



Point Topic's Broadband Operators and Tariffs

Broadband tariff benchmarks: Q4 2016

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Point Topic Ltd
73 Farringdon Road
London EC1M 3JQ, UK
Tel. +44 (0) 20 3301 3303
Email tariffs@point-topic.com

1 Introduction

Point Topic tracks the changes in the standalone and bundled broadband tariffs provided by operators across the globe every quarter. This report presents the latest tariff benchmarks at the end of December 2016.

The data is collated within Point Topic's **Broadband Operators and Tariffs** subscription service. Our analysts have reviewed and interpreted this data to show pricing trends by region, country and technology.

We provide access to the raw data, as well as charts and tables for the tariffs offered. For more details see the Appendix.

2 What we measure

The tariff database covers all major fixed broadband operators across the globe. In total, we track over 300 operators from more than 90 countries across the world.

We use this data to report on global trends in tariffs and bandwidths offered. We also report on regional trends and variations across countries. The data can also be used to track changes in the tariffs offered by individual operators.

Standalone and bundled

We report tariffs where broadband is offered as the only service (standalone) and tariffs where broadband is offered with other services such as TV and telephony (bundled).

Residential and business

We report both business and residential broadband tariffs.

Technologies

Within this report we look at differences between the three major fixed broadband technologies – copper, cable and fibre. The full tariff database also includes some wireless and mobile broadband tariffs.

Changes to reporting

Note that there have been some shifts in the global trends reported since last quarter, caused by changes to the reporting. Specifically:

- We have now excluded all tariffs which report a monthly subscription charge higher than \$5,000 (PPP) or which report no monthly subscription charge.
- We have now excluded all VDSL tariffs from the DSL category and included them in the fibre category instead.

These changes do not affect the full tariff database, only Point Topic's reporting of the tariffs.

For more details on methodology see the Appendix.

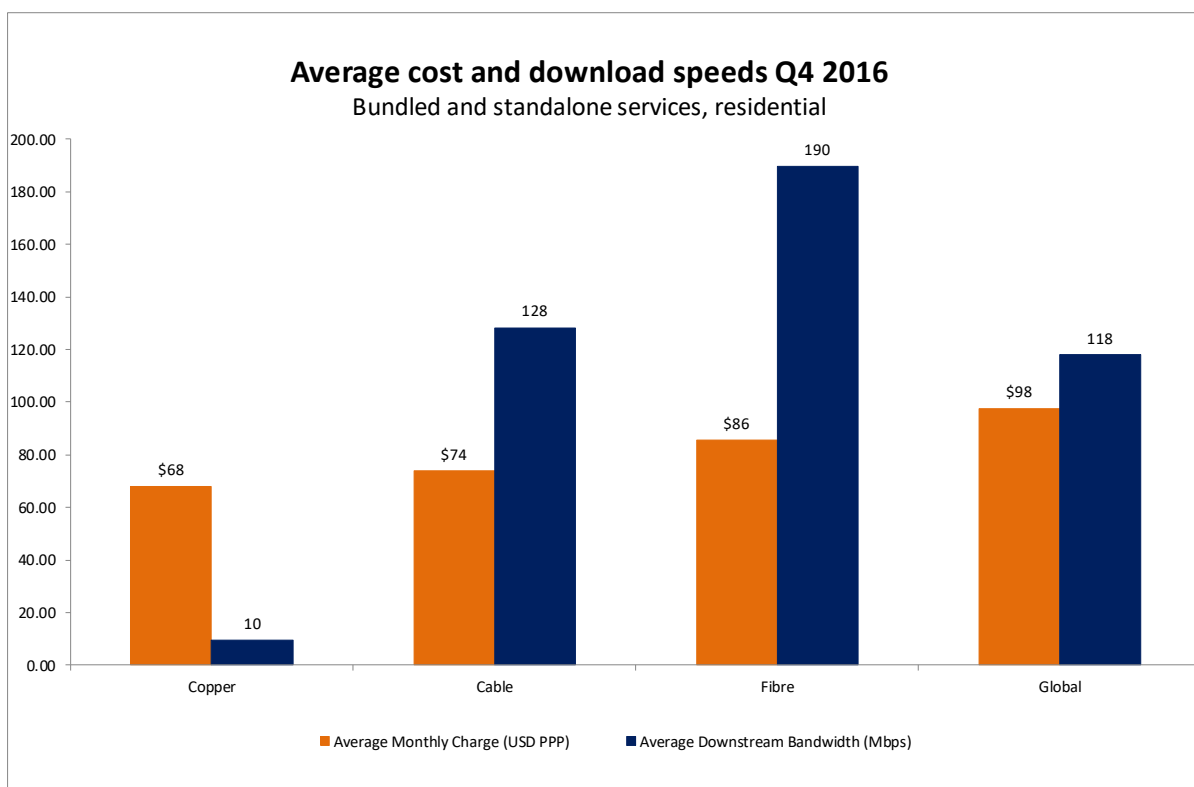
3 Global tariffs and bandwidths

We have compared the average subscription charges and corresponding bandwidths for different broadband technologies across the world. All prices are quoted in US dollars at PPP (purchasing power parity) rates to allow easier comparison.

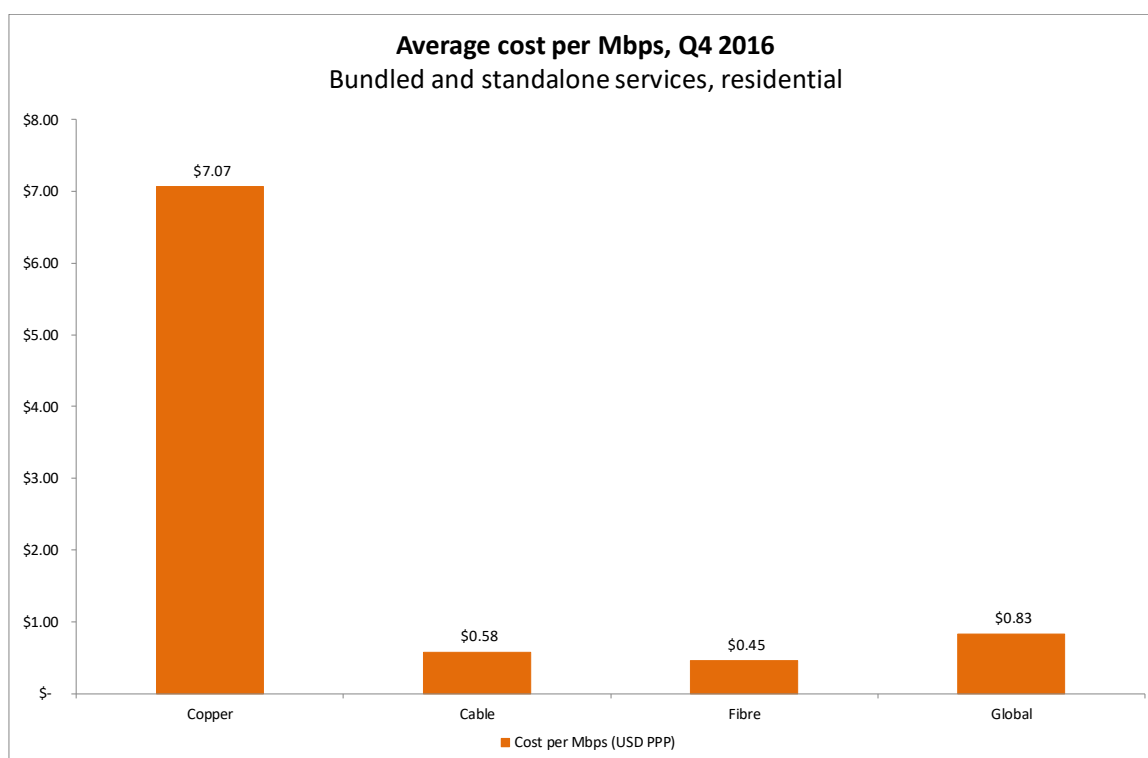
3.1 Residential broadband packages

In Q4 2016, the average monthly charge for residential broadband services was \$98, down slightly from \$100 in Q3 2016. This trend of decreasing average monthly cost has continued for several quarters.

At the same time, the average bandwidth provided to residential subscribers continued to climb and was 118Mbps, compared to 112Mbps in Q3 2016. The increase in the average bandwidth was due to a jump in the average speeds provided over cable connections (+16% over Q3 2016). This trend will continue, with a significant number of operators accelerating the rollout of Docsis 3.1 networks capable of Gigabit speeds. (For more details on the next generation network upgrades see operator profiles which are part of our **Broadband Operators and Tariffs** service).



The drop in the average monthly cost pushed down the average price per megabit further. The average global cost per Mbps was \$0.83 at the end of Q4 2016, compared to \$0.89 recorded at the end of Q3 2016.

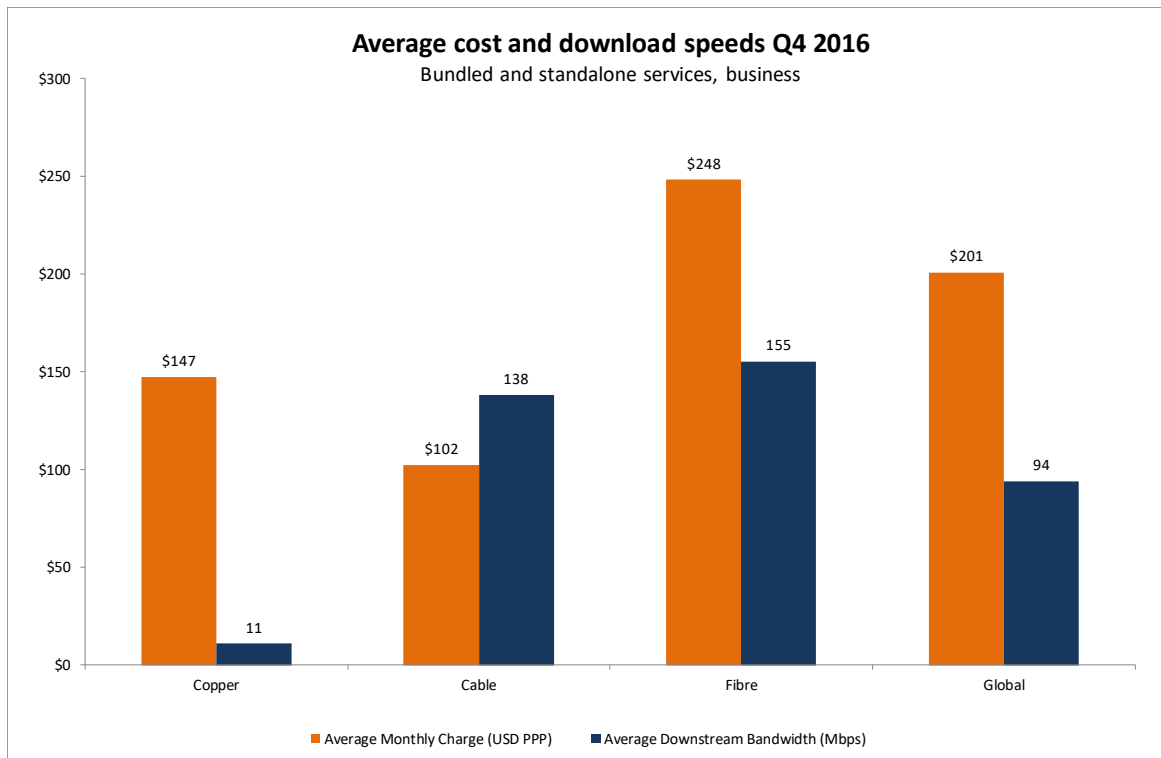


Between Q3 2016 and Q4 2016, all three broadband technologies saw a decrease in the average cost per Mbps. The drop was most significant in the case of cable connections (-17%) due to the boost in the average download speed, as mentioned above.

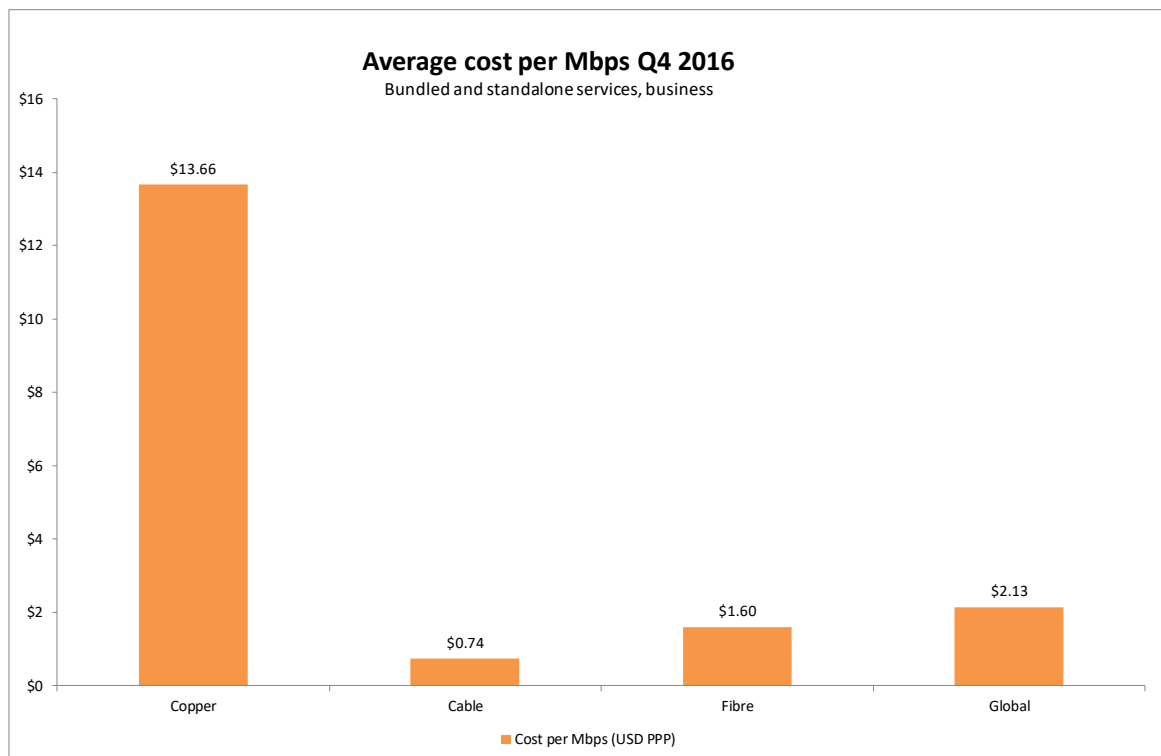
3.2 Business broadband packages

This quarter the average monthly charge for standalone business services increased slightly to \$201, compared to \$197 in the previous quarter. This change came along with the notable boost to the average bandwidth provided to business customers. It has gone up from 82Mbps in the previous quarter to 94Mbps in Q4 2016 (+15%). This trend was caused by significant increase in the average bandwidth of cable and fibre based business services. In the case of cable, it has gone up from 124Mbps in Q3 2016 to 138Mbps in Q4 2016 (+11%). For fibre connections, the average download speed has increased from 134Mbps to 155Mbps (+16%).

In terms of average monthly cost, fibre and copper tariffs increased slightly in Q4 2016, while the average monthly tariff of cable broadband packages has dropped from \$106 in Q3 2016 to \$102 in Q4 2016. The average monthly tariff of copper services continued to increase despite this legacy technology seeing falling take-up figures. (See our Global Broadband Statistics product for more details).



At the end of Q4 2016, the average global cost per Mbps for business broadband packages dropped slightly and was \$2.13. The average cost per Mbps on copper networks went up slightly from \$13.46 in Q3 2016 to \$13.66 in Q4 2016, while the same indicator on fibre and copper networks was lower in Q4 2016 compared to the previous quarter.

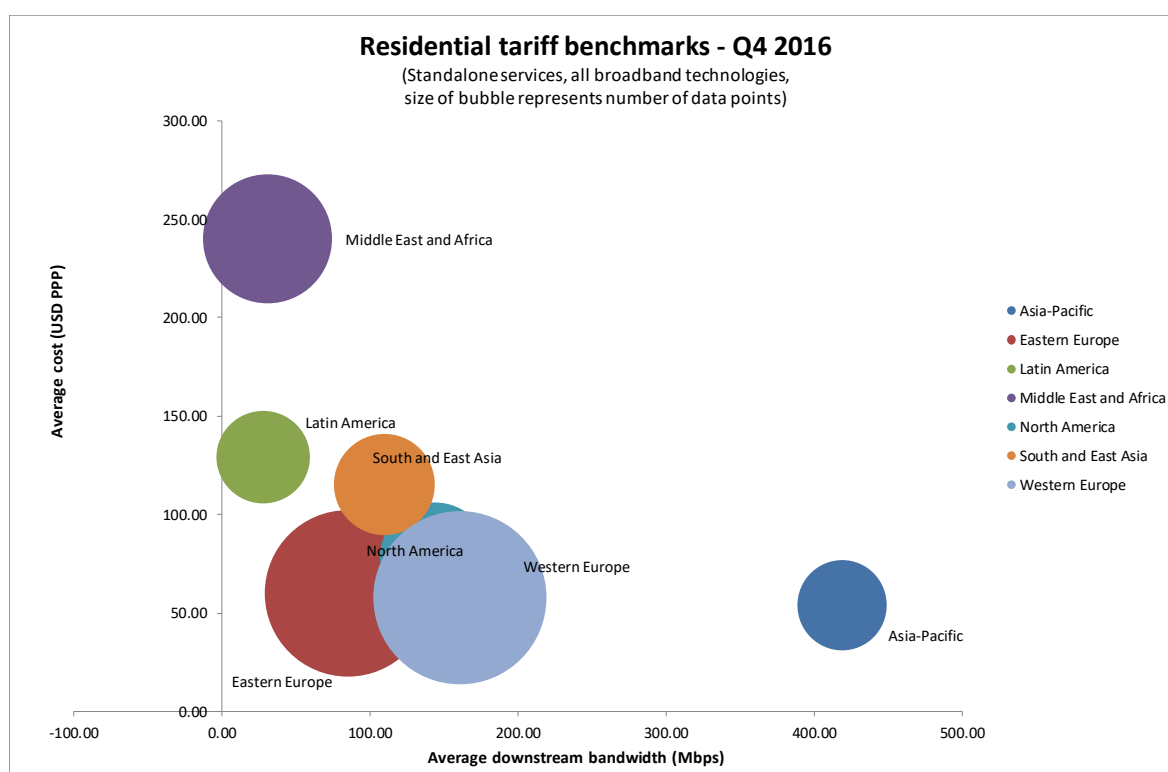


4. Regional tariffs and bandwidths

In this section, we have compared the average subscription charges and corresponding bandwidths in different regions across the world. All prices are quoted in international US dollars at PPP rates to allow direct comparison between regions.

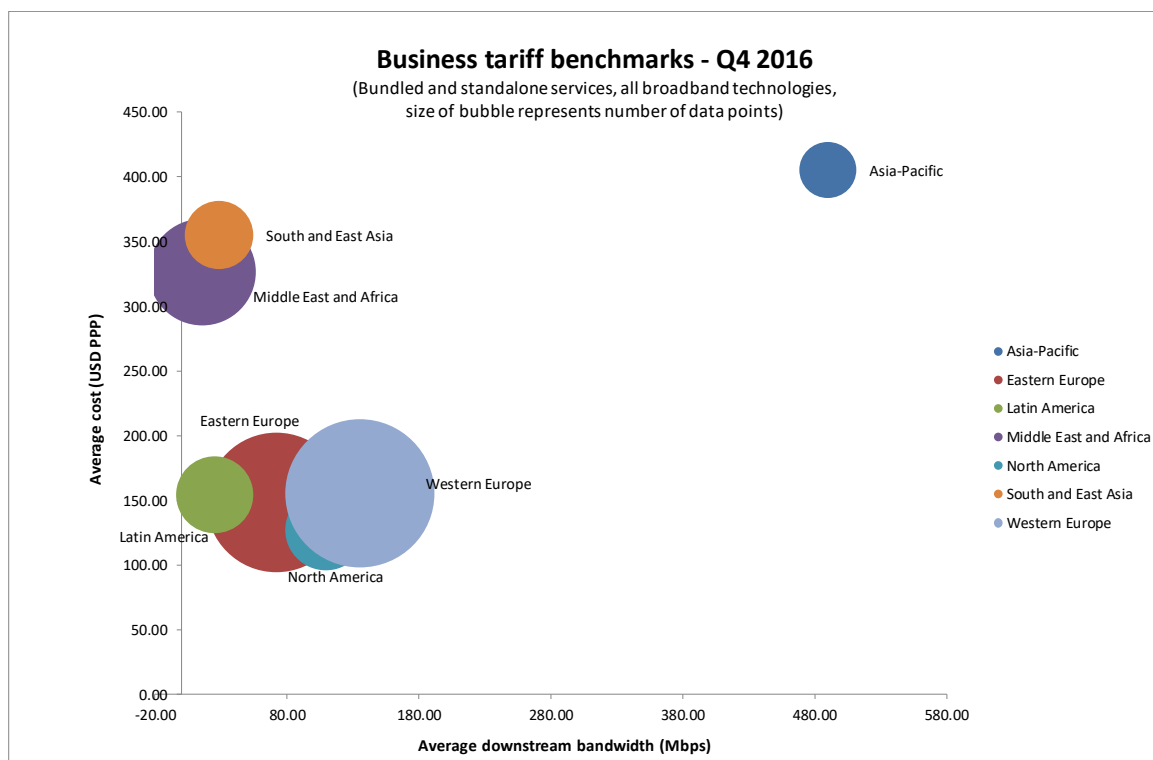
4.1 Residential broadband packages

Asia-Pacific has further boosted its dominant position in terms of bandwidth as the operators in the region continue to push FTTH and FTTx services. In Q4 2016, the average bandwidth in this region jumped to 419Mbps compared to 328Mbps in the previous quarter (+28%), and it continued to offer the best value for money to residential customers in terms of the average monthly tariff. Western Europe followed as it pushed VDSL and, since recently, G.fast. The region saw its average bandwidth drop slightly from 168Mbps in Q3 2016 to 161Mbps in Q2 2016, but it continued to be the second cheapest in terms of average monthly broadband tariff. North America was third by average bandwidth which stood at 143Mbps in Q4 2016, up from 122Mbps in Q3 2016 (+17%) as Canadian and US operators upgraded their speeds. Countries of Middle East and Africa continued to be the most expensive broadband markets, not least due to low saturation and fixed broadband being overshadowed by mobile.



4.2 Business broadband packages

The lowest priced business tariffs were offered in Europe and the Americas. Although being the most expensive market, Asia-Pacific offered the highest average speeds which further increased in Q4 2016 and stood at 490Mbps, compared to 304Mbps in Q3 2016 (+61%).



5 Country ranking

In this section, we look at the average monthly tariff for residential broadband services across the world. The average tariffs include copper, cable and fibre broadband services, and cover both standalone and bundled services.

All tariffs are quoted in international US dollars at PPP rates to allow comparisons between countries.

This isn't the end of the story when it comes to making a comparison. Different approaches could be applied. You may want to include bundles in cross country comparisons, though it is not easy to quantify the value of one TV channel versus another, for example. You could look at a range of services on offer or select a single entry level tariff from the most popular supplier. As ever the answer is to pick whatever best suits your needs.

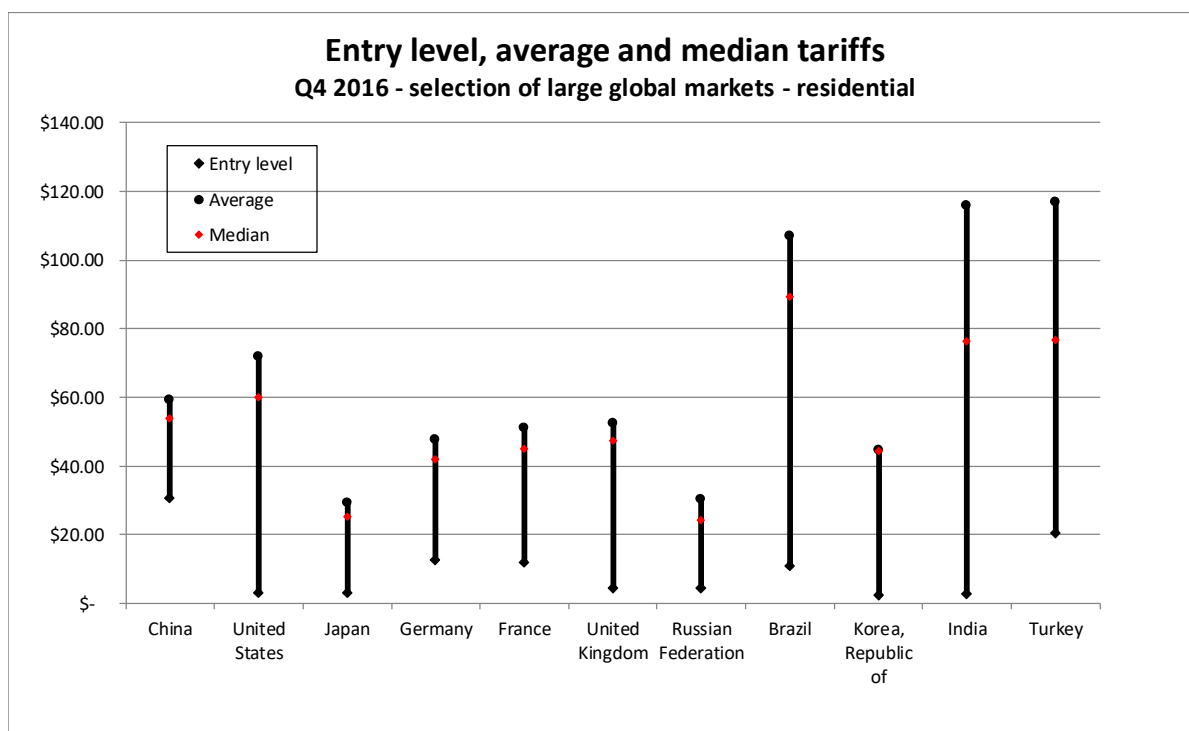
6.1 Entry level, median or average?

We are using the three most common comparison aggregations:

- The entry level tariff – typically ignores variations in bandwidth caps, time charging, actual bandwidth offered and overall availability of a tariff in the market. Best used to indicate the conditions at the low end of the market and best comparator if you're looking at the market penetration for broadband overall or a particular technology.
- The median tariff – the value in the middle of the count of all values in the set. Can be skewed by unbalanced reporting or data gathering. Useful as a general indication of the country market and for inter market comparisons.
- The average tariff – doesn't represent an amount anyone actually pays, skewed by extremes in price. The best single number for comparing whole country markets when you want to understand the range of options for the consumer.

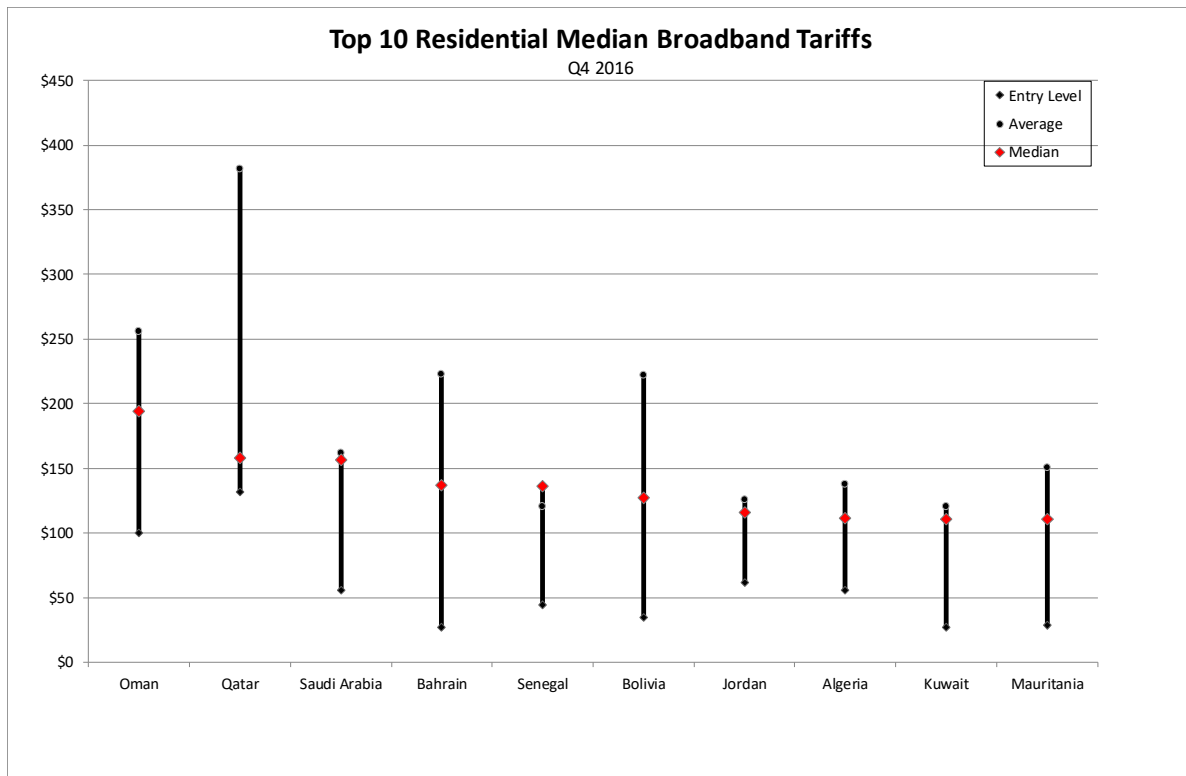
There is a difference in the relative country performance depending on which metric is used and the variation can be significant.

Here we show the price and country ranking for the metrics explained above for residential services. All prices expressed as international US\$ (PPP rates).



The above chart shows the range from the entry level service through the median up to the average value of all the residential tariffs in the market. This highlights some of the issues we have outlined above.

The spreads in China, Japan, Germany and Russia for example seem to indicate that it is relatively straightforward to get more bandwidth, at least in terms of cost. However perhaps that means that those on entry level tariffs are subsidising those on higher level tariffs. In India, Turkey, Brazil and the United States the differences in price levels of various speeds are much more pronounced, not least due to the limited supply of alternative technologies especially in rural areas.



If we look at the most expensive markets in terms of median tariffs we also see some variation in entry level and averages ones. Upgrading to higher level tariffs is still especially expensive in Qatar, Bahrain and Bolivia, while Oman is among the most expensive broadband markets for all customers.

Country ranking table

Ranking countries using the average cost of broadband subscriptions is a straightforward idea but the variation in entry level versus median and average costs can be significant. To help provide an easy way of comparing directly we have taken the PPP data on the entry level, median and average tariffs, produced rankings and then compared the variance.

We have included a 'variance' column to indicate how different ranks for the different metrics are spread. So we see that the wide spread in Brazil or India in the chart above (big differences in entry level, average and median tariffs) is represented by high variance. At the other end of the variance scale countries like Argentina, Japan or Belarus rank rather consistently.

However, it should be noted that this is only one set of metrics measuring one aspect of the broadband markets so it is dangerous to draw conclusions in isolation.

Country	Median tariff rank	Entry level tariff rank	Average tariff rank	Variance
Iran, Islamic Republic of	1	1	1	0.000
Ukraine	2	16	10	49.333
Russian Federation	3	14	3	40.333
Japan	4	10	2	17.333
Romania	5	28	4	184.333
Israel	6	44	6	481.333
Moldova, Republic of	7	29	7	161.333
Belarus	8	12	5	12.333
Austria	9	35	14	190.333
Finland	10	36	9	234.333
Estonia	11	33	11	161.333
Denmark	12	46	20	316.000
Bulgaria	13	32	16	104.333
Slovakia	14	37	8	234.333
Sweden	15	2	18	72.333
Czech Republic	16	42	22	185.333
Germany	17	22	17	8.333
Lithuania	18	31	15	72.333
Korea, Republic of	19	5	12	49.000
France	20	21	21	0.333
Norway	21	17	26	20.333
United Kingdom	22	13	24	34.333
Latvia	23	62	33	410.333
Venezuela	24	15	32	72.333
Iceland	25	58	28	333.000
Italy	26	23	25	2.333
Netherlands	27	24	23	4.333
Viet Nam	28	11	80	1292.333
Croatia	29	6	13	139.000
Hong Kong	30	49	44	97.000
China	31	57	30	234.333
Pakistan	32	41	71	417.000
Albania	33	3	55	681.333
Uruguay	34	26	19	56.333
Libyan Arab Jamahiriya	35	70	27	523.000
United Arab Emirates	36	20	51	240.333
Serbia	37	66	31	350.333
United States	38	9	40	301.000
Australia	39	74	34	475.000
Poland	40	7	56	624.333
Singapore	41	27	29	57.333
Yemen	42	25	62	343.000

Country	Median tariff rank	Entry level tariff rank	Average tariff rank	Variance
Cyprus	43	40	38	6.333
Peru	44	73	42	301.000
New Zealand	45	75	35	433.333
Thailand	46	76	77	310.333
Portugal	47	61	52	50.333
Egypt	48	39	53	50.333
Switzerland	49	59	36	133.000
Slovenia	50	56	41	57.000
Belgium	51	55	37	89.333
Montenegro	52	48	48	5.333
Ireland	53	64	43	110.333
Hungary	54	45	47	22.333
Tunisia	55	43	58	63.000
Bosnia and Herzegovina	56	30	46	172.000
Malta	57	67	70	46.333
Luxembourg	58	69	54	60.333
Spain	59	54	49	25.000
Greece	60	60	39	147.000
Mexico	61	68	45	139.000
Sudan	62	34	60	244.000
India	63	8	63	1008.333
Turkey	64	38	65	234.333
Canada	65	4	50	1010.333
Chile	66	76	59	73.000
Colombia	67	72	57	58.333
Brazil	68	19	61	702.333
South Africa	69	18	74	960.333
Argentina	70	82	69	52.333
Macedonia, The Former Yugoslav Republic of	71	65	64	14.333
Philippines	72	78	73	10.333
Malaysia	73	53	66	103.000
Morocco	74	51	76	193.000
Mauritania	75	52	78	202.333
Kuwait	76	47	67	220.333
Algeria	77	79	75	4.000
Jordan	78	81	72	21.000
Bolivia	79	63	81	97.333
Senegal	80	71	68	39.000
Bahrain	81	49	82	352.333
Saudi Arabia	82	80	79	2.333
Qatar	83	84	84	0.333
Oman	84	83	83	0.333

Note: Afghanistan is excluded as an outlier.

APPENDIX: Background to the methodology

Introduction

To more directly represent the operator tariffs we collate, we have consolidated the tariff benchmark spreadsheets into a single file. This is available to subscribers to the Broadband Operators and Tariffs service – [click here](#) to access the full file.

A current data set of tariffs can be downloaded from our *Broadband Operators and Tariffs* service website at any time, and users can conduct their own analysis using this data.

If there is a particular element that you cannot find and you wish to have available please contact us on tariffs@point-topic.com.

Coverage and methodology

The monthly rental prices have been analysed in terms of local currency and equivalent USD costs.

As of Q1 2007, a full set of tariff information is available for download as part of Point Topic's *Broadband Operators and Tariffs Service*. The data set contains the most up-to-date tariff information including such details as monthly rental, connection speed, equipment cost and service features. In Q1 2007, Point Topic began providing end of quarter tariff updates from the database, which clients may use for their own historical analysis. These are now incorporated into our benchmark report and are published simultaneously.

Entries within tariff data sets which do not have both a downstream speed and a monthly rental listed have been excluded from this analysis.

The PPP rates used are published annually by the World Bank for a selection of countries and are readily available to the public free of charge. Those PPP rates are published at the beginning of each year are used throughout the year and hence any quarterly changes in PPP rates are not taken into account during the analysis. Some retrospective adjustments to PPP rates were made during the period 2000–2010. All PPP rates during this period were updated accordingly.

Price comparison issues

This analysis is intended as a general indicator of the trends in pricing in major broadband countries. There are several additional variables that complicate the process of making a direct comparison of broadband prices. These need to be taken into account when making a more in-depth analysis:

- **ISP charges:** Some operators include ISP charges in their monthly rental, whereas others do not and charge an additional cost. This is evident in the case of Yahoo Japan, where a separate ISP charge is billed to the customer. In instances where this clearly occurs, Point Topic includes the charge in the monthly rental.
- **Bundling:** With the continuous competition in service price, ISPs are focusing on bundling value-added services in order to increase revenue. Since Q1 2007, an integrated tariff database file containing bundled services information is available as part of the *Broadband Operators and Tariffs* service. This allows a comprehensive analysis of bundled services and pricing which we introduced here for the first time in Q1 2007.
- **Tax charges:** Sales taxes (such as value-added tax) are also included in the residential monthly rental by most operators, although this is not the case in North America where telecommunications taxes are charged on

top of the monthly rental. There would be a slight difference in the rankings if tax costs were included in the quoted monthly rentals of North American operators.

- **Time limits:** Many operators worldwide have begun introducing broadband packages that restrict the time spent online without additional charges. For a monthly flat rate, customers can enjoy 'free' broadband access at particular times of the day/night, or for a certain number of hours per month. Any time spent beyond that limit is charged at an hourly rate.
- **Download limits:** Some operators offer entry level services with data volume limits. In most cases, these limits are generous enough so as not to affect light or medium users. Point Topic includes this type of service as a reasonable entry level service, since it does not involve adding a usage charge to the monthly cost for the typical user.