

**World Broadband Statistics:
Q1 2011**

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1. Introduction

This report continues the series of Point Topic's quarterly *World Broadband Statistics* publications. The series originated as several DSL reports, first published in Q2 2002, which were eventually expanded to include cable modem and other technologies in Q2 2003.

Other technologies covered include optical fibre and different forms of broadband Internet such as, for example, Fixed Wireless Access (FWA), Satellite and Powerline. Fibre in this context means anything from Fibre-to-the-kerb to Fibre-to-the-home and is often generalised as "FTTx."

Mobile broadband is undoubtedly taking off in many countries where 3G or WiFi/WiMAX networks are used as an alternative or complementary to fixed-line broadband access. To address the importance of this new development, Point Topic embarked on a special wireless broadband project in Q3 2006 with the aim of including more comprehensive coverage of wireless subscriber numbers in our quarterly broadband statistics report. Throughout this data collation process, we found that the figures are still very much restricted to certain geographical regions.

Consequently, it remains too early for wireless subscriber data to be examined in depth within the world broadband statistics analysis. However, as far as available, WiFi and WiMAX broadband subscriber data is being entered into GBS and clients to this Point Topic service are welcome to conduct their own in-depth analysis. For Q1 2011, GBS coverage has been extended to 114 countries and 362 operators.

This report begins with an examination of the growth in broadband subscribers for Q1 2011 at both a global and a regional level. The next section of the report addresses technology trends and choices, looking firstly at general trends in uptake followed by an analysis of regional market shares in a variety of broadband technologies.

The focus of the report then shifts to the "top ten" broadband countries for Q1 2011. Here we examine the total number of broadband subscribers, the net additions for the quarter, quarterly and annual percentage growth, technologies adopted as well as population and household penetration. The last section of the report offers a selection of tables highlighting both, quarterly and annual changes in total broadband, DSL and Non-DSL subscriber figures.

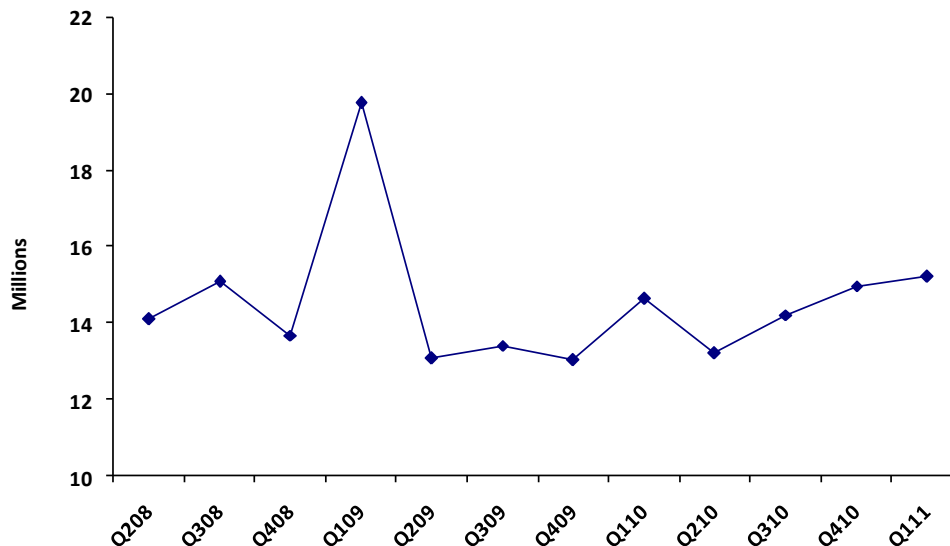
For the purposes of this report, China wherever mentioned refers to China at the exclusion of its territories. Subscribers in these territories, namely Hong Kong and Macau, are counted separately. Taiwan is also counted separately.

2. Global and Regional Perspectives

2.1 Overall Growth

There were 540.69 million broadband subscribers by end Q1 2011 globally. This was up 2.9 per cent on the previous quarter from 525.46 million and up almost 12 per cent year-on-year from 483.06 million. The quarterly net additions over the last three years are shown in figure 1. Apart from a peak in net additions to almost 20 million in Q1 2009, they have remained steady from Q2 2008 to Q2 2010. Net additions have increased steadily over the last three quarters from Q2 2010.

Figure 1: World Broadband Subscriber Net Additions (Q2 2008 – Q1 2011)



Net additions in Q1 2011 totalled 15.23 million, up 1.69 per cent on the previous quarter from 14.98 million. Net additions over the last 12 months totalled 57.62 million, up over 8 per cent on the previous 12 months when net additions totalled 54.13 million.

Broadband services are now a necessity of modern life and operators have responded to the increase in demand for quality broadband services by launching a number of initiatives involving extensive infrastructure construction and development. A number of operators have been hit hard by the tough economic conditions of the last few years. Despite this the net additions show that the broadband market is still growing.

The worldwide population penetration was 9.3 per cent in Q1 2011, up slightly from 9.1 per cent in the previous quarter. About 34 per cent of households tracked had broadband access in Q1 2011 compared with 33.3 per cent in the previous quarter.

2.2 Regional Trends

The share of global broadband subscribers by region is shown in figure 2 and quarterly growth by region is shown in figure 3. South and East Asia had the largest share of broadband subscribers totalling 156.07 million. This represented 28.87 per cent of the total. Western Europe followed with 121.55 million (22.48 per cent), then North America with 99.45 million (18.39 per cent).

Asia Pacific had 70.37 million (13.2 per cent) and the three smallest shares were held by Latin America (7.12 per cent or 38.5 million), Eastern Europe (7.06 per cent or 38.19 million) and the Middle East and Africa (3.05 per cent or 16.5 million).

Figure 2: Share of World Broadband Subscribers by Region in Q1 2011

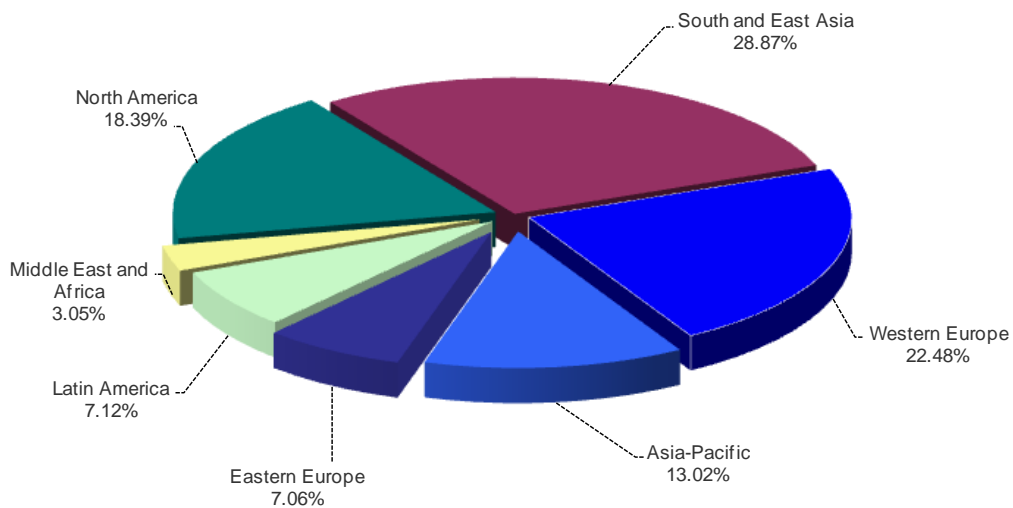
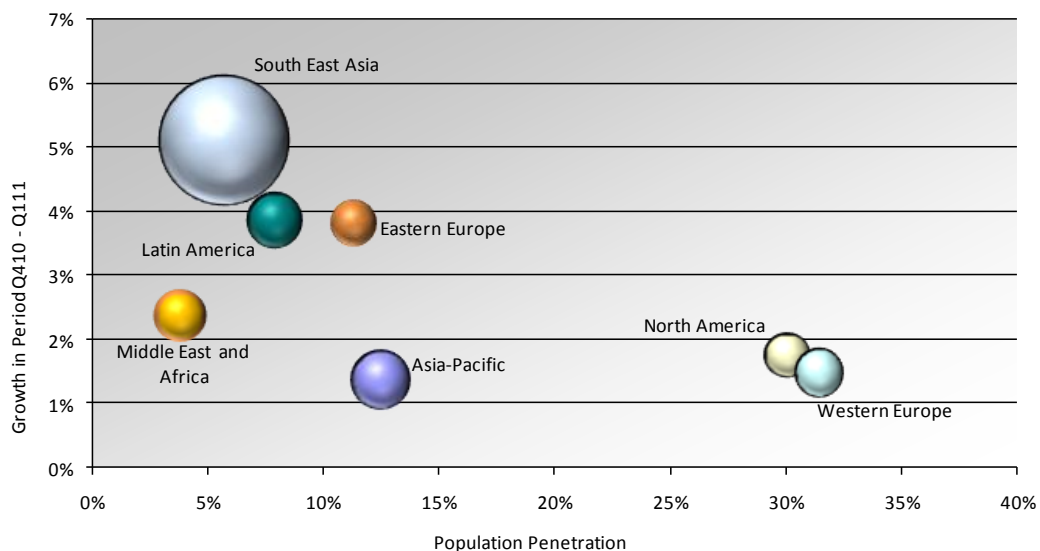


Figure 3: Penetration & Quarterly Growth by Region in Q1 2011



As shown in figure 3, the vertical axis represents quarterly growth while the horizontal line represents population penetration. The size of each globe represents the population in each region. Hence the region with the largest population by far is South and East Asia since it includes the highly populated countries India and China.

Both North America and Western Europe are home to some of the most mature broadband markets in the world. As a result, growth in these regions was relatively low at 1.75 and 1.48 per cent respectively while population penetration was high at 30.1 and 31.5 per cent respectively.

At 1.36 per cent, quarterly growth in Asia Pacific was the lowest overall, but its population penetration (12.5 per cent) was lower than that in Western Europe or North America. Asia Pacific is home to some of the most technologically advanced countries in the world, such as South Korea, Singapore and Japan. However, it also includes countries which pose a geographical challenge when it comes to the roll-out of fixed broadband networks, such as Indonesia and Philippines. In these countries, the roll-out of mobile broadband has been much more successful and WiMax infrastructure is currently being deployed.

Quarterly growth was highest in South and East Asia at 5.11 per cent, followed by Eastern Europe (3.81 per cent) and Latin America (3.86 per cent). These regions have markets which are still fast growing since they have not yet reached saturation.

Figure 4: Regional Share of World Broadband Net Additions in Q1 2011

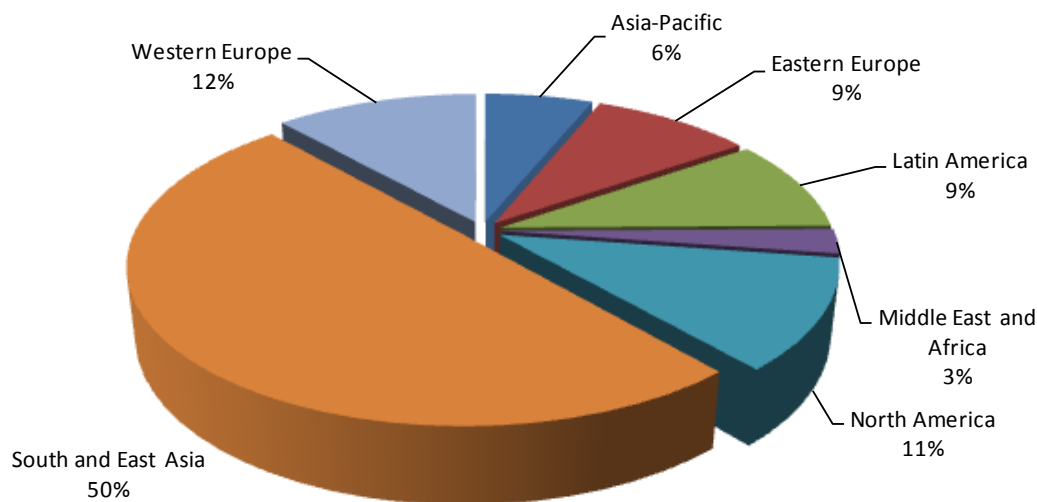


Figure 4 quantifies the quarterly growth in terms of the absolute numbers of broadband subscribers. Therefore, with the highest quarterly growth at 5.11 per cent, South and East Asia acquired the largest number of new subscribers (or net additions) during the quarter. This totalled 7.58 million and represented 50 per cent of the total. This was up 24 per cent on the previous quarter from 6.08 million.

China acquired the highest number of net additions in this region. This amounted to 6.44 million and represented 42.3 per cent of the total. China acquired more new subscribers compared to the previous quarter, up by 37.6 per cent from 4.68 million. China Telecom and China Unicom (Hong Kong) Ltd were the two top performing operators in this region, acquiring 3.4 million and 2.58 million new subscribers respectively.

India acquired the second highest number of net additions in South and East Asia, totalling 786,800. This was followed by Vietnam (786,800), Pakistan (112,185) and Thailand (47,395). India and Pakistan both improved their net additions on the previous quarter, but Vietnam and Thailand acquired less new subscribers compared with the previous quarter.

As shown in figure 4, Western Europe acquired the next largest share of net additions at 12 per cent, but this region was closely followed by North America with an 11 per cent share.

In Western Europe, net additions totalled 1.77 million, but this was down 24 per cent on the previous quarter from 2.34 million. The countries with the largest number of net additions include Germany (502,000 million new subscribers), France (289,270), UK (250,500), Spain (244,276) and Belgium (83,239). The top performing operators in Western Europe were German-based Vodafone (Arcor) with 228,000 new subscribers, French operator SFR (212,000), UK incumbent BT (199,000) and German incumbent Deutsche Telecom (115,000).

In North America, net additions totalled 1.7 million, up 2.4 per cent on the previous quarter from 1.66 million. The USA acquired over 1.55 million new subscribers while Canada acquired 154,577. As such, the USA acquired the second highest number of new subscribers after China, and India was third.

The top performing operators in this region were all US-based. They were Comcast with 418,000 new subscribers, Time Warner Cable (189,000), AT&T (175,000) and Charter Communications (162,000). The Canadian operator with the highest number of net additions was Videotron Communications acquiring 52,000 new subscribers.

Both Eastern Europe and Latin America acquired similar numbers of net additions, totalling 1.4 million each and representing a 9 per cent share. The Eastern European countries that acquired the most subscribers were Russia with 494,100 new subscribers, Romania (180,000), Serbia (133,000), Poland (101,600) and Greece (100,112). The Latin American countries with the most new subscribers were Brazil (504,300), Mexico (378,800), Argentina (198,200), Venezuela (162,000) and Columbia (102,600). Brazil acquired the fourth largest number of new subscribers overall after China, USA and India.

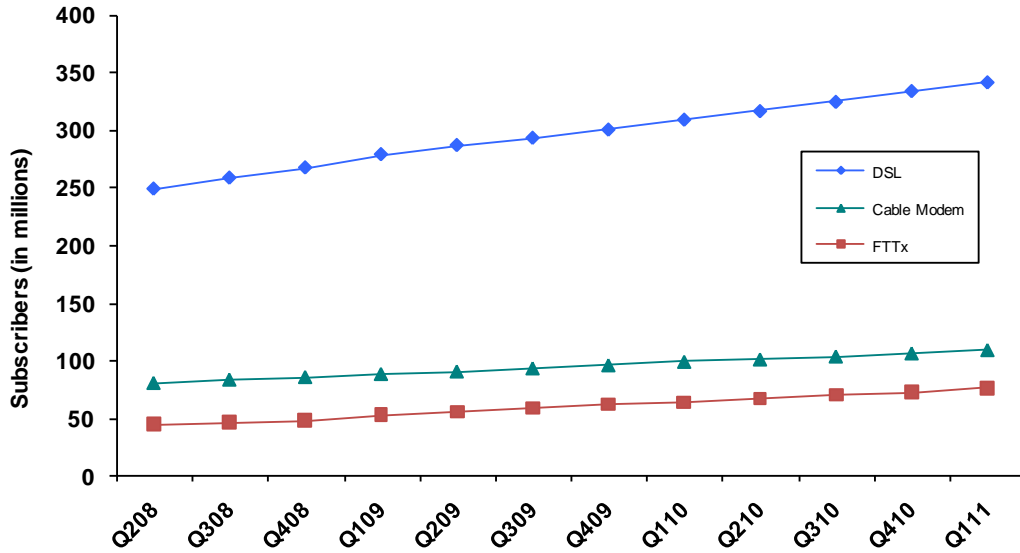
Asia Pacific was next with a 6 per cent share, representing 941,300 subscribers. This was down on the previous quarter by almost 19 per cent from 1.16 million subscribers. Japan acquired the most subscribers in this region totalling 342,100, but this was down by over 50 per cent from 708,200. Indonesia was next with 142,000 net additions, followed by Australia (140,700), South Korea (88,816) and the

Philippines (83,700). The best performing operator in this region was Indonesia-based PT Telkom with 142,000 new subscribers. NTT was next with 106,000 subscribers acquired in the West and 81,000 subscribers acquired in the East. Telekom Malaysia followed with 80,000 net additions.

The Middle East and Africa had the smallest share of net additions. At 380,900 new subscribers this represented 3 per cent of the total. Turkey acquired the most new subscribers (89,000), and Algeria was second with 73,000. Egypt was next with (58,800), then UAE (44,600) and Jordan (30,200). Algerie Telecom acquired the most subscribers in this region totalling 73,000 and Turk Telekom was next with 60,000 followed by Telecom Egypt with 58,800.

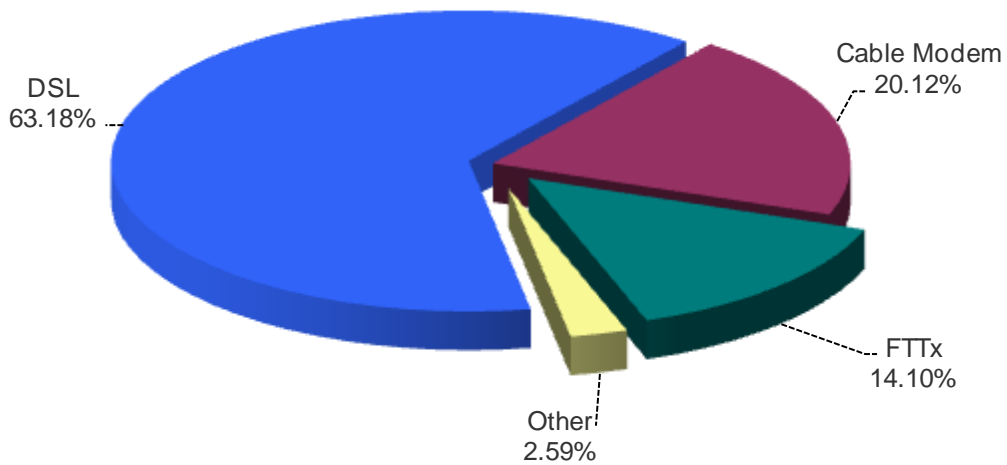
3. Technology Trends and Choices

Figure 5: Technology Trends in Q1 2011



The breakdown of subscribers in terms of broadband technologies used is shown in figures 5 and 6. DSL remains the most popular technology overall, with over 314.6 million subscribers (63.18 per cent). Cable modem was next with 108.8 million users (20 per cent) and FTTx was third with over 76 million subscribers (14 per cent).

Figure 6: Total Broadband by Technology in Q1 2011



FTTx is the most recent technology of the three but is often used for Next Generation Networks. As such, quarterly growth of this type of technology was the highest at 5.78 per cent, representing over 4.16 million new subscribers. Cable modem and DSL technologies had similar growth rates but Cable modem was marginally higher at 2.75 per cent (representing 2.9 million new subscribers), followed by DSL with 2.25 per cent growth (7.5 million new subscribers).

The market shares by region and technology are shown in figure 7. The first diagram shows that South and East Asia and Western Europe control the majority of the DSL market. Between them they are home to over 221.57 million DSL subscribers, representing almost 65 per cent of the total. South East Asia reported 122.8 million subscribers (almost 36 per cent) and Western Europe reported 98.76 million (almost 29 per cent).

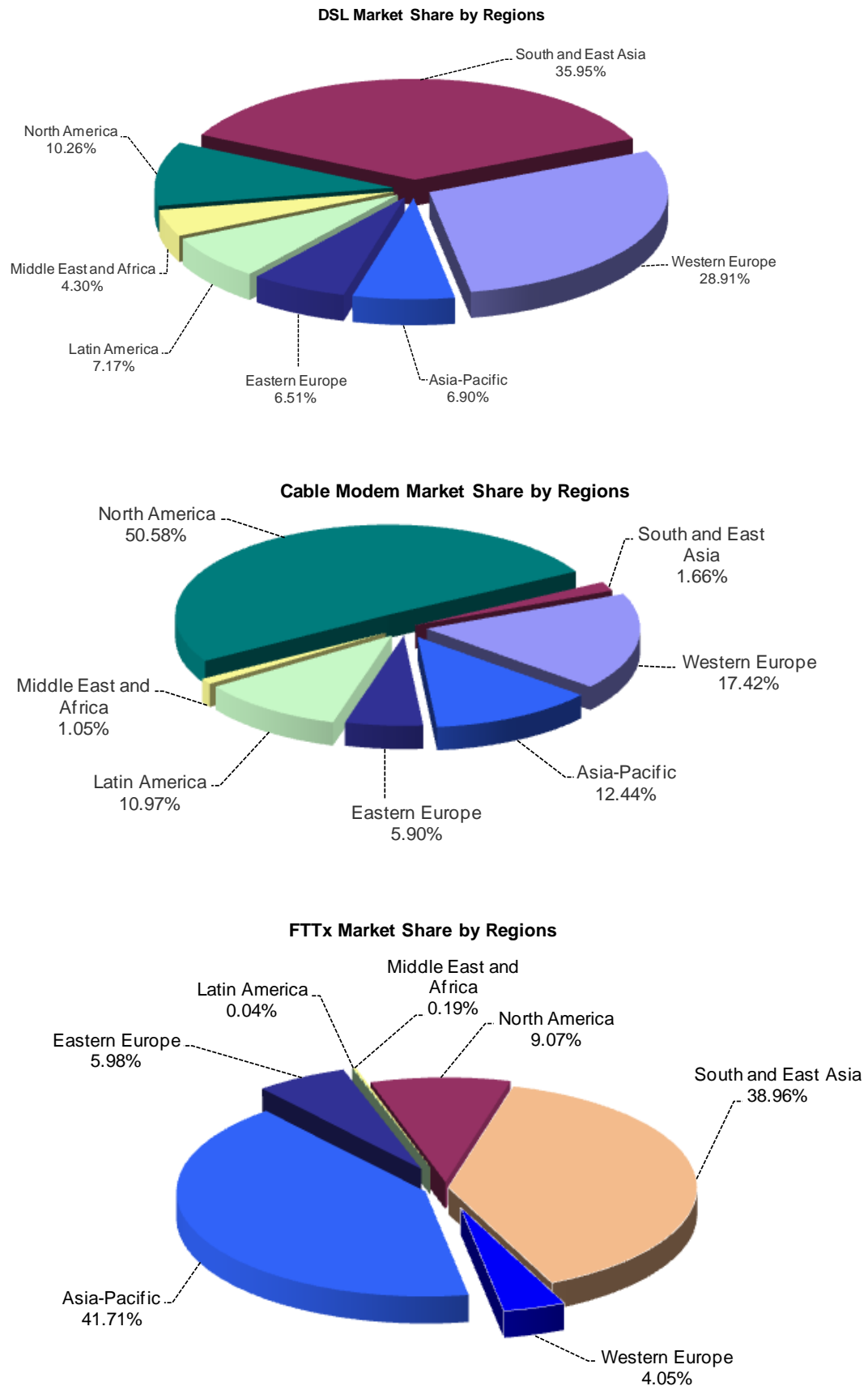
North America had the third largest share as shown in figure 7. At 10.26 per cent this represented 35.045 million subscribers. Latin America was next with a 7.2 per cent share (24.5 million). Both Asia Pacific and Eastern Europe had similar shares at 6.9 per cent (23.57 million) and 6.51 per cent (22.25 million) respectively. The smallest share of the DSL market was held by the Middle East and Africa at 4.3 per cent (14.7 million).

With 106.27 million subscribers, China had the largest DSL market not only in South and East Asia but also globally. China's share represented just over 31 per cent of the total. The USA had the second largest DSL market worldwide with over 30.38 million subscribers, representing 8.9 per cent of the total DSL market. The next three largest DSL markets were all based in Western Europe. They were Germany with 24 million subscribers (7 per cent), France with over 20 million subscribers (5.8 per cent), the UK with 15.7 million subscribers (4.6 per cent) and Italy with 13.6 million subscribers (4 per cent).

The second diagram in figure 7 shows that North America had an impressive share of the cable modem market. At 50.58 per cent this represented 55 million subscribers. The USA continues to maintain the largest cable modem market worldwide, amounting to 48.97 million subscribers, or 45 per cent of the total. Japan had the second largest cable modem market, surpassing Canada, with 6.08 million subscribers (5.58 per cent). Canada was in third place with 6.054 million subscribers (5.56 per cent). South Korea was next with 4.95 million cable modem subscribers (4.54 per cent), followed by the UK with almost 4.1 million subscribers (3.7 per cent).

FTTx is the most popular technology in Asia, with almost 31.8 million FTTx subscribers in Asia Pacific (41.71 per cent) and 29.7 million FTTx subscribers in South and East Asia (38.96 per cent). These regions are home to some of the most technologically advanced countries in the world. China had the largest FTTx market globally, totalling 28.9 million subscribers (38 per cent), followed by Japan with 20.14 million subscribers (26.4 per cent) and South Korea with 9.5 million subscribers (12.46 per cent). The USA was in fourth place with 6.9 million subscribers (9 per cent).

Figure 7: World DSL, Cable Modem & FTTx Market Share by Region in Q1 2011



Asia Pacific was the only region whose DSL market experienced quarterly negative growth. However, this was down by only 0.95 per cent from 23.79 million to 23.57 million. This could be an indication that the key DSL markets in this region have reached saturation and are experiencing churn. In addition, many of these countries could be looking to transfer their DSL subscribers to next generation services and as such are no longer aggressively marketing these types of services.

The region with the highest DSL quarterly growth was South and East Asia. This was up 3.9 per cent from almost 118.2 million to 122.81 million. The countries with the largest DSL markets all experienced positive growth. They include China (3.7 per cent), India (6.74 per cent), Vietnam (3.92 per cent) and Thailand (3.27 per cent).

Quarterly growth in Eastern Europe was the next highest at 3.34 per cent. Latin America was next with growth at 2.98 per cent. Both of these regions have relatively new fast growth markets and as such growth will be relatively high. Countries in these regions with high growth include Peru (8.76 per cent), Latvia (7.3 per cent), Belarus (6.12 per cent) and Bolivia (6.07 per cent).

At just over 6 per cent, South and East Asia was the region with the highest quarterly growth with respect to cable modem technology. However, this was up from 1.67 million to 1.8 million and as such the cable modem market in this region is relatively small.

Latin America and Eastern Europe had high quarterly growth at 4.77 per cent and 3.54 per cent respectively. In Latin America, countries with key cable modem markets all experienced positive growth. They include Brazil (7 per cent), Mexico (4.24 per cent), Argentina (12.05 per cent), Venezuela (9.57 per cent) and Colombia (3.08 per cent). Eastern Europe offers some of the best value for money cable modem broadband services in the world and as such they are increasingly popular. Countries experiencing positive growth in this region include Poland (3.77 per cent), Russia (1 per cent), Hungary (5 per cent) and Czech Republic (2.9 per cent).

Once again South and East Asia had the highest growth but this time with respect to FTTx technology - up 9.84 per cent from 27.04 million to 29.7 million. Despite the size of the market in this region, only two key countries have significant FTTx markets. They are China, whose market grew by 10.11 per cent from 26.25 million to 28.9 million and Hong Kong, whose market grew by less than 1 per cent from 788,000 to 795,000.

Eastern Europe, Western Europe and North America experienced similar quarterly growth rates at 5.71 per cent, 5.29 per cent and 4.86 per cent respectively. In Eastern Europe countries which reported high quarterly growth include Russia (6.33 per cent), Estonia (8.47 per cent) and Slovakia (5.22 per cent). In Western Europe, countries with high growth include Switzerland (11.4 per cent), UK (10.41 per cent), France (8.07 per cent) and the Netherlands (4.52 per cent). The FTTx market in the USA grew by 4.86 per cent from 6.59 million to 6.9 million.

4. “Top Ten” Broadband Countries

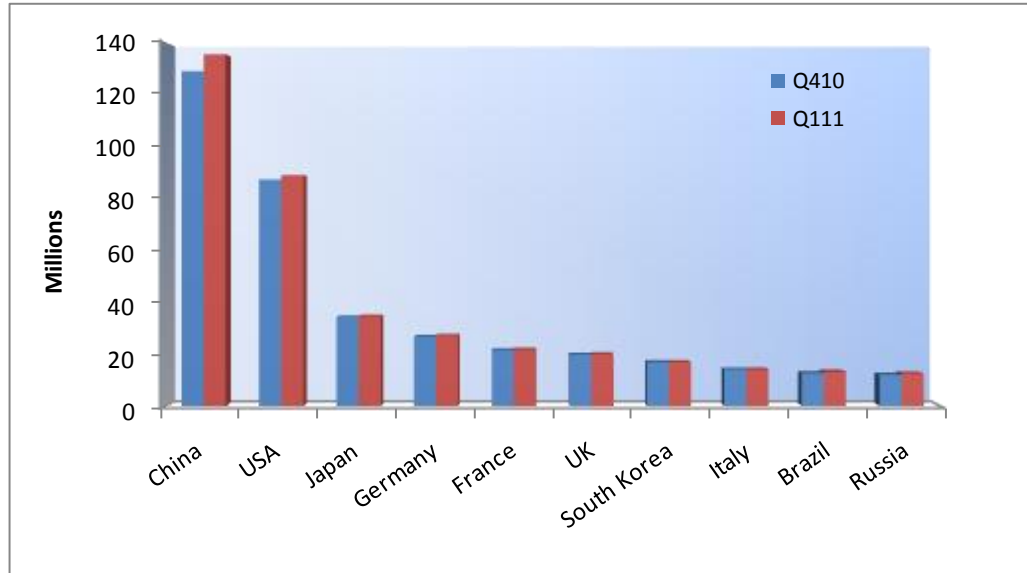
4.1 Number of Subscribers

The ‘top ten’ countries in terms of total broadband subscribers as of Q4 2010 and Q1 2011 are shown in figure 8. Since displacing the USA in Q2 2008, China has maintained its number one position while the USA is in second place.

China reported almost 135.23 million subscribers, up 5 per cent on the previous quarter from over 128.79 million. The USA had 88.7 million subscribers, up by 1.79 per cent from 87.17 million. As such, the Chinese broadband market is growing at a significantly higher rate than that in the US. Therefore if this continues the difference between their subscriber bases will continue to increase. The subscriber bases in China and the US combined represent over 41.4 per cent of the worldwide broadband market.

Japan was in third place with a subscriber base amounting to 34.6 million. This was up by 1 per cent from 34.27 million. In Germany the total number of subscribers increased by 1.88 per cent from 26.66 million to 27.16 million.

Figure 8: Total Number of Subscribers in Q4 2010 and Q1 2011

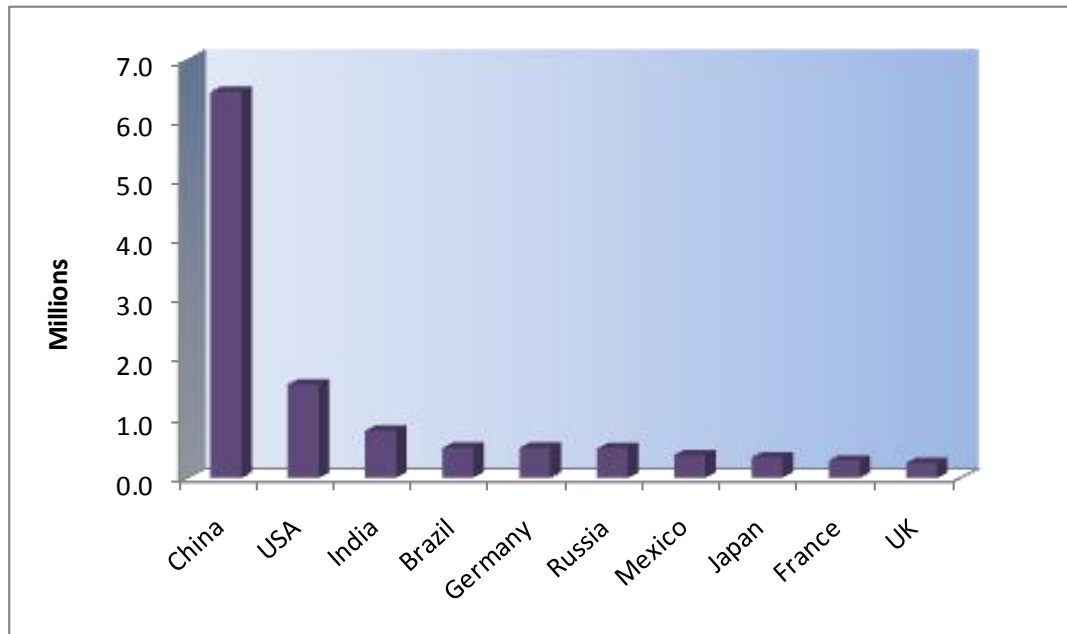


4.2 Broadband Subscribers Added

The ‘top ten’ countries ranked in terms of net additions during Q1 2011 are shown in figure 9. As shown, only two countries added more than 1 million subscribers. They were China, which added over 6.44 million new subscribers, and the USA, adding 1.56 million. Including China and the US, five countries added more than 500,000

subscribers. The additional countries were India (786,885 net additions), Brazil (504,300 net additions) and Germany (502,000 net additions).

Figure 9: Broadband Subscribers Added in Q1 2011

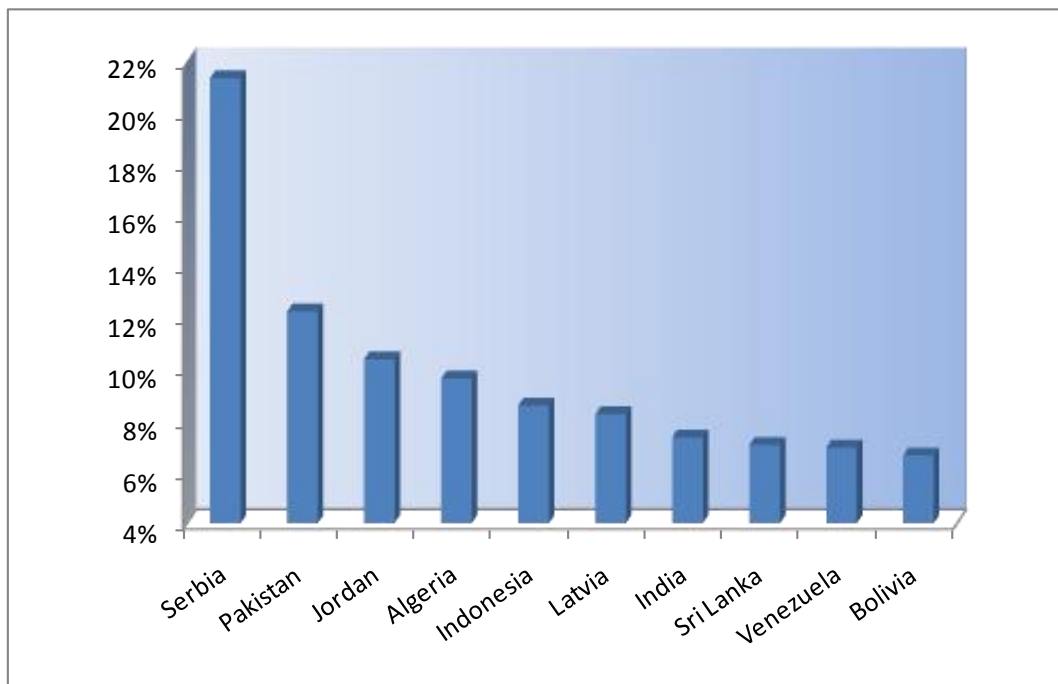


Five of the countries shown in figure 9 improved their net additions total on the previous quarter. India reported the highest increase in its net additions by proportion, up over 46 per cent from 538,768 subscribers. China was next with a 37.56 per cent increase from 4.68 million subscribers and Brazil followed with a 14.8 per cent increase from 439,300 subscribers. The two smallest increases took place in the USA (up 3.36 per cent from 1.509 million) and Mexico (up 2.68 per cent from 378,800).

Of the five countries that added less subscribers quarter-on-quarter, Japan experienced the largest fall, by over 51 per cent from 708,200 to 342,100. Net additions also fell in the UK, by over 41 per cent from 427,100 to 250,500. In Russia new subscribers were down 40 per cent from 831,453 to 494,100 and in France they were down 38.65 per cent from 471,530 to 289,270. The smallest fall was experienced in Germany, by 7.2 per cent from 541,000 to 502,000.

4.3 Percentage Growth

The 'top ten' countries in terms of quarterly and annual growth are shown in figures 10 and 11 respectively. Only countries with at least 100,000 broadband subscribers were included. This reduced the effect of disproportionately high growth rates exhibited by countries with very small subscriber bases.

Figure 10: Top Ten Countries by Quarterly Growth in Q1 2011

As shown in figure 10, Serbia experienced the highest quarterly growth at 21.35 per cent. Pakistan was in second place with 12.25 per cent growth and Jordan followed with 10.39 per cent growth. These were the only three countries with quarterly growth above 10 per cent. Algeria was in fourth place with 9.64 per cent growth and Indonesia followed with 8.58 per cent growth.

Five of the countries shown in figure 10 acquired more than 100,000 new subscribers over the quarter. They were India (786,885), Venezuela (162,000), Indonesia (142,000), Serbia (133,000) and Pakistan (112,185).

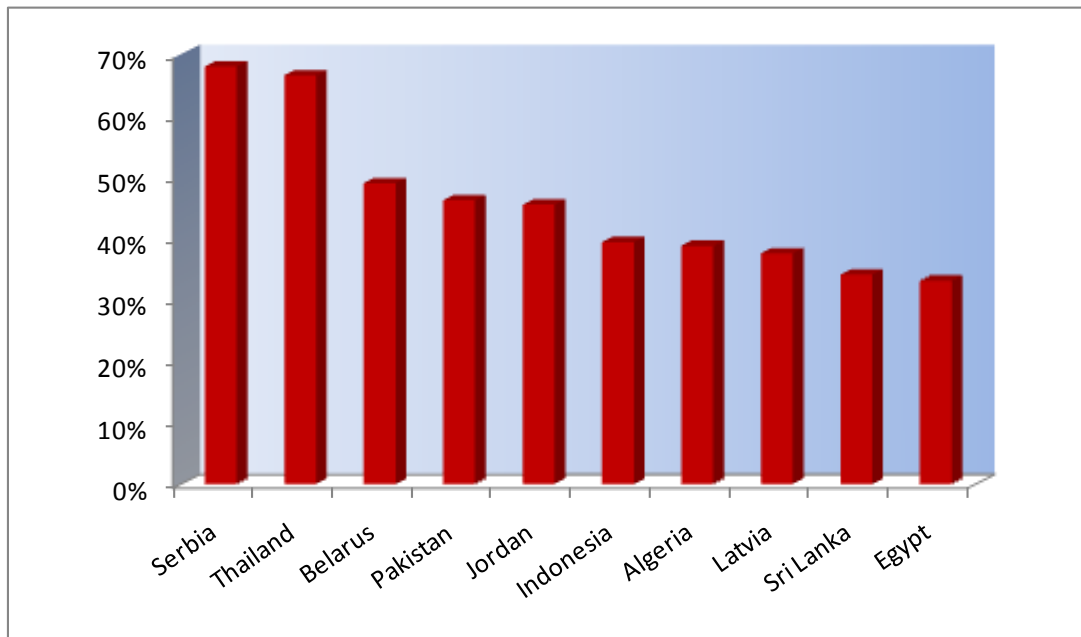
There were five new entrants compared with the previous ranking. They were Serbia, Jordan, Algeria, India and Venezuela. They displaced Greece, Belarus, Thailand, Estonia and Kosovo.

As shown in figure 11, Serbia had the highest growth year-on-year at 68 per cent, displacing Belarus from the top spot. Thailand was in second place with 66.53 per cent annual growth and Belarus was third with annual growth at almost 49 per cent.

Six of the countries in figure 11 added more than 300,000 subscribers over the year. They were Thailand, adding 621,677 new subscribers, Indonesia (508,000), Egypt (366,844), Belarus (336,000), Pakistan (325,089) and Serbia (306,000).

There were four new entrants compared with the previous year. They were Serbia, Thailand, Pakistan, and Algeria. They displaced Bolivia, India, Venezuela and Estonia.

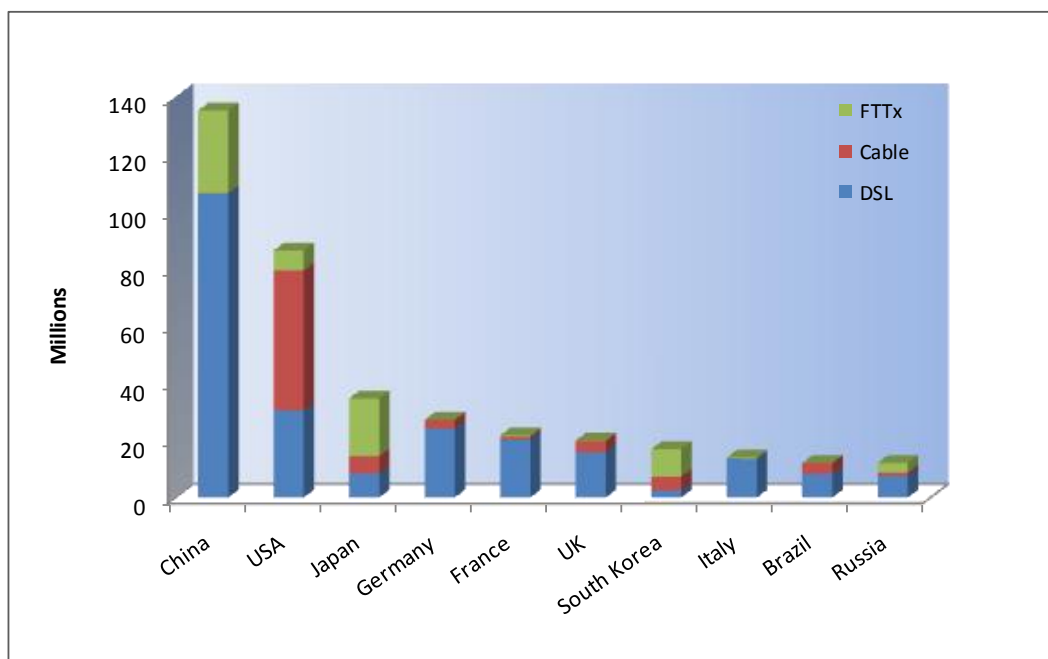
Figure 11: Top 10 Countries by Annual Growth from Q1 2010 to Q1 2011



4.4 Technologies Adopted

The 'top ten' countries from figure 8 but in terms of technology usage are shown in figure 12. These countries collectively represent over 70 per cent of the global broadband market. An analysis of the technology trends of these countries is a good indicator of worldwide trends.

Figure 12: Total Subscriber Numbers by Technology Adopted in Q1 2011



The breakdown shows that DSL is the main technology for worldwide broadband connections. Over 61.7 per cent of the top ten total, representing 236.79 million subscribers used this type of technology. The main countries that use DSL technology include China, USA, Germany, France, the UK and Italy.

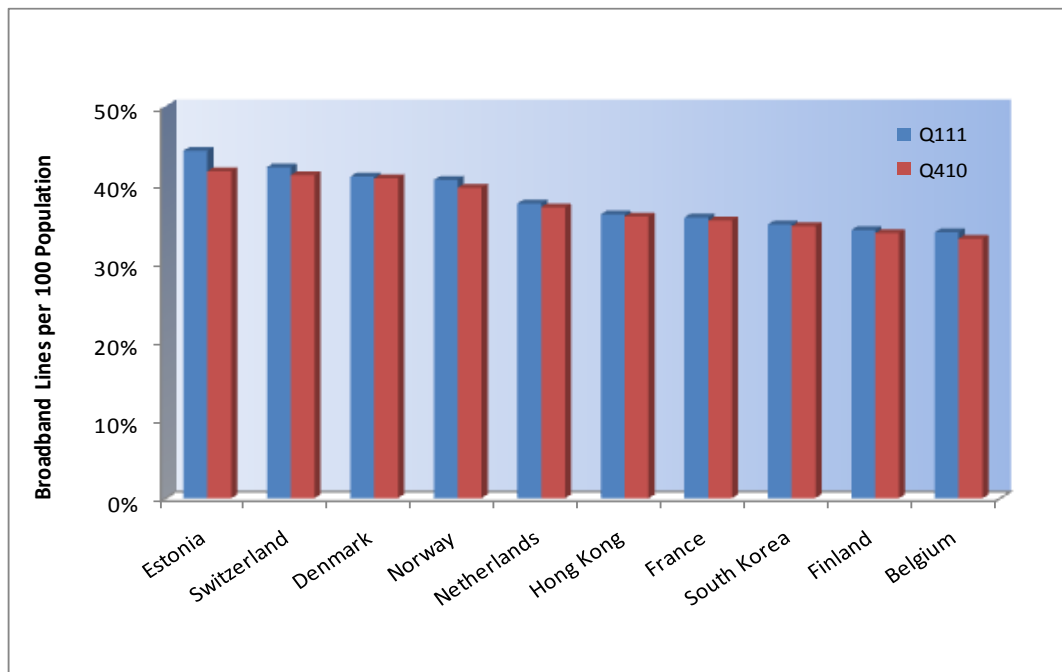
Cable modem technology is used by over 19 per cent of the top ten total, or 73.14 million subscribers. The USA has the largest cable modem market in the world with almost 49 million subscribers, representing 12.7 per cent of the top ten total. Other countries where cable modem technology is popular include Japan, UK, South Korea and Brazil.

Over 18 per cent of the top ten total use FTTx for their broadband connections. This represents over 69.8 million subscribers. China has the largest FTTx market in the world with over 28.9 million subscribers. This was followed by Japan (20.13 million subscribers), South Korea (9.54 million) USA (6.92 million), and Russia (3.14 million).

4.5 Population and Household Penetration

The top ten countries ranked in terms of population and household penetration are in figures 13 and 14 respectively. We have omitted all countries with populations less than 1 million from these rankings. This is so we can include countries with more significant broadband markets and give a more illustrative reflection of worldwide broadband trends.

Figure 13: Broadband Penetration by Population in Q4 2010 and Q1 2011

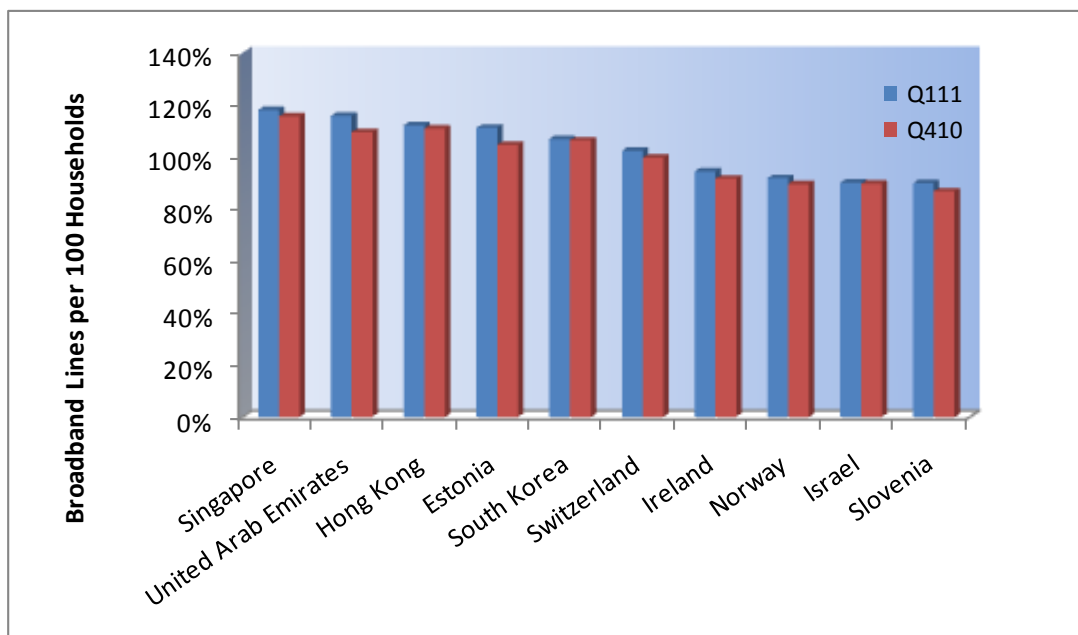


Even after the omission, the countries shown in figures 13 and 14 are relatively small in terms of area and population, such as Hong Kong, Singapore, Denmark and the Netherlands. This illustrates how much easier it is to build extensive broadband infrastructure that covers the majority of the population and households on a smaller scale.

As shown in figure 13, Estonia had the highest population penetration at 44.3 per cent, followed by Switzerland with 42.2 per cent and Denmark with 41 per cent. There is a 10.4 per cent difference between Estonia with the highest penetration and Belgium, with the lowest penetration

In contrast, the top ten countries in terms of household penetration are spread over a greater range (28.1 percentage points) as shown in figure 13. Household penetration in Singapore was 118 per cent, compared with 89.9 per cent in Slovenia. The second highest household penetration was in UAE at 115.7 per cent, followed by Hong Kong at 112.1 per cent and Estonia at 111.2 per cent.

Figure 14: Broadband Penetration by Household in Q4 2010 and Q1 2011



5. Methodology and Supporting Material

5.1 Data Collection

Point Topic aims to offer the most complete, up-to-date and accurate source for world broadband statistics and estimates. In order to do this, we collect quarterly statistics from major primary suppliers of DSL lines, cable modems and FTTx services. We also collate data from service providers which resell products provided by these primary suppliers. Many operators now publish quarterly numbers as part of their regular reporting cycle. Numerous others provide us with their numbers via email and personal communication. We are, as always, most grateful to all of them for having taken the time to do so.

Many operators continue to release annual reports as opposed to quarterly ones. Some also choose to aggregate subscriber trends into overall totals, avoiding breakdowns by technology. In these cases, Point Topic has continued conservatively estimating broadband up-take. Key sources for such estimated totals typically include prior and partial reports by the operators themselves. National Regulatory Authorities (NRAs) also frequently report DSL and other broadband statistics, although often with a greater time delay. Despite any difficulties that may arise as a consequence of this publication schedule, Point Topic will continue to provide the most up-to-date broadband statistics and estimates in our reports. In cases where these sources are unavailable, DSL and cable vendors often give useful indicators, as do estimates quoted by the trade press. Where we do have secondary estimates, we try as far as is possible to trace these to their original source.

During the research process for the latest quarterly statistics report, we often return to preceding quarters with the aim of synchronising earlier estimates with official sources. Some changes to the figures in Q4 2010 were necessary and deviation from earlier reports is possible. We shall continue to maintain close correspondence with broadband operators, national regulators and industry organisations in order to avoid ambiguities and also so as to minimise the number of restatements. Some of the historical statistics will be different from those published in earlier reports and contained within Excel spreadsheet datasets. Point Topic's *Global Broadband Statistics* service (GBS) contains the most up-to-date information and we endeavour to continuously update its data entries on an ongoing basis. Generally, precedence should be given to the figures contained within the most recent version of this report and the figures in GBS.

Data collected for individual operators may be aggregated in GBS in order to derive country and region totals, growth and penetration rates, market shares of operators and net additions. Full details at the operator level are also contained in the GBS service, which is available to Point Topic subscribers.

5.2 Variations in Coverage and Definitions

In principle, the definition of broadband Internet refers to connections with speeds of no less than 256 Kbps. For DSL statistics, all lines which are described by their suppliers as "DSL" are included. In practice the great majority of these are ADSL, variants such as ADSL2+ or other such versions of ADSL. The main exceptions are:

- VDSL lines, of which Korea Telecom and Hanaro are the major reporting suppliers
- Symmetrical DSL lines, offered mainly by Competitive Local Exchange Carriers such as Covad in the USA and their counterparts in other countries

Occasionally, there are contradictions between operator and regulator reports. This happens in South Korea, for example, where the operators typically report broadband subscriptions as either DSL or cable modem, whereas the regulator chooses to break this down further down into an "apartment LAN" or "A-LAN" category. A-LAN is defined as using a shared fibre or broadband copper connection to the apartment block with Ethernet-based distribution within the apartment block. Operator classifications of these A-LAN subscriptions vary, but they are often included as DSL lines. We have classified all these A-LAN lines as FTTx, although a proportion of them do use copper rather than fibre backhaul.

Other reported statistics may combine broadband lines of different technology types. If a number is an aggregate of major broadband types, such as DSL and cable modem, we generally break up such an aggregate and state uptake for each category separately in GBS. In cases where there is only a marginal proportion using a different technology, the aggregate is kept and assigned to the larger group. These cases are usually noted with a comment in the source 'Notes' of (GBS v2).

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.

5.3 Resources for Subscribers

In August 2006, Point Topic launched the full version of its *Global Broadband Statistics* database (GBS). Subscribers to Point Topic who wish to carry out their own analyses of broadband trends are welcome to query GBS and download data relevant to their own research.

Subscribers to the *Operator Source* service will also be granted direct online access to data in old workbooks collated up to December 2005. For further information, please refer to our website. This workbook series was discontinued in Q1 2006.

It is inevitable that a production of this nature will contain errors and omissions. We would be grateful if readers would notify us of any they may discover by sending an email to info@point-topic.com.

6. Tables

Table 1. DSL subscribers, Non-DSL, and total broadband subscribers in major countries (Top 30): Americas

Country	Total broadband subscribers			Non-DSL subscribers			DSL subscribers		
	Q410	Q111	Q410-Q111, Growth	Q410	Q111	Q410-Q111, Growth	Q410	Q111	Q410-Q111, Growth
World Total	525,458,713	540,686,957	2.90%	191,365,283	199,070,540	4.03%	334,093,430	341,616,417	2.25%
USA	87,174,827	88,734,728	1.79%	56,967,860	58,348,976	2.42%	30,206,967	30,385,752	0.59%
Brazil	12,608,200	13,112,500	4.00%	4,646,000	4,930,000	6.11%	7,962,200	8,182,500	2.77%
Mexico	11,402,888	11,781,689	3.32%	3,880,048	4,043,000	4.20%	7,522,840	7,738,689	2.87%
Canada	10,559,139	10,713,716	1.46%	5,952,547	6,054,069	1.71%	4,606,592	4,659,647	1.15%
Argentina	3,979,500	4,177,700	4.98%	1,146,800	1,285,000	12.05%	2,832,700	2,892,700	2.12%
Other Americas	9,093,650	9,443,384	3.85%	3,633,100	3,769,570	3.76%	5,460,550	5,673,814	3.91%
Total Americas	134,818,204	137,963,717	2.33%	76,226,355	78,430,615	2.89%	58,591,849	59,533,102	1.61%

Table 1. (Continued) DSL subscribers, Non-DSL, and total broadband subscribers in major countries: APSEA

Country	Total broadband subscribers			Non-DSL subscribers			DSL subscribers		
	Q410	Q111	Q410-Q111, Growth	Q410	Q111	Q410-Q111, Growth	Q410	Q111	Q410-Q111, Growth
China	128,792,000	135,236,500	5.00%	26,308,000	28,960,000	10.08%	102,484,000	106,276,500	3.70%
Japan	34,267,000	34,609,100	1.00%	25,477,000	26,235,100	2.98%	8,790,000	8,374,000	-4.73%
South Korea	16,767,847	16,856,663	0.53%	14,242,179	14,495,418	1.78%	2,525,668	2,361,245	-6.51%
India	10,713,608	11,500,493	7.34%	2,283,600	2,502,600	9.59%	8,430,008	8,997,893	6.74%
Australia	5,539,500	5,680,200	2.54%	974,480	990,200	1.61%	4,565,020	4,690,000	2.74%
Taiwan	5,119,000	5,151,000	0.63%	2,790,000	2,869,000	2.83%	2,329,000	2,282,000	-2.02%
Vietnam	3,677,000	3,826,800	4.07%	57,000	65,000	14.04%	3,620,000	3,761,800	3.92%
Hong Kong	2,524,654	2,550,654	1.03%	1,157,654	1,166,654	0.78%	1,367,000	1,384,000	1.24%
Philippines	2,153,004	2,236,743	3.89%	1,377,956	1,429,155	3.72%	775,048	807,588	4.20%
Indonesia	1,655,500	1,797,500	8.58%	6,500	6,500	0.00%	1,649,000	1,791,000	8.61%
Other APSEA	6,703,327	6,991,191	4.29%	1,246,611	1,342,421	7.69%	5,456,716	5,648,770	3.52%
Total APSEA	217,912,440	226,436,844	3.91%	75,920,980	80,062,048	5.45%	141,991,460	146,374,796	3.09%

Table 1. (Continued) DSL subscribers, Non-DSL, and total broadband subscribers in major countries: EMEA

Country	Total broadband subscribers			Non-DSL subscribers			DSL subscribers		
	Q410	Q111	Q410-Q111, Growth	Q410	Q111	Q410-Q111, Growth	Q410	Q111	Q410-Q111, Growth
Germany	26,655,350	27,157,350	1.88%	3,017,250	3,123,150	3.51%	23,638,100	24,034,200	1.68%
France	21,387,530	21,676,800	1.35%	1,351,300	1,393,800	3.15%	20,036,230	20,283,000	1.23%
UK	19,660,600	19,911,100	1.27%	4,149,600	4,211,100	1.48%	15,511,000	15,700,000	1.22%
Italy	14,012,650	14,014,650	0.01%	419,650	422,650	0.71%	13,593,000	13,592,000	-0.01%
Russia	11,993,900	12,488,000	4.12%	4,646,900	4,885,000	5.12%	7,347,000	7,603,000	3.48%
Spain	10,799,849	11,044,125	2.26%	2,216,636	2,282,427	2.97%	8,583,213	8,761,698	2.08%
Turkey	7,019,550	7,108,550	1.27%	357,050	386,050	8.12%	6,662,500	6,722,500	0.90%
Netherlands	6,053,100	6,129,500	1.26%	2,755,100	2,841,500	3.14%	3,298,000	3,288,000	-0.30%
Poland	5,359,747	5,461,423	1.90%	2,102,680	2,192,301	4.26%	3,257,067	3,269,122	0.37%
Belgium	3,479,461	3,562,700	2.39%	1,397,600	1,425,200	1.97%	2,081,861	2,137,500	2.67%
Romania	3,332,445	3,512,525	5.40%	2,319,000	2,450,200	5.66%	1,013,445	1,062,325	4.82%
Switzerland	3,071,200	3,151,600	2.62%	1,261,200	1,332,600	5.66%	1,810,000	1,819,000	0.50%
Sweden	2,991,002	3,022,302	1.05%	1,402,002	1,429,302	1.95%	1,589,000	1,593,000	0.25%
Greece	2,508,238	2,608,350	3.99%	3,916	3,916	0.00%	2,504,322	2,604,434	4.00%
Ukraine	2,417,600	2,465,000	1.96%	1,263,000	1,290,000	2.14%	1,154,600	1,175,000	1.77%
Czech Republic	2,276,300	2,352,600	3.35%	1,405,400	1,439,700	2.44%	870,900	912,900	4.82%
Denmark	2,216,497	2,226,797	0.46%	952,797	974,097	2.24%	1,263,700	1,252,700	-0.87%
Portugal	2,109,979	2,146,921	1.75%	986,979	1,011,921	2.53%	1,123,000	1,135,000	1.07%
Other EMEA	25,333,871	26,191,603	3.39%	7,160,688	7,428,463	3.74%	18,173,183	18,763,140	3.25%
EMEA Total	172,678,869	176,231,896	2.06%	39,168,748	40,523,377	3.46%	133,510,121	135,708,519	1.65%