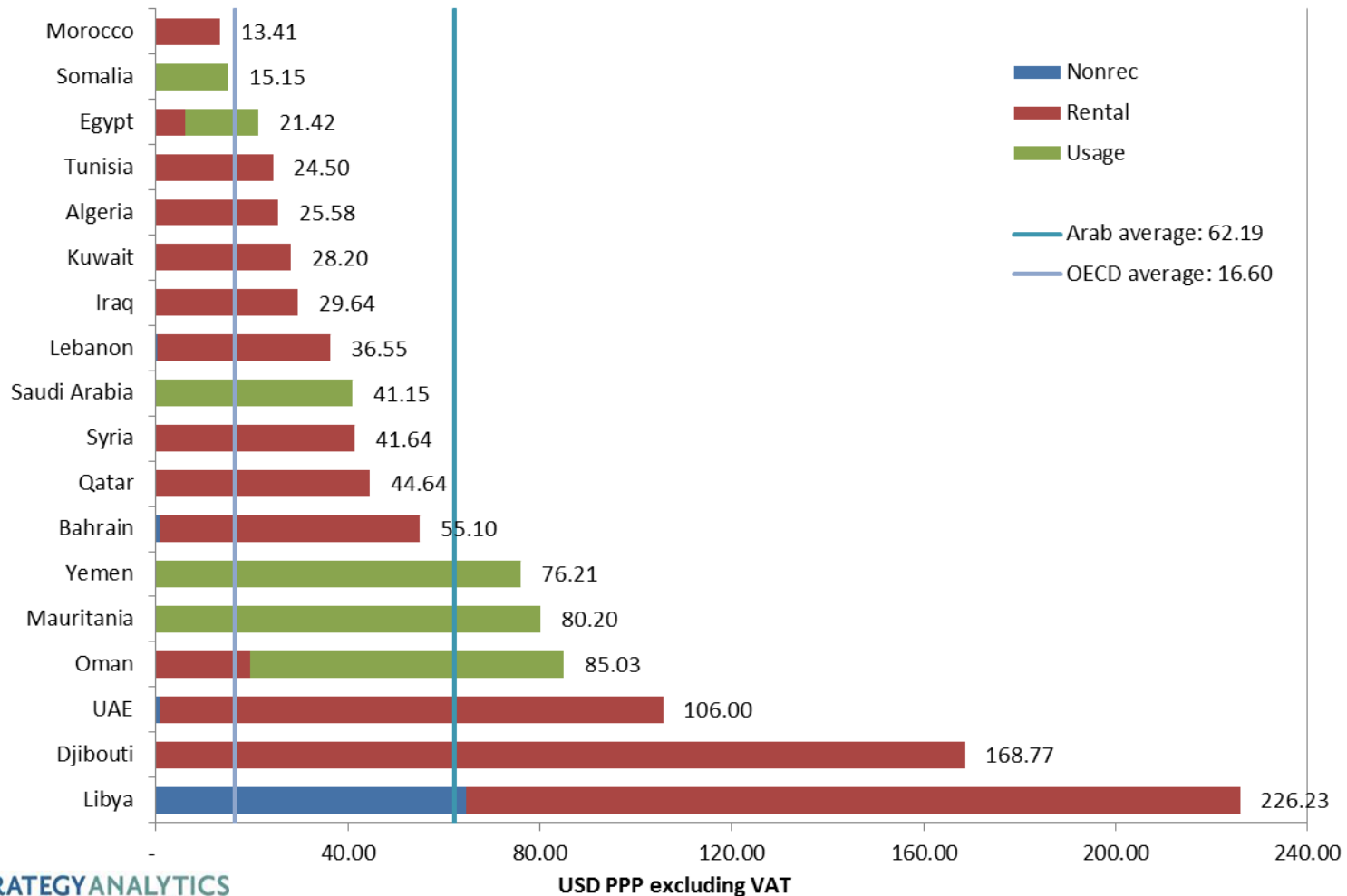
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 2 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 5GB BASKET



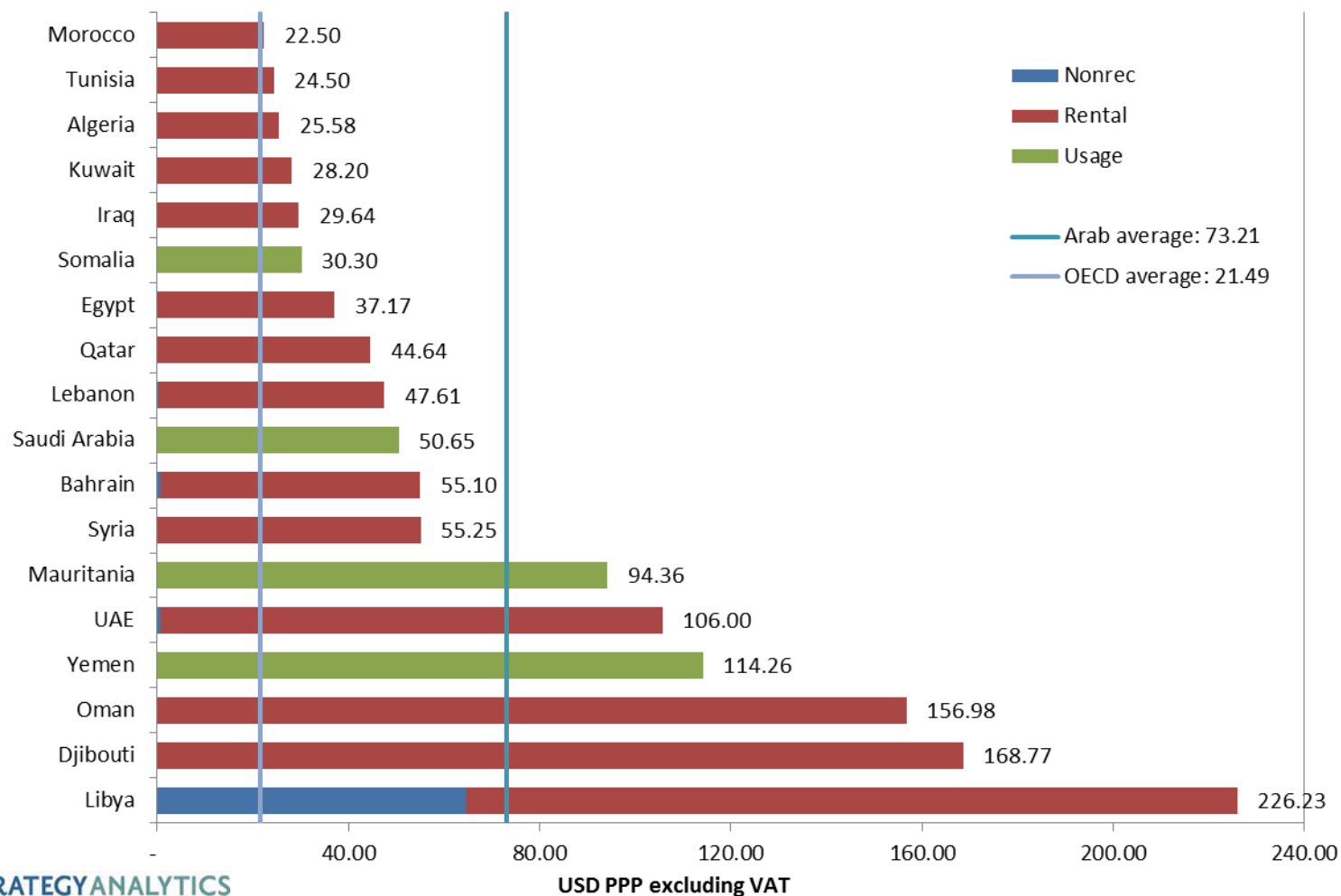
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 5 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 10GB BASKET



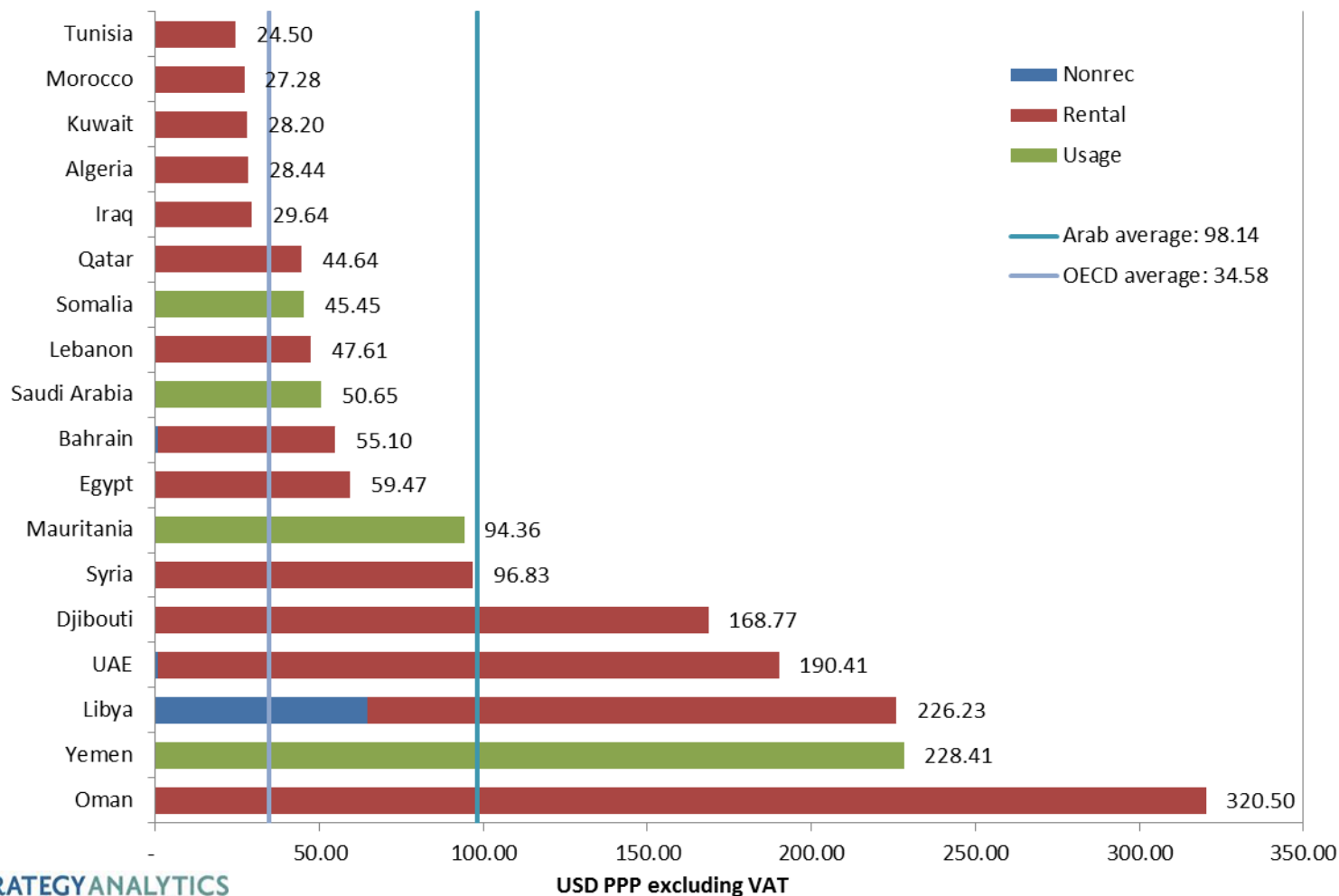
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 10 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 20GB BASKET



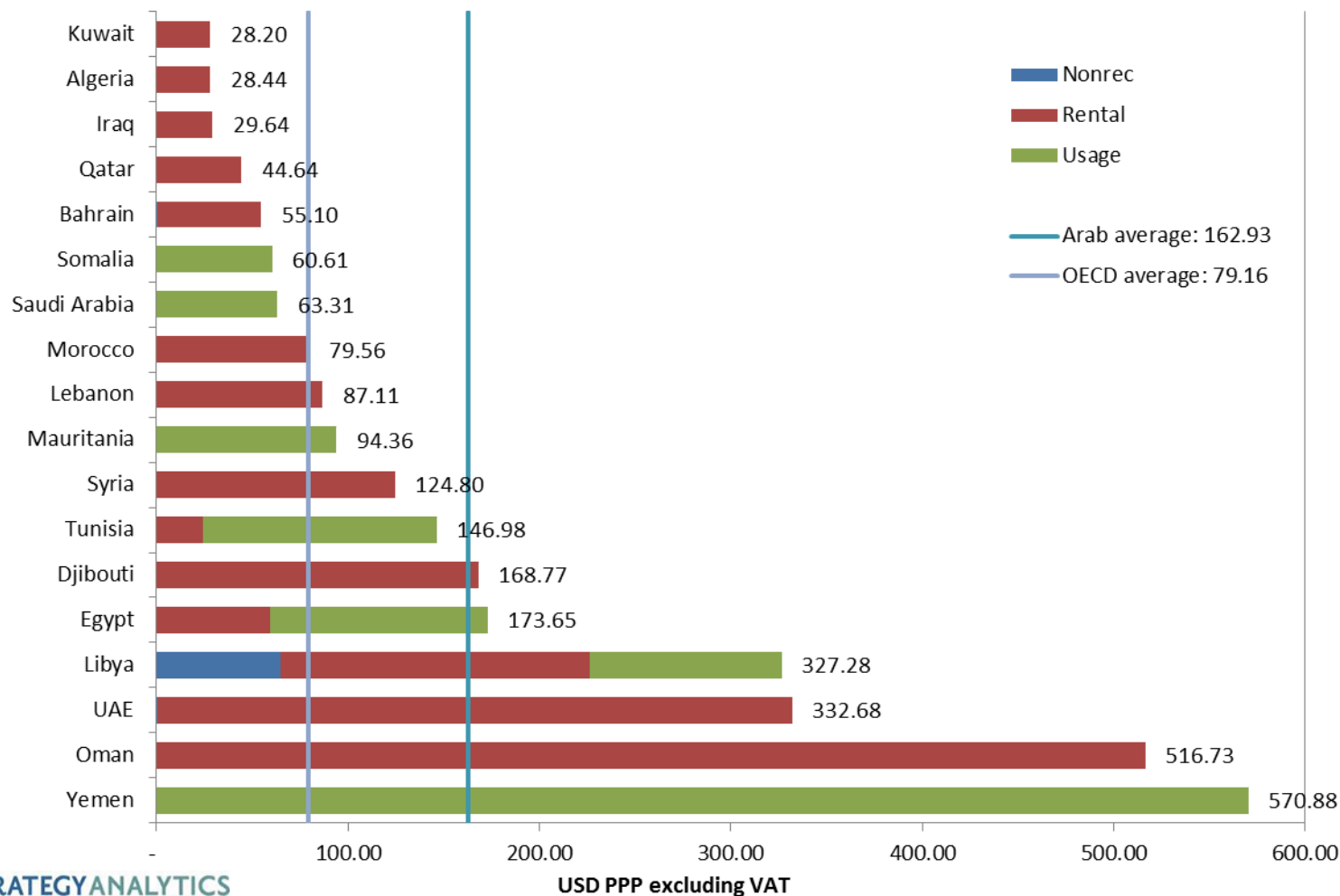
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 20 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 50GB BASKET



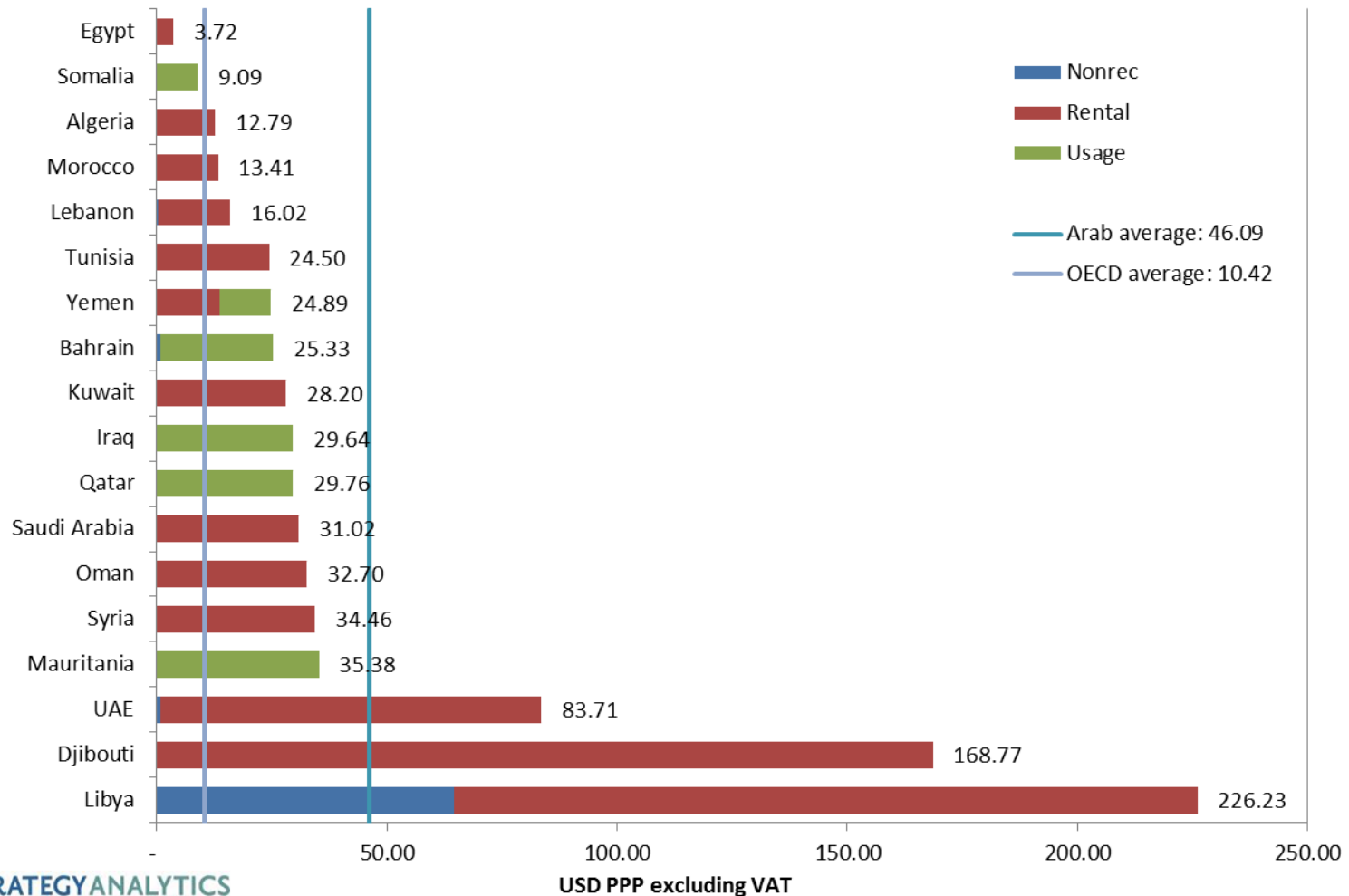
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 50 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 SHORT VALIDITY 0.5GB BASKET



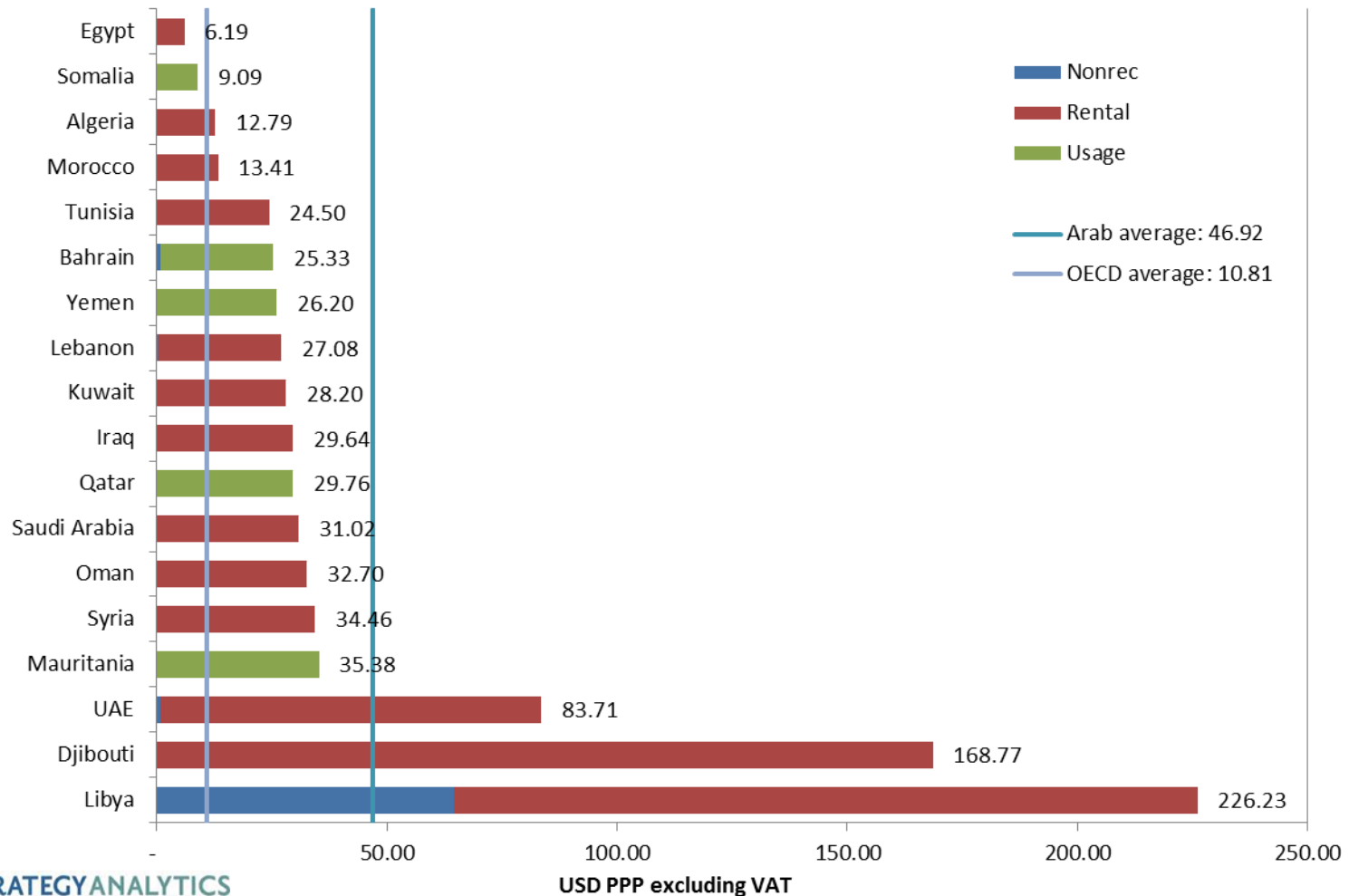
AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 0.5 GB / 15 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 SHORT VALIDITY 1 GB BASKET



AREGENET Mobile Broadband Price Benchmarking 2019
OECD 2017: 1 GB / 15 days per month, Business



OBSERVATIONS FROM MOBILE BROADBAND BASKET RESULTS



- Mobile broadband services are available across all the Arab countries.
- The table below on the left shows the 3 cheapest and 3 most expensive countries for each basket, each speed category, for both residential and business services, while the table on the right shows the average cost of mobile broadband services for both residential and business customers in the Arab countries compared to the OECD average.

		Cheapest			Most expensive				Arab:OECD average	
		1st	2nd	3rd	1st	2nd	3rd		Residential	Business
Residential	0.5 GB	Egypt	Sudan	Tunisia	Kuwait	Libya	Bahrain			
	1 GB	Tunisia	Egypt	Sudan	Kuwait	UAE	Libya			
	2 GB	Tunisia	Sudan	Egypt	Kuwait	UAE	Lebanon			
	5 GB	Morocco	Somalia	Tunisia	UAE	Yemen	Oman			
	10 GB	Jordan	Palestine	Morocco	Yemen	Oman	Mauritania			
	20 GB	Jordan	Tunisia	Iraq	Yemen	UAE	Oman			
	50 GB	Iraq	Djibouti	Jordan	Yemen	Oman	UAE			
	0.5 GB short validity	Egypt	Sudan	Tunisia	Kuwait	Iraq	UAE	0.5 GB	80%	368%
Business	1 GB short validity	Tunisia	Egypt	Sudan	Kuwait	UAE	Lebanon	1 GB	83%	353%
	0.5 GB	Egypt	Algeria	Morocco	Libya	Djibouti	UAE	2 GB	85%	317%
	1 GB	Egypt	Algeria	Morocco	Libya	Djibouti	UAE	5 GB	102%	275%
	2 GB	Egypt	Morocco	Somalia	Libya	Djibouti	UAE	10 GB	119%	241%
	5 GB	Morocco	Somalia	Egypt	Libya	Djibouti	UAE	20 GB	126%	184%
	10 GB	Morocco	Tunisia	Algeria	Libya	Djibouti	Oman	50 GB	88%	106%
	20 GB	Tunisia	Morocco	Kuwait	Oman	Yemen	Libya	0.5 GB short validity	57%	342%
	50 GB	Kuwait	Algeria	Iraq	Yemen	Oman	UAE	1 GB short validity	66%	334%
	0.5 GB short validity	Egypt	Somalia	Algeria	Libya	Djibouti	UAE			
	1 GB short validity	Egypt	Somalia	Algeria	Libya	Djibouti	UAE			

- Generally, Egypt, Sudan, Somalia, Morocco and Tunisia are consistently the cheapest countries, for both residential and business services. Kuwait, Yemen, Libya, Djibouti, Oman and UAE are among the most expensive.
- The average for the residential service baskets in the Arab countries compared to the OECD average ranges from 57% more expensive, for the 0.5 GB short validity basket, to 126% for the 20 GB basket.
- For business services, the range is 184% (more expensive) for the 20GB basket, to 368% for the 0.5 GB basket.





MOBILE BROADBAND TIME SERIES ANALYSIS AND RANKING TABLES 2015-2019

2017 OECD MOBILE BROADBAND BASKETS RANKING, 0.5GB DATA/MONTH, RESIDENTIAL



Results for Mobile Broadband: 0.5GB/30 days per mth, Residential basket, 2015-2019

Results in USD / PPP VAT included, residential results

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	24.86	22.83	15.22	15.22	15.22
Bahrain	15.53	15.53	31.63	31.63	31.66
Comoros	22.31	22.31	18.74	18.74	12.49
Djibouti	30.38	30.38	30.38	30.38	30.38
Egypt	3.53	3.53	4.24	4.24	2.82
Iraq	29.64	29.64	17.29	29.64	29.64
Jordan	18.02	18.02	7.21	7.21	7.21
Kuwait	35.25	28.20	35.25	35.25	49.34
Lebanon	17.62	17.62	16.02	17.78	17.78
Libya	56.42	56.42	56.42	56.42	32.34
Mauritania	64.95	64.95	27.84	27.84	27.84
Morocco	13.64	13.64	13.37	13.37	13.37
Oman	19.62	19.62	13.08	13.08	13.08
Palestine				11.05	11.05
Qatar	24.30	25.49	24.80	24.80	25.49
Saudi Arabia	13.05	13.05	12.66	13.30	12.66
Somalia	46.67	46.67	46.67	16.67	16.67
Sudan	2.34	1.87	2.30	2.39	3.06
Syria	11.34	11.39	20.84	20.84	20.85
Tunisia	11.56	17.34	11.56	11.56	5.20
UAE	24.44	24.44	32.72	24.90	27.39
Yemen		27.18	27.18	27.18	26.14

Arab average	24.27	24.29	22.16	20.61	19.62
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	14	12	8	9	10
Bahrain	7	6	16	19	19
Comoros	11	11	11	12	6
Djibouti	16	17	15	18	18
Egypt	2	2	2	2	1
Iraq	15	16	10	17	17
Jordan	9	9	3	3	4
Kuwait	17	15	18	20	21
Lebanon	8	8	9	11	12
Libya	19	19	20	21	20
Mauritania	20	20	14	16	16
Morocco	6	5	7	8	9
Oman	10	10	6	6	8
Palestine	-	-	-	4	5
Qatar	12	14	13	14	14
Saudi Arabia	5	4	5	7	7
Somalia	18	18	19	10	11
Sudan	1	1	1	1	2
Syria	3	3	12	13	13
Tunisia	4	7	4	5	3
UAE	13	13	17	15	15

Least expensive
Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 1GB DATA/MONTH, RESIDENTIAL



Results for Mobile Broadband: 1GB/30 days per mth, Residential basket, 2015-2019

Results in USD / PPP VAT included, residential results

	2015	2016	2017	2018	2019
Algeria	24.86	22.83	22.83	22.83	15.22
Bahrain	15.53	15.53	31.63	31.63	31.66
Comoros	33.46	33.46	22.31	22.31	12.49
Djibouti	30.38	30.38	30.38	30.38	30.38
Egypt	7.06	7.06	8.47	8.47	5.65
Iraq	37.05	37.05	17.29	29.64	29.64
Jordan	18.02	18.02	18.02	18.02	7.21
Kuwait	35.25	28.20	35.25	35.25	49.34
Lebanon	33.26	18.29	27.08	30.05	30.05
Libya	56.42	56.42	56.42	56.42	32.34
Mauritania	64.95	64.95	27.84	27.84	27.84
Morocco	13.64	13.64	13.37	13.37	13.37
Oman	32.70	32.70	19.62	19.62	19.62
Palestine				13.99	13.99
Qatar	24.30	25.49	34.72	34.72	25.49
Saudi Arabia	15.00	15.00	25.33	26.59	18.99
Somalia	83.33	83.33	83.33	16.67	16.67
Sudan	2.34	3.12	4.06	4.21	5.74
Syria	11.34	11.39	20.84	20.84	20.85
Tunisia	11.56	17.34	11.56	11.56	5.20
UAE	46.95	46.95	42.21	49.29	49.29
Yemen		43.49	35.99	34.36	27.51

Arab average	29.87	29.74	28.03	25.37	22.21
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	10	10	10	11	8
Bahrain	7	6	15	17	18
Comoros	14	15	9	10	5
Djibouti	11	13	14	16	17
Egypt	2	2	2	2	2
Iraq	16	16	5	14	15
Jordan	8	8	6	7	4
Kuwait	15	12	17	19	21
Lebanon	13	9	12	15	16
Libya	18	18	19	21	19
Mauritania	19	19	13	13	14
Morocco	5	4	4	4	6
Oman	12	14	7	8	11
Palestine	-	-	-	5	7
Qatar	9	11	16	18	13
Saudi Arabia	6	5	11	12	10
Somalia	20	20	20	6	9
Sudan	1	1	1	1	3
Syria	3	3	8	9	12
Tunisia	4	7	3	3	1
UAE	17	17	18	20	20

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 2GB DATA/MONTH, RESIDENTIAL



Results for Mobile Broadband: 2GB/30 days per mth, Residential basket, 2015-2019
Results in USD / PPP VAT included, residential results

	2015	2016	2017	2018	2019
Algeria	26.71	22.83	32.47	36.53	30.44
Bahrain	15.53	15.53	31.63	31.63	31.66
Comoros	44.62	44.62	31.23	31.23	21.86
Djibouti	30.38	30.38	30.38	30.38	30.38
Egypt	14.12	14.12	12.71	11.86	11.30
Iraq	49.40	49.40	17.29	29.64	29.64
Jordan	18.02	19.52	18.02	18.02	14.42
Kuwait	35.25	28.20	35.25	35.25	49.34
Lebanon	50.64	33.93	36.55	40.58	40.58
Libya	86.73	86.73	86.73	86.73	32.34
Mauritania	64.95	64.95	27.84	27.84	27.84
Morocco	13.64	13.64	13.37	13.37	13.37
Oman	52.33	52.33	32.70	32.70	32.70
Palestine				22.09	13.99
Qatar	24.30	25.49	34.72	34.72	25.49
Saudi Arabia	18.89	18.89	28.49	28.49	31.66
Somalia	116.67	116.67	116.67	16.67	16.67
Sudan	2.34	6.24	8.11	8.42	11.12
Syria	17.01	17.06	31.05	31.05	31.06
Tunisia	11.56	17.34	11.56	11.56	9.25
UAE	48.15	95.57	46.95	49.29	49.29
Yemen		86.98	41.97	40.06	40.06

Arab average	37.06	40.97	34.56	30.37	27.02
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	10	9	13	18	13
Bahrain	5	4	12	14	16
Comoros	13	14	11	13	8
Djibouti	11	12	9	11	12
Egypt	4	3	3	3	3
Iraq	15	15	5	10	11
Jordan	7	8	6	6	6
Kuwait	12	11	16	17	21
Lebanon	16	13	17	19	19
Libya	19	18	19	21	17
Mauritania	18	17	7	8	10
Morocco	3	2	4	4	4
Oman	17	16	14	15	18
Palestine	-	-	-	7	5
Qatar	9	10	15	16	9
Saudi Arabia	8	7	8	9	15
Somalia	20	20	20	5	7
Sudan	1	1	1	1	2
Syria	6	5	10	12	14
Tunisia	2	6	2	2	1
UAE	14	19	18	20	20

Least expensive
Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 5GB DATA/MONTH, RESIDENTIAL



Results for Mobile Broadband: 5GB/30 days per mth, Residential basket, 2015-2019

Results in USD / PPP VAT included, residential results

	2015	2016	2017	2018	2019
Algeria	26.71	22.83	38.05	38.05	30.44
Bahrain	31.05	20.99	31.63	31.63	31.66
Comoros	66.93	66.93	50.20	50.20	44.62
Djibouti	30.38	30.38	30.38	30.38	30.38
Egypt	28.25	28.25	21.19	21.19	21.19
Iraq	98.81	98.81	17.29	29.64	29.64
Jordan	19.52	19.52	21.62	21.62	21.62
Kuwait	49.34	35.25	35.25	35.25	49.34
Lebanon	50.64	50.64	36.55	40.58	40.58
Libya	177.67	177.67	177.67	177.67	36.38
Mauritania	92.78	92.78	46.39	46.39	46.39
Morocco	24.55	24.55	13.37	13.37	13.37
Oman	98.11	98.11	65.41	65.41	65.41
Palestine				38.29	22.09
Qatar	34.72	25.49	34.72	34.72	25.49
Saudi Arabia	30.56	30.56	41.15	41.15	47.49
Somalia	233.33	233.33	233.33	33.33	16.67
Sudan	2.34	10.29	14.75	15.31	20.29
Syria	28.35	30.29	51.11	51.11	51.11
Tunisia	17.34	17.34	17.34	17.34	17.34
UAE	71.86	95.57	56.66	59.49	89.13
Yemen		217.44	83.83	80.02	80.02

Arab average	60.66	67.95	53.23	44.19	37.76
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	5	5	12	12	11
Bahrain	10	4	8	8	12
Comoros	14	14	15	17	15
Djibouti	8	10	7	7	10
Egypt	6	8	5	4	5
Iraq	18	18	3	6	9
Jordan	3	3	6	5	6
Kuwait	12	12	10	11	18
Lebanon	13	13	11	14	14
Libya	19	19	19	21	13
Mauritania	16	15	14	16	16
Morocco	4	6	1	1	1
Oman	17	17	18	20	20
Palestine	-	-	-	13	7
Qatar	11	7	9	10	8
Saudi Arabia	9	11	13	15	17
Somalia	20	20	20	9	2
Sudan	1	1	2	2	4
Syria	7	9	16	18	19
Tunisia	2	2	4	3	3
UAE	15	16	17	19	21

Least expensive
Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 10GB DATA/MONTH, RESIDENTIAL



Results for Mobile Broadband: 10GB/30 days per mth, Residential basket, 2015-2019
Results in USD / PPP VAT included, residential results

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	26.71	22.83	38.05	38.05	30.44
Bahrain	36.23	20.99	31.63	31.63	31.66
Comoros	133.86	133.86	100.39	100.39	44.62
Djibouti	30.38	30.38	30.38	30.38	30.38
Egypt	42.37	42.37	42.37	36.72	36.72
Iraq	98.81	98.81	17.29	29.64	29.64
Jordan	19.52	19.52	21.62	21.62	21.62
Kuwait	49.34	35.25	56.39	35.25	49.34
Lebanon	85.39	51.31	61.83	68.63	52.85
Libya	329.25	329.25	329.25	329.25	60.63
Mauritania	92.78	92.78	92.78	92.78	92.78
Morocco	27.01	27.01	27.01	27.01	27.01
Oman	156.98	156.98	130.82	130.82	98.11
Palestine				50.81	25.77
Qatar	49.95	49.95	54.56	54.56	44.64
Saudi Arabia	50.01	50.01	63.31	49.86	60.15
Somalia	466.67	466.67	466.67	66.67	33.33
Sudan	2.34	15.44	18.43	19.14	28.71
Syria	56.70	56.75	83.24	83.24	83.24
Tunisia	20.23	23.12	28.91	28.91	28.91
UAE	95.57	212.92	80.94	84.99	89.13
Yemen		434.88	167.54	159.93	119.97

Arab average	93.50	112.91	92.54	71.38	50.89
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Below Arab average
Above Arab average

	2015	2016	2017	2018	2019
Algeria	4	4	8	10	8
Bahrain	7	3	7	7	9
Comoros	17	16	17	19	12
Djibouti	6	7	6	6	7
Egypt	8	9	9	9	11
Iraq	16	15	1	5	6
Jordan	2	2	3	2	1
Kuwait	9	8	11	8	14
Lebanon	13	12	12	15	15
Libya	19	19	19	21	17
Mauritania	14	14	16	18	20
Morocco	5	6	4	3	3
Oman	18	17	18	20	21
Palestine	-	-	-	12	2
Qatar	10	10	10	13	13
Saudi Arabia	11	11	13	11	16
Somalia	20	20	20	14	10
Sudan	1	1	2	1	4
Syria	12	13	15	16	18
Tunisia	3	5	5	4	5
UAE	15	18	14	17	19

Least expensive
Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 20GB DATA/MONTH, RESIDENTIAL



Results for Mobile Broadband: 20GB/30 days per mth, Residential basket, 2015-2019

Results in USD / PPP VAT included, residential results

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	26.71	22.83	38.05	38.05	38.05
Bahrain	51.76	31.05	51.76	51.76	51.76
Comoros	223.09	223.09	200.78	200.78	66.93
Djibouti	30.38	30.38	30.38	30.38	30.38
Egypt	70.62	70.62	70.62	70.62	70.62
Iraq	148.21	148.21	17.29	29.64	29.64
Jordan	37.54	37.54	25.38	21.62	21.62
Kuwait	49.34	35.25	56.39	35.25	49.34
Lebanon	120.15	86.07	93.43	103.70	79.15
Libya	632.39	632.39	632.39	632.39	80.84
Mauritania	92.78	92.78	92.78	92.78	92.78
Morocco	32.73	32.73	40.64	40.64	40.64
Oman	189.68	189.68	196.23	196.23	163.52
Palestine				73.64	34.61
Qatar	94.83	94.83	99.19	99.19	44.64
Saudi Arabia	52.71	60.15	84.42	99.72	65.81
Somalia	816.67	816.67	816.67	100.00	50.00
Sudan	2.34	30.88	36.87	38.28	44.03
Syria	113.40	75.65	138.05	138.05	138.05
Tunisia	40.47	40.47	28.91	28.91	28.91
UAE	142.99	212.92	129.50	135.97	188.71
Yemen		869.75	334.97	319.74	217.44

Arab average	148.44	182.57	153.08	117.15	73.98
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Below Arab average
 Above Arab average

	2015	2016	2017	2018	2019
Algeria	2	1	6	6	6
Bahrain	8	4	8	9	12
Comoros	18	18	18	20	14
Djibouti	3	2	4	4	4
Egypt	10	10	10	10	15
Iraq	16	15	1	3	3
Jordan	5	7	2	1	1
Kuwait	7	6	9	5	10
Lebanon	14	12	13	16	16
Libya	19	19	19	21	17
Mauritania	11	13	12	12	18
Morocco	4	5	7	8	7
Oman	17	16	17	19	20
Palestine	-	-	-	11	5
Qatar	12	14	14	13	9
Saudi Arabia	9	9	11	14	13
Somalia	20	20	20	15	11
Sudan	1	3	5	7	8
Syria	13	11	16	18	19
Tunisia	6	8	3	2	2
UAE	15	17	15	17	21

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 50GB DATA/MONTH, RESIDENTIAL



Results for Mobile Broadband: 50GB/30 days per mth, Residential basket, 2015-2019

Results in USD / PPP VAT included, residential results

	2015	2016	2017	2018	2019
Algeria	26.71	22.83	38.05	38.05	38.05
Bahrain	129.39	62.11	51.76	51.76	57.85
Comoros	557.73	557.73	501.96	501.96	178.47
Djibouti	30.38	30.38	30.38	30.38	30.38
Egypt	360.16	360.16	183.61	183.61	183.61
Iraq	444.64	444.64	17.29	29.64	29.64
Jordan	45.98	45.98	36.04	36.04	36.04
Kuwait	49.34	35.25	56.39	42.29	70.49
Lebanon	259.17	172.96	188.21	208.92	175.60
Libya	1,541.81	1,541.81	1,541.81	1,541.81	172.06
Mauritania	92.78	92.78	92.78	92.78	92.78
Morocco	90.47	51.83	95.47	95.47	95.47
Oman	189.68	189.68	327.04	327.04	327.04
Palestine				220.92	50.81
Qatar	138.87	198.39	247.98	247.98	44.64
Saudi Arabia	94.97	94.34	125.99	99.72	65.81
Somalia	1,983.33	1,983.33	1,983.33	208.33	66.67
Sudan	2.34	73.93	84.79	88.05	88.05
Syria	113.40	151.25	138.05	138.05	138.05
Tunisia	40.47	40.47	28.91	28.91	43.68
UAE	4,742.88	4,742.88	179.73	188.71	188.71
Yemen		2,174.39	753.54	719.29	565.34

Arab average	546.73	622.24	319.20	232.71	124.51
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	2	1	5	5	4
Bahrain	11	7	6	7	8
Comoros	17	17	18	20	18
Djibouti	3	2	3	3	2
Egypt	15	15	14	13	19
Iraq	16	16	1	2	1
Jordan	5	5	4	4	3
Kuwait	6	3	7	6	11
Lebanon	14	12	15	16	17
Libya	18	18	19	21	16
Mauritania	8	9	9	9	13
Morocco	7	6	10	10	14
Oman	13	13	17	19	21
Palestine	-	-	-	17	7
Qatar	12	14	16	18	6
Saudi Arabia	9	10	11	11	9
Somalia	19	19	20	15	10
Sudan	1	8	8	8	12
Syria	10	11	12	12	15
Tunisia	4	4	2	1	5
UAE	20	20	13	14	20

Least expensive
Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 0.5GB DATA/15 DAYS SHORT VALIDITY, RESIDENTIAL



Results for Mobile Broadband: 0.5GB/15 days per mth, Residential basket, 2015-2019

Results in USD / PPP VAT included, residential results

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	15.73	14.53	13.70	13.70	13.70
Bahrain	15.53	15.53	26.45	26.45	26.48
Comoros	22.31	22.31	16.73	16.73	6.25
Djibouti	15.19	15.19	15.19	15.19	15.19
Egypt	3.53	3.53	4.24	4.24	2.82
Iraq	29.64	29.64	17.29	29.64	29.64
Jordan	18.02	18.02	7.21	7.21	7.21
Kuwait	21.15	21.15	35.25	35.25	49.34
Lebanon	17.62	17.62	16.02	17.78	17.78
Libya	56.42	56.42	56.42	56.42	16.17
Mauritania	41.75	41.75	13.92	13.92	13.92
Morocco	13.64	13.64	13.37	13.37	13.37
Oman	19.62	19.62	13.08	13.08	13.08
Palestine				11.05	11.05
Qatar	22.32	22.32	22.32	22.32	25.49
Saudi Arabia	13.05	13.05	12.66	13.30	12.66
Somalia	46.67	46.67	46.67	10.00	10.00
Sudan	1.75	1.87	2.30	2.39	3.06
Syria	11.34	11.39	20.84	20.84	20.85
Tunisia	11.56	17.34	9.25	9.25	5.20
UAE	24.44	24.44	32.72	24.90	27.39
Yemen		27.18	27.18	27.18	26.14

Arab average	21.06	21.58	20.13	18.37	16.67
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Below Arab average
 Above Arab average

	2015	2016	2017	2018	2019
Algeria	9	6	8	10	11
Bahrain	8	8	16	18	18
Comoros	14	14	12	13	4
Djibouti	7	7	10	12	13
Egypt	2	2	2	2	1
Iraq	17	17	13	19	20
Jordan	11	11	3	3	5
Kuwait	13	13	18	20	21
Lebanon	10	10	11	14	15
Libya	20	20	20	21	14
Mauritania	18	18	9	11	12
Morocco	6	5	7	9	10
Oman	12	12	6	7	9
Palestine	-	-	-	6	7
Qatar	15	15	15	16	17
Saudi Arabia	5	4	5	8	8
Somalia	19	19	19	5	6
Sudan	1	1	1	1	2
Syria	3	3	14	15	16
Tunisia	4	9	4	4	3
UAE	16	16	17	17	19

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 1GB DATA/15 DAYS SHORT VALIDITY, RESIDENTIAL



Results for Mobile Broadband: 1GB/15 days per mth, Residential basket, 2015-2019
Results in USD / PPP VAT included, residential results

	2015	2016	2017	2018	2019
Algeria	20.29	19.10	18.26	18.26	15.22
Bahrain	15.53	15.53	26.45	26.45	26.48
Comoros	33.46	33.46	22.31	22.31	10.93
Djibouti	15.19	15.19	15.19	15.19	15.19
Egypt	7.06	7.06	8.47	5.93	5.65
Iraq	37.05	37.05	17.29	29.64	29.64
Jordan	18.02	18.02	16.22	16.22	7.21
Kuwait	21.15	21.15	35.25	35.25	49.34
Lebanon	33.26	18.29	27.08	30.05	30.05
Libya	56.42	56.42	56.42	56.42	16.17
Mauritania	41.75	41.75	13.92	13.92	13.92
Morocco	13.64	13.64	13.37	13.37	13.37
Oman	26.16	26.16	19.62	19.62	19.62
Palestine				13.99	13.99
Qatar	24.30	25.49	22.32	22.32	25.49
Saudi Arabia	15.00	15.00	25.33	26.59	18.99
Somalia	83.33	83.33	83.33	10.00	10.00
Sudan	1.75	3.12	4.06	4.21	5.74
Syria	11.34	11.39	20.84	20.84	20.85
Tunisia	11.56	17.34	9.25	9.25	5.20
UAE	46.95	46.95	42.21	49.29	49.29
Yemen		43.49	35.99	34.36	27.51

Arab average	26.66	27.09	25.39	22.43	19.54
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	10	11	9	10	11
Bahrain	8	7	15	15	17
Comoros	15	15	12	13	6
Djibouti	7	6	6	8	10
Egypt	2	2	2	2	2
Iraq	16	16	8	17	18
Jordan	9	9	7	9	4
Kuwait	11	12	17	19	21
Lebanon	14	10	16	18	19
Libya	19	19	19	21	12
Mauritania	17	17	5	6	8
Morocco	5	4	4	5	7
Oman	13	14	10	11	14
Palestine	-	-	-	7	9
Qatar	12	13	13	14	16
Saudi Arabia	6	5	14	16	13
Somalia	20	20	20	4	5
Sudan	1	1	1	1	3
Syria	3	3	11	12	15
Tunisia	4	8	3	3	1
UAE	18	18	18	20	20

Least expensive
Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 0.5GB DATA/MONTH, BUSINESS



Results for Mobile Broadband: 0.5GB/30 days per mth, Business basket, 2015-2019

Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	13.01	10.41	13.01	12.79	12.79
Bahrain	20.99	26.60	26.60	26.60	25.33
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	6.42	6.42	3.85	3.72	3.72
Iraq	29.64	29.64	17.29	29.64	29.64
Jordan					
Kuwait	35.25	35.25	169.18	28.20	28.20
Lebanon	13.65	13.65	13.65	12.81	16.02
Libya		107.22	107.22	107.22	226.23
Mauritania	55.04	55.04	70.77	70.77	70.77
Morocco	27.28	22.50	13.41	13.41	13.41
Oman	19.62	19.62	19.62	19.62	32.70
Palestine					
Qatar	30.45	25.49	34.72	24.80	44.64
Saudi Arabia	31.02	31.02	31.02	31.02	31.02
Somalia	46.67	46.67	46.67	15.15	15.15
Sudan					
Syria	34.45	34.45	34.45	34.45	34.46
Tunisia	19.60	19.60	20.41	20.41	24.50
UAE	29.18	28.45	83.71	83.71	83.71
Yemen			28.37	28.37	24.89

Arab average	34.70	38.53	48.72	49.16	49.22
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	2	2	2	2	2
Bahrain	6	8	8	9	7
Comoros	-	-	-	-	-
Djibouti	16	17	16	17	16
Egypt	1	1	1	1	1
Iraq	9	10	5	11	9
Jordan	-	-	-	-	-
Kuwait	13	13	17	10	8
Lebanon	3	3	4	3	5
Libya	-	16	15	16	17
Mauritania	15	15	13	14	14
Morocco	7	6	3	4	3
Oman	5	5	6	6	11
Palestine	-	-	-	-	-
Qatar	10	7	11	8	13
Saudi Arabia	11	11	9	12	10
Somalia	14	14	12	5	4
Sudan	-	-	-	-	-
Syria	12	12	10	13	12
Tunisia	4	4	7	7	6
UAE	8	9	14	15	15

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 1GB DATA/MONTH, BUSINESS



Results for Mobile Broadband: 1GB/30 days per mth, Business basket, 2015-2019

Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	21.25	10.41	20.81	20.46	12.79
Bahrain	20.99	26.60	26.60	26.60	25.33
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	6.42	6.42	6.42	6.19	6.19
Iraq	37.05	37.05	17.29	29.64	29.64
Jordan					
Kuwait	35.25	35.25	169.18	28.20	28.20
Lebanon	24.11	25.73	23.05	23.05	27.08
Libya		107.22	107.22	107.22	226.23
Mauritania	55.04	55.04	70.77	70.77	70.77
Morocco	27.28	22.50	13.41	13.41	13.41
Oman	32.70	32.70	32.70	32.70	32.70
Palestine					
Qatar	30.45	25.49	34.72	34.72	44.64
Saudi Arabia	31.02	31.02	31.02	31.02	31.02
Somalia	83.33	83.33	83.33	15.15	15.15
Sudan					
Syria	34.45	34.45	34.45	34.45	34.46
Tunisia	19.60	19.60	20.41	20.41	24.50
UAE	29.18	28.45	83.71	83.71	83.71
Yemen			32.72	32.72	26.20

Arab average	39.45	42.60	52.82	51.81	50.04
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	4	2	5	5	2
Bahrain	3	7	7	7	6
Comoros	-	-	-	-	-
Djibouti	16	17	16	17	16
Egypt	1	1	1	1	1
Iraq	13	13	3	9	9
Jordan	-	-	-	-	-
Kuwait	12	12	17	8	8
Lebanon	5	6	6	6	7
Libya	-	16	15	16	17
Mauritania	14	14	12	14	14
Morocco	6	4	2	2	3
Oman	10	10	9	11	11
Palestine	-	-	-	-	-
Qatar	8	5	11	13	13
Saudi Arabia	9	9	8	10	10
Somalia	15	15	13	3	4
Sudan	-	-	-	-	-
Syria	11	11	10	12	12
Tunisia	2	3	4	4	5
UAE	7	8	14	15	15

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 2GB DATA/MONTH, BUSINESS



Results for Mobile Broadband: 2GB/30 days per mth, Business basket, 2015-2019

Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	21.25	10.41	31.22	28.44	25.58
Bahrain	20.99	26.60	26.60	26.60	25.33
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	11.56	12.84	11.56	11.15	10.00
Iraq	49.40	49.40	17.29	29.64	29.64
Jordan					
Kuwait	56.39	35.25	169.18	28.20	28.20
Lebanon	36.87	39.16	52.59	31.10	36.55
Libya		107.22	107.22	107.22	226.23
Mauritania	55.04	55.04	70.77	70.77	70.77
Morocco	27.28	22.50	13.41	13.41	13.41
Oman	65.41	65.41	65.41	65.41	65.41
Palestine					
Qatar	40.37	25.49	34.72	34.72	44.64
Saudi Arabia	31.02	31.02	31.02	31.02	31.02
Somalia	116.67	116.67	116.67	15.15	15.15
Sudan					
Syria	34.45	34.45	34.45	34.45	34.46
Tunisia	19.60	19.60	20.41	20.41	24.50
UAE	48.15	47.42	83.71	83.71	83.71
Yemen			38.16	38.16	38.16

Arab average	48.59	49.50	59.30	55.10	53.97
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	4	1	7	7	6
Bahrain	3	6	5	5	5
Comoros	-	-	-	-	-
Djibouti	16	17	16	17	16
Egypt	1	2	1	1	1
Iraq	11	12	3	8	8
Jordan	-	-	-	-	-
Kuwait	13	9	17	6	7
Lebanon	8	10	10	10	11
Libya	-	15	14	16	17
Mauritania	12	13	12	14	14
Morocco	5	4	2	2	2
Oman	14	14	11	13	13
Palestine	-	-	-	-	-
Qatar	9	5	9	12	12
Saudi Arabia	6	7	6	9	9
Somalia	15	16	15	3	3
Sudan	-	-	-	-	-
Syria	7	8	8	11	10
Tunisia	2	3	4	4	4
UAE	10	11	13	15	15

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 5GB DATA/MONTH, BUSINESS



Results for Mobile Broadband: 5GB/30 days per mth, Business basket, 2015-2019

Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	21.25	10.41	45.53	28.44	25.58
Bahrain	31.05	31.05	51.76	51.76	55.10
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	23.11	23.11	23.11	22.30	21.42
Iraq	98.81	98.81	17.29	29.64	29.64
Jordan					
Kuwait	56.39	56.39	169.18	28.20	28.20
Lebanon	36.87	39.16	52.59	31.10	36.55
Libya		417.64	417.64	417.64	226.23
Mauritania	78.63	78.63	78.63	78.63	80.20
Morocco	27.28	22.50	13.41	13.41	13.41
Oman	111.19	111.19	111.19	111.19	85.03
Palestine					
Qatar	49.60	25.49	34.72	34.72	44.64
Saudi Arabia	60.49	44.32	44.32	41.15	41.15
Somalia	233.33	233.33	233.33	30.30	15.15
Sudan					
Syria	55.24	55.24	55.24	55.24	41.64
Tunisia	19.60	19.60	20.41	20.41	24.50
UAE	60.00	59.28	107.42	107.42	106.00
Yemen			76.21	76.21	76.21

Arab average	69.12	86.42	94.17	83.33	62.19
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	2	1	7	5	5
Bahrain	5	6	8	11	12
Comoros	-	-	-	-	-
Djibouti	15	15	14	16	16
Egypt	3	4	4	3	3
Iraq	13	13	2	6	7
Jordan	-	-	-	-	-
Kuwait	9	10	15	4	6
Lebanon	6	7	9	8	8
Libya	-	17	17	17	17
Mauritania	12	12	11	13	13
Morocco	4	3	1	1	1
Oman	14	14	13	15	14
Palestine	-	-	-	-	-
Qatar	7	5	5	9	11
Saudi Arabia	11	8	6	10	9
Somalia	16	16	16	7	2
Sudan	-	-	-	-	-
Syria	8	9	10	12	10
Tunisia	1	2	3	2	4
UAE	10	11	12	14	15

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 10GB DATA/MONTH, BUSINESS



Results for Mobile Broadband: 10GB/30 days per mth, Business basket, 2015-2019
Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	21.25	10.41	65.04	28.44	25.58
Bahrain	36.23	31.05	51.76	51.76	55.10
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	38.52	38.52	38.52	37.17	37.17
Iraq	98.81	98.81	17.29	29.64	29.64
Jordan					
Kuwait	112.79	105.74	169.18	28.20	28.20
Lebanon	62.15	66.02	52.59	49.46	47.61
Libya		935.00	935.00	935.00	226.23
Mauritania	78.63	78.63	78.63	78.63	94.36
Morocco	27.28	22.50	22.50	13.41	22.50
Oman	156.98	156.98	156.98	156.98	156.98
Palestine					
Qatar	64.83	44.87	44.87	44.87	44.64
Saudi Arabia	60.49	50.65	50.65	50.65	50.65
Somalia	466.67	466.67	466.67	60.61	30.30
Sudan					
Syria	68.85	68.85	68.85	68.85	55.25
Tunisia	19.60	19.60	20.41	20.41	24.50
UAE	60.00	59.28	107.42	107.42	106.00
Yemen			152.31	152.31	114.26

Arab average	94.75	140.98	146.76	124.22	73.21
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	2	1	9	4	3
Bahrain	4	4	7	10	11
Comoros	-	-	-	-	-
Djibouti	14	14	13	16	16
Egypt	5	5	4	6	7
Iraq	12	12	1	5	5
Jordan	-	-	-	-	-
Kuwait	13	13	15	3	4
Lebanon	8	9	8	8	9
Libya	-	17	17	17	17
Mauritania	11	11	11	13	13
Morocco	3	3	3	1	1
Oman	15	15	14	15	15
Palestine	-	-	-	-	-
Qatar	9	6	5	7	8
Saudi Arabia	7	7	6	9	10
Somalia	16	16	16	11	6
Sudan	-	-	-	-	-
Syria	10	10	10	12	12
Tunisia	1	2	2	2	2
UAE	6	8	12	14	14

Least expensive
Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 20GB DATA/MONTH, BUSINESS



Results for Mobile Broadband: 20GB/30 days per mth, Business basket, 2015-2019

Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	21.25	10.41	91.05	28.44	28.44
Bahrain	51.76	41.40	51.76	51.76	55.10
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	61.63	61.63	61.63	59.47	59.47
Iraq	148.21	148.21	17.29	29.64	29.64
Jordan					
Kuwait	112.79	105.74	169.18	28.20	28.20
Lebanon	87.42	92.87	79.45	74.74	47.61
Libya		1,969.73	1,969.73	1,969.73	226.23
Mauritania	78.63	78.63	78.63	78.63	94.36
Morocco	27.28	27.28	27.28	13.41	27.28
Oman	320.50	320.50	320.50	320.50	320.50
Palestine					
Qatar	115.62	84.67	79.47	79.47	44.64
Saudi Arabia	60.49	50.65	50.65	50.65	50.65
Somalia	816.67	816.67	816.67	90.91	45.45
Sudan					
Syria	96.82	96.82	96.82	96.82	96.83
Tunisia	34.30	34.30	24.50	24.50	24.50
UAE	190.41	190.41	190.41	190.41	190.41
Yemen			304.52	304.52	228.41

Arab average	147.92	251.35	254.03	211.89	98.14
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	1	1	10	4	4
Bahrain	4	4	5	7	10
Comoros	-	-	-	-	-
Djibouti	12	12	12	16	14
Egypt	6	6	6	8	11
Iraq	13	13	1	5	5
Jordan	-	-	-	-	-
Kuwait	10	11	13	3	3
Lebanon	8	9	8	9	8
Libya	-	17	17	17	16
Mauritania	7	7	7	10	12
Morocco	2	2	3	1	2
Oman	15	15	15	15	17
Palestine	-	-	-	-	-
Qatar	11	8	9	11	6
Saudi Arabia	5	5	4	6	9
Somalia	16	16	16	12	7
Sudan	-	-	-	-	-
Syria	9	10	11	13	13
Tunisia	3	3	2	2	1
UAE	14	14	14	14	15



2017 OECD MOBILE BROADBAND BASKETS RANKING, 50GB DATA/MONTH, BUSINESS



Results for Mobile Broadband: 50GB/30 days per mth, Business basket, 2015-2019

Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	21.25	10.41	169.10	28.44	28.44
Bahrain	51.76	64.69	51.76	51.76	55.10
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	215.71	215.71	215.71	208.14	173.65
Iraq	444.64	444.64	17.29	29.64	29.64
Jordan					
Kuwait	133.93	133.93	169.18	28.20	28.20
Lebanon	188.53	200.30	160.01	150.57	87.11
Libya		5,073.90	5,073.90	5,073.90	327.28
Mauritania	78.63	78.63	78.63	78.63	94.36
Morocco		79.56	79.56	13.41	79.56
Oman	516.73	516.73	516.73	516.73	516.73
Palestine					
Qatar	178.55	198.39	203.01	203.01	44.64
Saudi Arabia	60.49	63.31	63.31	63.31	63.31
Somalia	1,983.33	1,983.33	1,983.33	189.39	60.61
Sudan					
Syria	2,276.81	2,276.81	2,276.81	2,276.81	124.80
Tunisia	34.30	34.30	24.50	24.50	146.98
UAE	332.68	332.68	332.68	332.68	332.68
Yemen			685.04	685.04	570.88

Arab average	444.02	697.08	680.20	570.91	162.93
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	1	1	9	4	2
Bahrain	3	4	3	6	5
Comoros	-	-	-	-	-
Djibouti	7	8	7	13	13
Egypt	10	11	12	12	14
Iraq	12	13	1	5	3
Jordan	-	-	-	-	-
Kuwait	6	7	10	3	1
Lebanon	9	10	8	9	9
Libya	-	17	17	17	15
Mauritania	5	5	5	8	10
Morocco	-	6	6	1	8
Oman	13	14	14	15	17
Palestine	-	-	-	-	-
Qatar	8	9	11	11	4
Saudi Arabia	4	3	4	7	7
Somalia	14	15	15	10	6
Sudan	-	-	-	-	-
Syria	15	16	16	16	11
Tunisia	2	2	2	2	12
UAE	11	12	13	14	16

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 0.5GB DATA/15 DAYS SHORT VALIDITY, BUSINESS



Results for Mobile Broadband: 0.5GB/15 days per mth, Business basket, 2015-2019

Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	13.01	10.41	13.01	12.79	12.79
Bahrain	20.99	26.60	26.60	26.60	25.33
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	6.42	6.42	3.85	3.72	3.72
Iraq	29.64	29.64	17.29	29.64	29.64
Jordan					
Kuwait	35.25	35.25	169.18	28.20	28.20
Lebanon	13.65	13.65	13.65	12.81	16.02
Libya		107.22	107.22	107.22	226.23
Mauritania	35.38	35.38	35.38	35.38	35.38
Morocco	27.28	22.50	13.41	13.41	13.41
Oman	19.62	19.62	19.62	19.62	32.70
Palestine					
Qatar	30.45	25.49	34.72	24.80	29.76
Saudi Arabia	31.02	31.02	31.02	31.02	31.02
Somalia	46.67	46.67	46.67	9.09	9.09
Sudan					
Syria	34.45	34.45	34.45	34.45	34.46
Tunisia	19.60	19.60	20.41	20.41	24.50
UAE	29.18	28.45	83.71	83.71	83.71
Yemen			28.37	28.37	24.89

Arab average	33.48	37.38	46.75	46.86	46.09
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	2	2	2	3	3
Bahrain	6	8	8	9	7
Comoros	-	-	-	-	-
Djibouti	16	17	16	17	16
Egypt	1	1	1	1	1
Iraq	9	10	5	11	9
Jordan	-	-	-	-	-
Kuwait	13	13	17	10	8
Lebanon	3	3	4	4	5
Libya	-	16	15	16	17
Mauritania	14	14	12	14	14
Morocco	7	6	3	5	4
Oman	5	5	6	6	12
Palestine	-	-	-	-	-
Qatar	10	7	11	8	10
Saudi Arabia	11	11	9	12	11
Somalia	15	15	13	2	2
Sudan	-	-	-	-	-
Syria	12	12	10	13	13
Tunisia	4	4	7	7	6
UAE	8	9	14	15	15

Least expensive
 Most expensive



2017 OECD MOBILE BROADBAND BASKETS RANKING, 1GB DATA/15 DAYS SHORT VALIDITY, BUSINESS



Results for Mobile Broadband: 1GB/15 days per mth, Business basket, 2015-2019
Results in USD / PPP VAT excluded, residential results

	2015	2016	2017	2018	2019
Algeria	21.25	10.41	20.81	20.46	12.79
Bahrain	20.99	26.60	26.60	26.60	25.33
Comoros					
Djibouti	143.01	143.01	143.01	322.20	168.77
Egypt	6.42	6.42	6.42	6.19	6.19
Iraq	37.05	37.05	17.29	29.64	29.64
Jordan					
Kuwait	35.25	35.25	169.18	28.20	28.20
Lebanon	24.11	25.73	23.05	23.05	27.08
Libya		107.22	107.22	107.22	226.23
Mauritania	35.38	35.38	35.38	35.38	35.38
Morocco	27.28	22.50	13.41	13.41	13.41
Oman	32.70	32.70	32.70	32.70	32.70
Palestine					
Qatar	30.45	25.49	34.72	29.76	29.76
Saudi Arabia	31.02	31.02	31.02	31.02	31.02
Somalia	83.33	83.33	83.33	9.09	9.09
Sudan					
Syria	34.45	34.45	34.45	34.45	34.46
Tunisia	19.60	19.60	20.41	20.41	24.50
UAE	29.18	28.45	83.71	83.71	83.71
Yemen			32.72	32.72	26.20

Arab average	38.22	41.45	50.86	49.24	46.92
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2015-2019

	2015	2016	2017	2018	2019
Algeria	4	2	5	5	3
Bahrain	3	7	7	7	6
Comoros	-	-	-	-	-
Djibouti	16	17	16	17	16
Egypt	1	1	1	1	1
Iraq	14	14	3	9	9
Jordan	-	-	-	-	-
Kuwait	12	12	17	8	8
Lebanon	5	6	6	6	7
Libya	-	16	15	16	17
Mauritania	13	13	12	14	14
Morocco	6	4	2	3	4
Oman	10	10	9	12	12
Palestine	-	-	-	-	-
Qatar	8	5	11	10	10
Saudi Arabia	9	9	8	11	11
Somalia	15	15	13	2	2
Sudan	-	-	-	-	-
Syria	11	11	10	13	13
Tunisia	2	3	4	4	5
UAE	7	8	14	15	15

Least expensive
Most expensive



OBSERVATIONS FROM MOBILE BROADBAND TIME SERIES RESULTS



- There have been price and service changes from over half of the Arab providers since 2018, with revisions of portfolios and increases in data allowances. The table below shows the overall shift in the Arab average for each basket and speed category, for both residential and business services

Change in overall average

2018-2019	Residential	Business
0.5 GB	↓	↑
1 GB	↓	↓
2 GB	↓	↓
5 GB	↓	↓
10 GB	↓	↓
20 GB	↓	↓
50 GB	↓	↓
0.5 GB short validity	↓	↓
1 GB short validity	↓	↓

- What is noticeable is that for almost all baskets, the Arab average has fallen since 2018. Only the business 0.5GB basket increased, and this was only a very small increase. For the larger baskets, the decrease was much more dramatic, illustrating how providers are increasing data allowances within tariff offerings.
- Some of the key changes include:
 - Providers in both Egypt and Jordan made changes to existing plans for both monthly rental and data allowances. The changes in Jordan also included changes to top up fees as well as removal of selected postpaid plans and addition of new ones.
 - In Kuwait, prepaid plans for the cheapest providers rose from 5 KWD for 20 GB to 7 KWD for 30 GB,.
 - Lebanon – there were some small changes to some tariffs, with cheaper tariffs for higher data plans
 - In Libya. Libyana introduced a range of new plans, while a second provider was added – LTT.
 - In Oman, similarly there were some small changes to some tariffs, with cheaper tariffs for higher data plans
 - In Saudi Arabia, new prepaid plans were added to all provider portfolios, and postpaid plans saw changes to monthly rentals and data allowances.





SUMMARY OF THE MAIN FINDINGS FROM THE BENCHMARKING STUDY

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: FIXED VOICE TELEPHONY (1)



- The cheapest and most expensive countries throughout are:

	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
20 calls residential	Sudan	Egypt	Algeria	Comoros	Saudi Arabia	Mauritania
60 calls residential	Sudan	Egypt	Bahrain	Saudi Arabia	Jordan	Oman
140 calls residential	Sudan	Egypt	Bahrain	Saudi Arabia	Oman	Palestine
420 calls residential	Egypt	Kuwait	Sudan	Lebanon	Palestine	Djibouti
100 calls business	Tunisia	Djibouti	Bahrain	Mauritania	Kuwait	Qatar
260 calls business	Tunisia	Comoros	Morocco	Mauritania	Saudi Arabia	Palestine

- For residential services, most countries are either below the OECD average, or are on par with it., and the Arab average is consistently below that of the OECD average. Consequently, at this level of usage, the Arab average is below that of the OECD, typically by around USD PPP 4-6 , or between 8-25% cheaper.
- For business services, most countries are above the OECD average, and the Arab average is consistently higher than that of the OECD - 45% for the 100 calls basket and 64% for the 260 calls basket As in 2017, a number of the Arab countries in North Africa are cheaper than those in the Middle East.
- As in previous years, a number of the Arab countries in North Africa are cheaper than those in the Middle East, although as usage increases, operators in the Middle East become comparatively more competitive
- 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.
- In the GCC countries, Bahrain, Saudi Arabia and UAE have now applied 5% VAT to residential telecoms services
- Average costs across all residential and business baskets have remained broadly static since last year, with only very small changes observed..
- In addition, over the period 2015-2019, the average price has not changed dramatically. Lower usage residential basket costs have shown small, gradual increases, and this is very typical, and often driven by increases in rental charges, with the biggest impact being seen for small usage baskets

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: FIXED VOICE TELEPHONY (2)



		Arab average 2019 USD PPP	OECD average 2019 USD PPP	Arab average compared to OECD average
Fixed voice Residential	20 calls	20	27	 -26%
	60 calls	27	33	 -18%
	140 calls	39	42	 -7%
	420 calls	54	61	 -11%
Fixed voice Business	100 calls	48	33	 45%
	260 calls	79	48	 65%

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: MOBILE VOICE TELEPHONY (1)



- There is a clear correlation between the size of the basket (in terms of number of calls and volume of data), and the extent to which countries fall below the OECD average. For smaller baskets, more countries fall below the OECD average. This number steadily declines as the number of calls and the data volume increases. The number of providers for which prepaid offers are the cheapest is at its highest for no and low data usage baskets, and declines as data usage increases.
- The average result for the Arab providers is consistently higher than the OECD provider average across all mobile voice baskets, and the larger the basket the greater the variation.
- Baskets which incorporate handset data show a broad variation in price across the Arab providers – the difference becoming more marked for baskets with higher data requirements, indicating that in a number of countries, high mobile data use is still prohibitively expensive, and consequently, mobile data use is probably more limited.
- Similar to the voice baskets, the Arab provider average for the data baskets is typically much higher than the OECD one
- Where data costs are shown on the graph, these refer to overage charges or data add-on packages, rather than data included in the basic voice tariff. Where overage charges are higher, this indicates 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, and operators offer more competitively priced tariffs with more data included.
- The average number of tariff packages offered by the Arab operators is up slightly from 24 per operator in 2018, to 27 per operator in 2019
- While there have been a mix of decreases and increases over the period 2018 to 2019, the predominant change is one of decreasing prices.
- In terms of the low usage baskets, both with and without data, the overall average was broadly unchanged, with many operators making no changes to tariffs at all. The change in the 30 calls basket from 2018 to 2019, for example, was less the USD PPP 1
- For baskets that included more data, the cost reductions were much more dramatic, as providers increased data allowances without accompanying large increases in costs. This is a trend that is evident across OECD countries as well.

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: MOBILE VOICE TELEPHONY (2)



- The cheapest and most expensive countries, based on the cheapest result per country, are:

	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
30 calls no data	Sudan	Egypt	Syria	Saudi Arabia	Bahrain	Kuwait
100 calls no data	Sudan	Egypt	Tunisia	Lebanon	Kuwait	Palestine
30 calls, 0.1 GB	Egypt	Sudan	Tunisia	Bahrain	Lebanon	Kuwait
100 calls, 0.5 GB	Egypt	Sudan	Tunisia	Palestine	Lebanon	Kuwait
300 calls, 1 GB	Egypt	Jordan	Sudan	Oman	Lebanon	Libya
900 calls, 2 GB	Jordan	Egypt	Sudan	Mauritania	Lebanon	Comoros
30 calls, 0.5 GB	Sudan	Egypt	Tunisia	Djibouti	Palestine	Bahrain
100 calls, 2 GB	Sudan	Egypt	Morocco	Lebanon	Palestine	Iraq
300 calls, 5 GB	Jordan	Algeria	Morocco	Yemen	Lebanon	Iraq
900 calls, 10 GB	Jordan	Sudan	Morocco	Mauritania	Iraq	Comoros

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: MOBILE VOICE TELEPHONY (3)



		Arab average 2019 USD PPP	OECD average 2019 USD PPP	Arab average compared to OECD average
No data	30 calls no data	18	12	● 44%
	100 calls no data	29	18	● 66%
Low data	30 calls, 0.1 GB	24	14	● 65%
	100 calls, 0.5 GB	36	20	● 79%
	300 calls, 1 GB	63	25	● 151%
	900 calls, 2 GB	185	31	● 502%
High data	30 calls, 0.5 GB	28	16	● 73%
	100 calls, 2 GB	47	25	● 89%
	300 calls, 5 GB	89	33	● 168%
	900 calls, 10 GB	237	44	● 443%

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: FIXED BROADBAND (1)



- The Arab average residential cost is up to 6.5 times higher than the average OECD. For business services, the average is up to 17.9 times higher.
 - The residential figure continues to be skewed by particularly high costs in a number of countries, in particular, Algeria, Oman, Mauritania and Sudan, For business services, the Arab average is heavily skewed by a number of countries, including Comoros, Djibouti, Saudi Arabia, Algeria and Oman.
- Usage based charges are still prevalent, and appear in offers across 7 of the Arab countries, however, they have had limited impact on the basket results, and flat rate services have featured as the cheapest. There are also a number of services that include a limited monthly allowance only although some of these allowances can be very generous. In many OECD countries, usage-based charges often only apply for a very few ISPs.
- The number of Arab countries that are below the OECD average depends on the speed of service, and, for some countries, on the usage level. Generally, however, the greater the speed, the greater the variation in cost between the Arab countries and the OECD average.
- The table below summarizes how the overall Arab average changed from 2017-2018. The picture is generally one of declining prices or relatively small increases.

Change in overall average 2018-2019	Residential			Business		
	Low	Medium	High	Low	Medium	High
>= 0.25 Mb/s / 15 GB	↓	↓	↓	↑	↑	↓
>= 10 Mb/s / 30 GB	↑	↑	↑	↓	↓	↓
>= 25 Mb/s / 60 GB	↑	↑	↑	↓	↓	↓
>= 100 Mb/s / 120 GB	↓	↓	↓	↓	↓	↓

- The average speed has risen dramatically since the last report, up from 45 Mb/s in 2018 to 82 Mb/s in 2019), as providers have continued to roll out high speed broadband offerings. In spite of the dramatic increases in speeds, the averages, where they have increased, have not shown similar levels of increase, rather the increases are generally much lower. Notably, in the >= 100 Mbps basket, the overall average for both residential and business services has fallen. Averages can be dramatically impacted by the introduction of new countries, of course.
- Around half of all providers made some changes to prices since last year..
- The table on the next slide shows the cheapest and most expensive 3 countries for each basket, while the table on the second to next slide shows a comparison of the Arab averages for each basket, against the OECD averages

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: FIXED BROADBAND (2)



- There is a large variation in ranking according to the speed of service, for residential , and to a lesser degree, business services. The tables below shows the 3 cheapest and 3 most expensive countries for each of the 4 baskets considered for medium usage for both residential and business services (low and high usage may differ, but typically don't)

Residential-medium usage	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
>= 0.25 Mb/s / 15 GB	Syria	Kuwait	Tunisia	Qatar	Mauritania	Oman
>= 10 Mb/s / 30 GB	Tunisia	Egypt	Bahrain	Mauritania	Sudan	Algeria
>= 25 Mb/s / 60 GB	Egypt	Palestine	Tunisia	Algeria	Oman	Kuwait
>= 100 Mb/s / 120 GB	Egypt	Palestine	Jordan	Algeria	Oman	Bahrain

Business-medium usage	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
>= 0.25 Mb/s / 15 GB	Egypt	Morocco	Lebanon	Djibouti	UAE	Qatar
>= 10 Mb/s / 30 GB	Egypt	Morocco	Lebanon	Comoros	Algeria	Bahrain
>= 25 Mb/s / 60 GB	Lebanon	Morocco	Jordan	Oman	Djibouti	Bahrain
>= 100 Mb/s / 120 GB	Morocco	Jordan	Saudi Arabia	Oman	Qatar	UAE

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: FIXED BROADBAND (3)



Residential Fixed Broadband	Arab average 2019 USD PPP	OECD average 2019 USD PPP	Arab average compared to OECD average
>= 0.25 Mb/s / 5 GB: Low use	53	29	85%
>= 0.25 Mb/s / 15 GB: Medium use	56	29	94%
>= 0.25 Mb/s / 45 GB: High use	66	29	126%
>= 10 Mb/s / 10 GB: Low use	149	30	403%
>= 10 Mb/s / 30 GB: Medium use	149	30	400%
>= 10 Mb/s / 90 GB: High use	149	31	386%
>= 25 Mb/s / 20 GB: Low use	155	33	365%
>= 25 Mb/s / 60 GB: Medium use	156	33	365%
>= 25 Mb/s / 180 GB: High use	158	34	362%
>= 100 Mb/s / 40 GB: Low use	264	41	547%
>= 100 Mb/s / 120 GB: Medium use	266	41	551%
>= 100 Mb/s / 360 GB: High use	274	42	559%

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: FIXED BROADBAND (4)



Business Fixed Broadband	Arab average 2019 USD PPP	OECD average 2019 USD PPP	Arab average compared to OECD average
>= 0.25 Mb/s / 5 GB: Low use	155	36	● 331%
>= 0.25 Mb/s / 15 GB: Medium use	156	36	● 332%
>= 0.25 Mb/s / 45 GB: High use	159	36	● 342%
>= 10 Mb/s / 10 GB: Low use	493	36	● 1262%
>= 10 Mb/s / 30 GB: Medium use	493	36	● 1261%
>= 10 Mb/s / 90 GB: High use	493	37	● 1243%
>= 25 Mb/s / 20 GB: Low use	746	42	● 1691%
>= 25 Mb/s / 60 GB: Medium use	746	42	● 1686%
>= 25 Mb/s / 180 GB: High use	746	42	● 1679%
>= 100 Mb/s / 40 GB: Low use	711	54	● 1212%
>= 100 Mb/s / 120 GB: Medium use	711	54	● 1210%
>= 100 Mb/s / 360 GB: High use	711	54	● 1210%

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: MOBILE BROADBAND (1)



- Mobile broadband services are available across all the Arab countries. The table below shows the 3 cheapest and 3 most expensive countries for each basket, each speed category, for both residential and business services.

		Cheapest			Most expensive		
		1st	2nd	3rd	1st	2nd	3rd
Residential	0.5 GB	Egypt	Sudan	Tunisia	Kuwait	Libya	Bahrain
	1 GB	Tunisia	Egypt	Sudan	Kuwait	UAE	Libya
	2 GB	Tunisia	Sudan	Egypt	Kuwait	UAE	Lebanon
	5 GB	Morocco	Somalia	Tunisia	UAE	Yemen	Oman
	10 GB	Jordan	Palestine	Morocco	Yemen	Oman	Mauritania
	20 GB	Jordan	Tunisia	Iraq	Yemen	UAE	Oman
	50 GB	Iraq	Djibouti	Jordan	Yemen	Oman	UAE
	0.5 GB short validity	Egypt	Sudan	Tunisia	Kuwait	Iraq	UAE
	1 GB short validity	Tunisia	Egypt	Sudan	Kuwait	UAE	Lebanon
Business	0.5 GB	Egypt	Algeria	Morocco	Libya	Djibouti	UAE
	1 GB	Egypt	Algeria	Morocco	Libya	Djibouti	UAE
	2 GB	Egypt	Morocco	Somalia	Libya	Djibouti	UAE
	5 GB	Morocco	Somalia	Egypt	Libya	Djibouti	UAE
	10 GB	Morocco	Tunisia	Algeria	Libya	Djibouti	Oman
	20 GB	Tunisia	Morocco	Kuwait	Oman	Yemen	Libya
	50 GB	Kuwait	Algeria	Iraq	Yemen	Oman	UAE
	0.5 GB short validity	Egypt	Somalia	Algeria	Libya	Djibouti	UAE
	1 GB short validity	Egypt	Somalia	Algeria	Libya	Djibouti	UAE

- The average for the residential service baskets in the Arab countries compared to the OECD average ranges from 57% more expensive, for the 0.5 GB short validity basket, to 126% for the 20 GB basket. For business services, the range is 184% (more expensive) for the 20GB basket, to 368% for the 0.5 GB basket
- There have been price and service changes from over half of the Arab providers since 2018, with revisions of portfolios and increases in data allowances. The table below shows the overall shift in the Arab average for each basket, for both residential and business services. What is noticeable is that for almost all baskets, the Arab average has fallen since 2018. Only the business 0.5GB basket increased, and this was only a very small increase. For the larger baskets, the decrease was much more dramatic, illustrating how providers are increasing data allowances within tariff offerings.

	Change in overall average	
	2018-2019	
	Residential	Business
0.5 GB	↓	↑
1 GB	↓	↓
2 GB	↓	↓
5 GB	↓	↓
10 GB	↓	↓
20 GB	↓	↓
50 GB	↓	↓
0.5 GB short validity	↓	↓
1 GB short validity	↓	↓

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: MOBILE BROADBAND (2)



Residential Mobile Broadband	Arab average 2019 USD PPP	OECD average 2019 USD PPP	Arab average compared to OECD average
0.5 GB	20	11	80%
1 GB	22	12	83%
2 GB	27	15	85%
5 GB	38	19	102%
10 GB	51	23	119%
20 GB	74	33	126%
50 GB	125	66	88%
0.5 GB short validity	17	11	57%
1 GB short validity	20	12	66%

Business Mobile Broadband	Arab average 2019 USD PPP	OECD average 2019 USD PPP	Arab average compared to OECD average
0.5 GB	49	11	368%
1 GB	50	11	353%
2 GB	54	13	317%
5 GB	62	17	275%
10 GB	73	21	241%
20 GB	98	35	184%
50 GB	163	79	106%
0.5 GB short validity	46	10	342%
1 GB short validity	47	11	334%



APPENDIX



EXCHANGE RATES AND VAT

Exchange rates used: Related to: US\$		US\$ PPP	VAT %	World Bank PPPs 2018
Algeria	0.00834	0.0304380	19.0 %	0.274
Bahrain	2.63436	5.1755599	5.0 %	0.509
Comoros	0.00228	0.0044618	10.0 %	0.511
Djibouti	0.00563	0.0101264	10.0 %	0.556
Egypt	0.05819	0.2824757	14.0 %	0.206
Iraq	0.00083	0.0024702	0.0 %	0.336
Jordan	1.41044	3.1066960	16.0 %	0.454
Kuwait	3.27785	7.0491398	0.0 %	0.465
Lebanon	0.00066	0.0010427	11.0 %	0.633
Libya	0.70531	2.0209456	0.0 %	0.349
Mauritania	0.00270	0.0092784	18.0 %	0.291
Morocco	0.10284	0.2727851	20.0 %	0.377
Oman	2.59017	6.5408333	0.0 %	0.396
Palestine	0.28250	0.6348225	16.0 %	0.445
Qatar	0.27030	0.4959633	0.0 %	0.545
Saudi Arabia	0.26655	0.6331354	5.0 %	0.421
Somalia	0.00166	0.0055333	10.0 %	0.300
Sudan	0.02212	0.1417949	35.0 %	0.156
Syria	0.00465	0.0075600	0.0 %	0.615
Tunisia	0.31912	1.1562319	18.0 %	0.276
UAE	0.27220	0.4742160	5.0 %	0.574
Yemen	0.00399	0.0108719	5.0 %	0.367

Exchange rates taken from the Oanda web service on the 9 May 2019

PPPs are based on World Bank CPL data in 2018 (latest available).



PURCHASING POWER PARITIES (PPP)

- 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.



PPP BACKGROUND

- This benchmarking study relies on the PPP (Purchasing Power Parity) and CPL (Comparative Price Level) values produced by the OECD and the World Bank*. PPPs are used in international studies to provide a more even comparison between countries, adjusting the exchange rates to the purchasing power of the consumer in each country. CPL is used to calculate PPP values from current market exchange rates, in order to obtain the most up to date combination of PPP and market exchange rates.
- PPPs are usually expressed in US\$, referring to the US market. PPPs are produced comparing the cost of a basket of goods and services across countries
 - The World Bank defines PPP as: " ... the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as a U.S. dollar would buy in the United States."
- The CPL is the ratio between PPP and Market Exchange Rate (XR) for a given country, as seen from a reference country (usually the USA).

$$\text{CPL} = \text{PPP}_{\text{US\$}} / \text{XR}_{\text{US\$}}$$

CPL<1 means goods are more expensive, CPL>1 means goods are cheaper, referring to the USA.

- The basket of goods and services is extensive, however, the PPP result will of course depend on the content of this basket. The OECD and the World Bank are working together to improve on the methodology to calculate the PPP.
- The World Bank implemented a new methodology for calculating the PPPs in 2011, improving the PPP results to show a more accurate relation between countries. The results of the implementation of this new methodology was seen in the previously published 2014
 - As the previous World Bank methodology was different to that used by the OECD, and the new World Bank methodology is now more aligned with the OECD methodology. The changes seen from the old to the new World Bank PPP values are smaller in OECD countries than in other countries of the world.

*** The World Bank uses the term "Price Level Ratio" for the CPL.**

Please note: Inverse values of PPP and CPL are also used, depending on application.



ACRONYMS USED IN THE CONTEXT OF THIS REPORT

- OECD: Organisation of Economic Co-operation and Development
- OECD countries: Australia, Austria, Belgium, Canada, Chile, Colombia, Czech Rep., Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, 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.