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Introduction

This report is an abridged version of the regular benchmark analyses that Point Topic has been providing for the benefit of its subscribers since March 2000. In Q1 2007, Point Topic upgraded the Operator Source service which allows tariff information to be downloaded in two “.csv” formatted files – representing standalone and bundled tariffs. These files contain the entire set of the tariff information and include:

- Access type and download/upload speeds of each service
- Details and features of each service
- Monthly rental, equipment charges and promotional offers

As a result, the report format has changed and the analysis has been divided into two sections. The first is based on the global tariff data set from the new Operator Source Service (OPS) upgrade; the second is based on the long-term tariff data survey which has been carried out since March 2000 on selected operators and their entry-level services.

In Q2 2008, there were a number of significant changes to the list of tariffs included in the Entry-level tariff data survey. This included the addition of new tariffs. A further addition took place in Q2 2010 with the launch of UK-based BT’s new FTTx tariff.

Further modifications to our service were implemented in Q4 2010 when some of our countries were reallocated to different regions. This reallocation was implemented taking into consideration the geographical location of the countries in question. The modifications were as follows:

- Sri Lanka and Thailand were moved from Asia Pacific to South and East Asia
- Cyprus was moved from Western Europe to Middle East and Africa
- Greece was moved from Western Europe to Eastern Europe.

It is important to note that the exchange rates used are updated on a quarterly basis whereas the PPP rates are updated annually. As a result, the PPP rates will influence the trend on a yearly basis rather than on a quarterly basis. In the current economic climate, the rapidly fluctuating exchange rates are having an even greater influence on the tariff market trends.

For tariffs reported for quarters from 2011 onwards we changed the source of our PPP rates from the OECD to the United Nations (Millennium Development Goals Indicators). This is because the United Nations states the PPP rates for a wider selection of countries. However, it is important to note that these rates are two years behind instead of one year, so the latest PPP rates they have available as of August 2011 are for 2009 (last updated in July 2011). As a result the United Nations PPP rate we will be using will be for 2009.
**Entry level prices – by access technology**

The DSL monthly tariff (PPP rate) was USD 27.85, down slightly on the previous quarter from USD 28.19 and up 1.59 per cent year-on-year from USD 27.42. The cable modem monthly tariff (PPP rate) was USD 28.79, unchanged from the previous quarter but down 1.55 per cent year-on-year from USD 29.25.

The FTTx monthly tariff (PPP rate) was 1.27 per cent down year-on-year from USD 33.44 to USD 33.01. It was down slightly from the previous quarter when it was USD 33.66.

The DSL entry-level tariffs were the cheapest on average, followed by cable modem and FTTx. The cost of FTTx services was 18.5 per cent more expensive than DSL services and 14.65 per cent more expensive than cable modem services.

The average entry-level services in terms of USD only from December 2008 are shown in figure 7. A comparison between figures 6 and 7 shows the difference between trends depending on what parameters are being compared (PPP rates or USD exchange rate respectively).

The cable modem and FTTx services are slightly cheaper when the PPP rates are taken into consideration as shown in figure 6. As such, the entry level tariffs converge to a greater degree in figure 7. This comparison shows the importance of taking the relative cost of living into consideration since there is much more separation of the technologies in figure 1 compared with figure 2.
Figure 2: Average Entry-Level Broadband Service Tariff (in USD)
Price per megabit – regional comparison

The price per megabit of bandwidth across the regions is shown in figure 3. This gives an overview of the average costs and downstream speeds in different regions. As shown, the cost and quality of broadband services can depend on the technology as well as the region.

It is important to note that the downstream speeds used to calculate the price per megabit are based on maximum speeds as advertised by operators. It is often the case that these maximum speeds are not attained in practice. There are other variables to consider such as the equipment used for the network connection.

Due to the very high downstream speeds that operators claim can be attained, subscribers using FTTx services are receiving good value for money when looking at the price per megabit.

While many operators based in the Middle East and Africa and Latin America offer DSL services. The average price per megabit is particularly high. The average downstream speeds in these areas are particularly low, at 4.7 Mbps for Latin America and 5.2 Mbps in the Middle East and Africa. Many operators in these regions are working to increase their market shares in spite of heavy competition from mobile operators. Mobile services are extremely popular with penetration in some of these countries at over 100 per cent.

In order to save money in the long run, many operators are working to upgrade their DSL networks to VDSL and FTTx technology. This is a cost effective way of implementing Next Generation Services.
Residential v Business tariffs – global comparison

Figure 4 shows that business services are more expensive on average, especially with respect to FTTx tariffs. However, the downstream speeds attained using FTTx tariffs are considerably higher and operators have made substantial investments in the upgrading of their services using FTTx technology. In addition, the average cost of FTTx business tariffs is inflated because of the inclusion of tariffs offered by operators based in China, Japan and Taiwan. These operators advertise business tariffs costing more than USD 1,000 per month which are offered to buildings with multiple businesses. Therefore the cost is divided between businesses.

Cable operators based in the US and Canada offer relatively expensive business services costing within the range USD 50 – 200 per month. Despite these tariffs, the average cost remained the lowest overall. This was due to low cable tariffs offered by operators in Eastern Europe in particular. Cable operators in this region are faced with fierce competition and therefore keep their prices to a minimum.
Coverage and methodology

This paper reports on the entry-level tariffs of 52 major DSL, cable modem and FTTx / FTTP operators across the Americas, EMEA and Asia Pacific. The entry-level has been defined as the lowest-cost service offered with a downstream speed of at least 256 Kbps.

The monthly rental prices have been analysed in terms of local currency and equivalent USD costs, at both market exchange rates and at relative PPP rates.

As of Q1 2007, a full set of tariff information is available for download as part of Point Topic's Operator Source 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.

Full details of the tariffs and comparisons are provided in the excel workbooks 'DSL Tariff Benchmarks Q3 2011.xls', 'Cable Tariff Benchmarks Q3 2011.xls', 'FTTx Tariff Benchmarks Q3 2011.xls' and 'Complete Tariff Benchmarks Q2 2011.xls', which are available to Operator Source service subscribers. A current data set of tariffs can be downloaded from your Operator Source service website at any time.

Entries within these data sets which do not have both a downstream speed and a monthly rental listed have been excluded from this analysis. This paper has addressed services which are either residential or business. In cases where service tariffs apply to both residential and business customers, such services have not been included for analysis.

The Purchasing Power Parity exchange rate (PPP rate) is a means of equalising the purchasing power of different currencies in their native country for a given selection of goods. It is a means of comparing like-with-like when looking at the cost of living in each country.

The PPP rates used up to 2010 are published annually by the OECD for a selection of countries and are readily available to the public free of charge. The figures used in this report are the current updates which were published by the OECD in April 2010 and refer to end-2009. PPP rates 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.

For tariffs reported for quarters from 2011 onwards we changed the source of our PPP rates from the OECD to the United Nations (Millennium Development Goals Indicators). This is because the United Nations states the PPP rates for a wider selection of countries. However, it is important to note that these rates are two years behind instead of one year, so the latest PPP rates they have available as of August 2011 are for 2009 (last updated in July 2011). As a result the United Nations PPP rate we will be using will be for 2009.
5.1 DSL operators

DSL tariff information was collected for the 19 operators detailed in this report between Q1 2000 and Q3 2011. This information is recorded to the right of the workbook in the worksheet called “Entry-level” monthly rentals.

In earlier reports, Point Topic covered each of the four main elements that constitute the overall cost of a DSL service - installation, equipment, monthly rental and other costs. In order to simplify the analysis, this approach was abandoned and the worksheets are now limited to monthly rental costs for the typical entry-level services.

In addition, the workbook provides several worksheets with figures that form the basis for comparing rental prices at USD rates (as of July 2007) and PPP rates. The PPP rates used were sourced from OECD and the United Nations.

5.2 Cable modem operators

Cable modem tariff information was collected for 16 operators from Q2 2003 to Q3 2011. This information is recorded in a summary worksheet entitled “Entry-level” monthly rentals in the workbook. As with the DSL analysis, we have simplified the number of worksheets to include information that relates to monthly rentals for entry-level services only.

Local tariffs are then converted from local currency to USD using current currency exchange rates, and PPP rates using corresponding PPP exchange rates. The PPP rates used were sourced from OECD and the United Nations.

5.3 FTTx operators

Tariff information for FTTH and FTTP services was originally compared for 16 operators before Q3 2006, and was extended to include an additional two operators. In Q3 2008, this was further extended to 19 operators to reflect this rapidly growing market. For this purpose, tariff data for all 19 tariffs was tracked back to Q3 2004 where applicable. As with our DSL and cable modem analysis, subscribers to the Operator Source service will have access to a series of worksheets that sketch price developments in local and USD currency, as well as at the PPP rate.
5.4 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 of JPY 1354 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 your upgraded Operator Source 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 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.

- **Upload/download speeds**: There are significant differences in the upload and download speeds offered by different operators at the entry-level. However, the differences between services in terms of customer utility are not nearly as great as the differences in speed would imply.

- **Time limits**: Many operators worldwide have begun introducing broadband packages that restrict the time spent on-line 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. Generally, Point Topic does not advocate such services on the grounds that they constrain usage rather than encourage it. However, a small minority of entry-level packages have been included which include a certain number of hours per month. The included hours reflect ‘average’ usage which will be monitored and updated on a regular basis.

- **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.

More detail can be found in the full report available to Operator Source subscribers.

The data used in this report is taken from Point Topic’s Operator Source service. Users of the service have access to the full 40-page version of the report and supporting Excel workbooks as well as access to 260 operator profiles and 65 country overview reports. Please contact Toby French on +44 (0)20 3301 3308 or e-mail toby.french@point-topic.com for more information.