



Teligen

Telecommunications Price Benchmarking for Arab Countries 2009

Final Report from the AREGNET Price Benchmarking Study

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- The operators who have contributed with additional tariff information

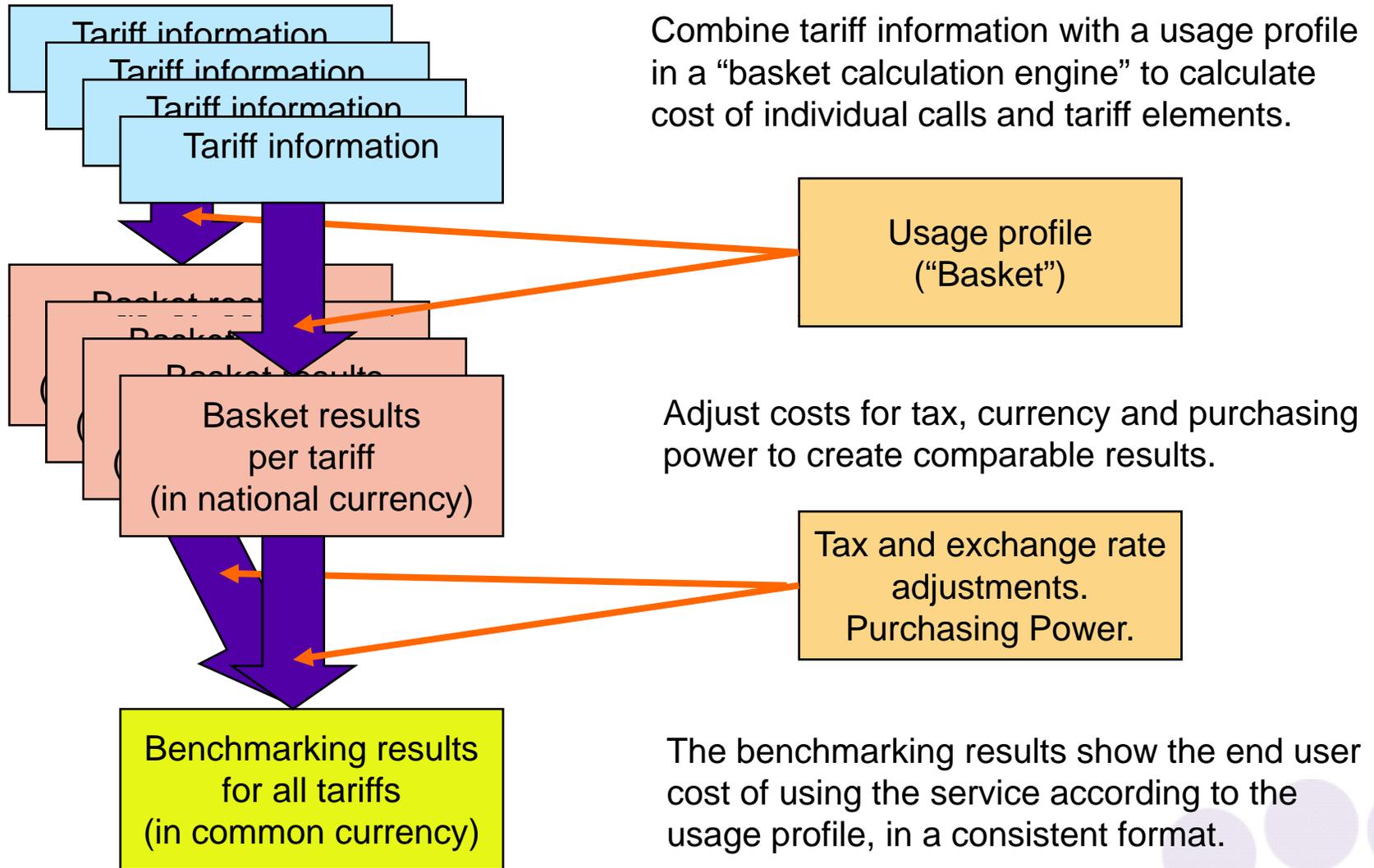
Contents of this report

• Background on this study and the basket concept	4
• Results from the PSTN basket	6
• Results from the Mobile basket	17
• Results from the Leased Line basket	24
• Results from the Broadband basket	33
• Results from the call price comparison	42
• Summary of findings	50
• Reference information and acronyms	51

The context

- The benchmarking study was originally initiated by TRA Bahrain in 2008. This update for 2009 was commissioned by TRA Bahrain on behalf of AREGNET.
- In increasingly competitive markets it is important for regulators to be able to track the evolution of prices and analyze the impact of price change 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. Data presented in this report is comparable with data from the 2008 report. However, please note that exchange rates are different.
- The benchmarking covers the following services:
 - Fixed voice (PSTN) (OECD basket equivalent)
 - Mobile telephony (OECD basket equivalent)
 - Leased Lines (OECD basket equivalent)
 - Broadband ADSL (Teligen basket)
 - Call cost for specific types of calls
- The methodologies for fixed and mobile telephony and leased lines are identical to the OECD Price Benchmarking baskets, with minor changes. A separate document explaining the methodology used in this study is available.
- The data was collected by Teligen from public sources on the Internet. Data has subsequently been passed to national regulators for comments.

The “Basket” method for price benchmarking



Fixed voice (PSTN) basket, as defined by the OECD

- Five different basket definitions:
 - Low usage, medium usage and high usage for residential users
 - SoHo usage (single user) and SME usage (30 users) for business
- The baskets define the volumes and the structure of usage
 - Volume and distribution of calls to different destinations
 - Distribution and duration of calls at different times of day

	Volumes	Call proportions			Call durations (minutes)		
	Total calls per month	Fixed line	Mobile	International	Fixed	Mobile	International
Residential Low	50	76.0%	19.0%	5.0%	3.7 - 7	1.8 - 2.1	5.5 - 7.2
Residential Medium	100	75.0%	23.0%	2.0%	3.7 - 7	1.8 - 2.1	5.5 - 7.2
Residential High	200	65.0%	31.0%	4.0%	3.7 - 7	1.8 - 2.1	5.5 - 7.2
Business Small	150	67.0%	29.0%	4.0%	1.9 - 3.1	1.6 - 1.7	2.9 - 3.9
Business SME	233	72.0%	20.0%	8.0%	1.9 - 3.1	1.6 - 1.7	2.9 - 3.9

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

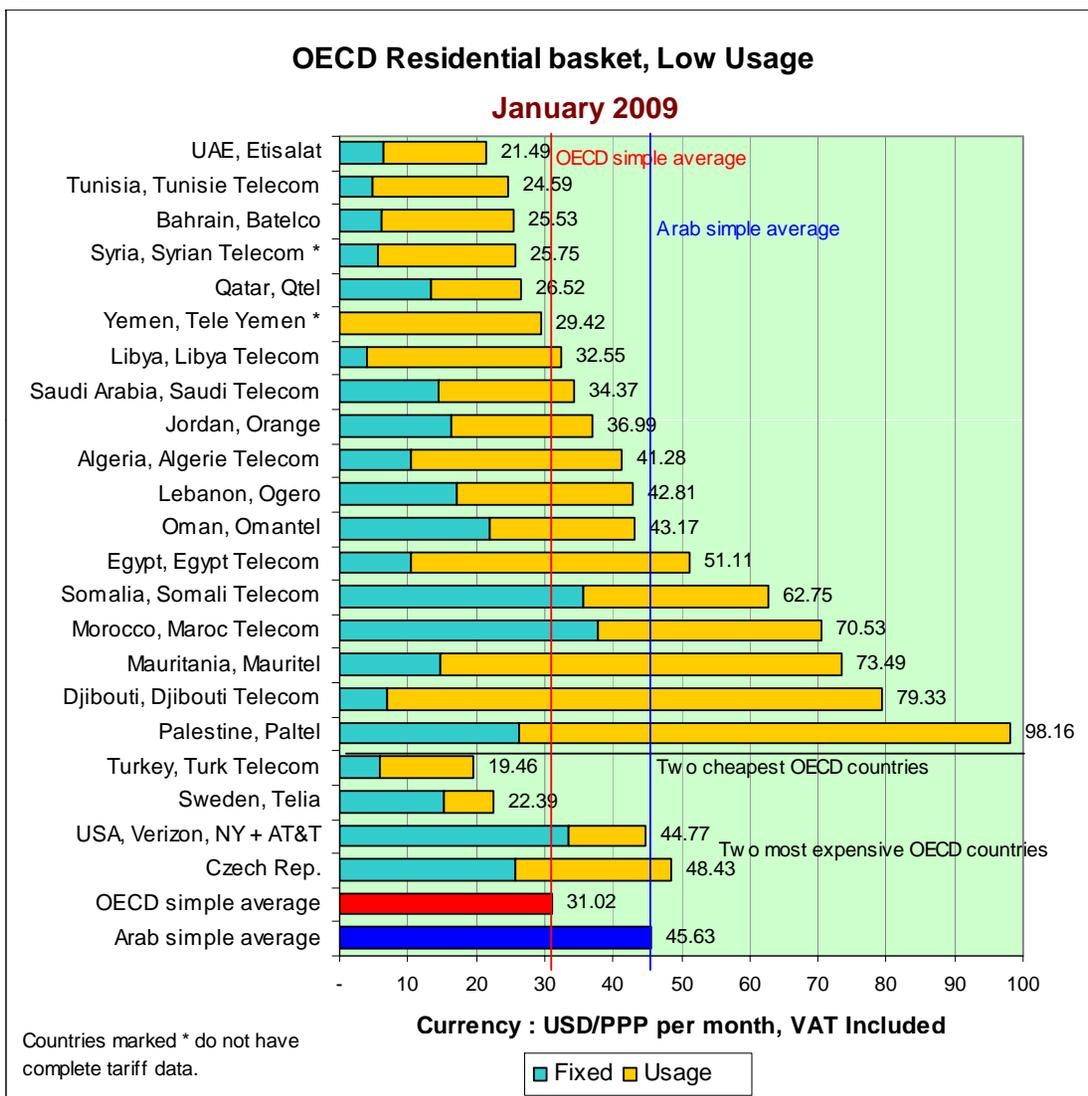


Fixed voice (PSTN) data issues

- Tariff data was researched from operator websites in the first weeks of January 2009.
 - Additional clarifications have been sought from operators and regulators.
 - Regulators have been offered the opportunity to comment on the tariff information, and on this report, prior to final publication.
- Due to lack of published data, and lack of feedback, no data is available for:
 - Comoros
 - Iraq
 - Kuwait
 - Sudan
- Part of data is missing for:
 - Syria (no prices for calls to mobile)
 - Yemen (no prices for national calls and fixed line)
- The analysis covers 37 tariffs from the incumbent operators in 18 countries



Low usage basket results



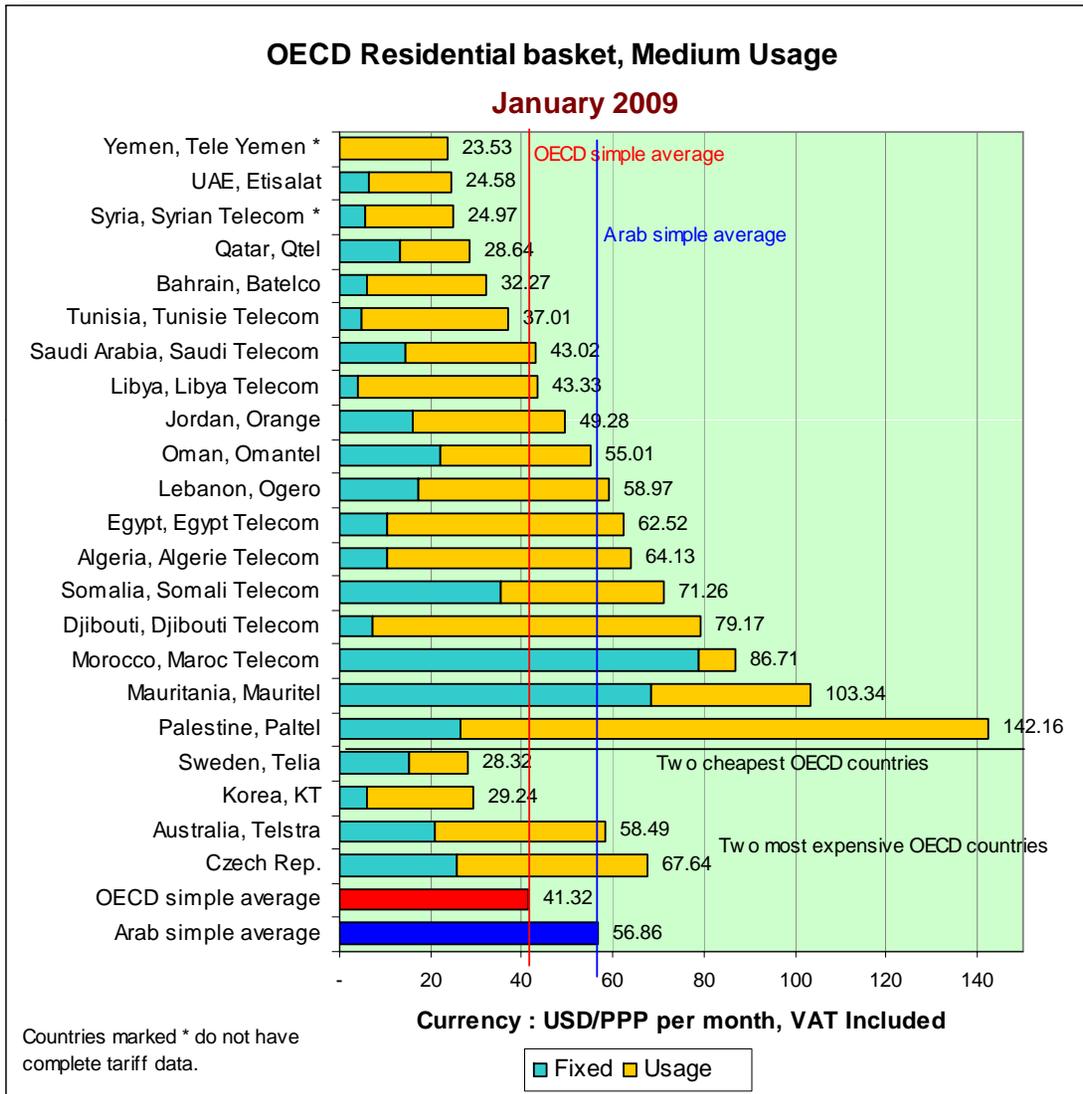
Most Arab countries have a low fixed cost, and “average to high” usage cost.

International calls are particularly expensive (see international basket). For Arab countries the international usage is 62% of the total usage, while for the OECD it is 31%.



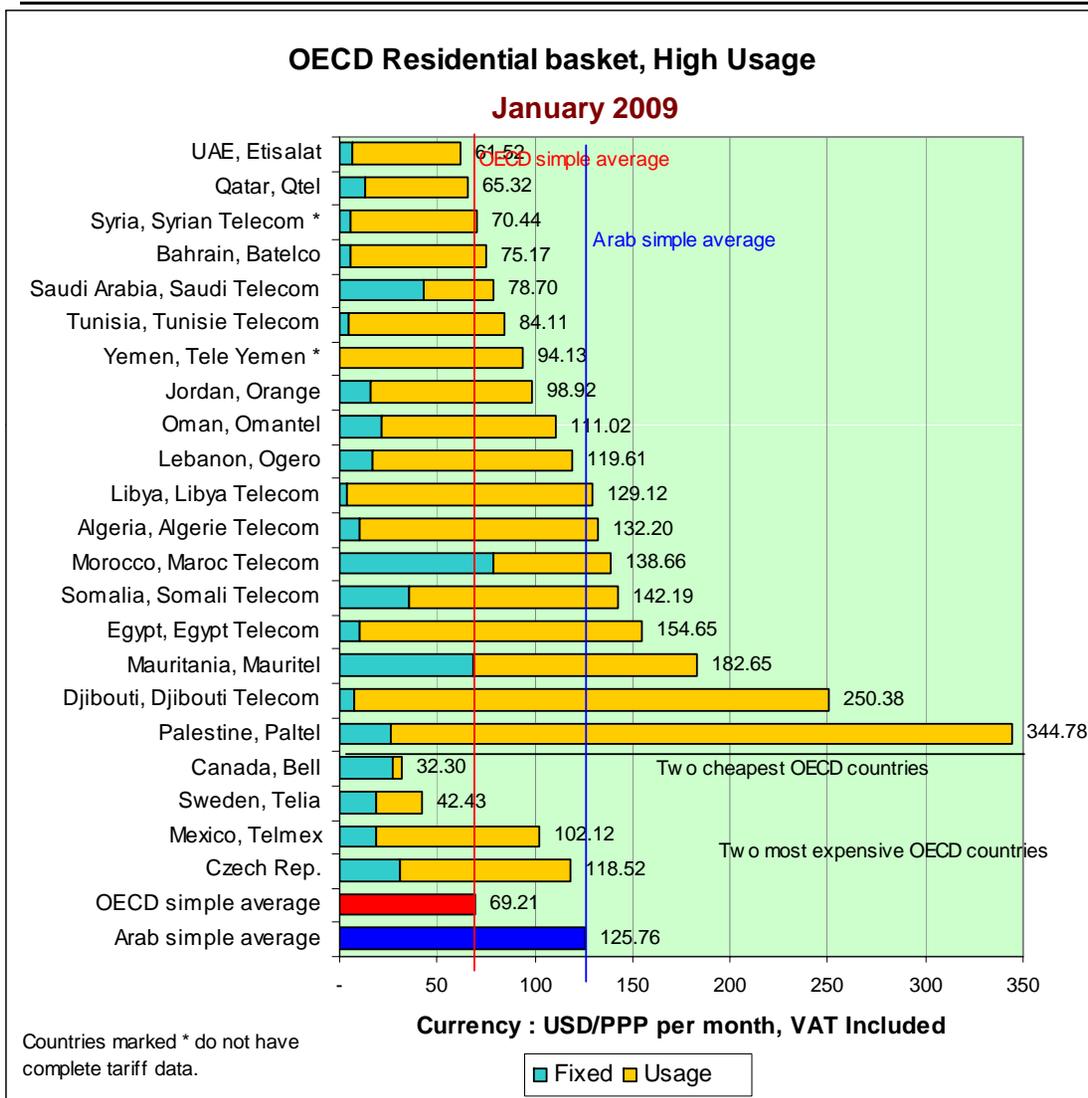
The “average” lines are indications of the averages across OECD countries and Arab countries covered in this study

Medium usage basket results



The “average” lines are indications of the averages across OECD countries and Arab countries covered in this study

High usage basket results



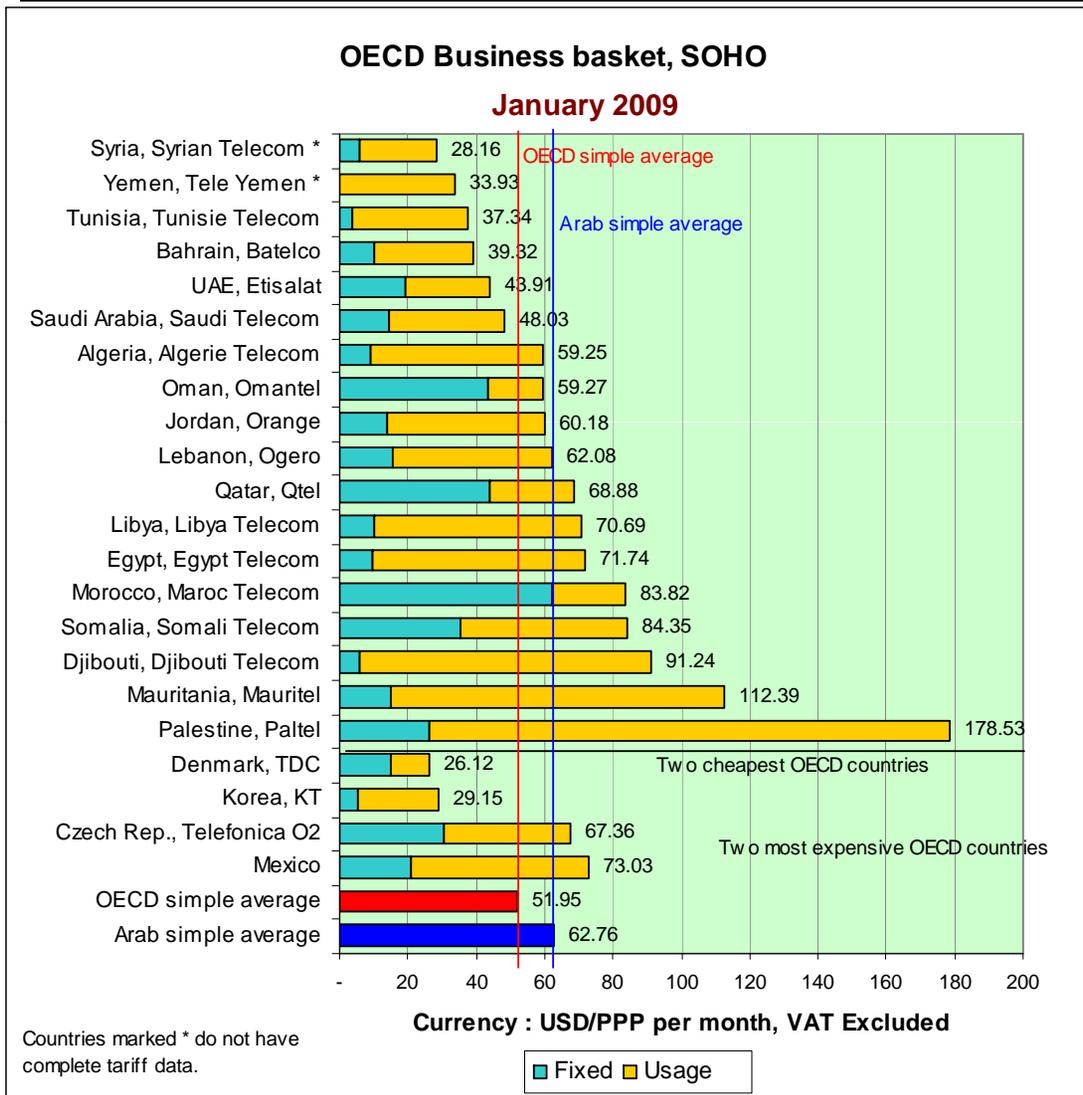
With high usage only three of the Arab countries can compare with the average OECD cost.

The low fixed cost will, combined with the relatively high usage cost, create a situation where competing operators may easily attract high volume users. Buying the low cost line from the incumbent operator, and cheaper calls from an indirect provider, may be a tempting alternative when usage is high. This may put the incumbent operator in a difficult position.



The “average” lines are indications of the averages across OECD countries and Arab countries covered in this study

SOHO basket results



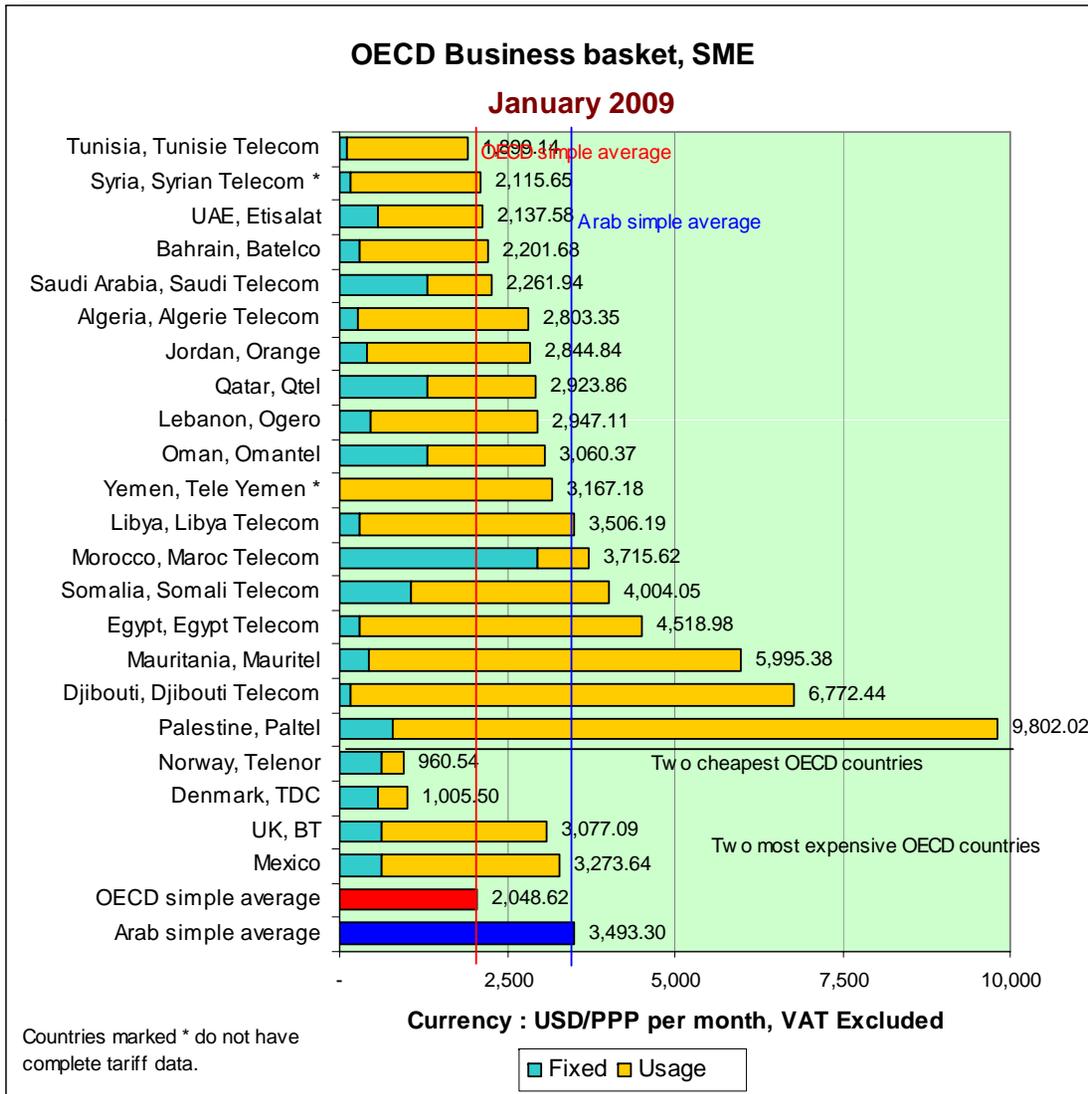
The profile of the “Small Office / Home Office” basket is largely similar to the Medium Residential basket. The main difference is higher overall usage and more international calls.

The difference between the Arab and the OECD averages is smaller for business services than for residential services.



The “average” lines are indications of the averages across OECD countries and Arab countries covered in this study

SME basket results



The SME basket covers 30 lines and 30 users. Usage per user is higher than with the SOHO basket.



The "average" lines are indications of the averages across OECD countries and Arab countries covered in this study

International call basket

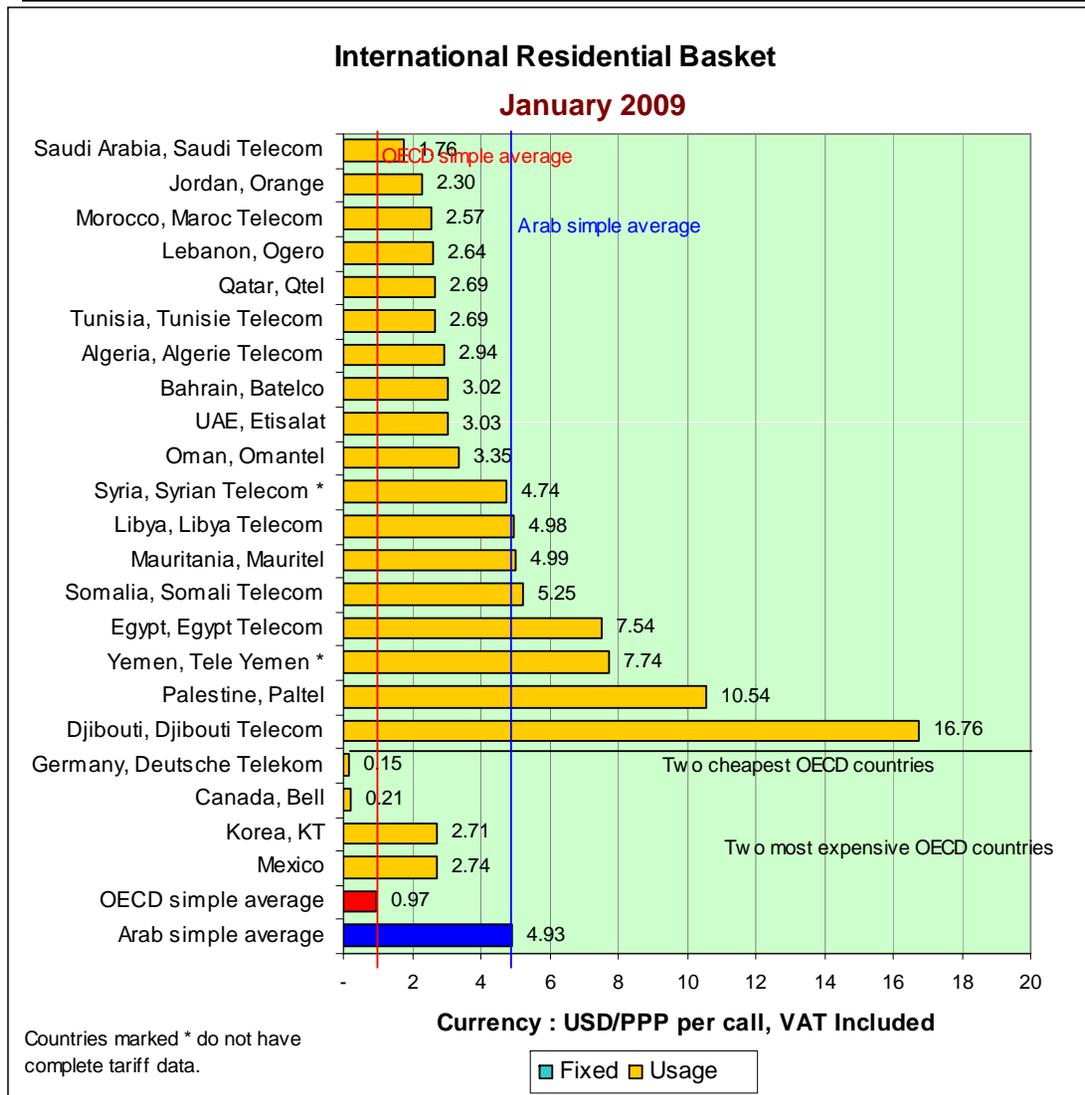
- The international basket gives the weighted average of the cost of **one call**, weighted by:
 - Destination: 22 Arab countries, 4 Western and 4 Eastern countries
 - Time of day: Residential basket with 25% peak time and 75% off-peak time
 - Duration: Peak calls of 3 minutes, off-peak calls of 5 minutes
- The destinations are weighted based on originating and destination countries:

From	To N. Africa	ME West	ME East	E. Africa	Europe	N. America	Asia
North Africa	30%	10%	10%	10%	20%	10%	10%
ME West	10%	35%	10%	5%	20%	15%	5%
ME East	10%	10%	35%	5%	5%	15%	20%
East Africa	10%	10%	20%	30%	10%	10%	10%

North Africa	Algeria	Libya	Mauritania	Morocco	Tunisia			
ME West	Jordan	Lebanon	Palestine	Syria				
ME East	Bahrain	Iraq	Kuwait	Oman	Qatar	Saudi	UAE	Yemen
East Africa	Comoros	Djibouti	Egypt	Somalia	Sudan			
Europe	France	UK	Spain					
N. America	USA							
Asia	India	Phillipines	Japan	Australia				



International call basket



International calls out of the Arab countries are 5 times as expensive as the OECD countries on average, and even the cheapest Arab country is 20 times more expensive than the “best in class” OECD country.

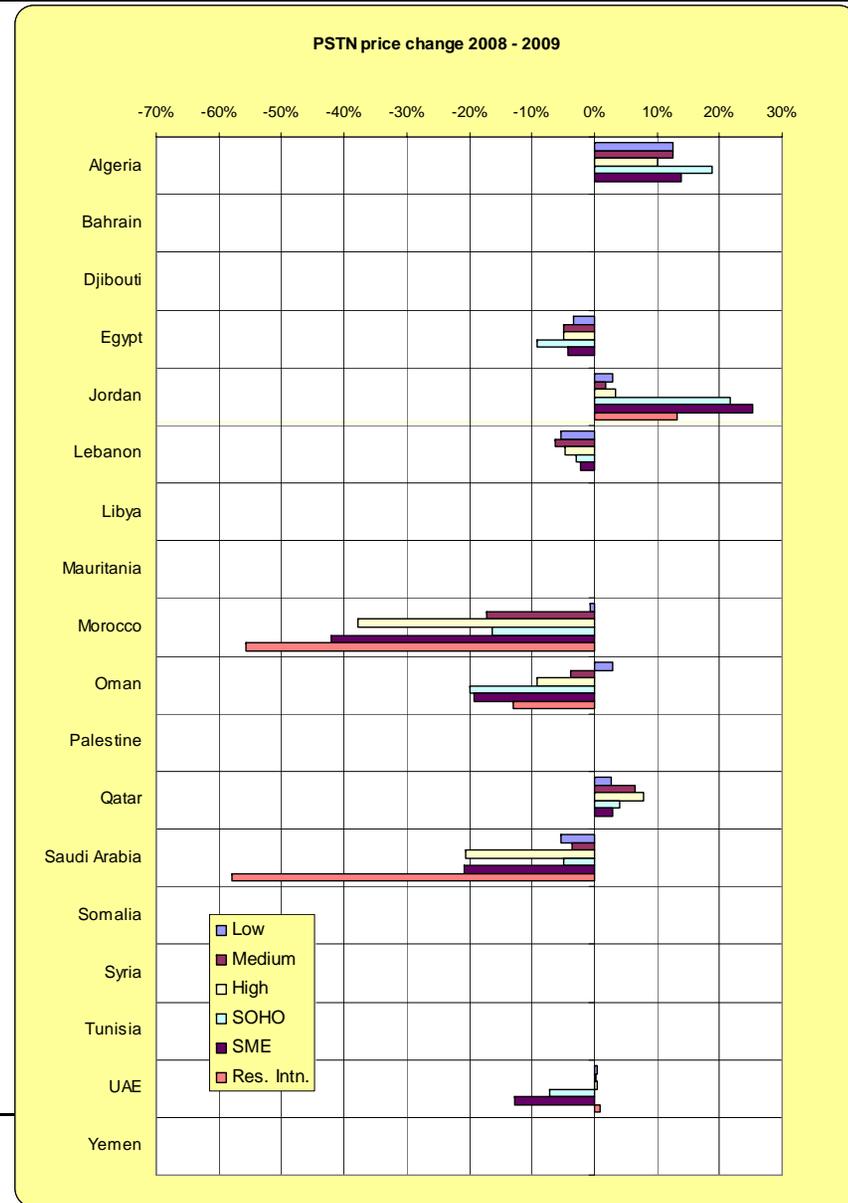


The “average” lines are indications of the averages across OECD countries and Arab countries covered in this study

Fixed voice basket results 2008 – 2009 (based on national currency)

- **Price changes 2008 - 2009:**
 - Algeria: Line rental change
 - Egypt: Significant changes with higher line rental, higher local call charges, and lower charges for calls to mobiles.
 - Jordan: No actual increase, 2009 data includes more international destinations and is thus a better reflection of the actual basket cost.
 - Lebanon: Lower installation charge, and off-peak call charge to fixed lines.
 - Morocco: New range of packages, higher line rental, simpler call charges to fixed, cheaper international calls.
 - Oman: New packages with higher line rental, long distance charges removed
 - Qatar: Increase in call charges to mobiles.
 - Saudi Arabia: Reduction in international call charges.
 - UAE: Minor change in residential international call charges, new business call charges.
 - Libya was not included in the 2008 data.
- The gap between the Arab average and the OECD average has widened over the last year for residential users, primarily because the prices in OECD countries have gone down more than in Arab countries

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



Observations from PSTN basket results

- The cheapest countries throughout are : (*)
 - UAE, Tunisia, Bahrain, Qatar, Saudi Arabia
 - The exact order of these may vary with usage level
 - This list is based on average ranking across all five baskets, residential and business
- Most of these countries have total costs below or just above the OECD average for all baskets
 - Generally the Arab countries in North Africa are more expensive than the Arab countries in the Middle East.
- The price range for the Arab countries (cheapest to most expensive) is wider than for the OECD countries
 - The cheapest OECD country is below the cheapest Arab country
 - The most expensive Arab country is significantly more expensive than the most expensive OECD country
- Most of the Arab countries 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.
- Even with significantly lower fixed cost the overall cost of using the service is higher in the Arab countries than in the OECD countries.
- There is a clear lack of rebalancing in most Arab countries, where the usage revenue covers a significant portion of the fixed line cost for the operators.
- International calls are significantly more expensive than in OECD countries



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

Mobile basket , as defined by the OECD

- Three different basket definitions:
 - Low usage, medium usage and high usage
 - The low usage results will include both pre- and post-paid tariff packages
- The baskets define the volumes and the structure of usage
 - Volume and distribution of calls to different destinations
 - Distribution of calls at different times of day

Calls / messages per month	Voice	SMS	MMS
Low usage	30	33	0.67
Medium usage	65	50	0.67
High usage	140	55	1.00

Destinations	Local	National	Mobile On-net	Mobile Off-net	Voice mail	SMS On-net	SMS Off-net
Low usage	15.00%	7.00%	48.00%	22.00%	8.00%	65.00%	35.00%
Medium usage	14.00%	7.00%	48.00%	24.00%	7.00%	65.00%	35.00%
High usage	13.00%	7.00%	47.00%	26.00%	7.00%	65.00%	35.00%

- Call durations are in the range of 1.4 to 1.9 minutes per call
- Tariffs from the two dominant operators in each country
 - Several tariff packages are covered for each operator
- Tariff information covers:
 - Fixed charges for connection and rental
 - Calls to fixed network, on-net and off-net mobile, and international calls to other AREGNET countries plus a few others (see international basket on earlier page)
 - Charges for SMS, MMS and voicemail calls
- The results show the lowest cost option for each operator
- The international calls are added to the OECD basket definition for this study.

ToD	Peak	Off-peak	Weekend
Low usage	48.00%	25.00%	27.00%
Medium usage	50.00%	24.00%	26.00%
High usage	60.00%	19.00%	21.00%



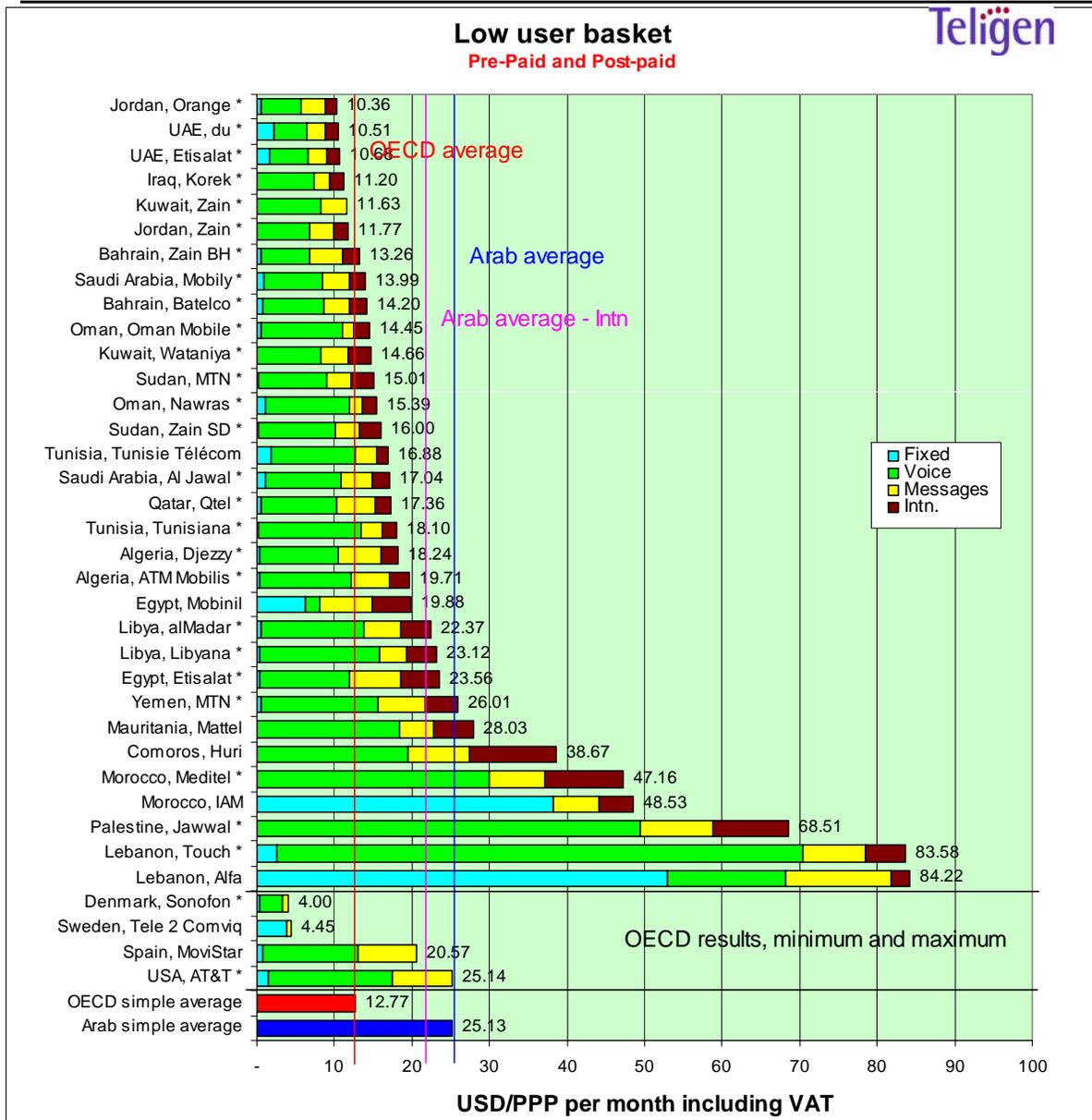
Mobile tariff data issues

- Tariff data was researched from operator websites in the first weeks of January 2009.
 - Additional clarifications have been sought from the operators and regulators.
 - Regulators have been offered the opportunity to comment on the tariff information and the draft version of this report.
- No tariff information available for:
 - Djibouti
 - Somalia
 - Syria
 - One operator only for Comoros, Palestine, Qatar(*) and Mauritania
- Part of tariff information missing for:
 - Iraq (International call prices for AsiaCell)
 - Kuwait (international call prices for Zain)
- Otherwise two operators are covered for each country
- A total of 248 tariff packages covered for 32 operators in 19 countries

* There is only one active operator in Qatar.



Low usage mobile basket results



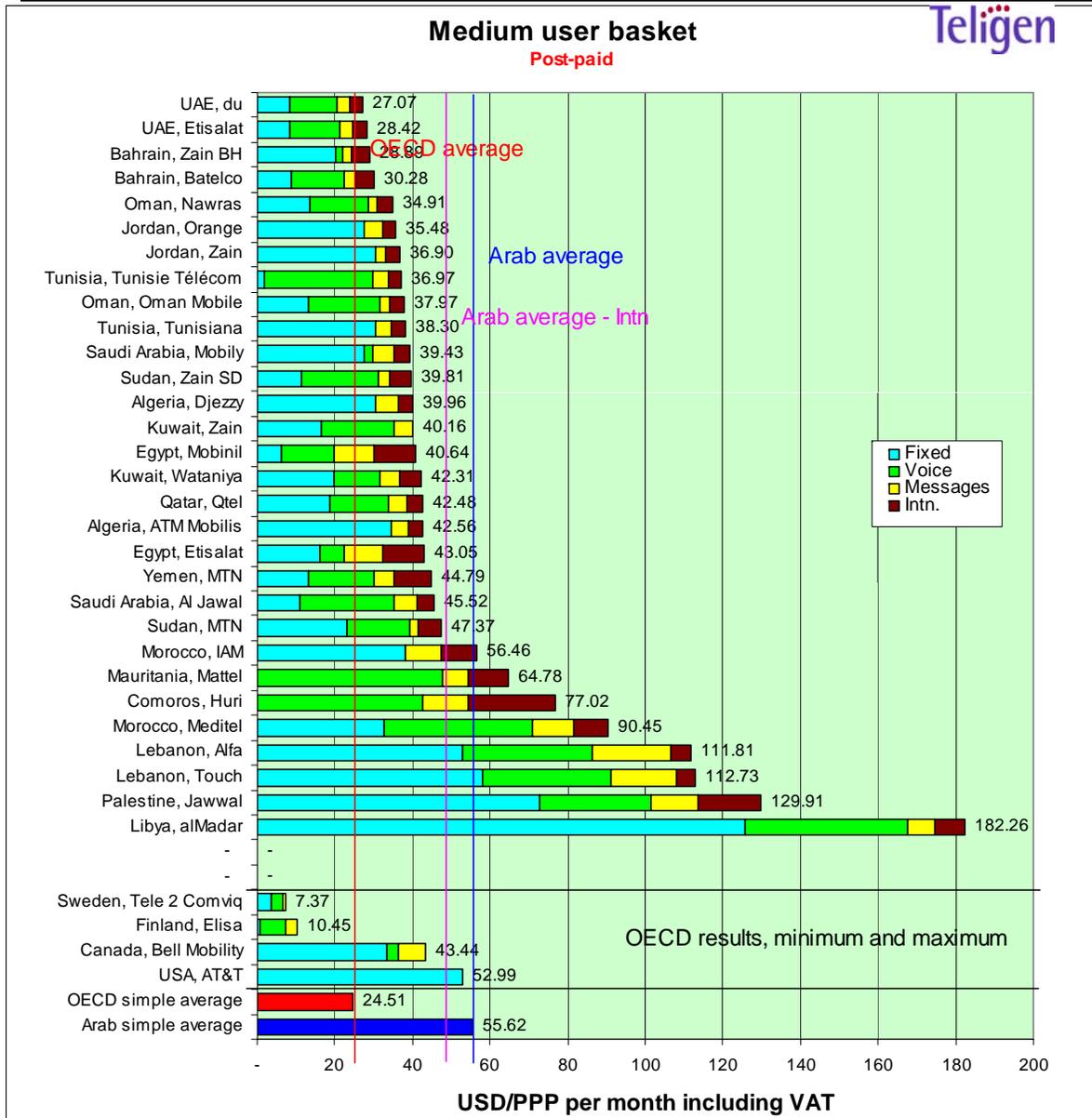
For the Low usage basket both pre- and post-paid tariffs are included. The cheapest option is selected regardless of tariff type.

Most of the tariffs shown in this graph are pre-paid (marked with an *).

The OECD results do not include International calls as these are not part of the OECD basket definitions. The “Arab average – Intn” line shows the equivalent average based on the Arab basket results



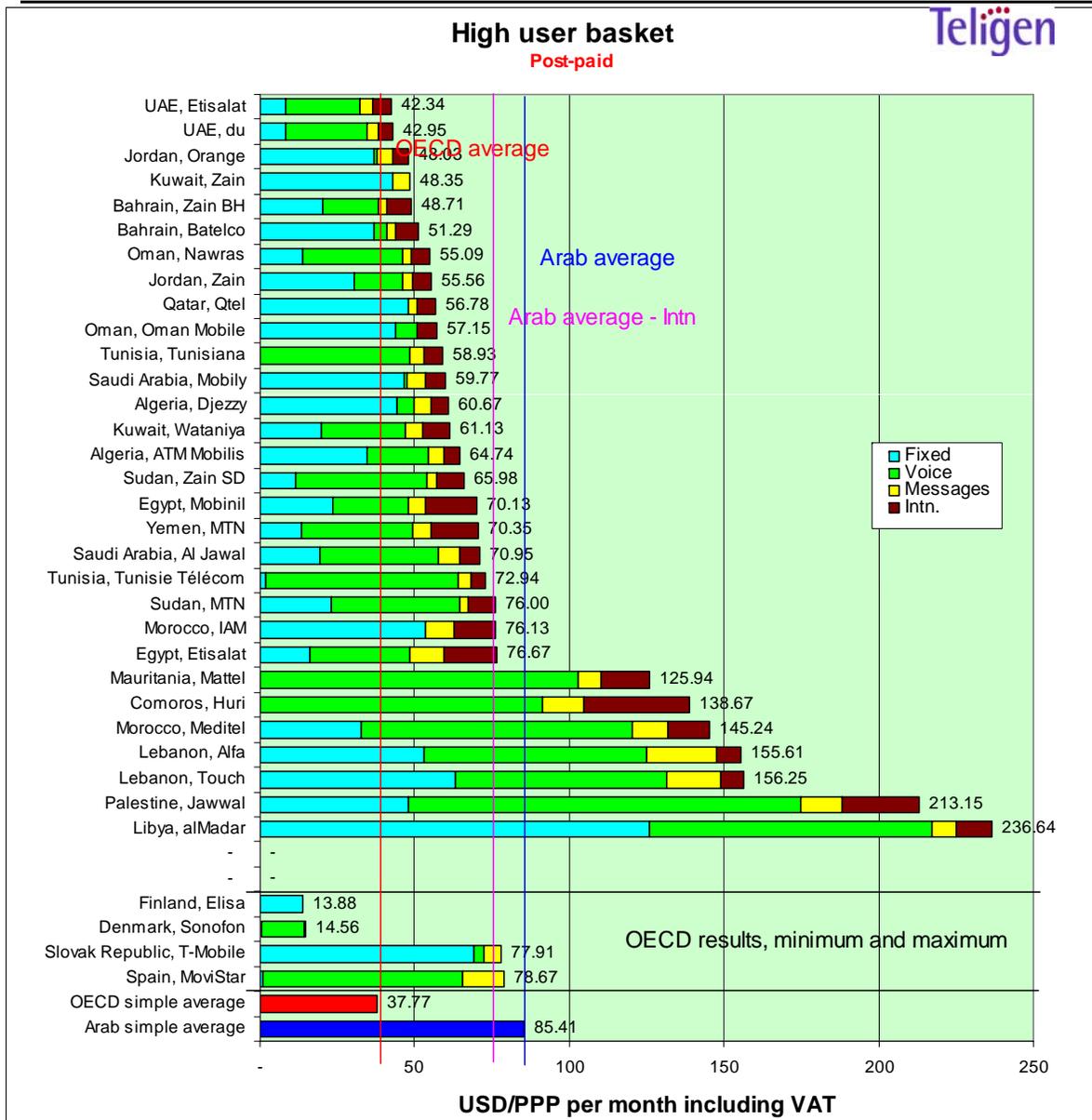
Medium usage mobile basket results



The OECD results do not include International calls as these are not part of the OECD basket definitions. The "Arab average – Intrn" line shows the equivalent average based on the Arab basket results



High usage mobile basket results

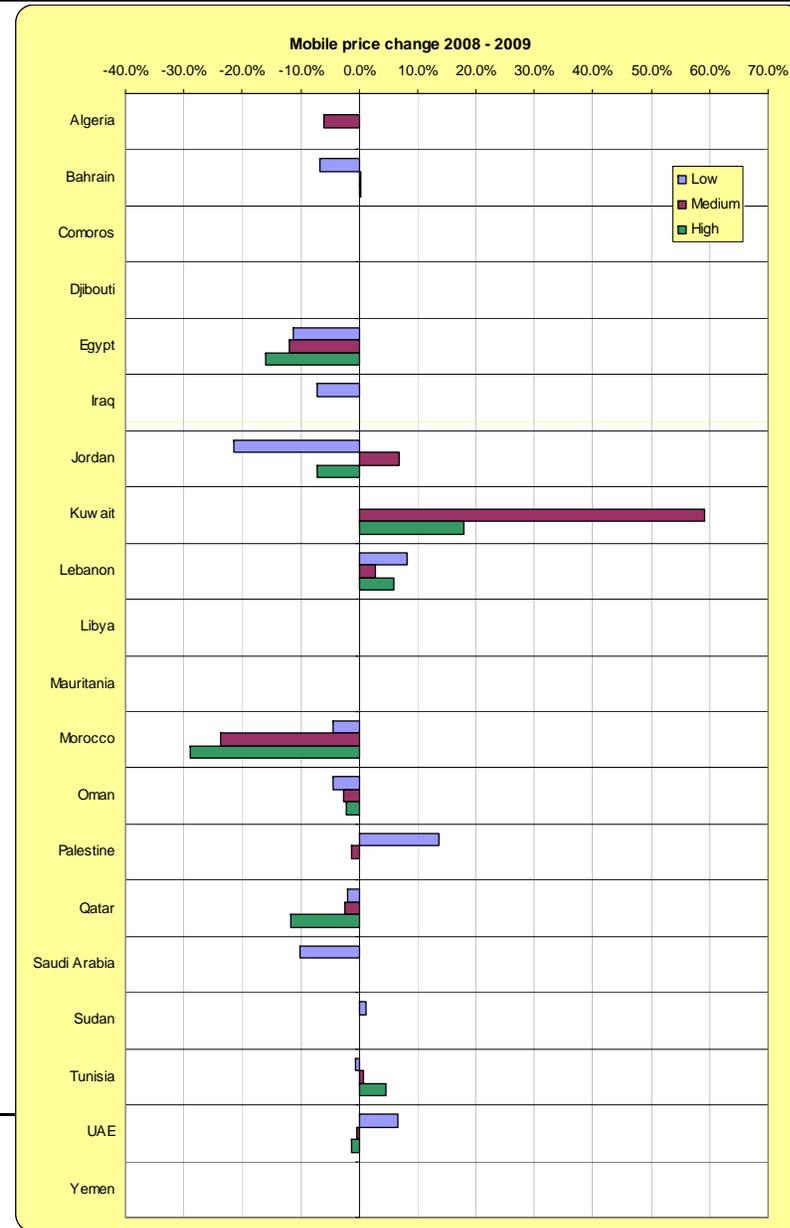


The OECD results do not include International calls as these are not part of the OECD basket definitions. The "Arab average – Intn" line shows the equivalent average based on the Arab basket results



Mobile basket results 2008 – 2009 (based on national currency)

- Changes affecting the mobile basket results:
 - Algeria: Many new tariffs
 - Bahrain: change in some per-paid tariffs elements
 - Egypt: Price reductions
 - Iraq: International call charges reduced
 - Jordan: Price reductions and changes in tariffs offered
 - Kuwait: Changes in tariffs offered
 - Lebanon: Changes in tariffs offered
 - Morocco: Price reductions
 - Oman: Price reductions and new tariffs
 - Palestine: Price structure changes
 - Qatar: Price reductions and new tariffs
 - Saudi Arabia: New tariffs
 - Tunisia: New tariffs
 - UAE: Pre-paid price structure change
- In other countries the changes have been minimal.
- The Arab average has not changed much over the last year, while the OECD average has had a clear decrease.



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



Observations from Mobile basket results

- The cheapest countries throughout are :
 - UAE, Jordan, Bahrain, Oman, Kuwait
 - The exact order of these may vary with usage level
 - Only UAE is among the top 5 for all baskets
 - These are largely the same countries that have the best PSTN results
- For low usage, with pre-paid packages, only a handful of the Arab countries have price levels below the OECD average
- For medium to high usage, with post-paid packages, most Arab countries are above the OECD average
- The average across Arab countries is 80-100% above the OECD average.

- Except for the five-six most expensive countries, the Arab countries have rather uniform price levels for mobile services.
- Many operators have very few tariff packages on offer, i.e. do not make any great attempts to capture customers with tailored prices.



Leased Lines basket, as defined by the OECD

- Prices for 64kb/s, 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**:

Distance (km)	2	20	50	100	200	500
Weight	35%	20%	15%	20%	5%	5%

- The 3 bitrates are calculated and reported separately.
- Where the distances in the basket would go beyond the country borders, the weights of those distances will be attributed to the longest available tariff zone.
 - For example: In Bahrain a 64 kb/s circuit costs BD 140 regardless of distance. The longest possible circuit distance in Bahrain is approximately 50 km. But the weights for 100 km (20%), 200 km (5%) and 500 km (5%) 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 two more bitrates are added:
 - 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.
 - To the extent they are offered in the countries concerned.

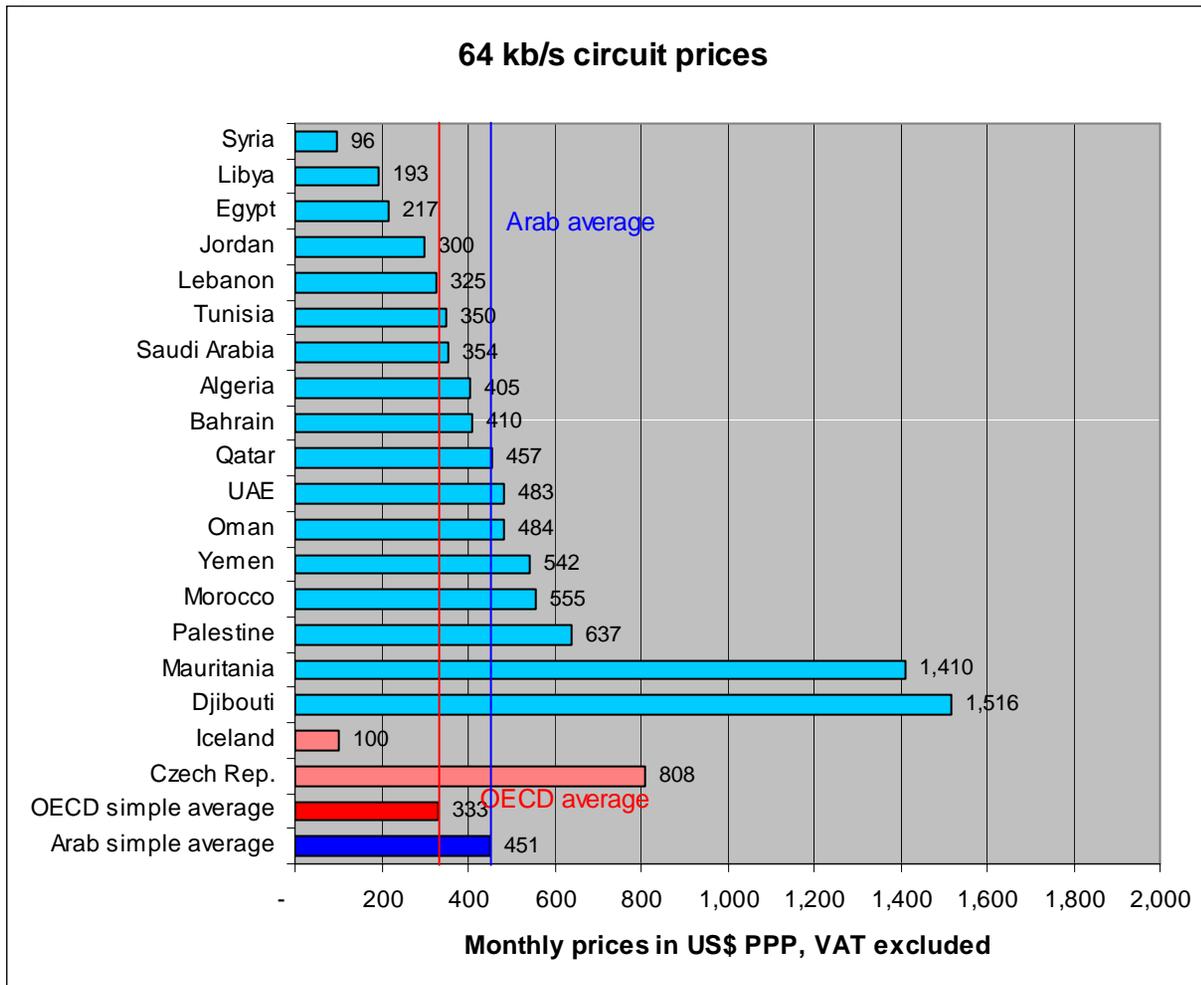


Leased Lines data issues

- Tariff data was researched from operator websites in the first weeks of January 2009.
 - Additional clarifications have been sought from the operators and regulators.
 - Regulators have been offered the opportunity to comment on the tariff information and on the draft report.
- No price data available for:
 - Comoros
 - Iraq
 - Kuwait
 - Somalia
 - Sudan
- Other countries may have data missing for specific bitrates



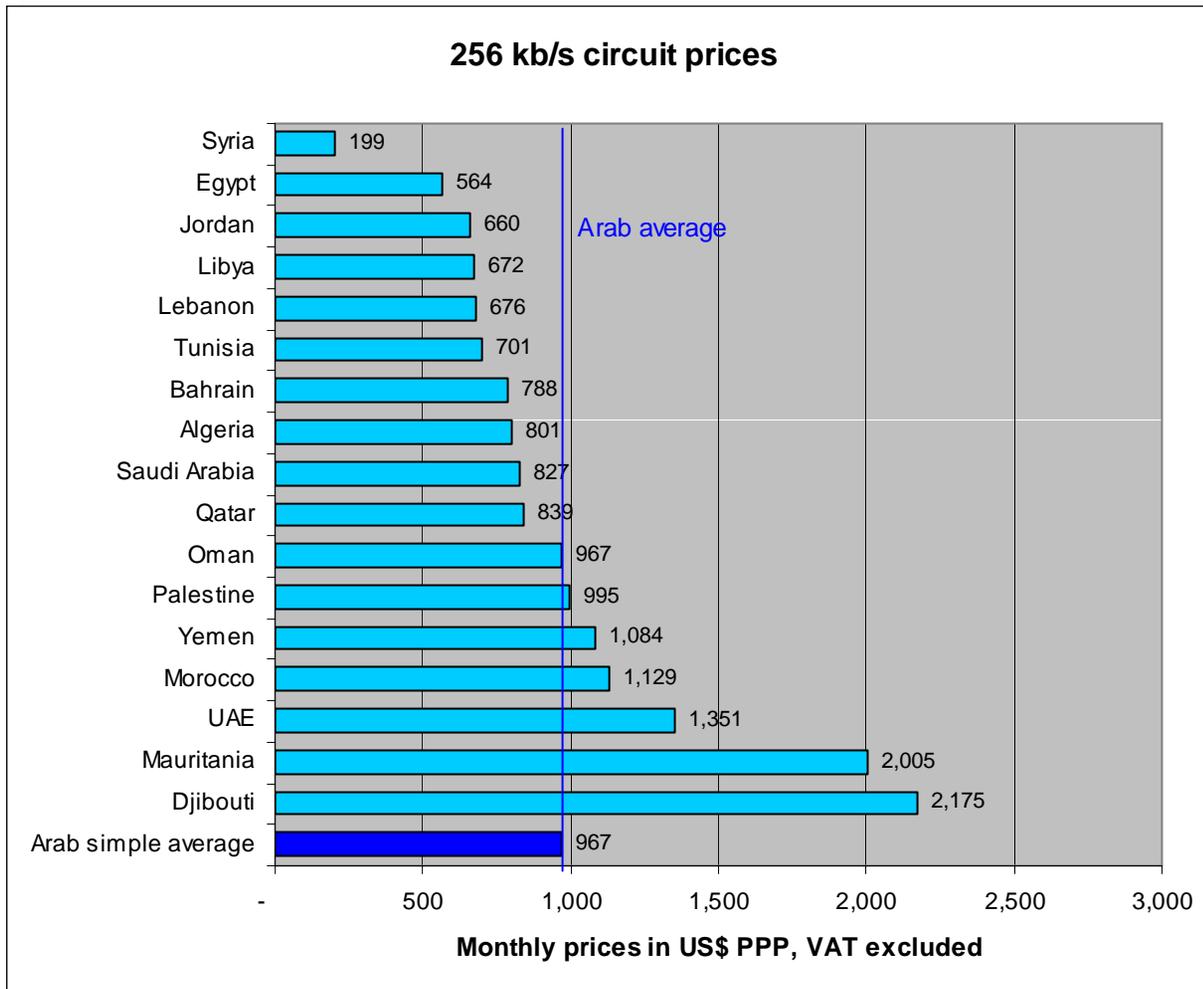
64 kb/s Leased Lines basket results



The OECD data shown represent the lowest and highest prices found in OECD countries, and the average across all 30 OECD countries.



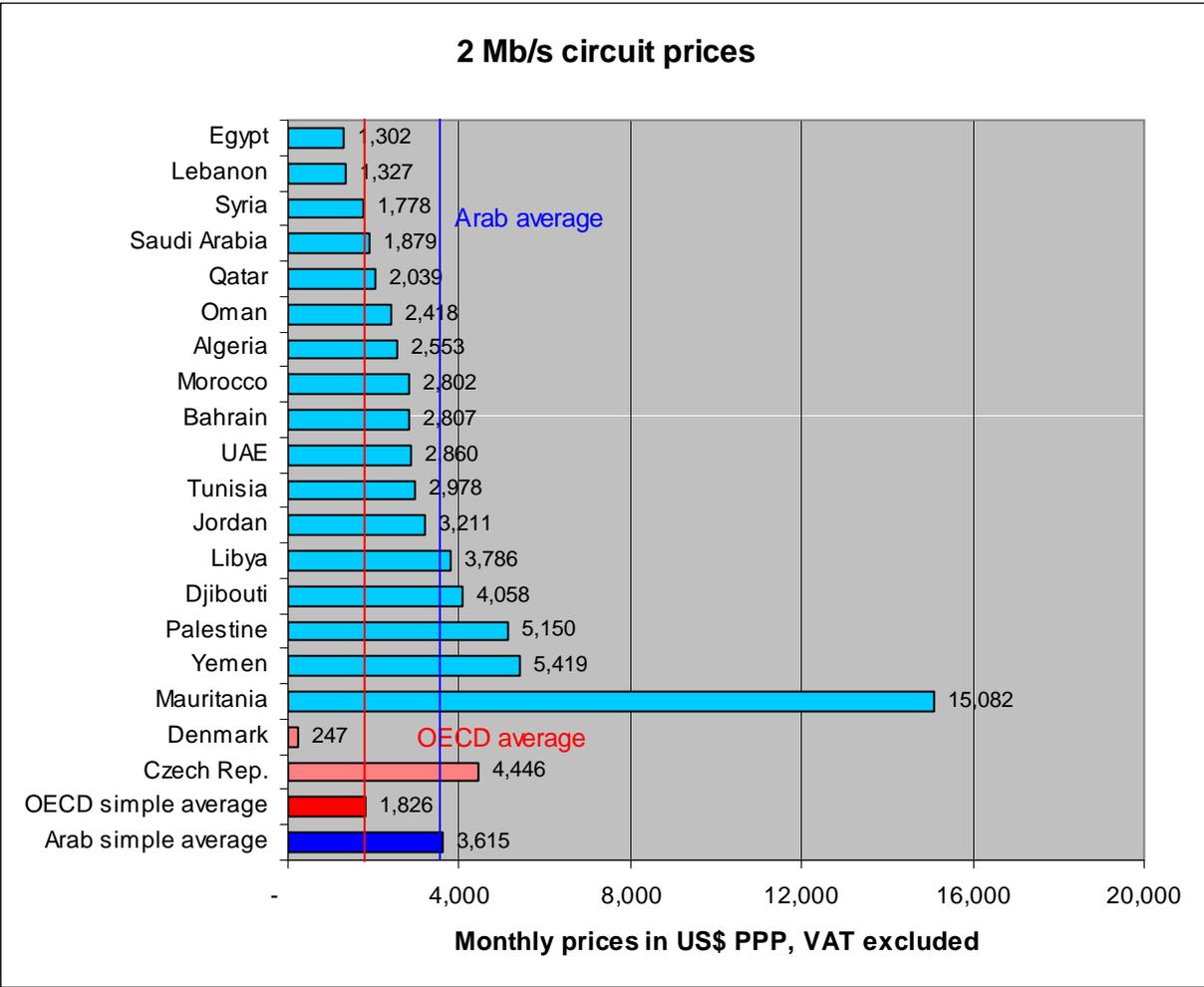
256kb/s Leased Lines basket results



Note: No equivalent OECD data exist.



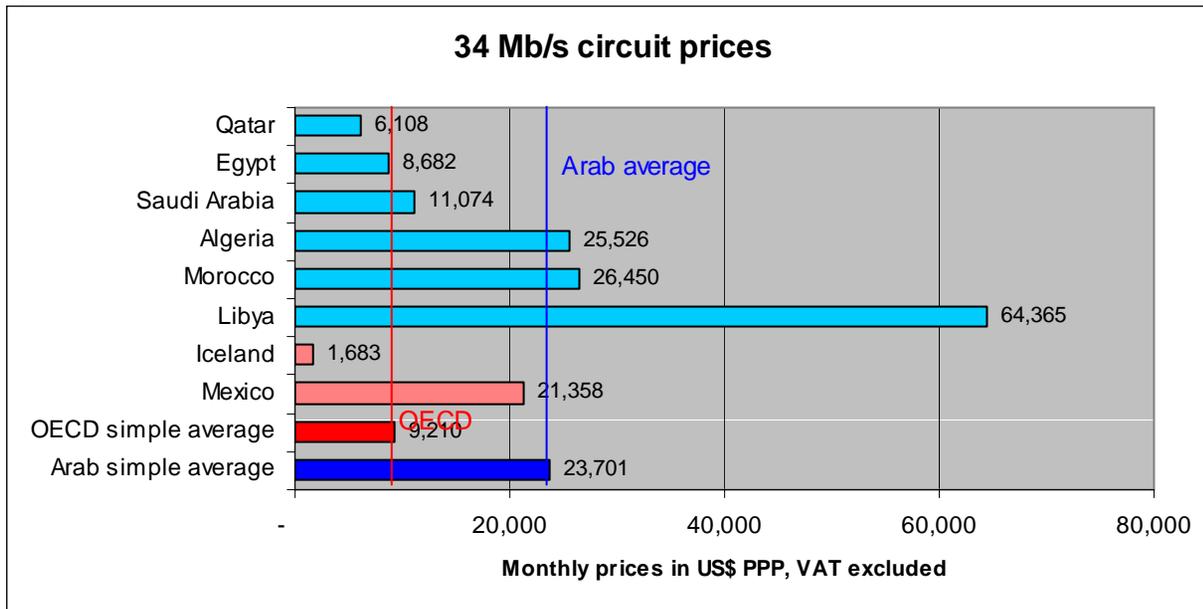
2 Mb/s Leased Lines basket results



The OECD data shown represent the lowest and highest prices found in OECD countries, and the average across all 30 OECD countries.



34 Mb/s Leased Lines basket results

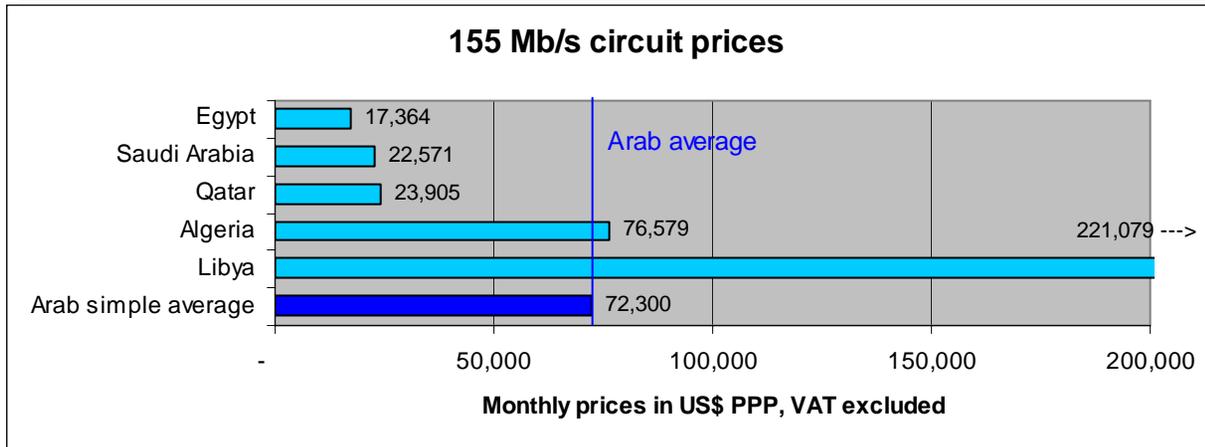


Only a few of the Arab countries publish these prices. The service may still be offered though.

The OECD data shown represent the lowest and highest prices found in OECD countries, and the average across all 30 OECD countries.



155 Mb/s Leased Lines basket results



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

Note: No equivalent OECD data exist.



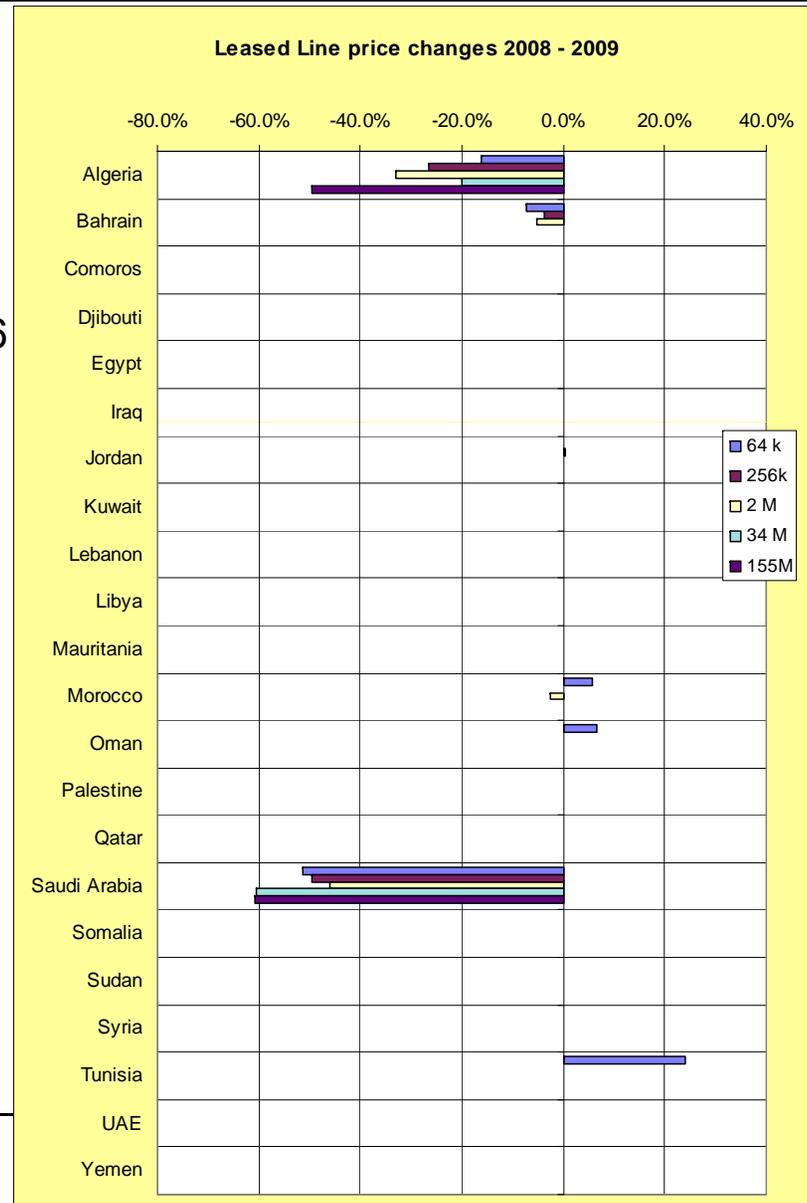
Leased Line basket results 2008 – 2009 (based on national currency)

- The basket results are affected by:
 - Algeria: General price reductions.
 - Bahrain: No price reduction (2009 data based on 1 year contract tariff, 2008 was based on open term contract tariffs).
 - Jordan: Slight price increase for 256 kb/s, long distances.
 - Morocco: Slight price increase for 64 kb/s.
 - Oman: Slight price increase for 64 kb/s, below 100 km.
 - Saudi Arabia: Price reductions for circuits below 100 km
 - Tunisia: Price increase for 64 kb/s, all distances

• No price changes recorded in other countries.

• The Arab average is closing in on the OECD average for low speeds (<= 2 Mb/s):

		64 k	2 M	34 M
Arab/OECD average	2009	136%	198%	257%
	2008	198%	251%	252%



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

Observations from Leased Line basket results

- Egypt, Jordan, Lebanon, Qatar, Saudi Arabia and Syria have the lowest prices for National Leased Lines.
 - Price levels in these countries are below or close to the OECD average
 - The price ranking may vary with product
- The majority of the Arab countries have prices below the most expensive OECD country
 - For 64 kb/s the prices in Djibouti and Mauritania stands out as very high.
 - For 2 Mb/s the prices in Mauritania stands out as very high.
 - For 34 Mb/s and 155 Mb/s the prices in Libya appear on the high side
- For speeds up to 2 Mb/s the Arab average is in line with the OECD average.
 - For higher speeds the prices in Arab countries appear higher than in the OECD countries
- However, most Arab countries are more expensive than the OECD “best-in-class”.
- 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 shown here.



Broadband basket methodology

- Research covering 148 ADSL service offerings from the incumbent ISP* in 18 Arab countries
- Costs are presented for low speed (< 1 Mb/s) and medium speed (1-4 Mb/s) services separately.
 - Low speed does not include 1024 kb/s offers
 - Not all providers may offer services in both categories
 - Not all providers may publish tariffs for both residential and business services
- Total monthly cost calculated based on two usage profiles:
 - Low usage: 1 GB and 10 hours per month, in 20 minute sessions.
 - High usage: 5 GB and 30 hours per month, in 30 minute sessions.
- Only “actual price” results are shown in this report.
 - “Actual price” refers to the monthly cost paid by the customer, as opposed to the “Normalised” price per 1 Mb/s that can also be produced by the benchmarking system
- The European data shown refer to the incumbent ISP* ADSL services in 30 European countries
- Tariff data cover the cheapest form of installation, modem cost (if applicable), monthly rental, usage allowances and any usage charges.
- Additional information on speed, web-space, email addresses, penalties with excess usage, and contract term duration is also included in the basic data and presented along with the cost results.
 - To the extent this information is published by the provider
 - Please also see the document on “AREGNET Price Benchmarking Methodology



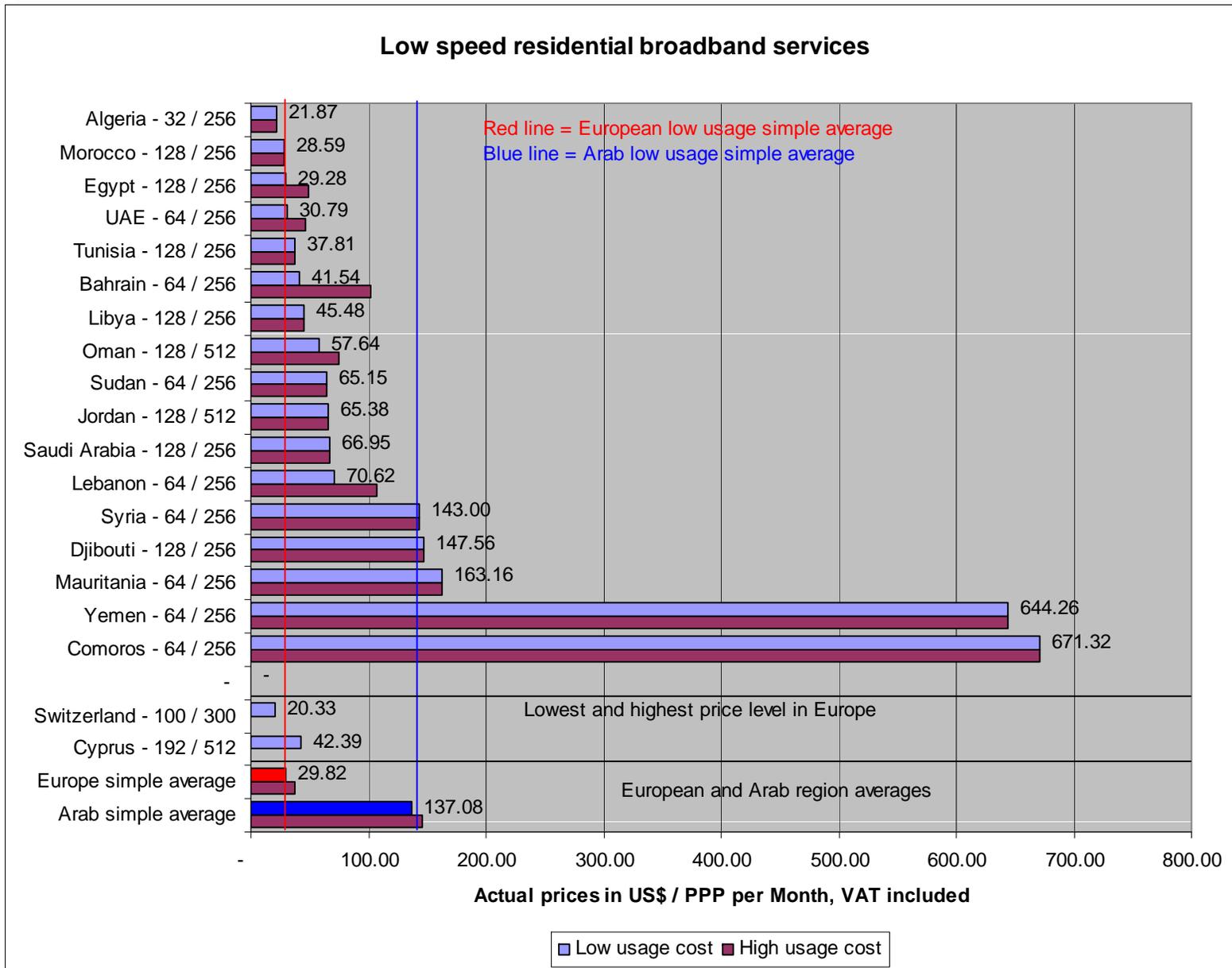
* Incumbent ISP will normally mean the ISP owned by the incumbent operator in the country.

Broadband data issues

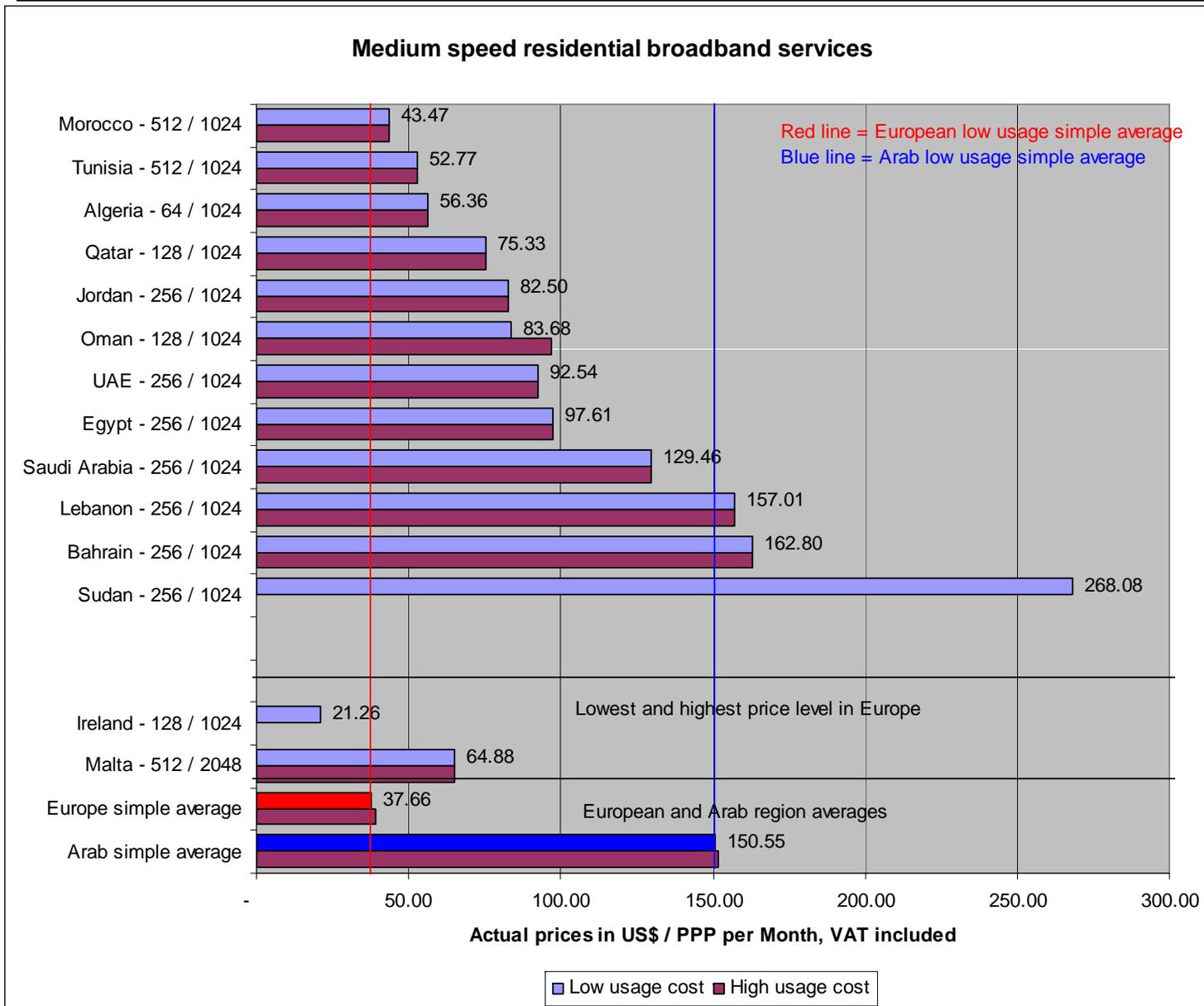
- Price data not available for broadband services in:
 - Iraq
 - Kuwait
 - Palestine
 - Somalia
- Speed assumptions for upload speed had to be made for:
 - Saudi Arabia
- Regulators have been offered the opportunity to comment on the tariff information and the draft report.
- Most providers in the Arab countries offer speeds down towards 128 kb/s. The highest speed from many providers is 2 Mb/s or below.
 - The results shown focus on speeds from 256 kb/s and upwards. This corresponds with the general definition of broadband.



Residential low speed broadband (below 1 Mb/s)

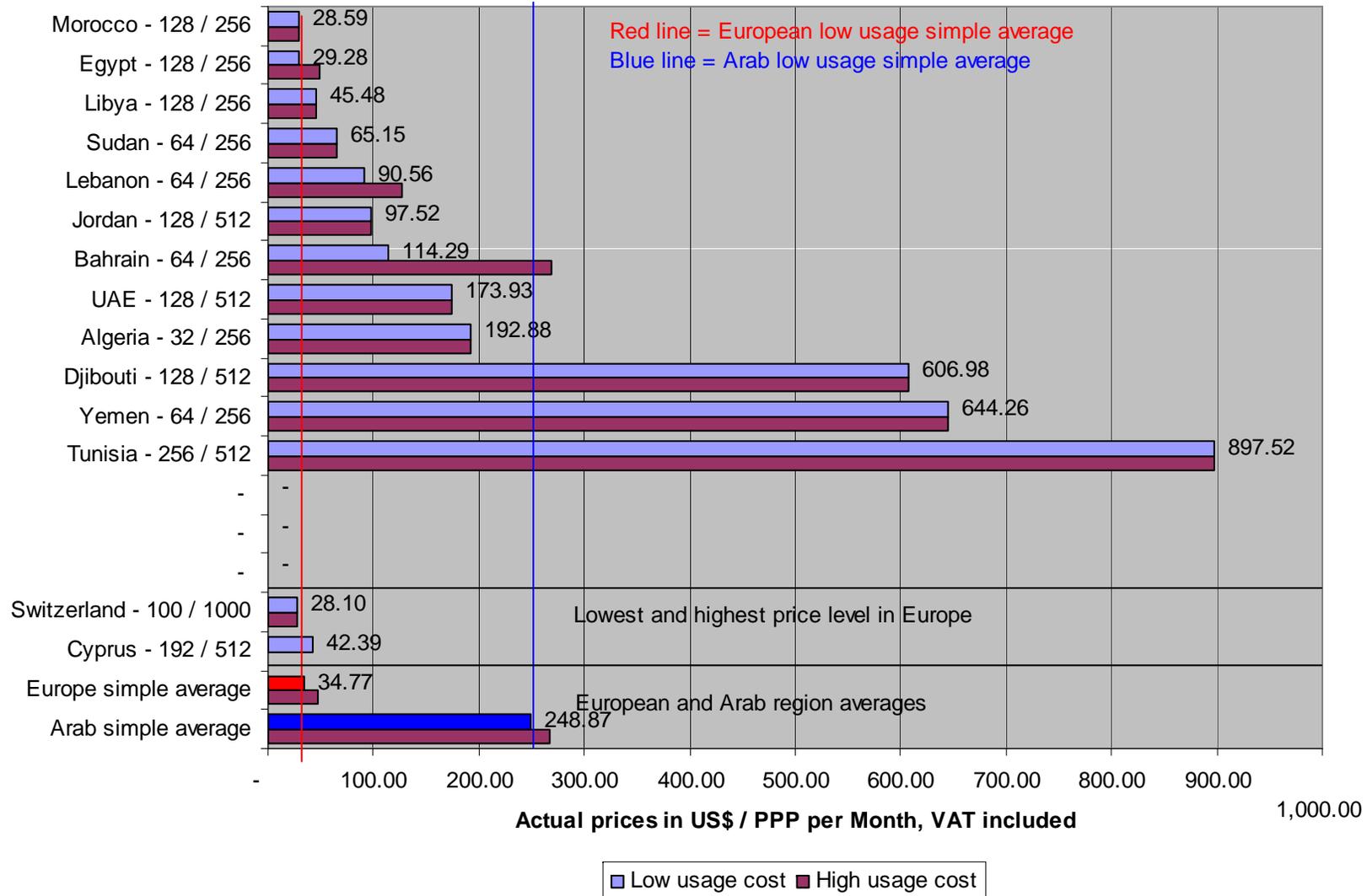


Residential medium speed broadband (1 – 4 Mb/s)

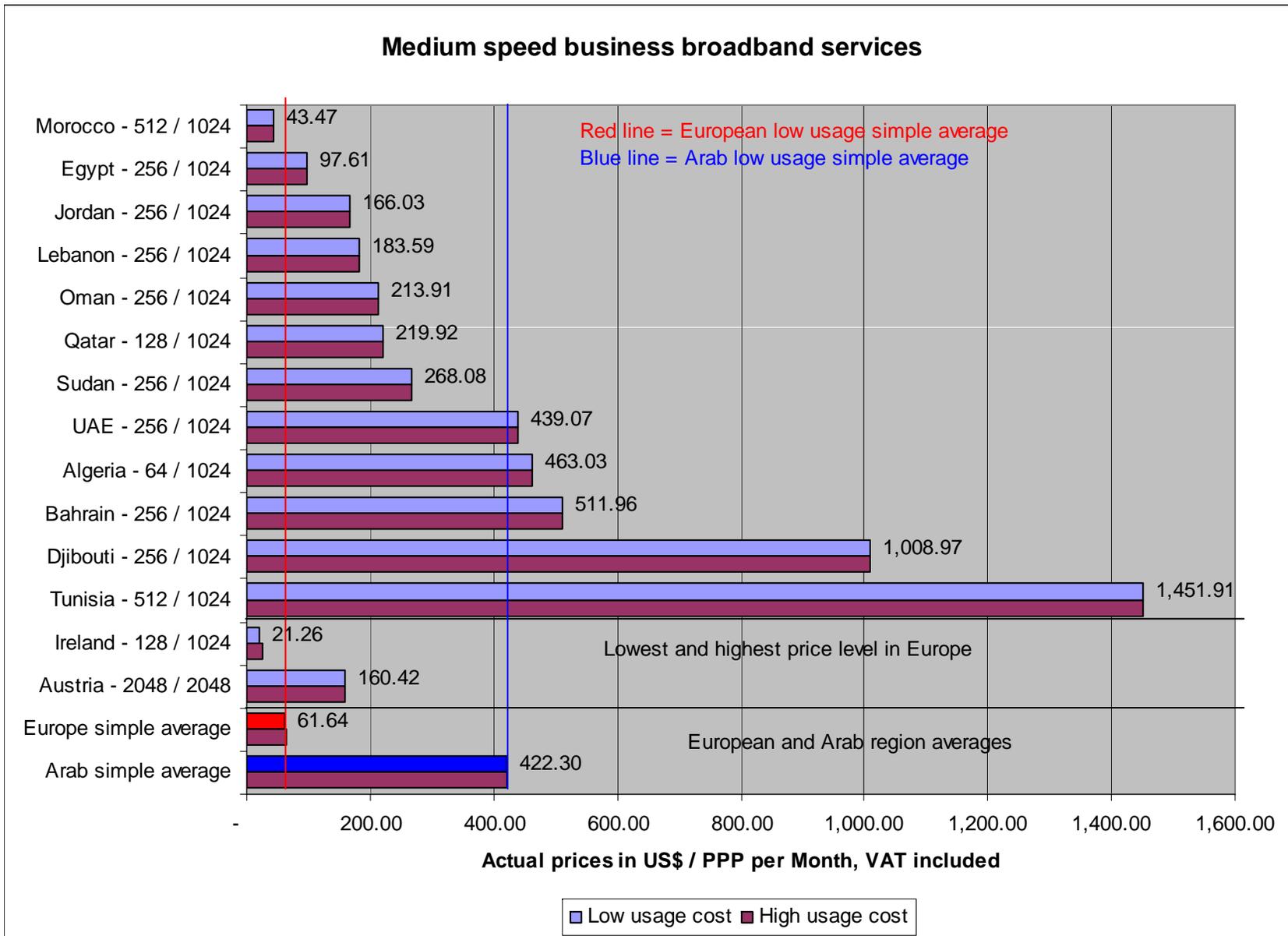


Business low speed broadband (below 1 Mb/s)

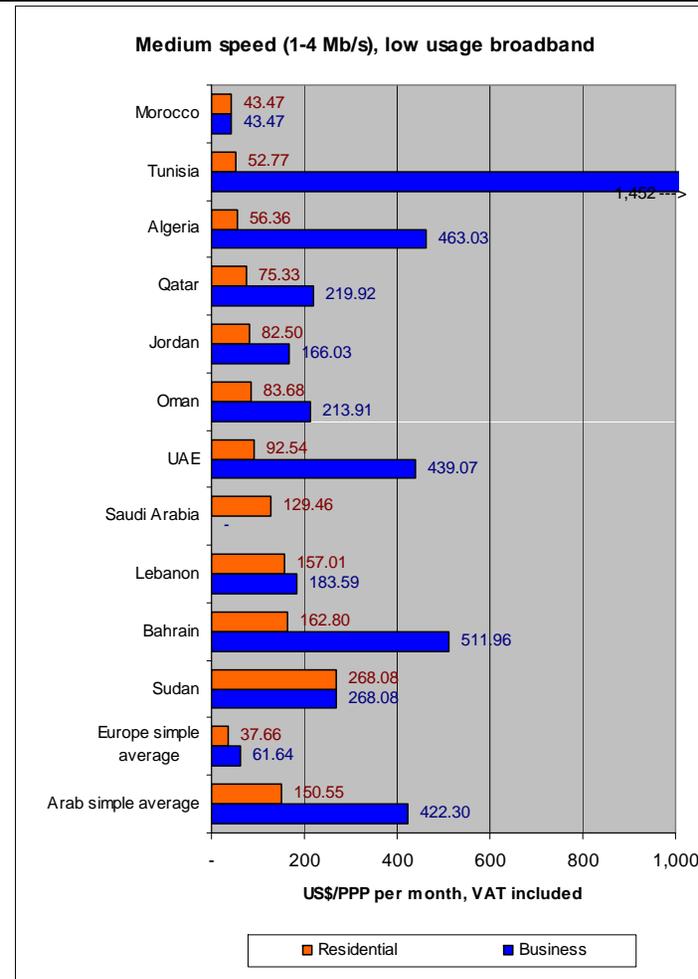
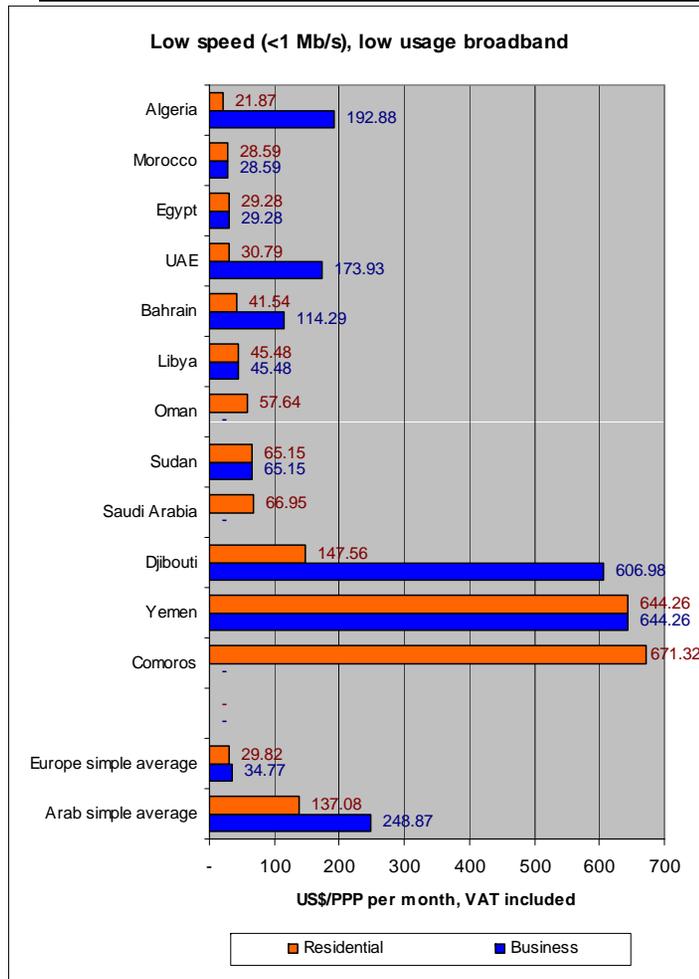
Low speed business broadband services



Business medium speed broadband (1 – 4 Mb/s)



Residential vs. Business broadband prices



The reason for the high business price in Tunisia is the charge to the incumbent operator for network access.

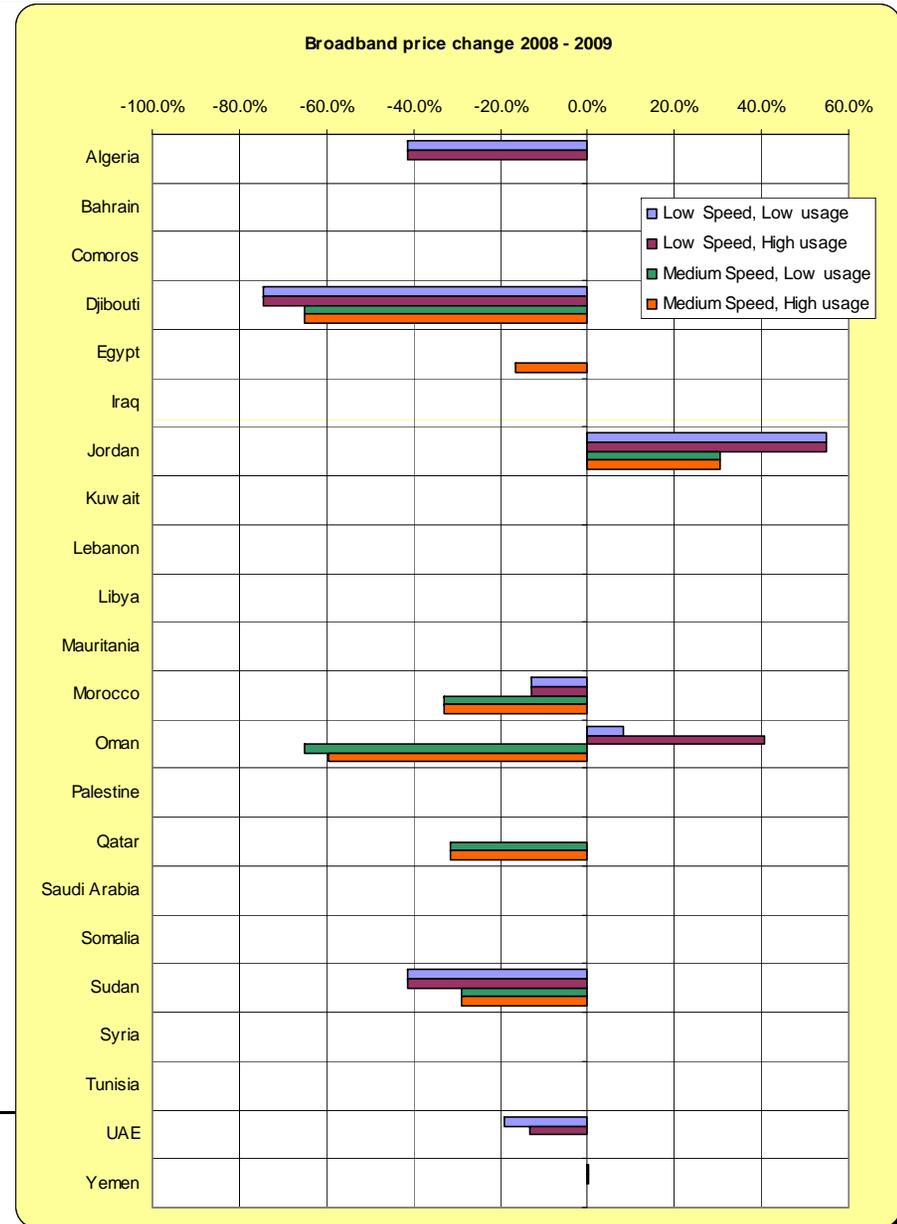
	Low speed	Medium speed
Business to residential price relationship in Arab countries compared to European average.	182%	280%
Europe simple average	117%	164%

Some business services offer higher speed and more space than comparable residential services.



Broadband basket results 2008 – 2009 (based on national currency)

- The basket results are affected by:
 - Algeria: Reduced monthly rental
 - Djibouti: Reduced monthly rental
 - Egypt: Change in usage allowance
 - Jordan: Not an actual increase, but the incumbent access charge was not registered in the 2008 data
 - Morocco: Reduced monthly rental
 - Oman: Change in package range, and monthly rental
 - Qatar: Price structure change for business
 - Sudan: Reduced prices
 - UAE: Reduced monthly rental
- Prices in Arab countries have gone down significantly over the last year. But so has prices in Europe, and the relative difference stays basically the same.



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



Observations from Broadband basket results

- Speeds above 4 Mb/s appear only to be offered by incumbents in 5 of the countries:
 - Morocco, Oman, Qatar, Saudi Arabia, Syria.
 - The prices are very different between countries
 - Price difference between lowest and highest price level is 3064% for low speed services, and 2321% for medium/high speed.
- Speeds below 256 kb/s are common in most Arab countries
- For speeds above 1 Mb/s the prices are generally higher than what is found in Europe
 - For low speed broadband (0.256 - 1 Mb/s) the prices in the majority of the Arab countries tend to be similar to the European average, but the speeds used in Europe will be higher.
 - In Europe the most common speeds are in the range 1-4 Mb/s and above, and lower speeds are in many cases not offered at all. There is a clear move towards higher speeds, only since last year the situation has changed significantly.
- The average price relationship between business and residential offering is higher for Arab countries than European countries
 - Please note that specific business offerings often include higher speeds, more email and web space, and different conditions.
- Most services are very basic and do not offer many additional facilities
- Only some of the countries apply usage-based prices

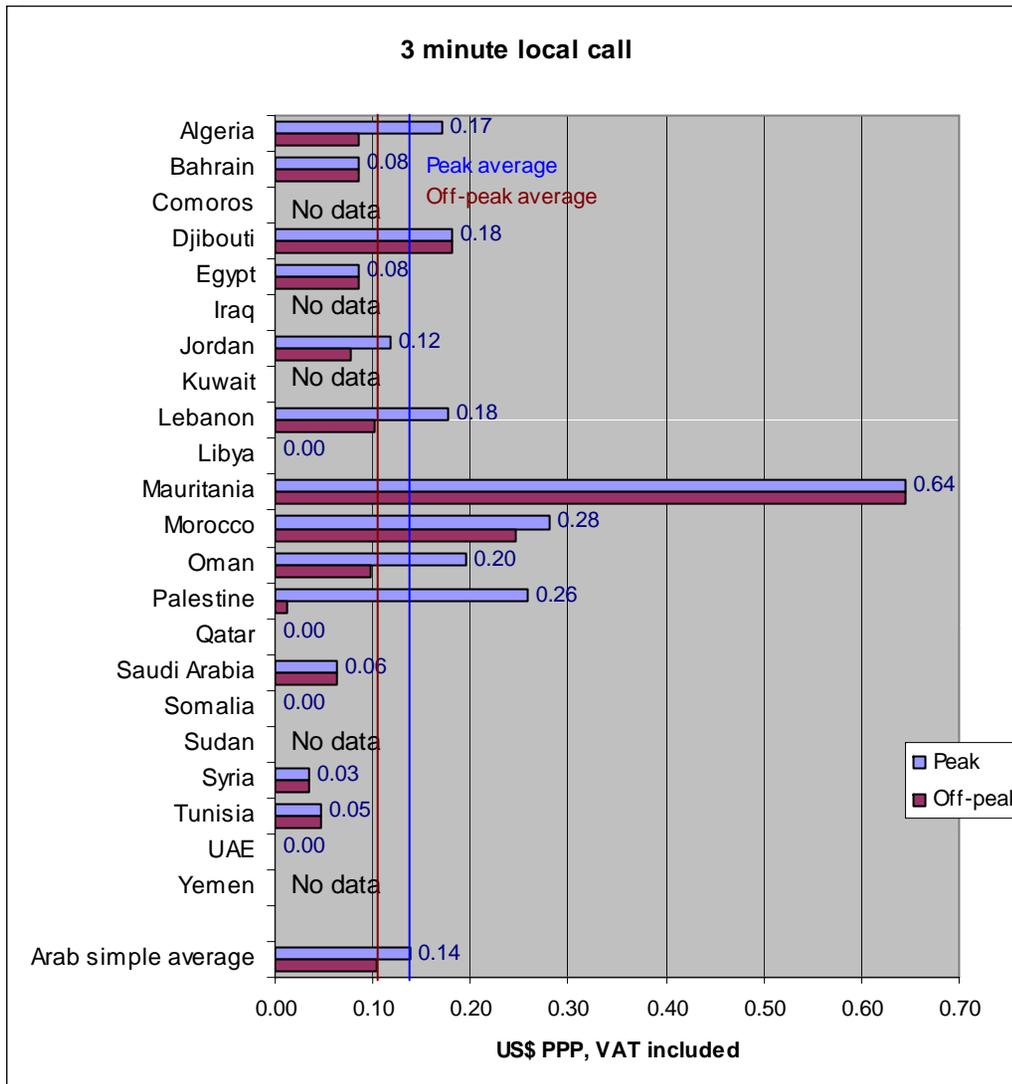


Call cost comparison

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



Local call comparison

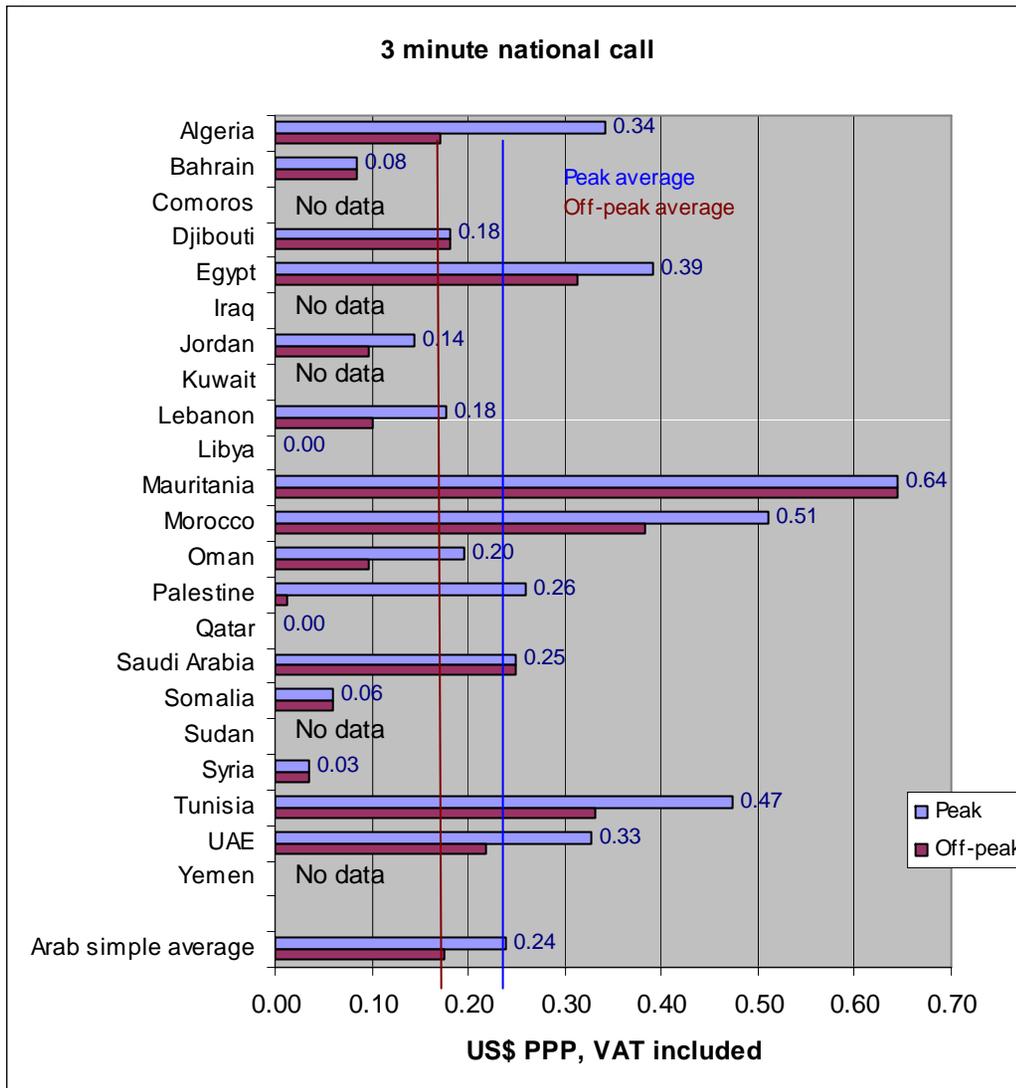


Many of the countries have the same prices for local and national calls.

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



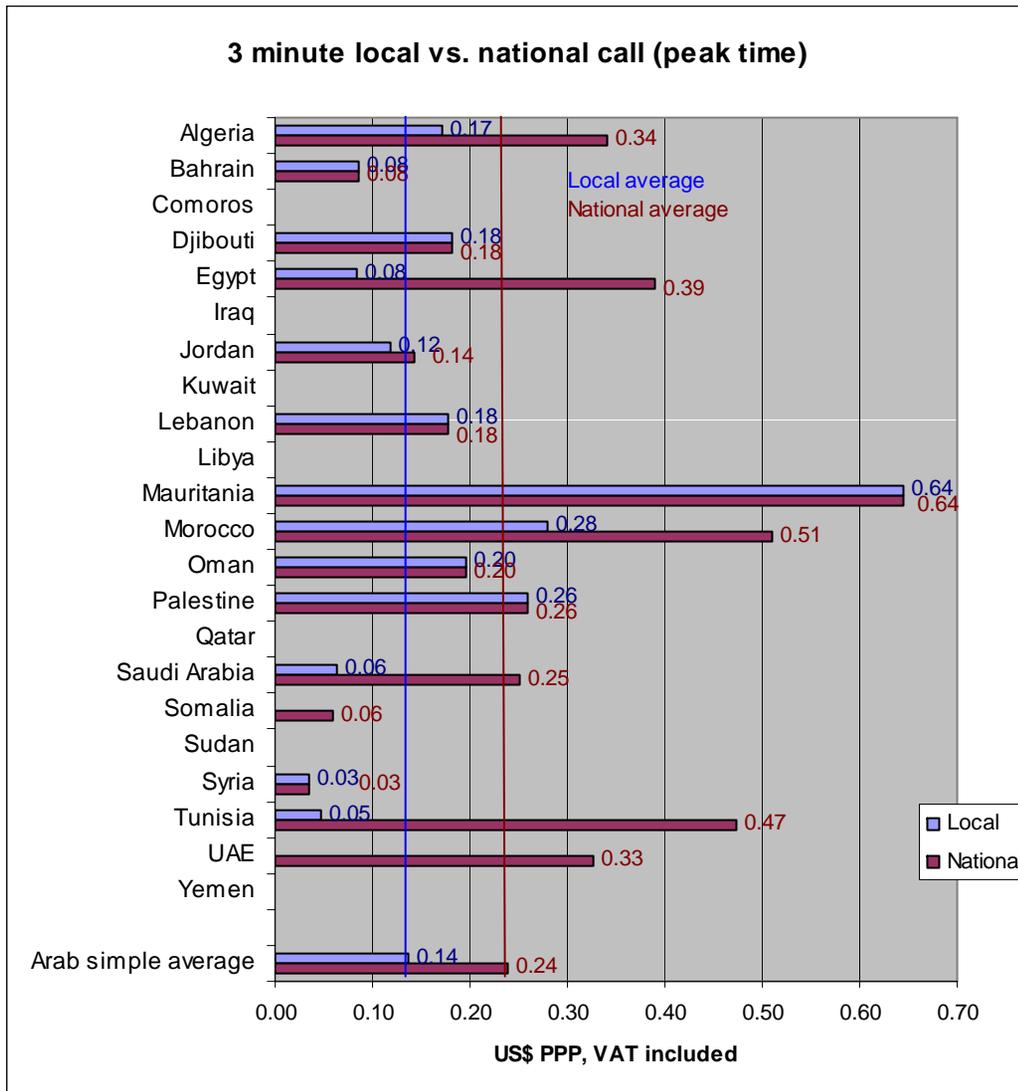
National call comparison



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



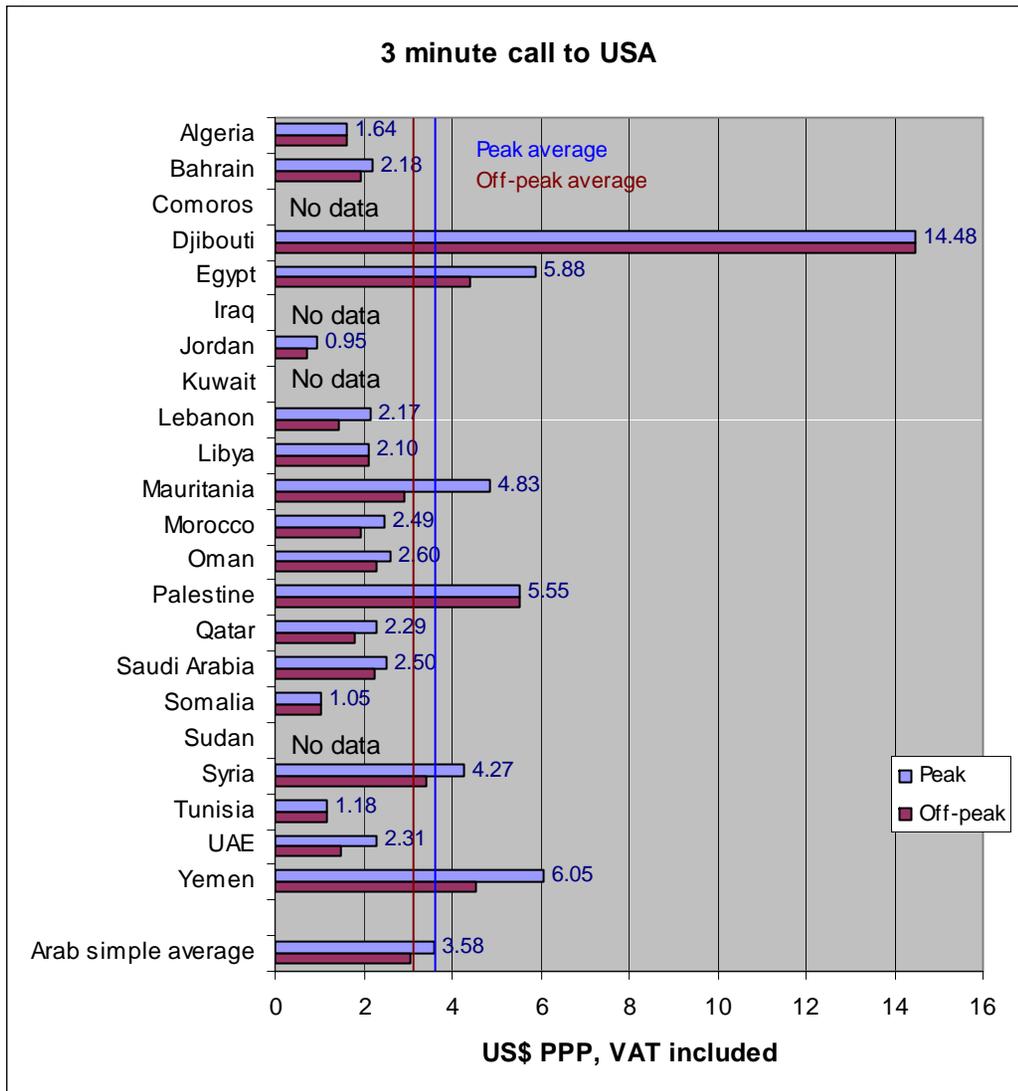
Local vs. National



For entries with no bar in the graph, please refer to the data in the special local and national graphs.

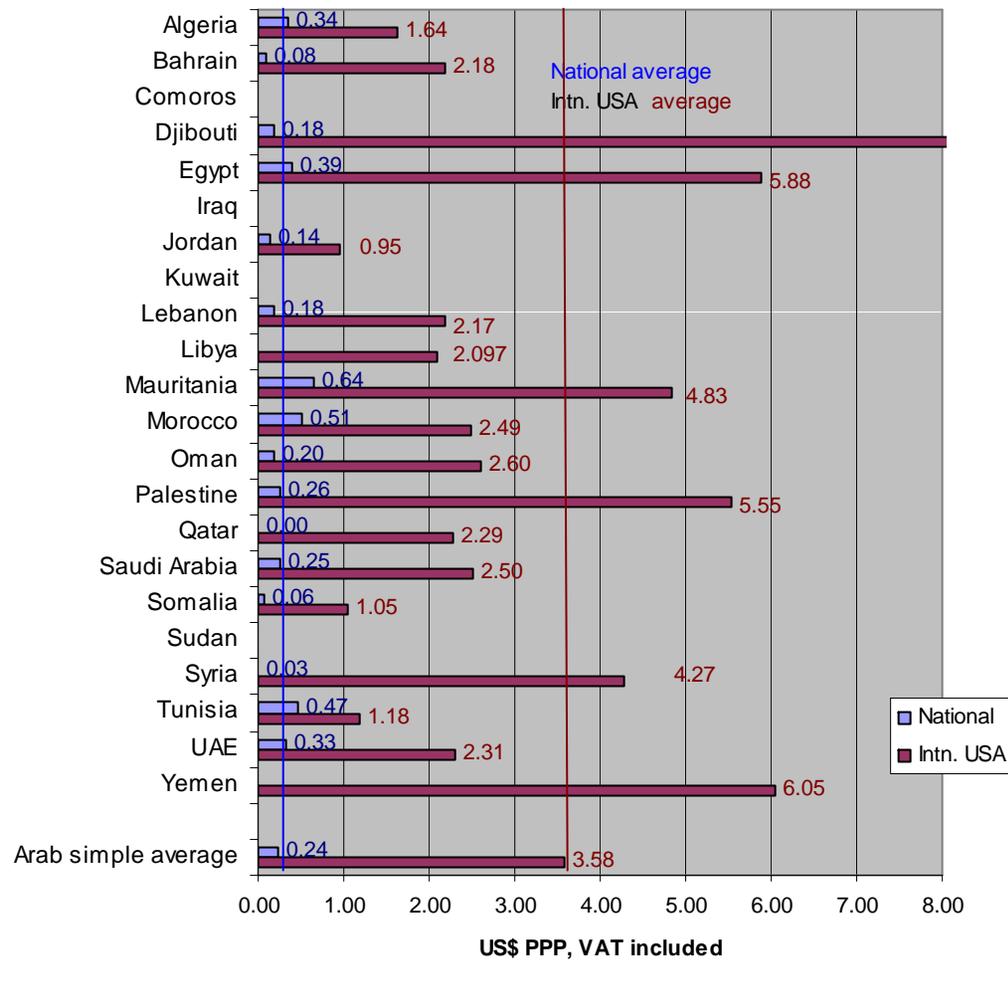


International call comparison (call to USA)



National vs. International to USA

3 minute National vs. International call (peak time)



For entries with no bar in the graph, please refer to the data in the special national graph.



Call costs 2008 – 2009 (based on national currency)

- Very few call charges have actually changed 2008 – 2009
 - No changes in basic national call charges and basic international call charges
 - Some changes in local call charges (see below)
 - The range of tariff packages has expanded in many countries, and alternative call charges may often be available.
- Changes in local call charges:
 - Egypt: Local call charges have increased with 30%
 - ... and are still below the average
 - Lebanon: Off peak charges for local calls are introduced
 - Oman: New tariffs have higher peak and lower off-peak charges than before, last year had one charge at all times.



Observations from the call cost comparison

- Prices of calls vary considerably between countries
- About half of the countries do not offer off-peak rates for national calls
- Off-peak discounts for international calls are generally quite small
- In in some countries the local and/or national calls are “free”, i.e. included in the monthly rental.
 - Libya, Qatar and UAE
- In some countries there are several tariff options available, with different call charges and fixed charges. This analysis is based on the so called “basic” packages.
- Ratios of national to international call prices indicate that rebalancing of call charges has not yet taken place in many countries of the region



Main findings from the benchmarking study

- Fixed voice telephony
 - Prices are on average higher in Arab countries than in OECD countries
 - There is a wide spread of price levels between the Arab countries
 - Rates are not rebalanced, with low fixed and high usage costs
 - Especially the international call charges are higher than in OECD countries
 - Prices have gone down over the last year in some countries
 - The lack of rebalancing will make it difficult for the incumbent operators to perform in a competitive market
 - Mobile telephony
 - Price levels in most Arab countries compare well with OECD countries, especially for low and medium usage
 - Rather uniform prices through the region
 - Many countries have reduced prices over the last year
 - Leased Lines
 - Prices for high speed circuits are generally higher than in OECD countries
 - There is a wide spread of prices between the Arab countries
 - Broadband
 - Price levels are significantly higher in Arab countries than in Europe
 - The speed range offered is lower in Arab countries, and prices increase rapidly with speed.
 - The higher rates will inhibit broadband penetration
 - Higher speeds are available in more countries than a year ago
 - Generally prices in Arab countries have gone down, most with Broadband services. But since prices have gone down in other parts of the world as well the gap between prices in Arab countries and prices in OECD / European countries remains.
-

Reference information

Exchange rates and VAT

Related to:	US\$	US\$ PPP	%	Currency
Algeria	0.014370	0.028740	17.0 %	DZD
Bahrain	2.667600	4.041818	0.0 %	BHD
Comoros	0.002609	0.004577	0.0 %	KMF
Djibouti	0.005791	0.012065	19.0 %	DJF
Egypt	0.182200	0.650714	10.0 %	EGP
Iraq	1.000000	2.631579	0.0 %	USDx
Jordan	1.422900	2.635000	16.0 %	JOD
Kuwait	3.469200	4.752329	0.0 %	KWD
Lebanon	0.000677	0.001208	10.0 %	LBP
Libya	0.798700	1.996750	0.0 %	LYD
Mauritania	0.003973	0.010738	0.0 %	MRO
Morocco	0.116900	0.212545	20.0 %	MAD
Oman	2.604500	4.340833	0.0 %	OMR
Palestine	0.246500	1.232500	0.0 %	ILS
Qatar	0.274900	0.366533	0.0 %	QAR
Saudi Arabia	0.266700	0.416719	0.0 %	SAR
Somalia	0.000730	0.002432	0.0 %	SOS
Sudan	0.456600	1.037727	10.0 %	SDG
Syria	0.021640	0.056947	0.0 %	SYP
Tunisia	0.708900	1.575333	18.0 %	TND
UAE	0.272400	0.363200	0.0 %	AED
Yemen	0.005007	0.013908	10.0 %	YER

Prices for services in Iraq are given in US\$

Exchange rates taken from the Oanda web service on the 2 February 2009.
 PPPs are based on World Bank CPL for 2005 (published 2007, latest available).

Acronyms used in the context of this report

- OECD: Organisation of Economic Co-operation and Development
- OECD countries: Australia, Austria, Belgium, Canada, Czech Rep., Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Rep., Spain, Sweden, Switzerland, Turkey, UK, USA
- 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. This study uses data from the World Bank.
- 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. The basket shall include 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.
- 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 of individual Tariff elements will cover their own cost, and not subsidise other Tariff elements.