

Telecommunications Retail Price Benchmarking for Arab Countries 2020



Report from the AREGNET Price Benchmarking Study

March 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 2020 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 2016 to 2020.
- The benchmarking covers the following services:
 - Fixed voice (PSTN)
 - Mobile telephony
 - Fixed Broadband
 - Mobile broadband
 - Leased Lines

Leased line basket results were excluded in the 2019 report, but have been reintroduced at the request of AREGNET members.
- 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 July/August 2020 by Teligen from public sources on the Internet, and was subsequently passed to national regulators for comments and checking.



2020 STUDY OVERVIEW

- The 2020 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 July/August 2020
 - 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 methodology used is based on the 2017 OECD basket revisions, which also featured in the 2019 update to this study. Full details of the OECD 2017 methodology are available, but key changes over the OECD 2010 methodology 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.



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.
- For this report, both OECD country results and AREGNET country results have been adjusted using World Bank CPLs. This is different to previous reports, where OECD results have used OECD CPLs and AREGNET country results have been adjusted using World Bank CPLs
 - This means that both sets of data – OECD and AREGNET – are based on conversions from the same source
 - Note however, OECD results converted using World Bank CPLs will not be directly comparable to official OECD results.
- Feedback, where received, has been taken into account in the production of these results

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

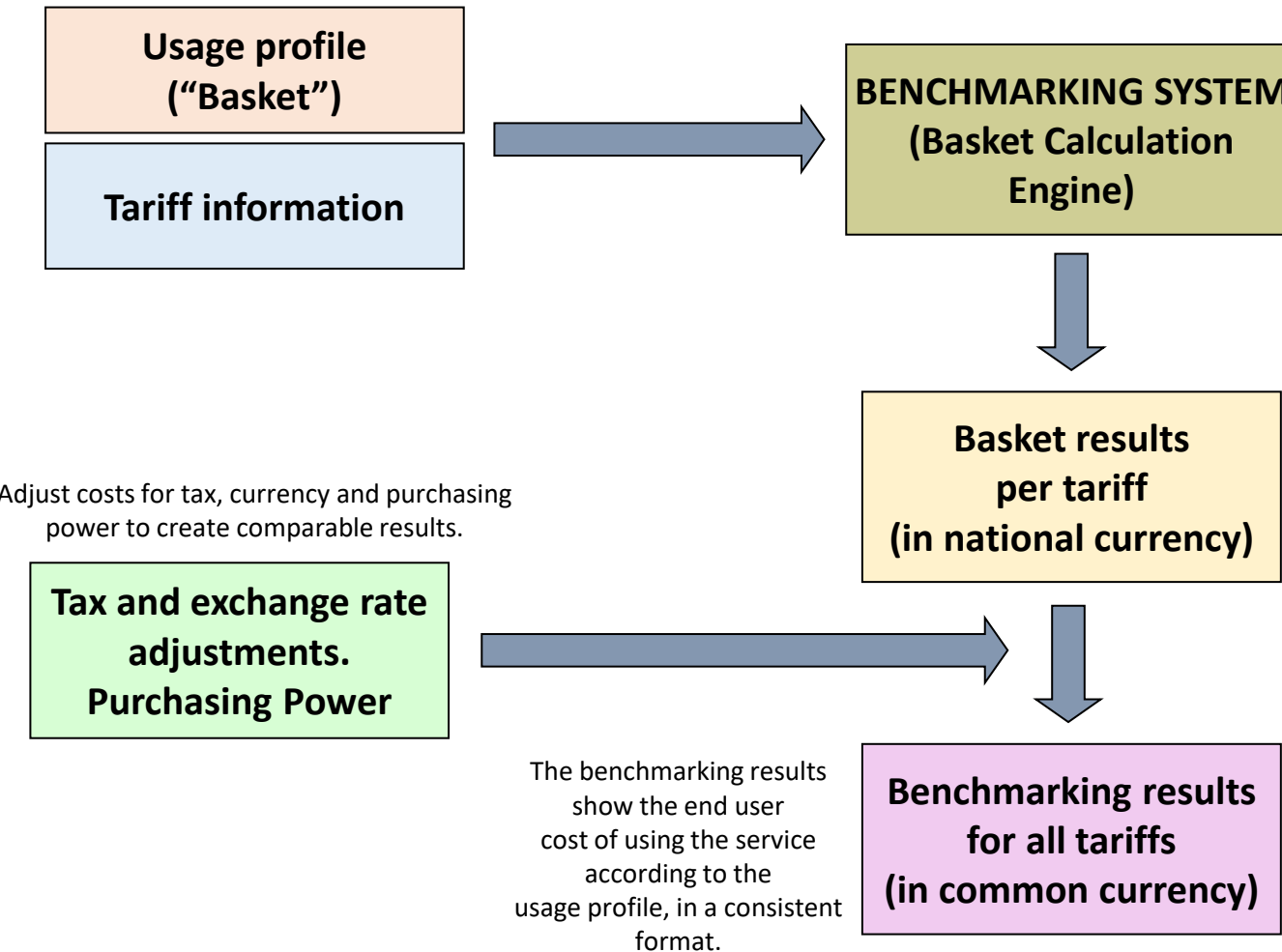


- The data presented in the report is presented using purchasing power parities (PPPs), which are used to incorporate both the financial differences between exchange rates, and the differences in the state of the economies as seen through the purchasing power of the citizens in each country.
- In order 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 164 to 166, in the appendix of this report.
- The CPL data used for this study has been obtained from the World Bank, and is based on 2019 data.
- For this report, both OECD country results and AREGNET country results have been adjusted using World Bank CPLs. This is different to previous reports, where OECD results have used OECD CPLs and AREGNET country results have been adjusted using World Bank CPLs
 - This means that both sets of data – OECD and AREGNET – are based on conversions from the same source
 - Note however, OECD results converted using World Bank CPLs will not be directly comparable to official OECD results.
- 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.





PSTN BASKET RESULTS 2020



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
 - Iraq
 - Libya
 - Somalia
 - Sudan
 - Syria
 - Yemen
- The analysis covers up to 86 tariffs from the incumbent operators in 20 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%

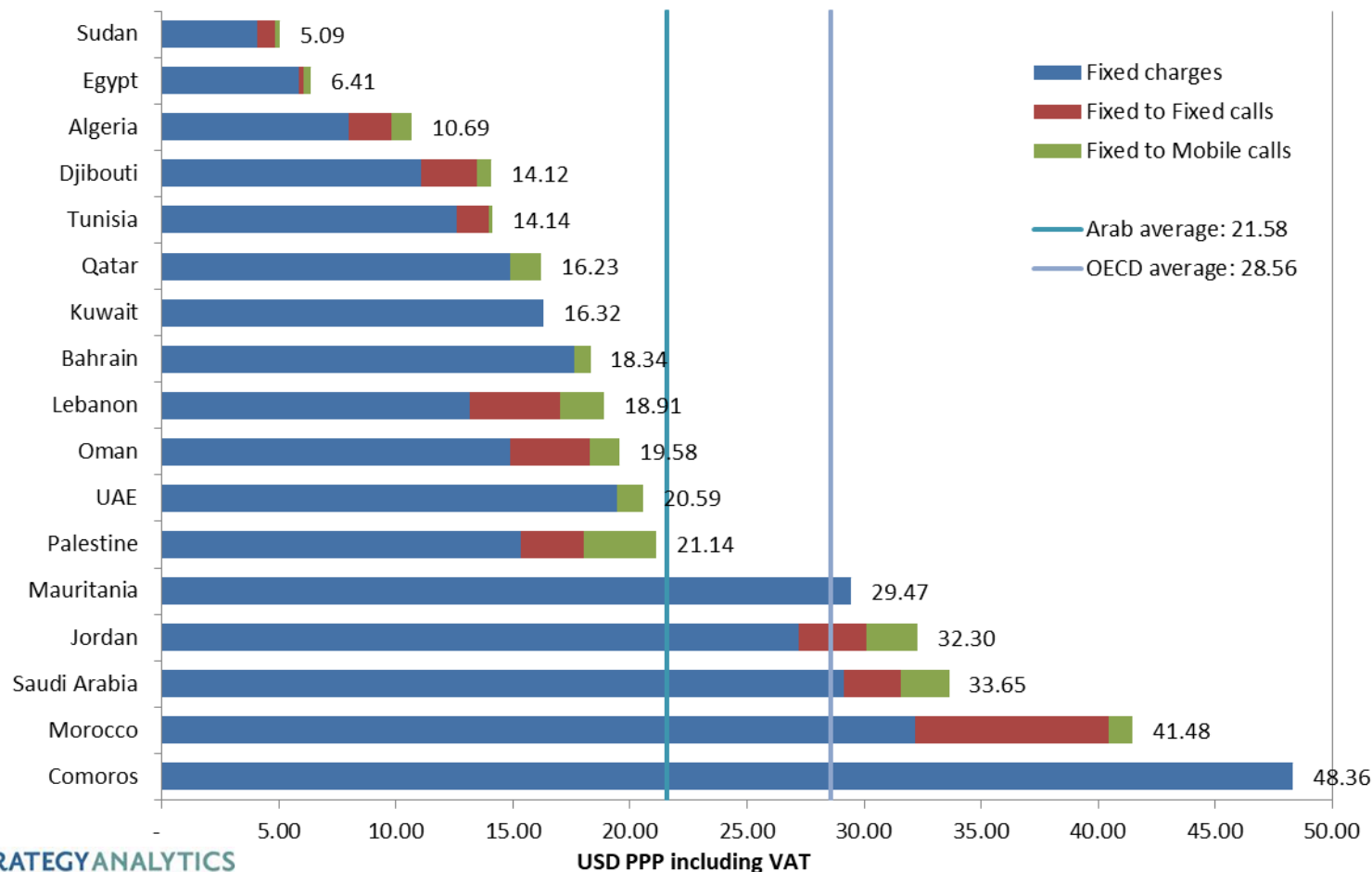
- Tariffs from the incumbent operator in each country
 - Several tariff packages can be covered for each operator
 - The results show the lowest cost option for each operator
- Tariff information included in basket calculation:
 - Fixed charges for installation (depreciated over the service life) and 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 2020
OECD 2017: 20 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

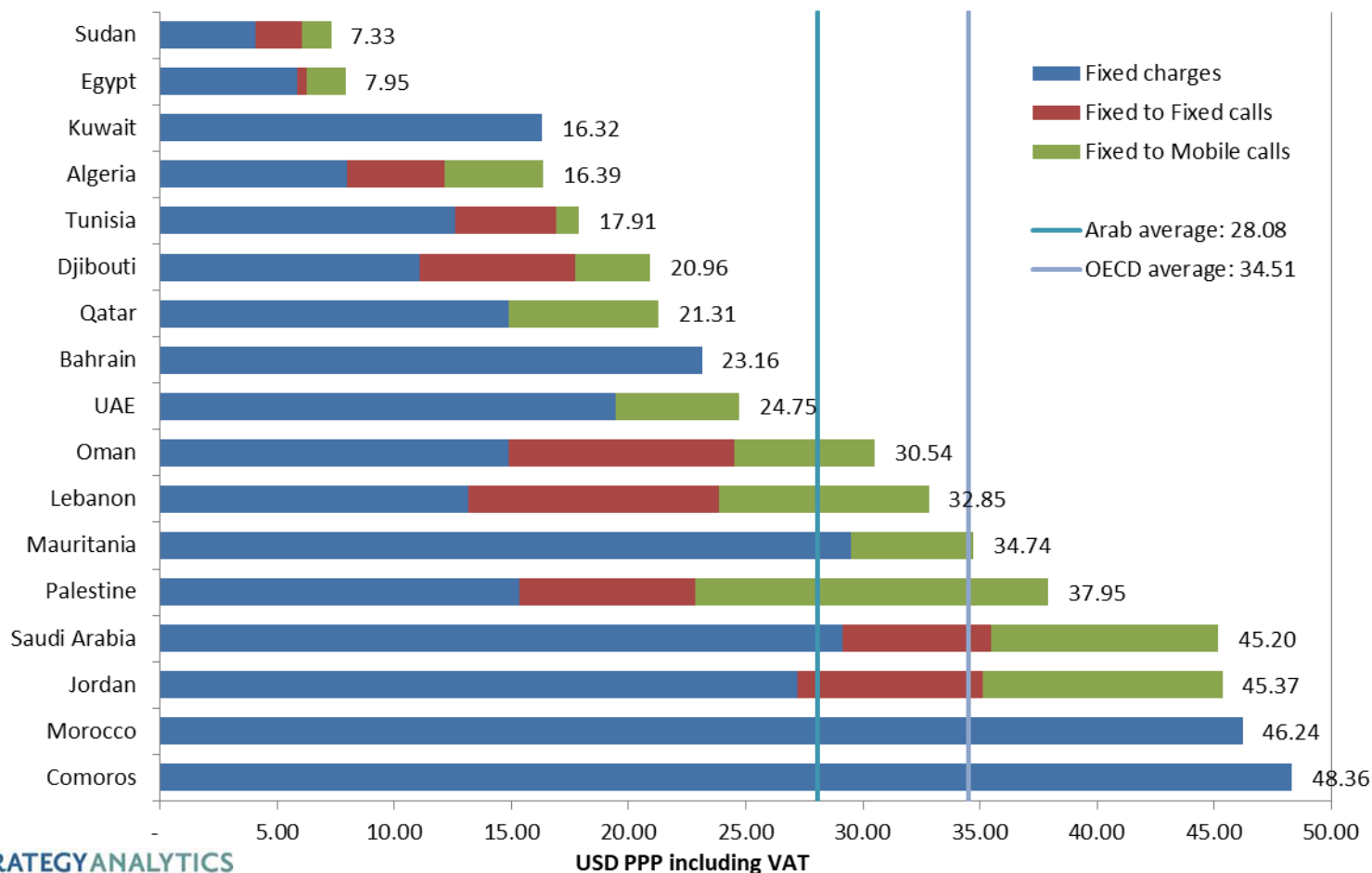
For information on what is included in Fixed charges, Fixed to Fixed calls and Fixed to Mobile calls, please see page 11



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



AREGNET Fixed Voice Price Benchmarking 2020
OECD 2017: 60 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

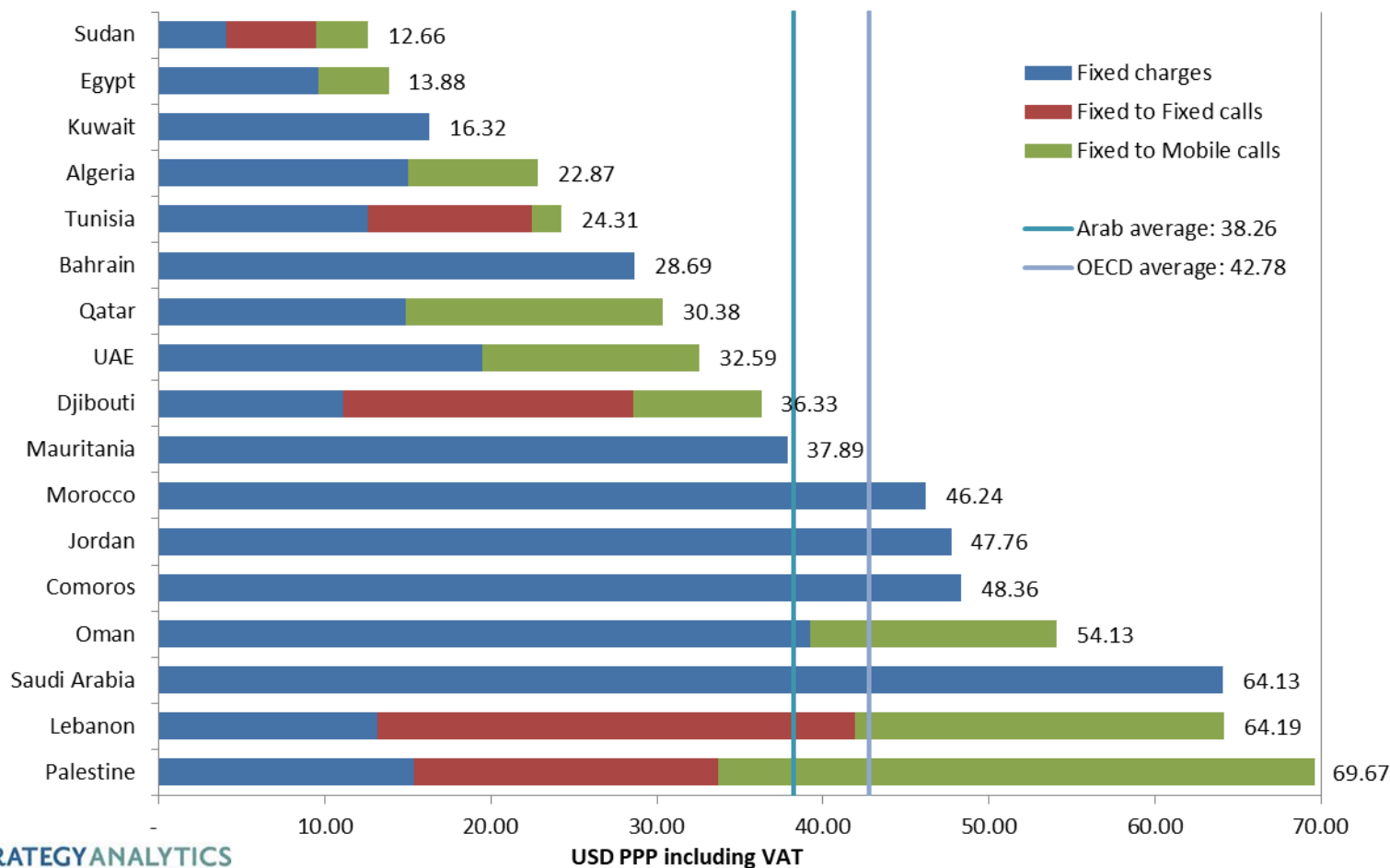
For information
on what is
included in
Fixed charges,
Fixed to Fixed
calls and Fixed
to Mobile calls,
please see page
11



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



AREGNET Fixed Voice Price Benchmarking 2020
OECD 2017: 140 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

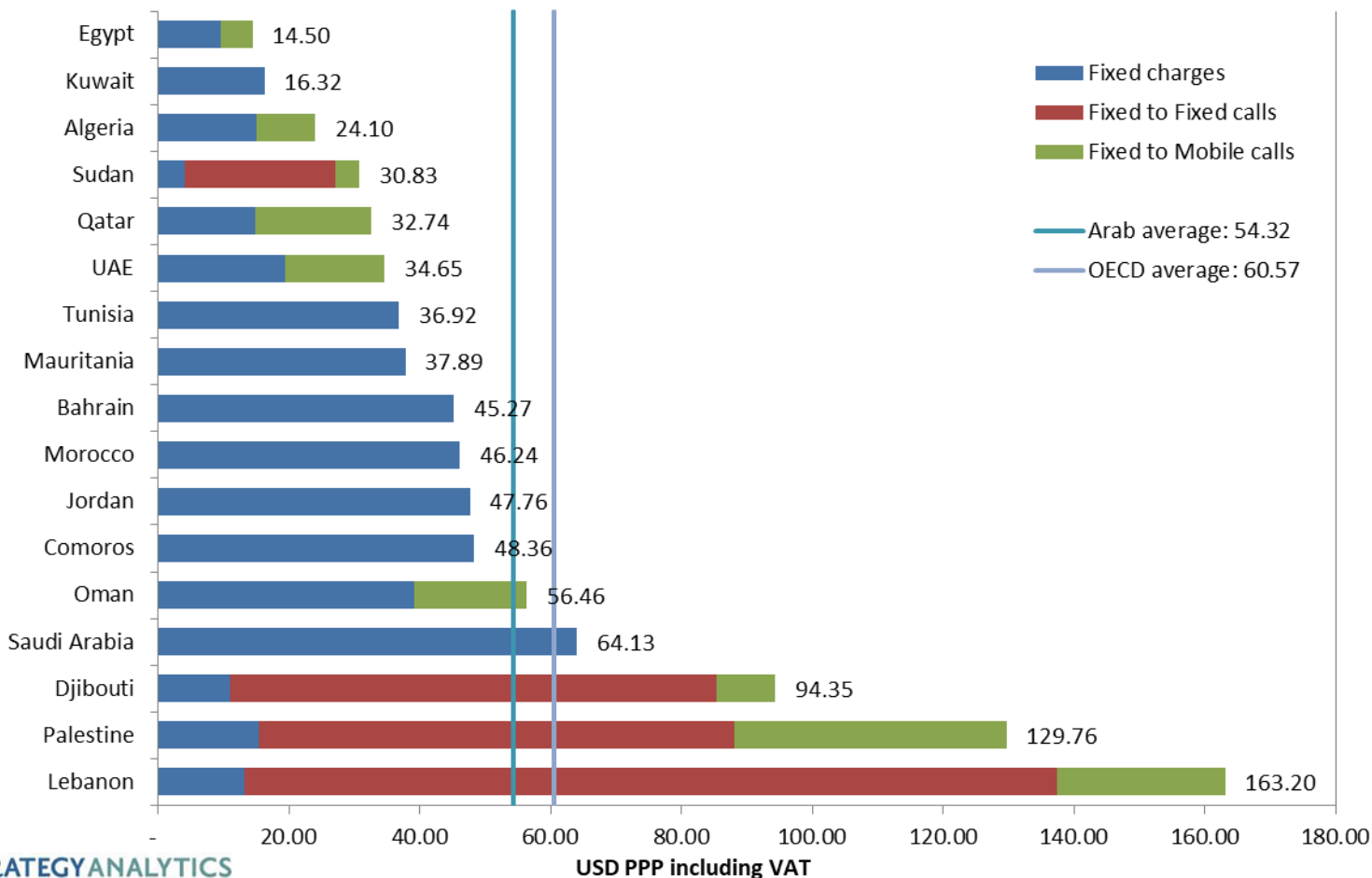
For information on what is included in Fixed charges, Fixed to Fixed calls and Fixed to Mobile calls, please see page 11



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



AREGNET Fixed Voice Price Benchmarking 2020
OECD 2017: 420 calls Residential



No data for:

- Iraq
- Libya
- Somalia
- Syria
- Yemen

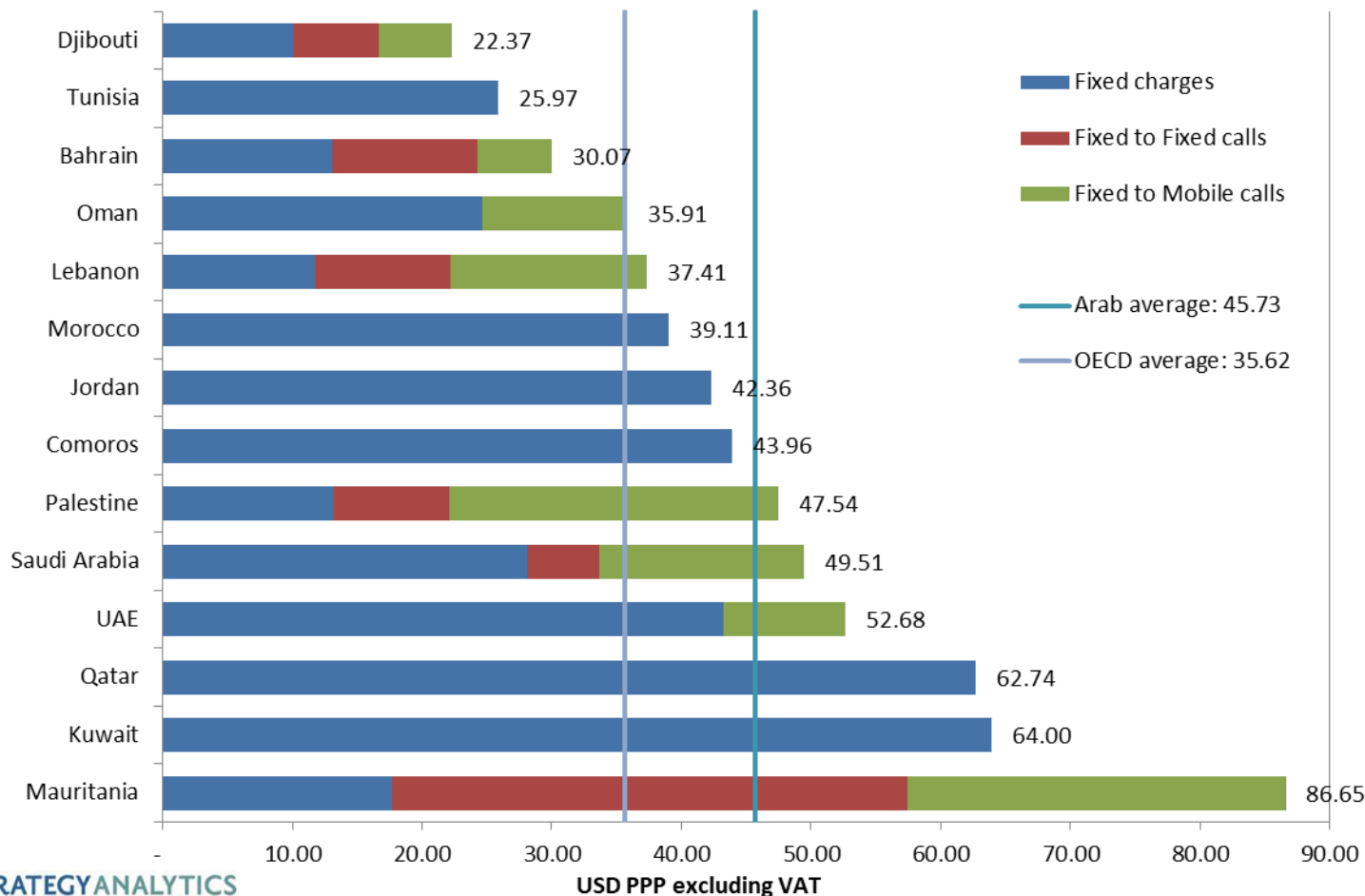
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please see page
11



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



AREGNET Fixed Voice Price Benchmarking 2020
OECD 2017: 100 calls Business



No data for:

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

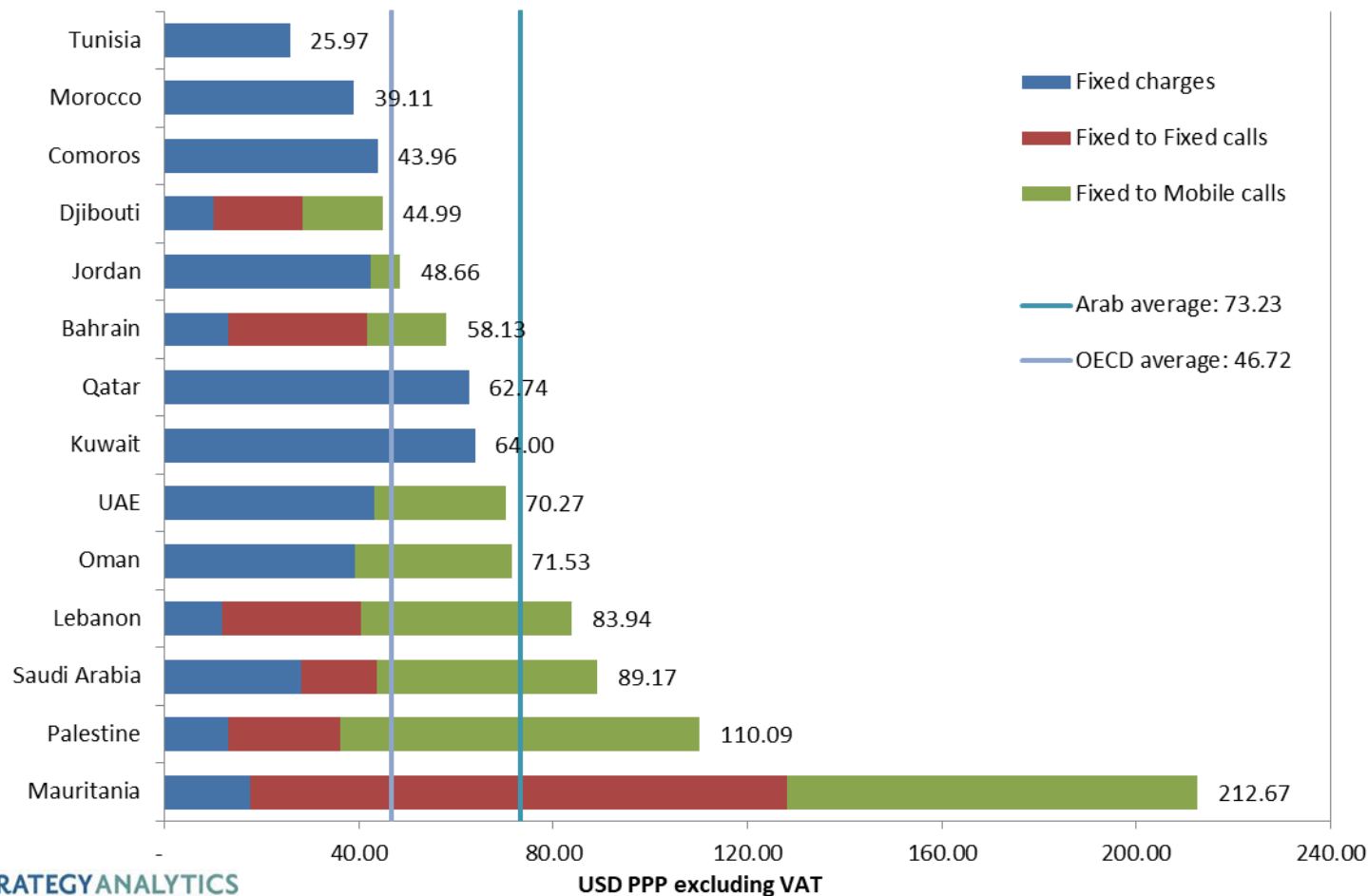
For information on what is included in Fixed charges, Fixed to Fixed calls and Fixed to Mobile calls, please see page 11



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



AREGNET Fixed Voice Price Benchmarking 2020
OECD 2017: 260 calls Business



No data for:

- Algeria
- Egypt
- Iraq
- 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	Morocco	Saudi Arabia
60 calls residential	Sudan	Egypt	Kuwait	Comoros	Morocco	Jordan
140 calls residential	Sudan	Egypt	Kuwait	Palestine	Lebanon	Saudi Arabia
420 calls residential	Egypt	Kuwait	Algeria	Lebanon	Palestine	Djibouti
100 calls business	Djibouti	Tunisia	Bahrain	Mauritania	Kuwait	Qatar
260 calls business	Tunisia	Morocco	Comoros	Mauritania	Palestine	Saudi Arabia

- Comparison between OECD and Arab averages are shown on the following slide, however, the following can be observed:
 - The trend from previous updates continues 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, between 10-24% cheaper.
 - Similarly for business services, most countries are above the OECD average, and the Arab average is consistently higher than that of the OECD, 28% for the 100 calls basket and 57% 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 Kuwait feature consistently among the cheapest for the residential baskets, while Tunisia, Djibouti and Morocco feature for the business baskets. In terms of the most expensive, Comoros, Morocco, Palestine and Saudi Arabia, are among the most expensive countries for the residential baskets, while for business, Mauritania, Kuwait and Palestine 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.

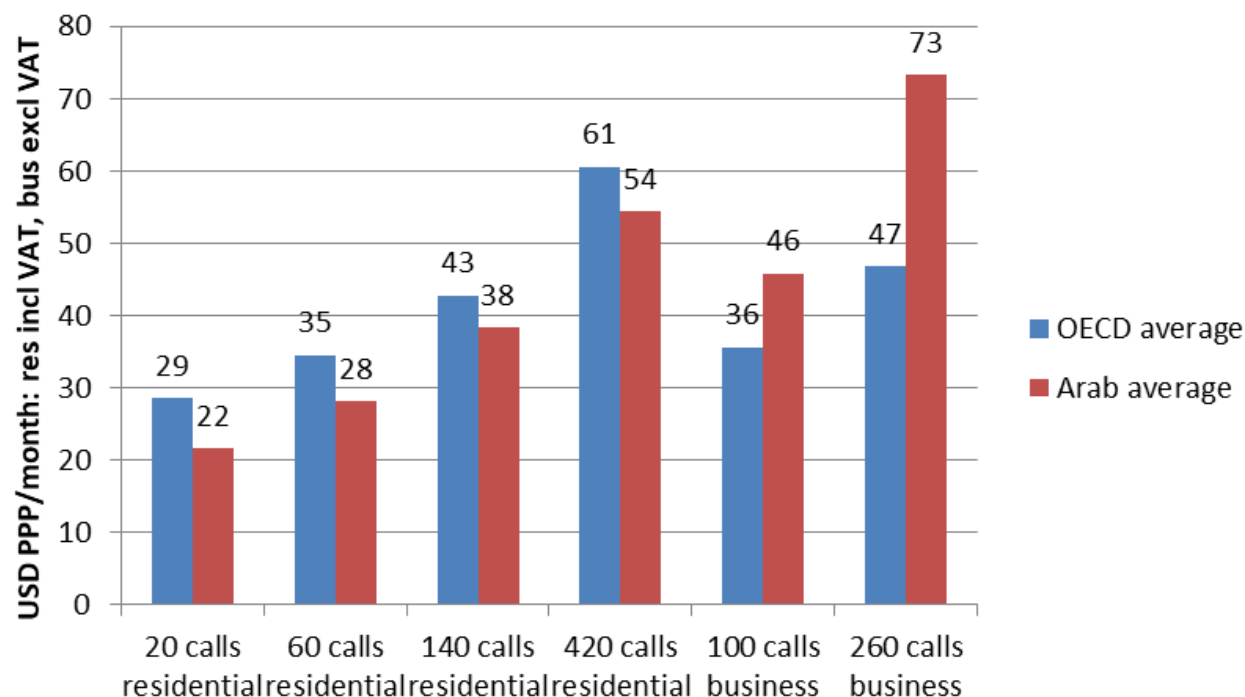
* Countries with gaps in the tariff information are not considered.





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 28% more, and higher usage businesses paying around 57% more.





FIXED VOICE TIME SERIES ANALYSIS AND RANKING TABLES 2016–2020

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



Results for Fixed Voice: OECD 2017: 20 calls Residential basket, 2016-2020
Results in USD PPP including VAT

	2016	2017	2018	2019	2020
Algeria	13.50	7.96	8.10	8.10	10.69
Bahrain	11.61	11.61	11.61	12.19	18.34
Comoros		43.96	48.36	48.36	48.36
Djibouti		14.12	14.12	14.12	14.12
Egypt	1.71	4.86	4.86	6.59	6.41
Jordan	24.64	28.40	28.40	32.30	32.30
Kuwait			18.97	16.32	16.32
Lebanon	18.74	18.74	18.91	18.91	18.91
Libya					
Mauritania	30.00	29.30	23.71	29.47	29.47
Morocco	40.61	40.61	40.61	41.48	41.48
Oman	19.58	19.58	19.58	19.58	19.58
Palestine	18.88	18.88	18.88	18.44	21.14
Qatar	16.23	16.23	16.23	16.23	16.23
Saudi Arabia	29.27	29.27	30.73	30.73	33.65
Somalia					
Sudan	2.01	4.90	5.09	5.09	5.09
Syria	2.02	2.02			
Tunisia	11.21	12.42	12.42	14.14	14.14
UAE	19.59	19.59	20.57	20.58	20.59
Yemen					

Arab average	16.57	18.22	19.26	20.74	21.58
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	6	4	3	3	3
Bahrain	5	5	4	4	8
Comoros	-	17	17	17	17
Djibouti	-	7	6	5	4
Egypt	1	2	1	2	2
Jordan	12	13	14	15	14
Kuwait	-	-	10	8	7
Lebanon	8	9	9	10	9
Libya	-	-	-	-	-
Mauritania	14	15	13	13	13
Morocco	15	16	16	16	16
Oman	10	11	11	11	10
Palestine	9	10	8	9	12
Qatar	7	8	7	7	6
Saudi Arabia	13	14	15	14	15
Somalia	-	-	-	-	-
Sudan	2	3	2	1	1
Syria	3	1	-	-	-
Tunisia	4	6	5	6	5
UAE	11	12	12	12	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, 2016-2020
Results in USD PPP including VAT

	2016	2017	2018	2019	2020
Algeria	29.07	20.27	20.61	20.61	16.39
Bahrain	13.12	13.12	13.12	13.78	23.16
Comoros		43.96	48.36	48.36	48.36
Djibouti		20.96	20.96	20.96	20.96
Egypt	5.04	7.42	7.42	8.36	7.95
Jordan	38.96	41.48	41.48	45.37	45.37
Kuwait			18.97	16.32	16.32
Lebanon	32.56	32.56	32.85	32.85	32.85
Libya					
Mauritania	49.07	35.41	35.41	34.74	34.74
Morocco	45.37	45.37	45.37	46.24	46.24
Oman	30.54	30.54	30.54	30.54	30.54
Palestine	35.00	35.00	35.00	34.56	37.95
Qatar	21.31	21.31	21.31	21.31	21.31
Saudi Arabia	39.31	39.31	41.27	41.27	45.20
Somalia					
Sudan	3.84	7.06	7.33	7.33	7.33
Syria	4.74	4.74			
Tunisia	15.89	16.92	16.92	17.91	17.91
UAE	23.50	23.50	24.67	24.74	24.75
Yemen					

Arab average	25.18	25.25	26.51	27.37	28.08
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	8	6	6	6	4
Bahrain	4	4	3	3	8
Comoros	-	16	17	17	17
Djibouti	-	7	7	7	6
Egypt	3	3	2	2	2
Jordan	12	15	15	15	15
Kuwait	-	-	5	4	3
Lebanon	10	11	11	11	11
Libya	-	-	-	-	-
Mauritania	15	13	13	13	12
Morocco	14	17	16	16	16
Oman	9	10	10	10	10
Palestine	11	12	12	12	13
Qatar	6	8	8	8	7
Saudi Arabia	13	14	14	14	14
Somalia	-	-	-	-	-
Sudan	1	2	1	1	1
Syria	2	1	-	-	-
Tunisia	5	5	4	5	5
UAE	7	9	9	9	9
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, 2016-2020
Results in USD PPP including VAT

	2016	2017	2018	2019	2020
Algeria	66.43	39.73	35.96	35.96	22.87
Bahrain	18.39	18.39	18.39	19.31	28.69
Comoros		43.96	48.36	48.36	48.36
Djibouti		36.33	36.33	36.33	36.33
Egypt	13.65	11.98	11.98	13.86	13.88
Jordan	38.96	43.86	43.86	47.76	47.76
Kuwait			18.97	16.32	16.32
Lebanon	63.62	63.62	64.19	64.19	64.19
Libya					
Mauritania	49.67	48.83	48.83	37.89	37.89
Morocco	45.37	45.37	45.37	46.24	46.24
Oman	54.13	54.13	54.13	54.13	54.13
Palestine	67.46	67.46	67.46	67.02	69.67
Qatar	30.38	30.38	30.38	30.38	30.38
Saudi Arabia	61.79	61.79	64.88	64.88	64.13
Somalia					
Sudan	8.18	12.19	12.66	12.66	12.66
Syria	10.85	10.85			
Tunisia	22.09	22.42	22.42	24.31	24.31
UAE	30.85	30.85	32.39	32.56	32.59
Yemen					

Arab average 38.50 37.58 38.38 38.36 38.26

Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	14	9	8	8	4
Bahrain	4	4	3	4	6
Comoros	-	11	12	13	13
Djibouti	-	8	9	9	9
Egypt	3	2	1	2	2
Jordan	8	10	10	12	12
Kuwait	-	-	4	3	3
Lebanon	13	16	15	15	16
Libya	-	-	-	-	-
Mauritania	10	13	13	10	10
Morocco	9	12	11	11	11
Oman	11	14	14	14	14
Palestine	15	17	17	17	17
Qatar	6	6	6	6	7
Saudi Arab	12	15	16	16	15
Somalia	-	-	-	-	-
Sudan	1	3	2	1	1
Syria	2	1	-	-	-
Tunisia	5	5	5	5	5
UAE	7	7	7	7	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, 2016-2020
Results in USD PPP including VAT

	2016	2017	2018	2019	2020
Algeria	198.72	73.96	39.24	39.24	24.10
Bahrain	34.18	34.18	34.18	35.89	45.27
Comoros		43.96	48.36	48.36	48.36
Djibouti		94.35	94.35	94.35	94.35
Egypt	17.83	18.27	18.27	14.48	14.50
Jordan	38.96	43.86	43.86	47.76	47.76
Kuwait			18.97	16.32	16.32
Lebanon	161.73	161.73	163.20	163.20	163.20
Libya					
Mauritania	49.67	48.83	48.83	37.89	37.89
Morocco	45.37	45.37	45.37	46.24	46.24
Oman	56.46	56.46	56.46	56.46	56.46
Palestine	129.12	129.12	129.12	128.68	129.76
Qatar	32.74	32.74	32.74	32.74	32.74
Saudi Arabia	73.95	73.95	77.65	77.65	64.13
Somalia					
Sudan	22.99	29.68	30.83	30.83	30.83
Syria	21.64	21.64			
Tunisia	36.92	36.92	36.92	36.92	36.92
UAE	32.77	32.77	34.41	34.61	34.65
Yemen					

Arab average	62.03	56.52	55.12	55.39	54.32
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	15	14	8	9	3
Bahrain	6	6	5	6	9
Comoros	-	9	11	12	12
Djibouti	-	15	15	15	15
Egypt	1	1	1	1	1
Jordan	8	8	9	11	11
Kuwait	-	-	2	2	2
Lebanon	14	17	17	17	17
Libya	-	-	-	-	-
Mauritania	10	11	12	8	8
Morocco	9	10	10	10	10
Oman	11	12	13	13	13
Palestine	13	16	16	16	16
Qatar	4	4	4	4	5
Saudi Arab	12	13	14	14	14
Somalia	-	-	-	-	-
Sudan	3	3	3	3	4
Syria	2	2	-	-	-
Tunisia	7	7	7	7	7
UAE	5	5	6	5	6
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, 2016-2020

Results in USD PPP excluding VAT

	2016	2017	2018	2019	2020
Algeria	34.55	25.93			
Bahrain	30.07	30.07	30.07	30.07	30.07
Comoros		43.96	43.96	43.96	43.96
Djibouti		22.37	22.37	22.37	22.37
Egypt	15.42				
Jordan	43.62	43.62	44.60	42.36	42.36
Kuwait				64.00	64.00
Lebanon	37.41	37.41	37.41	37.41	37.41
Libya					
Mauritania	146.29	86.65	86.65	86.65	86.65
Morocco	39.11	39.11	39.11	39.11	39.11
Oman	35.91	35.91	35.91	35.91	35.91
Palestine	43.92	43.92	43.92	43.55	47.54
Qatar	95.64	95.64	95.64	62.74	62.74
Saudi Arabia		49.51	49.51	49.51	49.51
Somalia					
Sudan					
Syria	7.44	7.44			
Tunisia	45.93	20.97	20.97	15.82	25.97
UAE	52.55	65.79	52.55	52.68	52.68
Yemen					

Arab average	47.00	42.40	45.20	44.72	45.73
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	4	4	-	-	-
Bahrain	3	5	3	3	3
Comoros	-	11	8	9	8
Djibouti	-	3	2	2	1
Egypt	2	-	-	-	-
Jordan	8	9	9	7	7
Kuwait	-	-	-	13	13
Lebanon	6	7	5	5	5
Libya	-	-	-	-	-
Mauritania	13	14	12	14	14
Morocco	7	8	6	6	6
Oman	5	6	4	4	4
Palestine	9	10	7	8	9
Qatar	12	15	13	12	12
Saudi Arabi	-	12	10	10	10
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	1	1	-	-	-
Tunisia	10	2	1	1	2
UAE	11	13	11	11	11
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, 2016-2020
Results in USD PPP excluding VAT

	2016	2017	2018	2019	2020
Algeria	87.19	50.75			
Bahrain	58.13	58.13	58.13	58.13	58.13
Comoros		43.96	43.96	43.96	43.96
Djibouti		44.99	44.99	44.99	44.99
Egypt	30.50				
Jordan	57.06	57.06	58.03	55.79	48.66
Kuwait				64.00	64.00
Lebanon	83.94	83.94	83.94	83.94	83.94
Libya					
Mauritania	373.41	212.67	212.67	212.67	212.67
Morocco	39.11	39.11	39.11	39.11	39.11
Oman	71.53	71.53	71.53	71.53	71.53
Palestine	108.85	108.85	108.85	108.48	110.09
Qatar	119.14	119.14	119.14	62.74	62.74
Saudi Arabia		89.17	89.17	89.17	89.17
Somalia					
Sudan					
Syria	20.54	20.54			
Tunisia	60.16	20.97	20.97	15.82	25.97
UAE	69.91	83.15	69.91	70.27	70.27
Yemen					

Arab average	89.52	73.61	78.16	72.90	73.23
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	10	6	-	-	-
Bahrain	5	8	6	6	6
Comoros	-	4	3	3	3
Djibouti	-	5	4	4	4
Egypt	2	-	-	-	-
Jordan	4	7	5	5	5
Kuwait	-	-	-	8	8
Lebanon	9	11	9	11	11
Libya	-	-	-	-	-
Mauritania	13	15	13	14	14
Morocco	3	3	2	2	2
Oman	8	9	8	10	10
Palestine	11	13	11	13	13
Qatar	12	14	12	7	7
Saudi Arabia	-	12	10	12	12
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	1	1	-	-	-
Tunisia	6	2	1	1	1
UAE	7	10	7	9	9
Yemen	-	-	-	-	-

Least expensive
Most expensive





OBSERVATIONS FROM FIXED VOICE TIME SERIES RESULTS

- There have been very few changes to fixed voice from the 2019 update. 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 2019-2020:
 - Saudi Arabia has increased VAT from 5% to 15% in reaction to the Covid pandemic, and this came into effect 1st June 2020. In Tunisia VAT has increased from 18% to 19%.
 - Batelco in Bahrain increased monthly rental to its plans but it now includes 100 on-net minutes.
 - Egypt Telecom changed its name to Telecom Egypt. There is an increase in connection charge for Telecom Egypt from previous update due to increase in stamps from EGP 6.1 + 1 (plus VAT) to EGP 8+ 2.9 (plus VAT).
 - Plans have not changed for Orange in Jordan but for residential plans included minutes have been corrected and surplus option have been removed as these are not picked up by the baskets.
 - New unlimited calls to fixed option added to Maroc Telecom tariffs.
 - For Palestine some adjustments have been made to the tariff to better reflect the pricelist.
 - In Qatar, the out of bundle rates for calls to the second operator were previously set to 0 but this has now been amended to show the call charges.
 - Saudi Telecom's Home Phone Plus now includes 100 anynet mobile minutes. For business Basic plan national call price has been corrected from previous update.
 - In Tunisia rental for business plans increases between updates.
 - Etisalat in UAE is not offering standalone fixed voice services to business.
- Average costs across all residential and business baskets have changed only slightly from previous year, very slight increases and decreases have been seen.

Change in overall average
2019-2020

20 calls residential	↑
60 calls residential	↑
140 calls residential	=
420 calls residential	↓
100 calls business	↑
260 calls business	↑

- Over the period 2016-2020, the trend continues with the average price not changing dramatically. However, lower usage residential basket costs continue to show 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 2020



MOBILE TARIFF DATA ISSUES

- Tariff restrictions:
 - Only pre-paid for Comoros
 - One operator only for Comoros, Mauritania, Syria
 - No data for Djibouti and Somalia
- Otherwise two operators are covered for each country where data is available
- A total of 1073 tariff packages covered for 38 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

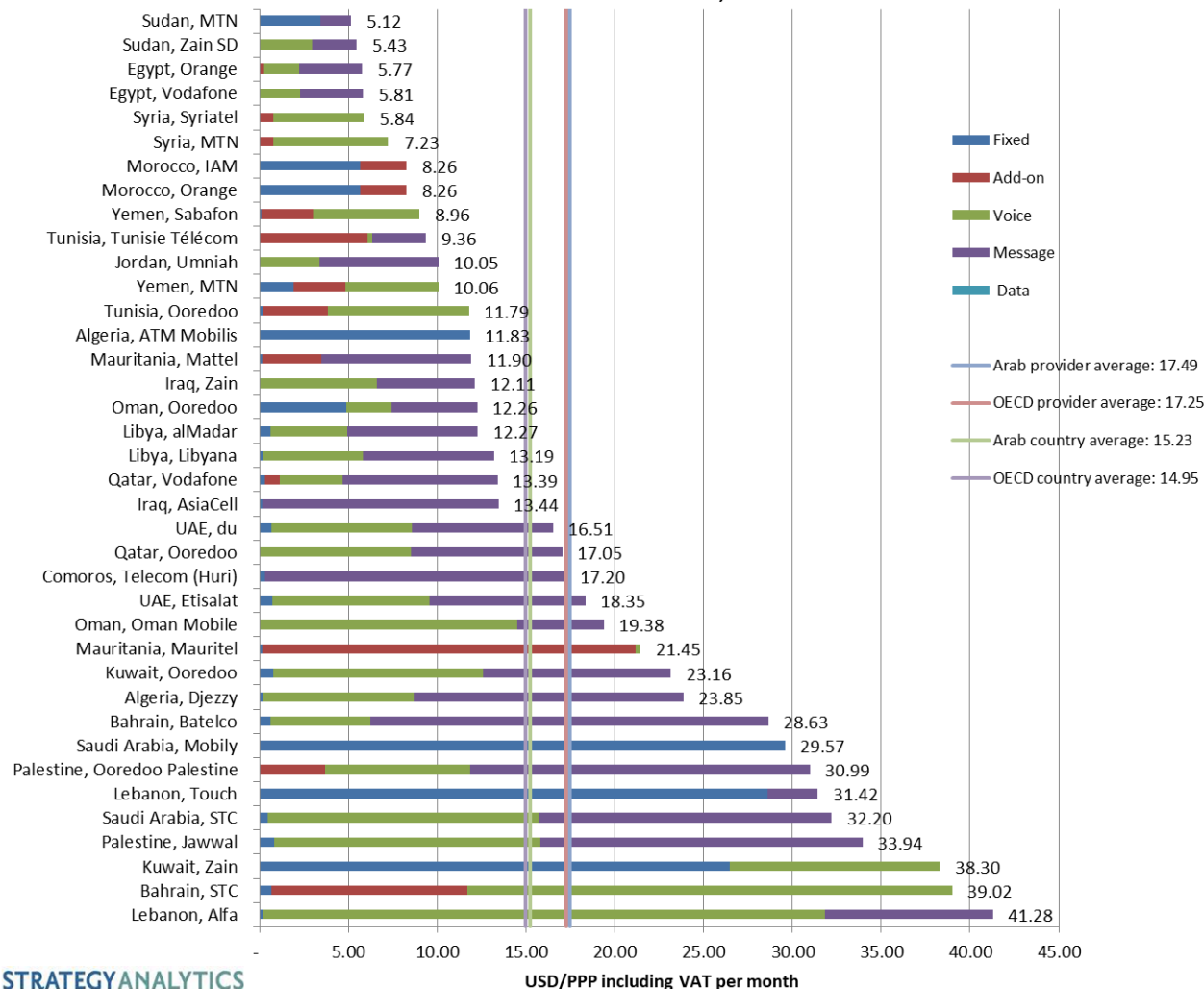


30 CALLS/MONTH NO DATA BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 30 calls, no data



Please note:
No data for Djibouti and 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.

31 provider results are based on prepaid tariffs

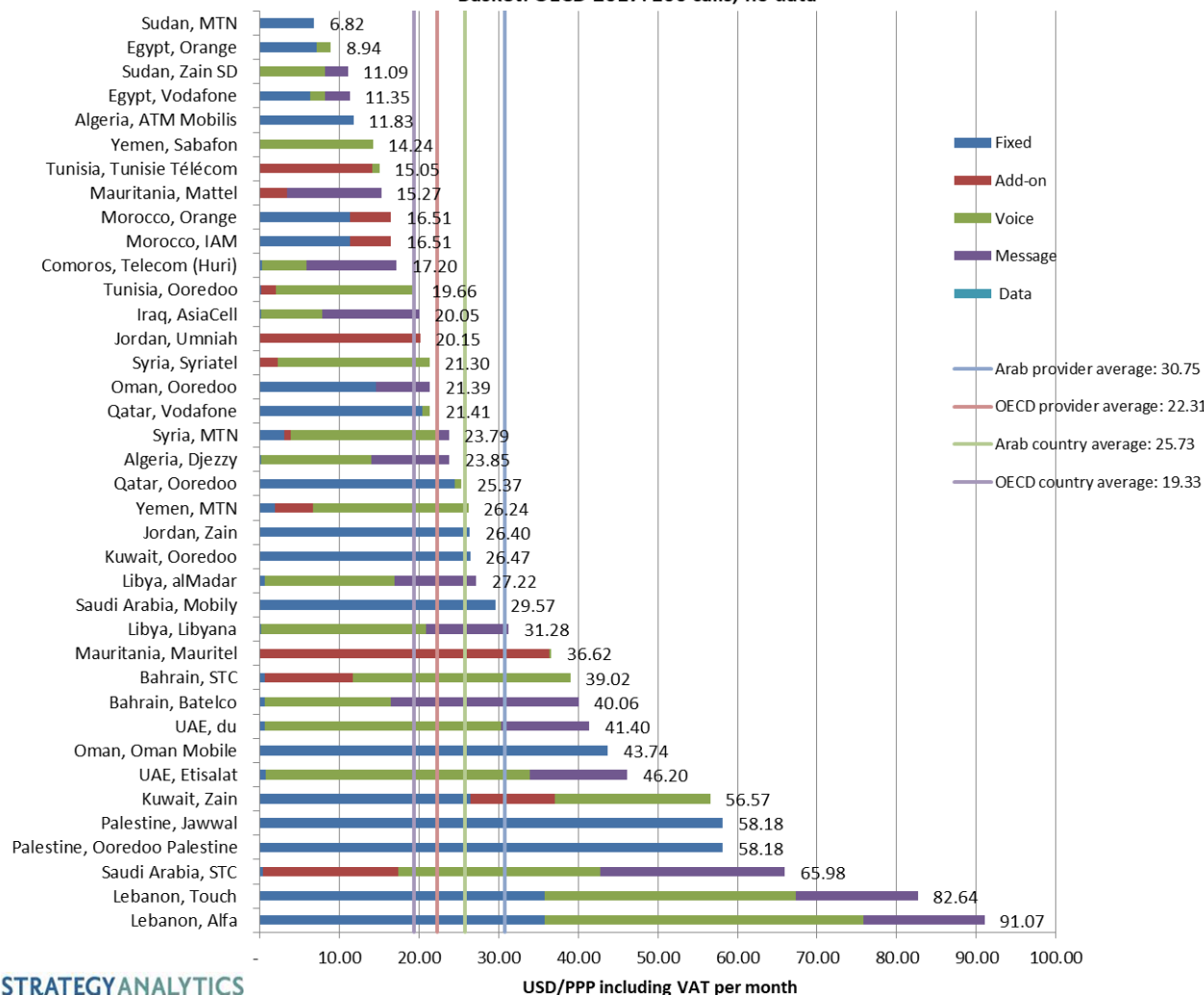


100 CALLS/MONTH NO DATA BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 100 calls, no data



Please note:
No data for Djibouti and 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.

24 provider results are based on prepaid tariffs

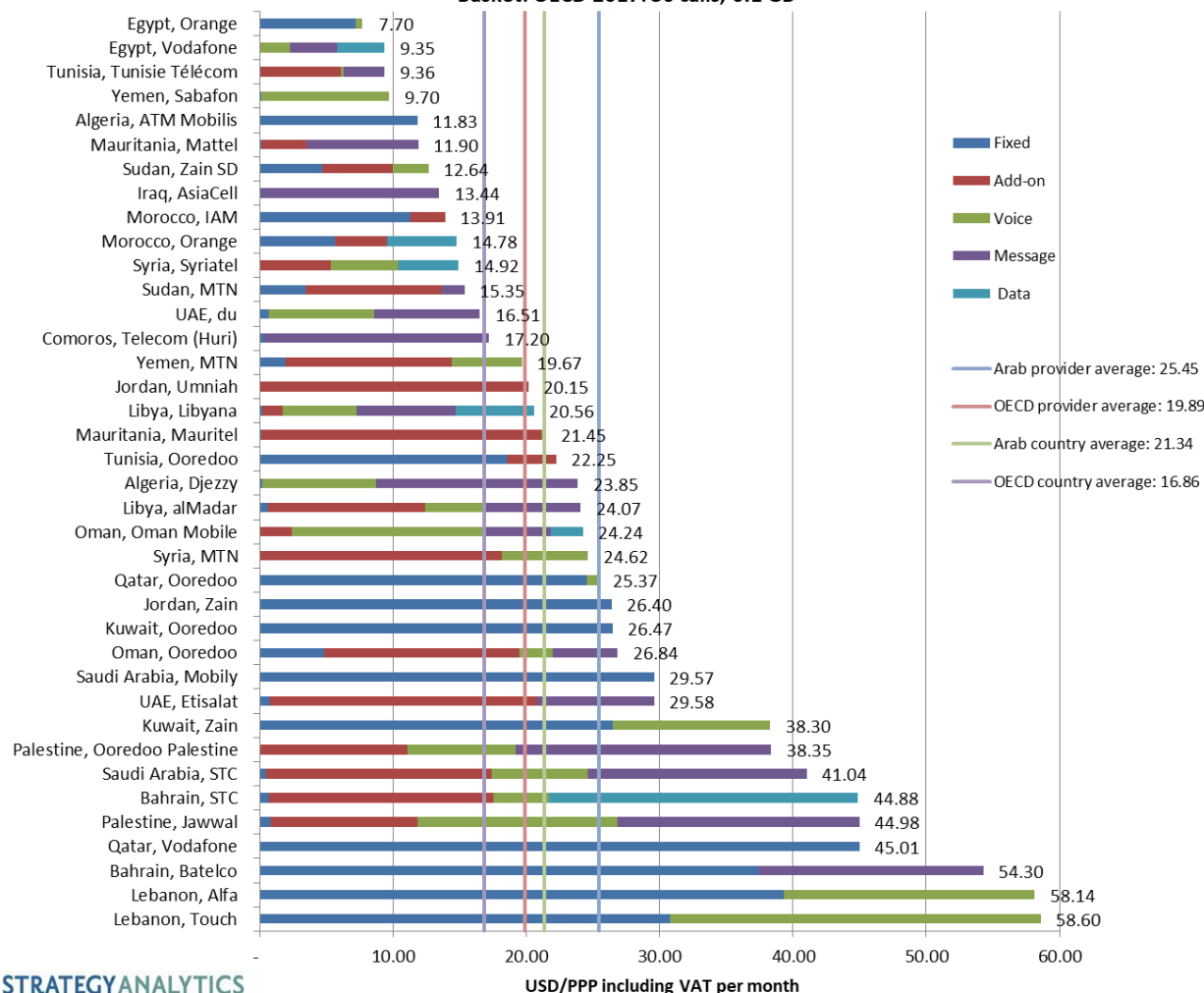


30 CALLS AND 0.1GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 30 calls, 0.1 GB



Please note:
No data for Djibouti
and 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.

26 provider results
are based on prepaid
tariffs

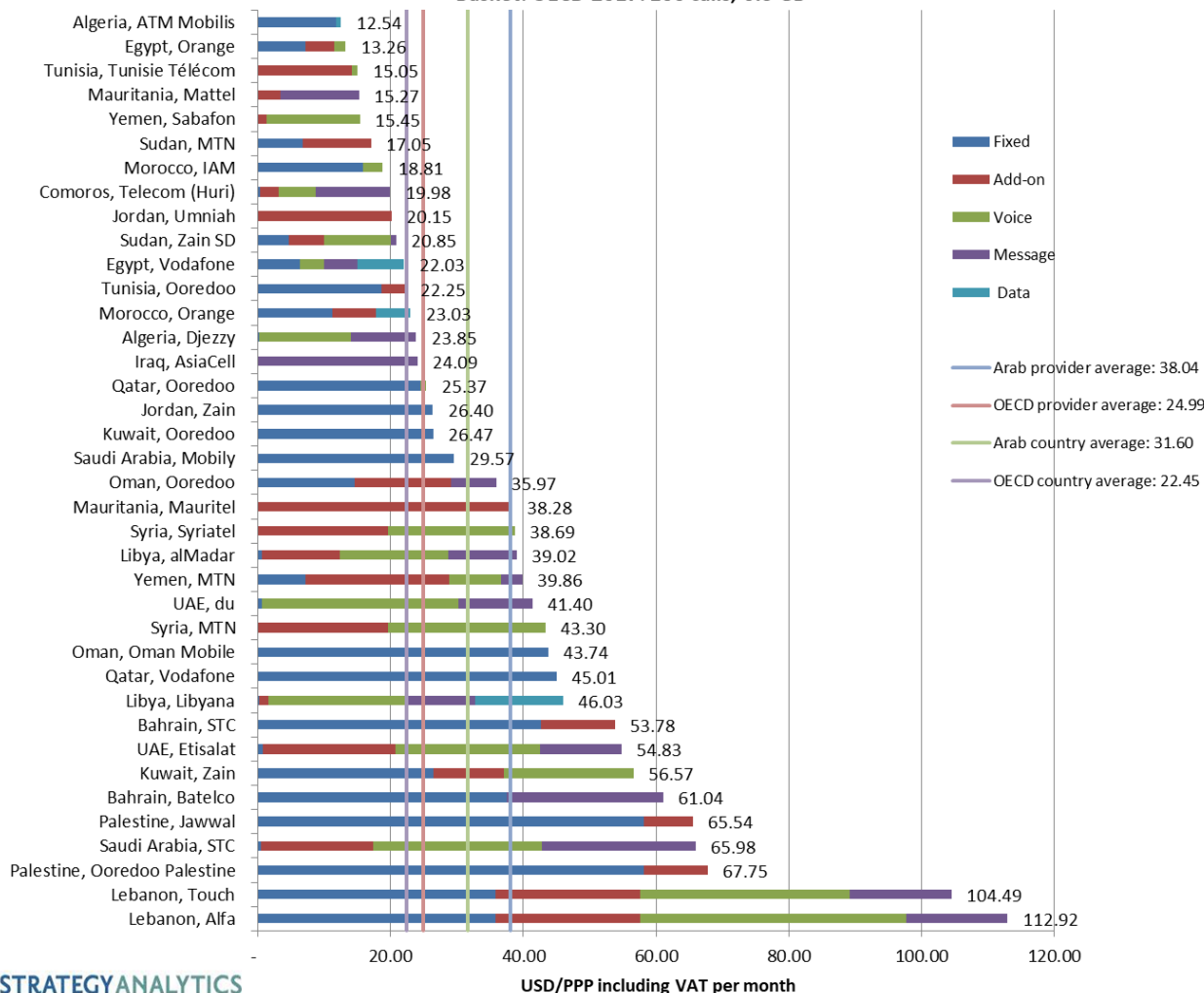


100 CALLS AND 0.5GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 100 calls, 0.5 GB



Please note:
No data for Djibouti and 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

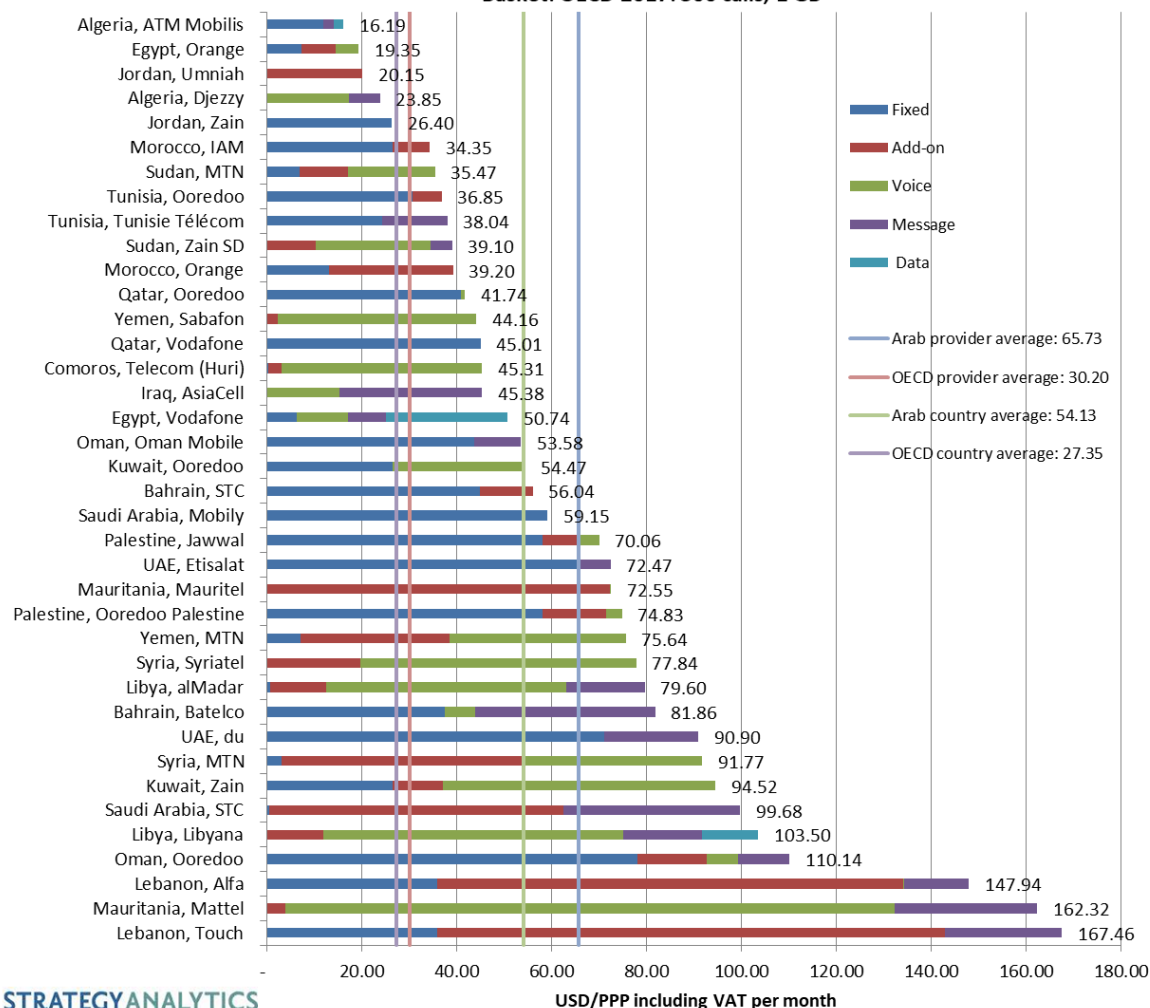


300 CALLS AND 1GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 300 calls, 1 GB



Please note:
No data for Djibouti
and 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.

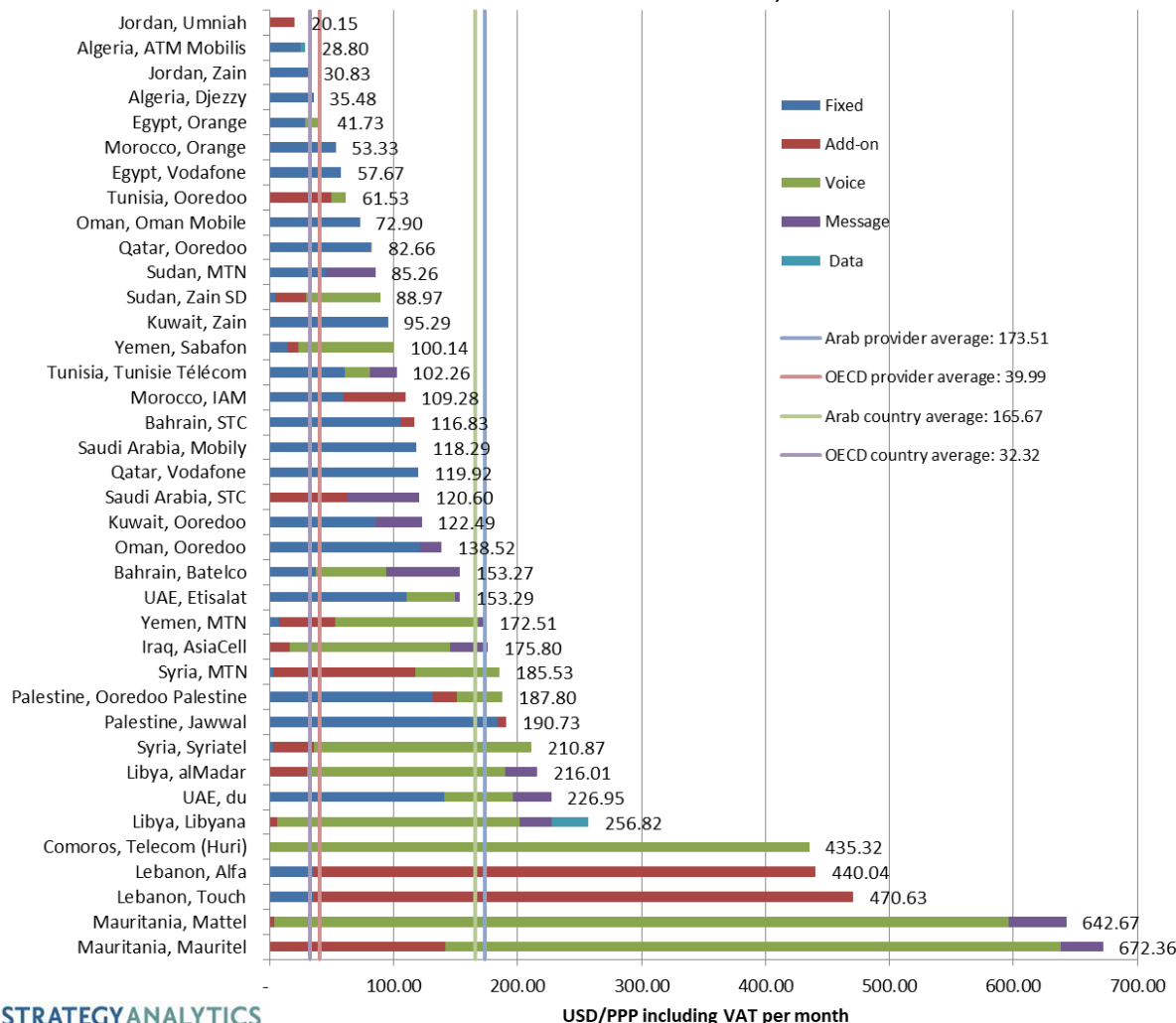
17 provider results
are based on prepaid
tariffs



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



AREGNET Mobile Voice and Data Price Benchmarking 2020
Basket: OECD 2017: 900 calls, 2 GB



Please note:
No data for Djibouti and 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.

12 provider results are based on prepaid tariffs

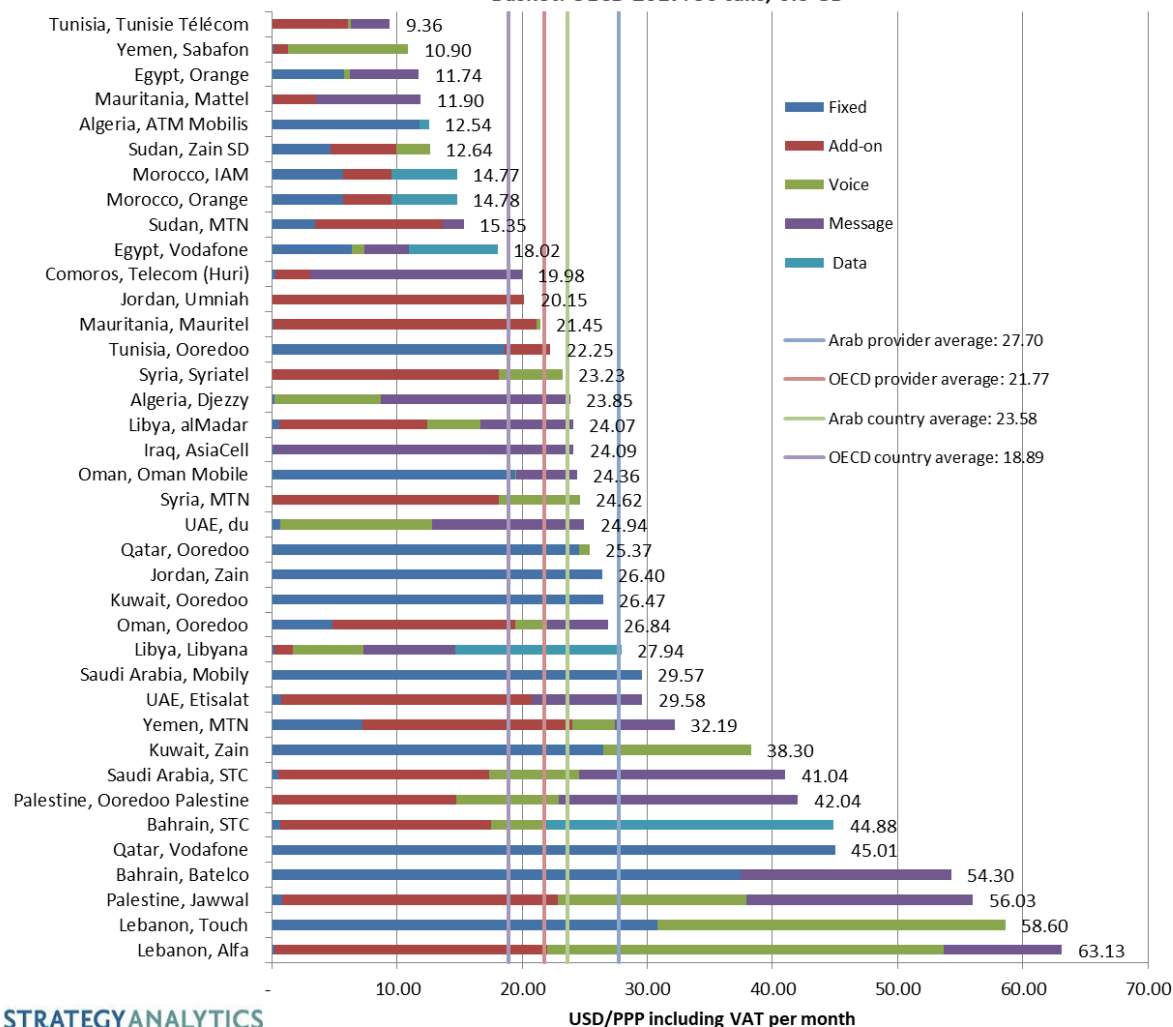


30 CALLS AND 0.5GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 30 calls, 0.5 GB



Please note:

No data for Djibouti and 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

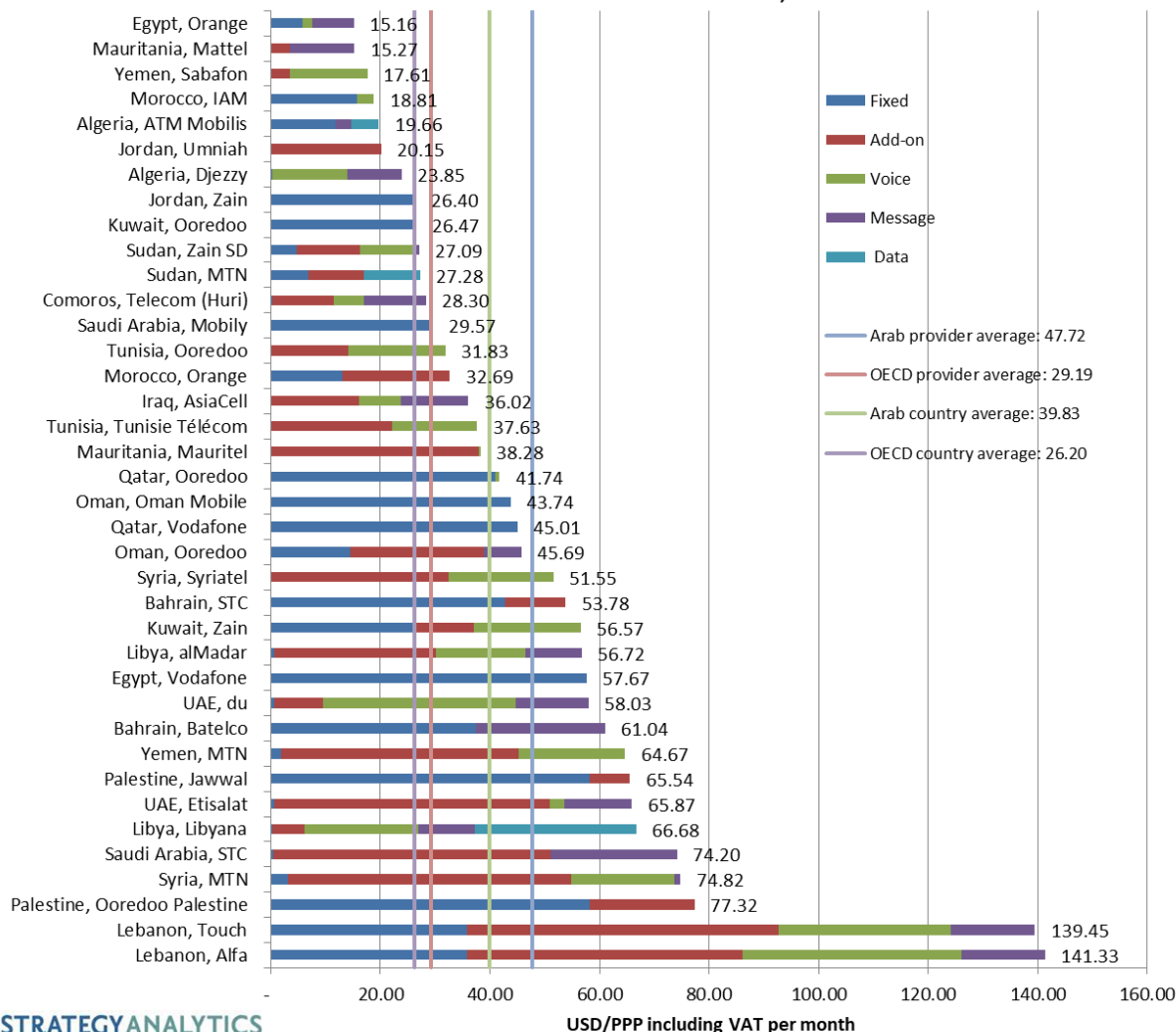


100 CALLS AND 2GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 100 calls, 2 GB



Please note:

No data for Djibouti and 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.

20 provider results are based on prepaid tariffs

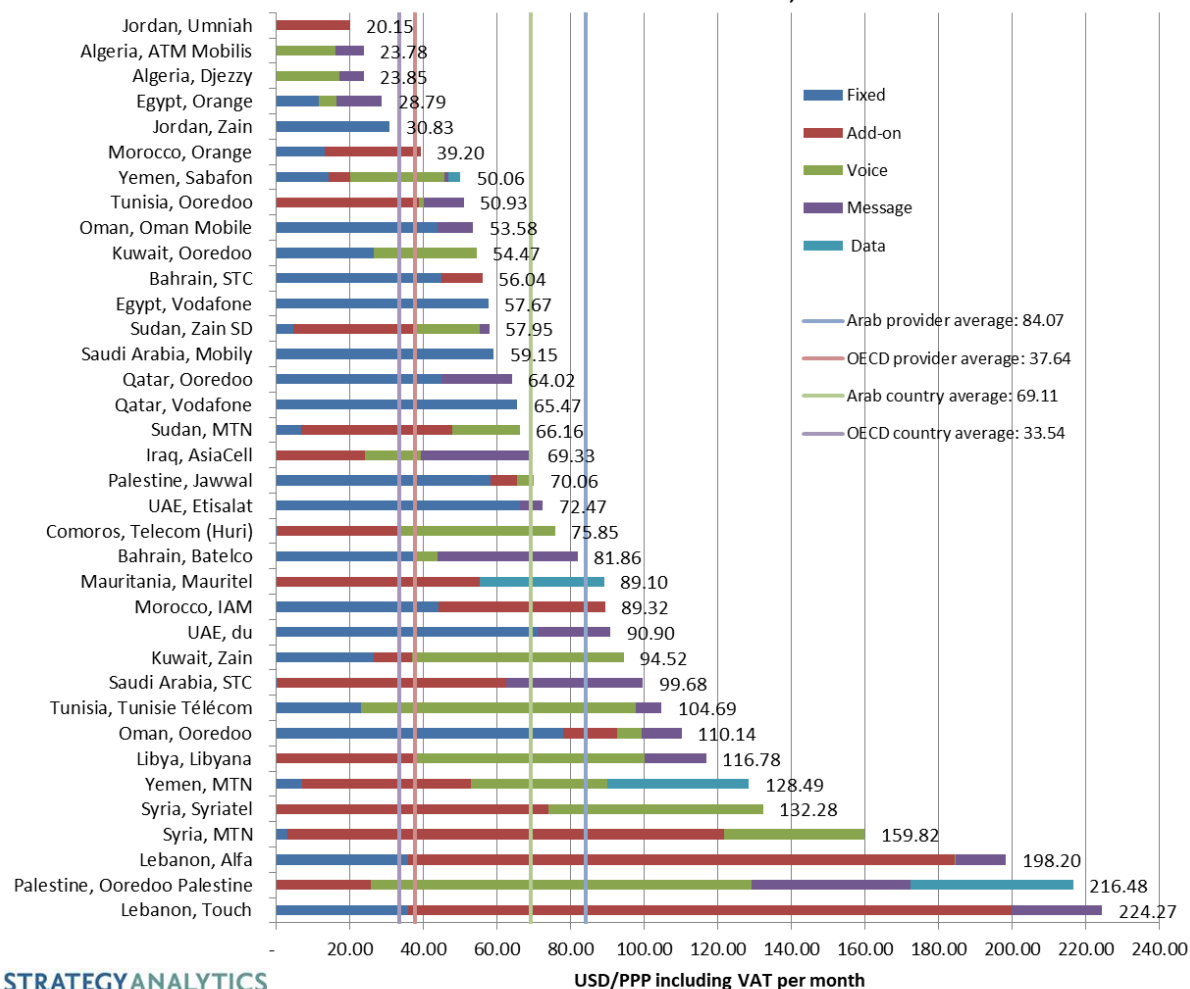


300 CALLS AND 5GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 300 calls, 5 GB



Please note:
No data for Djibouti
and 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**

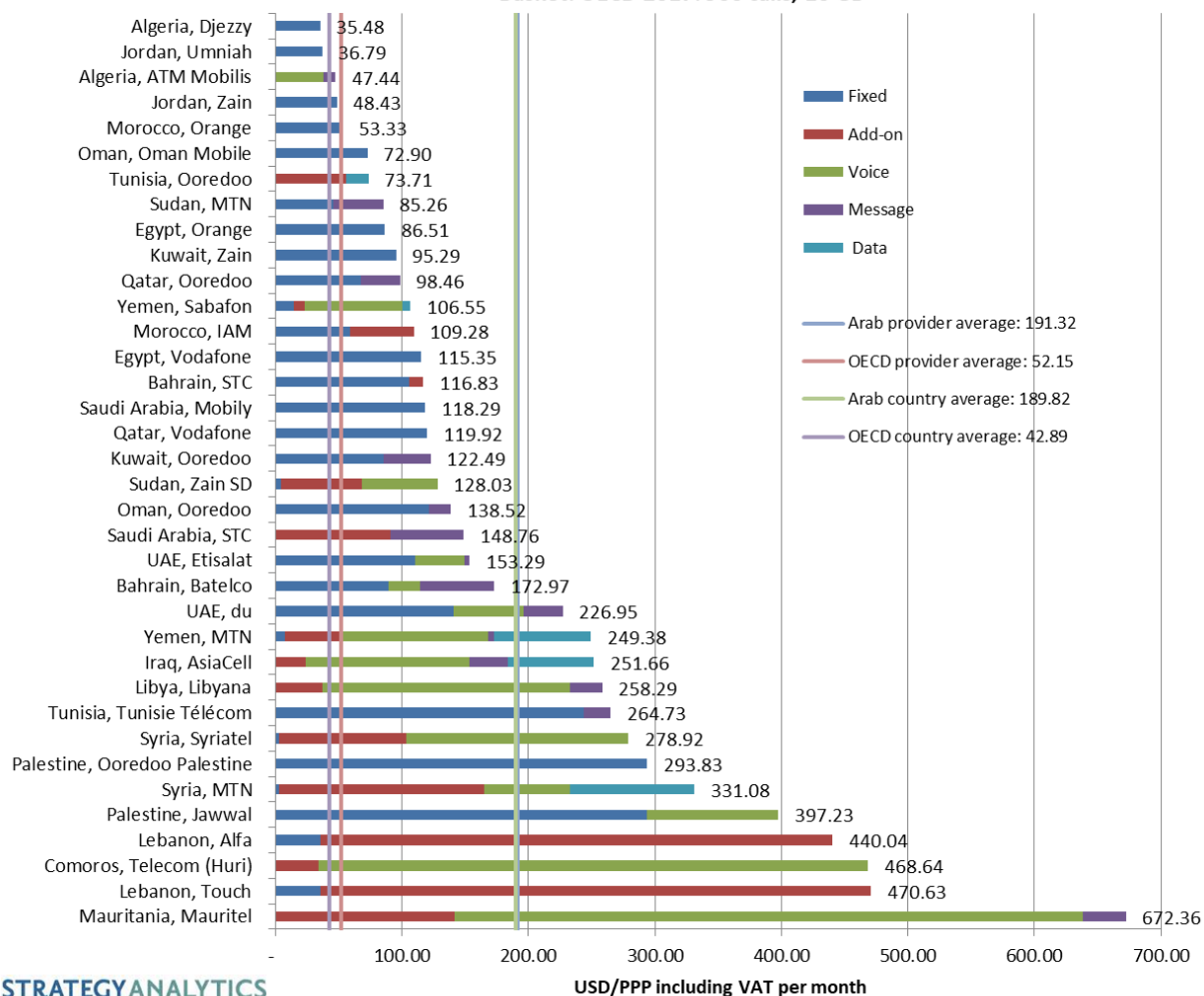


900 CALLS AND 10GB/MONTH BASED ON 2017 OECD MOBILE VOICE AND DATA BASKET



AREGNET Mobile Voice and Data Price Benchmarking 2020

Basket: OECD 2017: 900 calls, 10 GB



Please note:
No data for Djibouti and 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.

9 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	Lebanon	Palestine	Saudi Arabia
100 calls no data	Sudan	Egypt	Algeria	Lebanon	Palestine	UAE
30 calls, 0.1 GB	Egypt	Tunisia	Yemen	Lebanon	Bahrain	Palestine
100 calls, 0.5 GB	Algeria	Egypt	Tunisia	Lebanon	Palestine	Bahrain
300 calls, 1 GB	Algeria	Egypt	Jordan	Lebanon	Libya	Syria
900 calls, 2 GB	Jordan	Algeria	Egypt	Mauritania	Lebanon	Comoros
30 calls, 0.5 GB	Tunisia	Yemen	Egypt	Lebanon	Bahrain	Palestine
100 calls, 2 GB	Egypt	Mauritania	Yemen	Lebanon	Palestine	UAE
300 calls, 5 GB	Jordan	Algeria	Egypt	Lebanon	Syria	Libya
900 calls, 10 GB	Algeria	Jordan	Morocco	Mauritania	Comoros	Lebanon

- A comparison between the OECD and Arab averages is shown in the next slide, both per country and per provider
- As in the previous year 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. Similarly, as in 2019, the number of providers for which prepaid offers are the cheapest is at its highest for no and low data usage baskets, but this changes increasingly to postpaid tariffs as data usage increases.
- Generally, 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. For the 30 calls no data basket, however, both the per provider and per country Arab averages are only very slightly higher than the OECD averages.
- Baskets which incorporate handset data show a broad variation in price across the Arab providers. This is still true for 2020 and the price continues to rise for baskets with higher data requirements, again indicating that in a number of countries, high mobile data use is still prohibitively expensive, and consequently, mobile data use is probably more limited.
- 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 27 per operator in 2019, to 28 per operator in 2020.





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	14.95	17.25	15.23	17.49
100 calls no data	19.33	22.31	25.73	30.75
30 calls, 0.1 GB	16.86	19.89	21.34	25.45
100 calls, 0.5 GB	22.45	24.99	31.60	38.04
300 calls, 1 GB	27.35	30.20	54.13	65.73
900 calls, 2 GB	32.32	39.99	165.67	173.51
30 calls, 0.5 GB	18.89	21.77	23.58	27.70
100 calls, 2 GB	26.20	29.19	39.83	47.72
300 calls, 5 GB	33.54	37.64	69.11	84.07
900 calls, 10 GB	42.89	52.15	189.82	191.32

	% that Arab average is higer or lower than OECD average	
	Per country average	Per provider average
30 calls no data	2%	1%
100 calls no data	33%	38%
30 calls, 0.1 GB	27%	28%
100 calls, 0.5 GB	41%	52%
300 calls, 1 GB	98%	118%
900 calls, 2 GB	413%	334%
30 calls, 0.5 GB	25%	27%
100 calls, 2 GB	52%	63%
300 calls, 5 GB	106%	123%
900 calls, 10 GB	343%	267%

- 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, although for the very lowest basket, 30 calls and no data, the Arab average is almost identical to the OECD one.





MOBILE TIME SERIES ANALYSIS AND RANKING TABLES 2016–2020

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



Results for Mobile Voice and Data: OECD 2017: 30 calls, no data basket, 2016-2020
Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	10.03	11.96	23.78	23.78	11.83
Bahrain	19.28	32.17	32.17	32.20	28.63
Comoros	31.38	17.20	17.20	17.20	17.20
Djibouti					
Egypt	4.36	4.36	4.33	4.33	5.77
Iraq	12.19	12.39	13.41	13.41	12.11
Jordan	15.58	15.58	17.68	18.44	10.05
Kuwait	21.30	23.16	22.16	23.16	23.16
Lebanon	41.71	41.71	42.09	32.54	31.42
Libya	8.37	12.79	12.79	12.27	12.27
Mauritania	25.92	19.86	21.81	21.45	11.90
Morocco	11.30	8.26	8.26	8.26	8.26
Oman	18.18	18.04	18.18	18.01	12.26
Palestine	22.30	19.18	27.55	27.55	30.99
Qatar	16.98	17.15	17.33	13.46	13.39
Saudi Arabia	16.10	16.10	16.10	28.61	29.57
Somalia					
Sudan	1.95	2.24	2.33	2.41	5.12
Syria	4.16	5.95	5.95	4.89	5.84
Tunisia	6.09	6.25	6.25	5.35	9.36
UAE	15.80	14.47	16.51	16.51	16.51
Yemen	7.16	9.52	9.58	9.58	8.96

Arab average	15.51	15.42	16.77	16.67	15.23
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	7	7	17	16	8
Bahrain	15	19	19	19	17
Comoros	19	14	11	11	15
Djibouti	-	-	-	-	-
Egypt	3	2	2	2	2
Iraq	9	8	8	8	10
Jordan	10	11	13	13	7
Kuwait	16	18	16	15	16
Lebanon	20	20	20	20	20
Libya	6	9	7	7	12
Mauritania	18	17	15	14	9
Morocco	8	5	5	5	4
Oman	14	15	14	12	11
Palestine	17	16	18	17	19
Qatar	13	13	12	9	13
Saudi Arabia	12	12	9	18	18
Somalia	-	-	-	-	-
Sudan	1	1	1	1	1
Syria	2	3	3	3	3
Tunisia	4	4	4	4	6
UAE	11	10	10	10	14
Yemen	5	6	6	6	5

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, 2016-2020
Results in USD/PPP including VAT per month

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	23.17	28.65	23.78	23.78	11.83
Bahrain	26.61	37.57	37.57	40.06	39.02
Comoros	84.26	28.46	28.46	17.20	17.20
Djibouti					
Egypt	7.27	7.21	5.66	5.66	8.94
Iraq	26.54	26.52	26.61	20.05	20.05
Jordan	15.58	15.58	23.50	22.00	20.15
Kuwait	40.99	40.98	40.36	40.98	26.47
Lebanon	81.89	77.27	77.97	82.64	82.64
Libya	24.52	29.00	29.00	27.22	27.22
Mauritania	40.85	29.85	39.39	36.62	15.27
Morocco	22.60	16.51	16.51	16.51	16.51
Oman	40.12	31.24	31.38	30.65	21.39
Palestine	41.43	41.43	45.70	52.22	58.18
Qatar	36.26	37.32	37.32	21.41	21.41
Saudi Arabia	35.01	35.01	35.01	34.27	29.57
Somalia					
Sudan	4.63	5.47	5.68	5.68	6.82
Syria	14.03	21.93	21.93	21.30	21.30
Tunisia	18.26	17.65	17.65	12.46	15.05
UAE	30.00	30.00	31.78	33.51	41.40
Yemen	21.29	14.24	14.24	14.24	14.24

Arab average	31.77	28.59	29.48	27.92	25.73
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Below Arab average
Above Arab average

	2016	2017	2018	2019	2020
Algeria	8	10	8	11	3
Bahrain	11	17	16	17	17
Comoros	20	9	10	6	8
Djibouti	-	-	-	-	-
Egypt	2	2	1	1	2
Iraq	10	8	9	7	9
Jordan	4	4	7	10	10
Kuwait	17	18	18	18	14
Lebanon	19	20	20	20	20
Libya	9	11	11	12	15
Mauritania	16	12	17	16	6
Morocco	7	5	4	5	7
Oman	15	14	12	13	12
Palestine	18	19	19	19	19
Qatar	14	16	15	9	13
Saudi Arabia	13	15	14	15	16
Somalia	-	-	-	-	-
Sudan	1	1	2	2	1
Syria	3	7	6	8	11
Tunisia	5	6	5	3	5
UAE	12	13	13	14	18
Yemen	6	3	3	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, 30 CALLS AND 0.1GB DATA/MONTH



Results for Mobile Voice and Data: OECD 2017: 30 calls, 0.1 GB basket, 2016-2020

Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	13.58	19.05	23.78	23.78	11.83
Bahrain	26.61	46.66	46.66	44.83	44.88
Comoros		17.20	17.20	17.20	17.20
Djibouti					
Egypt	7.17	7.12	6.23	6.23	7.70
Iraq	12.19	15.38	15.38	13.44	13.44
Jordan	18.50	18.50	22.03	18.44	20.15
Kuwait	40.99	26.47	30.59	30.59	26.47
Lebanon	57.62	56.08	56.59	54.39	58.14
Libya	23.12	17.61	20.56	20.56	20.56
Mauritania	125.27	19.86	21.81	21.45	11.90
Morocco	11.30	12.78	12.78	13.35	13.91
Oman	18.18	18.04	18.18	24.71	24.24
Palestine	63.20	29.34	39.33	39.33	38.35
Qatar	23.12	23.19	23.19	21.41	25.37
Saudi Arabia	30.18	21.73	21.73	31.43	29.57
Somalia					
Sudan	2.33	2.69	2.79	9.23	12.64
Syria	9.82	11.88	11.88	14.92	14.92
Tunisia	10.49	8.71	8.71	9.36	9.36
UAE	28.59	16.51	16.51	16.51	16.51
Yemen	16.77	9.70	9.70	9.70	9.70

Arab average	28.37	19.92	21.28	22.04	21.34
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	7	13	16	14	4
Bahrain	13	19	19	19	19
Comoros	-	9	9	9	11
Djibouti	-	-	-	-	-
Egypt	2	2	2	1	1
Iraq	6	7	7	6	7
Jordan	10	12	14	10	12
Kuwait	16	17	17	16	16
Lebanon	17	20	20	20	20
Libya	11	10	11	11	13
Mauritania	19	14	13	13	5
Morocco	5	6	6	5	8
Oman	9	11	10	15	14
Palestine	18	18	18	18	18
Qatar	12	16	15	12	15
Saudi Arabia	15	15	12	17	17
Somalia	-	-	-	-	-
Sudan	1	1	1	2	6
Syria	3	5	5	7	9
Tunisia	4	3	3	3	2
UAE	14	8	8	8	10
Yemen	8	4	4	4	3

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, 2016-2020
Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	27.61	28.65	23.78	23.78	12.54
Bahrain	31.88	53.37	53.37	44.83	53.78
Comoros		28.46	28.46	19.98	19.98
Djibouti					
Egypt	16.16	11.53	7.21	7.21	13.26
Iraq	36.11	40.59	40.59	24.09	24.09
Jordan	18.50	18.50	23.50	22.00	20.15
Kuwait	40.99	40.98	40.98	40.98	26.47
Lebanon	103.54	77.27	77.97	104.49	104.49
Libya	98.27	46.03	54.88	37.55	39.02
Mauritania	140.20	29.85	39.39	38.28	15.27
Morocco	25.81	17.97	18.39	18.81	18.81
Oman	40.12	31.24	31.38	36.37	35.97
Palestine	112.56	57.30	64.11	69.93	65.54
Qatar	44.45	41.92	41.92	21.41	25.37
Saudi Arabia	68.81	43.46	43.46	42.72	29.57
Somalia					
Sudan	6.53	7.72	8.01	12.50	17.05
Syria	30.64	37.43	37.43	38.69	38.69
Tunisia	18.26	17.65	17.65	15.08	15.05
UAE	44.12	44.79	31.78	41.40	41.40
Yemen	35.11	24.10	24.10	24.10	15.45

Arab average	49.46	34.94	35.42	34.21	31.60
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	6	8	6	8	1
Bahrain	8	18	17	18	18
Comoros	-	7	8	5	8
Djibouti	-	-	-	-	-
Egypt	2	2	1	1	2
Iraq	10	12	13	9	10
Jordan	4	5	5	7	9
Kuwait	12	13	14	15	12
Lebanon	17	20	20	20	20
Libya	16	17	18	12	16
Mauritania	19	9	12	13	4
Morocco	5	4	4	4	7
Oman	11	10	9	11	14
Palestine	18	19	19	19	19
Qatar	14	14	15	6	11
Saudi Arabia	15	15	16	17	13
Somalia	-	-	-	-	-
Sudan	1	1	2	2	6
Syria	7	11	11	14	15
Tunisia	3	3	3	3	3
UAE	13	16	10	16	17
Yemen	9	6	7	10	5

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, 2016-2020
Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	49.67	41.56	41.56	23.78	16.19
Bahrain	49.34	53.37	53.37	51.23	56.04
Comoros		142.21	122.77	45.31	45.31
Djibouti					
Egypt	23.26	18.48	13.57	13.57	19.35
Iraq	97.42	97.40	102.79	45.38	45.38
Jordan	20.83	19.48	25.52	22.00	20.15
Kuwait	53.67	69.63	69.63	69.63	54.47
Lebanon	210.23	165.95	167.46	147.94	147.94
Libya	220.13	102.03	103.50	78.13	79.60
Mauritania	287.94	63.81	220.53	72.55	72.55
Morocco	25.81	25.81	25.81	26.75	34.35
Oman	91.16	74.25	74.39	92.34	53.58
Palestine	218.68	96.14	127.02	93.39	70.06
Qatar	65.75	61.95	61.95	40.92	41.74
Saudi Arabia	92.16	89.31	88.02	68.77	59.15
Somalia					
Sudan	18.75	21.63	22.46	28.48	35.47
Syria	57.54	78.24	78.24	77.84	77.84
Tunisia	42.72	38.04	38.04	38.04	36.85
UAE	84.79	72.14	72.47	76.09	72.47
Yemen	72.35	64.95	64.95	56.63	44.16

Arab average	93.80	69.82	78.70	58.44	54.13
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	7	6	6	3	1
Bahrain	6	7	7	10	13
Comoros	-	19	17	8	9
Djibouti	-	-	-	-	-
Egypt	3	1	1	1	2
Iraq	15	17	15	9	10
Jordan	2	2	3	2	3
Kuwait	8	11	10	13	12
Lebanon	16	20	19	20	20
Libya	18	18	16	17	19
Mauritania	19	9	20	14	17
Morocco	4	4	4	4	4
Oman	13	13	12	18	11
Palestine	17	16	18	19	15
Qatar	10	8	8	7	7
Saudi Arabia	14	15	14	12	14
Somalia	-	-	-	-	-
Sudan	1	3	2	5	5
Syria	9	14	13	16	18
Tunisia	5	5	5	6	6
UAE	12	12	11	15	16
Yemen	11	10	9	11	8

Least expensive
Most expensive

Note: The year on year results and averages are based on lowest cost per country, and will not be the same as the average across all carriers and countries



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



Results for Mobile Voice and Data: OECD 2017: 900 calls, 2 GB basket, 2016-2020
Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	178.65	58.48	80.68	35.68	28.80
Bahrain	84.81	113.03	113.03	116.83	116.83
Comoros		464.48	486.80	435.32	435.32
Djibouti					
Egypt	56.69	42.89	24.51	24.51	41.73
Iraq	303.68	336.02	336.02	183.79	175.80
Jordan	25.87	30.83	30.62	22.00	20.15
Kuwait	64.26	132.34	169.40	162.66	95.29
Lebanon	513.94	466.39	470.63	440.04	440.04
Libya	507.21	356.82	256.82	196.83	216.01
Mauritania	610.22	642.03	589.42	672.36	642.67
Morocco	51.89	51.89	51.89	53.54	53.33
Oman	234.92	165.52	165.52	151.53	72.90
Palestine	549.47	250.76	290.88	148.43	187.80
Qatar	102.30	102.30	102.30	81.84	82.66
Saudi Arabia	175.66	175.66	181.37	135.02	118.29
Somalia					
Sudan	45.95	62.62	44.02	48.13	85.26
Syria	142.09	205.96	205.96	185.53	185.53
Tunisia	75.31	79.45	79.45	79.45	61.53
UAE	200.60	150.64	153.29	160.95	153.29
Yemen	181.34	148.38	146.36	133.07	100.14

Arab average	216.04	201.82	198.95	173.38	165.67
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	11	4	6	3	2
Bahrain	7	8	8	8	11
Comoros	-	18	19	18	18
Djibouti	-	-	-	-	-
Egypt	4	2	1	2	3
Iraq	15	16	17	15	14
Jordan	1	1	2	1	1
Kuwait	5	9	12	14	9
Lebanon	17	19	18	19	19
Libya	16	17	15	17	17
Mauritania	19	20	20	20	20
Morocco	3	3	4	5	4
Oman	14	12	11	12	6
Palestine	18	15	16	11	16
Qatar	8	7	7	7	7
Saudi Arabia	10	13	13	10	12
Somalia	-	-	-	-	-
Sudan	2	5	3	4	8
Syria	9	14	14	16	15
Tunisia	6	6	5	6	5
UAE	13	11	10	13	13
Yemen	12	10	9	9	10

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, 2016-2020

Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	14.19	19.05	23.78	23.78	12.54
Bahrain	31.88	46.66	46.66	44.83	44.88
Comoros		28.46	28.46	19.98	19.98
Djibouti					
Egypt	8.27	8.48	7.21	7.21	11.74
Iraq	27.28	27.28	27.28	24.09	24.09
Jordan	18.50	18.50	22.03	18.44	20.15
Kuwait	40.99	26.47	30.59	30.59	26.47
Lebanon	63.36	63.36	63.94	54.39	58.60
Libya	82.12	27.94	36.79	22.60	24.07
Mauritania	125.27	19.86	21.81	21.45	11.90
Morocco	24.34	12.78	12.78	13.35	14.77
Oman	18.18	18.04	18.18	24.71	24.36
Palestine	65.74	35.05	45.96	45.96	42.04
Qatar	37.44	23.19	23.19	21.41	25.37
Saudi Arabia	49.90	24.55	24.55	37.06	29.57
Somalia					
Sudan	3.85	4.48	4.66	9.23	12.64
Syria	20.78	22.63	22.63	22.28	23.23
Tunisia	18.26	8.71	8.71	9.36	9.36
UAE	31.69	26.61	22.73	24.94	24.94
Yemen	21.39	24.10	24.10	23.27	10.90

Arab average	37.02	24.31	25.80	24.95	23.58
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	3	7	11	12	5
Bahrain	12	19	19	18	19
Comoros	-	17	15	6	8
Djibouti	-	-	-	-	-
Egypt	2	2	2	1	3
Iraq	10	15	14	13	12
Jordan	6	6	7	5	9
Kuwait	14	13	16	16	16
Lebanon	16	20	20	20	20
Libya	18	16	17	10	11
Mauritania	19	8	6	8	4
Morocco	9	4	4	4	7
Oman	4	5	5	14	13
Palestine	17	18	18	19	18
Qatar	13	10	10	7	15
Saudi Arabia	15	12	13	17	17
Somalia	-	-	-	-	-
Sudan	1	1	1	2	6
Syria	7	9	8	9	10
Tunisia	5	3	3	3	1
UAE	11	14	9	15	14
Yemen	8	11	12	11	2

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, 2016-2020
Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	27.61	38.11	28.65	23.78	19.66
Bahrain	37.14	53.37	53.37	44.83	53.78
Comoros		37.84	35.36	28.30	28.30
Djibouti					
Egypt	23.02	20.13	15.86	15.86	15.16
Iraq	60.07	64.54	64.54	42.58	36.02
Jordan	19.48	19.48	25.52	22.00	20.15
Kuwait	40.99	40.98	40.98	40.98	26.47
Lebanon	108.93	133.57	119.49	139.45	139.45
Libya	326.61	166.69	66.68	37.55	56.72
Mauritania	140.20	180.72	98.31	38.28	15.27
Morocco	26.07	17.97	18.39	18.81	18.81
Oman	54.70	77.10	43.74	41.23	43.74
Palestine	169.68	169.68	169.68	84.66	65.54
Qatar	69.00	55.05	61.95	40.92	41.74
Saudi Arabia	85.20	60.36	60.36	53.69	29.57
Somalia					
Sudan	10.66	14.66	15.22	19.33	27.09
Syria	36.31	43.10	43.10	51.55	51.55
Tunisia	60.86	40.92	29.92	37.82	31.83
UAE	44.12	66.18	31.78	58.03	58.03
Yemen	38.95	57.73	54.25	50.76	17.61

Arab average	72.61	67.91	53.86	44.52	39.83
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	5	6	5	5	5
Bahrain	7	10	12	14	16
Comoros	-	5	8	6	9
Djibouti	-	-	-	-	-
Egypt	3	4	2	1	1
Iraq	12	14	16	13	12
Jordan	2	3	4	4	6
Kuwait	9	8	9	11	7
Lebanon	16	17	19	20	20
Libya	19	18	17	7	17
Mauritania	17	20	18	9	2
Morocco	4	2	3	2	4
Oman	11	16	11	12	14
Palestine	18	19	20	19	19
Qatar	14	11	15	10	13
Saudi Arabia	15	13	14	17	10
Somalia	-	-	-	-	-
Sudan	1	1	1	3	8
Syria	6	9	10	16	15
Tunisia	13	7	6	8	11
UAE	10	15	7	18	18
Yemen	8	12	13	15	3

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, 2016-2020
Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	49.67	58.48	47.58	23.78	23.78
Bahrain	49.34	53.37	53.37	51.23	56.04
Comoros		203.51	122.77	75.85	75.85
Djibouti					
Egypt	92.00	41.69	33.57	33.57	28.79
Iraq	156.69	180.92	158.68	102.79	69.33
Jordan	34.26	30.83	30.62	22.00	20.15
Kuwait	80.14	69.63	69.63	69.63	54.47
Lebanon	231.89	225.39	224.27	198.20	198.20
Libya	824.31	555.16	442.76	78.13	116.78
Mauritania	287.94	292.82	296.07	89.10	89.10
Morocco	59.71	38.85	38.85	35.48	39.20
Oman	145.81	103.06	92.34	92.34	53.58
Palestine	1,766.01	250.76	290.88	109.72	70.06
Qatar	93.93	78.11	90.59	61.38	64.02
Saudi Arabia	141.53	106.35	88.02	97.34	59.15
Somalia					
Sudan	36.34	40.00	41.53	48.03	57.95
Syria	76.44	97.14	97.14	132.28	132.28
Tunisia	121.72	115.45	121.72	115.45	50.93
UAE	84.79	72.14	85.58	89.86	72.47
Yemen	82.44	155.18	172.93	134.50	50.06

Arab average	232.37	138.44	129.95	83.03	69.11
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	4	6	5	2	2
Bahrain	3	5	6	6	9
Comoros	-	16	14	9	16
Djibouti	-	-	-	-	-
Egypt	10	4	2	3	3
Iraq	15	15	15	15	13
Jordan	1	1	1	1	1
Kuwait	7	7	7	8	8
Lebanon	16	17	17	20	20
Libya	18	20	20	10	18
Mauritania	17	19	19	11	17
Morocco	5	2	3	4	4
Oman	14	11	11	13	7
Palestine	19	18	18	16	14
Qatar	11	9	10	7	12
Saudi Arabia	13	12	9	14	11
Somalia	-	-	-	-	-
Sudan	2	3	4	5	10
Syria	6	10	12	18	19
Tunisia	12	13	13	17	6
UAE	9	8	8	12	15
Yemen	8	14	16	19	5

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, 2016-2020
Results in USD/PPP including VAT per month

	2016	2017	2018	2019	2020
Algeria	178.65	58.48	80.68	71.09	35.48
Bahrain	84.81	134.25	134.25	116.83	116.83
Comoros		560.27	486.80	468.64	468.64
Djibouti					
Egypt	151.77	101.18	86.51	86.51	86.51
Iraq	503.30	535.64	535.64	375.42	251.66
Jordan	126.96	43.66	43.66	30.79	36.79
Kuwait	158.81	132.34	169.40	162.66	95.29
Lebanon	557.25	466.39	470.63	440.04	440.04
Libya	1,715.56	1,263.09	1,150.69	196.83	258.29
Mauritania	610.22	642.03	652.83	672.36	672.36
Morocco	104.03	104.03	104.03	53.54	53.33
Oman	291.61	165.52	165.52	151.53	72.90
Palestine	5,107.48	250.76	290.88	290.88	293.83
Qatar	143.22	143.22	130.94	102.30	98.46
Saudi Arabia	225.46	208.86	214.50	135.02	118.29
Somalia					
Sudan	99.01	93.48	49.45	49.45	85.26
Syria	181.78	245.65	245.65	278.92	278.92
Tunisia	243.43	212.51	212.51	264.73	73.71
UAE	200.60	150.64	183.79	183.05	153.29
Yemen	201.52	302.12	333.46	247.25	106.55

Arab average	572.92	290.71	287.09	218.89	189.82
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	8	2	3	4	1
Bahrain	1	7	7	7	11
Comoros	-	18	17	19	19
Djibouti	-	-	-	-	-
Egypt	6	4	4	5	7
Iraq	15	17	18	17	14
Jordan	4	1	1	1	2
Kuwait	7	6	9	10	8
Lebanon	16	16	16	18	18
Libya	18	20	20	12	15
Mauritania	17	19	19	20	20
Morocco	3	5	5	3	3
Oman	14	10	8	9	4
Palestine	19	14	14	16	17
Qatar	5	8	6	6	9
Saudi Arabia	12	11	12	8	12
Somalia	-	-	-	-	-
Sudan	2	3	2	2	6
Syria	9	13	13	15	16
Tunisia	13	12	11	14	5
UAE	10	9	10	11	13
Yemen	11	15	15	13	10

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

- There has been a general mix of decreases and increases over the period 2019 to 2020, the predominant change is one of decreasing prices, with more tariffs decreasing or remaining static than increasing from one year to another. In all baskets bar one, fourteen or more countries saw their results either go down or stay the same from the previous year.
- Across all the baskets considered, the Arab average decreased from 2019 to 2020, with larger decreases for baskets with higher calls and data.

Change in overall average
2019-2020

30 calls no data	↓
100 calls no data	↓
30 calls, 0.1 GB	↓
100 calls, 0.5 GB	↓
300 calls, 1 GB	↓
900 calls, 2 GB	↓
30 calls, 0.5 GB	↓
100 calls, 2 GB	↓
300 calls, 5 GB	↓
900 calls, 10 GB	↓

- 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 made comprehensive changes to their plans.
 - In Egypt both providers made numerous tariff changes, including a billing change.
 - AsiaCell and Zain in Iraq both made changes to their PAYG plans.
 - Zain in Jordan introduced new Go packages.
 - Oman Mobile and Ooredoo added new plans to their portfolios.
 - Vodafone in Qatar introduced new unlimited tariffs.
 - MTN in Sudan changed both postpaid and PAYG plans
 - Estisalat in UAE made changes to its Freedom plans
- Prepaid plans account for just over half of all plans, this is a similar proportion as in the previous year.





FIXED BROADBAND BASKET RESULTS 2020



FIXED BROADBAND BASKET METHODOLOGY

- Research covering 394 fixed broadband residential and business 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).
- The technologies included are DSL, Cable and Fibre. Wireless technology has been excluded.
 - As of July/August 2020, four Arab countries had broadband services >1000 Mb/s; Jordan, Oman, Qatar and UAE for residential services, and for business services UAE is the only country offering tariffs at this speed. For comparison in the OECD nearly 90% of its member states now offer very high speed services at 1000 Mb/s and above.
 - 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 37 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

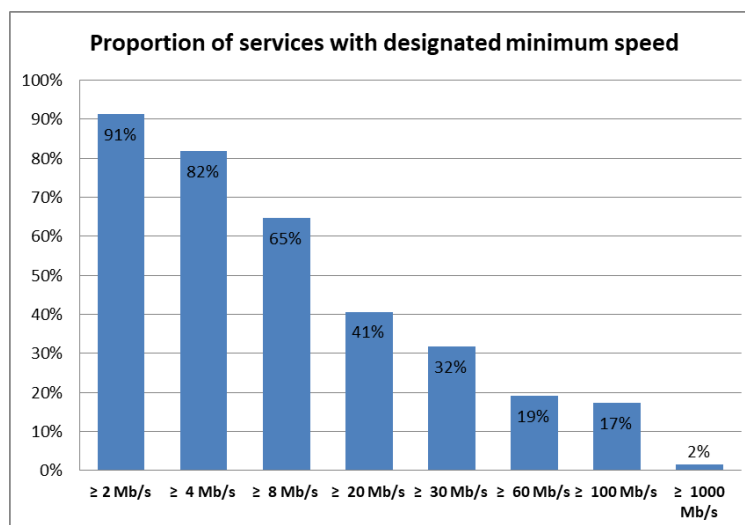
*** Incumbent ISP will normally mean the ISP owned by the incumbent operator in the country.**





FIXED BROADBAND DATA ISSUES

- Price data is not available for broadband services in Iraq (wireless services only) or Somalia.
- It has not been possible to verify the prices for Yemen, and for continuity, prices have been left at the 2019 level.
- In general, speeds have continued to rise since 2019, the slowest increase is in speeds above 1000Mb/s. The table below, shows an increase of 91% for services that have a minimum advertised download speed of 2 Mb/s or above, and the increase is 32% for those with speeds of at least 30 Mb/s.



- Speeds above 2 Mb/s are available in 20 of the 21 countries covered. Four countries offer speeds over 1000Mb/s which is up one country from previous year.
- The average speed for the Arab countries for the current update is just under 70 Mb/s.

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.

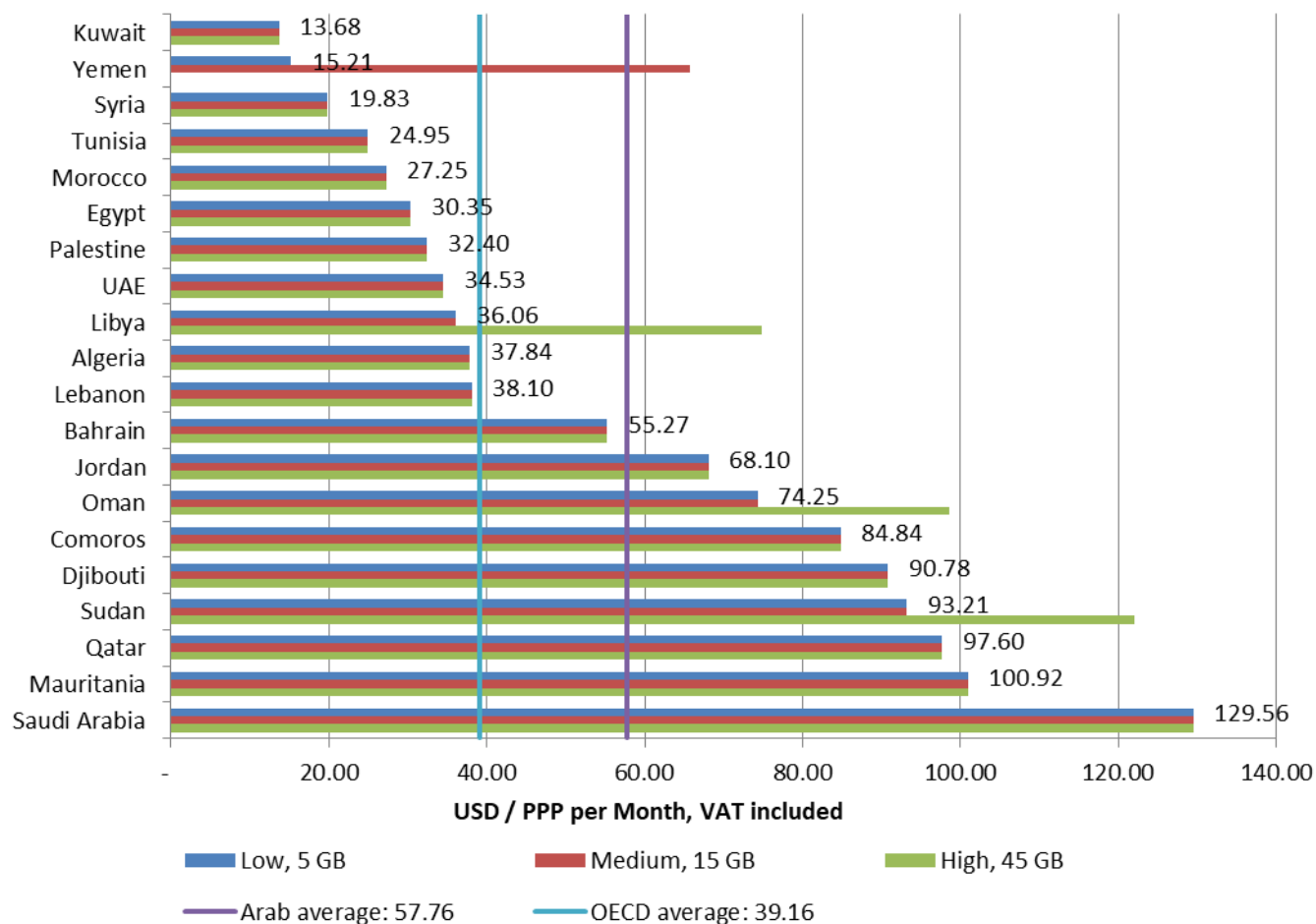


RESIDENTIAL FIXED BROADBAND VERY LOW SPEED OECD 2017 BASKET ≥ 0.25 MB/S



AREGNET Fixed Broadband Price Benchmarking 2020

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: 15 GB
High usage: 45 GB.

Average lines are based
on the medium usage
basket.

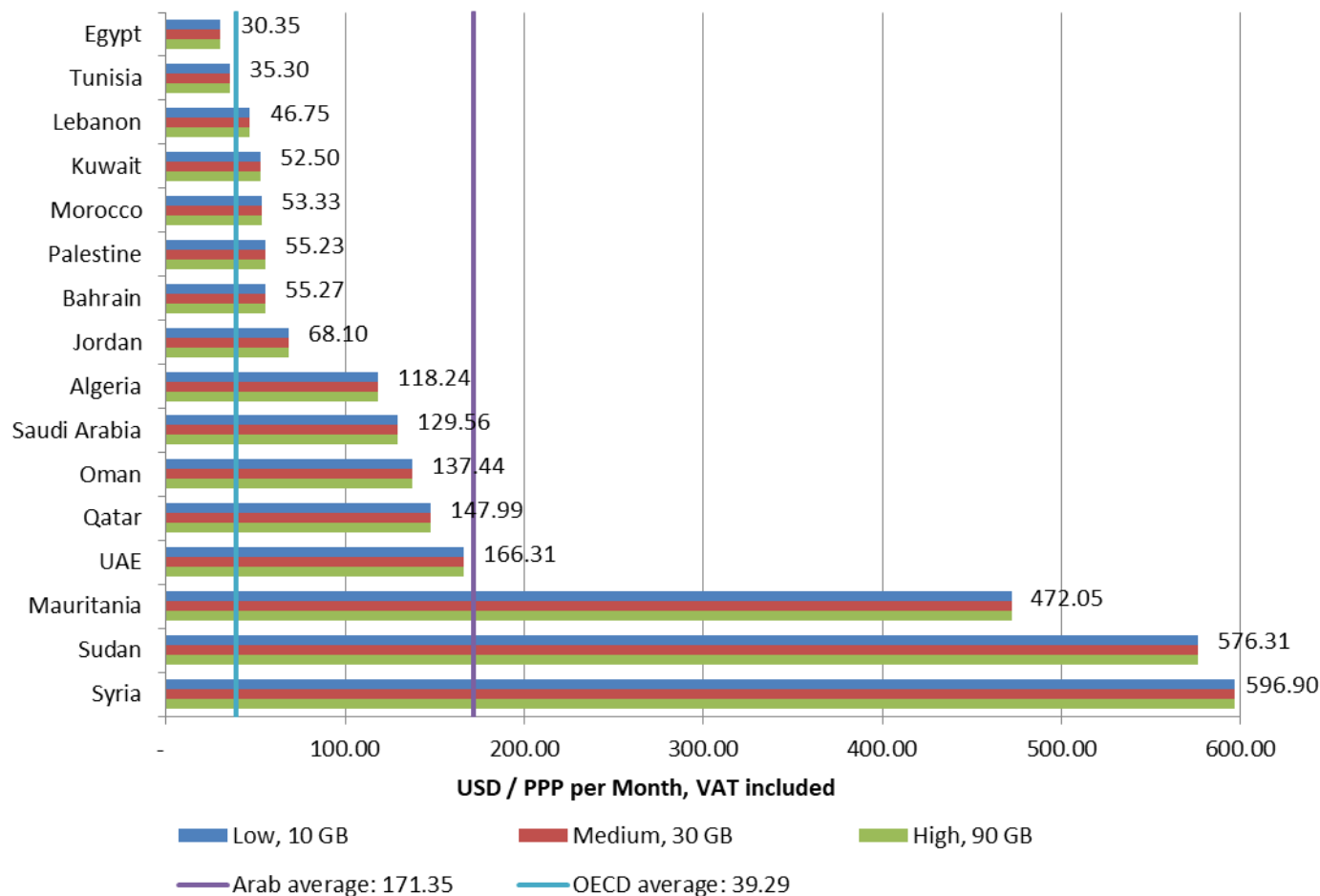


RESIDENTIAL FIXED BROADBAND LOW SPEED OECD 2017 BASKET ≥ 10 MB/S



AREGNET Fixed Broadband Price Benchmarking 2020

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.

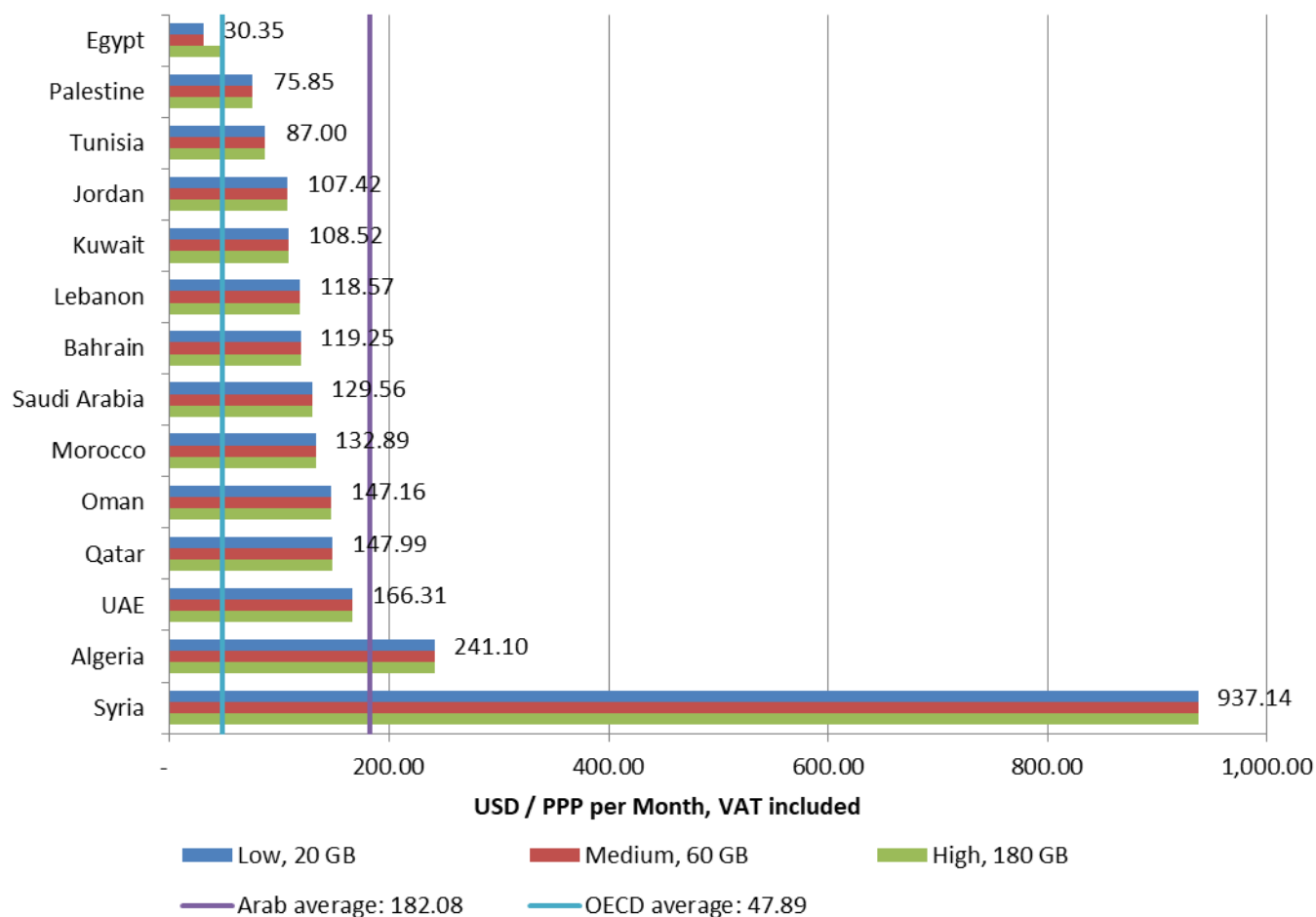


RESIDENTIAL FIXED BROADBAND MEDIUM SPEED OECD 2017 BASKET ≥ 25 MB/S



AREGNET Fixed Broadband Price Benchmarking 2020

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.

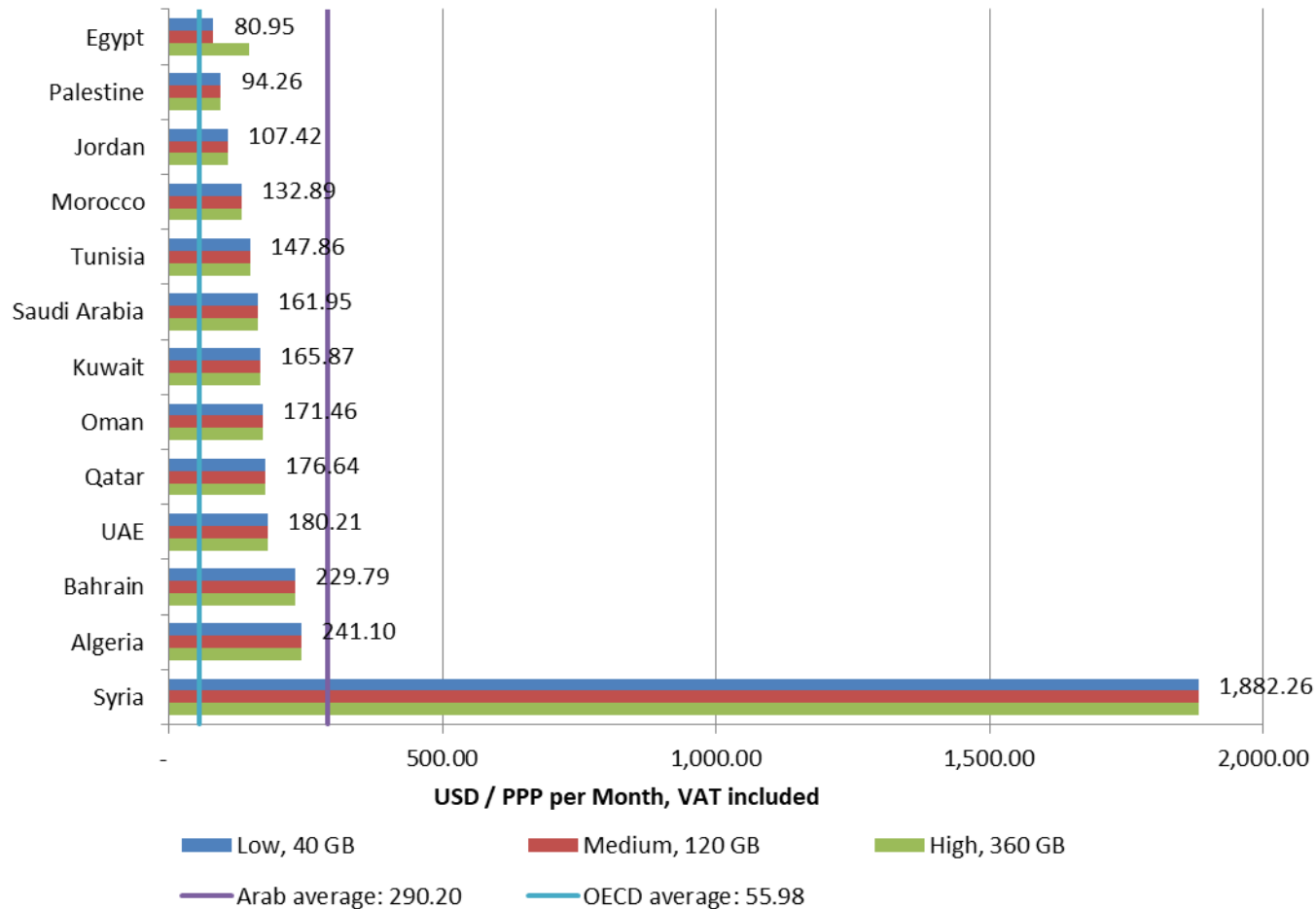
Average lines are based
on the medium usage
basket.



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



AREGNET Fixed Broadband Price Benchmarking 2020
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.

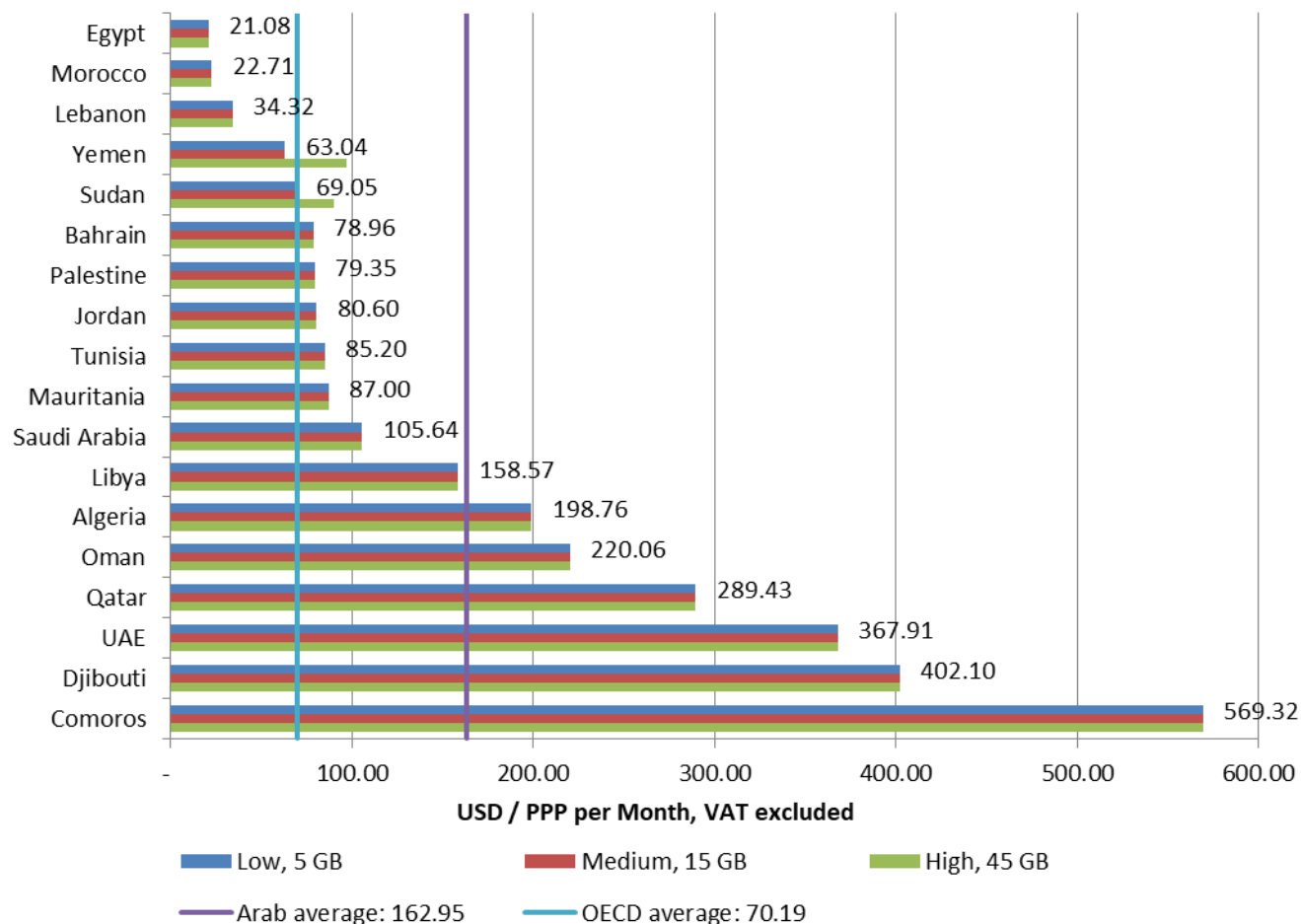


BUSINESS FIXED BROADBAND VERY LOW SPEED OECD 2017 BASKET ≥ 0.25 MB/S



AREGNET Fixed Broadband Price Benchmarking 2020

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: 15 GB
High usage: 45 GB.

Average lines are based
on the medium usage
basket.

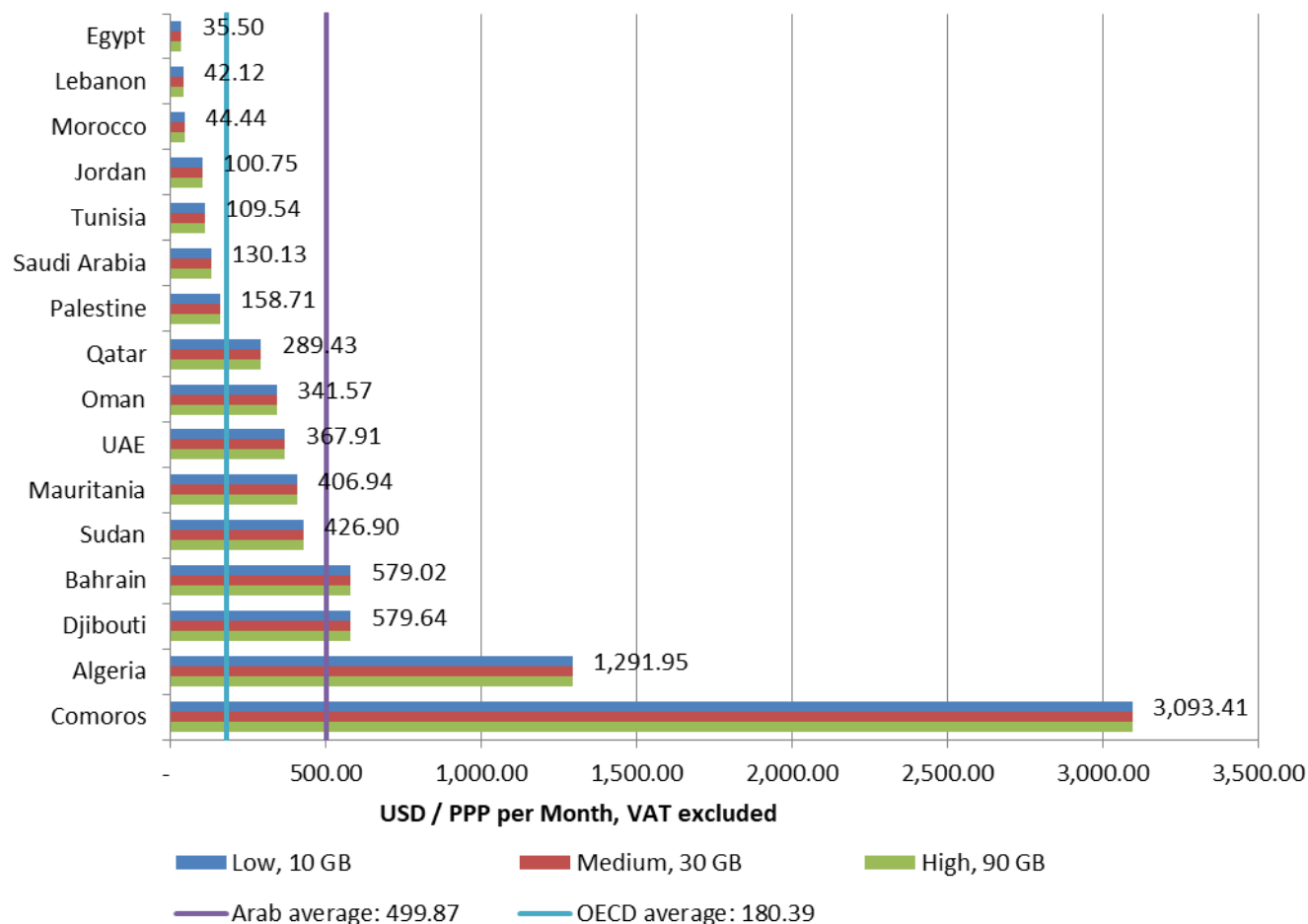


BUSINESS FIXED BROADBAND LOW SPEED OECD 2017 BASKET ≥ 10 MB/S



AREGNET Fixed Broadband Price Benchmarking 2020

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.

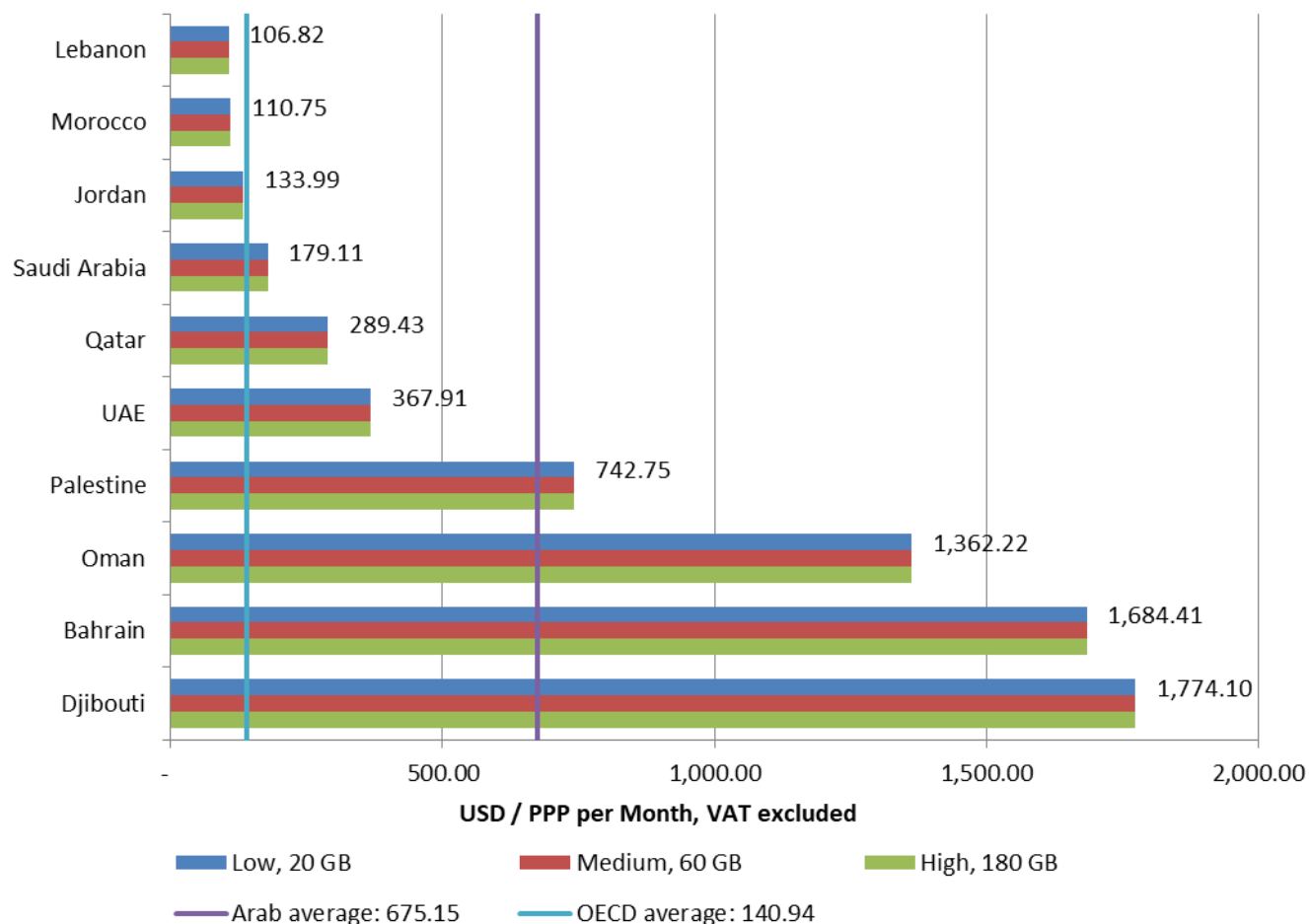
Average lines are based
on the medium usage
basket.



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



AREGNET Fixed Broadband Price Benchmarking 2020
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.

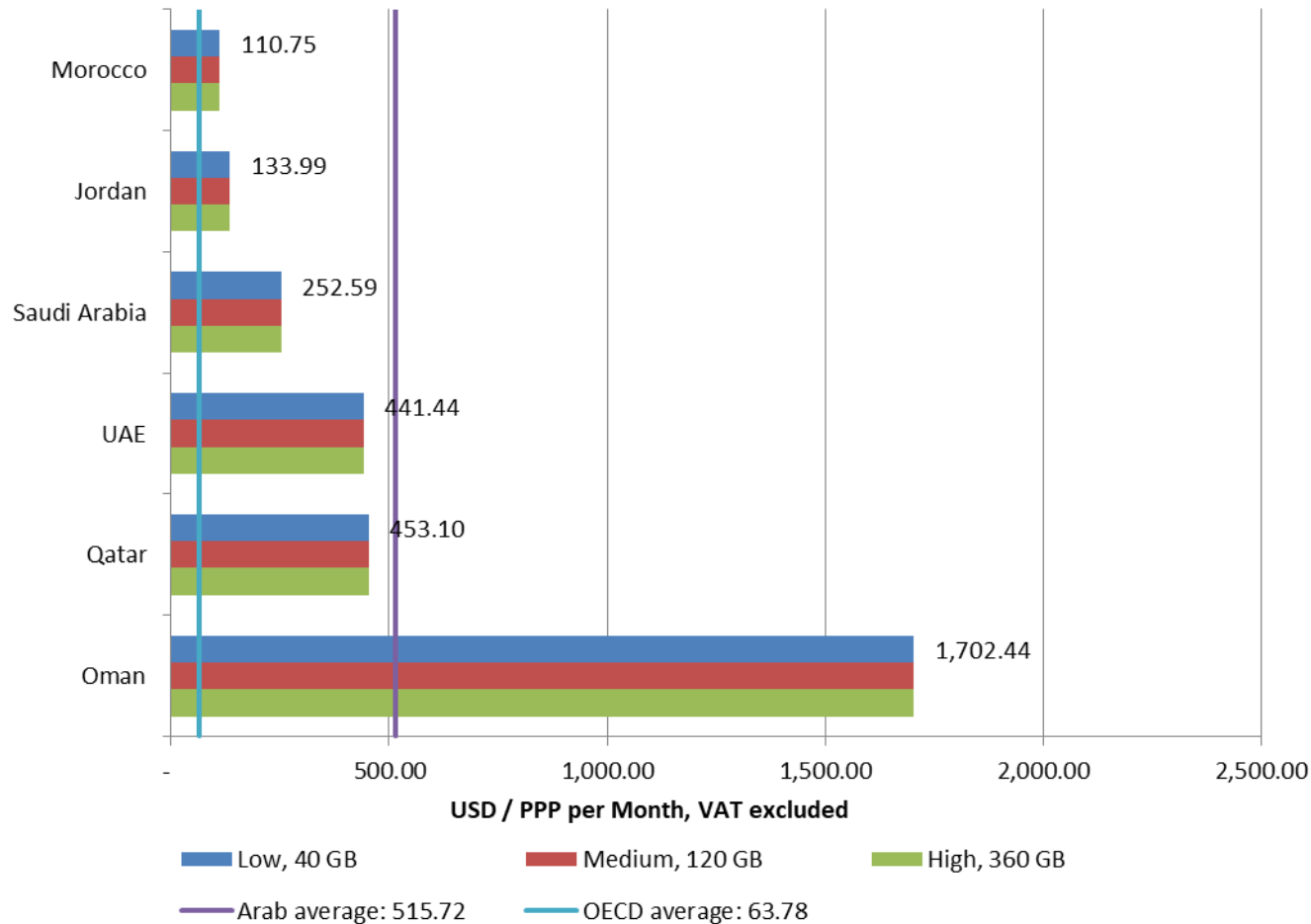
Average lines are based
on the medium usage
basket.



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



AREGNET Fixed Broadband Price Benchmarking 2020
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 show 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			USD PPP/month inc VAT	
	1st	2nd	3rd	1st	2nd	3rd	OECD average	Arab average
>= 0.25 Mb/s / 15 GB	Kuwait	Syria	Yemen	Saudi Arabia	Mauritania	Qatar	39.16	55.76
>= 10 Mb/s / 30 GB	Egypt	Tunisia	Lebanon	Syria	Sudan	Mauritania	39.29	171.35
>= 25 Mb/s / 60 GB	Egypt	Palestine	Tunisia	Syria	Algeria	UAE	47.89	182.08
>= 100 Mb/s / 120 GB	Egypt	Palestine	Jordan	Syria	Algeria	Bahrain	55.98	290.20
Business-medium usage	Cheapest			Most expensive			USD PPP/month excl VAT	
	1st	2nd	3rd	1st	2nd	3rd	OECD average	Arab average
>= 0.25 Mb/s / 15 GB	Egypt	Morocco	Lebanon	Yemen	Comoros	Djibouti	70.19	162.95
>= 10 Mb/s / 30 GB	Egypt	Lebanon	Morocco	Comoros	Algeria	Yemen	180.39	499.87
>= 25 Mb/s / 60 GB	Lebanon	Morocco	Jordan	Djibouti	Oman	Palestine	140.94	675.15
>= 100 Mb/s / 120 GB	Morocco	Jordan	Saudi Arabia	Oman	Bahrain	Qatar	63.78	515.72

- Egypt continues to feature prominently in the 'Cheapest' three for both residential and business users for many of the baskets. Palestine, Tunisia, Kuwait, Syria, Yemen and Jordan also feature in the top three for selected residential baskets. For business users alongside Egypt, Morocco, Lebanon and Jordan feature quite regularly in the top three. Most expensive countries for residential users are Syria, Algeria and Sudan, with Saudi featuring as the most expensive for the lowest speed basket. For business users, the most expensive countries varies a lot depending on minimum speed of the basket and data allowance, although Comoros, Djibouti, Oman and Yemen feature more than once.
- There has not been a change in the trend that 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 average Arab residential cost is still considerably higher than the OECD average or up to 5.2 times higher for the highest speed basket. For business services, the average is up to 8.1 times higher.
 - The residential figure continues to be skewed by particularly high costs in a number of countries, in particular, Algeria, Oman, Mauritania, Saudi Arabia, Sudan and Syria. For business services, the Arab average is heavily skewed by a number of countries, including Algeria, Comoros, Djibouti, Oman and Yemen.
- In ten of the twenty one countries usage based tariffs are still prevalent, in some instances providers offer both usage based and flat rate tariffs. Usage based results appear in selected baskets from Egypt, Libya, Oman, Sudan and Yemen. Usage based tariffs continue to be offered in many OECD countries, however, often it's limited to one provider with a country, and often for low usage tariffs.
- A notable promotional offer from Batelco in Bahrain was an increase in many of the speeds offered, at no additional cost to the user. At present, the promotion is only available until the end of February 2021, whereby speeds will return to their pre-promotional levels (at least this is the indication at the moment). As the speed boosts are only promotional in nature, they cannot be included in the results, however, if they were taken into account, this would present a significant reduction in the basket costs for Bahrain.





FIXED BROADBAND TIME SERIES ANALYSIS AND RANKING TABLES 2016–2020

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, 2016-2020
Results in USD / PPP per Month, VAT included, Residential packages

	2016	2017	2018	2019	2020
Algeria	37.84	37.84	37.84	37.84	37.84
Bahrain	26.32	53.37	52.64	55.27	55.27
Comoros	107.36	84.84	84.84	84.84	84.84
Djibouti	104.82	82.53	82.79	82.79	90.78
Egypt	12.65	12.65	12.65	27.83	30.35
Iraq					
Jordan	73.21	66.83	66.83	68.10	68.10
Kuwait			15.00	15.00	13.68
Lebanon	38.75	37.36	38.10	38.10	38.10
Libya	47.12	47.12	47.12	36.06	36.06
Mauritania	27.51	85.63	100.92	100.92	100.92
Morocco	27.19	26.53	26.53	27.62	27.25
Oman	83.97	74.25	74.25	74.25	74.25
Palestine	103.10	42.71	42.71	42.71	32.40
Qatar	97.73	118.67	112.74	104.56	97.60
Saudi Arabia	83.93	49.76	52.25	57.22	129.56
Somalia					
Sudan				93.21	93.21
Syria	5.38	9.16	9.16	12.29	19.83
Tunisia	29.21	29.82	32.38	24.95	24.95
UAE	71.12	71.72	34.53	34.53	34.53
Yemen	22.42	22.42	15.21	15.21	15.21

Arab average	55.53	52.96	49.39	51.66	55.24
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	8	7	8	9	10
Bahrain	4	11	13	12	12
Comoros	18	16	17	17	15
Djibouti	17	15	16	16	16
Egypt	2	2	2	6	6
Iraq	-	-	-	-	-
Jordan	12	12	14	14	13
Kuwait	-	-	3	2	1
Lebanon	9	6	9	10	11
Libya	10	9	11	8	9
Mauritania	6	17	18	19	19
Morocco	5	4	5	5	5
Oman	14	14	15	15	14
Palestine	16	8	10	11	7
Qatar	15	18	19	20	18
Saudi Arabia	13	10	12	13	20
Somalia	-	-	-	-	-
Sudan	-	-	-	18	17
Syria	1	1	1	1	3
Tunisia	7	5	6	4	4
UAE	11	13	7	7	8
Yemen	3	3	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	37.84	37.84	37.84	37.84	37.84
Bahrain	26.32	53.37	52.64	55.27	55.27
Comoros	107.36	84.84	84.84	84.84	84.84
Djibouti	104.82	82.53	82.79	82.79	90.78
Egypt	12.65	24.03	24.03	27.83	30.35
Iraq					
Jordan	103.22	66.83	66.83	68.10	68.10
Kuwait			15.00	15.00	13.68
Lebanon	38.75	37.36	38.10	38.10	38.10
Libya	47.12	47.12	47.12	36.06	36.06
Mauritania	27.51	85.63	100.92	100.92	100.92
Morocco	27.19	26.53	26.53	27.62	27.25
Oman	98.55	74.25	74.25	74.25	74.25
Palestine	103.10	42.71	42.71	42.71	32.40
Qatar	97.73	118.67	112.74	104.56	97.60
Saudi Arabia	83.93	49.76	52.25	57.22	129.56
Somalia					
Sudan				93.21	93.21
Syria	5.38	12.94	12.94	15.31	19.83
Tunisia	29.21	29.82	32.38	24.95	24.95
UAE	71.12	71.72	34.53	34.53	34.53
Yemen	22.42	65.66	65.66	65.66	65.66

Arab average	58.01	56.20	52.85	54.34	57.76
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	8	6	7	8	9
Bahrain	4	10	12	11	11
Comoros	18	16	17	17	15
Djibouti	17	15	16	16	16
Egypt	2	2	3	5	5
Iraq	-	-	-	-	-
Jordan	16	12	14	14	13
Kuwait	-	-	2	1	1
Lebanon	9	5	8	9	10
Libya	10	8	10	7	8
Mauritania	6	17	18	19	19
Morocco	5	3	4	4	4
Oman	14	14	15	15	14
Palestine	15	7	9	10	6
Qatar	13	18	19	20	18
Saudi Arabia	12	9	11	12	20
Somalia	-	-	-	-	-
Sudan	-	-	-	18	17
Syria	1	1	1	2	2
Tunisia	7	4	5	3	3
UAE	11	13	6	6	7
Yemen	3	11	13	13	12

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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	37.84	37.84	37.84	37.84	37.84
Bahrain	52.64	53.37	52.64	55.27	55.27
Comoros	107.36	84.84	84.84	84.84	84.84
Djibouti	104.82	82.53	82.79	82.79	90.78
Egypt	12.65	24.03	24.03	27.83	30.35
Iraq					
Jordan	103.22	66.83	66.83	68.10	68.10
Kuwait			15.00	15.00	13.68
Lebanon	53.04	45.93	46.75	46.75	38.10
Libya	231.50	231.50	231.50	74.78	74.78
Mauritania	27.51	85.63	100.92	100.92	100.92
Morocco	27.19	26.53	26.53	27.62	27.25
Oman	98.55	98.55	98.55	98.55	98.55
Palestine	103.10	42.71	42.71	42.71	32.40
Qatar	97.73	118.67	112.74	104.56	97.60
Saudi Arabia	83.93	112.66	118.29	129.56	129.56
Somalia					
Sudan				121.96	121.96
Syria	5.38	12.94	12.94	15.31	19.83
Tunisia	29.21	29.82	32.38	24.95	24.95
UAE	71.12	71.72	34.53	34.53	34.53
Yemen	22.42	102.23			

Arab average	70.51	73.80	67.88	62.83	62.17
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	7	5	7	7	8
Bahrain	8	8	10	10	10
Comoros	17	12	13	14	13
Djibouti	16	11	12	13	14
Egypt	2	2	3	5	5
Iraq	-	-	-	-	-
Jordan	15	9	11	11	11
Kuwait	-	-	2	1	1
Lebanon	9	7	9	9	9
Libya	18	18	18	12	12
Mauritania	5	13	15	16	17
Morocco	4	3	4	4	4
Oman	13	14	14	15	16
Palestine	14	6	8	8	6
Qatar	12	17	16	17	15
Saudi Arabia	11	16	17	19	19
Somalia	-	-	-	-	-
Sudan	-	-	-	18	18
Syria	1	1	1	2	2
Tunisia	6	4	5	3	3
UAE	10	10	6	6	7
Yemen	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria		186.86	186.86	186.86	118.24
Bahrain	78.96	53.37	52.64	55.27	55.27
Comoros					
Djibouti					
Egypt	177.07	40.47	40.47	37.94	30.35
Iraq					
Jordan	117.93	83.62	83.62	84.89	68.10
Kuwait			58.23	58.23	52.50
Lebanon		45.93	46.75	46.75	46.75
Libya					
Mauritania	330.61	383.51	472.05	472.05	472.05
Morocco	53.26	52.60	52.60	53.69	53.33
Oman	171.46	137.44	137.44	137.44	137.44
Palestine	168.64	55.23	55.23	55.23	55.23
Qatar	97.73	118.67	130.94	135.72	147.99
Saudi Arabia	83.93	112.66	118.29	129.56	129.56
Somalia					
Sudan				576.31	576.31
Syria		129.38	129.38	140.82	596.90
Tunisia	58.42	47.47	50.27	35.30	35.30
UAE	137.30	137.90	141.08	141.08	166.31
Yemen					

Arab average	134.12	113.22	117.06	146.69	171.35
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	13	14	14	9
Bahrain	3	5	5	6	7
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	10	1	1	2	1
Iraq	-	-	-	-	-
Jordan	6	7	8	8	8
Kuwait	-	-	7	7	4
Lebanon	-	2	2	3	3
Libya	-	-	-	-	-
Mauritania	11	14	15	15	14
Morocco	1	4	4	4	5
Oman	9	11	12	11	11
Palestine	8	6	6	5	6
Qatar	5	9	11	10	12
Saudi Arabia	4	8	9	9	10
Somalia	-	-	-	-	-
Sudan	-	-	-	16	15
Syria	-	10	10	12	16
Tunisia	2	3	3	1	2
UAE	7	12	13	13	13
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria		186.86	186.86	186.86	118.24
Bahrain	78.96	53.37	52.64	55.27	55.27
Comoros					
Djibouti					
Egypt	177.07	40.47	40.47	37.94	30.35
Iraq					
Jordan	117.93	83.62	83.62	84.89	68.10
Kuwait			58.23	58.23	52.50
Lebanon		45.93	46.75	46.75	46.75
Libya					
Mauritania	330.61	383.51	472.05	472.05	472.05
Morocco	53.26	52.60	52.60	53.69	53.33
Oman	171.46	137.44	137.44	137.44	137.44
Palestine	168.64	55.23	55.23	55.23	55.23
Qatar	97.73	118.67	130.94	135.72	147.99
Saudi Arabia	83.93	112.66	118.29	129.56	129.56
Somalia					
Sudan				576.31	576.31
Syria		129.38	129.38	140.82	596.90
Tunisia	58.42	47.47	50.27	35.30	35.30
UAE	137.30	137.90	141.08	141.08	166.31
Yemen					

Arab average	134.12	113.22	117.06	146.69	171.35
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	13	14	14	9
Bahrain	3	5	5	6	7
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	10	1	1	2	1
Iraq	-	-	-	-	-
Jordan	6	7	8	8	8
Kuwait	-	-	7	7	4
Lebanon	-	2	2	3	3
Libya	-	-	-	-	-
Mauritania	11	14	15	15	14
Morocco	1	4	4	4	5
Oman	9	11	12	11	11
Palestine	8	6	6	5	6
Qatar	5	9	11	10	12
Saudi Arabia	4	8	9	9	10
Somalia	-	-	-	-	-
Sudan	-	-	-	16	15
Syria	-	10	10	12	16
Tunisia	2	3	3	1	2
UAE	7	12	13	13	13
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria		186.86	186.86	186.86	118.24
Bahrain	78.96	63.90	52.64	55.27	55.27
Comoros					
Djibouti					
Egypt	177.07	40.47	40.47	37.94	30.35
Iraq					
Jordan	117.93	83.62	83.62	84.89	68.10
Kuwait			58.23	58.23	52.50
Lebanon		67.37	68.38	68.38	46.75
Libya					
Mauritania	330.61	383.51	472.05	472.05	472.05
Morocco	53.26	52.60	52.60	53.69	53.33
Oman	171.46	137.44	137.44	137.44	137.44
Palestine	168.64	55.23	55.23	55.23	55.23
Qatar	97.73	118.67	130.94	135.72	147.99
Saudi Arabia	83.93	112.66	118.29	129.56	129.56
Somalia					
Sudan				576.31	576.31
Syria		129.38	129.38	140.82	596.90
Tunisia	58.42	47.47	50.27	35.30	35.30
UAE	137.30	137.90	141.08	141.08	166.31
Yemen					

Arab average	134.12	115.50	118.50	148.05	171.35
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	13	14	14	9
Bahrain	3	5	4	5	7
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	10	1	1	2	1
Iraq	-	-	-	-	-
Jordan	6	7	8	8	8
Kuwait	-	-	6	6	4
Lebanon	-	6	7	7	3
Libya	-	-	-	-	-
Mauritania	11	14	15	15	14
Morocco	1	3	3	3	5
Oman	9	11	12	11	11
Palestine	8	4	5	4	6
Qatar	5	9	11	10	12
Saudi Arabia	4	8	9	9	10
Somalia	-	-	-	-	-
Sudan	-	-	-	16	15
Syria	-	10	10	12	16
Tunisia	2	2	2	1	2
UAE	7	12	13	13	13
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria				348.88	241.10
Bahrain	184.23	158.64	106.01	165.81	119.25
Comoros					
Djibouti					
Egypt				40.47	30.35
Iraq					
Jordan	174.40	92.80	92.80	107.42	107.42
Kuwait			135.87	135.87	108.52
Lebanon			118.57	118.57	118.57
Libya					
Mauritania					
Morocco		131.08	131.08	132.88	132.89
Oman	268.66	171.46	171.46	171.46	147.16
Palestine	189.99	67.75	67.75	67.75	75.85
Qatar	138.65	159.59	171.86	135.72	147.99
Saudi Arabia	168.43	140.82	118.29	129.56	129.56
Somalia					
Sudan					
Syria					937.14
Tunisia		116.18	116.31	85.76	87.00
UAE	225.54	226.14	150.80	150.80	166.31
Yemen					

Arab average	192.84	140.50	125.53	137.77	182.08
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	13	13
Bahrain	4	6	3	11	7
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	1	1
Iraq	-	-	-	-	-
Jordan	3	2	2	4	4
Kuwait	-	-	8	9	5
Lebanon	-	-	6	5	6
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	4	7	7	9
Oman	7	8	10	12	10
Palestine	5	1	1	2	2
Qatar	1	7	11	8	11
Saudi Arabia	2	5	5	6	8
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	14
Tunisia	-	3	4	3	3
UAE	6	9	9	10	12
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria				348.88	241.10
Bahrain	184.23	158.64	106.01	165.81	119.25
Comoros					
Djibouti					
Egypt				50.59	30.35
Iraq					
Jordan	174.40	92.80	92.80	107.42	107.42
Kuwait			135.87	135.87	108.52
Lebanon			118.57	118.57	118.57
Libya					
Mauritania					
Morocco		131.08	131.08	132.88	132.89
Oman	268.66	171.46	171.46	171.46	147.16
Palestine	189.99	67.75	67.75	67.75	75.85
Qatar	138.65	159.59	171.86	135.72	147.99
Saudi Arabia	168.43	140.82	118.29	129.56	129.56
Somalia					
Sudan					
Syria					937.14
Tunisia		116.18	116.31	85.76	87.00
UAE	225.54	226.14	150.80	150.80	166.31
Yemen					

Arab average	192.84	140.50	125.53	138.54	182.08
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	13	13
Bahrain	4	6	3	11	7
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	1	1
Iraq	-	-	-	-	-
Jordan	3	2	2	4	4
Kuwait	-	-	8	9	5
Lebanon	-	-	6	5	6
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	4	7	7	9
Oman	7	8	10	12	10
Palestine	5	1	1	2	2
Qatar	1	7	11	8	11
Saudi Arabia	2	5	5	6	8
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	14
Tunisia	-	3	4	3	3
UAE	6	9	9	10	12
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria				348.88	241.10
Bahrain	184.23	158.64	132.33	165.81	119.25
Comoros					
Djibouti					
Egypt				75.89	45.53
Iraq					
Jordan	174.40	92.80	92.80	107.42	107.42
Kuwait			135.87	135.87	108.52
Lebanon			118.57	118.57	118.57
Libya					
Mauritania					
Morocco		131.08	131.08	132.88	132.89
Oman	268.66	171.46	171.46	171.46	147.16
Palestine	189.99	67.75	67.75	67.75	75.85
Qatar	138.65	159.59	171.86	135.72	147.99
Saudi Arabia	168.43	140.82	118.29	129.56	129.56
Somalia					
Sudan					
Syria					937.14
Tunisia		116.18	116.31	85.76	87.00
UAE	225.54	226.14	150.80	150.80	166.31
Yemen					

Arab average	192.84	140.50	127.92	140.49	183.16
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	13	13
Bahrain	4	6	7	11	7
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	2	1
Iraq	-	-	-	-	-
Jordan	3	2	2	4	4
Kuwait	-	-	8	9	5
Lebanon	-	-	5	5	6
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	4	6	7	9
Oman	7	8	10	12	10
Palestine	5	1	1	1	2
Qatar	1	7	11	8	11
Saudi Arabia	2	5	4	6	8
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	14
Tunisia	-	3	3	3	3
UAE	6	9	9	10	12
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria				585.40	241.10
Bahrain	394.78	395.52	368.47	414.52	229.79
Comoros					
Djibouti					
Egypt				75.89	80.95
Iraq					
Jordan		131.19	131.19	130.27	107.42
Kuwait					165.87
Lebanon					
Libya					
Mauritania					
Morocco		131.08	131.08	132.88	132.89
Oman		390.17	390.17	390.17	171.46
Palestine		114.14	114.14	114.14	94.26
Qatar	268.36	220.97	233.24	176.64	176.64
Saudi Arabia	252.92	225.32	236.59	199.63	161.95
Somalia					
Sudan					
Syria					1,882.26
Tunisia		256.16	256.28	146.61	147.86
UAE	446.14	446.74	465.36	182.77	180.21
Yemen					

Arab average	340.55	256.81	258.50	231.72	290.20
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	11	12
Bahrain	3	8	7	10	11
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	1	1
Iraq	-	-	-	-	-
Jordan	-	3	3	3	3
Kuwait	-	-	-	-	7
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	2	2	4	4
Oman	-	7	8	9	8
Palestine	-	1	1	2	2
Qatar	2	4	4	6	9
Saudi Arabia	1	5	5	8	6
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	13
Tunisia	-	6	6	5	5
UAE	4	9	9	7	10
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria				585.40	241.10
Bahrain	394.78	395.52	368.47	414.52	229.79
Comoros					
Djibouti					
Egypt				101.18	80.95
Iraq					
Jordan		131.19	131.19	130.27	107.42
Kuwait					165.87
Lebanon					
Libya					
Mauritania					
Morocco		131.08	131.08	132.88	132.89
Oman		390.17	390.17	390.17	171.46
Palestine		114.14	114.14	114.14	94.26
Qatar	268.36	220.97	233.24	176.64	176.64
Saudi Arabia	252.92	225.32	236.59	199.63	161.95
Somalia					
Sudan					
Syria					1,882.26
Tunisia		256.16	256.28	146.61	147.86
UAE	446.14	446.74	465.36	182.77	180.21
Yemen					

Arab average	340.55	256.81	258.50	234.02	290.20
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	11	12
Bahrain	3	8	7	10	11
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	1	1
Iraq	-	-	-	-	-
Jordan	-	3	3	3	3
Kuwait	-	-	-	-	7
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	2	2	4	4
Oman	-	7	8	9	8
Palestine	-	1	1	2	2
Qatar	2	4	4	6	9
Saudi Arabia	1	5	5	8	6
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	13
Tunisia	-	6	6	5	5
UAE	4	9	9	7	10
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, 2016-2020
Results in USD / PPP per Month, VAT included, Residential packages

	2016	2017	2018	2019	2020
Algeria				585.40	241.10
Bahrain	394.78	395.52	368.47	414.52	229.79
Comoros					
Djibouti					
Egypt				177.07	145.45
Iraq					
Jordan		131.19	131.19	130.27	107.42
Kuwait					165.87
Lebanon					
Libya					
Mauritania					
Morocco		131.08	131.08	132.88	132.89
Oman		390.17	390.17	390.17	171.46
Palestine		114.14	114.14	114.14	94.26
Qatar	268.36	220.97	233.24	176.64	176.64
Saudi Arabia	252.92	225.32	236.59	199.63	161.95
Somalia					
Sudan					
Syria					1,882.26
Tunisia		256.16	256.28	146.61	147.86
UAE	446.14	446.74	465.36	182.77	180.21
Yemen					

Arab average	340.55	256.81	258.50	240.92	295.17
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	11	12
Bahrain	3	8	7	10	11
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	6	4
Iraq	-	-	-	-	-
Jordan	-	3	3	2	2
Kuwait	-	-	-	-	7
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	2	2	3	3
Oman	-	7	8	9	8
Palestine	-	1	1	1	1
Qatar	2	4	4	5	9
Saudi Arabia	1	5	5	8	6
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	13
Tunisia	-	6	6	4	5
UAE	4	9	9	7	10
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	202.16	202.16	198.76	198.76	198.76
Bahrain	78.96	78.96	78.96	78.96	78.96
Comoros		626.25	569.32	569.32	569.32
Djibouti	434.23	402.37	365.79	365.79	402.10
Egypt	11.50	11.09	11.09	21.08	21.08
Iraq					
Jordan	88.49	84.59	84.59	80.60	80.60
Kuwait					
Lebanon	35.22	33.96	34.32	34.32	34.32
Libya	47.12	47.12	47.12	158.57	158.57
Mauritania	42.58	73.82	87.00	87.00	87.00
Morocco	22.66	22.11	22.11	23.01	22.71
Oman	73.28	73.28	220.06	220.06	220.06
Palestine		79.35	79.35	79.35	79.35
Qatar	245.52	289.43	289.43	289.43	289.43
Saudi Arabia		121.48	115.70	105.64	105.64
Somalia					
Sudan				69.05	69.05
Syria					
Tunisia	96.16	96.16	96.16	85.20	85.20
UAE	136.28	159.40	347.81	347.81	367.91
Yemen	63.04	63.04	63.04	63.04	63.04

Arab average	112.66	144.98	159.45	159.83	162.95
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	12	14	12	13	13
Bahrain	8	8	6	6	6
Comoros	-	17	17	18	18
Djibouti	14	16	16	17	17
Egypt	1	1	1	1	1
Iraq	-	-	-	-	-
Jordan	9	10	8	8	8
Kuwait	-	-	-	-	-
Lebanon	3	3	3	3	3
Libya	5	4	4	12	12
Mauritania	4	7	9	10	10
Morocco	2	2	2	2	2
Oman	7	6	13	14	14
Palestine	-	9	7	7	7
Qatar	13	15	14	15	15
Saudi Arabia	-	12	11	11	11
Somalia	-	-	-	-	-
Sudan	-	-	-	5	5
Syria	-	-	-	-	-
Tunisia	10	11	10	9	9
UAE	11	13	15	16	16
Yemen	6	5	5	4	4

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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	202.16	202.16	198.76	198.76	198.76
Bahrain	78.96	78.96	78.96	78.96	78.96
Comoros		626.25	569.32	569.32	569.32
Djibouti	434.23	402.37	365.79	365.79	402.10
Egypt	11.50	21.08	21.08	21.08	21.08
Iraq					
Jordan	88.49	84.59	84.59	80.60	80.60
Kuwait					
Lebanon	35.22	33.96	34.32	34.32	34.32
Libya	47.12	47.12	47.12	158.57	158.57
Mauritania	42.58	73.82	87.00	87.00	87.00
Morocco	22.66	22.11	22.11	23.01	22.71
Oman	115.57	115.57	220.06	220.06	220.06
Palestine		79.35	79.35	79.35	79.35
Qatar	245.52	289.43	289.43	289.43	289.43
Saudi Arabia		121.48	115.70	105.64	105.64
Somalia					
Sudan				69.05	69.05
Syria					
Tunisia	96.16	96.16	96.16	85.20	85.20
UAE	136.28	180.40	347.81	347.81	367.91
Yemen	63.04	63.04	63.04	63.04	63.04

Arab average	115.68	149.29	160.04	159.83	162.95
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	Below Arab average
	Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	12	14	12	13	13
Bahrain	7	7	6	6	6
Comoros	-	17	17	18	18
Djibouti	14	16	16	17	17
Egypt	1	1	1	1	1
Iraq	-	-	-	-	-
Jordan	8	9	8	8	8
Kuwait	-	-	-	-	-
Lebanon	3	3	3	3	3
Libya	5	4	4	12	12
Mauritania	4	6	9	10	10
Morocco	2	2	2	2	2
Oman	10	11	13	14	14
Palestine	-	8	7	7	7
Qatar	13	15	14	15	15
Saudi Arabia	-	12	11	11	11
Somalia	-	-	-	-	-
Sudan	-	-	-	5	5
Syria	-	-	-	-	-
Tunisia	9	10	10	9	9
UAE	11	13	15	16	16
Yemen	6	5	5	4	4

	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	202.16	202.16	198.76	198.76	198.76
Bahrain	78.96	78.96	78.96	78.96	78.96
Comoros		626.25	569.32	569.32	569.32
Djibouti	434.23	402.37	365.79	365.79	402.10
Egypt	11.50	21.08	21.08	21.08	21.08
Iraq					
Jordan	88.49	84.59	84.59	80.60	80.60
Kuwait					
Lebanon	48.22	41.76	42.12	42.12	34.32
Libya	231.50	231.50	231.50	158.57	158.57
Mauritania	42.58	73.82	87.00	87.00	87.00
Morocco	22.66	22.11	22.11	23.01	22.71
Oman	220.06	220.06	220.06	220.06	220.06
Palestine		79.35	79.35	79.35	79.35
Qatar	245.52	289.43	289.43	289.43	289.43
Saudi Arabia		121.48	115.70	105.64	105.64
Somalia					
Sudan				90.34	90.34
Syria					
Tunisia	96.16	96.16	96.16	85.20	85.20
UAE	136.28	180.40	347.81	347.81	367.91
Yemen	63.04	97.36	97.36	97.36	97.36

Arab average	137.24	168.75	173.36	163.36	166.04
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	10	12	11	13	13
Bahrain	6	5	4	4	4
Comoros	-	17	17	18	18
Djibouti	14	16	16	17	17
Egypt	1	1	1	1	1
Iraq	-	-	-	-	-
Jordan	7	7	6	6	6
Kuwait	-	-	-	-	-
Lebanon	4	3	3	3	3
Libya	12	14	13	12	12
Mauritania	3	4	7	8	8
Morocco	2	2	2	2	2
Oman	11	13	12	14	14
Palestine	-	6	5	5	5
Qatar	13	15	14	15	15
Saudi Arabia	-	10	10	11	11
Somalia	-	-	-	-	-
Sudan	-	-	-	9	9
Syria	-	-	-	-	-
Tunisia	8	8	8	7	7
UAE	9	11	15	16	16
Yemen	5	9	9	10	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	1,314.04	1,314.04	1,291.95	1,291.95	1,291.95
Bahrain	661.63	579.02	579.02	579.02	579.02
Comoros		3,402.75	3,093.41	3,093.41	3,093.41
Djibouti	927.23	579.90	527.19	527.19	579.64
Egypt	160.97	35.50	35.50	35.50	35.50
Iraq					
Jordan	189.98	134.97	130.77	100.75	100.75
Kuwait					
Lebanon		41.76	42.12	42.12	42.12
Libya					
Mauritania	422.88	330.61	406.94	406.94	406.94
Morocco	44.39	43.84	43.84	44.74	44.44
Oman	881.05	881.05	341.57	341.57	341.57
Palestine		158.71	158.71	158.71	158.71
Qatar	245.52	289.43	289.43	289.43	289.43
Saudi Arabia		149.65	142.52	130.13	130.13
Somalia					
Sudan				426.90	426.90
Syria					
Tunisia	144.84	144.84	144.84	109.54	109.54
UAE	317.17	317.17	347.81	347.81	367.91
Yemen					

Arab average	482.70	560.22	505.04	495.36	499.87
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	11	14	14	15	15
Bahrain	8	11	13	14	13
Comoros	-	15	15	16	16
Djibouti	10	12	12	13	14
Egypt	3	1	1	1	1
Iraq	-	-	-	-	-
Jordan	4	4	4	4	4
Kuwait	-	-	-	-	-
Lebanon	-	2	2	2	2
Libya	-	-	-	-	-
Mauritania	7	10	11	11	11
Morocco	1	3	3	3	3
Oman	9	13	9	9	9
Palestine	-	7	7	7	7
Qatar	5	8	8	8	8
Saudi Arabia	-	6	5	6	6
Somalia	-	-	-	-	-
Sudan	-	-	-	12	12
Syria	-	-	-	-	-
Tunisia	2	5	6	5	5
UAE	6	9	10	10	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	1,314.04	1,314.04	1,291.95	1,291.95	1,291.95
Bahrain	661.63	579.02	579.02	579.02	579.02
Comoros		3,402.75	3,093.41	3,093.41	3,093.41
Djibouti	927.23	579.90	527.19	527.19	579.64
Egypt	160.97	35.50	35.50	35.50	35.50
Iraq					
Jordan	189.98	134.97	130.77	100.75	100.75
Kuwait					
Lebanon		41.76	42.12	42.12	42.12
Libya					
Mauritania	422.88	330.61	406.94	406.94	406.94
Morocco	44.39	43.84	43.84	44.74	44.44
Oman	881.05	881.05	341.57	341.57	341.57
Palestine		158.71	158.71	158.71	158.71
Qatar	245.52	289.43	289.43	289.43	289.43
Saudi Arabia		149.65	142.52	130.13	130.13
Somalia					
Sudan				426.90	426.90
Syria					
Tunisia	144.84	144.84	144.84	109.54	109.54
UAE	326.00	326.00	347.81	347.81	367.91
Yemen					

Arab average	483.50	560.80	505.04	495.36	499.87
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	11	14	14	15	15
Bahrain	8	11	13	14	13
Comoros	-	15	15	16	16
Djibouti	10	12	12	13	14
Egypt	3	1	1	1	1
Iraq	-	-	-	-	-
Jordan	4	4	4	4	4
Kuwait	-	-	-	-	-
Lebanon	-	2	2	2	2
Libya	-	-	-	-	-
Mauritania	7	10	11	11	11
Morocco	1	3	3	3	3
Oman	9	13	9	9	9
Palestine	-	7	7	7	7
Qatar	5	8	8	8	8
Saudi Arabia	-	6	5	6	6
Somalia	-	-	-	-	-
Sudan	-	-	-	12	12
Syria	-	-	-	-	-
Tunisia	2	5	6	5	5
UAE	6	9	10	10	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria	1,314.04	1,314.04	1,291.95	1,291.95	1,291.95
Bahrain	661.63	579.02	579.02	579.02	579.02
Comoros		3,402.75	3,093.41	3,093.41	3,093.41
Djibouti	927.23	579.90	527.19	527.19	579.64
Egypt	160.97	35.50	35.50	35.50	35.50
Iraq					
Jordan	189.98	134.97	130.77	100.75	100.75
Kuwait					
Lebanon		61.24	61.60	61.60	42.12
Libya					
Mauritania	422.88	330.61	406.94	406.94	406.94
Morocco	44.39	43.84	43.84	44.74	44.44
Oman	881.05	881.05	341.57	341.57	341.57
Palestine		158.71	158.71	158.71	158.71
Qatar	245.52	289.43	289.43	289.43	289.43
Saudi Arabia		149.65	142.52	130.13	130.13
Somalia					
Sudan				426.90	426.90
Syria					
Tunisia	144.84	144.84	144.84	109.54	109.54
UAE	326.00	326.00	347.81	347.81	367.91
Yemen					

Arab average	483.50	562.10	506.34	496.57	499.87
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	11	14	14	15	15
Bahrain	8	11	13	14	13
Comoros	-	15	15	16	16
Djibouti	10	12	12	13	14
Egypt	3	1	1	1	1
Iraq	-	-	-	-	-
Jordan	4	4	4	4	4
Kuwait	-	-	-	-	-
Lebanon	-	3	3	3	2
Libya	-	-	-	-	-
Mauritania	7	10	11	11	11
Morocco	1	2	2	2	3
Oman	9	13	9	9	9
Palestine	-	7	7	7	7
Qatar	5	8	8	8	8
Saudi Arabia	-	6	5	6	6
Somalia	-	-	-	-	-
Sudan	-	-	-	12	12
Syria	-	-	-	-	-
Tunisia	2	5	6	5	5
UAE	6	9	10	10	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria					
Bahrain		1,684.41	1,684.41	1,684.41	1,684.41
Comoros					
Djibouti	2,262.45	1,645.14	1,624.81	1,624.81	1,774.10
Egypt					
Iraq					
Jordan	269.27	164.78	164.78	133.99	133.99
Kuwait					
Lebanon			106.82	106.82	106.82
Libya					
Mauritania					
Morocco		109.24	109.24	110.74	110.75
Oman	2,237.06	2,237.06	1,362.22	1,362.22	1,362.22
Palestine		742.75	742.75	742.75	742.75
Qatar	491.03	739.54	739.54	453.10	289.43
Saudi Arabia		205.98	196.17	179.11	179.11
Somalia					
Sudan					
Syria					
Tunisia					
UAE	634.84	634.84	367.91	367.91	367.91
Yemen					

Arab average	1178.93	907.08	709.87	676.59	675.15
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	-	-
Bahrain	-	8	10	10	9
Comoros	-	-	-	-	-
Djibouti	5	7	9	9	10
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	1	2	3	3	3
Kuwait	-	-	-	-	-
Lebanon	-	-	1	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	1	2	2	2
Oman	4	9	8	8	8
Palestine	-	6	7	7	7
Qatar	2	5	6	6	5
Saudi Arabia	-	3	4	4	4
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	3	4	5	5	6
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria					
Bahrain		1,684.41	1,684.41	1,684.41	1,684.41
Comoros					
Djibouti	2,262.45	1,645.14	1,624.81	1,624.81	1,774.10
Egypt					
Iraq					
Jordan	269.27	164.78	164.78	133.99	133.99
Kuwait					
Lebanon			106.82	106.82	106.82
Libya					
Mauritania					
Morocco		109.24	109.24	110.74	110.75
Oman	2,237.06	2,237.06	1,362.22	1,362.22	1,362.22
Palestine		742.75	742.75	742.75	742.75
Qatar	491.03	739.54	739.54	453.10	289.43
Saudi Arabia		205.98	196.17	179.11	179.11
Somalia					
Sudan					
Syria					
Tunisia					
UAE	634.84	634.84	367.91	367.91	367.91
Yemen					

Arab average	1178.93	907.08	709.87	676.59	675.15
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	-	-
Bahrain	-	8	10	10	9
Comoros	-	-	-	-	-
Djibouti	5	7	9	9	10
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	1	2	3	3	3
Kuwait	-	-	-	-	-
Lebanon	-	-	1	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	1	2	2	2
Oman	4	9	8	8	8
Palestine	-	6	7	7	7
Qatar	2	5	6	6	5
Saudi Arabia	-	3	4	4	4
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	3	4	5	5	6
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria					
Bahrain		1,684.41	1,684.41	1,684.41	1,684.41
Comoros					
Djibouti	2,262.45	1,645.14	1,624.81	1,624.81	1,774.10
Egypt					
Iraq					
Jordan	269.27	164.78	164.78	133.99	133.99
Kuwait					
Lebanon			106.82	106.82	106.82
Libya					
Mauritania					
Morocco		109.24	109.24	110.74	110.75
Oman	2,237.06	2,237.06	1,362.22	1,362.22	1,362.22
Palestine		742.75	742.75	742.75	742.75
Qatar	491.03	739.54	739.54	453.10	289.43
Saudi Arabia		205.98	196.17	179.11	179.11
Somalia					
Sudan					
Syria					
Tunisia					
UAE	634.84	634.84	367.91	367.91	367.91
Yemen					

Arab average	1178.93	907.08	709.87	676.59	675.15
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	-	-
Bahrain	-	8	10	10	9
Comoros	-	-	-	-	-
Djibouti	5	7	9	9	10
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	1	2	3	3	3
Kuwait	-	-	-	-	-
Lebanon	-	-	1	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	1	2	2	2
Oman	4	9	8	8	8
Palestine	-	6	7	7	7
Qatar	2	5	6	6	5
Saudi Arabia	-	3	4	4	4
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	3	4	5	5	6
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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria					
Bahrain					
Comoros					
Djibouti					
Egypt					
Iraq					
Jordan		231.94	164.78	133.99	133.99
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco		109.24	109.24	110.74	110.75
Oman	5,347.62	5,347.62	1,702.44	1,702.44	1,702.44
Palestine					
Qatar	982.07	739.54	739.54	739.54	453.10
Saudi Arabia		290.47	276.64	252.59	252.59
Somalia					
Sudan					
Syria					
Tunisia					
UAE	1,327.52	1,327.52	678.96	493.65	441.44
Yemen					

Arab average	2552.40	1341.05	611.93	572.16	515.72
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	-	-
Bahrain	-	-	-	-	-
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	2	2	2	2
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	1	1	1	1
Oman	3	6	6	6	6
Palestine	-	-	-	-	-
Qatar	1	4	5	5	5
Saudi Arabia	-	3	3	3	3
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	5	4	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria					
Bahrain					
Comoros					
Djibouti					
Egypt					
Iraq					
Jordan		231.94	164.78	133.99	133.99
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco		109.24	109.24	110.74	110.75
Oman	5,347.62	5,347.62	1,702.44	1,702.44	1,702.44
Palestine					
Qatar	982.07	739.54	739.54	739.54	453.10
Saudi Arabia		290.47	276.64	252.59	252.59
Somalia					
Sudan					
Syria					
Tunisia					
UAE	1,327.52	1,327.52	678.96	493.65	441.44
Yemen					

Arab average	2552.40	1341.05	611.93	572.16	515.72
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	-	-
Bahrain	-	-	-	-	-
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	2	2	2	2
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	1	1	1	1
Oman	3	6	6	6	6
Palestine	-	-	-	-	-
Qatar	1	4	5	5	5
Saudi Arabia	-	3	3	3	3
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	5	4	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, 2016-2020

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

	2016	2017	2018	2019	2020
Algeria					
Bahrain					
Comoros					
Djibouti					
Egypt					
Iraq					
Jordan		231.94	164.78	133.99	133.99
Kuwait					
Lebanon					
Libya					
Mauritania					
Morocco		109.24	109.24	110.74	110.75
Oman	5,347.62	5,347.62	1,702.44	1,702.44	1,702.44
Palestine					
Qatar	982.07	739.54	739.54	739.54	453.10
Saudi Arabia		290.47	276.64	252.59	252.59
Somalia					
Sudan					
Syria					
Tunisia					
UAE	1,327.52	1,327.52	678.96	493.65	441.44
Yemen					

Arab average	2552.40	1341.05	611.93	572.16	515.72
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	-	-	-	-	-
Bahrain	-	-	-	-	-
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	-	-	-	-	-
Iraq	-	-	-	-	-
Jordan	-	2	2	2	2
Kuwait	-	-	-	-	-
Lebanon	-	-	-	-	-
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	1	1	1	1
Oman	3	6	6	6	6
Palestine	-	-	-	-	-
Qatar	1	4	5	5	5
Saudi Arabia	-	3	3	3	3
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	2	5	4	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 2019-2020. The picture is one mainly of increases, with only a small decrease for the ≥ 10 Mb/s business basket. Due to lack of services ≥ 1 Gb/s, results in this category are very limited and have been excluded.

Change in overall average 2019-2020	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 across all offers, all countries stands at around 69 Mb/s in 2020, with over 40% of services greater than or equal to 20 Mb/s.
- There have been changes for most providers in the current update. Some of the changes include:
 - Bahrain: New residential fibre plans and a fixed line service charge to broadband subscriptions have been added.
 - Egypt: New DSL residential plans have been added.
 - Jordan: New residential and business fibre plans have been added.
 - Kuwait: New residential DSL plans have been added.
 - Palestine: Monthly rental was reduced for DSL plans.
 - Saudi Arabia: New residential and business plans have been added, including both DSL and fibre plans.





MOBILE BROADBAND BASKET RESULTS 2020



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

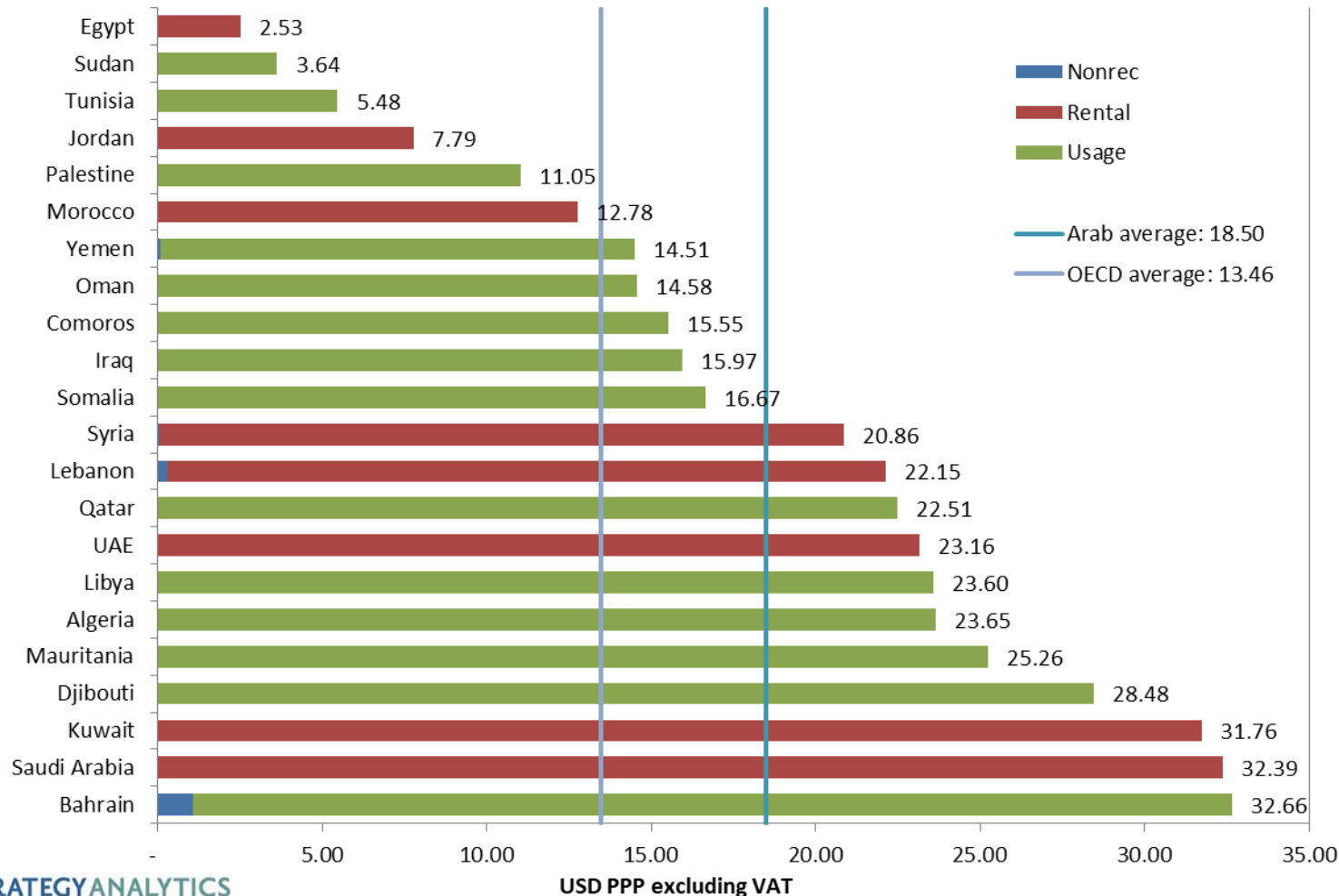
- In previous updates, proprietary baskets for mobile broadband have been used, however, for this and future reports, the analysis will be based on the OECD baskets.
- Data collected refers to dedicated mobile broadband packages (i.e. not mobile broadband bundled with or added to mobile voice packages)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



RESIDENTIAL MOBILE BROADBAND OECD 2017 0.5GB BASKET



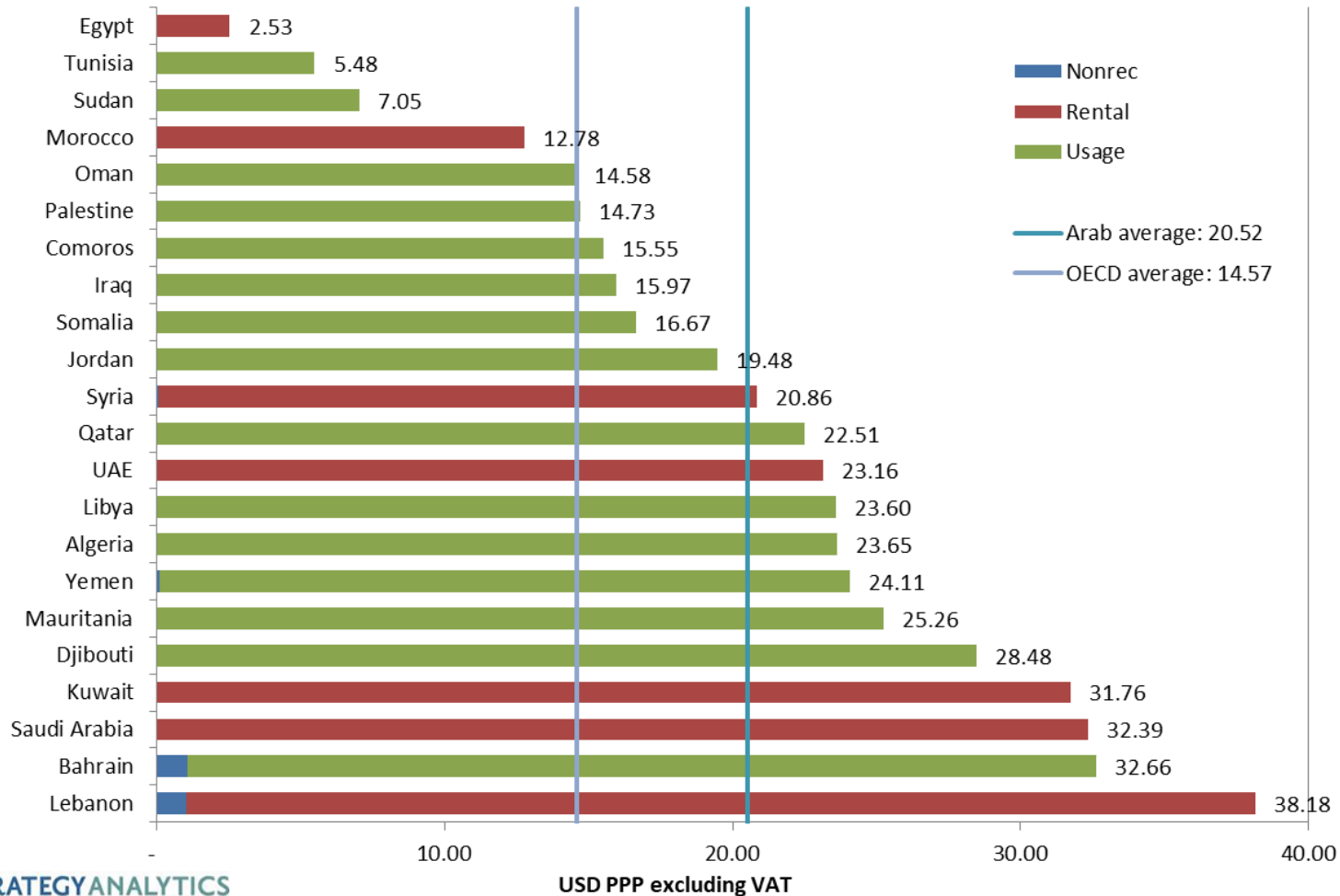
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 0.5 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 1GB BASKET



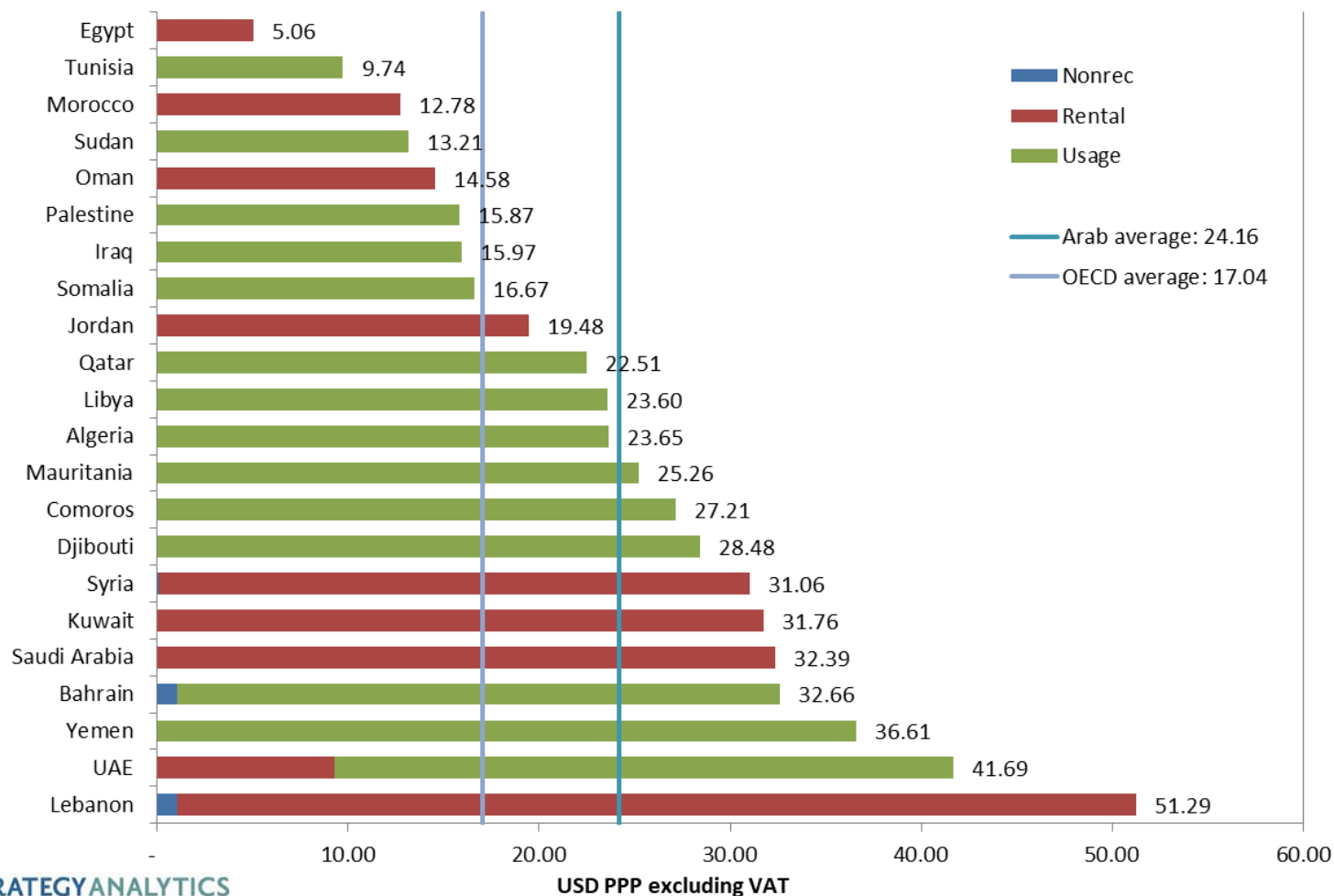
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 1 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 2GB BASKET



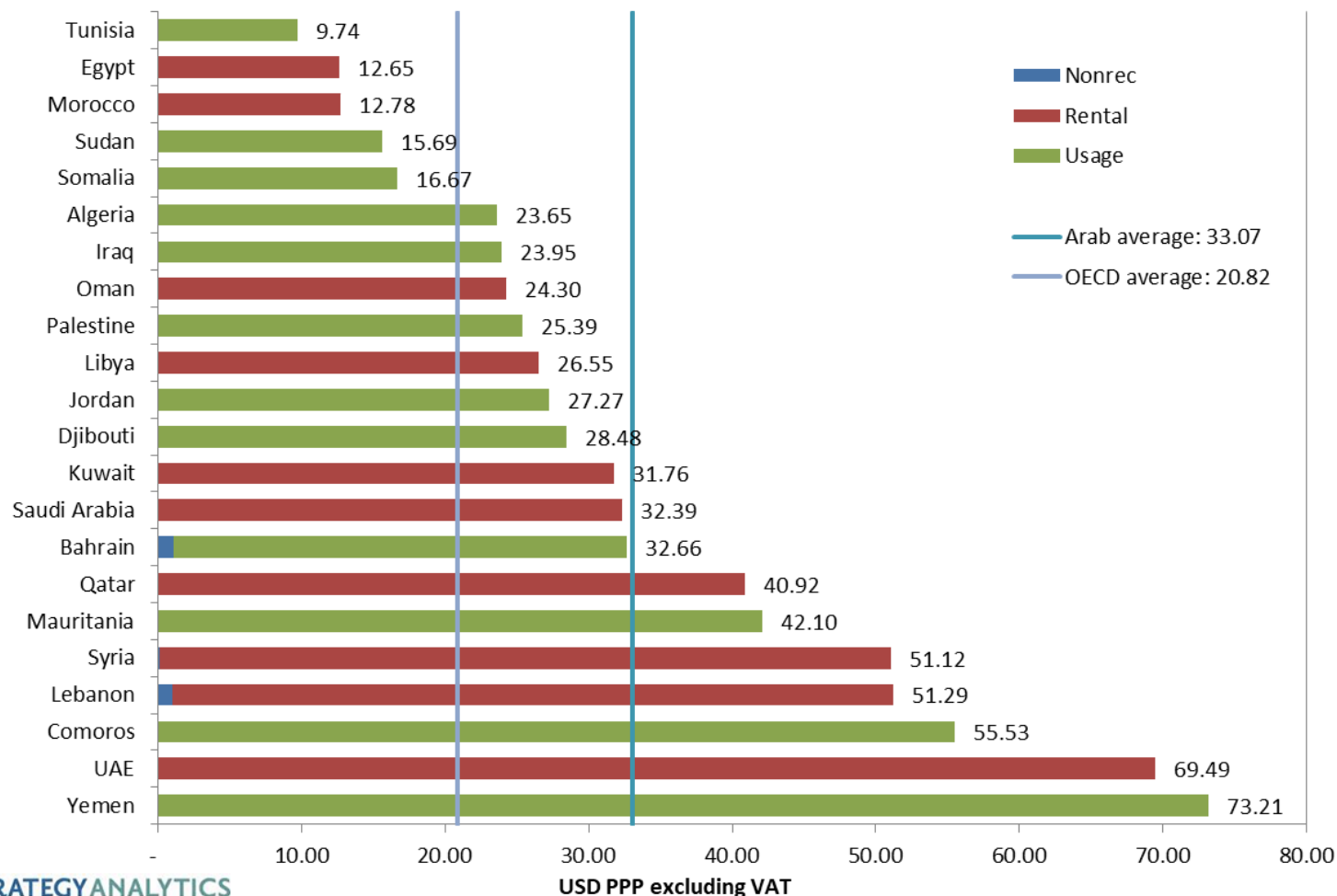
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 2 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 5GB BASKET



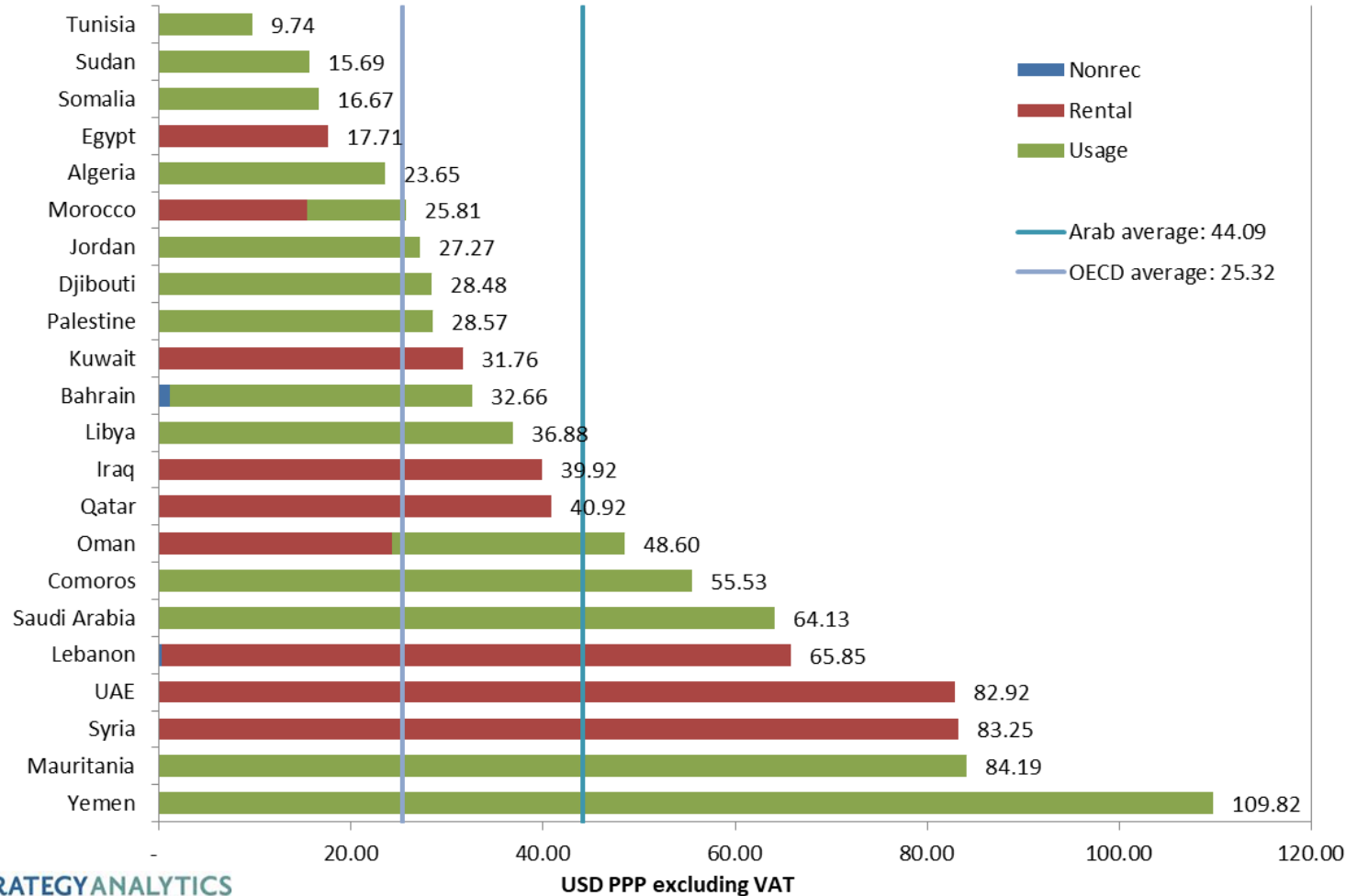
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 5 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 10GB BASKET



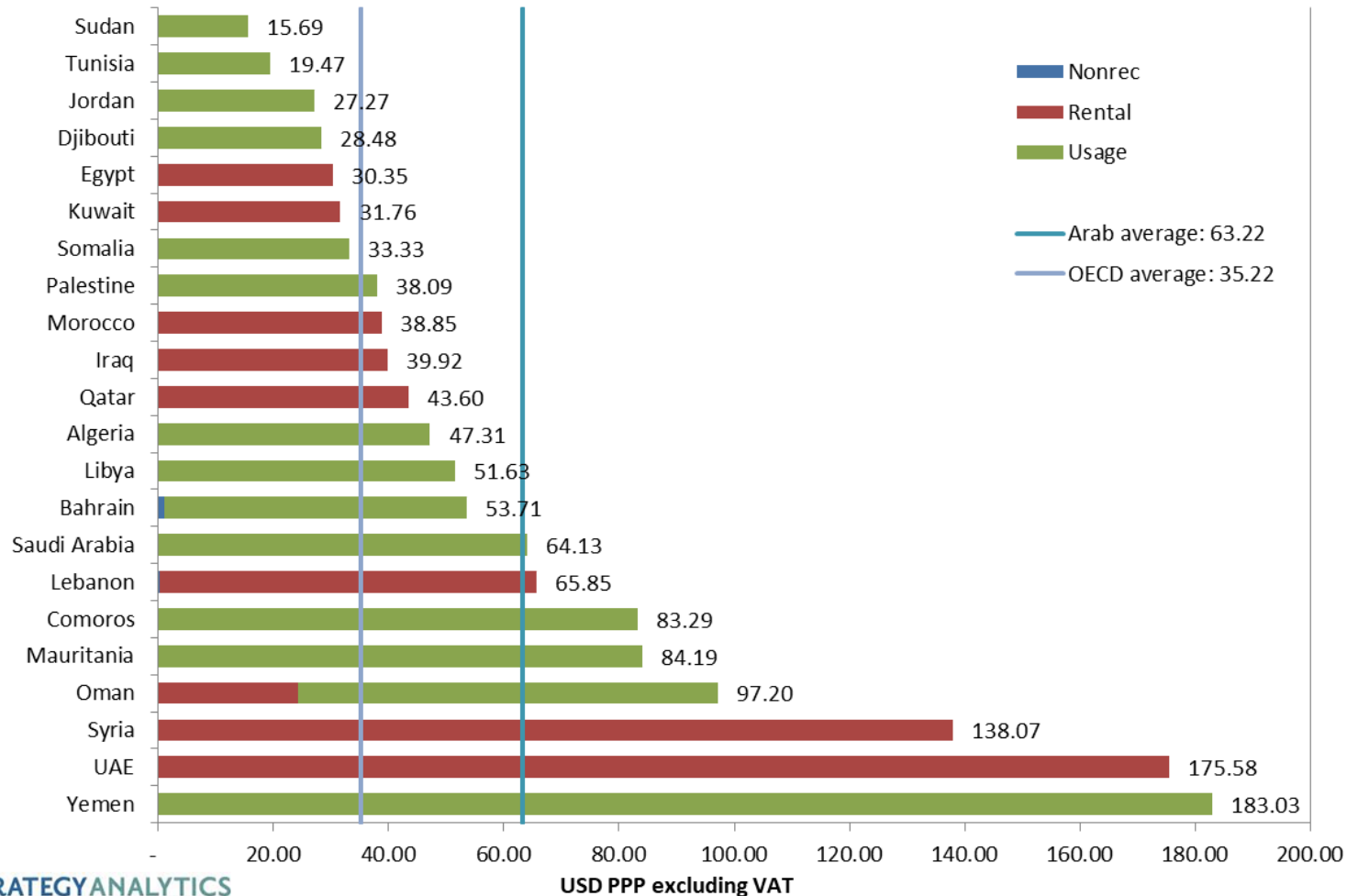
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 10 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 20GB BASKET



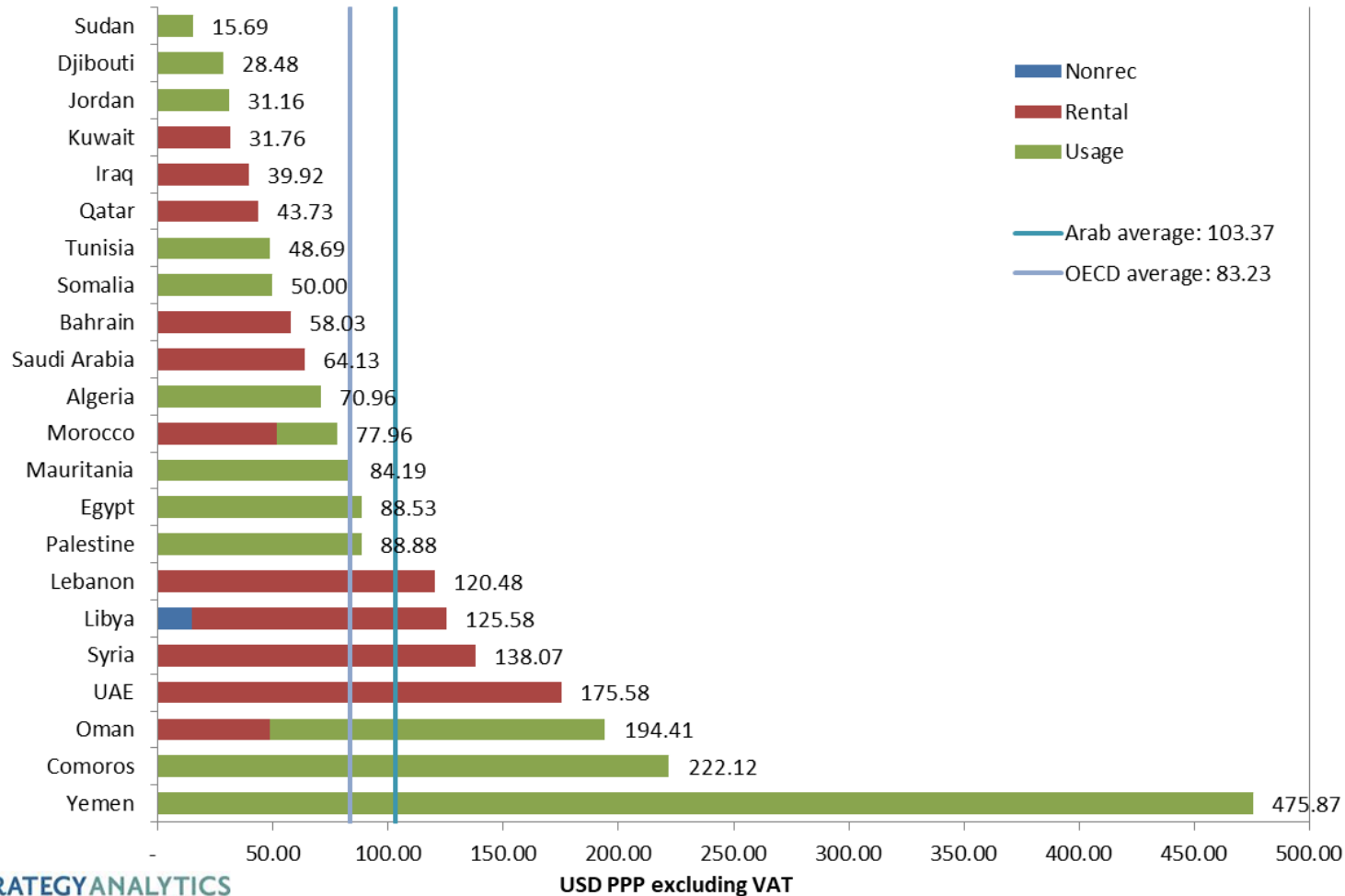
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 20 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 50GB BASKET



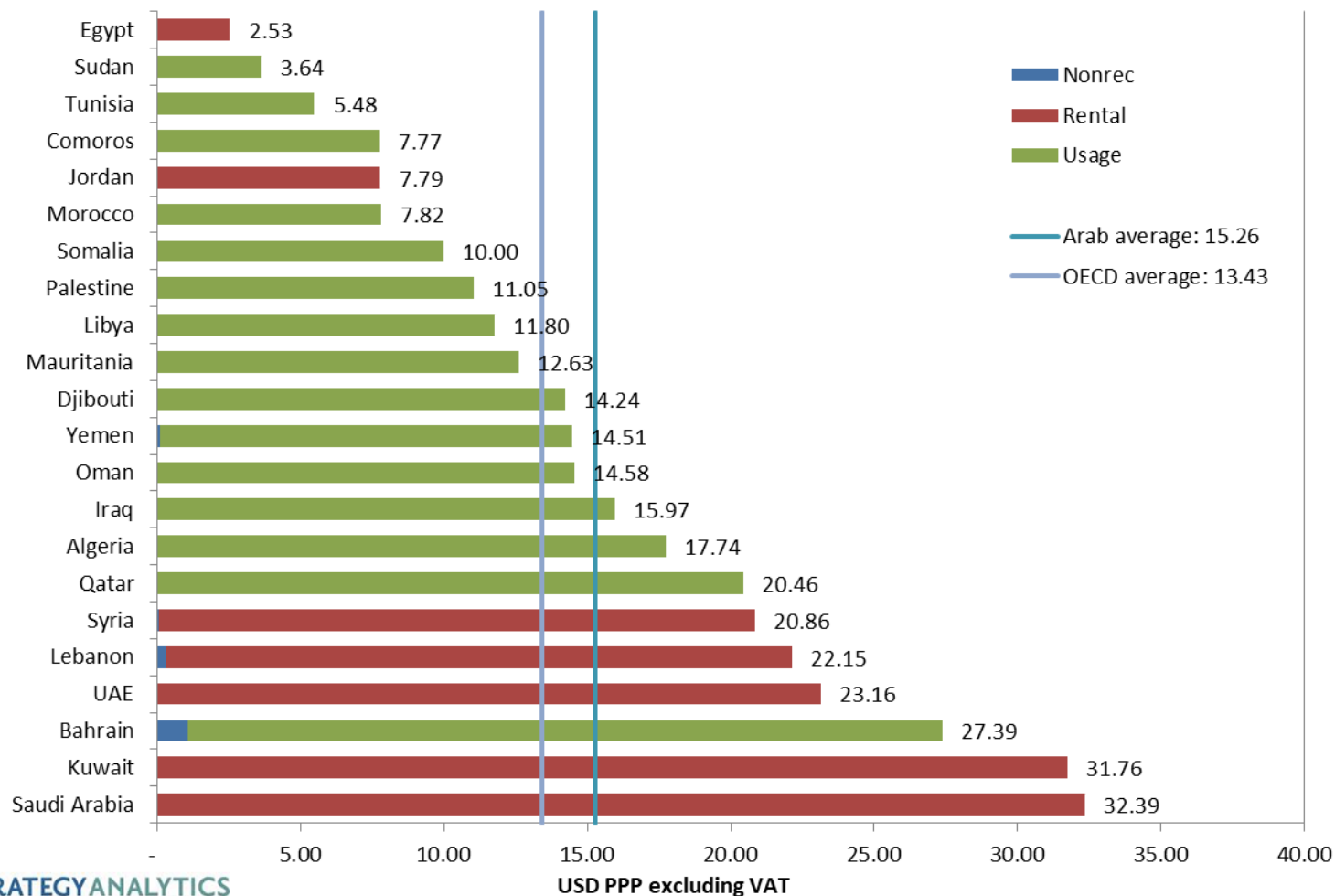
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 50 GB / 30 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 SHORT VALIDITY 0.5GB BASKET



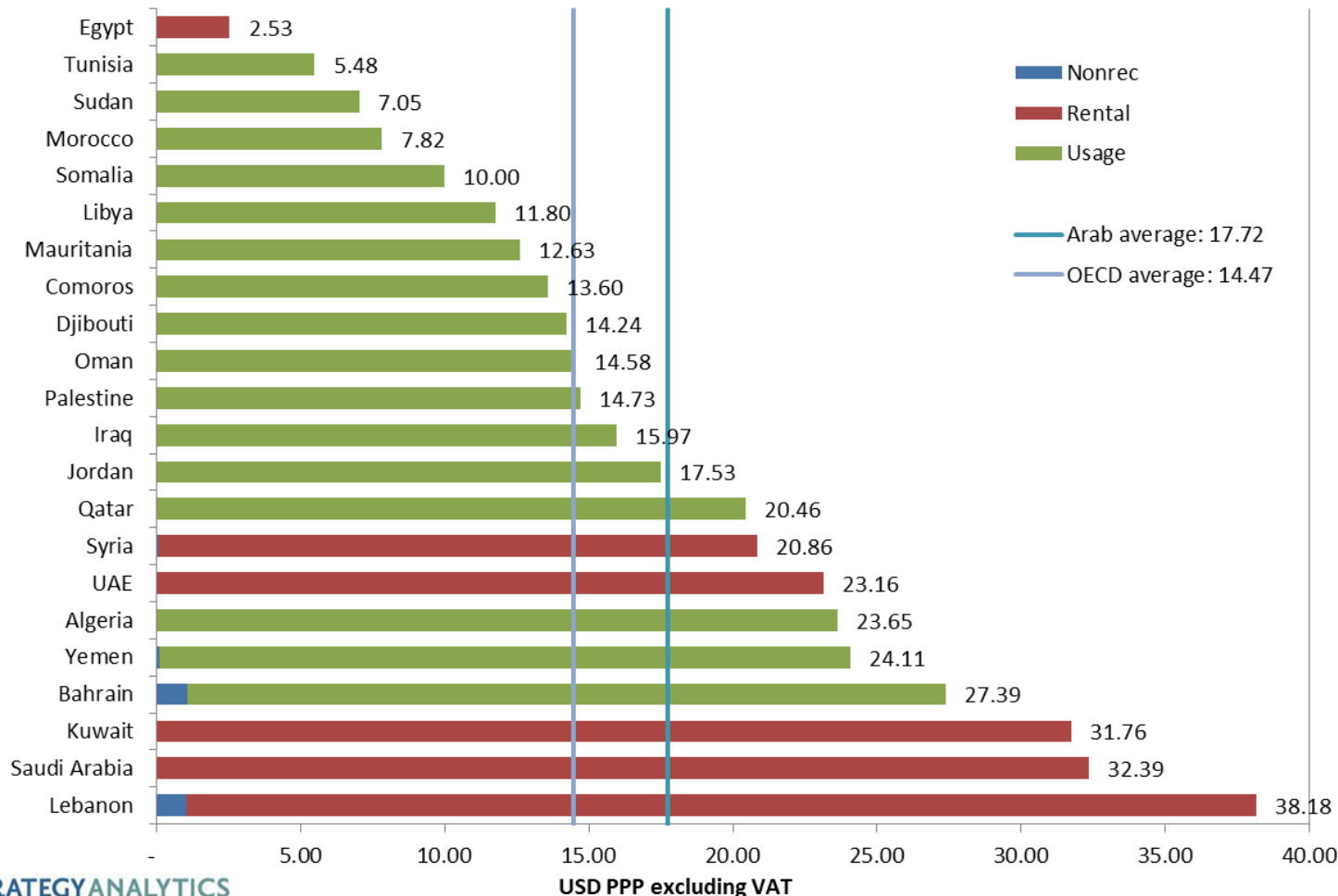
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 0.5 GB / 15 days per month, Residential



RESIDENTIAL MOBILE BROADBAND OECD 2017 SHORT VALIDITY 1GB BASKET



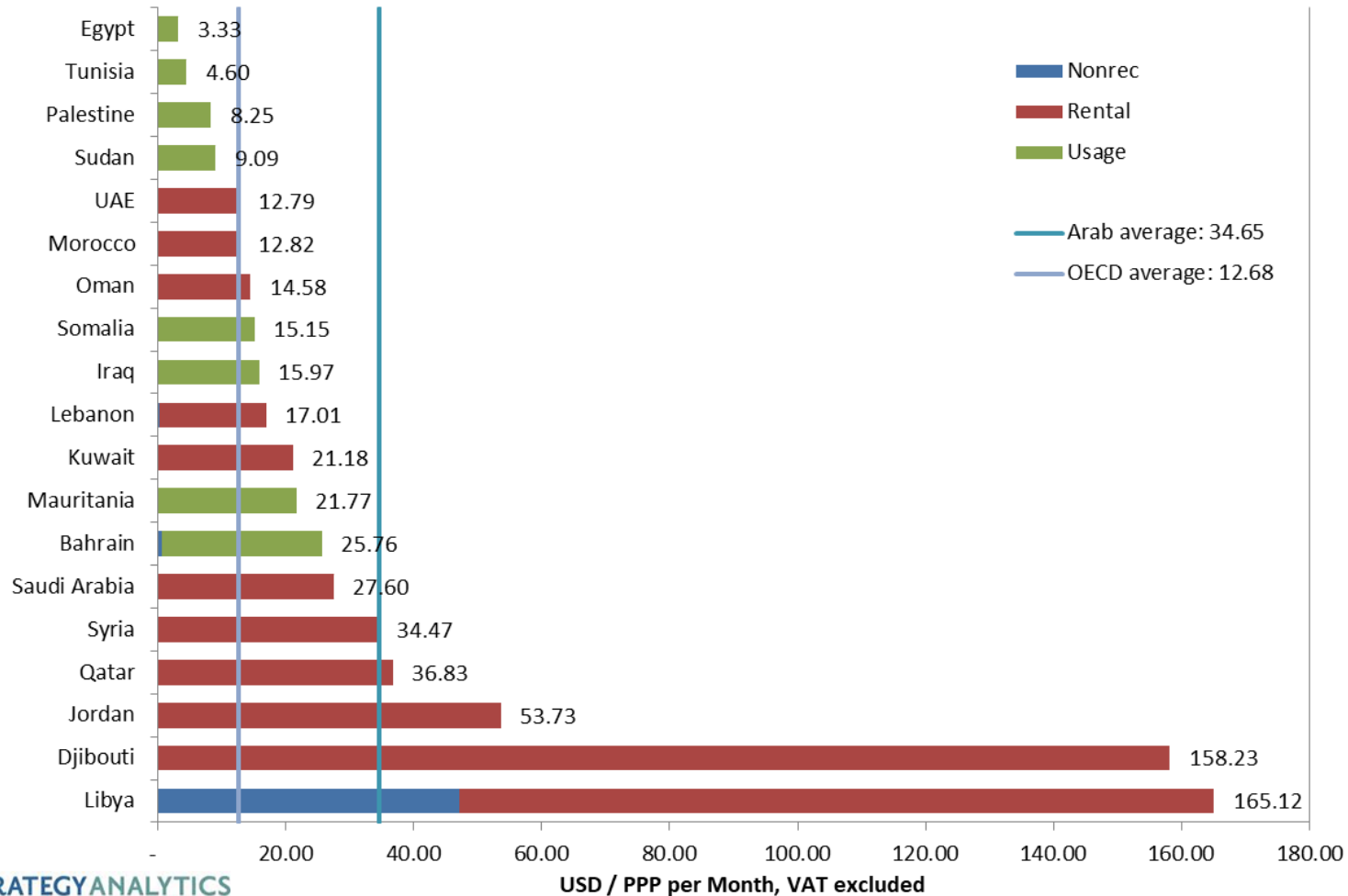
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 1 GB / 15 days per month, Residential



BUSINESS MOBILE BROADBAND OECD 2017 0.5GB BASKET



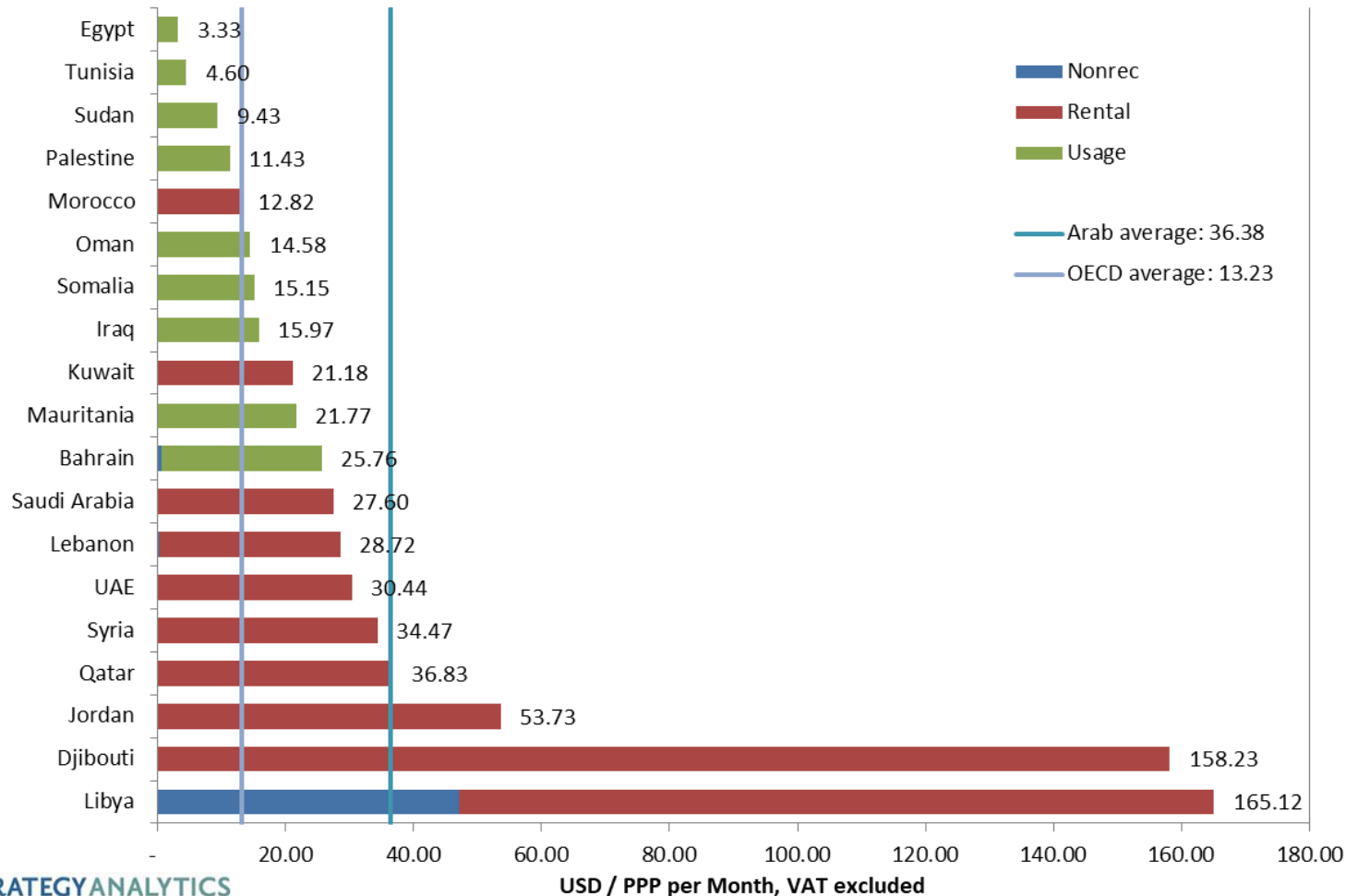
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 0.5 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 1GB BASKET



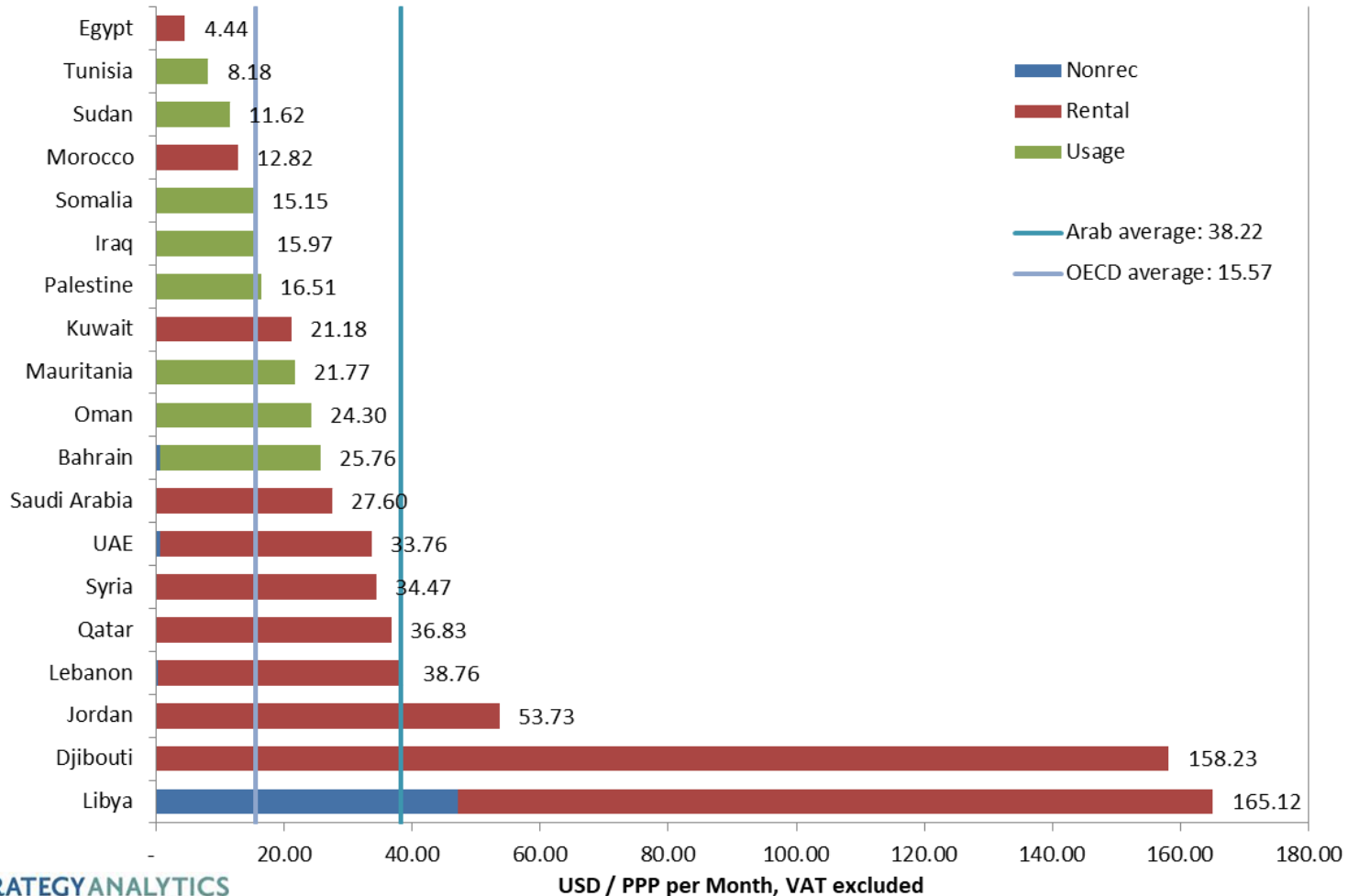
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 1 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 2GB BASKET



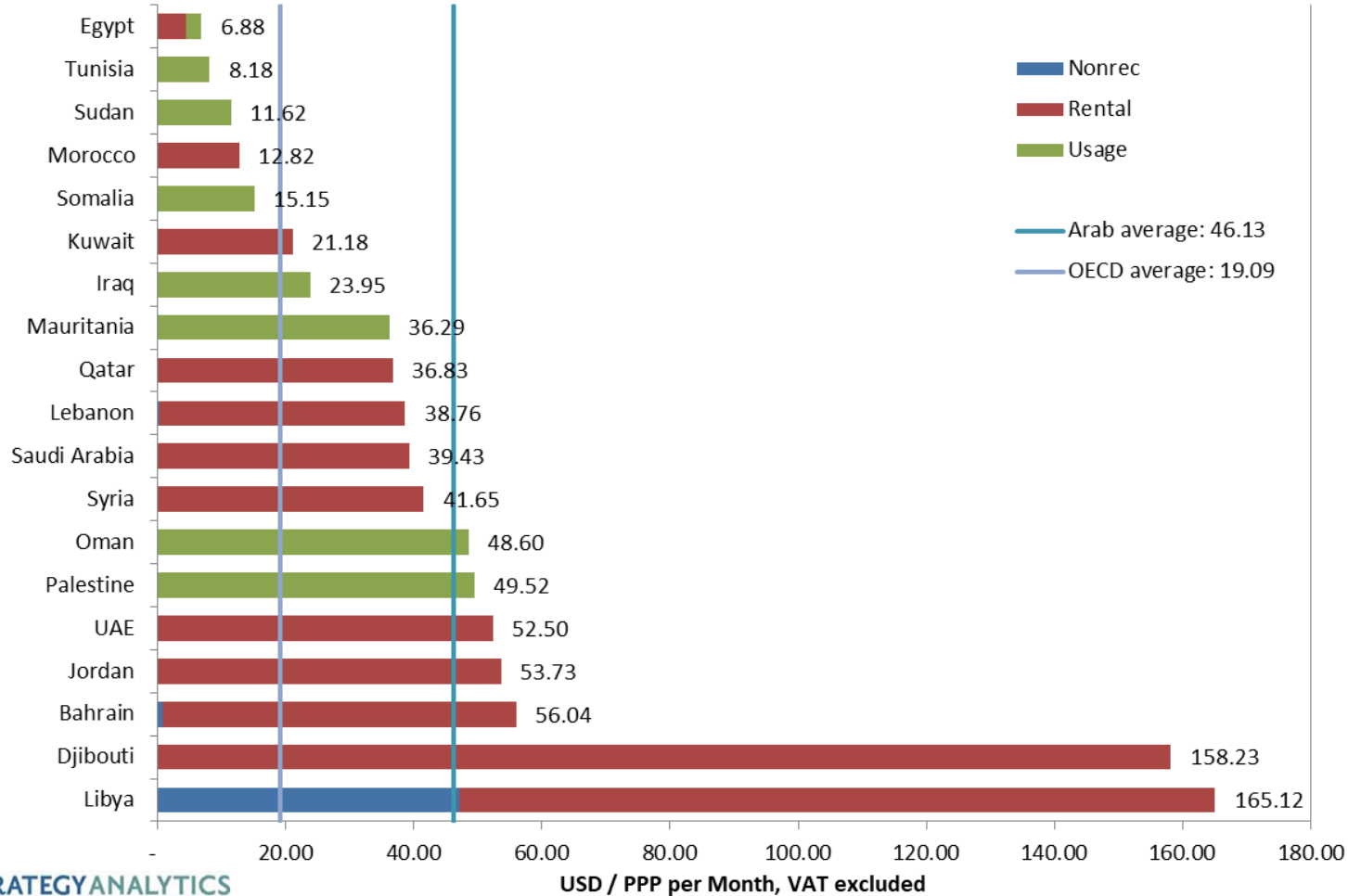
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 2 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 5GB BASKET



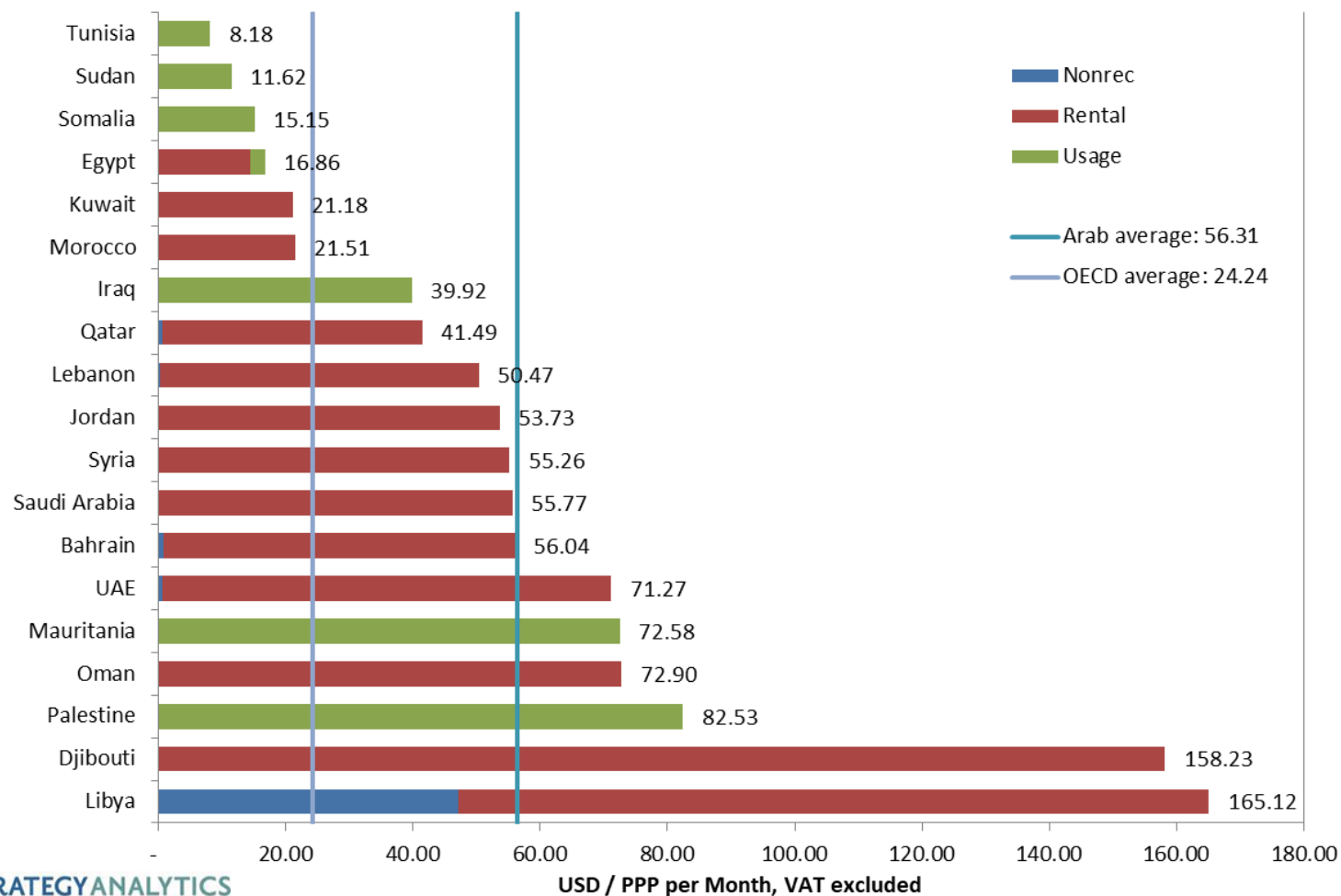
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 5 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 10GB BASKET



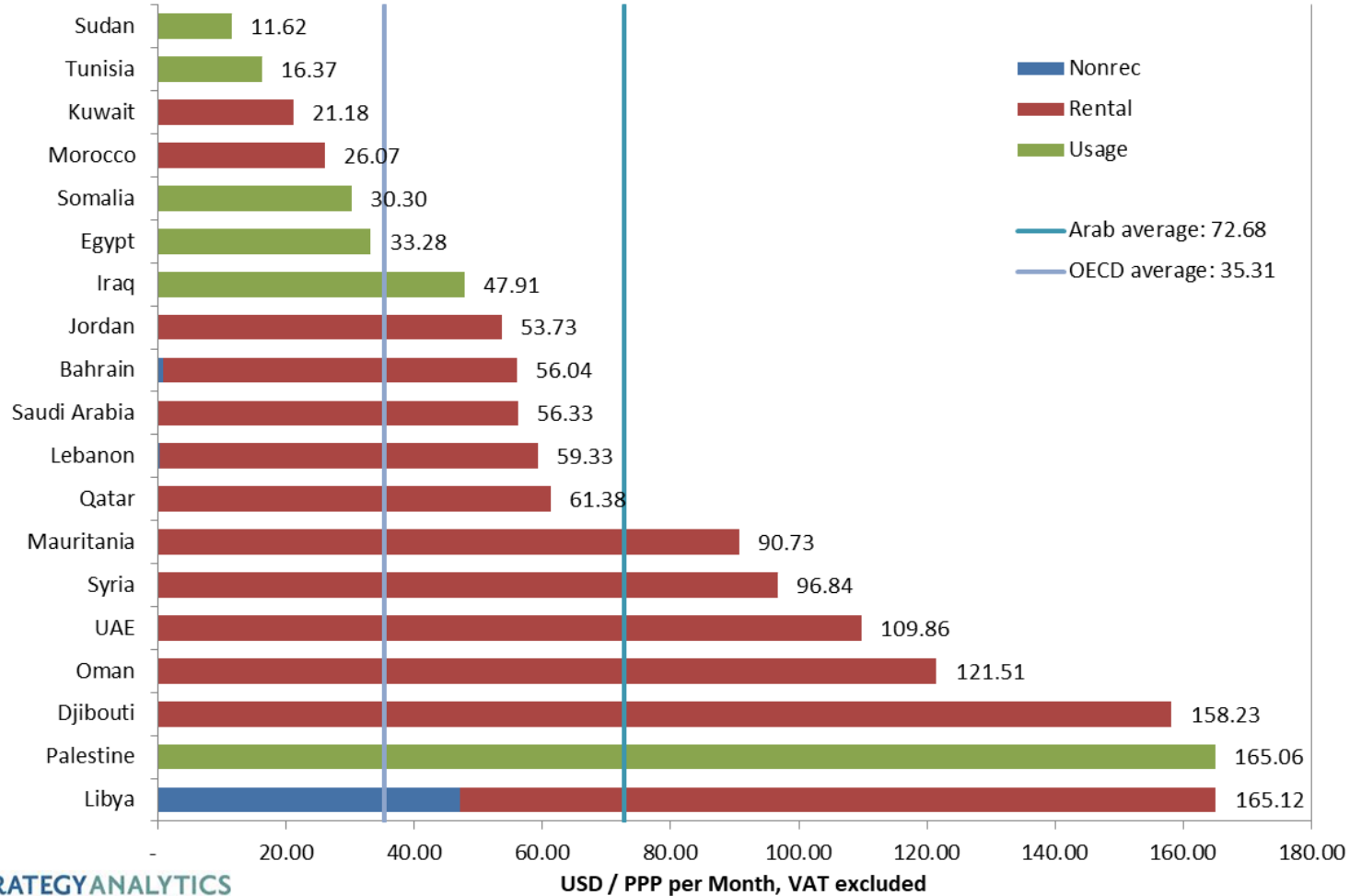
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 10 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 20GB BASKET



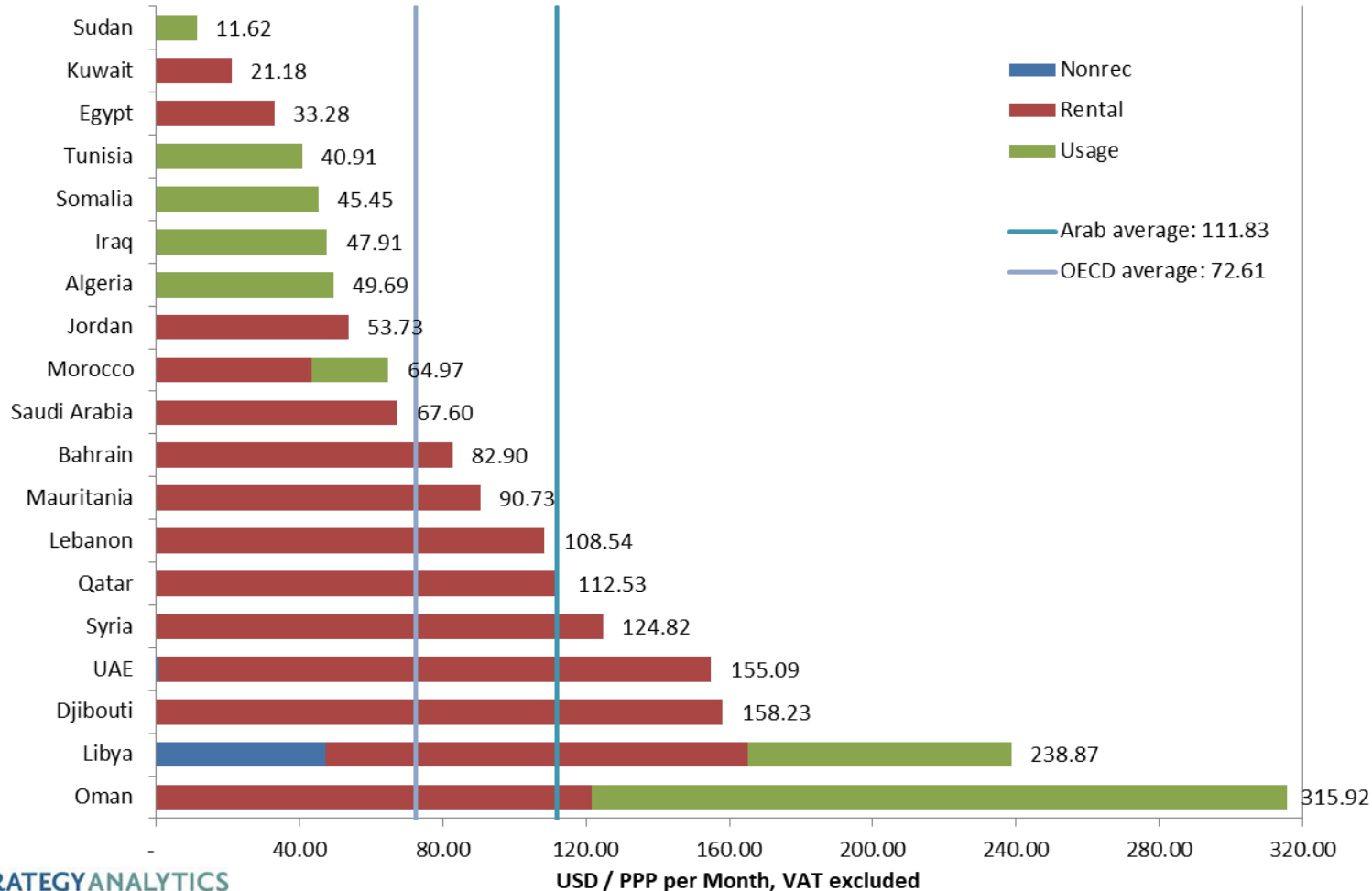
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 20 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 50GB BASKET



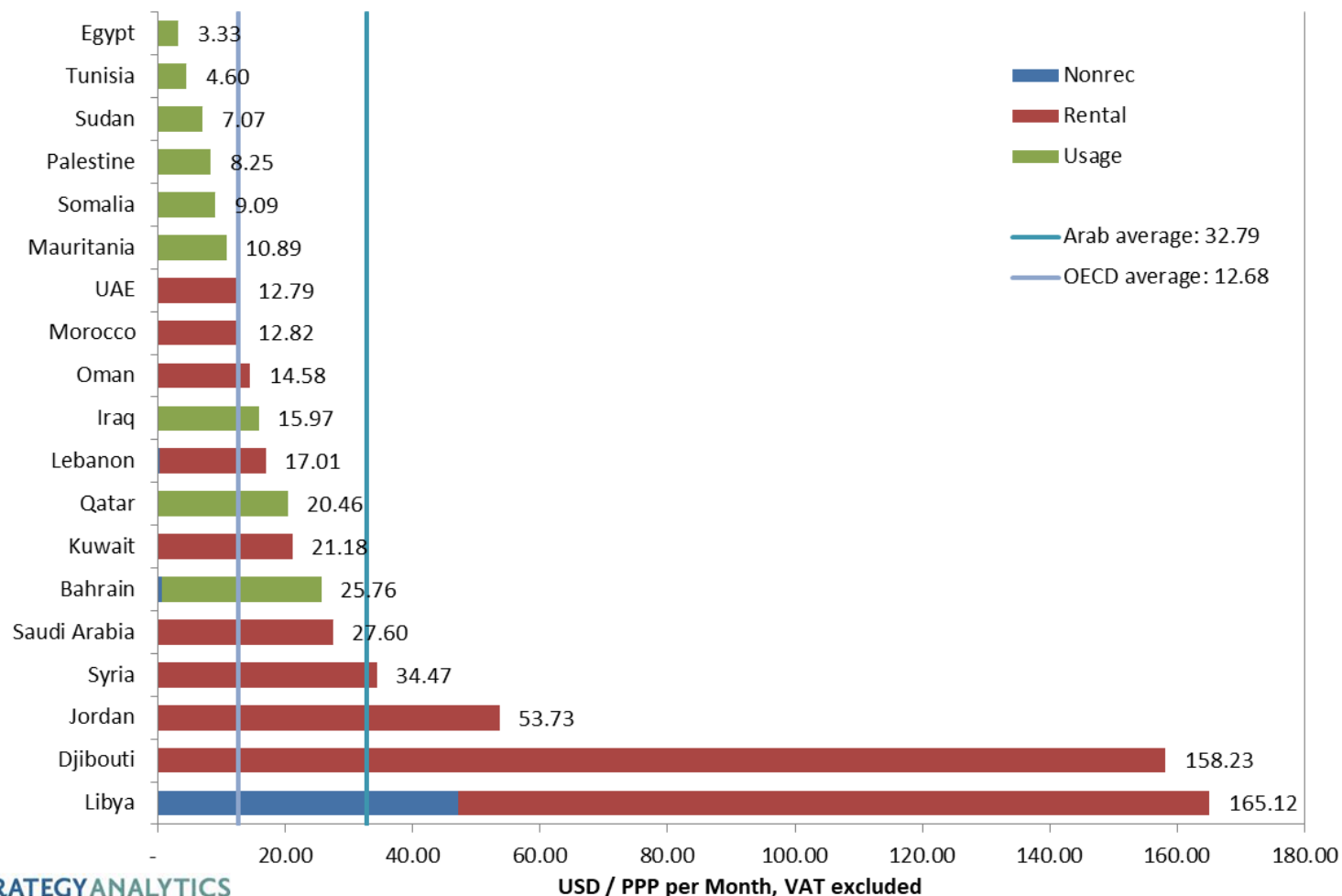
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 50 GB / 30 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 SHORT VALIDITY 0.5GB BASKET



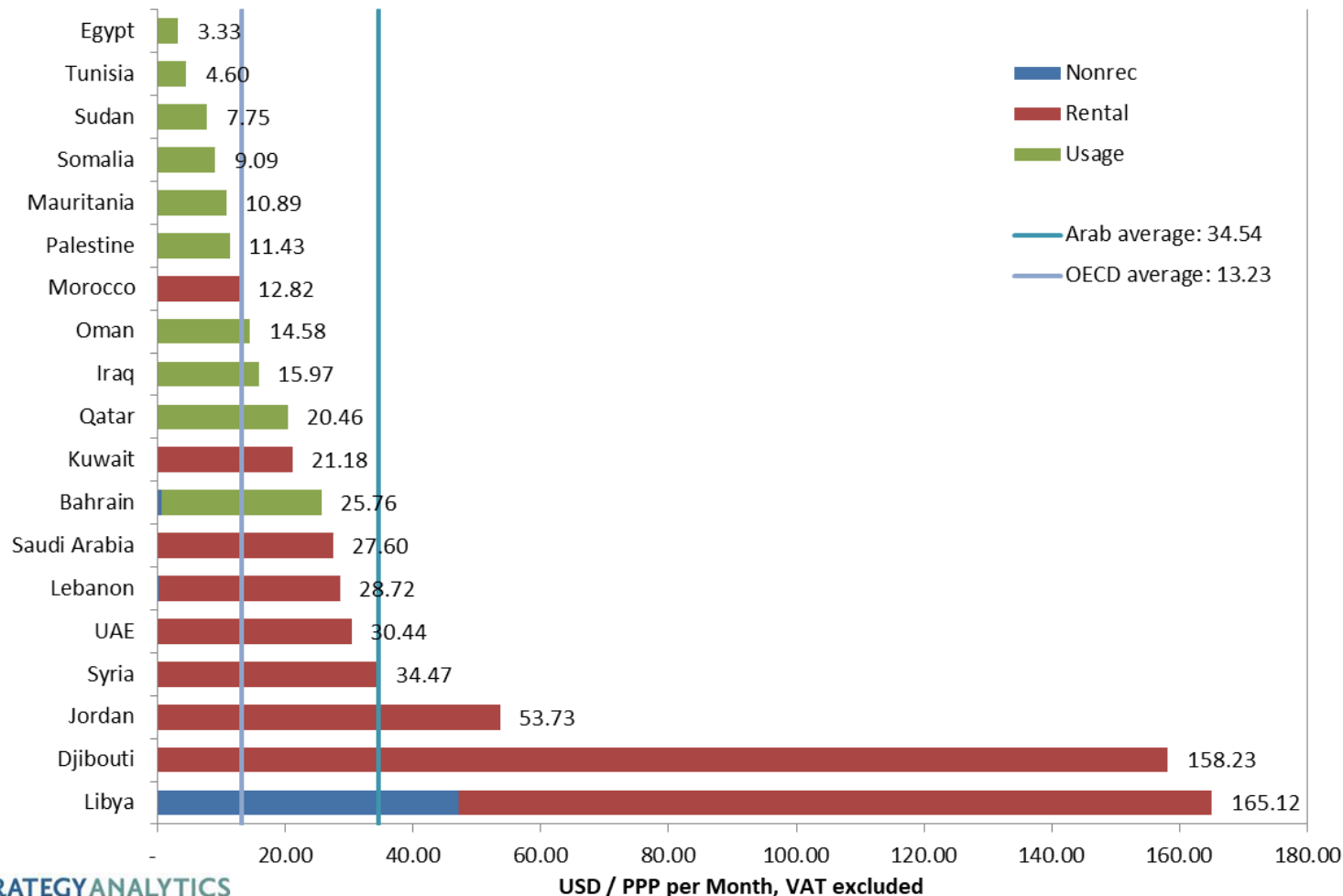
AREGENET Mobile Broadband Price Benchmarking 2020
OECD 2017: 0.5 GB / 15 days per month, Business



BUSINESS MOBILE BROADBAND OECD 2017 SHORT VALIDITY 1GB BASKET



AREGENET Mobile Broadband Price Benchmarking 2020
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	Bahrain	Saudi Arabia	Kuwait			
	1 GB	Egypt	Tunisia	Sudan	Lebanon	Bahrain	Saudi Arabia			
	2 GB	Egypt	Tunisia	Morocco	Lebanon	UAE	Yemen			
	5 GB	Tunisia	Egypt	Morocco	Yemen	UAE	Comoros			
	10 GB	Tunisia	Sudan	Somalia	Yemen	Mauritania	Syria			
	20 GB	Sudan	Tunisia	Jordan	Yemen	UAE	Syria			
	50 GB	Sudan	Djibouti	Jordan	Yemen	Comoros	Oman			
	0.5 GB short validity	Egypt	Sudan	Tunisia	Saudi Arabia	Kuwait	Bahrain			
Business	1 GB short validity	Egypt	Tunisia	Sudan	Lebanon	Saudi Arabia	Kuwait	0.5 GB	37%	173%
	0.5 GB	Egypt	Tunisia	Palestine	Libya	Djibouti	Jordan	1 GB	41%	175%
	1 GB	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan	2 GB	42%	145%
	2 GB	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan	5 GB	59%	142%
	5 GB	Egypt	Tunisia	Sudan	Libya	Djibouti	Bahrain	10 GB	74%	132%
	10 GB	Tunisia	Sudan	Somalia	Libya	Djibouti	Palestine	20 GB	80%	106%
	20 GB	Sudan	Tunisia	Kuwait	Libya	Palestine	Djibouti	50 GB	24%	54%
	50 GB	Sudan	Kuwait	Egypt	Oman	Libya	Djibouti	0.5 GB short validity	14%	159%
	0.5 GB short validity	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan	1 GB short validity	22%	161%
	1 GB short validity	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan			

- Generally, Egypt, Sudan, Somalia, Morocco and Tunisia are consistently the cheapest countries, for both residential and business services. Yemen, Libya, Djibouti, Jordan 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 14% more expensive, for the 0.5 GB short validity basket, to 80% for the 20 GB basket.
- For business services, the range is 54% (more expensive) for the 50GB basket, to 175% for the 1 GB basket.





MOBILE BROADBAND TIME SERIES ANALYSIS AND RANKING TABLES 2016–2020

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



Results for Mobile Broadband: 0.5GB/30 days per mth, Residential basket, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	17.74	11.83	11.83	11.83	23.65
Bahrain	15.79	32.17	32.17	32.20	32.66
Comoros	27.76	23.32	23.32	15.55	15.55
Djibouti	28.48	28.48	28.48	28.48	28.48
Egypt	3.16	3.79	3.79	2.53	2.53
Iraq	19.16	11.18	19.16	19.16	15.97
Jordan	19.48	7.79	7.79	7.79	7.79
Kuwait	21.18	26.47	26.47	37.06	31.76
Lebanon	21.95	19.96	22.15	22.15	22.15
Libya	41.18	41.18	41.18	23.60	23.60
Mauritania	58.94	25.26	25.26	25.26	25.26
Morocco	13.04	12.78	12.78	12.78	12.78
Oman	14.58	9.72	9.72	9.72	14.58
Palestine			28.72	11.05	11.05
Qatar	21.41	21.41	21.41	21.41	22.51
Saudi Arabia	11.61	11.27	11.83	11.27	32.39
Somalia	46.67	46.67	16.67	16.67	16.67
Sudan	2.22	2.74	2.84	3.64	3.64
Syria	11.39	20.85	20.85	20.86	20.86
Tunisia	18.26	12.17	12.17	5.48	5.48
UAE	22.73	30.44	23.16	25.48	23.16
Yemen	22.88	22.88	22.88	22.00	14.51

Arab average	21.89	20.11	19.30	17.54	18.50
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	8	7	5	8	16
Bahrain	7	18	20	20	21
Comoros	16	13	15	10	8
Djibouti	17	16	18	19	18
Egypt	2	2	2	1	1
Iraq	10	5	10	12	9
Jordan	11	3	3	4	4
Kuwait	12	15	17	21	19
Lebanon	14	10	13	15	12
Libya	18	19	21	16	15
Mauritania	20	14	16	17	17
Morocco	5	9	8	9	6
Oman	6	4	4	5	7
Palestine	-	-	19	6	5
Qatar	13	12	12	14	13
Saudi Arabia	4	6	6	7	20
Somalia	19	20	9	11	10
Sudan	1	1	1	2	2
Syria	3	11	11	13	11
Tunisia	9	8	7	3	3
UAE	15	17	14	18	14

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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	18.39	17.74	17.74	11.83	23.65
Bahrain	15.79	32.17	32.17	32.20	32.66
Comoros	41.65	27.76	27.76	15.55	15.55
Djibouti	28.48	28.48	28.48	28.48	28.48
Egypt	6.32	7.59	7.59	5.06	2.53
Iraq	23.95	23.95	23.95	23.95	15.97
Jordan	19.48	19.48	19.48	7.79	19.48
Kuwait	21.18	26.47	26.47	37.06	31.76
Lebanon	22.80	33.74	37.45	37.45	38.18
Libya	41.18	41.18	41.18	23.60	23.60
Mauritania	58.94	25.26	25.26	25.26	25.26
Morocco	13.04	12.78	12.78	12.78	12.78
Oman	24.30	14.58	14.58	14.58	14.58
Palestine			36.08	13.99	14.73
Qatar	21.41	21.41	21.41	21.41	22.51
Saudi Arabia	13.34	22.53	23.66	16.90	32.39
Somalia	83.33	83.33	16.67	16.67	16.67
Sudan	3.71	4.82	5.00	6.82	7.05
Syria	11.39	20.85	20.85	20.86	20.86
Tunisia	18.26	12.17	12.17	5.48	5.48
UAE	43.68	39.27	45.86	45.86	23.16
Yemen	36.61	28.92	28.92	23.15	24.11

Arab average	27.01	25.93	23.89	20.31	20.52
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	8	6	7	5	15
Bahrain	6	16	17	18	20
Comoros	17	14	15	9	7
Djibouti	15	15	16	17	17
Egypt	2	2	2	1	1
Iraq	13	11	12	15	8
Jordan	9	7	8	4	10
Kuwait	10	13	14	19	18
Lebanon	12	17	19	20	21
Libya	16	19	20	14	14
Mauritania	19	12	13	16	16
Morocco	4	4	4	6	4
Oman	14	5	5	8	5
Palestine	-	-	18	7	6
Qatar	11	9	10	13	12
Saudi Arabia	5	10	11	11	19
Somalia	20	20	6	10	9
Sudan	1	1	1	3	3
Syria	3	8	9	12	11
Tunisia	7	3	3	2	2
UAE	18	18	21	21	13

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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	29.03	25.23	28.38	23.65	23.65
Bahrain	15.79	32.17	32.17	32.20	32.66
Comoros	55.53	38.87	38.87	27.21	27.21
Djibouti	28.48	28.48	28.48	28.48	28.48
Egypt	12.65	11.38	10.62	10.12	5.06
Iraq	31.94	28.75	23.95	23.95	15.97
Jordan	23.37	19.48	19.48	15.58	19.48
Kuwait	21.18	26.47	26.47	37.06	31.76
Lebanon	42.28	45.55	50.56	50.56	51.29
Libya	63.30	63.30	63.30	23.60	23.60
Mauritania	58.94	25.26	25.26	25.26	25.26
Morocco	13.04	12.78	12.78	12.78	12.78
Oman	38.88	24.30	24.30	24.30	14.58
Palestine			72.17	13.99	15.87
Qatar	21.41	21.41	21.41	21.41	22.51
Saudi Arabia	16.81	25.35	25.35	28.16	32.39
Somalia	116.67	116.67	16.67	16.67	16.67
Sudan	7.41	9.63	10.00	13.21	13.21
Syria	17.06	31.05	31.05	31.06	31.06
Tunisia	18.26	12.17	12.17	9.74	9.74
UAE	88.91	43.68	45.86	45.86	41.69
Yemen	73.21	33.72	33.72	33.72	36.61

Arab average	37.82	32.18	29.68	24.94	24.16
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	12	8	13	10	12
Bahrain	4	15	16	18	19
Comoros	16	16	17	14	14
Djibouti	11	12	14	16	15
Egypt	2	2	2	2	1
Iraq	13	13	8	11	7
Jordan	10	5	6	6	9
Kuwait	8	11	12	19	17
Lebanon	15	18	19	21	21
Libya	18	19	20	9	11
Mauritania	17	9	10	13	13
Morocco	3	4	4	3	3
Oman	14	7	9	12	5
Palestine	-	-	21	5	6
Qatar	9	6	7	8	10
Saudi Arabia	5	10	11	15	18
Somalia	20	20	5	7	8
Sudan	1	1	1	4	4
Syria	6	14	15	17	16
Tunisia	7	3	3	1	2
UAE	19	17	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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	40.86	29.57	29.57	23.65	23.65
Bahrain	21.35	32.17	32.17	32.20	32.66
Comoros	83.29	62.47	62.47	55.53	55.53
Djibouti	28.48	28.48	28.48	28.48	28.48
Egypt	25.30	18.97	18.97	18.97	12.65
Iraq	63.88	28.75	23.95	23.95	23.95
Jordan	23.37	23.37	23.37	23.37	27.27
Kuwait	26.47	26.47	26.47	37.06	31.76
Lebanon	63.10	45.55	50.56	50.56	51.29
Libya	129.68	129.68	129.68	26.55	26.55
Mauritania	84.19	42.10	42.10	42.10	42.10
Morocco	23.47	12.78	12.78	12.78	12.78
Oman	72.90	48.60	48.60	48.60	24.30
Palestine			180.42	22.09	25.39
Qatar	36.83	36.83	36.83	36.83	40.92
Saudi Arabia	27.19	36.61	36.61	42.25	32.39
Somalia	233.33	233.33	33.33	16.67	16.67
Sudan	12.23	17.51	18.19	24.10	15.69
Syria	30.30	51.12	51.12	51.12	51.12
Tunisia	18.26	18.26	18.26	18.26	9.74
UAE	88.91	52.71	55.35	82.92	69.49
Yemen	183.03	67.35	67.35	67.35	73.21

Arab average	62.69	49.65	46.67	35.70	33.07
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	12	9	9	7	6
Bahrain	3	10	10	12	15
Comoros	16	18	19	20	20
Djibouti	9	7	8	11	12
Egypt	6	4	4	4	2
Iraq	14	8	6	8	7
Jordan	4	5	5	6	11
Kuwait	7	6	7	14	13
Lebanon	13	14	16	18	19
Libya	19	19	20	10	10
Mauritania	17	13	14	15	17
Morocco	5	1	1	1	3
Oman	15	15	15	17	8
Palestine	-	-	21	5	9
Qatar	11	12	13	13	16
Saudi Arabia	8	11	12	16	14
Somalia	20	20	11	2	5
Sudan	1	2	2	9	4
Syria	10	16	17	19	18
Tunisia	2	3	3	3	1
UAE	18	17	18	21	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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	58.74	59.13	67.80	23.65	23.65
Bahrain	21.35	32.17	32.17	32.20	32.66
Comoros	166.59	124.94	124.94	55.53	55.53
Djibouti	28.48	28.48	28.48	28.48	28.48
Egypt	37.94	37.94	32.88	32.88	17.71
Iraq	63.88	40.24	33.54	33.54	39.92
Jordan	35.06	23.37	23.37	23.37	27.27
Kuwait	26.47	42.35	26.47	37.06	31.76
Lebanon	63.94	77.05	85.52	65.85	65.85
Libya	240.31	240.31	240.31	44.25	36.88
Mauritania	84.19	84.19	84.19	84.19	84.19
Morocco	25.81	25.81	25.81	25.81	25.81
Oman	116.65	97.20	97.20	72.90	48.60
Palestine			360.84	25.77	28.57
Qatar	45.01	45.01	45.01	45.01	40.92
Saudi Arabia	44.49	56.33	44.36	53.51	64.13
Somalia	466.67	466.67	66.67	33.33	16.67
Sudan	18.34	21.89	22.74	34.10	15.69
Syria	56.76	83.25	83.25	83.25	83.25
Tunisia	24.34	30.43	30.43	30.43	9.74
UAE	198.10	75.30	79.07	82.92	82.92
Yemen	366.06	134.62	134.62	100.99	109.82

Arab average	104.25	86.99	80.44	47.68	44.09
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	12	12	13	2	5
Bahrain	2	6	7	7	11
Comoros	17	18	19	16	16
Djibouti	6	4	5	5	8
Egypt	8	7	8	8	4
Iraq	13	8	9	10	13
Jordan	7	2	2	1	7
Kuwait	5	9	4	12	10
Lebanon	14	14	17	17	18
Libya	19	19	20	13	12
Mauritania	15	16	16	21	21
Morocco	4	3	3	4	6
Oman	16	17	18	18	15
Palestine	-	-	21	3	9
Qatar	10	10	11	14	14
Saudi Arabia	9	11	10	15	17
Somalia	20	20	12	9	3
Sudan	1	1	1	11	2
Syria	11	15	15	20	20
Tunisia	3	5	6	6	1
UAE	18	13	14	19	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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	58.74	94.61	165.57	31.54	47.31
Bahrain	31.58	52.64	52.64	52.64	53.71
Comoros	277.65	249.88	249.88	83.29	83.29
Djibouti	28.48	28.48	28.48	28.48	28.48
Egypt	63.24	63.24	63.24	63.24	30.35
Iraq	95.82	47.91	47.91	47.91	39.92
Jordan	50.64	27.44	23.37	23.37	27.27
Kuwait	26.47	42.35	26.47	37.06	31.76
Lebanon	107.25	116.42	129.22	98.63	65.85
Libya	461.56	461.56	461.56	59.00	51.63
Mauritania	84.19	84.19	84.19	84.19	84.19
Morocco	31.29	38.85	38.85	38.85	38.85
Oman	140.95	145.81	145.81	121.51	97.20
Palestine			721.68	34.61	38.09
Qatar	81.84	81.84	81.84	81.84	43.60
Saudi Arabia	53.51	75.11	88.72	58.55	64.13
Somalia	816.67	816.67	100.00	50.00	33.33
Sudan	36.68	43.79	45.47	52.29	15.69
Syria	75.66	138.07	138.07	138.07	138.07
Tunisia	42.60	30.43	30.43	30.43	19.47
UAE	198.10	120.48	126.51	175.58	175.58
Yemen	732.11	269.14	269.14	183.03	183.03

Arab average	166.43	144.23	141.78	71.55	63.22
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	9	13	18	4	12
Bahrain	4	8	8	11	14
Comoros	18	18	19	16	17
Djibouti	2	2	3	2	4
Egypt	10	9	9	14	5
Iraq	14	7	7	8	10
Jordan	7	1	1	1	3
Kuwait	1	5	2	6	6
Lebanon	15	14	15	18	16
Libya	19	19	20	13	13
Mauritania	13	12	11	17	18
Morocco	3	4	5	7	9
Oman	16	17	17	19	19
Palestine	-	-	21	5	8
Qatar	12	11	10	15	11
Saudi Arabia	8	10	12	12	15
Somalia	20	20	13	9	7
Sudan	5	6	6	10	1
Syria	11	16	16	20	20
Tunisia	6	3	4	3	2
UAE	17	15	14	21	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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	58.74	221.74	413.92	70.96	70.96
Bahrain	63.17	52.64	52.64	58.84	58.03
Comoros	694.12	624.71	624.71	222.12	222.12
Djibouti	28.48	28.48	28.48	28.48	28.48
Egypt	322.52	164.42	164.42	164.42	88.53
Iraq	287.45	47.91	47.91	47.91	39.92
Jordan	57.57	38.96	38.96	38.96	31.16
Kuwait	26.47	42.35	31.76	52.94	31.76
Lebanon	215.51	234.53	260.32	218.81	120.48
Libya	1,125.33	1,125.33	1,125.33	125.58	125.58
Mauritania	84.19	84.19	84.19	84.19	84.19
Morocco	49.54	91.26	91.26	91.26	77.96
Oman	140.95	243.01	243.01	243.01	194.41
Palestine			1,804.19	50.81	88.88
Qatar	203.73	203.73	203.73	203.73	43.73
Saudi Arabia	83.93	112.10	88.72	58.55	64.13
Somalia	1,983.33	1,983.33	208.33	66.67	50.00
Sudan	87.81	100.71	104.58	104.58	15.69
Syria	151.27	138.07	138.07	138.07	138.07
Tunisia	42.60	176.49	243.43	60.86	48.69
UAE	4,412.67	167.21	175.58	175.58	175.58
Yemen	1,830.28	605.46	605.46	475.87	475.87

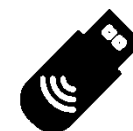
Arab average	569.03	308.89	308.14	126.46	103.37
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	6	15	18	10	11
Bahrain	7	5	5	7	9
Comoros	17	18	19	20	21
Djibouti	2	1	1	1	2
Egypt	16	11	11	16	14
Iraq	15	4	4	3	5
Jordan	5	2	3	2	3
Kuwait	1	3	2	5	4
Lebanon	14	16	17	19	16
Libya	18	19	20	14	17
Mauritania	9	6	6	11	13
Morocco	4	7	8	12	12
Oman	11	17	15	21	20
Palestine	-	-	21	4	15
Qatar	13	14	13	18	6
Saudi Arabia	8	9	7	6	10
Somalia	19	20	14	9	8
Sudan	10	8	9	13	1
Syria	12	10	10	15	18
Tunisia	3	13	16	8	7
UAE	20	12	12	17	19

 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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	11.29	10.64	10.64	10.64	17.74
Bahrain	15.79	26.90	26.90	26.93	27.39
Comoros	27.76	20.82	20.82	7.77	7.77
Djibouti	14.24	14.24	14.24	14.24	14.24
Egypt	3.16	3.79	3.79	2.53	2.53
Iraq	19.16	11.18	19.16	19.16	15.97
Jordan	19.48	7.79	7.79	7.79	7.79
Kuwait	15.88	26.47	26.47	37.06	31.76
Lebanon	21.95	19.96	22.15	22.15	22.15
Libya	41.18	41.18	41.18	11.80	11.80
Mauritania	37.89	12.63	12.63	12.63	12.63
Morocco	13.04	12.78	12.78	12.78	7.82
Oman	14.58	9.72	9.72	9.72	14.58
Palestine			28.72	11.05	11.05
Qatar	21.41	21.41	21.41	21.41	20.46
Saudi Arabia	11.61	11.27	11.83	11.27	32.39
Somalia	46.67	46.67	10.00	10.00	10.00
Sudan	2.22	2.74	2.84	3.64	3.64
Syria	11.39	20.85	20.85	20.86	20.86
Tunisia	18.26	9.74	9.74	5.48	5.48
UAE	22.73	30.44	23.16	25.48	23.16
Yemen	22.88	22.88	22.88	22.00	14.51

Arab average	19.65	18.29	17.26	14.84	15.26
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	3	6	7	8	14
Bahrain	9	17	19	20	19
Comoros	17	13	13	4	4
Djibouti	7	11	11	14	11
Egypt	2	2	2	1	1
Iraq	12	7	12	15	13
Jordan	13	3	3	5	5
Kuwait	10	16	18	21	20
Lebanon	15	12	16	18	17
Libya	19	19	21	11	9
Mauritania	18	9	9	12	10
Morocco	6	10	10	13	6
Oman	8	4	4	6	12
Palestine	-	-	20	9	8
Qatar	14	15	15	17	15
Saudi Arabia	5	8	8	10	21
Somalia	20	20	6	7	7
Sudan	1	1	1	2	2
Syria	4	14	14	16	16
Tunisia	11	5	5	3	3
UAE	16	18	17	19	18

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, 2016-2020

Results in USD / PPP VAT included, residential results

	2016	2017	2018	2019	2020
Algeria	14.84	14.19	14.19	11.83	23.65
Bahrain	15.79	26.90	26.90	26.93	27.39
Comoros	41.65	27.76	27.76	13.60	13.60
Djibouti	14.24	14.24	14.24	14.24	14.24
Egypt	6.32	7.59	5.31	5.06	2.53
Iraq	23.95	23.95	22.36	22.36	15.97
Jordan	19.48	17.53	17.53	7.79	17.53
Kuwait	15.88	26.47	26.47	37.06	31.76
Lebanon	22.80	33.74	37.45	37.45	38.18
Libya	41.18	41.18	41.18	11.80	11.80
Mauritania	37.89	12.63	12.63	12.63	12.63
Morocco	13.04	12.78	12.78	12.78	7.82
Oman	19.44	14.58	14.58	14.58	14.58
Palestine			36.08	13.99	14.73
Qatar	21.41	21.41	21.41	21.41	20.46
Saudi Arabia	13.34	22.53	23.66	16.90	32.39
Somalia	83.33	83.33	10.00	10.00	10.00
Sudan	3.71	4.82	5.00	6.82	7.05
Syria	11.39	20.85	20.85	20.86	20.86
Tunisia	18.26	9.74	9.74	5.48	5.48
UAE	43.68	39.27	45.86	45.86	23.16
Yemen	36.61	28.92	28.92	23.15	24.11

Arab average	24.68	24.02	21.59	17.84	17.72
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	7	6	7	7	17
Bahrain	8	15	16	18	18
Comoros	18	16	17	10	8
Djibouti	6	7	8	12	9
Egypt	2	2	2	1	1
Iraq	15	13	13	17	12
Jordan	12	9	10	4	13
Kuwait	9	14	15	19	19
Lebanon	14	17	19	20	21
Libya	17	19	20	6	6
Mauritania	16	4	5	8	7
Morocco	4	5	6	9	4
Oman	11	8	9	13	10
Palestine	-	-	18	11	11
Qatar	13	11	12	16	14
Saudi Arabia	5	12	14	14	20
Somalia	20	20	4	5	5
Sudan	1	1	1	3	3
Syria	3	10	11	15	15
Tunisia	10	3	3	2	2
UAE	19	18	21	21	16

 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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	10.11	10.11	9.94	9.94	
Bahrain	27.05	27.05	27.05	25.76	25.76
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	5.75	3.33	3.33	3.33	3.33
Iraq	19.16	11.18	19.16	19.16	15.97
Jordan					53.73
Kuwait	26.47	127.05	21.18	21.18	21.18
Lebanon	17.01	17.01	15.97	19.96	17.01
Libya	78.26	78.26	78.26	165.12	165.12
Mauritania	49.95	65.32	65.32	65.32	21.77
Morocco	21.51	12.82	12.82	12.82	12.82
Oman	14.58	14.58	14.58	24.30	14.58
Palestine					8.25
Qatar	36.83	36.83	36.83	36.83	36.83
Saudi Arabia	27.60	27.60	27.60	27.60	27.60
Somalia	46.67	46.67	15.15	15.15	15.15
Sudan					9.09
Syria	34.45	34.45	34.45	34.47	34.47
Tunisia	20.63	21.49	21.49	25.57	4.60
UAE	26.47	77.88	77.88	77.88	12.79
Yemen		23.88	23.88	20.95	

Arab average	35.74	43.36	44.83	42.42	34.65
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	2	2	2	2	-
Bahrain	10	8	10	10	13
Comoros	-	-	-	-	-
Djibouti	17	17	17	16	18
Egypt	1	1	1	1	1
Iraq	5	3	7	5	9
Jordan	-	-	-	-	17
Kuwait	8	16	8	7	11
Lebanon	4	6	6	6	10
Libya	16	15	16	17	19
Mauritania	15	13	14	14	12
Morocco	7	4	3	3	6
Oman	3	5	4	8	7
Palestine	-	-	-	-	3
Qatar	13	11	13	13	16
Saudi Arabia	11	9	11	11	14
Somalia	14	12	5	4	8
Sudan	-	-	-	-	4
Syria	12	10	12	12	15
Tunisia	6	7	9	9	2
UAE	9	14	15	15	5

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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	20.22	16.17	15.90	9.94	
Bahrain	27.05	27.05	27.05	25.76	25.76
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	5.75	5.55	5.55	5.55	3.33
Iraq	23.95	23.95	23.95	23.95	15.97
Jordan					53.73
Kuwait	26.47	127.05	21.18	21.18	21.18
Lebanon	32.06	28.72	28.72	33.74	28.72
Libya	78.26	78.26	78.26	165.12	165.12
Mauritania	49.95	65.32	65.32	65.32	21.77
Morocco	21.51	12.82	12.82	12.82	12.82
Oman	24.30	24.30	24.30	24.30	14.58
Palestine					11.43
Qatar	36.83	36.83	36.83	36.83	36.83
Saudi Arabia	27.60	27.60	27.60	27.60	27.60
Somalia	83.33	83.33	15.15	15.15	15.15
Sudan					9.43
Syria	34.45	34.45	34.45	34.47	34.47
Tunisia	20.63	21.49	21.49	25.57	4.60
UAE	26.47	77.88	77.88	77.88	30.44
Yemen		27.54	27.54	22.05	

Arab average	40.23	47.97	47.00	43.64	36.38
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	2	3	4	2	-
Bahrain	9	7	9	9	11
Comoros	-	-	-	-	-
Djibouti	17	17	17	16	18
Egypt	1	1	1	1	1
Iraq	5	5	7	6	8
Jordan	-	-	-	-	17
Kuwait	7	16	5	5	9
Lebanon	11	9	11	11	13
Libya	15	14	16	17	19
Mauritania	14	12	14	14	10
Morocco	4	2	2	3	5
Oman	6	6	8	7	6
Palestine	-	-	-	-	4
Qatar	13	11	13	13	16
Saudi Arabia	10	8	10	10	12
Somalia	16	15	3	4	7
Sudan	-	-	-	-	3
Syria	12	10	12	12	15
Tunisia	3	4	6	8	2
UAE	8	13	15	15	14

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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	38.41	24.26	22.10	19.88	
Bahrain	27.05	27.05	27.05	25.76	25.76
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	11.50	9.99	9.99	8.96	4.44
Iraq	31.94	28.75	23.95	23.95	15.97
Jordan					53.73
Kuwait	26.47	127.05	21.18	21.18	21.18
Lebanon	48.80	65.53	38.76	45.55	38.76
Libya	78.26	78.26	78.26	165.12	165.12
Mauritania	49.95	65.32	65.32	65.32	21.77
Morocco	21.51	12.82	12.82	12.82	12.82
Oman	48.60	48.60	48.60	48.60	24.30
Palestine					16.51
Qatar	36.83	36.83	36.83	36.83	36.83
Saudi Arabia	27.60	27.60	27.60	27.60	27.60
Somalia	116.67	116.67	15.15	15.15	15.15
Sudan					11.62
Syria	34.45	34.45	34.45	34.47	34.47
Tunisia	20.63	21.49	21.49	25.57	8.18
UAE	44.12	77.88	77.88	77.88	33.76
Yemen		32.12	32.12	32.12	

Arab average	47.52	54.43	49.76	46.94	38.22
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	10	4	6	4	-
Bahrain	5	5	8	8	11
Comoros	-	-	-	-	-
Djibouti	17	17	17	16	18
Egypt	1	1	1	1	1
Iraq	7	7	7	6	6
Jordan	-	-	-	-	17
Kuwait	4	16	4	5	8
Lebanon	13	12	12	12	16
Libya	15	14	16	17	19
Mauritania	14	11	14	14	9
Morocco	3	2	2	2	4
Oman	12	10	13	13	10
Palestine	-	-	-	-	7
Qatar	9	9	11	11	15
Saudi Arabia	6	6	9	9	12
Somalia	16	15	3	3	5
Sudan	-	-	-	-	3
Syria	8	8	10	10	14
Tunisia	2	3	5	7	2
UAE	11	13	15	15	13

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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	70.76	35.38	34.78	19.88	
Bahrain	31.58	36.85	36.85	56.04	56.04
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	20.70	19.97	19.97	19.18	6.88
Iraq	63.88	28.75	23.95	23.95	23.95
Jordan					53.73
Kuwait	42.35	127.05	21.18	21.18	21.18
Lebanon	48.80	65.53	38.76	45.55	38.76
Libya	304.83	304.83	304.83	165.12	165.12
Mauritania	71.35	72.58	72.58	74.03	36.29
Morocco	21.51	12.82	12.82	12.82	12.82
Oman	82.62	82.62	82.62	63.18	48.60
Palestine					49.52
Qatar	36.83	36.83	36.83	36.83	36.83
Saudi Arabia	39.43	39.43	36.61	36.61	39.43
Somalia	233.33	233.33	30.30	15.15	15.15
Sudan					11.62
Syria	55.25	55.25	55.25	41.65	41.65
Tunisia	20.63	21.49	21.49	25.57	8.18
UAE	55.15	99.94	99.94	98.62	52.50
Yemen		64.15	64.15	64.15	

Arab average	79.06	82.32	71.94	54.32	46.13
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	12	5	7	4	-
Bahrain	4	7	10	12	17
Comoros	-	-	-	-	-
Djibouti	15	15	16	16	18
Egypt	2	2	2	3	1
Iraq	11	4	5	6	7
Jordan	-	-	-	-	16
Kuwait	7	14	3	5	6
Lebanon	8	10	11	11	10
Libya	17	17	17	17	19
Mauritania	13	11	13	14	8
Morocco	3	1	1	1	4
Oman	14	12	14	13	13
Palestine	-	-	-	-	14
Qatar	5	6	9	9	9
Saudi Arabia	6	8	8	8	11
Somalia	16	16	6	2	5
Sudan	-	-	-	-	3
Syria	10	9	12	10	12
Tunisia	1	3	4	7	2
UAE	9	13	15	15	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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	101.08	50.54	49.69	19.88	
Bahrain	31.58	36.85	36.85	56.04	56.04
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	34.49	33.28	33.28	33.28	16.86
Iraq	63.88	40.24	33.54	33.54	39.92
Jordan					53.73
Kuwait	79.41	127.05	21.18	21.18	21.18
Lebanon	82.26	65.53	61.64	59.33	50.47
Libya	682.44	682.44	682.44	165.12	165.12
Mauritania	71.35	72.58	72.58	87.10	72.58
Morocco	21.51	21.51	21.51	21.51	21.51
Oman	116.65	116.65	116.65	116.65	72.90
Palestine					82.53
Qatar	45.01	45.01	45.01	45.01	41.49
Saudi Arabia	45.06	45.06	45.06	45.06	55.77
Somalia	466.67	466.67	60.61	30.30	15.15
Sudan					11.62
Syria	68.86	68.86	68.86	55.26	55.26
Tunisia	20.63	21.49	21.49	25.57	8.18
UAE	55.15	99.94	99.94	98.62	71.27
Yemen		128.21	128.21	96.18	

Arab average	125.36	125.94	105.59	64.88	56.31
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 Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	13	8	9	1	-
Bahrain	3	4	6	11	13
Comoros	-	-	-	-	-
Djibouti	15	15	16	16	18
Egypt	4	3	4	6	4
Iraq	8	5	5	7	7
Jordan	-	-	-	-	10
Kuwait	11	14	1	2	5
Lebanon	12	9	11	12	9
Libya	17	17	17	17	19
Mauritania	10	11	13	13	15
Morocco	2	2	3	3	6
Oman	14	13	15	15	16
Palestine	-	-	-	-	17
Qatar	5	6	7	8	8
Saudi Arabia	6	7	8	9	12
Somalia	16	16	10	5	3
Sudan	-	-	-	-	2
Syria	9	10	12	10	11
Tunisia	1	1	2	4	1
UAE	7	12	14	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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	242.59	70.76	69.57	26.50	
Bahrain	36.85	36.85	36.85	56.04	56.04
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	55.19	53.25	53.25	53.25	33.28
Iraq	95.82	47.91	47.91	47.91	47.91
Jordan					53.73
Kuwait	79.41	127.05	21.18	21.18	21.18
Lebanon	115.73	98.99	93.13	59.33	59.33
Libya	1,437.66	1,437.66	1,437.66	165.12	165.12
Mauritania	71.35	72.58	72.58	87.10	90.73
Morocco	26.07	26.07	26.07	26.07	26.07
Oman	238.15	238.15	238.15	238.15	121.51
Palestine					165.06
Qatar	92.07	92.07	92.07	82.41	61.38
Saudi Arabia	45.06	45.06	45.06	45.06	56.33
Somalia	816.67	816.67	90.91	45.45	30.30
Sudan					11.62
Syria	96.83	96.83	96.83	96.84	96.84
Tunisia	36.10	25.79	25.79	25.57	16.37
UAE	177.15	177.15	177.15	177.15	109.86
Yemen		256.33	256.33	192.27	

Arab average	223.99	214.68	176.81	89.09	72.68
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	15	7	8	4	-
Bahrain	3	3	4	9	9
Comoros	-	-	-	-	-
Djibouti	12	13	16	14	17
Egypt	5	6	7	8	6
Iraq	9	5	6	7	7
Jordan	-	-	-	-	8
Kuwait	7	12	1	1	3
Lebanon	11	11	12	10	11
Libya	17	17	17	15	19
Mauritania	6	8	9	12	13
Morocco	1	2	3	3	4
Oman	14	15	15	17	16
Palestine	-	-	-	-	18
Qatar	8	9	11	11	12
Saudi Arabia	4	4	5	5	10
Somalia	16	16	10	6	5
Sudan	-	-	-	-	1
Syria	10	10	13	13	14
Tunisia	2	1	2	2	2
UAE	13	14	14	16	15

Least expensive
Most expensive



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



Results for Mobile Broadband: 50GB/30 days per mth, Business basket, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	242.59	131.40	129.20	59.63	49.69
Bahrain	65.80	36.85	36.85	56.04	82.90
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	193.17	186.39	186.39	155.50	33.28
Iraq	287.45	47.91	47.91	47.91	47.91
Jordan					53.73
Kuwait	100.58	127.05	21.18	21.18	21.18
Lebanon	249.58	199.39	187.62	108.54	108.54
Libya	3,703.32	3,703.32	3,703.32	238.87	238.87
Mauritania	71.35	72.58	72.58	87.10	90.73
Morocco	76.05	76.05	76.05	76.05	64.97
Oman	383.96	383.96	383.96	383.96	315.92
Palestine					412.64
Qatar	167.49	167.49	167.49	102.30	112.53
Saudi Arabia	56.33	56.33	56.33	56.33	67.60
Somalia	1,983.33	1,983.33	189.39	60.61	45.45
Sudan					11.62
Syria	2,277.10	2,277.10	2,277.10	124.82	124.82
Tunisia	434.09			153.42	40.91
UAE	309.51	309.51	309.51	309.51	155.09
Yemen		576.62	576.62	480.53	

Arab average	632.16	616.49	513.15	148.92	111.83
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Below Arab average
 Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	9	7	7	5	7
Bahrain	2	1	2	3	11
Comoros	-	-	-	-	-
Djibouti	6	8	12	14	17
Egypt	8	10	9	13	3
Iraq	11	2	3	2	6
Jordan	-	-	-	-	8
Kuwait	5	6	1	1	2
Lebanon	10	11	10	10	13
Libya	17	16	16	15	18
Mauritania	3	4	5	8	12
Morocco	4	5	6	7	9
Oman	13	13	14	17	19
Palestine	-	-	-	-	20
Qatar	7	9	8	9	14
Saudi Arabia	1	3	4	4	10
Somalia	15	14	11	6	5
Sudan	-	-	-	-	1
Syria	16	15	15	11	15
Tunisia	14	-	-	12	4
UAE	12	12	13	16	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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	10.11	10.11	9.94	9.94	
Bahrain	27.05	27.05	27.05	25.76	25.76
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	5.75	3.33	3.33	3.33	3.33
Iraq	19.16	11.18	19.16	19.16	15.97
Jordan					53.73
Kuwait	26.47	127.05	21.18	21.18	21.18
Lebanon	17.01	17.01	15.97	19.96	17.01
Libya	78.26	78.26	78.26	165.12	165.12
Mauritania	32.11	32.66	32.66	32.66	10.89
Morocco	21.51	12.82	12.82	12.82	12.82
Oman	14.58	14.58	14.58	24.30	14.58
Palestine					8.25
Qatar	36.83	36.83	36.83	36.83	20.46
Saudi Arabia	27.60	27.60	27.60	27.60	27.60
Somalia	46.67	46.67	9.09	9.09	9.09
Sudan					7.07
Syria	34.45	34.45	34.45	34.47	34.47
Tunisia	20.63	21.49	21.49	25.57	4.60
UAE	26.47	77.88	77.88	77.88	12.79
Yemen		23.88	23.88	20.95	

Arab average	34.69	41.55	42.68	40.27	32.79
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	2	2	3	3	-
Bahrain	10	8	10	10	14
Comoros	-	-	-	-	-
Djibouti	17	17	17	16	18
Egypt	1	1	1	1	1
Iraq	5	3	7	5	10
Jordan	-	-	-	-	17
Kuwait	8	16	8	7	13
Lebanon	4	6	6	6	11
Libya	16	15	16	17	19
Mauritania	12	10	12	12	6
Morocco	7	4	4	4	8
Oman	3	5	5	8	9
Palestine	-	-	-	-	4
Qatar	14	12	14	14	12
Saudi Arabia	11	9	11	11	15
Somalia	15	13	2	2	5
Sudan	-	-	-	-	3
Syria	13	11	13	13	16
Tunisia	6	7	9	9	2
UAE	9	14	15	15	7

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, 2016-2020

Results in USD / PPP VAT excluded, residential results

	2016	2017	2018	2019	2020
Algeria	20.22	16.17	15.90	9.94	
Bahrain	27.05	27.05	27.05	25.76	25.76
Comoros					
Djibouti	145.05	145.05	302.08	158.23	158.23
Egypt	5.75	5.55	5.55	5.55	3.33
Iraq	23.95	23.95	22.36	22.36	15.97
Jordan					53.73
Kuwait	26.47	127.05	21.18	21.18	21.18
Lebanon	32.06	28.72	28.72	33.74	28.72
Libya	78.26	78.26	78.26	165.12	165.12
Mauritania	32.11	32.66	32.66	32.66	10.89
Morocco	21.51	12.82	12.82	12.82	12.82
Oman	24.30	24.30	24.30	24.30	14.58
Palestine					11.43
Qatar	36.83	36.83	36.83	36.83	20.46
Saudi Arabia	27.60	27.60	27.60	27.60	27.60
Somalia	83.33	83.33	9.09	9.09	9.09
Sudan					7.75
Syria	34.45	34.45	34.45	34.47	34.47
Tunisia	20.63	21.49	21.49	25.57	4.60
UAE	26.47	77.88	77.88	77.88	30.44
Yemen		27.54	27.54	22.05	

Arab average	39.18	46.15	44.76	41.40	34.54
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Below Arab average
Above Arab average

Ranking from cheapest to most expensive, 2016-2020

	2016	2017	2018	2019	2020
Algeria	2	3	4	3	-
Bahrain	9	7	9	9	12
Comoros	-	-	-	-	-
Djibouti	17	17	17	16	18
Egypt	1	1	1	1	1
Iraq	5	5	7	6	9
Jordan	-	-	-	-	17
Kuwait	7	16	5	5	11
Lebanon	11	9	11	12	14
Libya	15	14	16	17	19
Mauritania	12	10	12	11	5
Morocco	4	2	3	4	7
Oman	6	6	8	7	8
Palestine	-	-	-	-	6
Qatar	14	12	14	14	10
Saudi Arabia	10	8	10	10	13
Somalia	16	15	2	2	4
Sudan	-	-	-	-	3
Syria	13	11	13	13	16
Tunisia	3	4	6	8	2
UAE	8	13	15	15	15

Least expensive
Most expensive



OBSERVATIONS FROM MOBILE BROADBAND TIME SERIES RESULTS



- There have been price and service changes from around two thirds of the Arab providers since 2019, with revisions of portfolios and changes to 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, with the general cost trend being downwards for all but a limited number of baskets.

Change in overall average		
2019-2020	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 2019. Only the residential lower allowances baskets (0.5 GB, 1 GB and 0.5 GB short validity) increased, and these were generally relatively small increases. For the larger baskets, the decrease was much more dramatic, illustrating how providers are increasing data allowances within tariff offerings.
- There were changes to prices from most providers. Some of the key changes include:
 - Algeria – changes from all provider, in particular to business pricing
 - Bahrain – updating of residential and business pricing, with the introduction of new offers
 - Egypt – new residential and business plans
 - Iraq – new plans
 - Jordan – replacing of 3G plans with 4G plans, or addition of 4G to portfolio. Small increases in rentals, larger in allowances
 - Kuwait – introduction of 5G pricing in addition to 4G
 - Lebanon – changes to allowances and rentals leading to general overall reduction, particularly for the higher usage baskets
 - Morocco – removal of some tariffs and options
 - Oman – fewer options for users, but also price reductions, and change in presentation towards add-on style data
 - Qatar - Introduction of 5G pricing
 - Saudi Arabia – price increase to reflect VAT increase on some tariffs. Reduction in number of plans available. 5G plans offered extensively.
 - Sudan – some changes to data allowances and general increase in prices.
 - Syria – some price increases for lower allowances
 - UAE – New business plans. Some increase in allowances for residential plans.





LEASED LINE BASKET RESULTS 2020



OECD LEASED LINE BASKET, 2010 DEFINITIONS

- The leased line 2010 baskets were unchanged in the 2017 OECD review, and the 2010 baskets defined in 2010 are still current
- Prices for 2 Mb/s and 34 Mb/s national circuits
- 6 specific distances are used:
 - 2 km, 20 km, 50 km, 100 km, 200 km and 500 km
- Each distance is weighted in order to calculate a **weighted average price for one circuit** as follows:

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

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



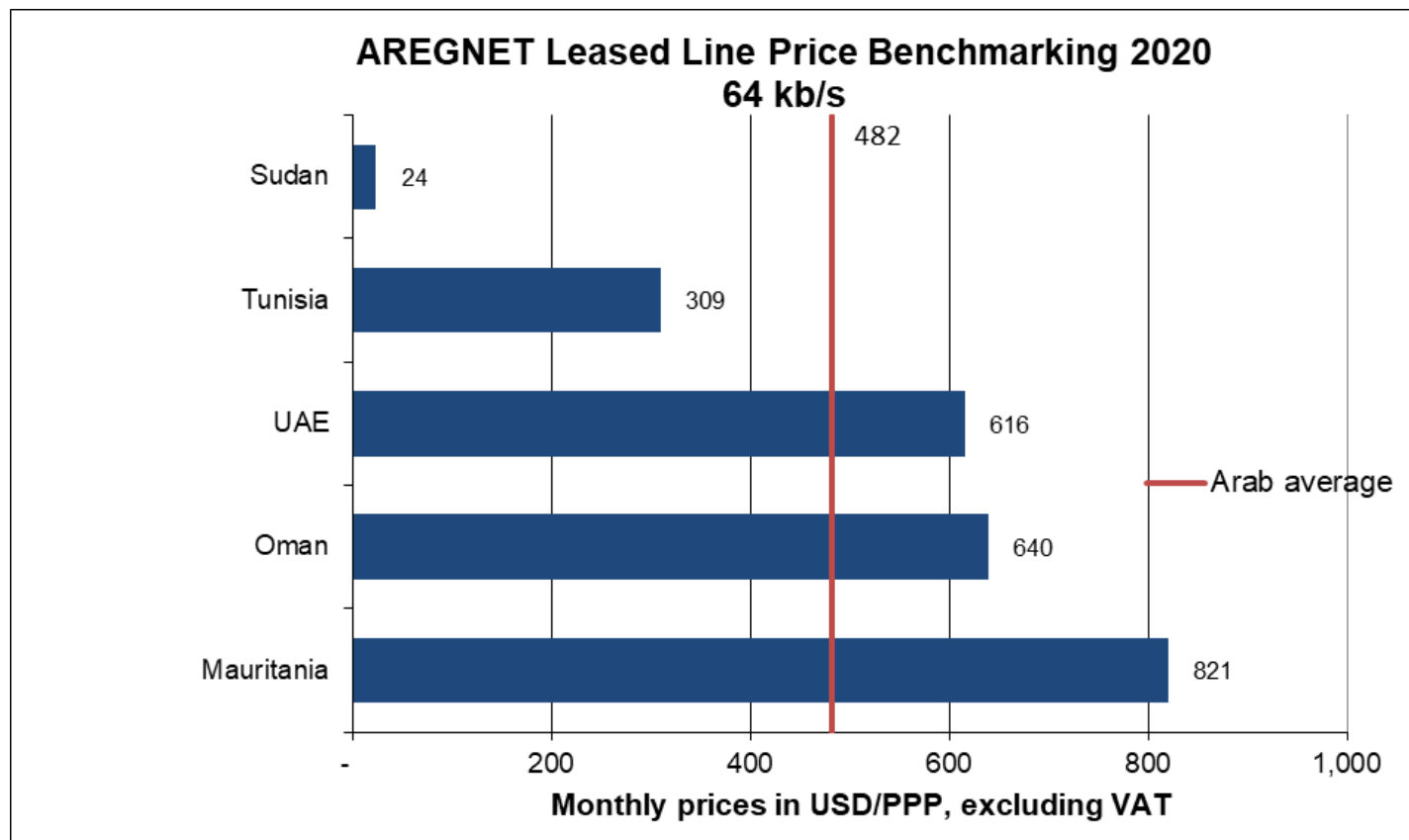


LEASED LINE DATA ISSUES

- No price data available for:
 - Comoros
 - Djibouti
 - Egypt
 - Iraq
 - Jordan
 - Libya
 - Morocco
 - Palestine
 - Qatar
 - Saudi Arabia
 - Somalia
 - Syria
 - Yemen
- Other countries may have data missing for specific bitrates



64 KB/S OECD LEASED LINE BASKET RESULTS

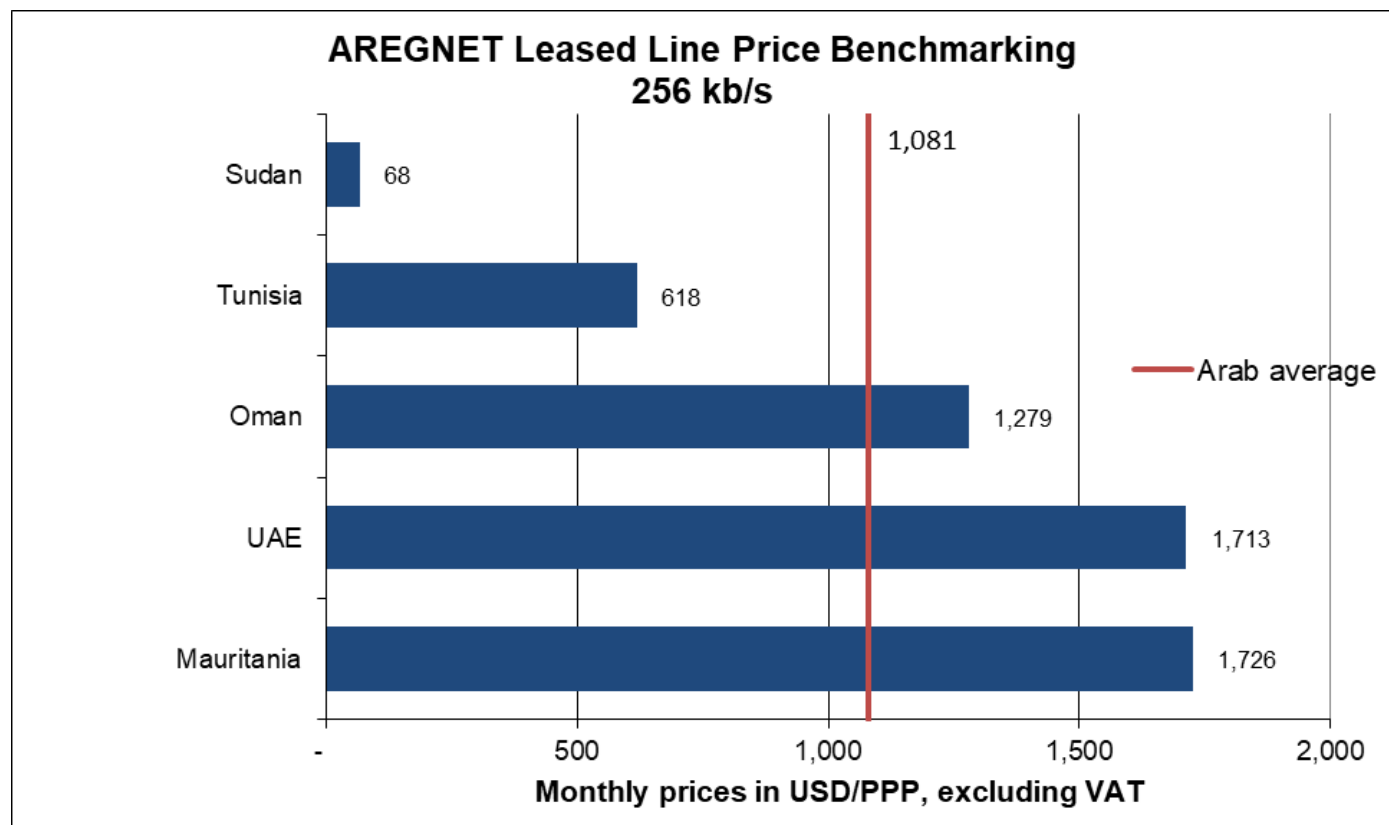


The 64 kb/s basket is no longer covered within the OECD baskets, however the standard 2010 methodology has been applied to 64 kb/s circuits for the Arab countries

Note: No equivalent OECD data exists.



256KB/S OECD LEASED LINE BASKET RESULTS



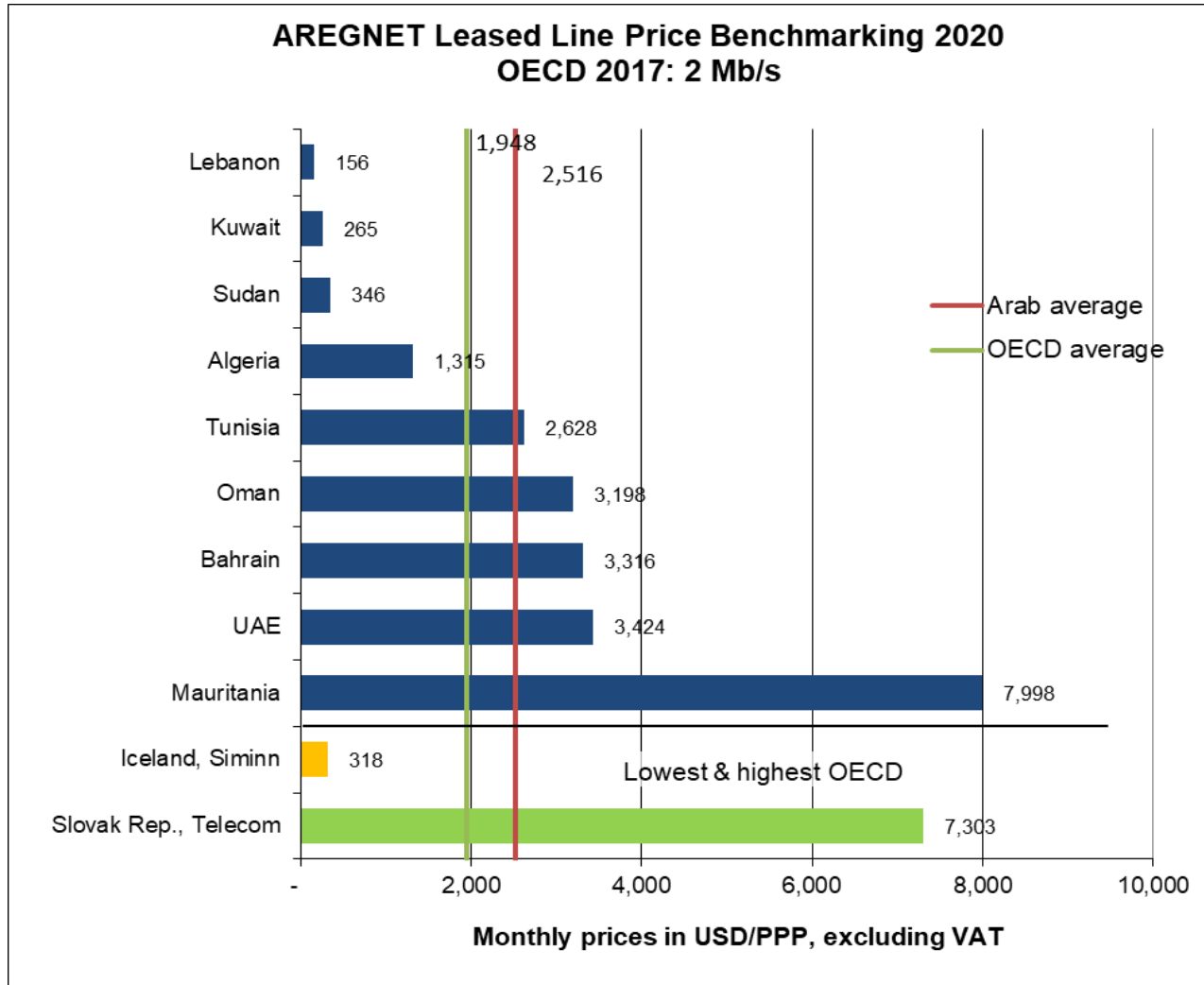
The OECD basket does not cover 256 kb/s, however the standard 2010 methodology has been applied to 256 kb/s circuits for the Arab countries

Note: No equivalent OECD data exists.





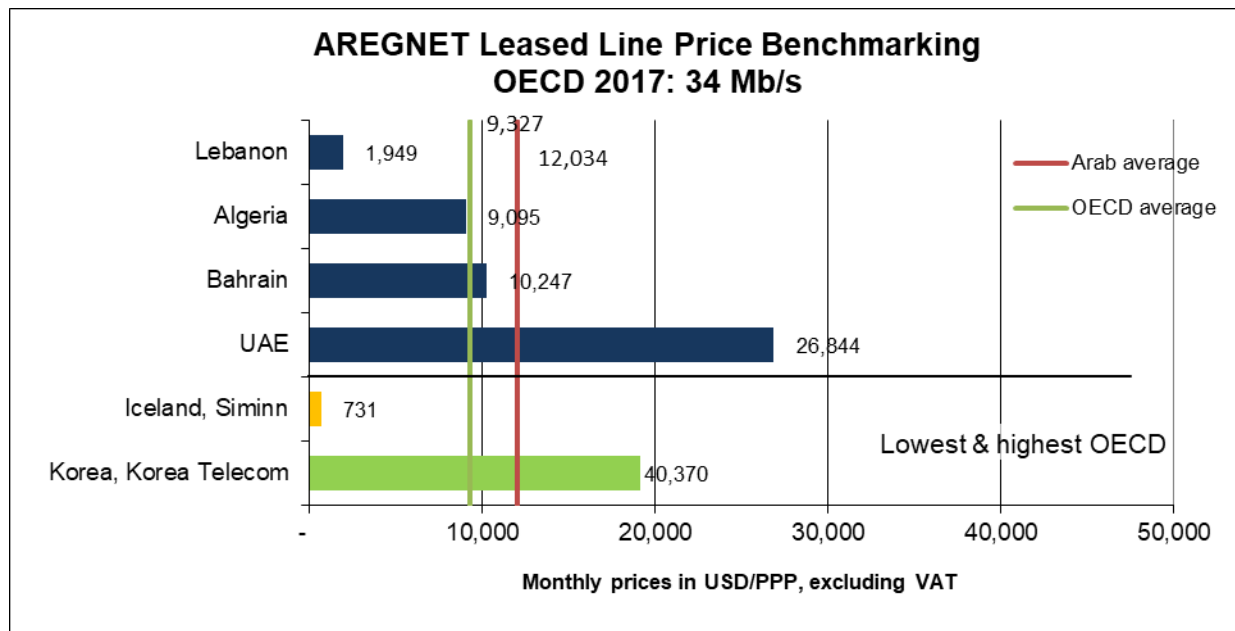
2 MB/S OECD LEASED LINE BASKET RESULTS



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



34 MB/S OECD LEASED LINE BASKET RESULTS

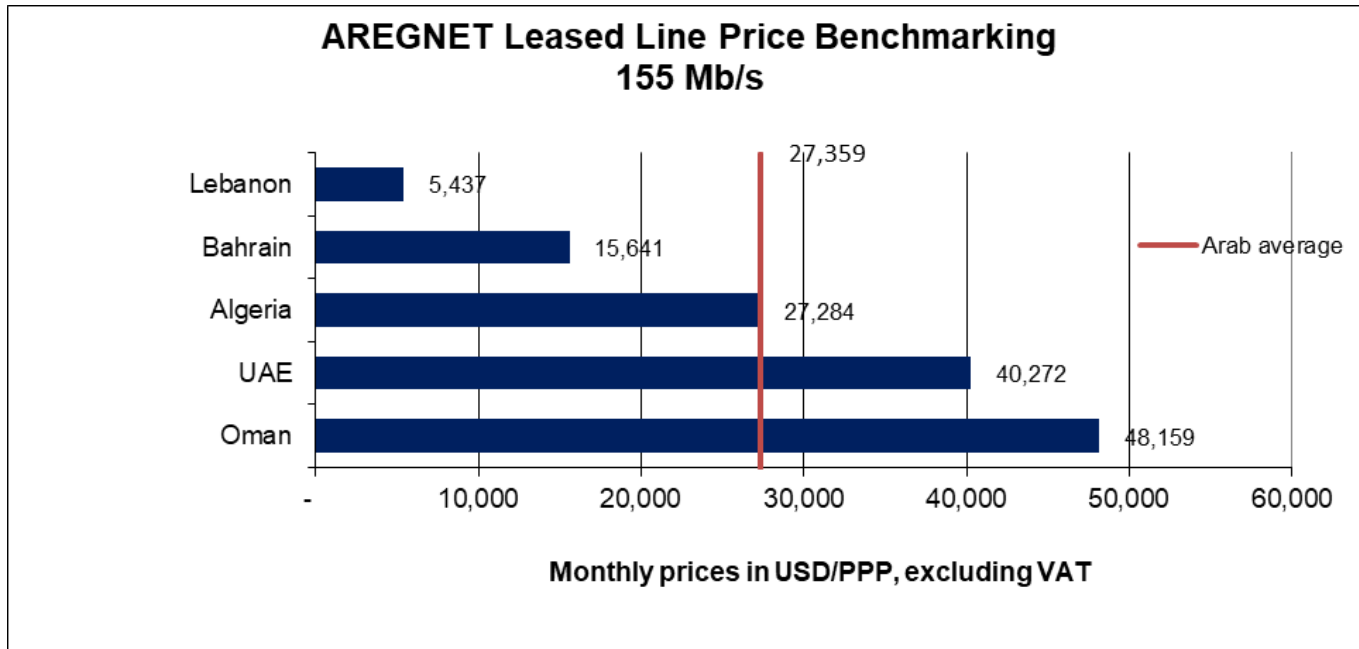


The OECD data shown represents the lowest and highest prices found in OECD countries, and the average price across all 34 OECD countries.

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



155 MB/S OECD LEASED LINE BASKET RESULTS



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

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

Note: No equivalent OECD data exists.





OBSERVATIONS FROM LEASED LINE RESULTS

- The table below shows a summary of the cheapest and most expensive countries for each basket. N/A indicates a limited number of countries where offers are available/published

	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
64 kb/s	Sudan	Tunisia	UAE	Mauritania	Oman	N/A
256 kb/s	Sudan	Tunisia	Oman	Mauritania	UAE	N/A
2 Mb/s	Lebanon	Kuwait	Sudan	Mauritania	UAE	Bahrain
34 Mb/s	Lebanon	Algeria	Bahrain	UAE	N/A	N/A
155 Mb/s	Lebanon	Algeria	Bahrain	Oman	UAE	N/A

- For leased lines up to 256 kb/s, Sudan, and Tunisia have the lowest prices. UAE features in the top three for 64 kb/s, while for 256 kb/s, Oman is third cheapest.
- For 2 Mb/s, Lebanon still features as the cheapest, followed by Kuwait and Sudan.
- Lebanon also has the cheapest offers for 34 Mb/s and 155 Mb/s, followed by Algeria and Bahrain.
 - Similar to 64 kb/s and 256 kb/s, very few countries publish prices for circuits at these speeds.
- The number of Arab countries publishing leased line pricing has shifted slightly since 2018, with fewer offers published or available at lower speeds, and more offers published at higher speeds

# countries publishing prices	2018	2019
64 kb/s	7	5
256 kb/s	7	5
2 Mb/s	8	9
34 Mb/s	3	4
155 Mb/s	3	5

- For 2 Mb/s, four countries – Lebanon, Kuwait, Sudan and Algeria - have prices below the OECD average
- For 34 Mb/s, Lebanon and Algeria fall below the OECD average, Bahrain is slightly more expensive, but broadly on par, and UAE is significantly higher than the OECD average cost.
- Many of the Arab countries are quite small in size and this price comparison may give advantage to the tariff structure used in these small countries.
 - i.e. the reality may be worse than the result shown here.





LEASED LINE TIME SERIES ANALYSIS AND RANKING TABLES 2015–2020

2010 OECD LEASED LINE BASKETS RANKING, 64 KB/S



Total results for 64 kb/s leased line basket

Results in US\$PPP excluding VAT

	2015	2016	2017	2018	2020
Algeria					
Bahrain	684	684	684	684	
Comoros					
Djibouti	1,529	1,529			
Egypt	109	109			
Iraq					
Jordan	491	491			
Kuwait					
Lebanon	348	348	301		
Libya	205	205			
Mauritania	1,183	1,183	821	821	821
Morocco	849	849			
Oman	640	640	640	640	640
Palestine	331	331			
Qatar	627	627			
Saudi Arabia	695	695			
Somalia					
Sudan			24	24	24
Syria	16	16			
Tunisia	309	309	309	309	309
UAE	1,240	1,240	616	616	616
Yemen	573	573			

Arab average	614	614	485	516	482
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 Below Arab average
 Above Arab average

Ranking for 64 kb/s leased line basket

	2015	2016	2017	2018	2020
Algeria	-	-	-	-	-
Bahrain	11	11	6	5	-
Comoros	-	-	-	-	-
Djibouti	16	16	-	-	-
Egypt	2	2	-	-	-
Iraq	-	-	-	-	-
Jordan	7	7	-	-	-
Kuwait	-	-	-	-	-
Lebanon	6	6	2	-	-
Libya	3	3	-	-	-
Mauritania	14	14	7	6	5
Morocco	13	13	-	-	-
Oman	10	10	5	4	4
Palestine	5	5	-	-	-
Qatar	9	9	-	-	-
Saudi Arabia	12	12	-	-	-
Somalia	-	-	-	-	-
Sudan	-	-	1	1	1
Syria	1	1	-	-	-
Tunisia	4	4	3	2	2
UAE	15	15	4	3	3
Yemen	8	8	-	-	-

 Least expensive
 Most expensive



2010 OECD LEASED LINE BASKETS RANKING, 256 KB/S



Total results for 256 kb/s leased line basket
Results in US\$PPP excluding VAT

	2015	2016	2017	2018	2020
Algeria					
Bahrain	1,316	1,316	1,316	1,316	
Comoros					
Djibouti	2,193	2,193			
Egypt	284	284			
Iraq					
Jordan	1,077	1,077			
Kuwait					
Lebanon	348	348	301		
Libya	716	716			
Mauritania	1,760	1,760	1,726	1,726	1,726
Morocco	1,715	1,715			
Oman	1,279	1,279	1,279	1,279	1,279
Palestine	590	590			
Qatar	1,139	1,139			
Saudi Arabia	2,193	2,193			
Somalia					
Sudan			68	68	68
Syria	52	52			
Tunisia	618	618	618	618	618
UAE	3,260	3,260	1,713	1,713	1,713
Yemen	959	959			

Arab average	1,219	1,219	1,003	1,120	1,081
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Below Arab average
Above Arab average

Ranking for 256 kb/s leased line basket

	2015	2016	2017	2018	2020
Algeria	-	-	-	-	-
Bahrain	11	11	5	4	-
Comoros	-	-	-	-	-
Djibouti	14	14	-	-	-
Egypt	2	2	-	-	-
Iraq	-	-	-	-	-
Jordan	8	8	-	-	-
Kuwait	-	-	-	-	-
Lebanon	3	3	2	-	-
Libya	6	6	-	-	-
Mauritania	13	13	7	6	5
Morocco	12	12	-	-	-
Oman	10	10	4	3	3
Palestine	4	4	-	-	-
Qatar	9	9	-	-	-
Saudi Arabia	15	15	-	-	-
Somalia	-	-	-	-	-
Sudan	-	-	1	1	1
Syria	1	1	-	-	-
Tunisia	5	5	3	2	2
UAE	16	16	6	5	4
Yemen	7	7	-	-	-

Least expensive
Most expensive



2010 OECD LEASED LINE BASKETS RANKING, 2 MB/S



Total results for OECD 2 Mb/s leased line basket
Results in US\$PPP excluding VAT

	2015	2016	2017	2018	2020
Algeria	1,625	1,625	1,625	1,315	1,315
Bahrain	4,685	4,685	4,685	4,685	3,316
Comoros					
Djibouti	4,092	4,092			
Egypt	655	655			
Iraq					
Jordan	5,505	5,505			
Kuwait				265	265
Lebanon	696	696	647	156	156
Libya	1,210	1,210			
Mauritania			7,998	7,998	7,998
Morocco	4,197	4,197			
Oman	3,198	3,198	3,198	3,198	3,198
Palestine	2,697	2,697			
Qatar	3,237	3,237			
Saudi Arabia	3,622	3,622			
Somalia					
Sudan	6,564	6,564	346	346	346
Syria	302	302			
Tunisia	2,628	2,628	2,628	2,628	2,628
UAE	5,332	5,332	3,424	3,424	3,424
Yemen	4,518	4,518			

Arab average	3,221	3,221	3,069	2,668	2,516
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Below Arab average
Above Arab average

Ranking for OECD 2 Mb/s leased line basket

	2015	2016	2017	2018	2020
Algeria	5	5	3	4	4
Bahrain	14	14	7	8	7
Comoros	-	-	-	-	-
Djibouti	11	11	-	-	-
Egypt	2	2	-	-	-
Iraq	-	-	-	-	-
Jordan	16	16	-	-	-
Kuwait	-	-	-	2	2
Lebanon	3	3	2	1	1
Libya	4	4	-	-	-
Mauritania	-	-	8	9	9
Morocco	12	12	-	-	-
Oman	8	8	5	6	6
Palestine	7	7	-	-	-
Qatar	9	9	-	-	-
Saudi Arabia	10	10	-	-	-
Somalia	-	-	-	-	-
Sudan	17	17	1	3	3
Syria	1	1	-	-	-
Tunisia	6	6	4	5	5
UAE	15	15	6	7	8
Yemen	13	13	-	-	-

Least expensive
Most expensive



2010 OECD LEASED LINE BASKETS RANKING, 34 MB/S



Total results for OECD 34 Mb/s leased line basket
Results in US\$PPP excluding VAT

	2015	2016	2017	2018	2020
Algeria	14,741	14,741	14,741	9,095	9,095
Bahrain					
Comoros					
Djibouti					
Egypt	4,361	4,361			
Iraq					
Jordan					
Kuwait					
Lebanon				1,949	1,949
Libya					
Mauritania					
Morocco	43,263	17,257			
Oman	28,006	28,006	28,006	28,006	28,006
Palestine					
Qatar	8,373	8,373			
Saudi Arabia	22,247	22,247			
Somalia					
Sudan					
Syria					
Tunisia					
UAE	38,195	38,195	26,844	26,844	26,844
Yemen	56,514	56,514			

Arab average	26,963	23,712	23,197	16,473	16,473
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Below Arab average
Above Arab average

Ranking for OECD 34 Mb/s leased line basket

	2015	2016	2017	2018	2020
Algeria	3	3	1	2	2
Bahrain	-	-	-	-	-
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	1	1	-	-	-
Iraq	-	-	-	-	-
Jordan	-	-	-	-	-
Kuwait	-	-	-	-	-
Lebanon	-	-	-	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	7	4	-	-	-
Oman	5	6	3	4	4
Palestine	-	-	-	-	-
Qatar	2	2	-	-	-
Saudi Arabia	4	5	-	-	-
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	6	7	2	3	3
Yemen	8	8	-	-	-

Least expensive
Most expensive



2010 OECD LEASED LINE BASKETS RANKING, 155 MB/S



Total results for 155 Mb/s leased line basket
Results in US\$PPP excluding VAT

	2015	2016	2017	2018	2020
Algeria	26,457	26,457	26,457	27,284	27,284
Bahrain					15,641
Comoros					
Djibouti					
Egypt	8,723	8,723			
Iraq					
Jordan					
Kuwait					
Lebanon				5,437	5,437
Libya					
Mauritania					
Morocco					
Oman	48,159	48,159	48,159	48,159	48,159
Palestine					
Qatar	30,505	30,505			
Saudi Arabia	45,444	45,444			
Somalia					
Sudan					
Syria					
Tunisia					
UAE	57,300	57,300	40,272	40,272	40,272
Yemen					

Arab average	36,098	36,098	38,296	30,288	27,359
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Below Arab average
Above Arab average

Ranking for 155 Mb/s leased line basket

	2015	2016	2017	2018	2020
Algeria	2	2	1	2	3
Bahrain	-	-	-	-	2
Comoros	-	-	-	-	-
Djibouti	-	-	-	-	-
Egypt	1	1	-	-	-
Iraq	-	-	-	-	-
Jordan	-	-	-	-	-
Kuwait	-	-	-	-	-
Lebanon	-	-	-	1	1
Libya	-	-	-	-	-
Mauritania	-	-	-	-	-
Morocco	-	-	-	-	-
Oman	5	5	3	4	5
Palestine	-	-	-	-	-
Qatar	3	3	-	-	-
Saudi Arabia	4	4	-	-	-
Somalia	-	-	-	-	-
Sudan	-	-	-	-	-
Syria	-	-	-	-	-
Tunisia	-	-	-	-	-
UAE	6	6	2	3	4
Yemen	-	-	-	-	-

Least expensive
Most expensive





OBSERVATIONS FROM LEASED LINE TIME SERIES RESULTS

- Leased line prices were not reported in 2019, but were re-introduced in 2020. As a result, the time series runs for an extra year, from 2015-2020
- Prices have been generally stable over time with either no or only occasional changes to prices by operators.
- Over the period 2018 to 2020, the only changes were to prices were as follows:
 - Bahrain reduced the price for the 2 Mb/s basket, with the basket cost falling from USD PPP 4,685 excl. VAT to USD PPP 3,316 excl. VAT
 - Bahrain also stopped publishing offers for 64 kb/s and 256 kb/s services, but introduced pricing for 155 Mb/s services
- The cumulative effect of these changes was as follows:
 - Reduction in the average for 64 kb/s from USD PPP 516 excl VAT to USD PPP 482 excl VAT
 - Reduction in the average for 256 kb/s from USD PPP 1,120 excl VAT to USD PPP 1,081 excl VAT
 - Reduction in the average for 2 Mb/s from USD PPP 2,668 excl VAT to USD PPP 2,516 excl VAT
 - No change to the 34 Mb/s average
 - Reduction in the average for 155 Mb/s from USD PPP 30,288 excl VAT to USD PPP 27,359 excl VAT
- The average price changes for each basket between 2017/2018 and 2018/2020 are shown in the table below

	2017-2018	2018-2020
64 kb/s	6.4%	-6.6%
256 kb/s	11.7%	-3.5%
2 Mb/s	-13%	-6%
34 Mb/s	-29.0%	0.0%
155 Mb/s	-20.9%	-9.7%

Percentage change 2017/18 and 2018/20



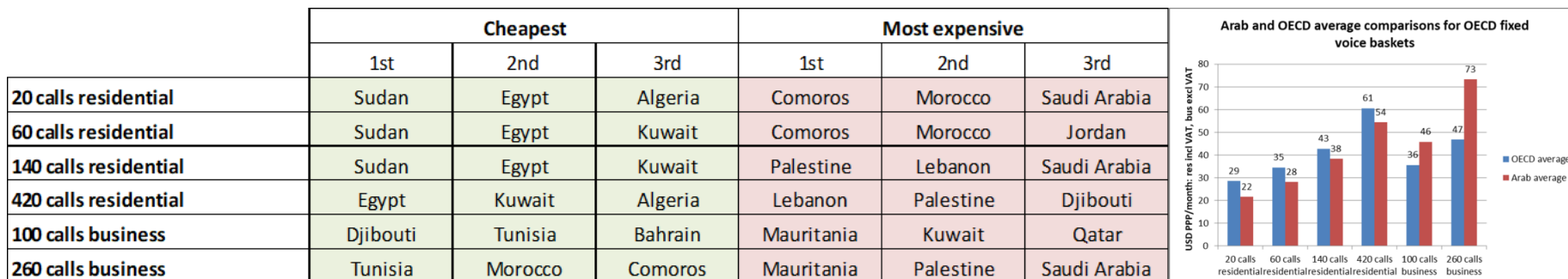


SUMMARY OF THE MAIN FINDINGS FROM THE BENCHMARKING STUDY

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



- The cheapest and most expensive countries throughout are shown in the table below, with an Arab/OECD average comparison shown alongside:



- The trend from previous updates continues 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, between 10-24% cheaper.
- Similarly for business services, most countries are above the OECD average, and the Arab average is consistently higher than that of the OECD, 28% for the 100 calls basket and 57% 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
- 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.
- There have been very few changes to fixed voice from the 2019 update. The impact of the changes was generally very small, and in some cases, did not have any effect on the basket results
- Average costs across all residential and business baskets have changed only slightly from previous year, very slight increases and decreases have been seen.
- Over the period 2016-2020, the trend continues with the average price not changing dramatically. However, lower usage residential basket costs continue to show 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 2020 USD PPP	OECD average 2020 USD PPP	Arab average compared to OECD average
Fixed voice Residential	20 calls	22	29	● -24%
	60 calls	28	35	● -20%
	140 calls	38	43	● -12%
	420 calls	54	61	● -11%
Fixed voice Business	100 calls	46	36	● 28%
	260 calls	73	47	● 57%

Residential prices include VAT, business prices exclude VAT

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



- As in the previous year 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. Similarly, as in 2019, the number of providers for which prepaid offers are the cheapest is at its highest for no and low data usage baskets, but this changes increasingly to postpaid tariffs as data usage increases.
- Generally, 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. For the 30 calls no data basket, however, both the per provider and per country Arab averages are only very slightly higher than the OECD average
- Baskets which incorporate handset data show a broad variation in price across the Arab providers. This is still true for 2020 and the price continues to rise for baskets with higher data requirements, again indicating that in a number of countries, high mobile data use is still prohibitively expensive, and consequently, mobile data use is probably more limited
- The average number of tariff packages offered by the Arab operators is up slightly from 27 per operator in 2019, to 28 per operator in 2020.
- There has been a general mix of decreases and increases over the period 2019 to 2020, the predominant change is one of decreasing prices, with more tariffs decreasing or remaining static than increasing from one year to another. In all baskets bar one, fourteen or more countries saw their results either go down or stay the same from the previous year
- Across all the baskets considered, the Arab average decreased from 2019 to 2020, with larger decreases for baskets with higher calls and data.

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	Lebanon	Palestine	Saudi Arabia
100 calls no data	Sudan	Egypt	Algeria	Lebanon	Palestine	UAE
30 calls, 0.1 GB	Egypt	Tunisia	Yemen	Lebanon	Bahrain	Palestine
100 calls, 0.5 GB	Algeria	Egypt	Tunisia	Lebanon	Palestine	Bahrain
300 calls, 1 GB	Algeria	Egypt	Jordan	Lebanon	Libya	Syria
900 calls, 2 GB	Jordan	Algeria	Egypt	Mauritania	Lebanon	Comoros
30 calls, 0.5 GB	Tunisia	Yemen	Egypt	Lebanon	Bahrain	Palestine
100 calls, 2 GB	Egypt	Mauritania	Yemen	Lebanon	Palestine	UAE
300 calls, 5 GB	Jordan	Algeria	Egypt	Lebanon	Syria	Libya
900 calls, 10 GB	Algeria	Jordan	Morocco	Mauritania	Comoros	Lebanon

- The variation between the OECD and Arab countries per country and per provider is shown in the table below

	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	14.95	17.25	15.23	16.23
100 calls no data	19.33	22.31	25.73	27.64
30 calls, 0.1 GB	16.86	19.89	21.34	23.63
100 calls, 0.5 GB	22.45	24.99	31.60	34.12
300 calls, 1 GB	27.35	30.20	54.13	60.22
900 calls, 2 GB	32.32	39.99	165.67	146.63
30 calls, 0.5 GB	18.89	21.77	23.58	25.86
100 calls, 2 GB	26.20	29.19	39.83	42.58
300 calls, 5 GB	33.54	37.64	69.11	84.07
900 calls, 10 GB	42.89	52.15	189.82	191.32

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



		Arab average 2020 USD PPP	OECD average 2020 USD PPP	Arab average compared to OECD average
No data	30 calls no data	15	15	● 2%
	100 calls no data	26	19	● 33%
Low data	30 calls, 0.1 GB	21	17	● 27%
	100 calls, 0.5 GB	32	22	● 41%
	300 calls, 1 GB	54	27	● 98%
	900 calls, 2 GB	166	32	● 413%
High data	30 calls, 0.5 GB	24	19	● 25%
	100 calls, 2 GB	40	26	● 52%
	300 calls, 5 GB	69	34	● 106%
	900 calls, 10 GB	190	43	● 343%

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



- The average Arab residential cost is still considerably higher than the OECD average or up to 5.2 times higher for the highest speed basket. For business services, the average is up to 8.1 times higher.
 - The residential figure continues to be skewed by particularly high costs in a number of countries, in particular, Algeria, Oman, Mauritania, Saudi Arabia Sudan and Syria. For business services, the Arab average is heavily skewed by a number of countries, including Algeria, Comoros, Djibouti, Oman and Yemen.
- In ten of the twenty one countries usage based tariffs are still prevalent, in some instances providers offer both usage based and flat rate tariffs. Usage based results appear in selected baskets fro Egypt, Libya, Oman, Sudan and Yemen. Usage based tariffs continue to be offered in many OECD countries, however, often it is limited to one provider with an country, and often for low usage tariffs
- As in previous years, 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 2019-2020. The picture is generally one of declining prices or relatively small increases. There have been changes for most providers in the current update

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	↓	↓	↓	↓	↓	↓

- Speeds have continued to rise since 2019, the slowest increase is in speeds above 1000Mb/s. The table below, shows an increase of 91% for services that have a minimum advertised download speed of 2 Mb/s or above, and the increase is 32% for those with speeds of at least 30 Mb/s.
 - Speeds above 2 Mb/s are available in 20 of the 21 countries covered. Four countries offer speeds over 1000Mb/s which is up one country from previous year.
 - The average speed for the Arab countries for the current update is just below 70 Mb/s which is down from previous year but still a huge rise from 2018.
- The table on the next slide shows the cheapest and most expensive 3 countries for each basket, along with 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 – residential and business (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	Kuwait	Syria	Yemen	Saudi Arabia	Mauritania	Qatar
>= 10 Mb/s / 30 GB	Egypt	Tunisia	Lebanon	Syria	Sudan	Mauritania
>= 25 Mb/s / 60 GB	Egypt	Palestine	Tunisia	Syria	Algeria	UAE
>= 100 Mb/s / 120 GB	Egypt	Palestine	Jordan	Syria	Algeria	Bahrain

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

- Below is a comparison of the Arab and OECD averages for each of the baskets considered.

Residential	USD PPP/month inc VAT	
	OECD average	Arab average
>= 0.25 Mb/s / 15 GB	39.16	55.76
>= 10 Mb/s / 30 GB	39.29	171.35
>= 25 Mb/s / 60 GB	47.89	182.08
>= 100 Mb/s / 120 GB	55.98	290.20

Business	USD PPP/month excl VAT	
	OECD average	Arab average
>= 0.25 Mb/s / 15 GB	70.19	162.95
>= 10 Mb/s / 30 GB	180.39	499.87
>= 25 Mb/s / 60 GB	140.94	675.15
>= 100 Mb/s / 120 GB	63.78	515.72

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



Residential Fixed Broadband	Arab average 2020 USD PPP	OECD average 2020 USD PPP	Arab average compared to OECD average
>= 0.25 Mb/s / 5 GB: Low use	55	39	● 41%
>= 0.25 Mb/s / 15 GB: Medium use	58	39	● 47%
>= 0.25 Mb/s / 45 GB: High use	62	39	● 58%
>= 10 Mb/s / 10 GB: Low use	171	39	● 338%
>= 10 Mb/s / 30 GB: Medium use	171	39	● 336%
>= 10 Mb/s / 90 GB: High use	171	40	● 330%
>= 25 Mb/s / 20 GB: Low use	182	47	● 283%
>= 25 Mb/s / 60 GB: Medium use	182	48	● 280%
>= 25 Mb/s / 180 GB: High use	183	49	● 277%
>= 100 Mb/s / 40 GB: Low use	290	56	● 420%
>= 100 Mb/s / 120 GB: Medium use	290	56	● 418%
>= 100 Mb/s / 360 GB: High use	295	57	● 415%

Residential prices include VAT

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



Business Fixed Broadband	Arab average 2020 USD PPP	OECD average 2020 USD PPP	Arab average compared to OECD average
>= 0.25 Mb/s / 5 GB: Low use	163	70	132%
>= 0.25 Mb/s / 15 GB: Medium use	163	70	132%
>= 0.25 Mb/s / 45 GB: High use	166	70	136%
>= 10 Mb/s / 10 GB: Low use	500	180	177%
>= 10 Mb/s / 30 GB: Medium use	500	180	177%
>= 10 Mb/s / 90 GB: High use	500	181	177%
>= 25 Mb/s / 20 GB: Low use	675	141	380%
>= 25 Mb/s / 60 GB: Medium use	675	141	379%
>= 25 Mb/s / 180 GB: High use	675	141	379%
>= 100 Mb/s / 40 GB: Low use	516	64	710%
>= 100 Mb/s / 120 GB: Medium use	516	64	709%
>= 100 Mb/s / 360 GB: High use	516	65	697%

Business prices exclude VAT

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



- Mobile broadband services are available across all the Arab countries. The tables below shows the 3 cheapest and 3 most expensive countries for each basket, each speed category, for both residential and business services, as well as the comparison of the Arab country average to the OECD country average. Note, the business calculations exclude VAT.

		Cheapest			Most expensive			Arab:OECD average	
		1st	2nd	3rd	1st	2nd	3rd		
Residential	0.5 GB	Egypt	Sudan	Tunisia	Bahrain	Saudi Arabia	Kuwait	0.5 GB	37%
	1 GB	Egypt	Tunisia	Sudan	Lebanon	Bahrain	Saudi Arabia		
	2 GB	Egypt	Tunisia	Morocco	Lebanon	UAE	Yemen		
	5 GB	Tunisia	Egypt	Morocco	Yemen	UAE	Comoros		
	10 GB	Tunisia	Sudan	Somalia	Yemen	Mauritania	Syria		
	20 GB	Sudan	Tunisia	Jordan	Yemen	UAE	Syria		
	50 GB	Sudan	Djibouti	Jordan	Yemen	Comoros	Oman		
	0.5 GB short validity	Egypt	Sudan	Tunisia	Saudi Arabia	Kuwait	Bahrain		
	1 GB short validity	Egypt	Tunisia	Sudan	Lebanon	Saudi Arabia	Kuwait		
Business	0.5 GB	Egypt	Tunisia	Palestine	Libya	Djibouti	Jordan	1 GB	41%
	1 GB	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan	2 GB	42%
	2 GB	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan	5 GB	59%
	5 GB	Egypt	Tunisia	Sudan	Libya	Djibouti	Bahrain	10 GB	74%
	10 GB	Tunisia	Sudan	Somalia	Libya	Djibouti	Palestine	20 GB	80%
	20 GB	Sudan	Tunisia	Kuwait	Libya	Palestine	Djibouti	50 GB	24%
	50 GB	Sudan	Kuwait	Egypt	Oman	Libya	Djibouti	0.5 GB short validity	14%
	0.5 GB short validity	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan	1 GB short validity	22%
	1 GB short validity	Egypt	Tunisia	Sudan	Libya	Djibouti	Jordan		

- The average for the residential service baskets in the Arab countries compared to the OECD average ranges from 14% more expensive, for the 0.5 GB short validity basket, to 80% for the 20 GB basket. For business services, the range is 54% (more expensive) for the 50GB basket, to 175% for the 1 GB basket.
- There have been price and service changes from around two thirds of the Arab providers since 2019, with revisions of portfolios and changes to 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, with the general cost trend being downwards for all but a limited number of baskets. What is noticeable is that for almost all baskets, the Arab average has fallen since 2019. Only the residential lower allowances baskets (0.5 GB, 1 GB and 0.5 GB short validity) increased, and these were generally relatively small increases. For the larger baskets, the decrease was much more dramatic, illustrating how providers are increasing data allowances within tariff offerings

Change in overall average		
2019-2020	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 2020 USD PPP	OECD average 2020 USD PPP	Arab average compared to OECD average
0.5 GB	19	13	37%
1 GB	21	15	41%
2 GB	24	17	42%
5 GB	33	21	59%
10 GB	44	25	74%
20 GB	63	35	80%
50 GB	103	83	24%
0.5 GB short validity	15	13	14%
1 GB short validity	18	14	22%

Business Mobile Broadband	Arab average 2020 USD PPP	OECD average 2020 USD PPP	Arab average compared to OECD average
0.5 GB	35	13	173%
1 GB	36	13	175%
2 GB	38	16	145%
5 GB	46	19	142%
10 GB	56	24	132%
20 GB	73	35	106%
50 GB	112	73	54%
0.5 GB short validity	33	13	159%
1 GB short validity	35	13	161%

Residential prices include VAT, business prices exclude VAT

SUMMARY OF MAIN FINDINGS FROM THE BENCHMARKING STUDY: LEASED LINES



- The table below shows a summary of the cheapest and most expensive countries for each basket. N/A indicates a limited number of countries where offers are available/published

	Cheapest			Most expensive		
	1st	2nd	3rd	1st	2nd	3rd
64 kb/s	Sudan	Tunisia	UAE	Mauritania	Oman	N/A
256 kb/s	Sudan	Tunisia	Oman	Mauritania	UAE	N/A
2 Mb/s	Lebanon	Kuwait	Sudan	Mauritania	UAE	Bahrain
34 Mb/s	Lebanon	Algeria	Bahrain	UAE	N/A	N/A
155 Mb/s	Lebanon	Algeria	Bahrain	Oman	UAE	N/A

- Leased line prices were not reported in 2019, but were re-introduced in 2020. As a result, the time series runs for an extra year, from 2015-2020. Prices have been generally stable over time with either no or only occasional changes to prices by operators.
- The average price changes for each basket between 2017/2018 and 2018/2020 are shown in the table below

	2017-2018	2018-2020
64 kb/s	6.4%	-6.6%
256 kb/s	11.7%	-3.5%
2 Mb/s	-13%	-6%
34 Mb/s	-29.0%	0.0%
155 Mb/s	-20.9%	-9.7%

		Arab average 2020 USD PPP	OECD average 2020 USD PPP	Arab average compared to OECD average
Leased Lines	64 Kb/s	482	N/A	
	256 kb/s	1081	N/A	
	2 Mb/s	2516	1948	29%
	34 Mb/s	16473	9327	77%
	155 Mb/s	27359	N/A	



APPENDIX



EXCHANGE RATES AND VAT

Exchange rates used:		World Bank CPLs		
Related to:	US\$	US\$ PPP	VAT %	2019
Algeria	0.00790	0.02365	19.0 %	0.334
Bahrain	2.63716	5.26379	5.0 %	0.501
Comoros	0.00241	0.00555	10.0 %	0.434
Djibouti	0.00563	0.00949	10.0 %	0.593
Egypt	0.06248	0.25296	14.0 %	0.247
Iraq	0.00084	0.00160	0.0 %	0.526
Jordan	1.41044	3.35819	16.0 %	0.420
Kuwait	3.26626	5.29378	0.0 %	0.617
Lebanon	0.00066	0.00130	11.0 %	0.508
Libya	0.71687	1.47504	0.0 %	0.486
Mauritania	0.00261	0.00842	16.0 %	0.310
Morocco	0.10664	0.26073	20.0 %	0.409
Oman	2.59051	4.86024	0.0 %	0.533
Palestine	0.28250	0.63482	16.0 %	0.445
Qatar	0.27457	0.40920	0.0 %	0.671
Saudi Arabia	0.26644	0.56330	15.0 %	0.473
Somalia	0.00166	0.00553	10.0 %	0.300
Sudan	0.01802	0.16841	35.0 %	0.107
Syria	0.00465	0.00756	0.0 %	0.615
Tunisia	0.36028	1.21716	19.0 %	0.296
UAE	0.27222	0.44120	5.0 %	0.617
Yemen	0.00399	0.00915	5.0 %	0.436

Exchange rates taken from the Oanda web service on the 1 August 2020

PPPs are based on World Bank CPL data in 2019 (latest available).

World Bank rates also used for OECD countries to provide more consistent comparison to Arab country results. Rates used shown.

World Bank CPLs	
OECD countries	2019
Australia	1.03
Austria	0.95
Belgium	0.97
Canada	0.96
Chile	0.64
Colombia	0.41
Czech Rep.	0.62
Denmark	1.19
Estonia	0.69
Finland	1.05
France	0.95
Germany	0.90
Greece	0.70
Hungary	0.52
Iceland	1.15
Ireland	1.10
Israel	1.19
Italy	0.86
Japan	1.04
Korea	0.80
Latvia	0.65
Lithuania	0.58
Luxembourg	1.09
Mexico	0.48
Netherlands	1.00
New Zealand	1.04
Norway	1.17
Poland	0.50
Portugal	0.73
Slovak Rep.	0.69
Slovenia	0.73
Spain	0.79
Sweden	1.03
Switzerland	1.38
Turkey	0.35
UK	1.00
USA	1



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 ration 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.