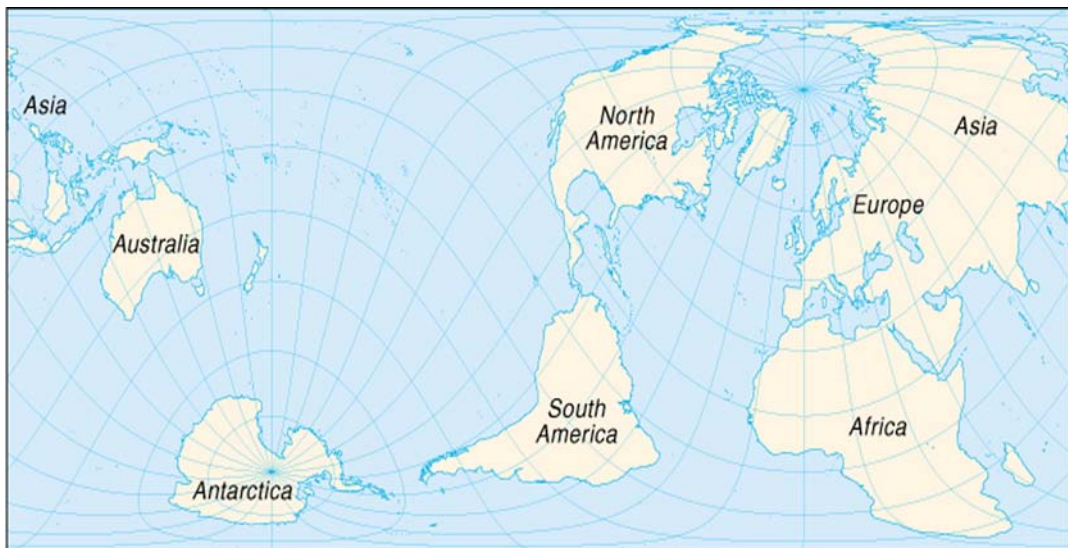


# The 2009-2014 World Outlook for Wide Area Networks (WAN)

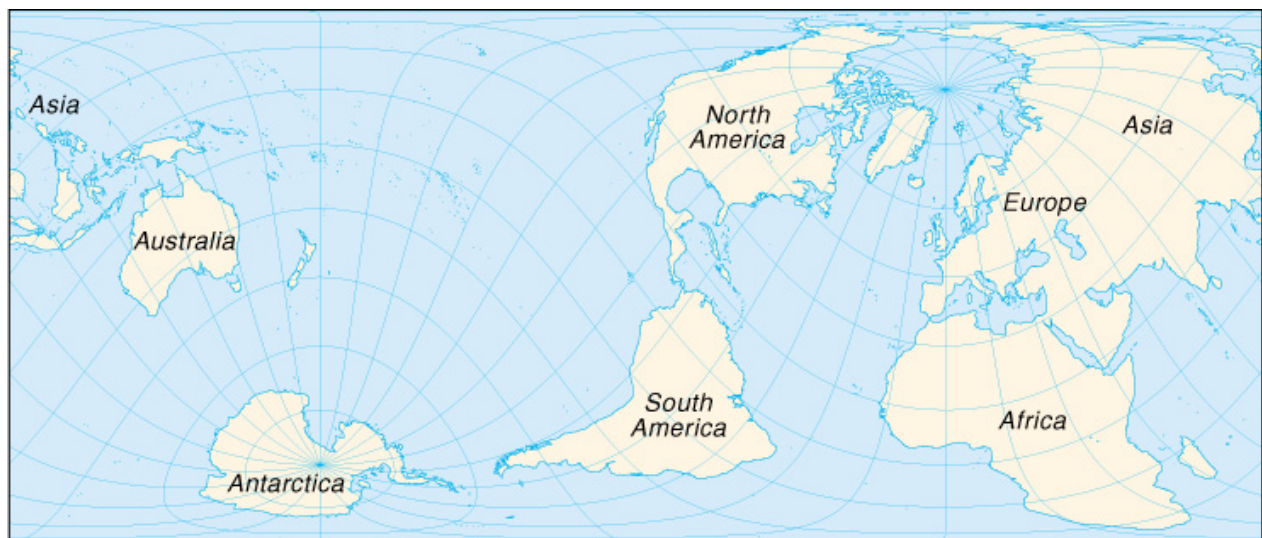


by  
**Professor Philip M. Parker, Ph.D.**  
Chaired Professor of Management Science  
INSEAD (Singapore and Fontainebleau, France)

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## About the Author

Dr. Philip M. Parker is the Eli Lilly Chaired Professor of Innovation, Business and Society at INSEAD where he has taught courses on global competitive strategy since 1988. He has also taught courses at MIT, Stanford University, Harvard University, UCLA, UCSD, and the Hong Kong University of Science and Technology. Professor Parker is the author of six books on the economic convergence of nations. These books introduce the notion of “physioeconomics” which foresees a lack of global convergence in economic behaviors due to physiological and physiographic forces. His latest book is *Physioeconomics: the basis for long-run economic growth* (MIT Press 2000). He has also published numerous articles in academic journals, including, the *Rand Journal of Economics*, *Marketing Science*, the *Journal of International Business Studies*, *Technological Forecasting and Social Change*, the *International Journal of Forecasting*, the *European Management Journal*, the *European Journal of Operational Research*, the *Journal of Marketing*, the *International Journal of Research in Marketing*, and the *Journal of Marketing Research*. He is also on the editorial boards of several academic journals.

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## About this Series

This series was created for international firms who rely on foreign markets for a substantial portion of their business or who might be threatened by international competition. The estimates given in this report were created using a methodology developed by and implemented under the direct supervision of Professor Philip M. Parker, the Eli Lilly Chaired Professor of Innovation, Business and Society, at INSEAD. The methodology relies on historical figures across countries. Reported figures should be seen as estimates of past and future levels of latent demand.

## Acknowledgements

Some of the methodologies and research approaches used in this report have benefited from the R&D Committee at INSEAD, whose research support is gratefully acknowledged.

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**Industry Studies:** Companies are racing to become more international, if not global in their strategies. For over 2000 product/industry categories, these reports give the reader a concise summary of latent market forecasts, pro-forma financials, import competition profiles, contacts, key references and trends across 200 countries of the world. Some reports focus on a particular product and region (up to four regions per product), while others focus on a product within a particular country.

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# 1 INTRODUCTION

## 1.1 OVERVIEW

This study covers the world outlook for wide area networks (WAN) across more than 200 countries. For each year reported, estimates are given for the *latent demand*, or *potential industry earnings (P.I.E.)*, for the country in question (in millions of U.S. dollars), the percent share the country is of the region and of the globe. These comparative benchmarks allow the reader to quickly gauge a country vis-à-vis others. Using econometric models which project fundamental economic dynamics within each country and across countries, latent demand estimates are created. This report does not discuss the specific players in the market serving the latent demand, nor specific details at the product level. The study also does not consider short-term cyclicalities that might affect realized sales. The study, therefore, is strategic in nature, taking an aggregate and long-run view, irrespective of the players or products involved.

This study does not report actual sales data (which are simply unavailable, in a comparable or consistent manner in virtually all of the 230 countries of the world). This study gives, however, my estimates for the worldwide latent demand, or the P.I.E. for wide area networks (WAN). It also shows how the P.I.E. is divided across the world's regional and national markets. For each country, I also show my estimates of how the P.I.E. grows over time (positive or negative growth). In order to make these estimates, a multi-stage methodology was employed that is often taught in courses on international strategic planning at graduate schools of business.

Another reason why sales do not equate to latent demand is exchange rates. In this report, all figures assume the long-run efficiency of currency markets. Figures, therefore, equate values based on purchasing power parities across countries. Short-run distortions in the value of the dollar, therefore, do not figure into the estimates. Purchasing power parity estimates of country income were collected from official sources, and extrapolated using standard econometric models. The report uses the dollar as the currency of comparison, but not as a measure of transaction volume. The units used in this report are: US\$ Million.

## 1.2 WHAT IS LATENT DEMAND AND THE P.I.E.?

The concept of *latent demand* is rather subtle. The term *latent* typically refers to something that is dormant, not observable or not yet realized. *Demand* is the notion of an economic quantity that a target population or market requires under different assumptions of price, quality, and distribution, among other factors. Latent demand, therefore, is commonly defined by economists as the industry earnings of a market when that market becomes accessible and attractive to serve by competing firms. It is a measure, therefore, of *potential* industry earnings (P.I.E.) or total revenues (not profit) if a market is served in an efficient manner. It is typically expressed as the total revenues potentially extracted by firms. The “market” is defined at a given level in the value

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chain. There can be latent demand at the retail level, at the wholesale level, the manufacturing level, and the raw materials level (the P.I.E. of higher levels of the value chain being always smaller than the P.I.E. of levels at lower levels of the same value chain, assuming all levels maintain minimum profitability).

The latent demand for wide area networks (WAN) is not actual or historic sales. Nor is latent demand future sales. In fact, latent demand can be lower or higher than actual sales if a market is inefficient (i.e. not representative of relatively competitive levels). Inefficiencies arise from a number of factors, including the lack of international openness, cultural barriers to consumption, regulations, and cartel-like behavior on the part of firms. In general, however, latent demand is typically larger than actual sales in a country market.

For reasons discussed later, this report does not consider the notion of “unit quantities”, only total latent revenues (i.e. a calculation of price times quantity is never made, though one is implied). The units used in this report are U.S. dollars not adjusted for inflation (i.e. the figures incorporate inflationary trends) and not adjusted for future dynamics in exchange rates. If inflation rates or exchange rates vary in a substantial way compared to recent experience, actually sales can also exceed latent demand (when expressed in U.S. dollars, not adjusted for inflation). On the other hand, latent demand can be typically higher than actual sales as there are often distribution inefficiencies that reduce actual sales below the level of latent demand.

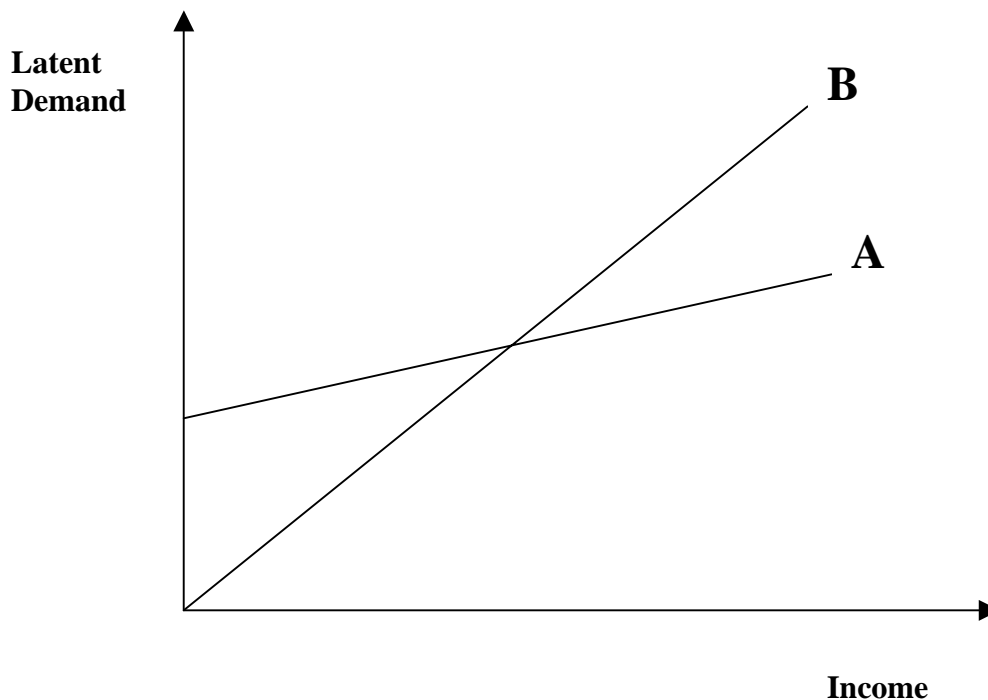
As mentioned in the introduction, this study is strategic in nature, taking an aggregate and long-run view, irrespective of the players or products involved. If fact, all the current products or services on the market can cease to exist in their present form (i.e. at a brand-, R&D specification, or corporate-image level) and all the players can be replaced by other firms (i.e. via exits, entries, mergers, bankruptcies, etc.), and there will still be an international latent demand for wide area networks (WAN) at the aggregate level. Product and service offering details, and the actual identity of the players involved, while important for certain issues, are relatively unimportant for estimates of latent demand.

### **1.3 THE METHODOLOGY**

In order to estimate the latent demand for wide area networks (WAN) on a worldwide basis, I used a multi-stage approach. Before applying the approach, one needs a basic theory from which such estimates are created. In this case, I heavily rely on the use of certain basic economic assumptions. In particular, there is an assumption governing the shape and type of aggregate latent demand functions. Latent demand functions relate the income of a country, city, state, household, or individual to realized consumption. Latent demand (often realized as consumption when an industry is efficient), at any level of the value chain, takes place if an equilibrium is realized. For firms to serve a market, they must perceive a latent demand and be able to serve that demand at a minimal return. The single most important variable determining consumption, assuming latent demand exists, is income (or other financial resources at higher levels of the

value chain). Other factors that can pivot or shape demand curves include external or exogenous shocks (i.e. business cycles), and or changes in utility for the product in question.

Ignoring, for the moment, exogenous shocks and variations in utility across countries, the aggregate relation between income and consumption has been a central theme in economics. The figure below concisely summarizes one aspect of problem. In the 1930s, John Meynard Keynes conjectured that as incomes rise, the average propensity to consume would fall. The average propensity to consume is the level of consumption divided by the level of income, or the slope of the line from the origin to the consumption function. He estimated this relationship empirically and found it to be true in the short-run (mostly based on cross-sectional data). The higher the income, the lower the average propensity to consume. This type of consumption function is labeled "A" in the figure below (note the rather flat slope of the curve). In the 1940s, another macroeconomist, Simon Kuznets, estimated long-run consumption functions which indicated that the marginal propensity to consume was rather constant (using time series data across countries). This type of consumption function is show as "B" in the figure below (note the higher slope and zero-zero intercept).<sup>1</sup> The average propensity to consume is constant.



Is it declining or is it constant? A number of other economists, notably Franco Modigliani and Milton Friedman, in the 1950s (and Irving Fisher earlier), explained why the two functions were different using various assumptions on intertemporal budget constraints, savings, and wealth. The shorter the time horizon, the more consumption can depend on wealth (earned in previous years)

<sup>1</sup> For a general overview of this subject area, see *Principles of Macroeconomics* by N. Gregory Mankiw, South-Western College Publishing; ISBN: 0030340594; 2nd edition (February 2002).

and business cycles. In the long-run, however, the propensity to consume is more constant. Similarly, in the long run, households, industries or countries with no income eventually have no consumption (wealth is depleted). While the debate surrounding beliefs about how income and consumption are related and interesting, in this study a very particular school of thought is adopted. In particular, we are considering the latent demand for wide area networks (WAN) across some 230 countries. The smallest have fewer than 10,000 inhabitants. I assume that all of these countries fall along a "long-run" aggregate consumption function. This long-run function applies despite some of these countries having wealth, current income dominates the latent demand for wide area networks (WAN). So, latent demand in the long-run has a zero intercept. However, I allow firms to have different propensities to consume (including being on consumption functions with differing slopes, which can account for differences in industrial organization, and end-user preferences).

Given this overriding philosophy, I will now describe the methodology used to create the latent demand estimates for wide area networks (WAN). Since ICON Group has asked me to apply this methodology to a large number of categories, the rather academic discussion below is general and can be applied to a wide variety of categories, not just wide area networks (WAN).

### **1.3.1 Step 1. Product Definition and Data Collection**

Any study of latent demand across countries requires that some standard be established to define "efficiently served". Having implemented various alternatives and matched these with market outcomes, I have found that the optimal approach is to assume that certain key countries are more likely to be at or near efficiency than others. These countries are given greater weight than others in the estimation of latent demand compared to other countries for which no known data are available. Of the many alternatives, I have found the assumption that the world's highest aggregate income and highest income-per-capita markets reflect the best standards for "efficiency". High aggregate income alone is not sufficient (i.e. China has high aggregate income, but low income per capita and can not assumed to be efficient). Aggregate income can be operationalized in a number of ways, including gross domestic product (for industrial categories), or total disposable income (for household categories; population times average income per capita, or number of households times average household income per capita). Brunei, Nauru, Kuwait, and Lichtenstein are examples of countries with high income per capita, but not assumed to be efficient, given low aggregate level of income (or gross domestic product); these countries have, however, high incomes per capita but may not benefit from the efficiencies derived from economies of scale associated with larger economies. Only countries with high income per capita and large aggregate income are assumed efficient. This greatly restricts the pool of countries to those in the OECD (Organization for Economic Cooperation and Development), like the United States, or the United Kingdom (which were earlier than other large OECD economies to liberalize their markets).

The selection of countries is further reduced by the fact that not all countries in the OECD report industry revenues at the category level. Countries that typically have ample data at the aggregate

level that meet the efficiency criteria include the United States, the United Kingdom and in some cases France and Germany.

Latent demand is therefore estimated using data collected for relatively efficient markets from independent data sources (e.g. Euromonitor, Mintel, Thomson Financial Services, the U.S. Industrial Outlook, the World Resources Institute, the Organization for Economic Cooperation and Development, various agencies from the United Nations, industry trade associations, the International Monetary Fund, and the World Bank). Depending on original data sources used, the definition of “wide area networks (WAN)” is established. In the case of this report, the data were reported at the aggregate level, with no further breakdown or definition. In other words, any potential product or service that might be incorporated within wide area networks (WAN) falls under this category. Public sources rarely report data at the disaggregated level in order to protect private information from individual firms that might dominate a specific product-market. These sources will therefore aggregate across components of a category and report only the aggregate to the public. While private data are certainly available, this report only relies on public data at the aggregate level without reliance on the summation of various category components. In other words, this report does not aggregate a number of components to arrive at the “whole”. Rather, it starts with the “whole”, and estimates the whole for all countries and the world at large (without needing to know the specific parts that went into the whole in the first place).

Given this caveat, in this report we define the sales of wide area networks (WAN) as including all commonly understood products falling within this broad category, including any network whose communications links cross metropolitan, regional, or national boundaries and uses routers and public communications links, irrespective of product packaging, formulation, size, or form. Companies participating in this industry include FatPipe Networks, Silver Peak Systems, Citrix, F5 Networks, and AdventNet. In addition to the sources indicated below, additional information available to the public via news and/or press releases published by players in the industry (including reports from AMR Research, Global Industry Analysts, Forrester Research, Frost & Sullivan, Gartner, IDC, and MarketResearch.com) was considered in defining and calibrating this category.

### **1.3.2 Step 2. Filtering and Smoothing**

Based on the aggregate view of wide area networks (WAN) as defined above, data were then collected for as many similar countries as possible for that same definition, at the same level of the value chain. This generates a convenience sample of countries from which comparable figures are available. If the series in question do not reflect the same accounting period, then adjustments are made. In order to eliminate short-term effects of business cycles, the series are smoothed using an 2 year moving average weighting scheme (longer weighting schemes do not substantially change the results). If data are available for a country, but these reflect short-run aberrations due to exogenous shocks (such as would be the case of beef sales in a country stricken with foot and mouth disease), these observations were dropped or "filtered" from the analysis.



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### 1.3.3 Step 3. Filling in Missing Values

In some cases, data are available for countries on a sporadic basis. In other cases, data from a country may be available for only one year. From a Bayesian perspective, these observations should be given greatest weight in estimating missing years. Assuming that other factors are held constant, the missing years are extrapolated using changes and growth in aggregate national income. Based on the overriding philosophy of a long-run consumption function (defined earlier), countries which have missing data for any given year, are estimated based on historical dynamics of aggregate income for that country.<sup>2</sup>

### 1.3.4 Step 4. Varying Parameter, Non-linear Estimation

Given the data available from the first three steps, the latent demand in additional countries is estimated using a “varying-parameter cross-sectionally pooled time series model”.<sup>3</sup> Simply stated, the effect of income on latent demand is assumed to be constant across countries unless there is empirical evidence to suggest that this effect varies (i.e. . the slope of the income effect is not necessarily same for all countries). This assumption applies across countries along the aggregate consumption function, but also over time (i.e. not all countries are perceived to have the same income growth prospects over time and this effect can vary from country to country as well). Another way of looking at this is to say that latent demand for wide area networks (WAN) is more likely to be similar across countries that have similar characteristics in terms of economic development (i.e. African countries will have similar latent demand structures controlling for the income variation across the pool of African countries).

This approach is useful across countries for which some notion of non-linearity exists in the aggregate cross-country consumption function. For some categories, however, the reader must realize that the numbers will reflect a country’s contribution to global latent demand and may never be realized in the form of local sales. For certain country-category combinations this will result in what at first glance will be odd results. For example, the latent demand for the category “space vehicles” will exist for “Togo” even though they have no space program. The assumption is that if the economies in these countries did not exist, the world aggregate for these categories

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<sup>2</sup> This report was prepared from a variety of sources including excerpts from documents and official reports or databases published by the World Bank, the U.S. Department of Commerce, the U.S. State Department, various national agencies, the International Monetary Fund, the Central Intelligence Agency, various agencies from the United Nations (e.g. ILO, ITU, UNDP, etc.), and non-governmental sources, including Icon Group International, Inc., Euromonitor, the World Resources Institute, Mintel, the U.S. Industrial Outlook, and various public sources cited in the trade press.

<sup>3</sup> The interested reader can find longer discussions of this type of modeling in *Studies in Global Econometrics (Advanced Studies in Theoretical and Applied Econometrics V. 30)*, by Henri Theil, et al., Kluwer Academic Publishers; ISBN: 0792336607; (June 1996), and in *Principles of Econometrics*, by Henri Theil John Wiley & Sons; ISBN: 0471858455; (December 1971), and in *Econometric Models and Economic Forecasts* by Robert S. Pindyck, Daniel L. Rubinfeld McGraw Hill Text; ISBN: 0070500983; 3rd edition (December 1991).

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would be lower. The share attributed to these countries is based on a proportion of their income (however small) being used to consume the category in question (i.e. perhaps via resellers).

### **1.3.5 Step 5. Fixed-Parameter Linear Estimation**

Nonlinearities are assumed in cases where filtered data exist along the aggregate consumption function. Because the world consists of more than 200 countries, there will always be those countries, especially toward the bottom of the consumption function, where non-linear estimation is simply not possible. For these countries, equilibrium latent demand is assumed to be perfectly parametric and not a function of wealth (i.e. a country's stock of income), but a function of current income (a country's flow of income). In the long run, if a country has no current income, the latent demand for wide area networks (WAN) is assumed to approach zero. The assumption is that wealth stocks fall rapidly to zero if flow income falls to zero (i.e. countries which earn low levels of income will not use their savings, in the long run, to demand wide area networks (WAN)). In a graphical sense, for low income countries, latent demand approaches zero in a parametric linear fashion with a zero-zero intercept. In this stage of the estimation procedure, low-income countries are assumed to have a latent demand proportional to their income, based on the country closest to it on the aggregate consumption function.

### **1.3.6 Step 6. Aggregation and Benchmarking**

Based on the models described above, latent demand figures are estimated for all countries of the world, including for the smallest economies. These are then aggregated to get world totals and regional totals. To make the numbers more meaningful, regional and global demand averages are presented. Figures are rounded, so minor inconsistencies may exist across tables.

### **1.3.7 Step 7. Latent Demand Density: Allocating Across Cities**

With the advent of a "borderless world", cities become a more important criteria in prioritizing markets, as opposed to regions, continents, or countries. This report also covers the world's top 2000 cities. The purpose is to understand the density of demand within a country and the extent to which a city might be used as a point of distribution within its region. From an economic perspective, however, a city does not represent a population within rigid geographical boundaries. To an economist or strategic planner, a city represents an area of dominant influence over markets in adjacent areas. This influence varies from one industry to another, but also from one period of time to another.

Similar to country-level data, the reader needs to realize that latent demand allocated to a city may or may not represent real sales. For many items, latent demand is clearly observable in sales, as in the case for food or housing items. Consider, again, the category "satellite launch vehicles."

Clearly, there are no launch pads in most cities of the world. However, the core benefit of the vehicles (e.g. telecommunications, etc.) is "consumed" by residents or industries within the world's cities. Without certain cities, in other words, the world market for satellite launch vehicles would be lower for the world in general. One needs to allocate, therefore, a portion of the worldwide economic demand for launch vehicles to regions, countries and cities. This report takes the broader definition and considers, therefore, a city as a part of the global market. I allocate latent demand across areas of dominant influence based on the relative economic importance of cities within its home country, within its region and across the world total. Not all cities are estimated within each country as demand may be allocated to adjacent areas of influence. Since some cities have higher economic wealth than others within the same country, a city's population is not generally used to allocate latent demand. Rather, the level of economic activity of the city vis-à-vis others.

## 2 SUMMARY OF FINDINGS

Based on the methodology described above, the latent demand for wide area networks (WAN) is estimated to be \$1.1 billion in 2009. The distribution of the world latent demand (or potential industry earnings), however, is not be evenly distributed across regions. Asia is the largest market with \$0.3 billion or 30.88 percent, followed by Europe with \$0.3 billion or 26.64 percent, and then North America & the Caribbean with \$0.3 billion or 23.70 percent of the world market. In essence, if firms target these top 3 regions, they cover come 81.22 percent of the global latent demand for wide area networks (WAN).

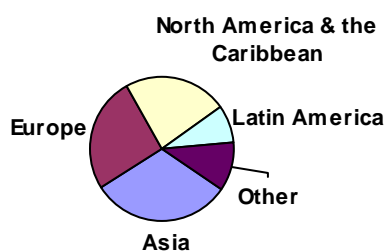
### 2.1 THE WORLDWIDE MARKET POTENTIAL

#### Worldwide Market Potential for Wide Area Networks (WAN) (US\$ Million): 2009

Region	Latent Demand US\$ Million	% of Globe
Asia	328	30.9
Europe	283	26.7
North America & the Caribbean	252	23.7
Latin America	87	8.2
Middle East	54	5.1
Africa	43	4.1
Oceania	15	1.4
<b>Total</b>	<b>1,062</b>	<b>100.0</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Worldwide Market Potential for Wide Area Networks (WAN) (US\$ Million): 2009



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**World Market for Wide Area Networks (WAN): 2004 - 2014**

<b>Year</b>	<b>World Market US\$ Million</b>
2004	892.52
2005	923.88
2006	956.60
2007	990.70
2008	1,025.91
2009	1,061.68
2010	1,098.81
2011	1,137.50
2012	1,177.85
2013	1,219.93
2014	1,263.83

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Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 3 AFRICA

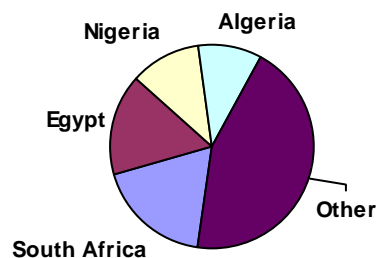
### 3.1 EXECUTIVE SUMMARY

#### Market Potential for Wide Area Networks (WAN) in Africa (US\$ Million): 2009

Country	Latent Demand US\$ Million	% of Africa
South Africa	7.72	17.93%
Egypt	7.21	16.73%
Nigeria	4.90	11.37%
Algeria	4.43	10.29%
Morocco	2.07	4.80%
Sudan	1.85	4.29%
Angola	1.40	3.26%
Libya	1.30	3.03%
Tunisia	1.28	2.98%
Kenya	0.96	2.22%
Ethiopia	0.93	2.16%
Tanzania	0.72	1.68%
Cameroon	0.65	1.52%
Cote d'Ivoire	0.53	1.24%
Uganda	0.52	1.21%
Ghana	0.52	1.20%
Equatorial Guinea	0.44	1.02%
Botswana	0.40	0.92%
Senegal	0.34	0.79%
Madagascar	0.33	0.77%
Gabon	0.33	0.77%
Congo (formerly Zaire)	0.32	0.74%
Mozambique	0.30	0.69%
Burkina Faso	0.29	0.67%
Zambia	0.26	0.61%
Other	3.06	7.10%
<b>Total</b>	<b>43.08</b>	<b>100.00%</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## Market Potential for Wide Area Networks (WAN) in Africa (US\$ Million): 2009



### The Market for Wide Area Networks (WAN) in Africa: 2004 - 2014

Year	US\$ Million	% of Globe
2004	34.93	3.91
2005	36.43	3.94
2006	38.00	3.97
2007	39.64	4.00
2008	41.35	4.03
2009	43.08	4.06
2010	44.88	4.08
2011	46.77	4.11
2012	48.75	4.14
2013	50.82	4.17
2014	52.99	4.19

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 3.2 ALGERIA

### Wide Area Networks (WAN) (US\$ Million): Algeria 2004 - 2014

Year	Algeria	% of Region	% of Globe
2004	3.73	10.69%	0.42%
2005	3.86	10.61%	0.42%
2006	4.00	10.53%	0.42%
2007	4.14	10.45%	0.42%
2008	4.29	10.37%	0.42%
2009	4.43	10.29%	0.42%
2010	4.58	10.21%	0.42%
2011	4.74	10.13%	0.42%
2012	4.90	10.05%	0.42%
2013	5.07	9.97%	0.42%
2014	5.24	9.89%	0.41%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Algeria: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Algiers	143	1.60	36.17	3.72	0.15
Oran	270	0.67	15.09	1.55	0.06
Constantine	371	0.47	10.58	1.09	0.04
Annaba	490	0.33	7.34	0.76	0.03
Batna	718	0.19	4.37	0.45	0.02
Blida	744	0.18	4.10	0.42	0.02
Setif	747	0.18	4.08	0.42	0.02
Sidi-Bel-Abbes	794	0.16	3.67	0.38	0.02
Ech-Cheliff	863	0.14	3.12	0.32	0.01
Skikda	865	0.14	3.10	0.32	0.01
Tlemcen	871	0.14	3.05	0.31	0.01
Bejaia	917	0.12	2.76	0.28	0.01
Bechar	953	0.11	2.57	0.26	0.01
<b>Total</b>		<b>4.43</b>	<b>100.00</b>	<b>10.29</b>	<b>0.42</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.3 ANGOLA****Wide Area Networks (WAN) (US\$ Million): Angola 2004 - 2014**

Year	Angola	% of Region	% of Globe
2004	0.90	2.58%	0.10%
2005	0.99	2.71%	0.11%
2006	1.08	2.84%	0.11%
2007	1.18	2.98%	0.12%
2008	1.29	3.12%	0.13%
2009	1.40	3.26%	0.13%
2010	1.52	3.39%	0.14%
2011	1.65	3.54%	0.15%
2012	1.80	3.68%	0.15%
2013	1.95	3.84%	0.16%
2014	2.12	4.00%	0.17%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Angola: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Luanda	194	1.10	78.48	2.55	0.10
Lubango	1,103	0.08	5.65	0.18	0.01
Namibe	1,132	0.08	5.38	0.18	0.01
Huambo	1,348	0.05	3.34	0.11	0.00
Lobito	1,359	0.05	3.23	0.11	0.00
Benguela	1,481	0.03	2.21	0.07	0.00
Malanje	1,556	0.02	1.72	0.06	0.00
<b>Total</b>		<b>1.40</b>	<b>100.00</b>	<b>3.26</b>	<b>0.13</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



### 3.4 BENIN

#### Wide Area Networks (WAN) (US\$ Million): Benin 2004 - 2014

Year	Benin	% of Region	% of Globe
2004	0.17	0.49%	0.02%
2005	0.18	0.48%	0.02%
2006	0.18	0.48%	0.02%
2007	0.19	0.47%	0.02%
2008	0.19	0.47%	0.02%
2009	0.20	0.47%	0.02%
2010	0.21	0.46%	0.02%
2011	0.21	0.46%	0.02%
2012	0.22	0.45%	0.02%
2013	0.23	0.45%	0.02%
2014	0.24	0.45%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Benin: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Cotonou	959	0.11	56.24	0.26	0.01
Porto-Novo	1,334	0.05	24.02	0.11	0.00
Parakou	1,678	0.02	7.62	0.04	0.00
Abomey	1,720	0.01	6.24	0.03	0.00
Natitingou	1,731	0.01	5.89	0.03	0.00
<b>Total</b>		<b>0.20</b>	<b>100.00</b>	<b>0.47</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.5 BOTSWANA

#### Wide Area Networks (WAN) (US\$ Million): Botswana 2004 - 2014

Year	Botswana	% of Region	% of Globe
2004	0.33	0.96%	0.04%
2005	0.35	0.95%	0.04%
2006	0.36	0.94%	0.04%
2007	0.37	0.94%	0.04%
2008	0.38	0.93%	0.04%
2009	0.40	0.92%	0.04%
2010	0.41	0.92%	0.04%
2011	0.43	0.91%	0.04%
2012	0.44	0.90%	0.04%
2013	0.46	0.90%	0.04%
2014	0.47	0.89%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Botswana: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Gaborone	1,181	0.07	17.02	0.16	0.01
Mahalapye	1,222	0.06	15.49	0.14	0.01
Serowe	1,264	0.06	14.26	0.13	0.01
Tutume	1,302	0.05	13.04	0.12	0.00
Bobonong	1,464	0.03	8.28	0.08	0.00
Francistown	1,486	0.03	7.52	0.07	0.00
Selebi-Phikwe	1,507	0.03	7.06	0.07	0.00
Lobatse	1,670	0.02	3.99	0.04	0.00
Molepolole	1,716	0.01	3.22	0.03	0.00
Kanye	1,725	0.01	3.07	0.03	0.00
Mochudi	1,748	0.01	2.76	0.03	0.00
Maun	1,780	0.01	2.30	0.02	0.00
Ramotswa	1,808	0.01	1.99	0.02	0.00
<b>Total</b>		<b>0.40</b>	<b>100.00</b>	<b>0.92</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.6 BURKINA FASO****Wide Area Networks (WAN) (US\$ Million): Burkina Faso 2004 - 2014**

Year	Burkina Faso	% of Region	% of Globe
2004	0.24	0.70%	0.03%
2005	0.25	0.69%	0.03%
2006	0.26	0.69%	0.03%
2007	0.27	0.68%	0.03%
2008	0.28	0.67%	0.03%
2009	0.29	0.67%	0.03%
2010	0.30	0.66%	0.03%
2011	0.31	0.66%	0.03%
2012	0.32	0.65%	0.03%
2013	0.33	0.64%	0.03%
2014	0.34	0.64%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Burkina Faso: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Ouagadougou	811	0.15	53.58	0.36	0.01
Bobo-Dioulasso	1,095	0.08	28.00	0.19	0.01
Koudougou	1,633	0.02	6.30	0.04	0.00
Ouahigouya	1,709	0.01	4.73	0.03	0.00
Banfora	1,724	0.01	4.24	0.03	0.00
Kaya	1,782	0.01	3.15	0.02	0.00
<b>Total</b>		<b>0.29</b>	<b>100.00</b>	<b>0.67</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.7 BURUNDI

#### Wide Area Networks (WAN) (US\$ Million): Burundi 2004 - 2014

Year	Burundi	% of Region	% of Globe
2004	0.09	0.25%	0.01%
2005	0.09	0.25%	0.01%
2006	0.09	0.25%	0.01%
2007	0.10	0.25%	0.01%
2008	0.10	0.25%	0.01%
2009	0.11	0.25%	0.01%
2010	0.11	0.24%	0.01%
2011	0.11	0.24%	0.01%
2012	0.12	0.24%	0.01%
2013	0.12	0.24%	0.01%
2014	0.13	0.24%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Burundi: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bujumbura	1,134	0.07	70.91	0.17	0.01
Gitega	1,529	0.03	24.68	0.06	0.00
Bururi	1,979	0.00	2.08	0.01	0.00
Rumonge	2,012	0.00	1.30	0.00	0.00
Ngozi	2,023	0.00	1.04	0.00	0.00
<b>Total</b>		<b>0.11</b>	<b>100.00</b>	<b>0.25</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.8 CAMEROON

#### Wide Area Networks (WAN) (US\$ Million): Cameroon 2004 - 2014

Year	Cameroon	% of Region	% of Globe
2004	0.57	1.64%	0.06%
2005	0.59	1.61%	0.06%
2006	0.60	1.59%	0.06%
2007	0.62	1.57%	0.06%
2008	0.64	1.54%	0.06%
2009	0.65	1.52%	0.06%
2010	0.67	1.50%	0.06%
2011	0.69	1.48%	0.06%
2012	0.71	1.46%	0.06%
2013	0.73	1.43%	0.06%
2014	0.75	1.41%	0.06%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Cameroon: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Douala	516	0.30	46.52	0.71	0.03
Yaounde	717	0.19	29.65	0.45	0.02
Nkongsamba	1,483	0.03	4.66	0.07	0.00
Maroua	1,499	0.03	4.41	0.07	0.00
Garoua	1,510	0.03	4.25	0.06	0.00
Bafoussam	1,591	0.02	3.17	0.05	0.00
Kumba	1,686	0.01	2.25	0.03	0.00
Bamenda	1,713	0.01	2.00	0.03	0.00
Foumban	1,746	0.01	1.71	0.03	0.00
Limbe	1,785	0.01	1.37	0.02	0.00
<b>Total</b>		<b>0.65</b>	<b>100.00</b>	<b>1.52</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 3.9 CAPE VERDE

### Wide Area Networks (WAN) (US\$ Million): Cape Verde 2004 - 2014

Year	Cape Verde	% of Region	% of Globe
2004	0.05	0.14%	0.01%
2005	0.05	0.14%	0.01%
2006	0.05	0.14%	0.01%
2007	0.06	0.14%	0.01%
2008	0.06	0.14%	0.01%
2009	0.06	0.14%	0.01%
2010	0.06	0.14%	0.01%
2011	0.07	0.14%	0.01%
2012	0.07	0.15%	0.01%
2013	0.07	0.15%	0.01%
2014	0.08	0.15%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Cape Verde: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Praia	1,456	0.03	54.95	0.08	0.00
Mindelo	1,541	0.03	40.66	0.06	0.00
Ribeira Grande	2,013	0.00	2.20	0.00	0.00
Sal Rei	2,050	0.00	1.10	0.00	0.00
Santa Maria	2,051	0.00	1.10	0.00	0.00
<b>Total</b>		<b>0.06</b>	<b>100.00</b>	<b>0.14</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.10 CENTRAL AFRICAN REPUBLIC

#### Wide Area Networks (WAN) (US\$ Million): Central African Republic 2004 - 2014

Year	Central African Republic	% of Region	% of Globe
2004	0.04	0.12%	0.00%
2005	0.04	0.12%	0.00%
2006	0.05	0.12%	0.00%
2007	0.05	0.12%	0.00%
2008	0.05	0.12%	0.00%
2009	0.05	0.12%	0.00%
2010	0.05	0.12%	0.00%
2011	0.05	0.12%	0.00%
2012	0.06	0.11%	0.00%
2013	0.06	0.11%	0.00%
2014	0.06	0.11%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Central African Republic: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bangui	1,448	0.04	68.70	0.08	0.00
Berberati	1,851	0.01	11.51	0.01	0.00
Bouar	1,926	0.00	6.33	0.01	0.00
Bambari	1,937	0.00	5.98	0.01	0.00
Bangassou	1,983	0.00	4.14	0.00	0.00
Mbaiki	2,003	0.00	3.34	0.00	0.00
<b>Total</b>		<b>0.05</b>	<b>100.00</b>	<b>0.12</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.11 CHAD

#### Wide Area Networks (WAN) (US\$ Million): Chad 2004 - 2014

Year	Chad	% of Region	% of Globe
2004	0.25	0.71%	0.03%
2005	0.25	0.69%	0.03%
2006	0.25	0.66%	0.03%
2007	0.25	0.64%	0.03%
2008	0.25	0.61%	0.02%
2009	0.26	0.59%	0.02%
2010	0.26	0.57%	0.02%
2011	0.26	0.55%	0.02%
2012	0.26	0.53%	0.02%
2013	0.26	0.51%	0.02%
2014	0.26	0.49%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Chad: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
N'Djamena	893	0.13	50.05	0.30	0.01
Sarh	1,480	0.03	12.12	0.07	0.00
Moundou	1,581	0.02	8.50	0.05	0.00
Abeche	1,637	0.02	6.94	0.04	0.00
Bongor	1,647	0.02	6.74	0.04	0.00
Doba	1,666	0.02	6.26	0.04	0.00
Lai	1,692	0.01	5.67	0.03	0.00
Koumra	1,872	0.00	1.96	0.01	0.00
Kelo	1,883	0.00	1.76	0.01	0.00
<b>Total</b>		<b>0.26</b>	<b>100.00</b>	<b>0.59</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.12 COMOROS****Wide Area Networks (WAN) (US\$ Million): Comoros 2004 - 2014**

Year	Comoros	% of Region	% of Globe
2004	0.02	0.06%	0.00%
2005	0.02	0.05%	0.00%
2006	0.02	0.05%	0.00%
2007	0.02	0.05%	0.00%
2008	0.02	0.05%	0.00%
2009	0.02	0.05%	0.00%
2010	0.02	0.05%	0.00%
2011	0.02	0.04%	0.00%
2012	0.02	0.04%	0.00%
2013	0.02	0.04%	0.00%
2014	0.02	0.04%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Comoros: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Moroni	1,763	0.01	48.84	0.02	0.00
Mutsamudu	1,843	0.01	30.23	0.01	0.00
Fomboni	1,944	0.00	13.95	0.01	0.00
Mitsamiouli	2,010	0.00	6.98	0.00	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.05</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.13 CONGO (FORMERLY ZAIRE)

#### Wide Area Networks (WAN) (US\$ Million): Congo (formerly Zaire) 2004 - 2014

Year	Congo (formerly Zaire)	% of Region	% of Globe
2004	0.25	0.72%	0.03%
2005	0.26	0.72%	0.03%
2006	0.28	0.73%	0.03%
2007	0.29	0.73%	0.03%
2008	0.30	0.74%	0.03%
2009	0.32	0.74%	0.03%
2010	0.33	0.74%	0.03%
2011	0.35	0.74%	0.03%
2012	0.36	0.75%	0.03%
2013	0.38	0.75%	0.03%
2014	0.40	0.75%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Congo (formerly Zaire): Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Kinshasa	802	0.16	50.00	0.37	0.01
Lubumbashi	1,469	0.03	10.23	0.08	0.00
Mbuji-Mayi	1,537	0.03	7.97	0.06	0.00
Kananga	1,640	0.02	5.48	0.04	0.00
Kisangani	1,654	0.02	5.33	0.04	0.00
Likasi	1,737	0.01	3.65	0.03	0.00
Kalemie	1,756	0.01	3.24	0.02	0.00
Bukavu	1,757	0.01	3.22	0.02	0.00
Kamina	1,771	0.01	3.01	0.02	0.00
Kikwit	1,789	0.01	2.77	0.02	0.00
Matadi	1,791	0.01	2.73	0.02	0.00
Mbandaka	1,827	0.01	2.35	0.02	0.00
<b>Total</b>		<b>0.32</b>	<b>100.00</b>	<b>0.74</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.14 COTE D'IVOIRE

#### Wide Area Networks (WAN) (US\$ Million): Cote d'Ivoire 2004 - 2014

Year	Cote d'Ivoire	% of Region	% of Globe
2004	0.48	1.39%	0.05%
2005	0.49	1.36%	0.05%
2006	0.50	1.33%	0.05%
2007	0.51	1.30%	0.05%
2008	0.52	1.27%	0.05%
2009	0.53	1.24%	0.05%
2010	0.54	1.21%	0.05%
2011	0.55	1.19%	0.05%
2012	0.57	1.16%	0.05%
2013	0.58	1.14%	0.05%
2014	0.59	1.11%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Cote d'Ivoire: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Abidjan	428	0.40	74.60	0.92	0.04
Bouake	1,340	0.05	8.87	0.11	0.00
Yamoussoukro	1,534	0.03	4.84	0.06	0.00
Daloa	1,646	0.02	3.23	0.04	0.00
Port-Bouet	1,715	0.01	2.42	0.03	0.00
Man	1,730	0.01	2.22	0.03	0.00
Korhogo	1,743	0.01	2.14	0.03	0.00
Gagnoa	1,783	0.01	1.69	0.02	0.00
<b>Total</b>		<b>0.53</b>	<b>100.00</b>	<b>1.24</b>	<b>0.05</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.15 DJIBOUTI

#### Wide Area Networks (WAN) (US\$ Million): Djibouti 2004 - 2014

Year	Djibouti	% of Region	% of Globe
2004	0.03	0.08%	0.00%
2005	0.03	0.08%	0.00%
2006	0.03	0.07%	0.00%
2007	0.03	0.07%	0.00%
2008	0.03	0.07%	0.00%
2009	0.03	0.07%	0.00%
2010	0.03	0.07%	0.00%
2011	0.03	0.07%	0.00%
2012	0.03	0.07%	0.00%
2013	0.03	0.07%	0.00%
2014	0.04	0.07%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**Djibouti: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Djibouti	1,597	0.02	66.67	0.05	0.00
Dikhil	1,932	0.00	10.11	0.01	0.00
Tadjourah	1,964	0.00	8.05	0.01	0.00
Ali-Sabiah	1,966	0.00	7.82	0.01	0.00
Obock	1,975	0.00	7.36	0.01	0.00
<b>Total</b>		<b>0.03</b>	<b>100.00</b>	<b>0.07</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.16 EGYPT****Wide Area Networks (WAN) (US\$ Million): Egypt 2004 - 2014**

Year	Egypt	% of Region	% of Globe
2004	5.68	16.26%	0.64%
2005	5.96	16.36%	0.65%
2006	6.25	16.46%	0.65%
2007	6.56	16.56%	0.66%
2008	6.88	16.65%	0.67%
2009	7.21	16.73%	0.68%
2010	7.55	16.82%	0.69%
2011	7.90	16.90%	0.69%
2012	8.27	16.97%	0.70%
2013	8.66	17.05%	0.71%
2014	9.07	17.12%	0.72%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Egypt: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Cairo	44	4.29	59.57	9.97	0.40
Alexandria	189	1.14	15.80	2.64	0.11
Giza	278	0.65	9.05	1.51	0.06
Al-Mahallah al Kubra	823	0.15	2.09	0.35	0.01
Port Said	825	0.15	2.07	0.35	0.01
Tanta	837	0.15	2.03	0.34	0.01
Al-Mansurah	859	0.14	1.94	0.32	0.01
Helwan	864	0.14	1.91	0.32	0.01
Asyut	954	0.11	1.58	0.26	0.01
Zagazig	985	0.11	1.48	0.25	0.01
Suez	1,003	0.10	1.44	0.24	0.01
Aswan	1,121	0.08	1.06	0.18	0.01
<b>Total</b>		<b>7.21</b>	<b>100.00</b>	<b>16.73</b>	<b>0.68</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.17 EQUATORIAL GUINEA

#### Wide Area Networks (WAN) (US\$ Million): Equatorial Guinea 2004 - 2014

Year	Equatorial Guinea	% of Region	% of Globe
2004	0.30	0.86%	0.03%
2005	0.32	0.89%	0.04%
2006	0.35	0.92%	0.04%
2007	0.38	0.96%	0.04%
2008	0.41	0.99%	0.04%
2009	0.44	1.02%	0.04%
2010	0.47	1.05%	0.04%
2011	0.51	1.09%	0.04%
2012	0.55	1.12%	0.05%
2013	0.59	1.15%	0.05%
2014	0.63	1.19%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Equatorial Guinea: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Malabo	689	0.21	47.24	0.48	0.02
Bata	1,016	0.10	22.83	0.23	0.01
Luba	1,123	0.08	17.32	0.18	0.01
Mbini	1,274	0.06	12.60	0.13	0.01
<b>Total</b>		<b>0.44</b>	<b>100.00</b>	<b>1.02</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.18 ETHIOPIA

#### Wide Area Networks (WAN) (US\$ Million): Ethiopia 2004 - 2014

Year	Ethiopia	% of Region	% of Globe
2004	0.69	1.96%	0.08%
2005	0.73	2.00%	0.08%
2006	0.78	2.04%	0.08%
2007	0.83	2.08%	0.08%
2008	0.88	2.12%	0.09%
2009	0.93	2.16%	0.09%
2010	0.99	2.20%	0.09%
2011	1.05	2.24%	0.09%
2012	1.11	2.27%	0.09%
2013	1.18	2.31%	0.10%
2014	1.25	2.35%	0.10%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Ethiopia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Addis Ababa	309	0.58	62.14	1.34	0.05
Asmera	948	0.11	12.30	0.27	0.01
Dire Dawa	1,428	0.04	4.07	0.09	0.00
Gondar	1,476	0.03	3.37	0.07	0.00
Dessye	1,490	0.03	3.16	0.07	0.00
Nazret	1,491	0.03	3.16	0.07	0.00
Jimma	1,545	0.02	2.66	0.06	0.00
Harar	1,551	0.02	2.62	0.06	0.00
Mekele	1,558	0.02	2.58	0.06	0.00
Bahr Dar	1,584	0.02	2.29	0.05	0.00
Debre Markos	1,676	0.02	1.66	0.04	0.00
<b>Total</b>		<b>0.93</b>	<b>100.00</b>	<b>2.16</b>	<b>0.09</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.19 GABON****Wide Area Networks (WAN) (US\$ Million): Gabon 2004 - 2014**

Year	Gabon	% of Region	% of Globe
2004	0.28	0.80%	0.03%
2005	0.29	0.79%	0.03%
2006	0.30	0.79%	0.03%
2007	0.31	0.78%	0.03%
2008	0.32	0.77%	0.03%
2009	0.33	0.77%	0.03%
2010	0.34	0.76%	0.03%
2011	0.35	0.76%	0.03%
2012	0.37	0.75%	0.03%
2013	0.38	0.74%	0.03%
2014	0.39	0.74%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Gabon: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Libreville	704	0.20	60.07	0.46	0.02
Port Gentil	1,053	0.09	27.99	0.22	0.01
Lambarene	1,695	0.01	4.27	0.03	0.00
Mouila	1,784	0.01	2.73	0.02	0.00
Tchibanga	1,797	0.01	2.56	0.02	0.00
Oyem	1,809	0.01	2.39	0.02	0.00
<b>Total</b>		<b>0.33</b>	<b>100.00</b>	<b>0.77</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.20 GHANA

#### Wide Area Networks (WAN) (US\$ Million): Ghana 2004 - 2014

Year	Ghana	% of Region	% of Globe
2004	0.42	1.20%	0.05%
2005	0.44	1.20%	0.05%
2006	0.46	1.20%	0.05%
2007	0.48	1.20%	0.05%
2008	0.50	1.20%	0.05%
2009	0.52	1.20%	0.05%
2010	0.54	1.20%	0.05%
2011	0.56	1.20%	0.05%
2012	0.59	1.20%	0.05%
2013	0.61	1.20%	0.05%
2014	0.64	1.20%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Ghana: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Accra	603	0.26	49.30	0.59	0.02
Kumasi	999	0.10	20.00	0.24	0.01
Tamale	1,411	0.04	7.84	0.09	0.00
Tema	1,492	0.03	5.66	0.07	0.00
Sekondi-Takoradi	1,508	0.03	5.40	0.07	0.00
Cape Coast	1,668	0.02	3.06	0.04	0.00
Koforidua	1,669	0.02	3.06	0.04	0.00
Sunyani	1,755	0.01	2.03	0.02	0.00
Ho	1,758	0.01	1.97	0.02	0.00
Bolgatanga	1,793	0.01	1.66	0.02	0.00
<b>Total</b>		<b>0.52</b>	<b>100.00</b>	<b>1.20</b>	<b>0.05</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.21 GUINEA

#### Wide Area Networks (WAN) (US\$ Million): Guinea 2004 - 2014

Year	Guinea	% of Region	% of Globe
2004	0.14	0.41%	0.02%
2005	0.15	0.40%	0.02%
2006	0.15	0.39%	0.02%
2007	0.15	0.38%	0.02%
2008	0.16	0.38%	0.02%
2009	0.16	0.37%	0.01%
2010	0.16	0.36%	0.01%
2011	0.16	0.35%	0.01%
2012	0.17	0.34%	0.01%
2013	0.17	0.33%	0.01%
2014	0.17	0.33%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Guinea: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Conakry	899	0.13	79.93	0.29	0.01
Kankan	1,667	0.02	10.09	0.04	0.00
Labe	1,734	0.01	7.37	0.03	0.00
Nzerekore	1,897	0.00	2.61	0.01	0.00
<b>Total</b>		<b>0.16</b>	<b>100.00</b>	<b>0.37</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.22 GUINEA-BISSAU

#### Wide Area Networks (WAN) (US\$ Million): Guinea-Bissau 2004 - 2014

Year	Guinea-Bissau	% of Region	% of Globe
2004	0.01	0.04%	0.00%
2005	0.01	0.04%	0.00%
2006	0.01	0.04%	0.00%
2007	0.01	0.04%	0.00%
2008	0.01	0.03%	0.00%
2009	0.01	0.03%	0.00%
2010	0.02	0.03%	0.00%
2011	0.02	0.03%	0.00%
2012	0.02	0.03%	0.00%
2013	0.02	0.03%	0.00%
2014	0.02	0.03%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Guinea-Bissau: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bissau	1,745	0.01	75.76	0.03	0.00
Bafata	2,021	0.00	7.88	0.00	0.00
Gabu	2,044	0.00	4.85	0.00	0.00
Cantchungo	2,059	0.00	3.03	0.00	0.00
Catio	2,060	0.00	3.03	0.00	0.00
Mansoa	2,061	0.00	3.03	0.00	0.00
Farim	2,068	0.00	2.42	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.03</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 3.23 KENYA

### Wide Area Networks (WAN) (US\$ Million): Kenya 2004 - 2014

Year	Kenya	% of Region	% of Globe
2004	0.77	2.21%	0.09%
2005	0.81	2.22%	0.09%
2006	0.84	2.22%	0.09%
2007	0.88	2.22%	0.09%
2008	0.92	2.22%	0.09%
2009	0.96	2.22%	0.09%
2010	1.00	2.23%	0.09%
2011	1.04	2.23%	0.09%
2012	1.09	2.23%	0.09%
2013	1.13	2.23%	0.09%
2014	1.18	2.23%	0.09%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Kenya: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Nairobi	334	0.53	55.53	1.24	0.05
Mombasa	693	0.21	21.43	0.48	0.02
Kisumu	1,097	0.08	8.40	0.19	0.01
Nakuru	1,322	0.05	5.13	0.11	0.00
Eldoret	1,498	0.03	3.02	0.07	0.00
Thika	1,604	0.02	2.06	0.05	0.00
Nyeri	1,643	0.02	1.81	0.04	0.00
Nanyuki	1,832	0.01	0.75	0.02	0.00
Kitale	1,837	0.01	0.70	0.02	0.00
Malindi	1,853	0.01	0.60	0.01	0.00
Kericho	1,863	0.01	0.55	0.01	0.00
<b>Total</b>		<b>0.96</b>	<b>100.00</b>	<b>2.22</b>	<b>0.09</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.24 LESOTHO

#### Wide Area Networks (WAN) (US\$ Million): Lesotho 2004 - 2014

Year	Lesotho	% of Region	% of Globe
2004	0.04	0.12%	0.00%
2005	0.04	0.12%	0.00%
2006	0.05	0.12%	0.00%
2007	0.05	0.12%	0.00%
2008	0.05	0.12%	0.00%
2009	0.05	0.12%	0.00%
2010	0.05	0.12%	0.00%
2011	0.05	0.12%	0.00%
2012	0.06	0.12%	0.00%
2013	0.06	0.12%	0.00%
2014	0.06	0.11%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Lesotho: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Maseru	1,378	0.04	85.16	0.10	0.00
Teyateyaneng	1,929	0.00	6.25	0.01	0.00
Leribe	1,969	0.00	4.69	0.01	0.00
Mafeteng	1,989	0.00	3.91	0.00	0.00
<b>Total</b>		<b>0.05</b>	<b>100.00</b>	<b>0.12</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.25 LIBERIA

#### Wide Area Networks (WAN) (US\$ Million): Liberia 2004 - 2014

Year	Liberia	% of Region	% of Globe
2004	0.02	0.05%	0.00%
2005	0.02	0.06%	0.00%
2006	0.02	0.06%	0.00%
2007	0.02	0.06%	0.00%
2008	0.02	0.06%	0.00%
2009	0.03	0.06%	0.00%
2010	0.03	0.06%	0.00%
2011	0.03	0.06%	0.00%
2012	0.03	0.06%	0.00%
2013	0.03	0.06%	0.00%
2014	0.03	0.06%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Liberia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Monrovia	1,605	0.02	78.41	0.05	0.00
Harbel	1,935	0.00	12.18	0.01	0.00
Buchanan	2,022	0.00	4.43	0.00	0.00
Tubmanburg	2,049	0.00	2.77	0.00	0.00
Harper	2,055	0.00	2.21	0.00	0.00
<b>Total</b>		<b>0.03</b>	<b>100.00</b>	<b>0.06</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.26 LIBYA****Wide Area Networks (WAN) (US\$ Million): Libya 2004 - 2014**

Year	Libya	% of Region	% of Globe
2004	1.08	3.08%	0.12%
2005	1.12	3.07%	0.12%
2006	1.16	3.06%	0.12%
2007	1.21	3.05%	0.12%
2008	1.26	3.04%	0.12%
2009	1.30	3.03%	0.12%
2010	1.35	3.02%	0.12%
2011	1.40	3.00%	0.12%
2012	1.46	2.99%	0.12%
2013	1.51	2.98%	0.12%
2014	1.57	2.96%	0.12%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Libya: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Tripoli	273	0.66	50.89	1.54	0.06
Benghazi	463	0.34	26.45	0.80	0.03
Misurata	1,045	0.09	7.24	0.22	0.01
Az Zawiyah	1,197	0.07	5.04	0.15	0.01
Al-Bayda	1,546	0.02	1.90	0.06	0.00
Ajdabiya	1,559	0.02	1.84	0.06	0.00
Darnah	1,566	0.02	1.78	0.05	0.00
Sebha	1,575	0.02	1.72	0.05	0.00
Tubruq	1,582	0.02	1.66	0.05	0.00
Al-Marj	1,607	0.02	1.48	0.04	0.00
<b>Total</b>		<b>1.30</b>	<b>100.00</b>	<b>3.03</b>	<b>0.12</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



### 3.27 MADAGASCAR

#### Wide Area Networks (WAN) (US\$ Million): Madagascar 2004 - 2014

Year	Madagascar	% of Region	% of Globe
2004	0.27	0.77%	0.03%
2005	0.28	0.77%	0.03%
2006	0.29	0.77%	0.03%
2007	0.30	0.77%	0.03%
2008	0.32	0.77%	0.03%
2009	0.33	0.77%	0.03%
2010	0.35	0.77%	0.03%
2011	0.36	0.77%	0.03%
2012	0.38	0.77%	0.03%
2013	0.39	0.77%	0.03%
2014	0.41	0.77%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Madagascar: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Antananarivo	733	0.19	56.02	0.43	0.02
Toamasina	1,439	0.04	11.08	0.09	0.00
Mahajanga	1,494	0.03	8.84	0.07	0.00
Fianarantsoa	1,495	0.03	8.84	0.07	0.00
Antsirabe	1,588	0.02	6.29	0.05	0.00
Toliara	1,671	0.02	4.70	0.04	0.00
Antsiranana	1,699	0.01	4.22	0.03	0.00
<b>Total</b>		<b>0.33</b>	<b>100.00</b>	<b>0.77</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.28 MALAWI

#### Wide Area Networks (WAN) (US\$ Million): Malawi 2004 - 2014

Year	Malawi	% of Region	% of Globe
2004	0.14	0.41%	0.02%
2005	0.15	0.41%	0.02%
2006	0.15	0.41%	0.02%
2007	0.16	0.40%	0.02%
2008	0.17	0.40%	0.02%
2009	0.17	0.40%	0.02%
2010	0.18	0.40%	0.02%
2011	0.19	0.40%	0.02%
2012	0.19	0.40%	0.02%
2013	0.20	0.40%	0.02%
2014	0.21	0.40%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Malawi: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Blantyre	1,077	0.09	49.45	0.20	0.01
Lilongwe	1,347	0.05	26.99	0.11	0.00
Mzuzu	1,550	0.02	14.11	0.06	0.00
Zomba	1,744	0.01	6.50	0.03	0.00
Karonga	1,948	0.00	1.60	0.01	0.00
Nkhotakota	1,971	0.00	1.35	0.01	0.00
<b>Total</b>		<b>0.17</b>	<b>100.00</b>	<b>0.40</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.29 MALI****Wide Area Networks (WAN) (US\$ Million): Mali 2004 - 2014**

Year	Mali	% of Region	% of Globe
2004	0.20	0.57%	0.02%
2005	0.20	0.56%	0.02%
2006	0.21	0.56%	0.02%
2007	0.22	0.55%	0.02%
2008	0.23	0.55%	0.02%
2009	0.23	0.54%	0.02%
2010	0.24	0.54%	0.02%
2011	0.25	0.53%	0.02%
2012	0.26	0.53%	0.02%
2013	0.27	0.52%	0.02%
2014	0.27	0.52%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Mali: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Bamako	781	0.17	71.15	0.39	0.02
Segou	1,659	0.02	7.16	0.04	0.00
Mopti	1,704	0.01	5.95	0.03	0.00
Sikasso	1,727	0.01	5.18	0.03	0.00
Kayes	1,739	0.01	4.96	0.03	0.00
Gao	1,806	0.01	3.41	0.02	0.00
Timbuktu	1,864	0.01	2.20	0.01	0.00
<b>Total</b>		<b>0.23</b>	<b>100.00</b>	<b>0.54</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.30 MAURITANIA

#### Wide Area Networks (WAN) (US\$ Million): Mauritania 2004 - 2014

Year	Mauritania	% of Region	% of Globe
2004	0.09	0.25%	0.01%
2005	0.09	0.24%	0.01%
2006	0.09	0.24%	0.01%
2007	0.09	0.23%	0.01%
2008	0.09	0.22%	0.01%
2009	0.09	0.22%	0.01%
2010	0.10	0.21%	0.01%
2011	0.10	0.21%	0.01%
2012	0.10	0.20%	0.01%
2013	0.10	0.20%	0.01%
2014	0.10	0.20%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Mauritania: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Nouakchott	1,106	0.08	82.92	0.18	0.01
Nouadhibou	1,916	0.00	3.65	0.01	0.00
Kaedi	1,924	0.00	3.48	0.01	0.00
Zouerate	1,955	0.00	2.82	0.01	0.00
Atar	1,960	0.00	2.65	0.01	0.00
Rosso	1,961	0.00	2.65	0.01	0.00
Kiffa	2,001	0.00	1.82	0.00	0.00
<b>Total</b>		<b>0.09</b>	<b>100.00</b>	<b>0.22</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.31 MAURITIUS

#### Wide Area Networks (WAN) (US\$ Million): Mauritius 2004 - 2014

Year	Mauritius	% of Region	% of Globe
2004	0.20	0.58%	0.02%
2005	0.21	0.58%	0.02%
2006	0.22	0.58%	0.02%
2007	0.23	0.58%	0.02%
2008	0.24	0.57%	0.02%
2009	0.25	0.57%	0.02%
2010	0.26	0.57%	0.02%
2011	0.27	0.57%	0.02%
2012	0.28	0.57%	0.02%
2013	0.29	0.57%	0.02%
2014	0.30	0.56%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Mauritius: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Port Louis	1,090	0.08	33.33	0.19	0.01
Beau Bassin	1,278	0.06	22.30	0.13	0.01
Quatre Bornes	1,425	0.04	15.59	0.09	0.00
Curepipe	1,426	0.04	15.59	0.09	0.00
Vacoas-Phoenix	1,468	0.03	13.19	0.08	0.00
<b>Total</b>		<b>0.25</b>	<b>100.00</b>	<b>0.57</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.32 MOROCCO****Wide Area Networks (WAN) (US\$ Million): Morocco 2004 - 2014**

Year	Morocco	% of Region	% of Globe
2004	1.86	5.31%	0.21%
2005	1.90	5.21%	0.21%
2006	1.94	5.10%	0.20%
2007	1.98	5.00%	0.20%
2008	2.02	4.90%	0.20%
2009	2.07	4.80%	0.19%
2010	2.11	4.71%	0.19%
2011	2.16	4.61%	0.19%
2012	2.20	4.52%	0.19%
2013	2.25	4.43%	0.18%
2014	2.30	4.34%	0.18%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Morocco: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Casablanca	350	0.51	24.65	1.18	0.05
Marrakech	614	0.25	12.09	0.58	0.02
Rabat	655	0.23	10.92	0.52	0.02
Fez	790	0.16	7.92	0.38	0.02
Oujda	807	0.16	7.60	0.36	0.01
Kenitra	836	0.15	7.07	0.34	0.01
Tetouan	857	0.14	6.79	0.33	0.01
Safi	861	0.14	6.73	0.32	0.01
Meknes	909	0.12	5.97	0.29	0.01
Agadir	913	0.12	5.94	0.29	0.01
Tangier	1,066	0.09	4.32	0.21	0.01
<b>Total</b>		<b>2.07</b>	<b>100.00</b>	<b>4.80</b>	<b>0.19</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.33 MOZAMBIQUE

#### Wide Area Networks (WAN) (US\$ Million): Mozambique 2004 - 2014

Year	Mozambique	% of Region	% of Globe
2004	0.23	0.67%	0.03%
2005	0.24	0.67%	0.03%
2006	0.26	0.68%	0.03%
2007	0.27	0.68%	0.03%
2008	0.28	0.69%	0.03%
2009	0.30	0.69%	0.03%
2010	0.31	0.70%	0.03%
2011	0.33	0.70%	0.03%
2012	0.34	0.70%	0.03%
2013	0.36	0.71%	0.03%
2014	0.38	0.71%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Mozambique: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Maputo	745	0.18	60.83	0.42	0.02
Beira	1,320	0.05	16.60	0.11	0.00
Nampula	1,462	0.03	11.20	0.08	0.00
Nacala	1,644	0.02	5.80	0.04	0.00
Machaze	1,814	0.01	2.62	0.02	0.00
Chibuto	1,889	0.00	1.48	0.01	0.00
Mandie	1,890	0.00	1.48	0.01	0.00
<b>Total</b>		<b>0.30</b>	<b>100.00</b>	<b>0.69</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.34 NAMIBIA

#### Wide Area Networks (WAN) (US\$ Million): Namibia 2004 - 2014

Year	Namibia	% of Region	% of Globe
2004	0.15	0.42%	0.02%
2005	0.15	0.42%	0.02%
2006	0.16	0.42%	0.02%
2007	0.16	0.41%	0.02%
2008	0.17	0.41%	0.02%
2009	0.18	0.41%	0.02%
2010	0.18	0.40%	0.02%
2011	0.19	0.40%	0.02%
2012	0.19	0.40%	0.02%
2013	0.20	0.39%	0.02%
2014	0.21	0.39%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Namibia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Windhoek	905	0.12	70.55	0.29	0.01
Tsumeb	1,697	0.01	7.98	0.03	0.00
Keetmanshoop	1,729	0.01	6.75	0.03	0.00
Otjiwarongo	1,766	0.01	5.52	0.02	0.00
Luderitz	1,792	0.01	4.91	0.02	0.00
Swakopmund	1,823	0.01	4.29	0.02	0.00
<b>Total</b>		<b>0.18</b>	<b>100.00</b>	<b>0.41</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.35 NIGER****Wide Area Networks (WAN) (US\$ Million): Niger 2004 - 2014**

Year	Niger	% of Region	% of Globe
2004	0.13	0.36%	0.01%
2005	0.13	0.36%	0.01%
2006	0.13	0.35%	0.01%
2007	0.14	0.35%	0.01%
2008	0.14	0.35%	0.01%
2009	0.15	0.34%	0.01%
2010	0.15	0.34%	0.01%
2011	0.16	0.34%	0.01%
2012	0.16	0.34%	0.01%
2013	0.17	0.33%	0.01%
2014	0.17	0.33%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Niger: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Niamey	1,056	0.09	61.99	0.21	0.01
Zinder	1,609	0.02	12.93	0.04	0.00
Maradi	1,682	0.02	10.12	0.03	0.00
Tahoua	1,767	0.01	6.54	0.02	0.00
Agadez	1,841	0.01	4.21	0.01	0.00
Birni N'Konni	1,906	0.00	2.49	0.01	0.00
Filingue	1,959	0.00	1.71	0.01	0.00
<b>Total</b>		<b>0.15</b>	<b>100.00</b>	<b>0.34</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.36 NIGERIA

#### Wide Area Networks (WAN) (US\$ Million): Nigeria 2004 - 2014

Year	Nigeria	% of Region	% of Globe
2004	3.95	11.31%	0.44%
2005	4.13	11.33%	0.45%
2006	4.31	11.34%	0.45%
2007	4.50	11.35%	0.45%
2008	4.70	11.36%	0.46%
2009	4.90	11.37%	0.46%
2010	5.11	11.38%	0.46%
2011	5.32	11.38%	0.47%
2012	5.55	11.39%	0.47%
2013	5.79	11.39%	0.47%
2014	6.03	11.39%	0.48%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Nigeria: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Lagos	228	0.84	17.07	1.94	0.08
Ibadan	239	0.79	16.09	1.83	0.07
Ogbomosho	424	0.40	8.20	0.93	0.04
Kano	449	0.37	7.57	0.86	0.03
Oshogbo	583	0.26	5.37	0.61	0.02
Ilorin	589	0.26	5.35	0.61	0.02
Abeokuta	639	0.24	4.81	0.55	0.02
Port Harcourt	656	0.23	4.60	0.52	0.02
Ilesha	686	0.21	4.26	0.48	0.02
Zaria	687	0.21	4.26	0.48	0.02
Onitsha	694	0.20	4.18	0.48	0.02
Kaduna	726	0.19	3.85	0.44	0.02
Enugu	765	0.17	3.55	0.40	0.02
Aba	785	0.16	3.36	0.38	0.02
Benin City	897	0.13	2.59	0.29	0.01
Others		0.24	4.90	0.56	0.02
<b>Total</b>		<b>4.90</b>	<b>100.00</b>	<b>11.37</b>	<b>0.46</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.37 REPUBLIC OF CONGO

#### Wide Area Networks (WAN) (US\$ Million): Republic of Congo 2004 - 2014

Year	Republic of Congo	% of Region	% of Globe
2004	0.20	0.58%	0.02%
2005	0.21	0.57%	0.02%
2006	0.21	0.56%	0.02%
2007	0.22	0.55%	0.02%
2008	0.22	0.54%	0.02%
2009	0.23	0.53%	0.02%
2010	0.23	0.52%	0.02%
2011	0.24	0.51%	0.02%
2012	0.25	0.50%	0.02%
2013	0.25	0.50%	0.02%
2014	0.26	0.49%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Republic of Congo: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Brazzaville	876	0.13	58.32	0.31	0.01
Pointe-Noire	1,189	0.07	29.16	0.15	0.01
Nkayi	1,796	0.01	3.72	0.02	0.00
Loubomo	1,802	0.01	3.62	0.02	0.00
Ngamaba-Mfilou	1,856	0.01	2.45	0.01	0.00
Loandjili	1,913	0.00	1.57	0.01	0.00
Mossendjo	1,954	0.00	1.17	0.01	0.00
<b>Total</b>		<b>0.23</b>	<b>100.00</b>	<b>0.53</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.38 REUNION

#### Wide Area Networks (WAN) (US\$ Million): Reunion 2004 - 2014

Year	Reunion	% of Region	% of Globe
2004	0.07	0.20%	0.01%
2005	0.07	0.19%	0.01%
2006	0.07	0.19%	0.01%
2007	0.07	0.19%	0.01%
2008	0.08	0.18%	0.01%
2009	0.08	0.18%	0.01%
2010	0.08	0.18%	0.01%
2011	0.08	0.18%	0.01%
2012	0.08	0.17%	0.01%
2013	0.09	0.17%	0.01%
2014	0.09	0.17%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**Reunion: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Saint-Denis	1,535	0.03	32.61	0.06	0.00
Saint-Paul	1,680	0.02	19.41	0.04	0.00
Saint-Pierre	1,722	0.01	15.90	0.03	0.00
Le Tampon	1,760	0.01	12.94	0.02	0.00
Saint-Louis	1,813	0.01	9.97	0.02	0.00
Le Port	1,834	0.01	9.16	0.02	0.00
<b>Total</b>		<b>0.08</b>	<b>100.00</b>	<b>0.18</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.39 RWANDA****Wide Area Networks (WAN) (US\$ Million): Rwanda 2004 - 2014**

Year	Rwanda	% of Region	% of Globe
2004	0.12	0.33%	0.01%
2005	0.12	0.33%	0.01%
2006	0.13	0.33%	0.01%
2007	0.13	0.33%	0.01%
2008	0.14	0.33%	0.01%
2009	0.14	0.33%	0.01%
2010	0.15	0.33%	0.01%
2011	0.15	0.33%	0.01%
2012	0.16	0.33%	0.01%
2013	0.17	0.33%	0.01%
2014	0.17	0.33%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Rwanda: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Kigali	1,023	0.10	69.78	0.23	0.01
Butare	1,701	0.01	9.78	0.03	0.00
Ruhengeri	1,759	0.01	7.11	0.02	0.00
Gisenyi	1,820	0.01	5.33	0.02	0.00
Nyabisindu	1,839	0.01	4.44	0.01	0.00
Cyangugu	1,868	0.01	3.56	0.01	0.00
<b>Total</b>		<b>0.14</b>	<b>100.00</b>	<b>0.33</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.40 SAO TOME E PRINCIPE

#### Wide Area Networks (WAN) (US\$ Million): Sao Tome E Principe 2004 - 2014

Year	Sao Tome E Principe	% of Region	% of Globe
2004	0.00	0.01%	0.00%
2005	0.00	0.01%	0.00%
2006	0.00	0.01%	0.00%
2007	0.00	0.01%	0.00%
2008	0.00	0.01%	0.00%
2009	0.00	0.01%	0.00%
2010	0.00	0.01%	0.00%
2011	0.01	0.01%	0.00%
2012	0.01	0.01%	0.00%
2013	0.01	0.01%	0.00%
2014	0.01	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Sao Tome E Principe: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Sao Tome	1,882	0.00	97.22	0.01	0.00
Santo Antonio	2,075	0.00	2.78	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.41 SENEGAL

#### Wide Area Networks (WAN) (US\$ Million): Senegal 2004 - 2014

Year	Senegal	% of Region	% of Globe
2004	0.28	0.82%	0.03%
2005	0.30	0.81%	0.03%
2006	0.31	0.81%	0.03%
2007	0.32	0.80%	0.03%
2008	0.33	0.79%	0.03%
2009	0.34	0.79%	0.03%
2010	0.35	0.78%	0.03%
2011	0.36	0.78%	0.03%
2012	0.38	0.77%	0.03%
2013	0.39	0.77%	0.03%
2014	0.40	0.76%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Senegal: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Dakar	626	0.24	71.64	0.57	0.02
Thies	1,515	0.03	8.09	0.06	0.00
Kaolack	1,563	0.02	6.84	0.05	0.00
Zinguinchor	1,618	0.02	5.55	0.04	0.00
Saint-Louis	1,649	0.02	5.03	0.04	0.00
Diourbel	1,769	0.01	2.85	0.02	0.00
<b>Total</b>		<b>0.34</b>	<b>100.00</b>	<b>0.79</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**3.42 SIERRA LEONE****Wide Area Networks (WAN) (US\$ Million): Sierra Leone 2004 - 2014**

Year	Sierra Leone	% of Region	% of Globe
2004	0.06	0.19%	0.01%
2005	0.07	0.19%	0.01%
2006	0.07	0.19%	0.01%
2007	0.07	0.19%	0.01%
2008	0.08	0.19%	0.01%
2009	0.08	0.19%	0.01%
2010	0.08	0.19%	0.01%
2011	0.09	0.19%	0.01%
2012	0.09	0.19%	0.01%
2013	0.10	0.19%	0.01%
2014	0.10	0.19%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Sierra Leone: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Freetown	1,156	0.07	88.18	0.17	0.01
Bo	1,901	0.00	4.88	0.01	0.00
Kenema	1,990	0.00	2.44	0.00	0.00
Makeni	1,998	0.00	2.25	0.00	0.00
Port Loko	2,032	0.00	1.13	0.00	0.00
Bonthe	2,033	0.00	1.13	0.00	0.00
<b>Total</b>		<b>0.08</b>	<b>100.00</b>	<b>0.19</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.43 SOMALIA

#### Wide Area Networks (WAN) (US\$ Million): Somalia 2004 - 2014

Year	Somalia	% of Region	% of Globe
2004	0.08	0.23%	0.01%
2005	0.08	0.23%	0.01%
2006	0.08	0.22%	0.01%
2007	0.09	0.22%	0.01%
2008	0.09	0.21%	0.01%
2009	0.09	0.21%	0.01%
2010	0.09	0.21%	0.01%
2011	0.10	0.20%	0.01%
2012	0.10	0.20%	0.01%
2013	0.10	0.20%	0.01%
2014	0.10	0.19%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Somalia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Mogadishu	1,423	0.04	42.66	0.09	0.00
Hargeysa	1,673	0.02	17.06	0.04	0.00
Burao	1,735	0.01	12.80	0.03	0.00
Baidoa	1,736	0.01	12.80	0.03	0.00
Kismaayo	1,815	0.01	8.53	0.02	0.00
Berbera	1,950	0.00	2.99	0.01	0.00
Marka	1,973	0.00	2.56	0.01	0.00
Giohar	2,056	0.00	0.60	0.00	0.00
<b>Total</b>		<b>0.09</b>	<b>100.00</b>	<b>0.21</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.44 SOUTH AFRICA

#### Wide Area Networks (WAN) (US\$ Million): South Africa 2004 - 2014

Year	South Africa	% of Region	% of Globe
2004	6.44	18.43%	0.72%
2005	6.68	18.33%	0.72%
2006	6.93	18.23%	0.72%
2007	7.19	18.13%	0.73%
2008	7.45	18.03%	0.73%
2009	7.72	17.93%	0.73%
2010	8.00	17.82%	0.73%
2011	8.29	17.72%	0.73%
2012	8.59	17.61%	0.73%
2013	8.90	17.50%	0.73%
2014	9.22	17.39%	0.73%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### South Africa: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Johannesburg	95	2.43	31.46	5.64	0.23
Cape Town	117	2.03	26.26	4.71	0.19
Pretoria	122	1.92	24.90	4.46	0.18
Durban	327	0.54	6.93	1.24	0.05
Roodepoort	771	0.17	2.21	0.40	0.02
Germiston	854	0.14	1.82	0.33	0.01
Boksburg	875	0.13	1.73	0.31	0.01
Umlazi	1,032	0.10	1.27	0.23	0.01
Bloemfontein	1,135	0.07	0.97	0.17	0.01
Pietermaritzburg	1,145	0.07	0.95	0.17	0.01
Port Elizabeth	1,180	0.07	0.88	0.16	0.01
East London	1,330	0.05	0.63	0.11	0.00
<b>Total</b>		<b>7.72</b>	<b>100.00</b>	<b>17.93</b>	<b>0.73</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 3.45 SUDAN

### Wide Area Networks (WAN) (US\$ Million): Sudan 2004 - 2014

Year	Sudan	% of Region	% of Globe
2004	1.26	3.60%	0.14%
2005	1.36	3.74%	0.15%
2006	1.47	3.87%	0.15%
2007	1.59	4.01%	0.16%
2008	1.72	4.16%	0.17%
2009	1.85	4.29%	0.17%
2010	1.99	4.43%	0.18%
2011	2.14	4.57%	0.19%
2012	2.30	4.71%	0.19%
2013	2.47	4.86%	0.20%
2014	2.65	5.01%	0.21%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Sudan: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Omdurman	320	0.55	29.89	1.28	0.05
Khartoum	360	0.50	26.85	1.15	0.05
Port Sudan	654	0.23	12.24	0.53	0.02
Wadi Medani	832	0.15	8.01	0.34	0.01
Al Obeid	838	0.15	7.90	0.34	0.01
Atbara	983	0.11	5.81	0.25	0.01
Kassala	998	0.10	5.64	0.24	0.01
Kosti	1,182	0.07	3.67	0.16	0.01
<b>Total</b>		<b>1.85</b>	<b>100.00</b>	<b>4.29</b>	<b>0.17</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.46 SWAZILAND

#### Wide Area Networks (WAN) (US\$ Million): Swaziland 2004 - 2014

Year	Swaziland	% of Region	% of Globe
2004	0.08	0.23%	0.01%
2005	0.08	0.22%	0.01%
2006	0.08	0.22%	0.01%
2007	0.08	0.21%	0.01%
2008	0.09	0.21%	0.01%
2009	0.09	0.20%	0.01%
2010	0.09	0.20%	0.01%
2011	0.09	0.20%	0.01%
2012	0.09	0.19%	0.01%
2013	0.09	0.19%	0.01%
2014	0.10	0.18%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Swaziland: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Mbabane	1,406	0.04	46.99	0.10	0.00
Manzini	1,611	0.02	21.69	0.04	0.00
Big Bend	1,753	0.01	12.05	0.02	0.00
Mhlume	1,830	0.01	8.43	0.02	0.00
Nhlangano	1,894	0.00	4.82	0.01	0.00
Pigg's Peak	1,930	0.00	3.61	0.01	0.00
Siteki	1,981	0.00	2.41	0.00	0.00
<b>Total</b>		<b>0.09</b>	<b>100.00</b>	<b>0.20</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.47 TANZANIA

#### Wide Area Networks (WAN) (US\$ Million): Tanzania 2004 - 2014

Year	Tanzania	% of Region	% of Globe
2004	0.58	1.65%	0.06%
2005	0.60	1.66%	0.07%
2006	0.63	1.66%	0.07%
2007	0.66	1.67%	0.07%
2008	0.69	1.68%	0.07%
2009	0.72	1.68%	0.07%
2010	0.76	1.69%	0.07%
2011	0.79	1.69%	0.07%
2012	0.83	1.70%	0.07%
2013	0.87	1.70%	0.07%
2014	0.91	1.71%	0.07%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Tanzania: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Dar es Salaam	413	0.42	57.47	0.97	0.04
Mwanza	1,237	0.06	8.30	0.14	0.01
Zanzibar	1,242	0.06	8.22	0.14	0.01
Tanga	1,273	0.06	7.70	0.13	0.01
Mbeya	1,399	0.04	5.75	0.10	0.00
Tabora	1,443	0.04	5.01	0.08	0.00
Arusha	1,488	0.03	4.11	0.07	0.00
Dodoma	1,543	0.02	3.44	0.06	0.00
<b>Total</b>		<b>0.72</b>	<b>100.00</b>	<b>1.68</b>	<b>0.07</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 3.48 THE GAMBIA

### Wide Area Networks (WAN) (US\$ Million): The Gambia 2004 - 2014

Year	The Gambia	% of Region	% of Globe
2004	0.02	0.05%	0.00%
2005	0.02	0.05%	0.00%
2006	0.02	0.05%	0.00%
2007	0.02	0.05%	0.00%
2008	0.02	0.05%	0.00%
2009	0.02	0.05%	0.00%
2010	0.02	0.05%	0.00%
2011	0.02	0.05%	0.00%
2012	0.03	0.05%	0.00%
2013	0.03	0.05%	0.00%
2014	0.03	0.05%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### The Gambia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Serekunda	1,752	0.01	47.69	0.02	0.00
Banjul	1,881	0.00	20.37	0.01	0.00
Brikama	1,985	0.00	9.26	0.00	0.00
Bakau	1,992	0.00	8.80	0.00	0.00
Farefenni	2,024	0.00	4.63	0.00	0.00
Sukuta	2,042	0.00	3.24	0.00	0.00
Gunjur	2,043	0.00	3.24	0.00	0.00
Georgetown	2,070	0.00	1.39	0.00	0.00
Basse Santa Su	2,071	0.00	1.39	0.00	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.05</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.49 TOGO

#### Wide Area Networks (WAN) (US\$ Million): Togo 2004 - 2014

Year	Togo	% of Region	% of Globe
2004	0.07	0.21%	0.01%
2005	0.08	0.21%	0.01%
2006	0.08	0.21%	0.01%
2007	0.08	0.20%	0.01%
2008	0.08	0.20%	0.01%
2009	0.08	0.19%	0.01%
2010	0.09	0.19%	0.01%
2011	0.09	0.19%	0.01%
2012	0.09	0.18%	0.01%
2013	0.09	0.18%	0.01%
2014	0.09	0.18%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Togo: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Lome	1,275	0.06	66.06	0.13	0.01
Sokodé	1,831	0.01	8.66	0.02	0.00
Palimé	1,875	0.00	5.78	0.01	0.00
Atakpamé	1,898	0.00	4.87	0.01	0.00
Bassari	1,919	0.00	3.97	0.01	0.00
Tsévié	1,958	0.00	3.07	0.01	0.00
Anécho	1,982	0.00	2.53	0.00	0.00
Mango	1,991	0.00	2.35	0.00	0.00
Bafilo	2,008	0.00	1.81	0.00	0.00
Tabligbo	2,039	0.00	0.90	0.00	0.00
<b>Total</b>		<b>0.08</b>	<b>100.00</b>	<b>0.19</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



### 3.50 TUNISIA

#### Wide Area Networks (WAN) (US\$ Million): Tunisia 2004 - 2014

Year	Tunisia	% of Region	% of Globe
2004	1.03	2.96%	0.12%
2005	1.08	2.96%	0.12%
2006	1.13	2.97%	0.12%
2007	1.18	2.97%	0.12%
2008	1.23	2.97%	0.12%
2009	1.28	2.98%	0.12%
2010	1.34	2.98%	0.12%
2011	1.39	2.98%	0.12%
2012	1.45	2.98%	0.12%
2013	1.51	2.98%	0.12%
2014	1.58	2.98%	0.12%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Tunisia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Tunis	346	0.52	40.17	1.20	0.05
Sfax	702	0.20	15.61	0.46	0.02
Ariana	1,079	0.09	6.66	0.20	0.01
Bizerte	1,092	0.08	6.39	0.19	0.01
Djerba	1,101	0.08	6.19	0.18	0.01
Gabes	1,102	0.08	6.19	0.18	0.01
Sousse	1,153	0.07	5.65	0.17	0.01
Kairouan	1,220	0.06	4.85	0.14	0.01
La Goulette	1,290	0.05	4.17	0.12	0.01
Gafsa	1,294	0.05	4.10	0.12	0.00
<b>Total</b>		<b>1.28</b>	<b>100.00</b>	<b>2.98</b>	<b>0.12</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.51 UGANDA

#### Wide Area Networks (WAN) (US\$ Million): Uganda 2004 - 2014

Year	Uganda	% of Region	% of Globe
2004	0.42	1.21%	0.05%
2005	0.44	1.21%	0.05%
2006	0.46	1.21%	0.05%
2007	0.48	1.21%	0.05%
2008	0.50	1.21%	0.05%
2009	0.52	1.21%	0.05%
2010	0.54	1.21%	0.05%
2011	0.57	1.21%	0.05%
2012	0.59	1.21%	0.05%
2013	0.61	1.21%	0.05%
2014	0.64	1.20%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Uganda: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Kampala	451	0.37	70.72	0.86	0.03
Jinja	1,384	0.04	8.17	0.10	0.00
Masaka	1,562	0.02	4.47	0.05	0.00
Mbale	1,572	0.02	4.31	0.05	0.00
Mbarara	1,627	0.02	3.54	0.04	0.00
Entebbe	1,656	0.02	3.24	0.04	0.00
Tororo	1,690	0.01	2.77	0.03	0.00
Gulu	1,691	0.01	2.77	0.03	0.00
<b>Total</b>		<b>0.52</b>	<b>100.00</b>	<b>1.21</b>	<b>0.05</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.52 WESTERN SAHARA

#### Wide Area Networks (WAN) (US\$ Million): Western Sahara 2004 - 2014

Year	Western Sahara	% of Region	% of Globe
2004	0.00	0.00%	0.00%
2005	0.00	0.00%	0.00%
2006	0.00	0.00%	0.00%
2007	0.00	0.00%	0.00%
2008	0.00	0.00%	0.00%
2009	0.00	0.00%	0.00%
2010	0.00	0.00%	0.00%
2011	0.00	0.00%	0.00%
2012	0.00	0.00%	0.00%
2013	0.00	0.00%	0.00%
2014	0.00	0.00%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Western Sahara: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Laayoune	2,028	0.00	72.31	0.00	0.00
Dakhla	2,073	0.00	13.85	0.00	0.00
Semara	2,074	0.00	13.85	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 3.53 ZAMBIA

### Wide Area Networks (WAN) (US\$ Million): Zambia 2004 - 2014

Year	Zambia	% of Region	% of Globe
2004	0.21	0.62%	0.02%
2005	0.22	0.61%	0.02%
2006	0.23	0.61%	0.02%
2007	0.24	0.61%	0.02%
2008	0.25	0.61%	0.02%
2009	0.26	0.61%	0.02%
2010	0.28	0.61%	0.03%
2011	0.29	0.61%	0.03%
2012	0.30	0.61%	0.03%
2013	0.31	0.61%	0.03%
2014	0.32	0.61%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Zambia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Lusaka	1,093	0.08	30.87	0.19	0.01
Kitwe	1,368	0.04	16.75	0.10	0.00
Ndola	1,402	0.04	15.72	0.10	0.00
Kabwe	1,620	0.02	7.10	0.04	0.00
Mufulira	1,622	0.02	7.06	0.04	0.00
Chingola	1,631	0.02	6.88	0.04	0.00
Luanshya	1,672	0.02	5.89	0.04	0.00
Livingstone	1,778	0.01	3.48	0.02	0.00
Kalulushi	1,788	0.01	3.34	0.02	0.00
Chililabombwe	1,816	0.01	2.91	0.02	0.00
<b>Total</b>		<b>0.26</b>	<b>100.00</b>	<b>0.61</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 3.54 ZIMBABWE

#### Wide Area Networks (WAN) (US\$ Million): Zimbabwe 2004 - 2014

Year	Zimbabwe	% of Region	% of Globe
2004	0.10	0.28%	0.01%
2005	0.10	0.27%	0.01%
2006	0.10	0.26%	0.01%
2007	0.10	0.25%	0.01%
2008	0.10	0.24%	0.01%
2009	0.10	0.23%	0.01%
2010	0.10	0.22%	0.01%
2011	0.10	0.21%	0.01%
2012	0.10	0.20%	0.01%
2013	0.10	0.19%	0.01%
2014	0.10	0.19%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Zimbabwe: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Harare	1,416	0.04	40.01	0.09	0.00
Bulawayo	1,544	0.02	25.21	0.06	0.00
Chitungwiza	1,732	0.01	11.87	0.03	0.00
Gweru	1,880	0.00	4.64	0.01	0.00
Mutare	1,899	0.00	4.11	0.01	0.00
Kwekwe	1,946	0.00	2.82	0.01	0.00
Kadoma	1,957	0.00	2.64	0.01	0.00
Hwange	1,976	0.00	2.29	0.01	0.00
Masvingo	2,000	0.00	1.82	0.00	0.00
Zvishavane	2,005	0.00	1.59	0.00	0.00
Chegutu	2,006	0.00	1.59	0.00	0.00
Chinhoyi	2,011	0.00	1.41	0.00	0.00
<b>Total</b>		<b>0.10</b>	<b>100.00</b>	<b>0.23</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4 ASIA

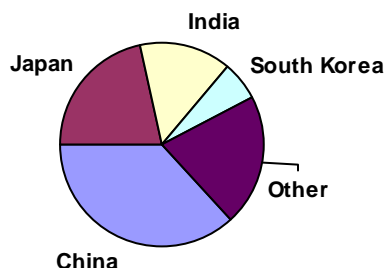
### 4.1 EXECUTIVE SUMMARY

#### Market Potential for Wide Area Networks (WAN) in Asia (US\$ Million): 2009

Country	Latent Demand US\$ Million	% of Asia
China	119.95	36.58%
Japan	71.84	21.91%
India	49.80	15.19%
South Korea	19.91	6.07%
Indonesia	14.04	4.28%
Taiwan	11.42	3.48%
Thailand	8.56	2.61%
Malaysia	5.93	1.81%
Philippines	4.99	1.52%
Hong Kong	4.86	1.48%
Vietnam	3.74	1.14%
Singapore	3.72	1.14%
Bangladesh	3.47	1.06%
Burma	1.51	0.46%
Sri Lanka	1.38	0.42%
North Korea	0.64	0.20%
Nepal	0.50	0.15%
Cambodia	0.43	0.13%
Papua New Guinea	0.27	0.08%
Macau	0.22	0.07%
Laos	0.21	0.06%
Brunei	0.15	0.05%
Mongolia	0.14	0.04%
Bhutan	0.06	0.02%
Maldives	0.05	0.01%
Other	0.07	0.02%
<b>Total</b>	<b>327.87</b>	<b>100.00%</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## Market Potential for Wide Area Networks (WAN) in Asia (US\$ Million): 2009



### The Market for Wide Area Networks (WAN) in Asia: 2004 - 2014

Year	US\$ Million	% of Globe
2004	258.20	28.93
2005	270.79	29.31
2006	284.10	29.70
2007	298.17	30.10
2008	312.89	30.50
2009	327.87	30.88
2010	343.58	31.27
2011	360.16	31.66
2012	377.65	32.06
2013	396.12	32.47
2014	415.62	32.89

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.2 BANGLADESH

### Wide Area Networks (WAN) (US\$ Million): Bangladesh 2004 - 2014

Year	Bangladesh	% of Region	% of Globe
2004	2.82	1.09%	0.32%
2005	2.94	1.09%	0.32%
2006	3.07	1.08%	0.32%
2007	3.20	1.07%	0.32%
2008	3.33	1.07%	0.33%
2009	3.47	1.06%	0.33%
2010	3.61	1.05%	0.33%
2011	3.76	1.04%	0.33%
2012	3.92	1.04%	0.33%
2013	4.08	1.03%	0.33%
2014	4.24	1.02%	0.34%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Bangladesh: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Dhaka	160	1.45	41.79	0.44	0.14
Chittagong	298	0.60	17.31	0.18	0.06
Khulna	432	0.40	11.41	0.12	0.04
Narayanganj	780	0.17	4.79	0.05	0.02
Rajshahi	808	0.16	4.49	0.05	0.01
Mymensingh	937	0.12	3.37	0.04	0.01
Comilla	960	0.11	3.25	0.03	0.01
Barisal	988	0.11	3.06	0.03	0.01
Sylhet	1,004	0.10	2.97	0.03	0.01
Rangpur	1,048	0.09	2.70	0.03	0.01
Jessore	1,057	0.09	2.63	0.03	0.01
Saidpur	1,112	0.08	2.24	0.02	0.01
<b>Total</b>		<b>3.47</b>	<b>100.00</b>	<b>1.06</b>	<b>0.33</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**4.3 BHUTAN****Wide Area Networks (WAN) (US\$ Million): Bhutan 2004 - 2014**

Year	Bhutan	% of Region	% of Globe
2004	0.04	0.02%	0.00%
2005	0.05	0.02%	0.01%
2006	0.05	0.02%	0.01%
2007	0.05	0.02%	0.01%
2008	0.06	0.02%	0.01%
2009	0.06	0.02%	0.01%
2010	0.06	0.02%	0.01%
2011	0.07	0.02%	0.01%
2012	0.07	0.02%	0.01%
2013	0.07	0.02%	0.01%
2014	0.08	0.02%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Bhutan: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Thimphu	1,683	0.01	25.32	0.00	0.00
Taga Dzong	1,694	0.01	24.05	0.00	0.00
Punakha	1,768	0.01	16.46	0.00	0.00
Bumthang	1,804	0.01	13.92	0.00	0.00
Phuntsholing	1,828	0.01	12.66	0.00	0.00
Paro	1,977	0.00	3.80	0.00	0.00
Tongsa Dzong	1,978	0.00	3.80	0.00	0.00
<b>Total</b>		<b>0.06</b>	<b>100.00</b>	<b>0.02</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.4 BRUNEI

### Wide Area Networks (WAN) (US\$ Million): Brunei 2004 - 2014

Year	Brunei	% of Region	% of Globe
2004	0.14	0.06%	0.02%
2005	0.15	0.05%	0.02%
2006	0.15	0.05%	0.02%
2007	0.15	0.05%	0.02%
2008	0.15	0.05%	0.01%
2009	0.15	0.05%	0.01%
2010	0.16	0.05%	0.01%
2011	0.16	0.04%	0.01%
2012	0.16	0.04%	0.01%
2013	0.16	0.04%	0.01%
2014	0.16	0.04%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Brunei: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bandar Seri Begawan	1,081	0.08	54.74	0.03	0.01
Seria	1,421	0.04	25.26	0.01	0.00
Kuala Belait	1,482	0.03	20.00	0.01	0.00
<b>Total</b>		<b>0.15</b>	<b>100.00</b>	<b>0.05</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.5 BURMA

### Wide Area Networks (WAN) (US\$ Million): Burma 2004 - 2014

Year	Burma	% of Region	% of Globe
2004	1.24	0.48%	0.14%
2005	1.29	0.48%	0.14%
2006	1.34	0.47%	0.14%
2007	1.40	0.47%	0.14%
2008	1.45	0.46%	0.14%
2009	1.51	0.46%	0.14%
2010	1.57	0.46%	0.14%
2011	1.63	0.45%	0.14%
2012	1.69	0.45%	0.14%
2013	1.75	0.44%	0.14%
2014	1.82	0.44%	0.14%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**Burma: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Yangon	208	0.97	64.22	0.30	0.09
Mandalay	680	0.21	13.92	0.06	0.02
Moulmein	1,074	0.09	5.75	0.03	0.01
Pegu	1,246	0.06	3.92	0.02	0.01
Bassein	1,265	0.06	3.76	0.02	0.01
Taunggye	1,386	0.04	2.82	0.01	0.00
Sittwe	1,387	0.04	2.82	0.01	0.00
Monywa	1,392	0.04	2.79	0.01	0.00
<b>Total</b>		<b>1.51</b>	<b>100.00</b>	<b>0.46</b>	<b>0.14</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**4.6 CAMBODIA****Wide Area Networks (WAN) (US\$ Million): Cambodia 2004 - 2014**

Year	Cambodia	% of Region	% of Globe
2004	0.33	0.13%	0.04%
2005	0.35	0.13%	0.04%
2006	0.37	0.13%	0.04%
2007	0.39	0.13%	0.04%
2008	0.41	0.13%	0.04%
2009	0.43	0.13%	0.04%
2010	0.46	0.13%	0.04%
2011	0.48	0.13%	0.04%
2012	0.51	0.14%	0.04%
2013	0.54	0.14%	0.04%
2014	0.57	0.14%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Cambodia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Bhnom Penh	470	0.34	77.88	0.10	0.03
Kompong Cham	1,038	0.10	22.12	0.03	0.01
<b>Total</b>		<b>0.43</b>	<b>100.00</b>	<b>0.13</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.7 CHINA

### Wide Area Networks (WAN) (US\$ Million): China 2004 - 2014

Year	China	% of Region	% of Globe
2004	84.77	32.83%	9.50%
2005	90.95	33.59%	9.84%
2006	97.59	34.35%	10.20%
2007	104.70	35.12%	10.57%
2008	112.25	35.88%	10.94%
2009	119.95	36.58%	11.30%
2010	128.10	37.28%	11.66%
2011	136.81	37.99%	12.03%
2012	146.12	38.69%	12.41%
2013	156.05	39.40%	12.79%
2014	166.66	40.10%	13.19%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### China: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Shanghai	4	17.17	14.32	5.24	1.62
Beijing	6	14.31	11.93	4.37	1.35
Chongqing	8	12.11	10.10	3.69	1.14
Guangzhou	10	11.05	9.21	3.37	1.04
Chengdu	11	10.17	8.48	3.10	0.96
Tianjin	16	8.80	7.33	2.68	0.83
Harbin	28	5.80	4.84	1.77	0.55
Nanjing	29	5.76	4.80	1.76	0.54
Wuhan	30	5.73	4.78	1.75	0.54
Jinan	33	5.32	4.43	1.62	0.50
Shenyang	36	4.88	4.07	1.49	0.46
Changchun	40	4.66	3.89	1.42	0.44
Xi'an	41	4.62	3.85	1.41	0.44
Dalian	43	4.40	3.66	1.34	0.41
Shenzhen	73	3.05	2.54	0.93	0.29
Others		2.11	1.76	0.64	0.20
<b>Total</b>		<b>119.95</b>	<b>100.00</b>	<b>36.58</b>	<b>11.30</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.8 HONG KONG

### Wide Area Networks (WAN) (US\$ Million): Hong Kong 2004 - 2014

Year	Hong Kong	% of Region	% of Globe
2004	3.97	1.54%	0.45%
2005	4.14	1.53%	0.45%
2006	4.31	1.52%	0.45%
2007	4.49	1.51%	0.45%
2008	4.68	1.49%	0.46%
2009	4.86	1.48%	0.46%
2010	5.06	1.47%	0.46%
2011	5.26	1.46%	0.46%
2012	5.47	1.45%	0.46%
2013	5.69	1.44%	0.47%
2014	5.92	1.42%	0.47%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Hong Kong: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Hong Kong	38	4.86	100.00	1.48	0.46
<b>Total</b>		<b>4.86</b>	<b>100.00</b>	<b>1.48</b>	<b>0.46</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.9 INDIA

### Wide Area Networks (WAN) (US\$ Million): India 2004 - 2014

Year	India	% of Region	% of Globe
2004	37.95	14.70%	4.25%
2005	40.09	14.81%	4.34%
2006	42.36	14.91%	4.43%
2007	44.75	15.01%	4.52%
2008	47.26	15.10%	4.61%
2009	49.80	15.19%	4.69%
2010	52.46	15.27%	4.77%
2011	55.27	15.35%	4.86%
2012	58.23	15.42%	4.94%
2013	61.34	15.49%	5.03%
2014	64.63	15.55%	5.11%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**India: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Maharashtra State	17	8.59	17.25	2.62	0.81
Uttar Pradesh State	27	5.90	11.84	1.80	0.56
West Bengal State	48	3.98	7.99	1.21	0.37
Andhra Pradesh State	50	3.82	7.68	1.17	0.36
Tamil Nadu State	60	3.43	6.89	1.05	0.32
Gujarat State	70	3.10	6.23	0.95	0.29
Madhya Pradesh State	71	3.10	6.22	0.94	0.29
Karnataka State	80	2.81	5.65	0.86	0.26
Bihar State	81	2.81	5.64	0.86	0.26
Rajasthan State	110	2.19	4.41	0.67	0.21
Punjab State	111	2.18	4.38	0.67	0.21
Haryana State	145	1.57	3.15	0.48	0.15
Kerala State	158	1.46	2.93	0.45	0.14
Orissa State	177	1.24	2.50	0.38	0.12
Union Territories	187	1.15	2.31	0.35	0.11
Others		2.46	4.94	0.75	0.23
<b>Total</b>		<b>49.80</b>	<b>100.00</b>	<b>15.19</b>	<b>4.69</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**4.10 INDONESIA****Wide Area Networks (WAN) (US\$ Million): Indonesia 2004 - 2014**

Year	Indonesia	% of Region	% of Globe
2004	11.38	4.41%	1.28%
2005	11.87	4.38%	1.29%
2006	12.39	4.36%	1.29%
2007	12.92	4.33%	1.30%
2008	13.48	4.31%	1.31%
2009	14.04	4.28%	1.32%
2010	14.62	4.26%	1.33%
2011	15.23	4.23%	1.34%
2012	15.86	4.20%	1.35%
2013	16.52	4.17%	1.35%
2014	17.20	4.14%	1.36%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Indonesia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Jawa Barat	90	2.54	18.11	0.78	0.24
DKI Jakarta	106	2.24	15.94	0.68	0.21
Jawa Timur	113	2.15	15.31	0.66	0.20
Jawa Tengah	159	1.45	10.34	0.44	0.14
Sumatra Utara	237	0.79	5.62	0.24	0.07
Riau	281	0.64	4.58	0.20	0.06
Kalimantan Timur	356	0.50	3.58	0.15	0.05
Sumatra Selatan	364	0.49	3.46	0.15	0.05
Daerah Istimewa Aceh	414	0.42	2.97	0.13	0.04
Sulawesi Selatan	486	0.33	2.35	0.10	0.03
Sumatra Barat	594	0.26	1.86	0.08	0.02
Lampung	602	0.26	1.83	0.08	0.02
Kalimantan Barat	613	0.25	1.78	0.08	0.02
Bali	629	0.24	1.72	0.07	0.02
Irian Jaya	650	0.23	1.63	0.07	0.02
Others		1.25	8.91	0.38	0.12
<b>Total</b>		<b>14.04</b>	<b>100.00</b>	<b>4.28</b>	<b>1.32</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**4.11 JAPAN****Wide Area Networks (WAN) (US\$ Million): Japan 2004 - 2014**

Year	Japan	% of Region	% of Globe
2004	64.82	25.10%	7.26%
2005	66.17	24.44%	7.16%
2006	67.56	23.78%	7.06%
2007	68.97	23.13%	6.96%
2008	70.40	22.50%	6.86%
2009	71.84	21.91%	6.77%
2010	73.32	21.34%	6.67%
2011	74.82	20.77%	6.58%
2012	76.35	20.22%	6.48%
2013	77.92	19.67%	6.39%
2014	79.52	19.13%	6.29%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Japan: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Tokyo	9	12.03	16.75	3.67	1.13
Yokohama	37	4.88	6.79	1.49	0.46
Nagoya	82	2.79	3.88	0.85	0.26
Osaka	86	2.66	3.70	0.81	0.25
Sapporo	124	1.91	2.66	0.58	0.18
Kawasaki	135	1.73	2.41	0.53	0.16
Kyoto	144	1.58	2.20	0.48	0.15
Kobe	153	1.50	2.09	0.46	0.14
Fukuoka	163	1.42	1.97	0.43	0.13
Hiroshima	169	1.35	1.88	0.41	0.13
Chiba	188	1.14	1.59	0.35	0.11
Sendai	190	1.14	1.58	0.35	0.11
Kitakyushu	212	0.93	1.29	0.28	0.09
Sakai	220	0.89	1.23	0.27	0.08
Sagamihara	243	0.77	1.08	0.24	0.07
Others		35.13	48.89	10.71	3.31
<b>Total</b>		<b>71.84</b>	<b>100.00</b>	<b>21.91</b>	<b>6.77</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**4.12 LAOS****Wide Area Networks (WAN) (US\$ Million): Laos 2004 - 2014**

Year	Laos	% of Region	% of Globe
2004	0.17	0.06%	0.02%
2005	0.17	0.06%	0.02%
2006	0.18	0.06%	0.02%
2007	0.19	0.06%	0.02%
2008	0.20	0.06%	0.02%
2009	0.21	0.06%	0.02%
2010	0.22	0.06%	0.02%
2011	0.23	0.06%	0.02%
2012	0.24	0.06%	0.02%
2013	0.25	0.06%	0.02%
2014	0.26	0.06%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Laos: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Vientiane	839	0.15	69.30	0.04	0.01
Savannakhet	1,606	0.02	9.38	0.01	0.00
Pakse	1,641	0.02	8.27	0.01	0.00
Luang Prabang	1,652	0.02	8.09	0.01	0.00
Sayaboury	1,859	0.01	2.57	0.00	0.00
Khammouane	1,870	0.01	2.39	0.00	0.00
<b>Total</b>		<b>0.21</b>	<b>100.00</b>	<b>0.06</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**4.13 MACAU****Wide Area Networks (WAN) (US\$ Million): Macau 2004 - 2014**

Year	Macau	% of Region	% of Globe
2004	0.14	0.05%	0.02%
2005	0.15	0.06%	0.02%
2006	0.17	0.06%	0.02%
2007	0.18	0.06%	0.02%
2008	0.20	0.06%	0.02%
2009	0.22	0.07%	0.02%
2010	0.24	0.07%	0.02%
2011	0.26	0.07%	0.02%
2012	0.28	0.07%	0.02%
2013	0.30	0.08%	0.02%
2014	0.33	0.08%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Macau: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Macau	697	0.20	94.12	0.06	0.02
Taipa	1,765	0.01	4.52	0.00	0.00
Coloane	1,941	0.00	1.36	0.00	0.00
<b>Total</b>		<b>0.22</b>	<b>100.00</b>	<b>0.07</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.14 MALAYSIA

### Wide Area Networks (WAN) (US\$ Million): Malaysia 2004 - 2014

Year	Malaysia	% of Region	% of Globe
2004	4.86	1.88%	0.54%
2005	5.06	1.87%	0.55%
2006	5.26	1.85%	0.55%
2007	5.48	1.84%	0.55%
2008	5.70	1.82%	0.56%
2009	5.93	1.81%	0.56%
2010	6.16	1.79%	0.56%
2011	6.41	1.78%	0.56%
2012	6.66	1.76%	0.57%
2013	6.92	1.75%	0.57%
2014	7.20	1.73%	0.57%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Malaysia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Kuala Lumpur	174	1.31	22.08	0.40	0.12
Ipoh	396	0.44	7.38	0.13	0.04
Johor Baharu	446	0.38	6.34	0.11	0.04
Melaka	469	0.34	5.71	0.10	0.03
Petaling Jaya	531	0.29	4.92	0.09	0.03
Tawai	545	0.28	4.72	0.09	0.03
Kelang	548	0.28	4.70	0.09	0.03
Kuala Terengganu	595	0.26	4.41	0.08	0.02
Sandakan	604	0.26	4.31	0.08	0.02
Kota Baharu	611	0.25	4.24	0.08	0.02
George Town	612	0.25	4.23	0.08	0.02
Kota Kinabalu	632	0.24	4.02	0.07	0.02
Kuantan	653	0.23	3.83	0.07	0.02
Taiping	681	0.21	3.53	0.06	0.02
Seremban	685	0.21	3.52	0.06	0.02
Others		0.72	12.06	0.22	0.07
<b>Total</b>		<b>5.93</b>	<b>100.00</b>	<b>1.81</b>	<b>0.56</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



## 4.15 MALDIVES

### Wide Area Networks (WAN) (US\$ Million): Maldives 2004 - 2014

Year	Maldives	% of Region	% of Globe
2004	0.04	0.01%	0.00%
2005	0.04	0.01%	0.00%
2006	0.04	0.01%	0.00%
2007	0.04	0.01%	0.00%
2008	0.05	0.01%	0.00%
2009	0.05	0.01%	0.00%
2010	0.05	0.01%	0.00%
2011	0.05	0.01%	0.00%
2012	0.05	0.01%	0.00%
2013	0.05	0.01%	0.00%
2014	0.06	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Maldives: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Male	1,343	0.05	100.00	0.01	0.00
<b>Total</b>		<b>0.05</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.16 MONGOLIA

### Wide Area Networks (WAN) (US\$ Million): Mongolia 2004 - 2014

Year	Mongolia	% of Region	% of Globe
2004	0.10	0.04%	0.01%
2005	0.11	0.04%	0.01%
2006	0.12	0.04%	0.01%
2007	0.13	0.04%	0.01%
2008	0.13	0.04%	0.01%
2009	0.14	0.04%	0.01%
2010	0.15	0.04%	0.01%
2011	0.16	0.04%	0.01%
2012	0.17	0.05%	0.01%
2013	0.18	0.05%	0.01%
2014	0.19	0.05%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Mongolia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Ulaanbaatar	989	0.11	74.25	0.03	0.01
Darhan	1,675	0.02	10.84	0.00	0.00
Erdenedalay	1,801	0.01	5.83	0.00	0.00
Choybalsan	1,886	0.00	3.12	0.00	0.00
Nalayh	1,942	0.00	2.03	0.00	0.00
Ulaangom	1,943	0.00	2.03	0.00	0.00
Uliastay	1,951	0.00	1.90	0.00	0.00
<b>Total</b>		<b>0.14</b>	<b>100.00</b>	<b>0.04</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**4.17 NEPAL****Wide Area Networks (WAN) (US\$ Million): Nepal 2004 - 2014**

Year	Nepal	% of Region	% of Globe
2004	0.44	0.17%	0.05%
2005	0.46	0.17%	0.05%
2006	0.47	0.16%	0.05%
2007	0.48	0.16%	0.05%
2008	0.49	0.16%	0.05%
2009	0.50	0.15%	0.05%
2010	0.51	0.15%	0.05%
2011	0.52	0.15%	0.05%
2012	0.54	0.14%	0.05%
2013	0.55	0.14%	0.04%
2014	0.56	0.14%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Nepal: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Kathmandu	878	0.13	26.43	0.04	0.01
Sallyan	1,078	0.09	17.10	0.03	0.01
Pyuthan	1,083	0.08	16.65	0.03	0.01
Jumla	1,138	0.07	14.85	0.02	0.01
Biratnagar	1,292	0.05	10.57	0.02	0.00
Lalitpur	1,360	0.05	9.00	0.01	0.00
Bhaktapur	1,521	0.03	5.40	0.01	0.00
<b>Total</b>		<b>0.50</b>	<b>100.00</b>	<b>0.15</b>	<b>0.05</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.18 NORTH KOREA

### Wide Area Networks (WAN) (US\$ Million): North Korea 2004 - 2014

Year	North Korea	% of Region	% of Globe
2004	0.62	0.24%	0.07%
2005	0.63	0.23%	0.07%
2006	0.63	0.22%	0.07%
2007	0.63	0.21%	0.06%
2008	0.64	0.20%	0.06%
2009	0.64	0.20%	0.06%
2010	0.64	0.19%	0.06%
2011	0.65	0.18%	0.06%
2012	0.65	0.17%	0.06%
2013	0.66	0.17%	0.05%
2014	0.66	0.16%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### North Korea: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Pyongyang	605	0.26	39.81	0.08	0.02
Chongjin	1,147	0.07	11.37	0.02	0.01
Nampo	1,187	0.07	10.42	0.02	0.01
Sinuiju	1,329	0.05	7.54	0.01	0.00
Hungnam	1,424	0.04	6.03	0.01	0.00
Wonsan	1,459	0.03	5.28	0.01	0.00
Kaesong	1,461	0.03	5.22	0.01	0.00
Hamhung	1,475	0.03	4.90	0.01	0.00
Kimchaek	1,518	0.03	4.24	0.01	0.00
Haeju	1,594	0.02	3.21	0.01	0.00
Sariwon	1,719	0.01	1.96	0.00	0.00
<b>Total</b>		<b>0.64</b>	<b>100.00</b>	<b>0.20</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.19 PAPUA NEW GUINEA

### Wide Area Networks (WAN) (US\$ Million): Papua New Guinea 2004 - 2014

Year	Papua New Guinea	% of Region	% of Globe
2004	0.23	0.09%	0.03%
2005	0.24	0.09%	0.03%
2006	0.25	0.09%	0.03%
2007	0.26	0.09%	0.03%
2008	0.26	0.08%	0.03%
2009	0.27	0.08%	0.03%
2010	0.28	0.08%	0.03%
2011	0.29	0.08%	0.03%
2012	0.30	0.08%	0.03%
2013	0.31	0.08%	0.03%
2014	0.32	0.08%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Papua New Guinea: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Port Moresby	900	0.12	45.92	0.04	0.01
Lae	1,195	0.07	24.17	0.02	0.01
Madang	1,596	0.02	7.55	0.01	0.00
Wewak	1,616	0.02	6.95	0.01	0.00
Goroka	1,634	0.02	6.65	0.01	0.00
Rabaul	1,712	0.01	4.83	0.00	0.00
Mount Hagen	1,751	0.01	3.93	0.00	0.00
<b>Total</b>		<b>0.27</b>	<b>100.00</b>	<b>0.08</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.20 PHILIPPINES

### Wide Area Networks (WAN) (US\$ Million): Philippines 2004 - 2014

Year	Philippines	% of Region	% of Globe
2004	3.92	1.52%	0.44%
2005	4.12	1.52%	0.45%
2006	4.32	1.52%	0.45%
2007	4.54	1.52%	0.46%
2008	4.76	1.52%	0.46%
2009	4.99	1.52%	0.47%
2010	5.23	1.52%	0.48%
2011	5.48	1.52%	0.48%
2012	5.74	1.52%	0.49%
2013	6.01	1.52%	0.49%
2014	6.29	1.51%	0.50%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

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**Philippines: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Manila	42	4.42	88.46	1.35	0.42
Quezon City	1,006	0.10	2.05	0.03	0.01
Davao	1,250	0.06	1.18	0.02	0.01
Cebu	1,394	0.04	0.84	0.01	0.00
Caloocan	1,418	0.04	0.79	0.01	0.00
Makati	1,512	0.03	0.55	0.01	0.00
Zamboanga	1,520	0.03	0.54	0.01	0.00
Cagayan de Oro	1,538	0.03	0.51	0.01	0.00
Pasig	1,555	0.02	0.49	0.01	0.00
Pasay	1,560	0.02	0.48	0.01	0.00
Las Pinas	1,564	0.02	0.47	0.01	0.00
Bacolod	1,586	0.02	0.42	0.01	0.00
Valenzuela	1,590	0.02	0.42	0.01	0.00
Marikina	1,615	0.02	0.38	0.01	0.00
Paranaque	1,619	0.02	0.38	0.01	0.00
Others		0.10	2.06	0.03	0.01
<b>Total</b>		<b>4.99</b>	<b>100.00</b>	<b>1.52</b>	<b>0.47</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.21 SEYCHELLES

**Wide Area Networks (WAN) (US\$ Million): Seychelles 2004 - 2014**

Year	Seychelles	% of Region	% of Globe
2004	0.02	0.01%	0.00%
2005	0.02	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.03	0.01%	0.00%
2008	0.03	0.01%	0.00%
2009	0.03	0.01%	0.00%
2010	0.03	0.01%	0.00%
2011	0.03	0.01%	0.00%
2012	0.03	0.01%	0.00%
2013	0.03	0.01%	0.00%
2014	0.03	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Seychelles: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Victoria	1,610	0.02	69.70	0.01	0.00
Anse Boileau	1,918	0.00	12.12	0.00	0.00
Anse Royale	1,962	0.00	9.09	0.00	0.00
Cascade	1,963	0.00	9.09	0.00	0.00
<b>Total</b>		<b>0.03</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.22 SINGAPORE

### Wide Area Networks (WAN) (US\$ Million): Singapore 2004 - 2014

Year	Singapore	% of Region	% of Globe
2004	2.91	1.13%	0.33%
2005	3.06	1.13%	0.33%
2006	3.22	1.13%	0.34%
2007	3.38	1.13%	0.34%
2008	3.55	1.13%	0.35%
2009	3.72	1.14%	0.35%
2010	3.90	1.14%	0.36%
2011	4.09	1.14%	0.36%
2012	4.29	1.14%	0.36%
2013	4.50	1.14%	0.37%
2014	4.72	1.13%	0.37%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Singapore: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Singapore	52	3.72	100.00	1.14	0.35
<b>Total</b>		<b>3.72</b>	<b>100.00</b>	<b>1.14</b>	<b>0.35</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.23 SOUTH KOREA

### Wide Area Networks (WAN) (US\$ Million): South Korea 2004 - 2014

Year	South Korea	% of Region	% of Globe
2004	16.64	6.44%	1.86%
2005	17.25	6.37%	1.87%
2006	17.89	6.30%	1.87%
2007	18.55	6.22%	1.87%
2008	19.22	6.14%	1.87%
2009	19.91	6.07%	1.87%
2010	20.61	6.00%	1.88%
2011	21.34	5.93%	1.88%
2012	22.10	5.85%	1.88%
2013	22.89	5.78%	1.88%
2014	23.70	5.70%	1.88%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### South Korea: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Seoul	13	9.72	48.85	2.97	0.92
Pusan	94	2.45	12.29	0.75	0.23
Inchon	136	1.73	8.68	0.53	0.16
Taegu	164	1.40	7.05	0.43	0.13
Taejon	229	0.83	4.16	0.25	0.08
Kwangju	230	0.83	4.16	0.25	0.08
Ulsan	234	0.80	3.99	0.24	0.07
Suwon	255	0.72	3.62	0.22	0.07
Masan	369	0.47	2.37	0.14	0.04
Chonju	430	0.40	1.99	0.12	0.04
Cheju	459	0.36	1.81	0.11	0.03
Mokpo	696	0.20	1.03	0.06	0.02
<b>Total</b>		<b>19.91</b>	<b>100.00</b>	<b>6.07</b>	<b>1.87</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.24 SRI LANKA

### Wide Area Networks (WAN) (US\$ Million): Sri Lanka 2004 - 2014

Year	Sri Lanka	% of Region	% of Globe
2004	1.12	0.43%	0.13%
2005	1.17	0.43%	0.13%
2006	1.22	0.43%	0.13%
2007	1.27	0.43%	0.13%
2008	1.33	0.42%	0.13%
2009	1.38	0.42%	0.13%
2010	1.44	0.42%	0.13%
2011	1.50	0.42%	0.13%
2012	1.56	0.41%	0.13%
2013	1.62	0.41%	0.13%
2014	1.69	0.41%	0.13%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Sri Lanka: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Colombo	286	0.63	45.56	0.19	0.06
Dehiwala	757	0.18	12.74	0.05	0.02
Jaffna	881	0.13	9.54	0.04	0.01
Moratuwa	895	0.13	9.21	0.04	0.01
Kandy	929	0.12	8.67	0.04	0.01
Galle	1,019	0.10	7.27	0.03	0.01
Negombo	1,268	0.06	4.07	0.02	0.01
Trincomalee	1,412	0.04	2.94	0.01	0.00
<b>Total</b>		<b>1.38</b>	<b>100.00</b>	<b>0.42</b>	<b>0.13</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.25 TAIWAN

### Wide Area Networks (WAN) (US\$ Million): Taiwan 2004 - 2014

Year	Taiwan	% of Region	% of Globe
2004	9.40	3.64%	1.05%
2005	9.78	3.61%	1.06%
2006	10.17	3.58%	1.06%
2007	10.58	3.55%	1.07%
2008	11.00	3.52%	1.07%
2009	11.42	3.48%	1.08%
2010	11.86	3.45%	1.08%
2011	12.32	3.42%	1.08%
2012	12.79	3.39%	1.09%
2013	13.29	3.35%	1.09%
2014	13.80	3.32%	1.09%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Taiwan: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Taipei	62	3.42	29.96	1.04	0.32
Kaohsiung	162	1.44	12.60	0.44	0.14
Taichung	207	0.97	8.52	0.30	0.09
Tainan	303	0.59	5.14	0.18	0.06
Panchiao	377	0.47	4.07	0.14	0.04
Hsinchu	465	0.34	2.99	0.10	0.03
Chungho	468	0.34	2.97	0.10	0.03
Sanchung	482	0.33	2.92	0.10	0.03
Keelung	505	0.32	2.77	0.10	0.03
Chungli	584	0.26	2.30	0.08	0.02
Chiayi	607	0.25	2.23	0.08	0.02
Taoyuan	635	0.24	2.07	0.07	0.02
Fengshan	646	0.23	2.01	0.07	0.02
Hsintien	664	0.22	1.92	0.07	0.02
Yungho	695	0.20	1.79	0.06	0.02
Others		1.80	15.72	0.55	0.17
<b>Total</b>		<b>11.42</b>	<b>100.00</b>	<b>3.48</b>	<b>1.08</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



## 4.26 THAILAND

### Wide Area Networks (WAN) (US\$ Million): Thailand 2004 - 2014

Year	Thailand	% of Region	% of Globe
2004	7.23	2.80%	0.81%
2005	7.48	2.76%	0.81%
2006	7.74	2.73%	0.81%
2007	8.01	2.69%	0.81%
2008	8.29	2.65%	0.81%
2009	8.56	2.61%	0.81%
2010	8.85	2.58%	0.81%
2011	9.15	2.54%	0.80%
2012	9.45	2.50%	0.80%
2013	9.77	2.47%	0.80%
2014	10.10	2.43%	0.80%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Thailand: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bangkok	18	7.97	93.11	2.43	0.75
Chon Buri	524	0.30	3.46	0.09	0.03
Songkhla	1,064	0.09	1.06	0.03	0.01
Nakhon Ratchasima	1,287	0.05	0.63	0.02	0.01
Chiang Mai	1,297	0.05	0.61	0.02	0.00
Khon Kaen	1,344	0.05	0.55	0.01	0.00
Nakhon Si Thammarat	1,457	0.03	0.40	0.01	0.00
Phitsanulok	1,687	0.01	0.17	0.00	0.00
Hat Yai	1,988	0.00	0.02	0.00	0.00
<b>Total</b>		<b>8.56</b>	<b>100.00</b>	<b>2.61</b>	<b>0.81</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 4.27 VIETNAM

### Wide Area Networks (WAN) (US\$ Million): Vietnam 2004 - 2014

Year	Vietnam	% of Region	% of Globe
2004	2.85	1.10%	0.32%
2005	3.01	1.11%	0.33%
2006	3.18	1.12%	0.33%
2007	3.36	1.13%	0.34%
2008	3.55	1.13%	0.35%
2009	3.74	1.14%	0.35%
2010	3.94	1.15%	0.36%
2011	4.15	1.15%	0.36%
2012	4.37	1.16%	0.37%
2013	4.60	1.16%	0.38%
2014	4.85	1.17%	0.38%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

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**Vietnam: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Ho Chi Minh	182	1.18	31.46	0.36	0.11
Can Tho	203	1.00	26.70	0.30	0.09
Hanoi	267	0.67	18.05	0.21	0.06
Thai Nguyen	528	0.29	7.83	0.09	0.03
Da Nang	529	0.29	7.81	0.09	0.03
Hue	647	0.23	6.15	0.07	0.02
Pleyku	1,137	0.07	2.00	0.02	0.01
<b>Total</b>		<b>3.74</b>	<b>100.00</b>	<b>1.14</b>	<b>0.35</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5 EUROPE

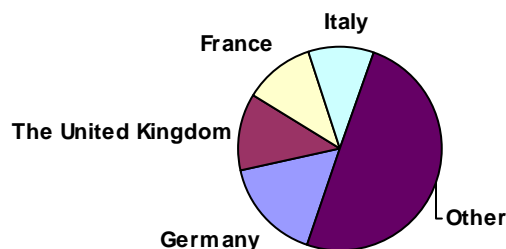
### 5.1 EXECUTIVE SUMMARY

#### Market Potential for Wide Area Networks (WAN) in Europe (US\$ Million): 2009

Country	Latent Demand US\$ Million	% of Europe
Germany	46.24	16.35%
The United Kingdom	35.09	12.41%
France	33.60	11.88%
Italy	29.28	10.35%
Spain	22.36	7.91%
Russia	17.40	6.15%
The Netherlands	10.47	3.70%
Poland	10.39	3.67%
Belgium	6.19	2.19%
Sweden	5.46	1.93%
Greece	5.36	1.89%
Ukraine	5.36	1.89%
Austria	5.24	1.85%
Switzerland	4.91	1.74%
Norway	4.25	1.50%
Czech Republic	4.13	1.46%
Romania	4.09	1.45%
Portugal	3.77	1.33%
Denmark	3.32	1.18%
Hungary	3.16	1.12%
Ireland	3.10	1.10%
Finland	3.06	1.08%
Kazakhstan	2.72	0.96%
Slovakia	1.81	0.64%
Belarus	1.75	0.62%
Other	10.31	3.65%
<b>Total</b>	<b>282.81</b>	<b>100.00%</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## Market Potential for Wide Area Networks (WAN) in Europe (US\$ Million): 2009



### The Market for Wide Area Networks (WAN) in Europe: 2004 - 2014

Year	US\$ Million	% of Globe
2004	244.48	27.39
2005	251.72	27.25
2006	259.19	27.10
2007	266.91	26.94
2008	274.81	26.79
2009	282.81	26.64
2010	291.05	26.49
2011	299.56	26.33
2012	308.35	26.18
2013	317.42	26.02
2014	326.79	25.86

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.2 ALBANIA

### Wide Area Networks (WAN) (US\$ Million): Albania 2004 - 2014

Year	Albania	% of Region	% of Globe
2004	0.27	0.11%	0.03%
2005	0.28	0.11%	0.03%
2006	0.29	0.11%	0.03%
2007	0.30	0.11%	0.03%
2008	0.31	0.11%	0.03%
2009	0.33	0.12%	0.03%
2010	0.34	0.12%	0.03%
2011	0.35	0.12%	0.03%
2012	0.36	0.12%	0.03%
2013	0.38	0.12%	0.03%
2014	0.39	0.12%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Albania: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Tirane	992	0.11	32.42	0.04	0.01
Durres	1,437	0.04	11.33	0.01	0.00
Elbasan	1,440	0.04	11.19	0.01	0.00
Shkoder	1,446	0.04	10.90	0.01	0.00
Vlore	1,474	0.03	9.76	0.01	0.00
Korce	1,496	0.03	8.90	0.01	0.00
Berat	1,608	0.02	5.88	0.01	0.00
Fier	1,621	0.02	5.74	0.01	0.00
Lushnje	1,718	0.01	3.87	0.00	0.00
<b>Total</b>		<b>0.33</b>	<b>100.00</b>	<b>0.12</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.3 ANDORRA****Wide Area Networks (WAN) (US\$ Million): Andorra 2004 - 2014**

Year	Andorra	% of Region	% of Globe
2004	0.04	0.02%	0.00%
2005	0.04	0.02%	0.00%
2006	0.04	0.02%	0.00%
2007	0.04	0.02%	0.00%
2008	0.04	0.02%	0.00%
2009	0.05	0.02%	0.00%
2010	0.05	0.02%	0.00%
2011	0.05	0.02%	0.00%
2012	0.05	0.02%	0.00%
2013	0.05	0.02%	0.00%
2014	0.05	0.02%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Andorra: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Andorra la Vella	1,516	0.03	60.00	0.01	0.00
Les Escaldes	1,632	0.02	40.00	0.01	0.00
<b>Total</b>		<b>0.05</b>	<b>100.00</b>	<b>0.02</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.4 AUSTRIA

### Wide Area Networks (WAN) (US\$ Million): Austria 2004 - 2014

Year	Austria	% of Region	% of Globe
2004	4.56	1.86%	0.51%
2005	4.69	1.86%	0.51%
2006	4.82	1.86%	0.50%
2007	4.96	1.86%	0.50%
2008	5.10	1.85%	0.50%
2009	5.24	1.85%	0.49%
2010	5.38	1.85%	0.49%
2011	5.53	1.85%	0.49%
2012	5.68	1.84%	0.48%
2013	5.84	1.84%	0.48%
2014	6.00	1.83%	0.47%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Austria: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Vienna	68	3.14	60.06	1.11	0.30
Graz	358	0.50	9.53	0.18	0.05
Linz	419	0.41	7.85	0.15	0.04
Salzburg	537	0.29	5.45	0.10	0.03
Innsbruck	630	0.24	4.59	0.08	0.02
Klagenfurt	750	0.18	3.41	0.06	0.02
Villach	976	0.11	2.08	0.04	0.01
Wels	995	0.10	2.00	0.04	0.01
Sankt Poelten	1,005	0.10	1.96	0.04	0.01
Steyr	1,108	0.08	1.49	0.03	0.01
Bregenz	1,261	0.06	1.10	0.02	0.01
Eisenstadt	1,548	0.02	0.47	0.01	0.00
<b>Total</b>		<b>5.24</b>	<b>100.00</b>	<b>1.85</b>	<b>0.49</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.5 BELARUS

### Wide Area Networks (WAN) (US\$ Million): Belarus 2004 - 2014

Year	Belarus	% of Region	% of Globe
2004	1.39	0.57%	0.16%
2005	1.45	0.58%	0.16%
2006	1.52	0.59%	0.16%
2007	1.59	0.60%	0.16%
2008	1.67	0.61%	0.16%
2009	1.75	0.62%	0.16%
2010	1.82	0.63%	0.17%
2011	1.91	0.64%	0.17%
2012	1.99	0.65%	0.17%
2013	2.08	0.66%	0.17%
2014	2.18	0.67%	0.17%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Belarus: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Minsk	274	0.66	37.91	0.23	0.06
Gomel	688	0.21	11.93	0.07	0.02
Mogilyov	831	0.15	8.49	0.05	0.01
Vitebsk	840	0.15	8.35	0.05	0.01
Grodno	963	0.11	6.44	0.04	0.01
Brest	982	0.11	6.15	0.04	0.01
Bobruysk	1,052	0.09	5.32	0.03	0.01
Baranovichi	1,192	0.07	3.79	0.02	0.01
Borisov	1,239	0.06	3.44	0.02	0.01
Orsha	1,307	0.05	2.93	0.02	0.00
Pinsk	1,318	0.05	2.84	0.02	0.00
Mozyr	1,393	0.04	2.41	0.01	0.00
<b>Total</b>		<b>1.75</b>	<b>100.00</b>	<b>0.62</b>	<b>0.16</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.6 BELGIUM

### Wide Area Networks (WAN) (US\$ Million): Belgium 2004 - 2014

Year	Belgium	% of Region	% of Globe
2004	5.47	2.24%	0.61%
2005	5.61	2.23%	0.61%
2006	5.75	2.22%	0.60%
2007	5.89	2.21%	0.59%
2008	6.04	2.20%	0.59%
2009	6.19	2.19%	0.58%
2010	6.34	2.18%	0.58%
2011	6.49	2.17%	0.57%
2012	6.65	2.16%	0.56%
2013	6.82	2.15%	0.56%
2014	6.98	2.14%	0.55%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Belgium: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Brussels	112	2.16	34.89	0.76	0.20
Antwerp	200	1.06	17.12	0.37	0.10
Ghent	341	0.52	8.38	0.18	0.05
Charleroi	376	0.47	7.52	0.16	0.04
Liege	392	0.45	7.19	0.16	0.04
Bruges	585	0.26	4.24	0.09	0.02
Namur	649	0.23	3.71	0.08	0.02
Mons	701	0.20	3.24	0.07	0.02
Leuven	730	0.19	3.02	0.07	0.02
Aalst	770	0.17	2.77	0.06	0.02
Mechelen	774	0.17	2.73	0.06	0.02
Kortrijk	775	0.17	2.73	0.06	0.02
Oostende	820	0.15	2.45	0.05	0.01
<b>Total</b>		<b>6.19</b>	<b>100.00</b>	<b>2.19</b>	<b>0.58</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



## 5.7 BOSNIA AND HERZEGOVINA

### Wide Area Networks (WAN) (US\$ Million): Bosnia and Herzegovina 2004 - 2014

Year	Bosnia and Herzegovina	% of Region	% of Globe
2004	0.41	0.17%	0.05%
2005	0.42	0.17%	0.05%
2006	0.44	0.17%	0.05%
2007	0.46	0.17%	0.05%
2008	0.48	0.17%	0.05%
2009	0.49	0.17%	0.05%
2010	0.51	0.18%	0.05%
2011	0.53	0.18%	0.05%
2012	0.55	0.18%	0.05%
2013	0.58	0.18%	0.05%
2014	0.60	0.18%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Bosnia and Herzegovina: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Sarajevo	715	0.19	39.33	0.07	0.02
Banja Luca	1,154	0.07	14.57	0.03	0.01
Zenica	1,288	0.05	10.84	0.02	0.01
Tuzla	1,327	0.05	9.80	0.02	0.00
Mostar	1,349	0.05	9.44	0.02	0.00
Prijedor	1,405	0.04	8.37	0.01	0.00
Doboj	1,430	0.04	7.63	0.01	0.00
<b>Total</b>		<b>0.49</b>	<b>100.00</b>	<b>0.17</b>	<b>0.05</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.8 BULGARIA

### Wide Area Networks (WAN) (US\$ Million): Bulgaria 2004 - 2014

Year	Bulgaria	% of Region	% of Globe
2004	1.17	0.48%	0.13%
2005	1.22	0.48%	0.13%
2006	1.27	0.49%	0.13%
2007	1.33	0.50%	0.13%
2008	1.38	0.50%	0.13%
2009	1.44	0.51%	0.14%
2010	1.50	0.52%	0.14%
2011	1.56	0.52%	0.14%
2012	1.63	0.53%	0.14%
2013	1.69	0.53%	0.14%
2014	1.76	0.54%	0.14%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Bulgaria: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Sofia	315	0.56	39.05	0.20	0.05
Plovdiv	751	0.18	12.35	0.06	0.02
Varna	816	0.15	10.58	0.05	0.01
Burgas	1,027	0.10	6.85	0.03	0.01
Ruse	1,044	0.09	6.57	0.03	0.01
Stara Zagora	1,114	0.08	5.40	0.03	0.01
Pleven	1,188	0.07	4.64	0.02	0.01
Tolbukhin	1,277	0.06	3.84	0.02	0.01
Sliven	1,291	0.05	3.70	0.02	0.01
Shumen	1,293	0.05	3.67	0.02	0.00
Pernik	1,331	0.05	3.36	0.02	0.00
<b>Total</b>		<b>1.44</b>	<b>100.00</b>	<b>0.51</b>	<b>0.14</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.9 CROATIA****Wide Area Networks (WAN) (US\$ Million): Croatia 2004 - 2014**

Year	Croatia	% of Region	% of Globe
2004	0.94	0.39%	0.11%
2005	0.98	0.39%	0.11%
2006	1.02	0.39%	0.11%
2007	1.06	0.40%	0.11%
2008	1.11	0.40%	0.11%
2009	1.15	0.41%	0.11%
2010	1.19	0.41%	0.11%
2011	1.24	0.41%	0.11%
2012	1.29	0.42%	0.11%
2013	1.34	0.42%	0.11%
2014	1.39	0.43%	0.11%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Croatia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Zagreb	279	0.65	56.52	0.23	0.06
Rijeka	979	0.11	9.38	0.04	0.01
Split	1,020	0.10	8.71	0.04	0.01
Osijek	1,070	0.09	7.65	0.03	0.01
Zadar	1,209	0.06	5.58	0.02	0.01
Slavonski Brod	1,252	0.06	5.10	0.02	0.01
Vukovar	1,363	0.04	3.90	0.02	0.00
Dubrovnik	1,441	0.04	3.17	0.01	0.00
<b>Total</b>		<b>1.15</b>	<b>100.00</b>	<b>0.41</b>	<b>0.11</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.10 CYPRUS

### Wide Area Networks (WAN) (US\$ Million): Cyprus 2004 - 2014

Year	Cyprus	% of Region	% of Globe
2004	0.30	0.12%	0.03%
2005	0.31	0.12%	0.03%
2006	0.32	0.12%	0.03%
2007	0.33	0.12%	0.03%
2008	0.34	0.12%	0.03%
2009	0.35	0.12%	0.03%
2010	0.36	0.13%	0.03%
2011	0.38	0.13%	0.03%
2012	0.39	0.13%	0.03%
2013	0.40	0.13%	0.03%
2014	0.41	0.13%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Cyprus: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Nicosia	809	0.15	43.83	0.05	0.01
Limassol	969	0.11	31.50	0.04	0.01
Larnaca	1,324	0.05	13.91	0.02	0.00
Famagusta	1,427	0.04	10.76	0.01	0.00
<b>Total</b>		<b>0.35</b>	<b>100.00</b>	<b>0.12</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.11 CZECH REPUBLIC

### Wide Area Networks (WAN) (US\$ Million): Czech Republic 2004 - 2014

Year	Czech Republic	% of Region	% of Globe
2004	3.38	1.38%	0.38%
2005	3.52	1.40%	0.38%
2006	3.66	1.41%	0.38%
2007	3.81	1.43%	0.39%
2008	3.97	1.44%	0.39%
2009	4.13	1.46%	0.39%
2010	4.29	1.47%	0.39%
2011	4.46	1.49%	0.39%
2012	4.64	1.50%	0.39%
2013	4.82	1.52%	0.40%
2014	5.01	1.53%	0.40%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

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**Czech Republic: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Prague	131	1.84	44.62	0.65	0.17
Brno	300	0.59	14.35	0.21	0.06
Ostrava	353	0.50	12.21	0.18	0.05
Plzen	575	0.27	6.47	0.09	0.03
Olomouc	795	0.16	3.92	0.06	0.02
Usti nad Labem	798	0.16	3.88	0.06	0.02
Liberec	806	0.16	3.81	0.06	0.01
Hradec Kralove	815	0.15	3.70	0.05	0.01
Ceske Budejovice	841	0.15	3.51	0.05	0.01
Pardubice	842	0.15	3.51	0.05	0.01
<b>Total</b>		<b>4.13</b>	<b>100.00</b>	<b>1.46</b>	<b>0.39</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.12 DENMARK

**Wide Area Networks (WAN) (US\$ Million): Denmark 2004 - 2014**

Year	Denmark	% of Region	% of Globe
2004	3.01	1.23%	0.34%
2005	3.07	1.22%	0.33%
2006	3.14	1.21%	0.33%
2007	3.20	1.20%	0.32%
2008	3.26	1.19%	0.32%
2009	3.32	1.18%	0.31%
2010	3.39	1.16%	0.31%
2011	3.46	1.15%	0.30%
2012	3.52	1.14%	0.30%
2013	3.59	1.13%	0.29%
2014	3.66	1.12%	0.29%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Denmark: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Copenhagen	130	1.85	55.68	0.65	0.17
Aarhus	460	0.35	10.63	0.12	0.03
Odense	633	0.24	7.17	0.08	0.02
Aalborg	677	0.21	6.38	0.08	0.02
Esbjerg	970	0.11	3.34	0.04	0.01
Randers	1,082	0.08	2.51	0.03	0.01
Helsingor	1,109	0.08	2.35	0.03	0.01
Kolding	1,110	0.08	2.35	0.03	0.01
Herning	1,119	0.08	2.31	0.03	0.01
Horsens	1,133	0.08	2.27	0.03	0.01
Vejle	1,232	0.06	1.81	0.02	0.01
Roskilde	1,280	0.05	1.65	0.02	0.01
Naestved	1,301	0.05	1.57	0.02	0.00
<b>Total</b>		<b>3.32</b>	<b>100.00</b>	<b>1.18</b>	<b>0.31</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.13 ESTONIA****Wide Area Networks (WAN) (US\$ Million): Estonia 2004 - 2014**

Year	Estonia	% of Region	% of Globe
2004	0.39	0.16%	0.04%
2005	0.40	0.16%	0.04%
2006	0.42	0.16%	0.04%
2007	0.45	0.17%	0.04%
2008	0.47	0.17%	0.05%
2009	0.49	0.17%	0.05%
2010	0.51	0.18%	0.05%
2011	0.54	0.18%	0.05%
2012	0.56	0.18%	0.05%
2013	0.59	0.19%	0.05%
2014	0.62	0.19%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Estonia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Tallinn	552	0.28	56.71	0.10	0.03
Tartu	1,196	0.07	13.41	0.02	0.01
Narva	1,341	0.05	9.65	0.02	0.00
Kohtla-Järve	1,367	0.04	9.06	0.02	0.00
Pärnu	1,477	0.03	6.35	0.01	0.00
Sillamäe	1,726	0.01	2.47	0.00	0.00
Rakvere	1,740	0.01	2.35	0.00	0.00
<b>Total</b>		<b>0.49</b>	<b>100.00</b>	<b>0.17</b>	<b>0.05</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.14 FINLAND

### Wide Area Networks (WAN) (US\$ Million): Finland 2004 - 2014

Year	Finland	% of Region	% of Globe
2004	2.59	1.06%	0.29%
2005	2.68	1.06%	0.29%
2006	2.77	1.07%	0.29%
2007	2.87	1.07%	0.29%
2008	2.96	1.08%	0.29%
2009	3.06	1.08%	0.29%
2010	3.16	1.09%	0.29%
2011	3.27	1.09%	0.29%
2012	3.37	1.09%	0.29%
2013	3.49	1.10%	0.29%
2014	3.60	1.10%	0.28%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Finland: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Helsinki	213	0.93	30.33	0.33	0.09
Tampere	492	0.32	10.54	0.11	0.03
Espoo	501	0.32	10.36	0.11	0.03
Turku	515	0.31	9.99	0.11	0.03
Vantaa	539	0.28	9.31	0.10	0.03
Oulu	731	0.19	6.10	0.07	0.02
Lahti	752	0.18	5.80	0.06	0.02
Pori	822	0.15	4.93	0.05	0.01
Kuopio	826	0.15	4.87	0.05	0.01
Jyvaskyla	902	0.12	4.07	0.04	0.01
Kotka	956	0.11	3.70	0.04	0.01
<b>Total</b>		<b>3.06</b>	<b>100.00</b>	<b>1.08</b>	<b>0.29</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.15 FRANCE

### Wide Area Networks (WAN) (US\$ Million): France 2004 - 2014

Year	France	% of Region	% of Globe
2004	30.39	12.43%	3.41%
2005	31.01	12.32%	3.36%
2006	31.65	12.21%	3.31%
2007	32.29	12.10%	3.26%
2008	32.94	11.99%	3.21%
2009	33.60	11.88%	3.17%
2010	34.28	11.78%	3.12%
2011	34.96	11.67%	3.07%
2012	35.66	11.57%	3.03%
2013	36.37	11.46%	2.98%
2014	37.10	11.35%	2.94%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### France: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Paris	2	23.62	70.30	8.35	2.23
Marseille	126	1.89	5.63	0.67	0.18
Lyon	128	1.87	5.57	0.66	0.18
Lille	167	1.36	4.05	0.48	0.13
Toulouse	338	0.52	1.56	0.19	0.05
Nice	383	0.45	1.34	0.16	0.04
Strasbourg	387	0.45	1.34	0.16	0.04
Nantes	438	0.38	1.14	0.14	0.04
Rennes	467	0.34	1.01	0.12	0.03
Bordeaux	483	0.33	0.99	0.12	0.03
Saint-Etienne	500	0.32	0.94	0.11	0.03
Reims	532	0.29	0.87	0.10	0.03
Le Havre	533	0.29	0.87	0.10	0.03
Toulon	547	0.28	0.83	0.10	0.03
Grenoble	565	0.27	0.81	0.10	0.03
Others		0.92	2.75	0.33	0.09
<b>Total</b>		<b>33.60</b>	<b>100.00</b>	<b>11.88</b>	<b>3.17</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.16 GEORGIA

### Wide Area Networks (WAN) (US\$ Million): Georgia 2004 - 2014

Year	Georgia	% of Region	% of Globe
2004	0.23	0.10%	0.03%
2005	0.25	0.10%	0.03%
2006	0.27	0.10%	0.03%
2007	0.29	0.11%	0.03%
2008	0.31	0.11%	0.03%
2009	0.34	0.12%	0.03%
2010	0.36	0.12%	0.03%
2011	0.38	0.13%	0.03%
2012	0.41	0.13%	0.04%
2013	0.44	0.14%	0.04%
2014	0.47	0.14%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Georgia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
T'Bilisi	683	0.21	62.35	0.07	0.02
Kutaisi	1,419	0.04	11.63	0.01	0.00
Rustavi	1,525	0.03	7.87	0.01	0.00
Batumi	1,570	0.02	6.73	0.01	0.00
Sukhumi	1,601	0.02	5.99	0.01	0.00
Poti	1,798	0.01	2.52	0.00	0.00
Tskhinvali	1,857	0.01	1.63	0.00	0.00
Chiatura	1,892	0.00	1.29	0.00	0.00
<b>Total</b>		<b>0.34</b>	<b>100.00</b>	<b>0.12</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.17 GERMANY

### Wide Area Networks (WAN) (US\$ Million): Germany 2004 - 2014

Year	Germany	% of Region	% of Globe
2004	40.98	16.76%	4.59%
2005	41.99	16.68%	4.55%
2006	43.02	16.60%	4.50%
2007	44.08	16.52%	4.45%
2008	45.15	16.43%	4.40%
2009	46.24	16.35%	4.36%
2010	47.35	16.27%	4.31%
2011	48.48	16.19%	4.26%
2012	49.65	16.10%	4.22%
2013	50.84	16.02%	4.17%
2014	52.06	15.93%	4.12%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**Germany: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Berlin	14	9.40	20.32	3.32	0.88
Cologne	88	2.62	5.66	0.93	0.25
Dresden	141	1.62	3.51	0.57	0.15
Dusseldorf	148	1.55	3.36	0.55	0.15
Dortmund	149	1.54	3.34	0.55	0.15
Bremen	155	1.49	3.23	0.53	0.14
Duisburg	161	1.45	3.13	0.51	0.14
Cottbus	462	0.35	0.75	0.12	0.03
Dessau	541	0.28	0.61	0.10	0.03
<b>Total</b>		<b>20.30</b>	<b>43.91</b>	<b>7.18</b>	<b>1.91</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.18 GREECE****Wide Area Networks (WAN) (US\$ Million): Greece 2004 - 2014**

Year	Greece	% of Region	% of Globe
2004	4.62	1.89%	0.52%
2005	4.76	1.89%	0.51%
2006	4.90	1.89%	0.51%
2007	5.05	1.89%	0.51%
2008	5.20	1.89%	0.51%
2009	5.36	1.89%	0.50%
2010	5.51	1.89%	0.50%
2011	5.68	1.90%	0.50%
2012	5.84	1.90%	0.50%
2013	6.02	1.90%	0.49%
2014	6.19	1.90%	0.49%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Greece: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Athens	101	2.31	43.07	0.82	0.22
Thessaloniki	201	1.06	19.74	0.37	0.10
Piraeus	348	0.51	9.58	0.18	0.05
Patras	450	0.37	6.90	0.13	0.03
Larissa	573	0.27	5.01	0.09	0.03
Iraklion	577	0.27	4.96	0.09	0.03
Volos	736	0.18	3.45	0.07	0.02
Kavalla	828	0.15	2.77	0.05	0.01
Canea	916	0.12	2.28	0.04	0.01
Serrai	928	0.12	2.24	0.04	0.01
<b>Total</b>		<b>5.36</b>	<b>100.00</b>	<b>1.89</b>	<b>0.50</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.19 HUNGARY

### Wide Area Networks (WAN) (US\$ Million): Hungary 2004 - 2014

Year	Hungary	% of Region	% of Globe
2004	2.84	1.16%	0.32%
2005	2.90	1.15%	0.31%
2006	2.96	1.14%	0.31%
2007	3.03	1.13%	0.31%
2008	3.10	1.13%	0.30%
2009	3.16	1.12%	0.30%
2010	3.23	1.11%	0.29%
2011	3.30	1.10%	0.29%
2012	3.37	1.09%	0.29%
2013	3.44	1.08%	0.28%
2014	3.52	1.08%	0.28%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Hungary: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Budapest	127	1.88	59.51	0.67	0.18
Debrecen	713	0.20	6.19	0.07	0.02
Miskolc	735	0.19	5.85	0.07	0.02
Szeged	777	0.17	5.32	0.06	0.02
Pécs	793	0.16	5.15	0.06	0.02
Győr	933	0.12	3.71	0.04	0.01
Nyiregyha	990	0.11	3.35	0.04	0.01
Szekesfehervar	1,012	0.10	3.21	0.04	0.01
Kecskemét	1,046	0.09	2.98	0.03	0.01
Szombathely	1,117	0.08	2.45	0.03	0.01
Szolnok	1,155	0.07	2.28	0.03	0.01
<b>Total</b>		<b>3.16</b>	<b>100.00</b>	<b>1.12</b>	<b>0.30</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.20 ICELAND

### Wide Area Networks (WAN) (US\$ Million): Iceland 2004 - 2014

Year	Iceland	% of Region	% of Globe
2004	0.17	0.07%	0.02%
2005	0.18	0.07%	0.02%
2006	0.18	0.07%	0.02%
2007	0.19	0.07%	0.02%
2008	0.19	0.07%	0.02%
2009	0.19	0.07%	0.02%
2010	0.20	0.07%	0.02%
2011	0.20	0.07%	0.02%
2012	0.21	0.07%	0.02%
2013	0.21	0.07%	0.02%
2014	0.21	0.07%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Iceland: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Reykjavik	957	0.11	58.54	0.04	0.01
Kopavogur	1,638	0.02	9.15	0.01	0.00
Akureyri	1,660	0.02	8.54	0.01	0.00
Hafnarfjordhur	1,661	0.02	8.54	0.01	0.00
Keflavik	1,803	0.01	4.27	0.00	0.00
Vestmannaeyjar	1,849	0.01	3.05	0.00	0.00
Akranes	1,850	0.01	3.05	0.00	0.00
Husavik	1,914	0.00	1.83	0.00	0.00
Isafjorour	1,915	0.00	1.83	0.00	0.00
Neskaupstaour	1,970	0.00	1.22	0.00	0.00
<b>Total</b>		<b>0.19</b>	<b>100.00</b>	<b>0.07</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.21 IRELAND

### Wide Area Networks (WAN) (US\$ Million): Ireland 2004 - 2014

Year	Ireland	% of Region	% of Globe
2004	2.57	1.05%	0.29%
2005	2.67	1.06%	0.29%
2006	2.77	1.07%	0.29%
2007	2.88	1.08%	0.29%
2008	2.99	1.09%	0.29%
2009	3.10	1.10%	0.29%
2010	3.22	1.11%	0.29%
2011	3.34	1.11%	0.29%
2012	3.46	1.12%	0.29%
2013	3.59	1.13%	0.29%
2014	3.73	1.14%	0.29%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Ireland: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Dublin	105	2.27	73.10	0.80	0.21
Cork	404	0.43	13.81	0.15	0.04
Limerick	725	0.19	6.11	0.07	0.02
Galway	942	0.12	3.73	0.04	0.01
Waterford	1,015	0.10	3.25	0.04	0.01
<b>Total</b>		<b>3.10</b>	<b>100.00</b>	<b>1.10</b>	<b>0.29</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.22 ITALY

### Wide Area Networks (WAN) (US\$ Million): Italy 2004 - 2014

Year	Italy	% of Region	% of Globe
2004	26.41	10.80%	2.96%
2005	26.97	10.71%	2.92%
2006	27.53	10.62%	2.88%
2007	28.11	10.53%	2.84%
2008	28.69	10.44%	2.80%
2009	29.28	10.35%	2.76%
2010	29.88	10.27%	2.72%
2011	30.49	10.18%	2.68%
2012	31.11	10.09%	2.64%
2013	31.75	10.00%	2.60%
2014	32.40	9.92%	2.56%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

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**Italy: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Rome	19	7.42	25.35	2.62	0.70
Milan	49	3.90	13.31	1.38	0.37
Naples	67	3.16	10.81	1.12	0.30
Turin	84	2.70	9.22	0.95	0.25
Palermo	123	1.92	6.56	0.68	0.18
Genoa	125	1.90	6.50	0.67	0.18
Bologna	191	1.12	3.84	0.40	0.11
Florence	193	1.11	3.79	0.39	0.10
Catania	206	0.98	3.35	0.35	0.09
Bari	210	0.95	3.23	0.33	0.09
Venice	224	0.86	2.95	0.31	0.08
Messina	256	0.71	2.44	0.25	0.07
Verona	264	0.68	2.33	0.24	0.06
Taranto	280	0.65	2.20	0.23	0.06
Trieste	290	0.62	2.13	0.22	0.06
Others		0.58	2.00	0.21	0.06
<b>Total</b>		<b>29.28</b>	<b>100.00</b>	<b>10.35</b>	<b>2.76</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.23 KAZAKHSTAN

### Wide Area Networks (WAN) (US\$ Million): Kazakhstan 2004 - 2014

Year	Kazakhstan	% of Region	% of Globe
2004	2.06	0.84%	0.23%
2005	2.18	0.86%	0.24%
2006	2.30	0.89%	0.24%
2007	2.44	0.91%	0.25%
2008	2.57	0.94%	0.25%
2009	2.72	0.96%	0.26%
2010	2.86	0.98%	0.26%
2011	3.02	1.01%	0.27%
2012	3.18	1.03%	0.27%
2013	3.36	1.06%	0.28%
2014	3.54	1.08%	0.28%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Kazakhstan: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Almaty	325	0.54	19.81	0.19	0.05
Karaganda	527	0.29	10.78	0.10	0.03
Chimkent	728	0.19	6.90	0.07	0.02
Semipalatinsk	800	0.16	5.86	0.06	0.01
Pavlodar	804	0.16	5.81	0.06	0.01
Ust-Kamenogorsk	810	0.15	5.69	0.05	0.01
Dzhambul	834	0.15	5.39	0.05	0.01
Tselinograd	880	0.13	4.86	0.05	0.01
Aktyubinsk	924	0.12	4.44	0.04	0.01
Petropavlovsk	945	0.11	4.23	0.04	0.01
Kustanay	986	0.11	3.93	0.04	0.01
Temirtau	1,013	0.10	3.72	0.04	0.01
Uralsk	1,042	0.10	3.51	0.03	0.01
Shevchenko	1,128	0.08	2.79	0.03	0.01
Kzyl-Orda	1,146	0.07	2.69	0.03	0.01
Others		0.26	9.57	0.09	0.02
<b>Total</b>		<b>2.72</b>	<b>100.00</b>	<b>0.96</b>	<b>0.26</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.24 LATVIA****Wide Area Networks (WAN) (US\$ Million): Latvia 2004 - 2014**

Year	Latvia	% of Region	% of Globe
2004	0.49	0.20%	0.06%
2005	0.53	0.21%	0.06%
2006	0.56	0.22%	0.06%
2007	0.60	0.22%	0.06%
2008	0.64	0.23%	0.06%
2009	0.68	0.24%	0.06%
2010	0.72	0.25%	0.07%
2011	0.77	0.26%	0.07%
2012	0.81	0.26%	0.07%
2013	0.86	0.27%	0.07%
2014	0.92	0.28%	0.07%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Latvia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Riga	390	0.45	65.78	0.16	0.04
Daugavpils	1,218	0.06	9.18	0.02	0.01
Liepaja	1,272	0.06	8.25	0.02	0.01
Jelgava	1,442	0.04	5.38	0.01	0.00
Jurmala	1,472	0.03	4.73	0.01	0.00
Ventspils	1,552	0.02	3.59	0.01	0.00
Rezekne	1,587	0.02	3.08	0.01	0.00
<b>Total</b>		<b>0.68</b>	<b>100.00</b>	<b>0.24</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.25 LIECHTENSTEIN****Wide Area Networks (WAN) (US\$ Million): Liechtenstein 2004 - 2014**

Year	Liechtenstein	% of Region	% of Globe
2004	0.02	0.01%	0.00%
2005	0.02	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.03	0.01%	0.00%
2008	0.03	0.01%	0.00%
2009	0.03	0.01%	0.00%
2010	0.03	0.01%	0.00%
2011	0.03	0.01%	0.00%
2012	0.04	0.01%	0.00%
2013	0.04	0.01%	0.00%
2014	0.04	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Liechtenstein: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Vaduz	1,844	0.01	20.00	0.00	0.00
Schaan	1,845	0.01	20.00	0.00	0.00
Balzers	1,874	0.00	16.00	0.00	0.00
Triesen	1,907	0.00	12.00	0.00	0.00
Mauren	1,908	0.00	12.00	0.00	0.00
Eschen	1,909	0.00	12.00	0.00	0.00
Triesenberg	1,965	0.00	8.00	0.00	0.00
<b>Total</b>		<b>0.03</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.26 LITHUANIA

### Wide Area Networks (WAN) (US\$ Million): Lithuania 2004 - 2014

Year	Lithuania	% of Region	% of Globe
2004	0.77	0.32%	0.09%
2005	0.81	0.32%	0.09%
2006	0.86	0.33%	0.09%
2007	0.90	0.34%	0.09%
2008	0.95	0.35%	0.09%
2009	1.00	0.35%	0.09%
2010	1.05	0.36%	0.10%
2011	1.10	0.37%	0.10%
2012	1.16	0.38%	0.10%
2013	1.22	0.38%	0.10%
2014	1.28	0.39%	0.10%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Lithuania: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Vilnius	417	0.41	41.37	0.15	0.04
Kaunas	557	0.28	27.56	0.10	0.03
Klaipeda	879	0.13	13.24	0.05	0.01
Siauliai	1,043	0.09	9.48	0.03	0.01
Panevezys	1,085	0.08	8.34	0.03	0.01
<b>Total</b>		<b>1.00</b>	<b>100.00</b>	<b>0.35</b>	<b>0.09</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.27 LUXEMBOURG

### Wide Area Networks (WAN) (US\$ Million): Luxembourg 2004 - 2014

Year	Luxembourg	% of Region	% of Globe
2004	0.53	0.22%	0.06%
2005	0.55	0.22%	0.06%
2006	0.57	0.22%	0.06%
2007	0.60	0.22%	0.06%
2008	0.62	0.22%	0.06%
2009	0.64	0.23%	0.06%
2010	0.66	0.23%	0.06%
2011	0.69	0.23%	0.06%
2012	0.71	0.23%	0.06%
2013	0.74	0.23%	0.06%
2014	0.76	0.23%	0.06%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**Luxembourg: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Luxembourg	497	0.32	49.68	0.11	0.03
Esch	1,024	0.10	15.48	0.04	0.01
Differdange	1,193	0.07	10.32	0.02	0.01
Dudelange	1,257	0.06	9.03	0.02	0.01
Remich	1,316	0.05	7.74	0.02	0.00
Petange	1,317	0.05	7.74	0.02	0.00
<b>Total</b>		<b>0.64</b>	<b>100.00</b>	<b>0.23</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.28 MALTA****Wide Area Networks (WAN) (US\$ Million): Malta 2004 - 2014**

Year	Malta	% of Region	% of Globe
2004	0.13	0.05%	0.01%
2005	0.14	0.05%	0.01%
2006	0.14	0.05%	0.01%
2007	0.14	0.05%	0.01%
2008	0.15	0.05%	0.01%
2009	0.15	0.05%	0.01%
2010	0.16	0.05%	0.01%
2011	0.16	0.05%	0.01%
2012	0.17	0.05%	0.01%
2013	0.17	0.05%	0.01%
2014	0.18	0.05%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Malta: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Birkirkara	1,358	0.05	29.85	0.02	0.00
Qormi	1,377	0.04	28.36	0.02	0.00
Sliema	1,473	0.03	20.90	0.01	0.00
Valletta	1,595	0.02	13.43	0.01	0.00
Victoria	1,742	0.01	7.46	0.00	0.00
<b>Total</b>		<b>0.15</b>	<b>100.00</b>	<b>0.05</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.29 MOLDOVA

### Wide Area Networks (WAN) (US\$ Million): Moldova 2004 - 2014

Year	Moldova	% of Region	% of Globe
2004	0.13	0.06%	0.02%
2005	0.14	0.06%	0.02%
2006	0.15	0.06%	0.02%
2007	0.15	0.06%	0.02%
2008	0.16	0.06%	0.02%
2009	0.17	0.06%	0.02%
2010	0.17	0.06%	0.02%
2011	0.18	0.06%	0.02%
2012	0.19	0.06%	0.02%
2013	0.19	0.06%	0.02%
2014	0.20	0.06%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Moldova: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Chisinau	1,035	0.10	58.54	0.03	0.01
Tiraspol	1,522	0.03	16.02	0.01	0.00
Beltsy	1,565	0.02	14.00	0.01	0.00
Bendery	1,613	0.02	11.44	0.01	0.00
<b>Total</b>		<b>0.17</b>	<b>100.00</b>	<b>0.06</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.30 MONACO

### Wide Area Networks (WAN) (US\$ Million): Monaco 2004 - 2014

Year	Monaco	% of Region	% of Globe
2004	0.01	0.01%	0.00%
2005	0.01	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.02	0.01%	0.00%
2008	0.02	0.01%	0.00%
2009	0.02	0.01%	0.00%
2010	0.02	0.01%	0.00%
2011	0.02	0.01%	0.00%
2012	0.02	0.01%	0.00%
2013	0.02	0.01%	0.00%
2014	0.02	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Monaco: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Monte Carlo	1,706	0.01	86.67	0.00	0.00
Monaco	1,984	0.00	13.33	0.00	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.31 NORWAY****Wide Area Networks (WAN) (US\$ Million): Norway 2004 - 2014**

Year	Norway	% of Region	% of Globe
2004	3.55	1.45%	0.40%
2005	3.68	1.46%	0.40%
2006	3.82	1.47%	0.40%
2007	3.96	1.48%	0.40%
2008	4.10	1.49%	0.40%
2009	4.25	1.50%	0.40%
2010	4.40	1.51%	0.40%
2011	4.56	1.52%	0.40%
2012	4.72	1.53%	0.40%
2013	4.88	1.54%	0.40%
2014	5.06	1.55%	0.40%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Norway: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Oslo	138	1.71	40.14	0.60	0.16
Bergen	238	0.79	18.57	0.28	0.07
Trondheim	349	0.51	12.06	0.18	0.05
Stavanger	454	0.36	8.54	0.13	0.03
Kristiansand	638	0.24	5.55	0.08	0.02
Drammen	716	0.19	4.58	0.07	0.02
Tromso	740	0.18	4.31	0.06	0.02
Alesund	873	0.13	3.17	0.05	0.01
Bodo	886	0.13	3.08	0.05	0.01
<b>Total</b>		<b>4.25</b>	<b>100.00</b>	<b>1.50</b>	<b>0.40</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.32 POLAND

### Wide Area Networks (WAN) (US\$ Million): Poland 2004 - 2014

Year	Poland	% of Region	% of Globe
2004	8.34	3.41%	0.93%
2005	8.72	3.46%	0.94%
2006	9.11	3.52%	0.95%
2007	9.53	3.57%	0.96%
2008	9.95	3.62%	0.97%
2009	10.39	3.67%	0.98%
2010	10.84	3.73%	0.99%
2011	11.31	3.78%	0.99%
2012	11.81	3.83%	1.00%
2013	12.32	3.88%	1.01%
2014	12.86	3.93%	1.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Poland: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Warsaw	89	2.60	24.99	0.92	0.24
Lodz	172	1.31	12.64	0.46	0.12
Krakow	185	1.16	11.14	0.41	0.11
Wroclaw	204	0.99	9.57	0.35	0.09
Poznan	216	0.91	8.76	0.32	0.09
Gdansk	253	0.73	7.01	0.26	0.07
Szczecin	294	0.62	5.92	0.22	0.06
Bydgoszcz	308	0.58	5.58	0.20	0.05
Katowice	311	0.57	5.52	0.20	0.05
Lublin	342	0.52	4.98	0.18	0.05
Sosnowiec	422	0.40	3.89	0.14	0.04
<b>Total</b>		<b>10.39</b>	<b>100.00</b>	<b>3.67</b>	<b>0.98</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### 5.33 PORTUGAL

#### Wide Area Networks (WAN) (US\$ Million): Portugal 2004 - 2014

Year	Portugal	% of Region	% of Globe
2004	3.40	1.39%	0.38%
2005	3.48	1.38%	0.38%
2006	3.55	1.37%	0.37%
2007	3.62	1.36%	0.37%
2008	3.70	1.35%	0.36%
2009	3.77	1.33%	0.36%
2010	3.85	1.32%	0.35%
2011	3.93	1.31%	0.35%
2012	4.01	1.30%	0.34%
2013	4.09	1.29%	0.34%
2014	4.18	1.28%	0.33%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Portugal: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Lisbon	129	1.85	49.14	0.66	0.17
Oporto	242	0.78	20.54	0.27	0.07
Amadora	675	0.21	5.68	0.08	0.02
Setubal	764	0.17	4.62	0.06	0.02
Coimbra	778	0.17	4.44	0.06	0.02
Braga	853	0.14	3.73	0.05	0.01
Vila Nova de Gaia	862	0.14	3.67	0.05	0.01
Barreiro	951	0.11	3.02	0.04	0.01
Funchal	1,030	0.10	2.61	0.03	0.01
Almada	1,039	0.10	2.55	0.03	0.01
<b>Total</b>		<b>3.77</b>	<b>100.00</b>	<b>1.33</b>	<b>0.36</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.34 ROMANIA

### Wide Area Networks (WAN) (US\$ Million): Romania 2004 - 2014

Year	Romania	% of Region	% of Globe
2004	3.33	1.36%	0.37%
2005	3.47	1.38%	0.38%
2006	3.62	1.40%	0.38%
2007	3.77	1.41%	0.38%
2008	3.93	1.43%	0.38%
2009	4.09	1.45%	0.39%
2010	4.26	1.46%	0.39%
2011	4.43	1.48%	0.39%
2012	4.61	1.49%	0.39%
2013	4.80	1.51%	0.39%
2014	4.99	1.53%	0.39%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Romania: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bucharest	139	1.67	40.80	0.59	0.16
Brasov	526	0.29	7.20	0.10	0.03
Constanta	558	0.28	6.72	0.10	0.03
Timisoara	564	0.27	6.66	0.10	0.03
Iasi	587	0.26	6.42	0.09	0.02
Cluj-Napoca	599	0.26	6.36	0.09	0.02
Galati	619	0.25	6.05	0.09	0.02
Craiova	637	0.24	5.76	0.08	0.02
Braila	706	0.20	4.84	0.07	0.02
Ploiesti	709	0.20	4.82	0.07	0.02
Oradea	748	0.18	4.39	0.06	0.02
<b>Total</b>		<b>4.09</b>	<b>100.00</b>	<b>1.45</b>	<b>0.39</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.35 RUSSIA

### Wide Area Networks (WAN) (US\$ Million): Russia 2004 - 2014

Year	Russia	% of Region	% of Globe
2004	13.40	5.48%	1.50%
2005	14.13	5.61%	1.53%
2006	14.89	5.75%	1.56%
2007	15.70	5.88%	1.58%
2008	16.54	6.02%	1.61%
2009	17.40	6.15%	1.64%
2010	18.30	6.29%	1.67%
2011	19.24	6.42%	1.69%
2012	20.23	6.56%	1.72%
2013	21.27	6.70%	1.74%
2014	22.37	6.84%	1.77%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Russia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Moscow	35	5.25	30.16	1.86	0.49
Saint Petersburg	75	2.94	16.88	1.04	0.28
Nizhni Novgorod	226	0.84	4.84	0.30	0.08
Novosibirsk	227	0.84	4.83	0.30	0.08
Yekaterinburg	233	0.80	4.60	0.28	0.08
Kuybyshev	250	0.74	4.23	0.26	0.07
Omsk	268	0.67	3.86	0.24	0.06
Chelyabinsk	271	0.67	3.84	0.24	0.06
Kazan	282	0.64	3.68	0.23	0.06
Rostov-on-Don	299	0.60	3.43	0.21	0.06
Volgograd	306	0.58	3.36	0.21	0.06
Krasnoyark	331	0.53	3.07	0.19	0.05
Saratov	335	0.53	3.04	0.19	0.05
Vladivostok	440	0.38	2.18	0.13	0.04
Irkutsk	453	0.37	2.11	0.13	0.03
Others		1.03	5.90	0.36	0.10
<b>Total</b>		<b>17.40</b>	<b>100.00</b>	<b>6.15</b>	<b>1.64</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.36 SAN MARINO

### Wide Area Networks (WAN) (US\$ Million): San Marino 2004 - 2014

Year	San Marino	% of Region	% of Globe
2004	0.01	0.00%	0.00%
2005	0.01	0.00%	0.00%
2006	0.01	0.00%	0.00%
2007	0.01	0.00%	0.00%
2008	0.01	0.00%	0.00%
2009	0.01	0.00%	0.00%
2010	0.01	0.00%	0.00%
2011	0.01	0.01%	0.00%
2012	0.02	0.01%	0.00%
2013	0.02	0.01%	0.00%
2014	0.02	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### San Marino: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Serravalle	1,787	0.01	63.64	0.00	0.00
San Marino	1,867	0.01	36.36	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.37 SLOVAKIA

### Wide Area Networks (WAN) (US\$ Million): Slovakia 2004 - 2014

Year	Slovakia	% of Region	% of Globe
2004	1.37	0.56%	0.15%
2005	1.45	0.58%	0.16%
2006	1.53	0.59%	0.16%
2007	1.62	0.61%	0.16%
2008	1.71	0.62%	0.17%
2009	1.81	0.64%	0.17%
2010	1.91	0.66%	0.17%
2011	2.01	0.67%	0.18%
2012	2.13	0.69%	0.18%
2013	2.24	0.71%	0.18%
2014	2.37	0.72%	0.19%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**Slovakia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Bratislava	180	1.18	65.25	0.42	0.11
Kosice	287	0.63	34.75	0.22	0.06
<b>Total</b>		<b>1.81</b>	<b>100.00</b>	<b>0.64</b>	<b>0.17</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**5.38 SLOVENIA****Wide Area Networks (WAN) (US\$ Million): Slovenia 2004 - 2014**

Year	Slovenia	% of Region	% of Globe
2004	0.74	0.30%	0.08%
2005	0.77	0.31%	0.08%
2006	0.81	0.31%	0.08%
2007	0.84	0.31%	0.08%
2008	0.87	0.32%	0.09%
2009	0.91	0.32%	0.09%
2010	0.94	0.32%	0.09%
2011	0.98	0.33%	0.09%
2012	1.02	0.33%	0.09%
2013	1.06	0.33%	0.09%
2014	1.11	0.34%	0.09%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Slovenia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Ljubljana	400	0.43	47.66	0.15	0.04
Maribor	580	0.26	29.06	0.09	0.02
Koper	1,241	0.06	6.56	0.02	0.01
Kranj	1,332	0.05	5.31	0.02	0.00
Celje	1,346	0.05	5.16	0.02	0.00
Jesenice	1,502	0.03	3.13	0.01	0.00
Trbovlje	1,503	0.03	3.13	0.01	0.00
<b>Total</b>		<b>0.91</b>	<b>100.00</b>	<b>0.32</b>	<b>0.09</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.39 SPAIN

### Wide Area Networks (WAN) (US\$ Million): Spain 2004 - 2014

Year	Spain	% of Region	% of Globe
2004	19.22	7.86%	2.15%
2005	19.82	7.87%	2.15%
2006	20.43	7.88%	2.14%
2007	21.06	7.89%	2.13%
2008	21.71	7.90%	2.12%
2009	22.36	7.91%	2.11%
2010	23.03	7.91%	2.10%
2011	23.72	7.92%	2.09%
2012	24.43	7.92%	2.07%
2013	25.17	7.93%	2.06%
2014	25.92	7.93%	2.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Spain: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Madrid	20	6.44	28.79	2.28	0.61
Barcelona	57	3.54	15.82	1.25	0.33
Valencia	150	1.52	6.80	0.54	0.14
Sevilla	168	1.36	6.08	0.48	0.13
Zaragoza	179	1.19	5.34	0.42	0.11
Malaga	183	1.17	5.25	0.42	0.11
Bilbao	236	0.79	3.55	0.28	0.07
Las Palmas	249	0.74	3.32	0.26	0.07
Valladolid	263	0.68	3.05	0.24	0.06
Palma	283	0.64	2.85	0.23	0.06
Murcia	284	0.63	2.83	0.22	0.06
Cordoba	293	0.62	2.77	0.22	0.06
Hospitalet	310	0.58	2.58	0.20	0.05
Alicante	326	0.54	2.40	0.19	0.05
Granada	332	0.53	2.39	0.19	0.05
Others		1.38	6.19	0.49	0.13
<b>Total</b>		<b>22.36</b>	<b>100.00</b>	<b>7.91</b>	<b>2.11</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.40 SWEDEN

### Wide Area Networks (WAN) (US\$ Million): Sweden 2004 - 2014

Year	Sweden	% of Region	% of Globe
2004	4.74	1.94%	0.53%
2005	4.88	1.94%	0.53%
2006	5.02	1.94%	0.52%
2007	5.16	1.93%	0.52%
2008	5.31	1.93%	0.52%
2009	5.46	1.93%	0.51%
2010	5.61	1.93%	0.51%
2011	5.77	1.93%	0.51%
2012	5.93	1.92%	0.50%
2013	6.10	1.92%	0.50%
2014	6.27	1.92%	0.50%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Sweden: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Stockholm	165	1.39	25.41	0.49	0.13
Göteborg	218	0.89	16.37	0.32	0.08
Malmö	367	0.48	8.81	0.17	0.05
Uppsala	474	0.34	6.15	0.12	0.03
Örebro	617	0.25	4.56	0.09	0.02
Norrköping	621	0.25	4.52	0.09	0.02
Linköping	622	0.25	4.52	0.09	0.02
Västerås	623	0.25	4.52	0.09	0.02
Jönköping	651	0.23	4.18	0.08	0.02
Helsingborg	663	0.22	4.06	0.08	0.02
Boras	682	0.21	3.84	0.07	0.02
Sundsvall	720	0.19	3.53	0.07	0.02
Umeå	737	0.18	3.38	0.07	0.02
Gävle	742	0.18	3.34	0.06	0.02
Skellefteå	813	0.15	2.81	0.05	0.01
<b>Total</b>		<b>5.46</b>	<b>100.00</b>	<b>1.93</b>	<b>0.51</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.41 SWITZERLAND

### Wide Area Networks (WAN) (US\$ Million): Switzerland 2004 - 2014

Year	Switzerland	% of Region	% of Globe
2004	4.35	1.78%	0.49%
2005	4.46	1.77%	0.48%
2006	4.57	1.76%	0.48%
2007	4.68	1.75%	0.47%
2008	4.80	1.75%	0.47%
2009	4.91	1.74%	0.46%
2010	5.03	1.73%	0.46%
2011	5.15	1.72%	0.45%
2012	5.27	1.71%	0.45%
2013	5.40	1.70%	0.44%
2014	5.53	1.69%	0.44%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Switzerland: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Zürich	170	1.33	27.10	0.47	0.13
Basel	275	0.66	13.44	0.23	0.06
Geneva	292	0.62	12.66	0.22	0.06
Bern	339	0.52	10.66	0.19	0.05
Lausanne	368	0.48	9.73	0.17	0.05
Winterthur	493	0.32	6.56	0.11	0.03
Saint Gallen	555	0.28	5.64	0.10	0.03
Luzern	652	0.23	4.63	0.08	0.02
Biel	719	0.19	3.94	0.07	0.02
Thun	858	0.14	2.86	0.05	0.01
Koniz	867	0.14	2.78	0.05	0.01
<b>Total</b>		<b>4.91</b>	<b>100.00</b>	<b>1.74</b>	<b>0.46</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.42 THE NETHERLANDS

### Wide Area Networks (WAN) (US\$ Million): The Netherlands 2004 - 2014

Year	The Netherlands	% of Region	% of Globe
2004	9.07	3.71%	1.02%
2005	9.34	3.71%	1.01%
2006	9.61	3.71%	1.00%
2007	9.90	3.71%	1.00%
2008	10.18	3.71%	0.99%
2009	10.47	3.70%	0.99%
2010	10.77	3.70%	0.98%
2011	11.08	3.70%	0.97%
2012	11.40	3.70%	0.97%
2013	11.72	3.69%	0.96%
2014	12.05	3.69%	0.95%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### The Netherlands: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Rotterdam	93	2.47	23.59	0.87	0.23
Amsterdam - Haarlem	134	1.79	17.08	0.63	0.17
Eindhoven - Tilberg	147	1.56	14.93	0.55	0.15
Gelderland	195	1.09	10.37	0.38	0.10
Utrecht	240	0.79	7.50	0.28	0.07
Limburg	257	0.71	6.75	0.25	0.07
Overijssel	291	0.62	5.94	0.22	0.06
Groningen	374	0.47	4.44	0.16	0.04
Friesland	477	0.34	3.20	0.12	0.03
Zeeland	598	0.26	2.49	0.09	0.02
Drenthe	608	0.25	2.42	0.09	0.02
Flevoland	874	0.13	1.27	0.05	0.01
<b>Total</b>		<b>10.47</b>	<b>100.00</b>	<b>3.70</b>	<b>0.99</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.43 THE UNITED KINGDOM

### Wide Area Networks (WAN) (US\$ Million): The United Kingdom 2004 - 2014

Year	The United Kingdom	% of Region	% of Globe
2004	30.87	12.63%	3.46%
2005	31.68	12.58%	3.43%
2006	32.51	12.54%	3.40%
2007	33.36	12.50%	3.37%
2008	34.22	12.45%	3.34%
2009	35.09	12.41%	3.31%
2010	35.99	12.36%	3.28%
2011	36.91	12.32%	3.24%
2012	37.85	12.27%	3.21%
2013	38.81	12.23%	3.18%
2014	39.80	12.18%	3.15%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### The United Kingdom: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
London	7	12.29	35.03	4.35	1.16
Birmingham	63	3.42	9.73	1.21	0.32
Manchester	64	3.39	9.67	1.20	0.32
Leeds	77	2.84	8.09	1.00	0.27
Bradford	78	2.84	8.09	1.00	0.27
Liverpool	132	1.83	5.21	0.65	0.17
Sheffield	140	1.63	4.65	0.58	0.15
Bristol	154	1.49	4.25	0.53	0.14
Coventry	157	1.48	4.22	0.52	0.14
Nottingham	166	1.39	3.95	0.49	0.13
Leicester	173	1.31	3.73	0.46	0.12
Hull	181	1.18	3.36	0.42	0.11
<b>Total</b>		<b>35.09</b>	<b>100.00</b>	<b>12.41</b>	<b>3.31</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 5.44 UKRAINE

### Wide Area Networks (WAN) (US\$ Million): Ukraine 2004 - 2014

Year	Ukraine	% of Region	% of Globe
2004	4.25	1.74%	0.48%
2005	4.46	1.77%	0.48%
2006	4.67	1.80%	0.49%
2007	4.89	1.83%	0.49%
2008	5.12	1.86%	0.50%
2009	5.36	1.89%	0.50%
2010	5.60	1.92%	0.51%
2011	5.85	1.95%	0.51%
2012	6.12	1.98%	0.52%
2013	6.40	2.02%	0.52%
2014	6.69	2.05%	0.53%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Ukraine: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Kiev	205	0.99	18.44	0.35	0.09
Kharkiv	295	0.61	11.48	0.22	0.06
Dnipropetrovsk	386	0.45	8.40	0.16	0.04
Odessa	405	0.43	7.95	0.15	0.04
Donetsk	407	0.42	7.91	0.15	0.04
Zaporozhye	473	0.34	6.30	0.12	0.03
Lviv	519	0.30	5.63	0.11	0.03
Krivoy Rog	568	0.27	5.08	0.10	0.03
Mariupol (Zhdanov)	708	0.20	3.68	0.07	0.02
Nikolayev	722	0.19	3.58	0.07	0.02
Lugansk	724	0.19	3.54	0.07	0.02
Makeyevka	787	0.16	3.06	0.06	0.02
Vinnitsa	849	0.14	2.67	0.05	0.01
Sevastopol	868	0.14	2.54	0.05	0.01
Kherson	870	0.14	2.53	0.05	0.01
Others		0.39	7.20	0.14	0.04
<b>Total</b>		<b>5.36</b>	<b>100.00</b>	<b>1.89</b>	<b>0.50</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6 LATIN AMERICA

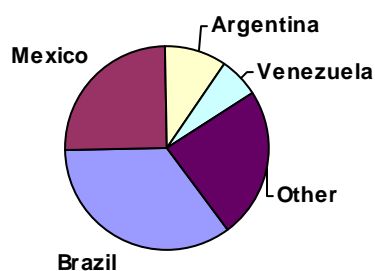
### 6.1 EXECUTIVE SUMMARY

#### Market Potential for Wide Area Networks (WAN) in Latin America (US\$ Million): 2009

Country	Latent Demand US\$ Million	% of Latin America
Brazil	30.28	34.80%
Mexico	22.13	25.43%
Argentina	8.80	10.11%
Venezuela	5.62	6.46%
Colombia	5.33	6.13%
Chile	3.87	4.45%
Peru	3.64	4.18%
Ecuador	1.60	1.84%
Guatemala	1.12	1.28%
Costa Rica	0.93	1.07%
Bolivia	0.65	0.75%
Uruguay	0.62	0.71%
El Salvador	0.59	0.68%
Panama	0.49	0.56%
Paraguay	0.44	0.50%
Honduras	0.41	0.47%
Nicaragua	0.30	0.34%
Guyana	0.07	0.08%
Suriname	0.06	0.07%
Belize	0.04	0.04%
French Guiana	0.03	0.03%
The Falkland Islands	0.00	0.00%
<b>Total</b>	<b>87.00</b>	<b>100.00%</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

#### Market Potential for Wide Area Networks (WAN) in Latin America (US\$ Million): 2009





### The Market for Wide Area Networks (WAN) in Latin America: 2004 - 2014

Year	US\$ Million	% of Globe
2004	72.47	8.12
2005	75.18	8.14
2006	77.99	8.15
2007	80.92	8.17
2008	83.94	8.18
2009	87.00	8.19
2010	90.17	8.21
2011	93.46	8.22
2012	96.88	8.22
2013	100.43	8.23
2014	104.12	8.24

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.2 ARGENTINA

### Wide Area Networks (WAN) (US\$ Million): Argentina 2004 - 2014

Year	Argentina	% of Region	% of Globe
2004	6.70	9.25%	0.75%
2005	7.08	9.42%	0.77%
2006	7.48	9.59%	0.78%
2007	7.90	9.77%	0.80%
2008	8.35	9.94%	0.81%
2009	8.80	10.11%	0.83%
2010	9.27	10.28%	0.84%
2011	9.76	10.45%	0.86%
2012	10.28	10.62%	0.87%
2013	10.83	10.79%	0.89%
2014	11.41	10.96%	0.90%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Argentina: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Buenos Aires	197	1.07	12.21	1.23	0.10
Santa Fe	198	1.07	12.20	1.23	0.10
Cordoba	199	1.07	12.15	1.23	0.10
Mendoza	319	0.55	6.30	0.64	0.05
Tucumán	391	0.45	5.07	0.51	0.04
Entre Rios	436	0.39	4.40	0.44	0.04
Salta	455	0.36	4.11	0.42	0.03
Rosario	472	0.34	3.84	0.39	0.03
Misiones	476	0.34	3.82	0.39	0.03
Chaco	487	0.33	3.73	0.38	0.03
Corrientes	503	0.32	3.60	0.36	0.03
Santiago del Estero	609	0.25	2.87	0.29	0.02
Río Negro	679	0.21	2.39	0.24	0.02
Jujuy	692	0.21	2.35	0.24	0.02
San Juan	700	0.20	2.29	0.23	0.02
Others		1.64	18.67	1.89	0.15
<b>Total</b>		<b>8.80</b>	<b>100.00</b>	<b>10.11</b>	<b>0.83</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.3 BELIZE

### Wide Area Networks (WAN) (US\$ Million): Belize 2004 - 2014

Year	Belize	% of Region	% of Globe
2004	0.03	0.05%	0.00%
2005	0.03	0.05%	0.00%
2006	0.04	0.05%	0.00%
2007	0.04	0.04%	0.00%
2008	0.04	0.04%	0.00%
2009	0.04	0.04%	0.00%
2010	0.04	0.04%	0.00%
2011	0.04	0.04%	0.00%
2012	0.04	0.04%	0.00%
2013	0.04	0.04%	0.00%
2014	0.04	0.04%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Belize: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Belize City	1,569	0.02	60.00	0.03	0.00
Orange Walk	1,877	0.00	12.50	0.01	0.00
Corozal	1,878	0.00	12.50	0.01	0.00
Dangriga	1,905	0.00	10.00	0.00	0.00
Belmopan	1,994	0.00	5.00	0.00	0.00
<b>Total</b>		<b>0.04</b>	<b>100.00</b>	<b>0.04</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**6.4 BOLIVIA****Wide Area Networks (WAN) (US\$ Million): Bolivia 2004 - 2014**

Year	Bolivia	% of Region	% of Globe
2004	0.56	0.77%	0.06%
2005	0.58	0.77%	0.06%
2006	0.60	0.76%	0.06%
2007	0.61	0.76%	0.06%
2008	0.63	0.76%	0.06%
2009	0.65	0.75%	0.06%
2010	0.67	0.75%	0.06%
2011	0.69	0.74%	0.06%
2012	0.72	0.74%	0.06%
2013	0.74	0.74%	0.06%
2014	0.76	0.73%	0.06%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Bolivia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
La Paz	567	0.27	41.65	0.31	0.03
Santa Cruz	796	0.16	24.74	0.19	0.02
Cochabamba	1,031	0.10	15.01	0.11	0.01
Oruro	1,309	0.05	7.72	0.06	0.00
Potosi	1,493	0.03	4.49	0.03	0.00
Sucre	1,547	0.02	3.78	0.03	0.00
Tarija	1,653	0.02	2.60	0.02	0.00
<b>Total</b>		<b>0.65</b>	<b>100.00</b>	<b>0.75</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.5 BRAZIL

### Wide Area Networks (WAN) (US\$ Million): Brazil 2004 - 2014

Year	Brazil	% of Region	% of Globe
2004	25.57	35.29%	2.87%
2005	26.46	35.19%	2.86%
2006	27.37	35.10%	2.86%
2007	28.32	35.00%	2.86%
2008	29.29	34.90%	2.86%
2009	30.28	34.80%	2.85%
2010	31.29	34.71%	2.85%
2011	32.34	34.61%	2.84%
2012	33.42	34.50%	2.84%
2013	34.54	34.40%	2.83%
2014	35.70	34.29%	2.82%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Brazil: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Sao Paulo	47	4.04	13.35	4.65	0.38
Rio de Janeiro	104	2.28	7.53	2.62	0.21
Salvador	219	0.89	2.95	1.03	0.08
Belo Horizonte	225	0.85	2.80	0.97	0.08
Fortaleza	245	0.76	2.51	0.87	0.07
Brasilia	248	0.75	2.47	0.86	0.07
Curitiba	317	0.56	1.85	0.64	0.05
Recife	324	0.54	1.78	0.62	0.05
Belem	333	0.53	1.76	0.61	0.05
Pórtó Alegre	337	0.53	1.74	0.60	0.05
Manaus	394	0.44	1.46	0.51	0.04
Goiânia	433	0.39	1.30	0.45	0.04
Campinas	456	0.36	1.19	0.41	0.03
Guarulhos	466	0.34	1.13	0.39	0.03
Sao Gonçalo	484	0.33	1.10	0.38	0.03
Others		16.68	55.09	19.17	1.57
<b>Total</b>		<b>30.28</b>	<b>100.00</b>	<b>34.80</b>	<b>2.85</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.6 CHILE

### Wide Area Networks (WAN) (US\$ Million): Chile 2004 - 2014

Year	Chile	% of Region	% of Globe
2004	3.21	4.44%	0.36%
2005	3.34	4.44%	0.36%
2006	3.47	4.44%	0.36%
2007	3.60	4.45%	0.36%
2008	3.74	4.45%	0.36%
2009	3.87	4.45%	0.36%
2010	4.02	4.46%	0.37%
2011	4.17	4.46%	0.37%
2012	4.32	4.46%	0.37%
2013	4.48	4.46%	0.37%
2014	4.65	4.46%	0.37%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Chile: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Santiago	92	2.49	64.14	2.86	0.23
Concepcion	723	0.19	4.92	0.22	0.02
Viña del Mar	758	0.18	4.53	0.20	0.02
Valparaiso	792	0.16	4.21	0.19	0.02
Talcahuano	847	0.14	3.70	0.16	0.01
Temuco	856	0.14	3.62	0.16	0.01
Antofagasta	882	0.13	3.40	0.15	0.01
Rancagua	978	0.11	2.79	0.12	0.01
Talca	1,026	0.10	2.55	0.11	0.01
Arica	1,033	0.10	2.52	0.11	0.01
Puerto Montt	1,136	0.07	1.93	0.09	0.01
Punta Arenas	1,200	0.07	1.69	0.08	0.01
<b>Total</b>		<b>3.87</b>	<b>100.00</b>	<b>4.45</b>	<b>0.36</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.7 COLOMBIA

### Wide Area Networks (WAN) (US\$ Million): Colombia 2004 - 2014

Year	Colombia	% of Region	% of Globe
2004	4.28	5.90%	0.48%
2005	4.47	5.95%	0.48%
2006	4.67	5.99%	0.49%
2007	4.89	6.04%	0.49%
2008	5.11	6.08%	0.50%
2009	5.33	6.13%	0.50%
2010	5.56	6.17%	0.51%
2011	5.80	6.21%	0.51%
2012	6.06	6.25%	0.51%
2013	6.32	6.29%	0.52%
2014	6.59	6.33%	0.52%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Colombia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bogota	96	2.42	45.36	2.78	0.23
Cali	260	0.70	13.10	0.80	0.07
Medell;n	262	0.68	12.81	0.78	0.06
Barranquilla	554	0.28	5.21	0.32	0.03
Cartagena	559	0.28	5.16	0.32	0.03
Bucaramanga	844	0.14	2.71	0.17	0.01
Cucuta	872	0.13	2.53	0.15	0.01
Pereira	921	0.12	2.28	0.14	0.01
Manizales	991	0.11	1.99	0.12	0.01
Ibague	1,007	0.10	1.91	0.12	0.01
Armenia	1,111	0.08	1.46	0.09	0.01
Santa Marta	1,244	0.06	1.12	0.07	0.01
Neiva	1,296	0.05	0.99	0.06	0.00
Pasto	1,321	0.05	0.92	0.06	0.00
Monteria	1,354	0.05	0.87	0.05	0.00
Others		0.08	1.58	0.10	0.01
<b>Total</b>		<b>5.33</b>	<b>100.00</b>	<b>6.13</b>	<b>0.50</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.8 COSTA RICA

### Wide Area Networks (WAN) (US\$ Million): Costa Rica 2004 - 2014

Year	Costa Rica	% of Region	% of Globe
2004	0.75	1.04%	0.08%
2005	0.79	1.05%	0.09%
2006	0.82	1.05%	0.09%
2007	0.86	1.06%	0.09%
2008	0.89	1.06%	0.09%
2009	0.93	1.07%	0.09%
2010	0.97	1.07%	0.09%
2011	1.01	1.08%	0.09%
2012	1.05	1.08%	0.09%
2013	1.09	1.09%	0.09%
2014	1.14	1.09%	0.09%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Costa Rica: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
San Jose	475	0.34	36.14	0.39	0.03
Alajuela	753	0.18	19.04	0.20	0.02
Cartago	920	0.12	13.08	0.14	0.01
Puntarenas	1,002	0.10	11.14	0.12	0.01
Limon	1,129	0.08	8.16	0.09	0.01
Heredia	1,130	0.08	8.16	0.09	0.01
Liberia	1,413	0.04	4.27	0.05	0.00
<b>Total</b>		<b>0.93</b>	<b>100.00</b>	<b>1.07</b>	<b>0.09</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.9 ECUADOR

### Wide Area Networks (WAN) (US\$ Million): Ecuador 2004 - 2014

Year	Ecuador	% of Region	% of Globe
2004	1.42	1.96%	0.16%
2005	1.46	1.94%	0.16%
2006	1.49	1.91%	0.16%
2007	1.53	1.89%	0.15%
2008	1.57	1.87%	0.15%
2009	1.60	1.84%	0.15%
2010	1.64	1.82%	0.15%
2011	1.68	1.80%	0.15%
2012	1.72	1.78%	0.15%
2013	1.76	1.76%	0.14%
2014	1.81	1.73%	0.14%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Ecuador: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Guayaquil	265	0.68	42.53	0.78	0.06
Quito	361	0.50	30.89	0.57	0.05
Cuenca	1,073	0.09	5.46	0.10	0.01
Machala	1,211	0.06	3.98	0.07	0.01
Portoviejo	1,216	0.06	3.90	0.07	0.01
Riobamba	1,236	0.06	3.75	0.07	0.01
Ambato	1,285	0.05	3.35	0.06	0.01
Manta	1,299	0.05	3.25	0.06	0.00
Esmeraldas	1,356	0.05	2.88	0.05	0.00
<b>Total</b>		<b>1.60</b>	<b>100.00</b>	<b>1.84</b>	<b>0.15</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**6.10 EL SALVADOR****Wide Area Networks (WAN) (US\$ Million): El Salvador 2004 - 2014**

Year	El Salvador	% of Region	% of Globe
2004	0.50	0.69%	0.06%
2005	0.52	0.69%	0.06%
2006	0.53	0.69%	0.06%
2007	0.55	0.68%	0.06%
2008	0.57	0.68%	0.06%
2009	0.59	0.68%	0.06%
2010	0.61	0.68%	0.06%
2011	0.63	0.68%	0.06%
2012	0.66	0.68%	0.06%
2013	0.68	0.68%	0.06%
2014	0.70	0.67%	0.06%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**El Salvador: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
San Salvador	481	0.33	56.44	0.38	0.03
Santa Ana	1,018	0.10	16.93	0.12	0.01
San Miguel	1,214	0.06	10.67	0.07	0.01
Nueva San Salvador	1,429	0.04	6.38	0.04	0.00
Sonsonate	1,454	0.03	5.77	0.04	0.00
Cojutepeque	1,571	0.02	3.80	0.03	0.00
<b>Total</b>		<b>0.59</b>	<b>100.00</b>	<b>0.68</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



## 6.11 FRENCH GUIANA

### Wide Area Networks (WAN) (US\$ Million): French Guiana 2004 - 2014

Year	French Guiana	% of Region	% of Globe
2004	0.02	0.03%	0.00%
2005	0.03	0.03%	0.00%
2006	0.03	0.03%	0.00%
2007	0.03	0.03%	0.00%
2008	0.03	0.03%	0.00%
2009	0.03	0.03%	0.00%
2010	0.03	0.03%	0.00%
2011	0.03	0.03%	0.00%
2012	0.03	0.03%	0.00%
2013	0.03	0.03%	0.00%
2014	0.03	0.03%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### French Guiana: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Cayenne	1,625	0.02	66.67	0.02	0.00
Kourou	1,925	0.00	11.67	0.00	0.00
Remire	1,945	0.00	10.00	0.00	0.00
Saint Laurent	1,974	0.00	8.33	0.00	0.00
Sinnamary	2,029	0.00	3.33	0.00	0.00
<b>Total</b>		<b>0.03</b>	<b>100.00</b>	<b>0.03</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.12 GUATEMALA

### Wide Area Networks (WAN) (US\$ Million): Guatemala 2004 - 2014

Year	Guatemala	% of Region	% of Globe
2004	0.92	1.27%	0.10%
2005	0.95	1.27%	0.10%
2006	0.99	1.27%	0.10%
2007	1.03	1.28%	0.10%
2008	1.08	1.28%	0.10%
2009	1.12	1.28%	0.11%
2010	1.16	1.29%	0.11%
2011	1.21	1.29%	0.11%
2012	1.25	1.29%	0.11%
2013	1.30	1.30%	0.11%
2014	1.35	1.30%	0.11%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Guatemala: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Guatemala City	231	0.83	74.02	0.95	0.08
Escuintla	1,234	0.06	5.39	0.07	0.01
Quezaltenango	1,262	0.06	5.11	0.07	0.01
Puerto Barrios	1,432	0.04	3.36	0.04	0.00
Retalhuleu	1,438	0.04	3.29	0.04	0.00
Coban	1,453	0.03	3.08	0.04	0.00
Chiquimula	1,460	0.03	3.01	0.04	0.00
Mazatenango	1,484	0.03	2.73	0.04	0.00
<b>Total</b>		<b>1.12</b>	<b>100.00</b>	<b>1.28</b>	<b>0.11</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**6.13 GUYANA****Wide Area Networks (WAN) (US\$ Million): Guyana 2004 - 2014**

Year	Guyana	% of Region	% of Globe
2004	0.06	0.08%	0.01%
2005	0.06	0.08%	0.01%
2006	0.06	0.08%	0.01%
2007	0.06	0.08%	0.01%
2008	0.06	0.08%	0.01%
2009	0.07	0.08%	0.01%
2010	0.07	0.08%	0.01%
2011	0.07	0.08%	0.01%
2012	0.07	0.08%	0.01%
2013	0.08	0.08%	0.01%
2014	0.08	0.08%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Guyana: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Georgetown	1,310	0.05	75.19	0.06	0.00
Linden	1,824	0.01	11.28	0.01	0.00
New Amsterdam	1,869	0.01	7.52	0.01	0.00
Corriverton	1,949	0.00	4.14	0.00	0.00
Mahaicony	2,018	0.00	1.88	0.00	0.00
<b>Total</b>		<b>0.07</b>	<b>100.00</b>	<b>0.08</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.14 HONDURAS

### Wide Area Networks (WAN) (US\$ Million): Honduras 2004 - 2014

Year	Honduras	% of Region	% of Globe
2004	0.33	0.46%	0.04%
2005	0.35	0.46%	0.04%
2006	0.36	0.46%	0.04%
2007	0.38	0.47%	0.04%
2008	0.39	0.47%	0.04%
2009	0.41	0.47%	0.04%
2010	0.43	0.47%	0.04%
2011	0.44	0.48%	0.04%
2012	0.46	0.48%	0.04%
2013	0.48	0.48%	0.04%
2014	0.50	0.48%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Honduras: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Tegucigalpa	739	0.18	44.79	0.21	0.02
San Pedro Sula	914	0.12	29.98	0.14	0.01
La Ceiba	1,617	0.02	4.61	0.02	0.00
Choluteca	1,623	0.02	4.54	0.02	0.00
El Progreso	1,639	0.02	4.26	0.02	0.00
Puerto Cortes	1,728	0.01	2.94	0.01	0.00
Comayagua	1,779	0.01	2.24	0.01	0.00
Tela	1,805	0.01	1.96	0.01	0.00
Siguatopeque	1,829	0.01	1.82	0.01	0.00
Santa Rosa de Copan	1,847	0.01	1.47	0.01	0.00
Danli	1,854	0.01	1.40	0.01	0.00
<b>Total</b>		<b>0.41</b>	<b>100.00</b>	<b>0.47</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.15 MEXICO

### Wide Area Networks (WAN) (US\$ Million): Mexico 2004 - 2014

Year	Mexico	% of Region	% of Globe
2004	19.41	26.79%	2.18%
2005	19.93	26.51%	2.16%
2006	20.46	26.24%	2.14%
2007	21.01	25.96%	2.12%
2008	21.56	25.69%	2.10%
2009	22.13	25.43%	2.08%
2010	22.70	25.18%	2.07%
2011	23.29	24.92%	2.05%
2012	23.90	24.67%	2.03%
2013	24.52	24.41%	2.01%
2014	25.16	24.16%	1.99%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Mexico: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Mexico City	22	6.29	28.42	7.23	0.59
Guadalajara	178	1.21	5.47	1.39	0.11
Nezahualcoyotl	215	0.91	4.13	1.05	0.09
Puebla	217	0.91	4.10	1.04	0.09
Monterrey	232	0.81	3.64	0.93	0.08
Leon	244	0.77	3.49	0.89	0.07
Ciudad Juarez	246	0.75	3.39	0.86	0.07
Tijuana	251	0.73	3.32	0.84	0.07
Culiacan	344	0.52	2.33	0.59	0.05
Mexicali	345	0.52	2.33	0.59	0.05
Acapulco	351	0.51	2.30	0.59	0.05
Chihuahua	375	0.47	2.10	0.53	0.04
S. Luis Potosi	378	0.46	2.10	0.53	0.04
Aguascalientes	401	0.43	1.95	0.50	0.04
Morelia	403	0.43	1.94	0.49	0.04
Others		6.41	28.99	7.37	0.60
<b>Total</b>		<b>22.13</b>	<b>100.00</b>	<b>25.43</b>	<b>2.08</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.16 NICARAGUA

### Wide Area Networks (WAN) (US\$ Million): Nicaragua 2004 - 2014

Year	Nicaragua	% of Region	% of Globe
2004	0.26	0.36%	0.03%
2005	0.27	0.36%	0.03%
2006	0.28	0.35%	0.03%
2007	0.28	0.35%	0.03%
2008	0.29	0.35%	0.03%
2009	0.30	0.34%	0.03%
2010	0.30	0.34%	0.03%
2011	0.31	0.33%	0.03%
2012	0.32	0.33%	0.03%
2013	0.33	0.33%	0.03%
2014	0.34	0.32%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Nicaragua: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Managua	855	0.14	47.30	0.16	0.01
Rosita	1,186	0.07	22.54	0.08	0.01
Leon	1,589	0.02	7.00	0.02	0.00
Granada	1,629	0.02	6.17	0.02	0.00
Masaya	1,677	0.02	5.20	0.02	0.00
Chinandega	1,698	0.01	4.72	0.02	0.00
Matagalpa	1,818	0.01	2.57	0.01	0.00
San Carlos	1,836	0.01	2.36	0.01	0.00
Esteli	1,838	0.01	2.15	0.01	0.00
<b>Total</b>		<b>0.30</b>	<b>100.00</b>	<b>0.34</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.17 PANAMA

### Wide Area Networks (WAN) (US\$ Million): Panama 2004 - 2014

Year	Panama	% of Region	% of Globe
2004	0.38	0.52%	0.04%
2005	0.40	0.53%	0.04%
2006	0.42	0.54%	0.04%
2007	0.44	0.55%	0.04%
2008	0.46	0.55%	0.05%
2009	0.49	0.56%	0.05%
2010	0.51	0.57%	0.05%
2011	0.54	0.58%	0.05%
2012	0.56	0.58%	0.05%
2013	0.59	0.59%	0.05%
2014	0.62	0.60%	0.05%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Panama: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Panama	512	0.31	62.90	0.35	0.03
Colon	1,306	0.05	10.55	0.06	0.00
David	1,434	0.04	7.64	0.04	0.00
La Chorrera	1,458	0.03	6.94	0.04	0.00
Penonome	1,578	0.02	4.51	0.03	0.00
Santiago	1,580	0.02	4.46	0.03	0.00
Bocas del Toro	1,825	0.01	1.54	0.01	0.00
Tocumen	1,835	0.01	1.46	0.01	0.00
<b>Total</b>		<b>0.49</b>	<b>100.00</b>	<b>0.56</b>	<b>0.05</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**6.18 PARAGUAY****Wide Area Networks (WAN) (US\$ Million): Paraguay 2004 - 2014**

Year	Paraguay	% of Region	% of Globe
2004	0.37	0.51%	0.04%
2005	0.38	0.51%	0.04%
2006	0.40	0.51%	0.04%
2007	0.41	0.51%	0.04%
2008	0.42	0.50%	0.04%
2009	0.44	0.50%	0.04%
2010	0.45	0.50%	0.04%
2011	0.47	0.50%	0.04%
2012	0.48	0.50%	0.04%
2013	0.50	0.50%	0.04%
2014	0.52	0.50%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Paraguay: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Asuncion	592	0.26	59.85	0.30	0.02
Puerto Stroessner	1,415	0.04	9.03	0.05	0.00
San Lorenzo	1,500	0.03	6.57	0.03	0.00
Pedro Juan Caballero	1,501	0.03	6.57	0.03	0.00
Fernando de la Mora	1,533	0.03	5.91	0.03	0.00
Encarnacion	1,747	0.01	2.55	0.01	0.00
Concepción	1,775	0.01	2.13	0.01	0.00
Pilar	1,776	0.01	2.13	0.01	0.00
Coronel Oviedo	1,810	0.01	1.81	0.01	0.00
Villarrica	1,811	0.01	1.81	0.01	0.00
Caaguazu	1,833	0.01	1.64	0.01	0.00
<b>Total</b>		<b>0.44</b>	<b>100.00</b>	<b>0.50</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.19 PERU

### Wide Area Networks (WAN) (US\$ Million): Peru 2004 - 2014

Year	Peru	% of Region	% of Globe
2004	2.84	3.92%	0.32%
2005	2.99	3.97%	0.32%
2006	3.14	4.03%	0.33%
2007	3.30	4.08%	0.33%
2008	3.47	4.13%	0.34%
2009	3.64	4.18%	0.34%
2010	3.81	4.23%	0.35%
2011	4.00	4.28%	0.35%
2012	4.19	4.33%	0.36%
2013	4.39	4.38%	0.36%
2014	4.61	4.42%	0.36%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Peru: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Lima	116	2.04	56.10	2.34	0.19
Arequipa	591	0.26	7.21	0.30	0.02
Callao	618	0.25	6.82	0.29	0.02
Trujillo	670	0.22	5.98	0.25	0.02
Chiclayo	762	0.17	4.81	0.20	0.02
Piura	883	0.13	3.62	0.15	0.01
Chimbote	908	0.12	3.40	0.14	0.01
Cuzco	958	0.11	3.11	0.13	0.01
Iquitos	973	0.11	3.02	0.13	0.01
Huancayo	1,069	0.09	2.42	0.10	0.01
Sullana	1,203	0.06	1.78	0.07	0.01
Pucallpa	1,217	0.06	1.72	0.07	0.01
<b>Total</b>		<b>3.64</b>	<b>100.00</b>	<b>4.18</b>	<b>0.34</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.20 SURINAME

### Wide Area Networks (WAN) (US\$ Million): Suriname 2004 - 2014

Year	Suriname	% of Region	% of Globe
2004	0.05	0.07%	0.01%
2005	0.05	0.07%	0.01%
2006	0.05	0.07%	0.01%
2007	0.05	0.07%	0.01%
2008	0.05	0.07%	0.01%
2009	0.06	0.07%	0.01%
2010	0.06	0.07%	0.01%
2011	0.06	0.07%	0.01%
2012	0.06	0.07%	0.01%
2013	0.07	0.07%	0.01%
2014	0.07	0.07%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Suriname: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Paramaribo	1,314	0.05	87.39	0.06	0.00
Nieuw Nickerie	1,904	0.00	6.72	0.00	0.00
Marienburg	1,993	0.00	3.36	0.00	0.00
Moengo	2,027	0.00	1.68	0.00	0.00
Totness	2,058	0.00	0.84	0.00	0.00
<b>Total</b>		<b>0.06</b>	<b>100.00</b>	<b>0.07</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.21 THE FALKLAND ISLANDS

### Wide Area Networks (WAN) (US\$ Million): The Falkland Islands 2004 - 2014

Year	The Falkland Islands	% of Region	% of Globe
2004	0.00	0.00%	0.00%
2005	0.00	0.00%	0.00%
2006	0.00	0.00%	0.00%
2007	0.00	0.00%	0.00%
2008	0.00	0.00%	0.00%
2009	0.00	0.00%	0.00%
2010	0.00	0.00%	0.00%
2011	0.00	0.00%	0.00%
2012	0.00	0.00%	0.00%
2013	0.00	0.00%	0.00%
2014	0.00	0.00%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**The Falkland Islands: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Stanley	2,019	0.00	100.00	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**6.22 URUGUAY****Wide Area Networks (WAN) (US\$ Million): Uruguay 2004 - 2014**

Year	Uruguay	% of Region	% of Globe
2004	0.49	0.67%	0.05%
2005	0.51	0.68%	0.06%
2006	0.54	0.69%	0.06%
2007	0.56	0.70%	0.06%
2008	0.59	0.70%	0.06%
2009	0.62	0.71%	0.06%
2010	0.65	0.72%	0.06%
2011	0.68	0.73%	0.06%
2012	0.71	0.73%	0.06%
2013	0.74	0.74%	0.06%
2014	0.78	0.75%	0.06%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Uruguay: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Montevideo	380	0.46	74.51	0.53	0.04
Salto	1,487	0.03	4.84	0.03	0.00
Paysandu	1,511	0.03	4.48	0.03	0.00
Las Piedras	1,573	0.02	3.64	0.03	0.00
Rivera	1,593	0.02	3.34	0.02	0.00
Melo	1,674	0.02	2.51	0.02	0.00
Tacuarembó	1,685	0.01	2.39	0.02	0.00
Mercedes	1,707	0.01	2.21	0.02	0.00
Minas	1,714	0.01	2.09	0.01	0.00
<b>Total</b>		<b>0.62</b>	<b>100.00</b>	<b>0.71</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 6.23 VENEZUELA

### Wide Area Networks (WAN) (US\$ Million): Venezuela 2004 - 2014

Year	Venezuela	% of Region	% of Globe
2004	4.31	5.94%	0.48%
2005	4.54	6.04%	0.49%
2006	4.80	6.15%	0.50%
2007	5.06	6.26%	0.51%
2008	5.34	6.36%	0.52%
2009	5.62	6.46%	0.53%
2010	5.92	6.56%	0.54%
2011	6.23	6.66%	0.55%
2012	6.55	6.77%	0.56%
2013	6.90	6.87%	0.57%
2014	7.26	6.97%	0.57%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Venezuela: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Caracas	152	1.50	26.70	1.73	0.14
Maracaibo	312	0.57	10.15	0.66	0.05
Valencia	352	0.51	9.01	0.58	0.05
Maracay	437	0.38	6.80	0.44	0.04
Barquisimeto	498	0.32	5.65	0.37	0.03
Petare	659	0.22	3.97	0.26	0.02
Ciudad Guayana	668	0.22	3.89	0.25	0.02
San Cristobal	827	0.15	2.65	0.17	0.01
La Guaira	852	0.14	2.51	0.16	0.01
Baruta	938	0.12	2.08	0.13	0.01
Ciudad Bolivar	944	0.11	2.04	0.13	0.01
Maturin	964	0.11	1.99	0.13	0.01
Merida	968	0.11	1.98	0.13	0.01
Cumana	975	0.11	1.95	0.13	0.01
Barcelona	1,008	0.10	1.81	0.12	0.01
Others		0.95	16.83	1.09	0.09
<b>Total</b>		<b>5.62</b>	<b>100.00</b>	<b>6.46</b>	<b>0.53</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7 NORTH AMERICA & THE CARIBBEAN

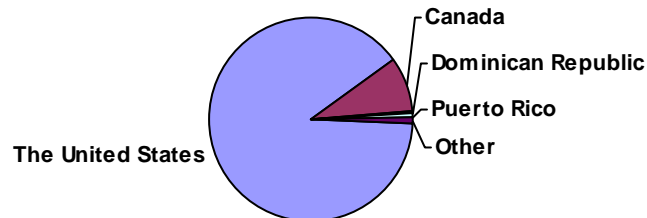
### 7.1 EXECUTIVE SUMMARY

#### Market Potential for Wide Area Networks (WAN) in North America & the Caribbean (US\$ Million): 2009

Country	Latent Demand US\$ Million	% of North America & the Caribbean
The United States	225.77	89.71%
Canada	20.80	8.27%
Dominican Republic	1.43	0.57%
Puerto Rico	1.24	0.49%
Cuba	0.85	0.34%
Trinidad and Tobago	0.38	0.15%
Haiti	0.26	0.10%
Jamaica	0.22	0.09%
The Bahamas	0.11	0.04%
Martinique	0.11	0.04%
Barbados	0.09	0.04%
Bermuda	0.07	0.03%
Guadeloupe	0.06	0.03%
The Netherlands Antilles	0.05	0.02%
Aruba	0.04	0.01%
The Cayman Islands	0.03	0.01%
The U.S. Virgin Islands	0.03	0.01%
Antigua and Barbuda	0.02	0.01%
St. Lucia	0.02	0.01%
Greenland	0.02	0.01%
Grenada	0.02	0.01%
St. Vincent and the Grenadines	0.01	0.01%
The British Virgin Islands	0.01	0.01%
St. Kitts and Nevis	0.01	0.00%
Dominica	0.01	0.00%
Other	0.01	0.00%
<b>Total</b>	<b>251.67</b>	<b>100.00%</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Market Potential for Wide Area Networks (WAN) in North America & the Caribbean (US\$ Million): 2009



### The Market for Wide Area Networks (WAN) in North America & the Caribbean: 2004 - 2014

Year	US\$ Million	% of Globe
2004	224.97	25.21
2005	230.11	24.91
2006	235.37	24.61
2007	240.75	24.30
2008	246.16	23.99
2009	251.67	23.70
2010	257.30	23.42
2011	263.06	23.13
2012	268.95	22.83
2013	274.98	22.54
2014	281.15	22.25

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.2 ANTIGUA AND BARBUDA

### Wide Area Networks (WAN) (US\$ Million): Antigua and Barbuda 2004 - 2014

Year	Antigua and Barbuda	% of Region	% of Globe
2004	0.02	0.01%	0.00%
2005	0.02	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.02	0.01%	0.00%
2008	0.02	0.01%	0.00%
2009	0.02	0.01%	0.00%
2010	0.02	0.01%	0.00%
2011	0.02	0.01%	0.00%
2012	0.02	0.01%	0.00%
2013	0.02	0.01%	0.00%
2014	0.02	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Antigua and Barbuda: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Saint John's	1,612	0.02	97.30	0.01	0.00
Codrington	2,057	0.00	2.70	0.00	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.3 ARUBA****Wide Area Networks (WAN) (US\$ Million): Aruba 2004 - 2014**

Year	Aruba	% of Region	% of Globe
2004	0.03	0.01%	0.00%
2005	0.03	0.01%	0.00%
2006	0.03	0.01%	0.00%
2007	0.04	0.01%	0.00%
2008	0.04	0.01%	0.00%
2009	0.04	0.01%	0.00%
2010	0.04	0.01%	0.00%
2011	0.04	0.01%	0.00%
2012	0.04	0.01%	0.00%
2013	0.04	0.01%	0.00%
2014	0.04	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Aruba: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Oranjestad	1,602	0.02	54.05	0.01	0.00
Sint Nicolaas	1,655	0.02	45.95	0.01	0.00
<b>Total</b>		<b>0.04</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.4 BARBADOS

### Wide Area Networks (WAN) (US\$ Million): Barbados 2004 - 2014

Year	Barbados	% of Region	% of Globe
2004	0.08	0.03%	0.01%
2005	0.08	0.03%	0.01%
2006	0.08	0.04%	0.01%
2007	0.09	0.04%	0.01%
2008	0.09	0.04%	0.01%
2009	0.09	0.04%	0.01%
2010	0.09	0.04%	0.01%
2011	0.10	0.04%	0.01%
2012	0.10	0.04%	0.01%
2013	0.10	0.04%	0.01%
2014	0.11	0.04%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Barbados: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bridgetown	1,060	0.09	100.00	0.04	0.01
<b>Total</b>		<b>0.09</b>	<b>100.00</b>	<b>0.04</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.5 BERMUDA

### Wide Area Networks (WAN) (US\$ Million): Bermuda 2004 - 2014

Year	Bermuda	% of Region	% of Globe
2004	0.06	0.03%	0.01%
2005	0.06	0.03%	0.01%
2006	0.07	0.03%	0.01%
2007	0.07	0.03%	0.01%
2008	0.07	0.03%	0.01%
2009	0.07	0.03%	0.01%
2010	0.08	0.03%	0.01%
2011	0.08	0.03%	0.01%
2012	0.08	0.03%	0.01%
2013	0.08	0.03%	0.01%
2014	0.09	0.03%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Bermuda: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Hamilton	1,366	0.04	60.00	0.02	0.00
Saint George	1,489	0.03	40.00	0.01	0.00
<b>Total</b>		<b>0.07</b>	<b>100.00</b>	<b>0.03</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.6 CANADA****Wide Area Networks (WAN) (US\$ Million): Canada 2004 - 2014**

Year	Canada	% of Region	% of Globe
2004	18.39	8.18%	2.06%
2005	18.85	8.19%	2.04%
2006	19.33	8.21%	2.02%
2007	19.81	8.23%	2.00%
2008	20.31	8.25%	1.98%
2009	20.80	8.27%	1.96%
2010	21.31	8.28%	1.94%
2011	21.84	8.30%	1.92%
2012	22.37	8.32%	1.90%
2013	22.92	8.33%	1.88%
2014	23.48	8.35%	1.86%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Canada: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Toronto	24	6.22	29.90	2.47	0.59
Montreal	34	5.30	25.49	2.11	0.50
Vancouver	91	2.51	12.05	1.00	0.24
Ottawa	156	1.49	7.15	0.59	0.14
Calgary	186	1.15	5.55	0.46	0.11
Winnipeg	196	1.08	5.19	0.43	0.10
Edmonton	202	1.04	5.01	0.41	0.10
Hamilton	318	0.56	2.68	0.22	0.05
Regina	499	0.32	1.53	0.13	0.03
Quebec	521	0.30	1.44	0.12	0.03
Halifax	690	0.21	0.99	0.08	0.02
Thunder Bay	699	0.20	0.98	0.08	0.02
Saint John's	763	0.17	0.84	0.07	0.02
Niagara Falls	888	0.13	0.63	0.05	0.01
Victoria	927	0.12	0.58	0.05	0.01
<b>Total</b>		<b>20.80</b>	<b>100.00</b>	<b>8.27</b>	<b>1.96</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.7 CUBA

### Wide Area Networks (WAN) (US\$ Million): Cuba 2004 - 2014

Year	Cuba	% of Region	% of Globe
2004	0.68	0.30%	0.08%
2005	0.71	0.31%	0.08%
2006	0.74	0.32%	0.08%
2007	0.78	0.32%	0.08%
2008	0.81	0.33%	0.08%
2009	0.85	0.34%	0.08%
2010	0.89	0.35%	0.08%
2011	0.93	0.35%	0.08%
2012	0.98	0.36%	0.08%
2013	1.02	0.37%	0.08%
2014	1.07	0.38%	0.08%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Cuba: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Havana	385	0.45	52.92	0.18	0.04
Santiago de Cuba	1,080	0.09	10.02	0.03	0.01
Camagüey	1,235	0.06	7.07	0.02	0.01
Holguin	1,339	0.05	5.60	0.02	0.00
Guantanamo	1,390	0.04	4.96	0.02	0.00
Santa Clara	1,409	0.04	4.83	0.02	0.00
Bayamo	1,530	0.03	3.06	0.01	0.00
Cienfuegos	1,536	0.03	2.98	0.01	0.00
Pinar del Rio	1,549	0.02	2.88	0.01	0.00
Las Tunas	1,553	0.02	2.85	0.01	0.00
Matanzas	1,557	0.02	2.83	0.01	0.00
<b>Total</b>		<b>0.85</b>	<b>100.00</b>	<b>0.34</b>	<b>0.08</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



## 7.8 DOMINICA

### Wide Area Networks (WAN) (US\$ Million): Dominica 2004 - 2014

Year	Dominica	% of Region	% of Globe
2004	0.01	0.00%	0.00%
2005	0.01	0.00%	0.00%
2006	0.01	0.00%	0.00%
2007	0.01	0.00%	0.00%
2008	0.01	0.00%	0.00%
2009	0.01	0.00%	0.00%
2010	0.01	0.00%	0.00%
2011	0.01	0.00%	0.00%
2012	0.01	0.00%	0.00%
2013	0.01	0.00%	0.00%
2014	0.01	0.00%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Dominica: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Roseau	1,865	0.01	64.71	0.00	0.00
Portsmouth	2,045	0.00	8.82	0.00	0.00
Berekua	2,046	0.00	8.82	0.00	0.00
Marigot	2,047	0.00	8.82	0.00	0.00
Saint Joseph	2,048	0.00	8.82	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.9 DOMINICAN REPUBLIC

### Wide Area Networks (WAN) (US\$ Million): Dominican Republic 2004 - 2014

Year	Dominican Republic	% of Region	% of Globe
2004	1.12	0.50%	0.13%
2005	1.18	0.51%	0.13%
2006	1.24	0.53%	0.13%
2007	1.30	0.54%	0.13%
2008	1.36	0.55%	0.13%
2009	1.43	0.57%	0.13%
2010	1.49	0.58%	0.14%
2011	1.56	0.59%	0.14%
2012	1.64	0.61%	0.14%
2013	1.71	0.62%	0.14%
2014	1.79	0.64%	0.14%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Dominican Republic: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Santo Domingo	214	0.92	64.68	0.37	0.09
Santiago	732	0.19	13.07	0.07	0.02
La Romana	1,194	0.07	4.63	0.03	0.01
San Pedro de Macoris	1,248	0.06	4.13	0.02	0.01
San Francisco de Macoris	1,279	0.05	3.85	0.02	0.01
La Vega	1,397	0.04	2.94	0.02	0.00
Barahona	1,466	0.03	2.29	0.01	0.00
San Juan	1,467	0.03	2.29	0.01	0.00
Puerto Plata	1,485	0.03	2.11	0.01	0.00
<b>Total</b>		<b>1.43</b>	<b>100.00</b>	<b>0.57</b>	<b>0.13</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.10 GREENLAND****Wide Area Networks (WAN) (US\$ Million): Greenland 2004 - 2014**

Year	Greenland	% of Region	% of Globe
2004	0.02	0.01%	0.00%
2005	0.02	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.02	0.01%	0.00%
2008	0.02	0.01%	0.00%
2009	0.02	0.01%	0.00%
2010	0.02	0.01%	0.00%
2011	0.02	0.01%	0.00%
2012	0.02	0.01%	0.00%
2013	0.02	0.01%	0.00%
2014	0.02	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Greenland: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Nuuk	1,866	0.01	28.57	0.00	0.00
Holsteinsborg	1,980	0.00	11.90	0.00	0.00
Jakobshavn	2,002	0.00	9.52	0.00	0.00
Egedesminde	2,015	0.00	7.14	0.00	0.00
Julianehab	2,016	0.00	7.14	0.00	0.00
Sukkertoppen	2,017	0.00	7.14	0.00	0.00
Frederikshab	2,035	0.00	4.76	0.00	0.00
Narsarsuaq	2,036	0.00	4.76	0.00	0.00
Christianshab	2,037	0.00	4.76	0.00	0.00
Uppernavik	2,062	0.00	2.38	0.00	0.00
Scoresbysund	2,063	0.00	2.38	0.00	0.00
Godhavn	2,064	0.00	2.38	0.00	0.00
Ammassalik	2,065	0.00	2.38	0.00	0.00
Nanortalik	2,066	0.00	2.38	0.00	0.00
Thule	2,067	0.00	2.38	0.00	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.11 GRENADA****Wide Area Networks (WAN) (US\$ Million): Grenada 2004 - 2014**

Year	Grenada	% of Region	% of Globe
2004	0.01	0.01%	0.00%
2005	0.01	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.02	0.01%	0.00%
2008	0.02	0.01%	0.00%
2009	0.02	0.01%	0.00%
2010	0.02	0.01%	0.00%
2011	0.02	0.01%	0.00%
2012	0.02	0.01%	0.00%
2013	0.02	0.01%	0.00%
2014	0.02	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Grenada: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Saint George's	1,717	0.01	80.00	0.01	0.00
Gouyave	1,931	0.00	20.00	0.00	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.12 GUADELOUPE

### Wide Area Networks (WAN) (US\$ Million): Guadeloupe 2004 - 2014

Year	Guadeloupe	% of Region	% of Globe
2004	0.06	0.02%	0.01%
2005	0.06	0.02%	0.01%
2006	0.06	0.02%	0.01%
2007	0.06	0.02%	0.01%
2008	0.06	0.03%	0.01%
2009	0.06	0.03%	0.01%
2010	0.06	0.03%	0.01%
2011	0.07	0.03%	0.01%
2012	0.07	0.03%	0.01%
2013	0.07	0.03%	0.01%
2014	0.07	0.03%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Guadeloupe: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Les Abymes	1,624	0.02	29.44	0.01	0.00
Pointe-a-Pitre	1,817	0.01	12.15	0.00	0.00
Le Gosier	1,842	0.01	9.81	0.00	0.00
Moule	1,862	0.01	8.41	0.00	0.00
Sainte Anne	1,871	0.01	7.94	0.00	0.00
Morne-a-l'Eau	1,879	0.00	7.48	0.00	0.00
Petit Bourg	1,887	0.00	7.01	0.00	0.00
Sainte Rose	1,895	0.00	6.54	0.00	0.00
Basse-Terre	1,896	0.00	6.54	0.00	0.00
Saint-Claude	1,940	0.00	4.67	0.00	0.00
<b>Total</b>		<b>0.06</b>	<b>100.00</b>	<b>0.03</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.13 HAITI

### Wide Area Networks (WAN) (US\$ Million): Haiti 2004 - 2014

Year	Haiti	% of Region	% of Globe
2004	0.22	0.10%	0.03%
2005	0.23	0.10%	0.03%
2006	0.24	0.10%	0.02%
2007	0.25	0.10%	0.02%
2008	0.25	0.10%	0.02%
2009	0.26	0.10%	0.02%
2010	0.27	0.10%	0.02%
2011	0.27	0.10%	0.02%
2012	0.28	0.10%	0.02%
2013	0.29	0.11%	0.02%
2014	0.30	0.11%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Haiti: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Port-au-Prince	741	0.18	70.39	0.07	0.02
Cap-Haitien	1,526	0.03	10.12	0.01	0.00
Petionville	1,693	0.01	5.51	0.01	0.00
Les Cayes	1,702	0.01	5.36	0.01	0.00
Gonaives	1,703	0.01	5.36	0.01	0.00
Port-de-Paix	1,795	0.01	3.27	0.00	0.00
<b>Total</b>		<b>0.26</b>	<b>100.00</b>	<b>0.10</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.14 JAMAICA

### Wide Area Networks (WAN) (US\$ Million): Jamaica 2004 - 2014

Year	Jamaica	% of Region	% of Globe
2004	0.20	0.09%	0.02%
2005	0.20	0.09%	0.02%
2006	0.21	0.09%	0.02%
2007	0.21	0.09%	0.02%
2008	0.21	0.09%	0.02%
2009	0.22	0.09%	0.02%
2010	0.22	0.09%	0.02%
2011	0.23	0.09%	0.02%
2012	0.23	0.09%	0.02%
2013	0.24	0.09%	0.02%
2014	0.24	0.09%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Jamaica: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Kingston	829	0.15	67.83	0.06	0.01
Spanish Town	1,542	0.03	11.50	0.01	0.00
Montego Bay	1,603	0.02	9.04	0.01	0.00
May Pen	1,738	0.01	5.30	0.00	0.00
Mandeville	1,762	0.01	4.52	0.00	0.00
Savanna-la-Mar	1,902	0.00	1.81	0.00	0.00
<b>Total</b>		<b>0.22</b>	<b>100.00</b>	<b>0.09</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.15 MARTINIQUE****Wide Area Networks (WAN) (US\$ Million): Martinique 2004 - 2014**

Year	Martinique	% of Region	% of Globe
2004	0.10	0.04%	0.01%
2005	0.10	0.04%	0.01%
2006	0.10	0.04%	0.01%
2007	0.10	0.04%	0.01%
2008	0.11	0.04%	0.01%
2009	0.11	0.04%	0.01%
2010	0.11	0.04%	0.01%
2011	0.12	0.04%	0.01%
2012	0.12	0.04%	0.01%
2013	0.12	0.04%	0.01%
2014	0.13	0.04%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Martinique: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Fort-de-France	1,247	0.06	53.66	0.02	0.01
Le Lamentin	1,689	0.01	13.17	0.01	0.00
Sainte Marie	1,770	0.01	8.78	0.00	0.00
Schoelcher	1,794	0.01	7.80	0.00	0.00
Le François	1,826	0.01	6.83	0.00	0.00
La Trinité	1,861	0.01	4.88	0.00	0.00
Ducos	1,952	0.00	2.44	0.00	0.00
Saint Pierre	1,953	0.00	2.44	0.00	0.00
<b>Total</b>		<b>0.11</b>	<b>100.00</b>	<b>0.04</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.16 PUERTO RICO

### Wide Area Networks (WAN) (US\$ Million): Puerto Rico 2004 - 2014

Year	Puerto Rico	% of Region	% of Globe
2004	1.21	0.54%	0.14%
2005	1.22	0.53%	0.13%
2006	1.22	0.52%	0.13%
2007	1.23	0.51%	0.12%
2008	1.23	0.50%	0.12%
2009	1.24	0.49%	0.12%
2010	1.25	0.48%	0.11%
2011	1.25	0.48%	0.11%
2012	1.26	0.47%	0.11%
2013	1.26	0.46%	0.10%
2014	1.27	0.45%	0.10%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Puerto Rico: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
San Juan	538	0.29	22.99	0.11	0.03
Bayamon	817	0.15	12.29	0.06	0.01
Ponce	901	0.12	10.07	0.05	0.01
Carolina	906	0.12	9.99	0.05	0.01
Caguas	1,054	0.09	7.43	0.04	0.01
Guaynabo	1,174	0.07	5.56	0.03	0.01
Mayaguez	1,190	0.07	5.35	0.03	0.01
Arecibo	1,191	0.07	5.34	0.03	0.01
Toa Baja	1,227	0.06	4.91	0.02	0.01
Trujillo Alto	1,323	0.05	3.96	0.02	0.00
Aguadilla	1,383	0.04	3.46	0.02	0.00
Cayey	1,463	0.03	2.69	0.01	0.00
Guayama	1,513	0.03	2.23	0.01	0.00
Fajardo	1,539	0.03	2.03	0.01	0.00
Catano	1,583	0.02	1.72	0.01	0.00
<b>Total</b>		<b>1.24</b>	<b>100.00</b>	<b>0.49</b>	<b>0.12</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.17 ST. KITTS AND NEVIS

### Wide Area Networks (WAN) (US\$ Million): St. Kitts and Nevis 2004 - 2014

Year	St. Kitts and Nevis	% of Region	% of Globe
2004	0.01	0.00%	0.00%
2005	0.01	0.00%	0.00%
2006	0.01	0.00%	0.00%
2007	0.01	0.00%	0.00%
2008	0.01	0.00%	0.00%
2009	0.01	0.00%	0.00%
2010	0.01	0.00%	0.00%
2011	0.01	0.00%	0.00%
2012	0.01	0.01%	0.00%
2013	0.01	0.01%	0.00%
2014	0.01	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### St. Kitts and Nevis: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Basseterre	1,741	0.01	95.00	0.00	0.00
Charlestown	2,053	0.00	5.00	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.18 ST. LUCIA

### Wide Area Networks (WAN) (US\$ Million): St. Lucia 2004 - 2014

Year	St. Lucia	% of Region	% of Globe
2004	0.02	0.01%	0.00%
2005	0.02	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.02	0.01%	0.00%
2008	0.02	0.01%	0.00%
2009	0.02	0.01%	0.00%
2010	0.02	0.01%	0.00%
2011	0.02	0.01%	0.00%
2012	0.02	0.01%	0.00%
2013	0.02	0.01%	0.00%
2014	0.02	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**St. Lucia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Castries	1,665	0.02	82.81	0.01	0.00
Vieux Fort	1,917	0.00	17.19	0.00	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.19 ST. VINCENT AND THE GRENADINES****Wide Area Networks (WAN) (US\$ Million): St. Vincent and the Grenadines 2004 - 2014**

Year	St. Vincent and the Grenadines	% of Region	% of Globe
2004	0.01	0.01%	0.00%
2005	0.01	0.01%	0.00%
2006	0.01	0.01%	0.00%
2007	0.01	0.01%	0.00%
2008	0.01	0.01%	0.00%
2009	0.01	0.01%	0.00%
2010	0.02	0.01%	0.00%
2011	0.02	0.01%	0.00%
2012	0.02	0.01%	0.00%
2013	0.02	0.01%	0.00%
2014	0.02	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**St. Vincent and the Grenadines: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Kingstown	1,696	0.01	95.00	0.01	0.00
Georgetown	2,040	0.00	5.00	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.20 THE BAHAMAS

### Wide Area Networks (WAN) (US\$ Million): The Bahamas 2004 - 2014

Year	The Bahamas	% of Region	% of Globe
2004	0.10	0.04%	0.01%
2005	0.10	0.04%	0.01%
2006	0.10	0.04%	0.01%
2007	0.11	0.04%	0.01%
2008	0.11	0.04%	0.01%
2009	0.11	0.04%	0.01%
2010	0.12	0.05%	0.01%
2011	0.12	0.05%	0.01%
2012	0.12	0.05%	0.01%
2013	0.12	0.05%	0.01%
2014	0.13	0.05%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### The Bahamas: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Nassau	1,040	0.10	84.91	0.04	0.01
Freeport	1,650	0.02	15.09	0.01	0.00
<b>Total</b>		<b>0.11</b>	<b>100.00</b>	<b>0.04</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.21 THE BRITISH VIRGIN ISLANDS

### Wide Area Networks (WAN) (US\$ Million): The British Virgin Islands 2004 - 2014

Year	The British Virgin Islands	% of Region	% of Globe
2004	0.01	0.01%	0.00%
2005	0.01	0.01%	0.00%
2006	0.01	0.01%	0.00%
2007	0.01	0.01%	0.00%
2008	0.01	0.01%	0.00%
2009	0.01	0.01%	0.00%
2010	0.01	0.01%	0.00%
2011	0.01	0.01%	0.00%
2012	0.01	0.01%	0.00%
2013	0.01	0.01%	0.00%
2014	0.01	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**The British Virgin Islands: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Road Town	1,705	0.01	100.00	0.01	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.22 THE CAYMAN ISLANDS****Wide Area Networks (WAN) (US\$ Million): The Cayman Islands 2004 - 2014**

Year	The Cayman Islands	% of Region	% of Globe
2004	0.03	0.01%	0.00%
2005	0.03	0.01%	0.00%
2006	0.03	0.01%	0.00%
2007	0.03	0.01%	0.00%
2008	0.03	0.01%	0.00%
2009	0.03	0.01%	0.00%
2010	0.03	0.01%	0.00%
2011	0.03	0.01%	0.00%
2012	0.03	0.01%	0.00%
2013	0.03	0.01%	0.00%
2014	0.03	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**The Cayman Islands: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
George Town	1,630	0.02	58.33	0.01	0.00
West Bay	1,781	0.01	29.17	0.00	0.00
Savannah	1,956	0.00	8.33	0.00	0.00
Bodden Town	2,014	0.00	4.17	0.00	0.00
<b>Total</b>		<b>0.03</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.23 THE NETHERLANDS ANTILLES

### Wide Area Networks (WAN) (US\$ Million): The Netherlands Antilles 2004 - 2014

Year	The Netherlands Antilles	% of Region	% of Globe
2004	0.04	0.02%	0.00%
2005	0.04	0.02%	0.00%
2006	0.04	0.02%	0.00%
2007	0.04	0.02%	0.00%
2008	0.04	0.02%	0.00%
2009	0.05	0.02%	0.00%
2010	0.05	0.02%	0.00%
2011	0.05	0.02%	0.00%
2012	0.05	0.02%	0.00%
2013	0.05	0.02%	0.00%
2014	0.05	0.02%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### The Netherlands Antilles: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Willemstad	1,382	0.04	94.70	0.02	0.00
Philipsburg	1,987	0.00	4.55	0.00	0.00
Kralendijk	2,069	0.00	0.76	0.00	0.00
<b>Total</b>		<b>0.05</b>	<b>100.00</b>	<b>0.02</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 7.24 THE U.S. VIRGIN ISLANDS

### Wide Area Networks (WAN) (US\$ Million): The U.S. Virgin Islands 2004 - 2014

Year	The U.S. Virgin Islands	% of Region	% of Globe
2004	0.02	0.01%	0.00%
2005	0.02	0.01%	0.00%
2006	0.02	0.01%	0.00%
2007	0.02	0.01%	0.00%
2008	0.03	0.01%	0.00%
2009	0.03	0.01%	0.00%
2010	0.03	0.01%	0.00%
2011	0.03	0.01%	0.00%
2012	0.03	0.01%	0.00%
2013	0.03	0.01%	0.00%
2014	0.03	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**The U.S. Virgin Islands: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Charlotte Amalie	1,684	0.01	57.58	0.01	0.00
Frederiksted	1,933	0.00	12.12	0.00	0.00
Road Town	1,934	0.00	12.12	0.00	0.00
Christiansted	1,972	0.00	9.09	0.00	0.00
Cruz Bay	2,007	0.00	6.06	0.00	0.00
Spanish Town	2,038	0.00	3.03	0.00	0.00
<b>Total</b>		<b>0.03</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.25 THE UNITED STATES****Wide Area Networks (WAN) (US\$ Million): The United States 2004 - 2014**

Year	The United States	% of Region	% of Globe
2004	202.20	89.88%	22.65%
2005	206.75	89.85%	22.38%
2006	211.40	89.81%	22.10%
2007	216.14	89.78%	21.82%
2008	220.91	89.74%	21.53%
2009	225.77	89.71%	21.27%
2010	230.74	89.68%	21.00%
2011	235.81	89.64%	20.73%
2012	241.00	89.61%	20.46%
2013	246.30	89.57%	20.19%
2014	251.72	89.53%	19.92%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**The United States: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
New York	1	51.36	22.75	20.41	4.84
Los Angeles	3	18.59	8.23	7.39	1.75
Chicago	5	17.09	7.57	6.79	1.61
Houston	12	9.95	4.41	3.95	0.94
Philadelphia	15	8.82	3.91	3.50	0.83
Dallas	21	6.30	2.79	2.50	0.59
San Jose	23	6.23	2.76	2.47	0.59
San Francisco	25	6.13	2.71	2.44	0.58
San Diego	26	5.96	2.64	2.37	0.56
Detroit	31	5.72	2.53	2.27	0.54
Phoenix	32	5.68	2.52	2.26	0.54
San Antonio	39	4.76	2.11	1.89	0.45
Indianapolis	46	4.06	1.80	1.61	0.38
Baltimore	51	3.79	1.68	1.50	0.36
Washington D.C.	54	3.69	1.63	1.47	0.35
Others		67.66	29.97	26.88	6.37
<b>Total</b>		<b>225.77</b>	<b>100.00</b>	<b>89.71</b>	<b>21.27</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**7.26 TRINIDAD AND TOBAGO****Wide Area Networks (WAN) (US\$ Million): Trinidad and Tobago 2004 - 2014**

Year	Trinidad and Tobago	% of Region	% of Globe
2004	0.31	0.14%	0.04%
2005	0.32	0.14%	0.04%
2006	0.34	0.14%	0.04%
2007	0.35	0.15%	0.04%
2008	0.37	0.15%	0.04%
2009	0.38	0.15%	0.04%
2010	0.39	0.15%	0.04%
2011	0.41	0.16%	0.04%
2012	0.43	0.16%	0.04%
2013	0.44	0.16%	0.04%
2014	0.46	0.16%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Trinidad and Tobago: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Port-of-Spain	767	0.17	45.67	0.07	0.02
San Fernando	1,010	0.10	26.77	0.04	0.01
Arima	1,075	0.09	22.83	0.03	0.01
Scarborough	1,635	0.02	4.72	0.01	0.00
<b>Total</b>		<b>0.38</b>	<b>100.00</b>	<b>0.15</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8 OCEANA

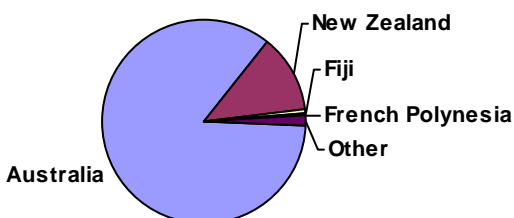
### 8.1 EXECUTIVE SUMMARY

#### Market Potential for Wide Area Networks (WAN) in Oceana (US\$ Million): 2009

Country	Latent Demand US\$ Million	% of Oceana
Australia	12.60	85.16%
New Zealand	1.84	12.44%
Fiji	0.08	0.56%
French Polynesia	0.08	0.51%
New Caledonia	0.05	0.35%
Guam	0.04	0.28%
Western Samoa	0.02	0.14%
The Northern Mariana Island	0.01	0.10%
Tonga	0.01	0.09%
Solomon Islands	0.01	0.09%
Vanuatu	0.01	0.08%
American Samoa	0.01	0.06%
Micronesia Federation	0.00	0.03%
Kiribati	0.00	0.03%
Cook Islands	0.00	0.02%
Palau	0.00	0.01%
Marshall Islands	0.00	0.01%
Nauru	0.00	0.01%
Wallis and Futuna	0.00	0.01%
Norfolk Island	0.00	0.01%
Pacific Islands Trust	0.00	0.00%
Christmas Island	0.00	0.00%
Tuvalu	0.00	0.00%
Niue	0.00	0.00%
Tokelau	0.00	0.00%
Other	0.00	0.00%
<b>Total</b>	<b>14.80</b>	<b>100.00%</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## Market Potential for Wide Area Networks (WAN) in Oceania (US\$ Million): 2009



### The Market for Wide Area Networks (WAN) in Oceania: 2004 - 2014

Year	US\$ Million	% of Globe
2004	12.70	1.42
2005	13.10	1.42
2006	13.51	1.41
2007	13.93	1.41
2008	14.36	1.40
2009	14.80	1.39
2010	15.25	1.39
2011	15.71	1.38
2012	16.19	1.37
2013	16.68	1.37
2014	17.18	1.36

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.2 AMERICAN SAMOA

### Wide Area Networks (WAN) (US\$ Million): American Samoa 2004 - 2014

Year	American Samoa	% of Region	% of Globe
2004	0.01	0.06%	0.00%
2005	0.01	0.06%	0.00%
2006	0.01	0.06%	0.00%
2007	0.01	0.06%	0.00%
2008	0.01	0.06%	0.00%
2009	0.01	0.06%	0.00%
2010	0.01	0.06%	0.00%
2011	0.01	0.06%	0.00%
2012	0.01	0.06%	0.00%
2013	0.01	0.06%	0.00%
2014	0.01	0.06%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**American Samoa: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Pago Pago	1,947	0.00	33.33	0.02	0.00
Fagatogo	1,996	0.00	22.22	0.01	0.00
Leone	1,997	0.00	22.22	0.01	0.00
Vaitogi	2,030	0.00	11.11	0.01	0.00
Utulei	2,031	0.00	11.11	0.01	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.06</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**8.3 AUSTRALIA****Wide Area Networks (WAN) (US\$ Million): Australia 2004 - 2014**

Year	Australia	% of Region	% of Globe
2004	10.78	84.87%	1.21%
2005	11.12	84.93%	1.20%
2006	11.48	84.99%	1.20%
2007	11.85	85.05%	1.20%
2008	12.22	85.11%	1.19%
2009	12.60	85.16%	1.19%
2010	12.99	85.22%	1.18%
2011	13.39	85.27%	1.18%
2012	13.81	85.32%	1.17%
2013	14.24	85.38%	1.17%
2014	14.68	85.43%	1.16%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Australia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Sydney	53	3.69	29.32	24.97	0.35
Melbourne	55	3.64	28.92	24.63	0.34
Brisbane	102	2.30	18.26	15.55	0.22
Perth	184	1.16	9.21	7.85	0.11
Adelaide	301	0.59	4.70	4.00	0.06
Canberra	429	0.40	3.15	2.69	0.04
Newcastle	727	0.19	1.49	1.27	0.02
Gold Coast	729	0.19	1.49	1.27	0.02
Hobart	889	0.13	1.03	0.88	0.01
Wollongong	1,055	0.09	0.73	0.62	0.01
Townsville	1,086	0.08	0.66	0.56	0.01
Darwin	1,171	0.07	0.55	0.47	0.01
Geelong	1,224	0.06	0.49	0.41	0.01
<b>Total</b>		<b>12.60</b>	<b>100.00</b>	<b>85.16</b>	<b>1.19</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.4 CHRISTMAS ISLAND

### Wide Area Networks (WAN) (US\$ Million): Christmas Island 2004 - 2014

Year	Christmas Island	% of Region	% of Globe
2004	0.00	0.00%	0.00%
2005	0.00	0.00%	0.00%
2006	0.00	0.00%	0.00%
2007	0.00	0.00%	0.00%
2008	0.00	0.00%	0.00%
2009	0.00	0.00%	0.00%
2010	0.00	0.00%	0.00%
2011	0.00	0.00%	0.00%
2012	0.00	0.00%	0.00%
2013	0.00	0.00%	0.00%
2014	0.00	0.00%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Christmas Island: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
The Settlement	2,052	0.00	100.00	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.5 COOK ISLANDS

### Wide Area Networks (WAN) (US\$ Million): Cook Islands 2004 - 2014

Year	Cook Islands	% of Region	% of Globe
2004	0.00	0.02%	0.00%
2005	0.00	0.02%	0.00%
2006	0.00	0.02%	0.00%
2007	0.00	0.02%	0.00%
2008	0.00	0.02%	0.00%
2009	0.00	0.02%	0.00%
2010	0.00	0.02%	0.00%
2011	0.00	0.02%	0.00%
2012	0.00	0.02%	0.00%
2013	0.00	0.02%	0.00%
2014	0.00	0.02%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

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**Cook Islands: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Avarua	1,939	0.00	100.00	0.02	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.02</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.6 FIJI

**Wide Area Networks (WAN) (US\$ Million): Fiji 2004 - 2014**

Year	Fiji	% of Region	% of Globe
2004	0.07	0.56%	0.01%
2005	0.07	0.56%	0.01%
2006	0.08	0.56%	0.01%
2007	0.08	0.56%	0.01%
2008	0.08	0.56%	0.01%
2009	0.08	0.56%	0.01%
2010	0.09	0.56%	0.01%
2011	0.09	0.56%	0.01%
2012	0.09	0.56%	0.01%
2013	0.09	0.56%	0.01%
2014	0.10	0.56%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Fiji: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Suva	1,127	0.08	90.91	0.51	0.01
Nadi	1,821	0.01	9.09	0.05	0.00
<b>Total</b>		<b>0.08</b>	<b>100.00</b>	<b>0.56</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.7 FRENCH POLYNESIA

### Wide Area Networks (WAN) (US\$ Million): French Polynesia 2004 - 2014

Year	French Polynesia	% of Region	% of Globe
2004	0.06	0.50%	0.01%
2005	0.07	0.50%	0.01%
2006	0.07	0.50%	0.01%
2007	0.07	0.51%	0.01%
2008	0.07	0.51%	0.01%
2009	0.08	0.51%	0.01%
2010	0.08	0.51%	0.01%
2011	0.08	0.52%	0.01%
2012	0.08	0.52%	0.01%
2013	0.09	0.52%	0.01%
2014	0.09	0.53%	0.01%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### French Polynesia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Papeete	1,417	0.04	52.17	0.27	0.00
Mahina	1,662	0.02	21.74	0.11	0.00
Papara	1,764	0.01	13.04	0.07	0.00
Mataiea	1,873	0.00	6.52	0.03	0.00
Afareaitu	1,923	0.00	4.35	0.02	0.00
Teahupoo	2,004	0.00	2.17	0.01	0.00
<b>Total</b>		<b>0.08</b>	<b>100.00</b>	<b>0.51</b>	<b>0.01</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.8 GUAM

### Wide Area Networks (WAN) (US\$ Million): Guam 2004 - 2014

Year	Guam	% of Region	% of Globe
2004	0.04	0.28%	0.00%
2005	0.04	0.28%	0.00%
2006	0.04	0.28%	0.00%
2007	0.04	0.28%	0.00%
2008	0.04	0.28%	0.00%
2009	0.04	0.28%	0.00%
2010	0.04	0.28%	0.00%
2011	0.04	0.27%	0.00%
2012	0.04	0.27%	0.00%
2013	0.05	0.27%	0.00%
2014	0.05	0.27%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Guam: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Dededo	1,598	0.02	49.80	0.14	0.00
Tamuning	1,750	0.01	26.17	0.07	0.00
Santa Rita	1,819	0.01	18.61	0.05	0.00
Talofofo	2,009	0.00	3.63	0.01	0.00
Agana	2,041	0.00	1.79	0.00	0.00
<b>Total</b>		<b>0.04</b>	<b>100.00</b>	<b>0.28</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**8.9 KIRIBATI****Wide Area Networks (WAN) (US\$ Million): Kiribati 2004 - 2014**

Year	Kiribati	% of Region	% of Globe
2004	0.00	0.03%	0.00%
2005	0.00	0.03%	0.00%
2006	0.00	0.03%	0.00%
2007	0.00	0.03%	0.00%
2008	0.00	0.03%	0.00%
2009	0.00	0.03%	0.00%
2010	0.00	0.03%	0.00%
2011	0.00	0.03%	0.00%
2012	0.00	0.02%	0.00%
2013	0.00	0.02%	0.00%
2014	0.00	0.02%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Kiribati: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Tarawa	1,903	0.00	100.00	0.03	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.03</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.10 MARSHALL ISLANDS

### Wide Area Networks (WAN) (US\$ Million): Marshall Islands 2004 - 2014

Year	Marshall Islands	% of Region	% of Globe
2004	0.00	0.01%	0.00%
2005	0.00	0.01%	0.00%
2006	0.00	0.01%	0.00%
2007	0.00	0.01%	0.00%
2008	0.00	0.01%	0.00%
2009	0.00	0.01%	0.00%
2010	0.00	0.01%	0.00%
2011	0.00	0.01%	0.00%
2012	0.00	0.01%	0.00%
2013	0.00	0.01%	0.00%
2014	0.00	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Marshall Islands: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Majuro	1,995	0.00	100.00	0.01	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.11 MICRONESIA FEDERATION

### Wide Area Networks (WAN) (US\$ Million): Micronesia Federation 2004 - 2014

Year	Micronesia Federation	% of Region	% of Globe
2004	0.00	0.03%	0.00%
2005	0.00	0.03%	0.00%
2006	0.00	0.03%	0.00%
2007	0.00	0.03%	0.00%
2008	0.00	0.03%	0.00%
2009	0.00	0.03%	0.00%
2010	0.00	0.03%	0.00%
2011	0.00	0.03%	0.00%
2012	0.00	0.03%	0.00%
2013	0.00	0.03%	0.00%
2014	0.00	0.03%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

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**Micronesia Federation: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Palikir	1,884	0.00	100.00	0.03	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.03</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.12 NAURU

**Wide Area Networks (WAN) (US\$ Million): Nauru 2004 - 2014**

Year	Nauru	% of Region	% of Globe
2004	0.00	0.01%	0.00%
2005	0.00	0.01%	0.00%
2006	0.00	0.01%	0.00%
2007	0.00	0.01%	0.00%
2008	0.00	0.01%	0.00%
2009	0.00	0.01%	0.00%
2010	0.00	0.01%	0.00%
2011	0.00	0.01%	0.00%
2012	0.00	0.01%	0.00%
2013	0.00	0.01%	0.00%
2014	0.00	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Nauru: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Yaren	2,025	0.00	100.00	0.01	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.13 NEW CALEDONIA

### Wide Area Networks (WAN) (US\$ Million): New Caledonia 2004 - 2014

Year	New Caledonia	% of Region	% of Globe
2004	0.05	0.36%	0.01%
2005	0.05	0.36%	0.01%
2006	0.05	0.35%	0.00%
2007	0.05	0.35%	0.00%
2008	0.05	0.35%	0.00%
2009	0.05	0.35%	0.00%
2010	0.05	0.35%	0.00%
2011	0.05	0.35%	0.00%
2012	0.06	0.34%	0.00%
2013	0.06	0.34%	0.00%
2014	0.06	0.34%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### New Caledonia: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Noumea	1,414	0.04	76.74	0.27	0.00
Dumbea	1,910	0.00	6.98	0.02	0.00
Canala	1,967	0.00	4.65	0.02	0.00
Bourail	1,968	0.00	4.65	0.02	0.00
Thio	1,999	0.00	3.49	0.01	0.00
Hienghene	2,020	0.00	2.33	0.01	0.00
Houailu	2,054	0.00	1.16	0.00	0.00
<b>Total</b>		<b>0.05</b>	<b>100.00</b>	<b>0.35</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.14 NEW ZEALAND

### Wide Area Networks (WAN) (US\$ Million): New Zealand 2004 - 2014

Year	New Zealand	% of Region	% of Globe
2004	1.62	12.72%	0.18%
2005	1.66	12.67%	0.18%
2006	1.70	12.61%	0.18%
2007	1.75	12.55%	0.18%
2008	1.79	12.50%	0.17%
2009	1.84	12.44%	0.17%
2010	1.89	12.39%	0.17%
2011	1.94	12.34%	0.17%
2012	1.99	12.29%	0.17%
2013	2.04	12.24%	0.17%
2014	2.09	12.18%	0.17%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



### New Zealand: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Auckland	259	0.70	38.01	4.73	0.07
Wellington	636	0.24	12.80	1.59	0.02
Christchurch	648	0.23	12.46	1.55	0.02
Hamilton	965	0.11	6.06	0.75	0.01
Napier-Hastings	1,100	0.08	4.32	0.54	0.01
Dunedin	1,107	0.08	4.25	0.53	0.01
Waitemata	1,161	0.07	3.87	0.48	0.01
Tauranga	1,256	0.06	3.15	0.39	0.01
Palmerston North	1,300	0.05	2.83	0.35	0.00
Rotorua	1,433	0.04	2.03	0.25	0.00
Nelson	1,445	0.04	1.94	0.24	0.00
Invercargill	1,449	0.03	1.89	0.24	0.00
New Plymouth	1,452	0.03	1.87	0.23	0.00
Whangarei	1,479	0.03	1.69	0.21	0.00
Wanganui	1,497	0.03	1.57	0.20	0.00
Others		0.02	1.25	0.16	0.00
<b>Total</b>		<b>1.84</b>	<b>100.00</b>	<b>12.44</b>	<b>0.17</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.15 NIUE

### Wide Area Networks (WAN) (US\$ Million): Niue 2004 - 2014

Year	Niue	% of Region	% of Globe
2004	0.00	0.00%	0.00%
2005	0.00	0.00%	0.00%
2006	0.00	0.00%	0.00%
2007	0.00	0.00%	0.00%
2008	0.00	0.00%	0.00%
2009	0.00	0.00%	0.00%
2010	0.00	0.00%	0.00%
2011	0.00	0.00%	0.00%
2012	0.00	0.00%	0.00%
2013	0.00	0.00%	0.00%
2014	0.00	0.00%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Niue: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Alofi	2,076	0.00	100.00	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.16 NORFOLK ISLAND

### Wide Area Networks (WAN) (US\$ Million): Norfolk Island 2004 - 2014

Year	Norfolk Island	% of Region	% of Globe
2004	0.00	0.01%	0.00%
2005	0.00	0.01%	0.00%
2006	0.00	0.01%	0.00%
2007	0.00	0.01%	0.00%
2008	0.00	0.01%	0.00%
2009	0.00	0.01%	0.00%
2010	0.00	0.01%	0.00%
2011	0.00	0.01%	0.00%
2012	0.00	0.01%	0.00%
2013	0.00	0.01%	0.00%
2014	0.00	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Norfolk Island: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Kingston	2,034	0.00	100.00	0.01	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.17 PALAU

### Wide Area Networks (WAN) (US\$ Million): Palau 2004 - 2014

Year	Palau	% of Region	% of Globe
2004	0.00	0.01%	0.00%
2005	0.00	0.01%	0.00%
2006	0.00	0.01%	0.00%
2007	0.00	0.01%	0.00%
2008	0.00	0.01%	0.00%
2009	0.00	0.01%	0.00%
2010	0.00	0.01%	0.00%
2011	0.00	0.01%	0.00%
2012	0.00	0.01%	0.00%
2013	0.00	0.01%	0.00%
2014	0.00	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Palau: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Koror	1,986	0.00	100.00	0.01	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**8.18 SOLOMON ISLANDS****Wide Area Networks (WAN) (US\$ Million): Solomon Islands 2004 - 2014**

Year	Solomon Islands	% of Region	% of Globe
2004	0.01	0.09%	0.00%
2005	0.01	0.09%	0.00%
2006	0.01	0.09%	0.00%
2007	0.01	0.09%	0.00%
2008	0.01	0.09%	0.00%
2009	0.01	0.09%	0.00%
2010	0.01	0.09%	0.00%
2011	0.01	0.09%	0.00%
2012	0.01	0.09%	0.00%
2013	0.01	0.09%	0.00%
2014	0.02	0.09%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Solomon Islands: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Honiara	1,711	0.01	100.00	0.09	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.09</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.19 THE NORTHERN MARIANA ISLAND

### Wide Area Networks (WAN) (US\$ Million): The Northern Mariana Island 2004 - 2014

Year	The Northern Mariana Island	% of Region	% of Globe
2004	0.01	0.10%	0.00%
2005	0.01	0.10%	0.00%
2006	0.01	0.10%	0.00%
2007	0.01	0.10%	0.00%
2008	0.01	0.10%	0.00%
2009	0.01	0.10%	0.00%
2010	0.02	0.10%	0.00%
2011	0.02	0.10%	0.00%
2012	0.02	0.10%	0.00%
2013	0.02	0.10%	0.00%
2014	0.02	0.10%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### The Northern Mariana Island: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Saipan	1,688	0.01	100.00	0.10	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.10</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.20 TOKELAU

### Wide Area Networks (WAN) (US\$ Million): Tokelau 2004 - 2014

Year	Tokelau	% of Region	% of Globe
2004	0.00	0.00%	0.00%
2005	0.00	0.00%	0.00%
2006	0.00	0.00%	0.00%
2007	0.00	0.00%	0.00%
2008	0.00	0.00%	0.00%
2009	0.00	0.00%	0.00%
2010	0.00	0.00%	0.00%
2011	0.00	0.00%	0.00%
2012	0.00	0.00%	0.00%
2013	0.00	0.00%	0.00%
2014	0.00	0.00%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Tokelau: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Tokelau	2,077	0.00	100.00	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**8.21 TONGA****Wide Area Networks (WAN) (US\$ Million): Tonga 2004 - 2014**

Year	Tonga	% of Region	% of Globe
2004	0.01	0.11%	0.00%
2005	0.01	0.11%	0.00%
2006	0.01	0.10%	0.00%
2007	0.01	0.10%	0.00%
2008	0.01	0.10%	0.00%
2009	0.01	0.09%	0.00%
2010	0.01	0.09%	0.00%
2011	0.01	0.09%	0.00%
2012	0.01	0.09%	0.00%
2013	0.01	0.08%	0.00%
2014	0.01	0.08%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Tonga: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Nuku'alofa	1,700	0.01	100.00	0.09	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.09</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.22 TUVALU

### Wide Area Networks (WAN) (US\$ Million): Tuvalu 2004 - 2014

Year	Tuvalu	% of Region	% of Globe
2004	0.00	0.00%	0.00%
2005	0.00	0.00%	0.00%
2006	0.00	0.00%	0.00%
2007	0.00	0.00%	0.00%
2008	0.00	0.00%	0.00%
2009	0.00	0.00%	0.00%
2010	0.00	0.00%	0.00%
2011	0.00	0.00%	0.00%
2012	0.00	0.00%	0.00%
2013	0.00	0.00%	0.00%
2014	0.00	0.00%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Tuvalu: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Funafuti	2,072	0.00	100.00	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.23 VANUATU

### Wide Area Networks (WAN) (US\$ Million): Vanuatu 2004 - 2014

Year	Vanuatu	% of Region	% of Globe
2004	0.01	0.08%	0.00%
2005	0.01	0.08%	0.00%
2006	0.01	0.08%	0.00%
2007	0.01	0.08%	0.00%
2008	0.01	0.08%	0.00%
2009	0.01	0.08%	0.00%
2010	0.01	0.08%	0.00%
2011	0.01	0.09%	0.00%
2012	0.01	0.09%	0.00%
2013	0.01	0.09%	0.00%
2014	0.02	0.09%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Vanuatu: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Port Vila	1,723	0.01	100.00	0.08	0.00
<b>Total</b>		<b>0.01</b>	<b>100.00</b>	<b>0.08</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**8.24 WALLIS AND FUTUNA****Wide Area Networks (WAN) (US\$ Million): Wallis and Futuna 2004 - 2014**

Year	Wallis and Futuna	% of Region	% of Globe
2004	0.00	0.01%	0.00%
2005	0.00	0.01%	0.00%
2006	0.00	0.01%	0.00%
2007	0.00	0.01%	0.00%
2008	0.00	0.01%	0.00%
2009	0.00	0.01%	0.00%
2010	0.00	0.01%	0.00%
2011	0.00	0.01%	0.00%
2012	0.00	0.01%	0.00%
2013	0.00	0.01%	0.00%
2014	0.00	0.01%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Wallis and Futuna: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Mata-Utu	2,026	0.00	100.00	0.01	0.00
<b>Total</b>		<b>0.00</b>	<b>100.00</b>	<b>0.01</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 8.25 WESTERN SAMOA

### Wide Area Networks (WAN) (US\$ Million): Western Samoa 2004 - 2014

Year	Western Samoa	% of Region	% of Globe
2004	0.02	0.13%	0.00%
2005	0.02	0.13%	0.00%
2006	0.02	0.13%	0.00%
2007	0.02	0.13%	0.00%
2008	0.02	0.14%	0.00%
2009	0.02	0.14%	0.00%
2010	0.02	0.14%	0.00%
2011	0.02	0.14%	0.00%
2012	0.02	0.14%	0.00%
2013	0.02	0.14%	0.00%
2014	0.02	0.14%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Western Samoa: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Apia	1,600	0.02	100.00	0.14	0.00
<b>Total</b>		<b>0.02</b>	<b>100.00</b>	<b>0.14</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



## 9 THE MIDDLE EAST

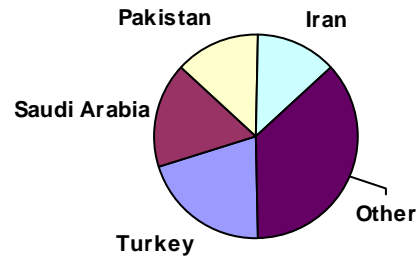
### 9.1 EXECUTIVE SUMMARY

#### Market Potential for Wide Area Networks (WAN) in the Middle East (US\$ Million): 2009

Country	Latent Demand US\$ Million	% of the Middle East
Turkey	11.03	20.26%
Saudi Arabia	9.44	17.33%
Pakistan	7.41	13.61%
Iran	7.02	12.88%
Israel	3.05	5.61%
The United Arab Emirates	2.45	4.50%
Kuwait	2.30	4.22%
Iraq	1.65	3.03%
Syrian Arab Republic	1.36	2.50%
Azerbaijan	1.25	2.30%
Uzbekistan	1.04	1.92%
Oman	1.01	1.86%
Qatar	0.97	1.77%
Yemen	0.86	1.58%
Turkmenistan	0.79	1.45%
Lebanon	0.66	1.20%
Afghanistan	0.59	1.07%
Jordan	0.47	0.86%
Bahrain	0.41	0.75%
Armenia	0.29	0.53%
Tajikistan	0.20	0.36%
Kyrgyzstan	0.17	0.32%
Palestine	0.04	0.08%
<b>Total</b>	<b>54.45</b>	<b>100.00%</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## Market Potential for Wide Area Networks (WAN) in the Middle East (US\$ Million): 2009



### The Market for Wide Area Networks (WAN) in the Middle East: 2004 - 2014

Year	US\$ Million	% of Globe
2004	44.77	5.02
2005	46.57	5.04
2006	48.44	5.06
2007	50.39	5.09
2008	52.41	5.11
2009	54.45	5.13
2010	56.58	5.15
2011	58.79	5.17
2012	61.09	5.19
2013	63.49	5.20
2014	65.99	5.22

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.2 AFGHANISTAN

### Wide Area Networks (WAN) (US\$ Million): Afghanistan 2004 - 2014

Year	Afghanistan	% of Region	% of Globe
2004	0.46	1.02%	0.05%
2005	0.48	1.03%	0.05%
2006	0.51	1.04%	0.05%
2007	0.53	1.05%	0.05%
2008	0.56	1.06%	0.05%
2009	0.59	1.07%	0.06%
2010	0.61	1.08%	0.06%
2011	0.64	1.09%	0.06%
2012	0.67	1.10%	0.06%
2013	0.71	1.11%	0.06%
2014	0.74	1.12%	0.06%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Afghanistan: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Kabul	447	0.38	64.17	0.69	0.04
Qandahar	1,243	0.06	10.18	0.11	0.01
Herat	1,350	0.05	7.98	0.09	0.00
Mazar-e-Sharif	1,450	0.03	5.90	0.06	0.00
Jalalabad	1,679	0.02	2.61	0.03	0.00
Qonduz	1,681	0.02	2.57	0.03	0.00
Baghlan	1,749	0.01	1.85	0.02	0.00
Meymaneh	1,754	0.01	1.80	0.02	0.00
Pol-e-Khomri	1,790	0.01	1.49	0.02	0.00
Ghazni	1,799	0.01	1.44	0.02	0.00
<b>Total</b>		<b>0.59</b>	<b>100.00</b>	<b>1.07</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**9.3 ARMENIA****Wide Area Networks (WAN) (US\$ Million): Armenia 2004 - 2014**

Year	Armenia	% of Region	% of Globe
2004	0.19	0.43%	0.02%
2005	0.21	0.45%	0.02%
2006	0.23	0.47%	0.02%
2007	0.25	0.49%	0.02%
2008	0.27	0.51%	0.03%
2009	0.29	0.53%	0.03%
2010	0.31	0.55%	0.03%
2011	0.34	0.57%	0.03%
2012	0.36	0.60%	0.03%
2013	0.39	0.62%	0.03%
2014	0.42	0.64%	0.03%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Armenia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Yerevan	789	0.16	56.57	0.30	0.02
Gyumri	1,517	0.03	9.39	0.05	0.00
Kirovakan	1,574	0.02	7.74	0.04	0.00
Hrazdan	1,800	0.01	2.89	0.02	0.00
Echmiadzin	1,807	0.01	2.75	0.01	0.00
Abovian	1,812	0.01	2.70	0.01	0.00
Kaphan	1,840	0.01	2.15	0.01	0.00
Hoktemberian	1,852	0.01	2.02	0.01	0.00
Charentsavan	1,876	0.00	1.65	0.01	0.00
Artashat	1,891	0.00	1.51	0.01	0.00
Kamo	1,893	0.00	1.47	0.01	0.00
Sevan	1,911	0.00	1.24	0.01	0.00
Goris	1,912	0.00	1.24	0.01	0.00
Others		0.01	4.40	0.02	0.00
<b>Total</b>		<b>0.29</b>	<b>100.00</b>	<b>0.53</b>	<b>0.03</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**9.4 AZERBAIJAN****Wide Area Networks (WAN) (US\$ Million): Azerbaijan 2004 - 2014**

Year	Azerbaijan	% of Region	% of Globe
2004	0.80	1.80%	0.09%
2005	0.88	1.89%	0.10%
2006	0.96	1.99%	0.10%
2007	1.05	2.09%	0.11%
2008	1.15	2.20%	0.11%
2009	1.25	2.30%	0.12%
2010	1.36	2.40%	0.12%
2011	1.48	2.51%	0.13%
2012	1.60	2.62%	0.14%
2013	1.74	2.74%	0.14%
2014	1.89	2.86%	0.15%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Azerbaijan: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Baku	223	0.87	69.28	1.59	0.08
Gyandzha	866	0.14	10.96	0.25	0.01
Sumgait	952	0.11	9.11	0.21	0.01
Mingechaur	1,451	0.03	2.76	0.06	0.00
Sheki	1,527	0.03	2.09	0.05	0.00
Nakhichevan	1,540	0.03	2.01	0.05	0.00
Lenkoran	1,592	0.02	1.66	0.04	0.00
Stepanakert	1,645	0.02	1.38	0.03	0.00
Shemakha	1,773	0.01	0.75	0.02	0.00
<b>Total</b>		<b>1.25</b>	<b>100.00</b>	<b>2.30</b>	<b>0.12</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**9.5 BAHRAIN****Wide Area Networks (WAN) (US\$ Million): Bahrain 2004 - 2014**

Year	Bahrain	% of Region	% of Globe
2004	0.33	0.73%	0.04%
2005	0.34	0.74%	0.04%
2006	0.36	0.74%	0.04%
2007	0.38	0.74%	0.04%
2008	0.39	0.75%	0.04%
2009	0.41	0.75%	0.04%
2010	0.43	0.76%	0.04%
2011	0.45	0.76%	0.04%
2012	0.47	0.76%	0.04%
2013	0.49	0.77%	0.04%
2014	0.51	0.77%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Bahrain: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Manama	698	0.20	49.67	0.37	0.02
Muharraq	996	0.10	25.49	0.19	0.01
Jidd Hafs	1,208	0.06	15.69	0.12	0.01
Isa Town	1,506	0.03	6.86	0.05	0.00
Al Hidd	1,774	0.01	2.29	0.02	0.00
<b>Total</b>		<b>0.41</b>	<b>100.00</b>	<b>0.75</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.6 IRAN

### Wide Area Networks (WAN) (US\$ Million): Iran 2004 - 2014

Year	Iran	% of Region	% of Globe
2004	5.96	13.30%	0.67%
2005	6.16	13.22%	0.67%
2006	6.36	13.13%	0.67%
2007	6.58	13.05%	0.66%
2008	6.79	12.96%	0.66%
2009	7.02	12.88%	0.66%
2010	7.24	12.80%	0.66%
2011	7.48	12.72%	0.66%
2012	7.72	12.64%	0.66%
2013	7.97	12.56%	0.65%
2014	8.23	12.48%	0.65%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Iran: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Tehran	74	3.01	42.86	5.52	0.28
Mashad	254	0.73	10.38	1.34	0.07
Isfahan	363	0.49	7.00	0.90	0.05
Tabriz	365	0.48	6.89	0.89	0.05
Shiraz	408	0.42	6.01	0.77	0.04
Ahvaz	534	0.29	4.11	0.53	0.03
Bakhtaran	546	0.28	3.98	0.51	0.03
Qom	569	0.27	3.85	0.50	0.03
Karaj	590	0.26	3.74	0.48	0.02
Orumiyeh	824	0.15	2.13	0.28	0.01
Abadan	835	0.15	2.09	0.27	0.01
Rasht	843	0.14	2.06	0.27	0.01
Kerman	892	0.13	1.82	0.23	0.01
Yazd	949	0.11	1.63	0.21	0.01
Bandar 'Abbas	1,017	0.10	1.43	0.18	0.01
<b>Total</b>		<b>7.02</b>	<b>100.00</b>	<b>12.88</b>	<b>0.66</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.7 IRAQ

### Wide Area Networks (WAN) (US\$ Million): Iraq 2004 - 2014

Year	Iraq	% of Region	% of Globe
2004	1.38	3.08%	0.15%
2005	1.43	3.07%	0.15%
2006	1.48	3.06%	0.15%
2007	1.54	3.05%	0.16%
2008	1.59	3.04%	0.16%
2009	1.65	3.03%	0.16%
2010	1.71	3.02%	0.16%
2011	1.77	3.02%	0.16%
2012	1.84	3.01%	0.16%
2013	1.90	3.00%	0.16%
2014	1.97	2.99%	0.16%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Iraq: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Baghdad	211	0.93	56.60	1.72	0.09
Basra	904	0.12	7.51	0.23	0.01
Mosul	946	0.11	6.95	0.21	0.01
Kirkuk	981	0.11	6.51	0.20	0.01
Irbil	1,185	0.07	4.07	0.12	0.01
As-Sulaymaniyah	1,271	0.06	3.40	0.10	0.01
An-Najaf	1,326	0.05	2.96	0.09	0.00
Al-Hillah	1,380	0.04	2.62	0.08	0.00
Karbala	1,435	0.04	2.25	0.07	0.00
An-Nasiriyah	1,509	0.03	1.69	0.05	0.00
Ar-Ramadi	1,514	0.03	1.67	0.05	0.00
Al-Amarah	1,523	0.03	1.61	0.05	0.00
Ba'qubah	1,567	0.02	1.40	0.04	0.00
Samarra	1,721	0.01	0.75	0.02	0.00
<b>Total</b>		<b>1.65</b>	<b>100.00</b>	<b>3.03</b>	<b>0.16</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.8 ISRAEL

### Wide Area Networks (WAN) (US\$ Million): Israel 2004 - 2014

Year	Israel	% of Region	% of Globe
2004	2.54	5.68%	0.28%
2005	2.64	5.66%	0.29%
2006	2.74	5.65%	0.29%
2007	2.84	5.64%	0.29%
2008	2.95	5.62%	0.29%
2009	3.05	5.61%	0.29%
2010	3.17	5.60%	0.29%
2011	3.28	5.58%	0.29%
2012	3.40	5.57%	0.29%
2013	3.53	5.55%	0.29%
2014	3.65	5.54%	0.29%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Israel: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Jerusalem	221	0.88	28.97	1.63	0.08
Tel Aviv	296	0.60	19.77	1.11	0.06
Haifa	410	0.42	13.77	0.77	0.04
Holon	579	0.26	8.65	0.49	0.02
Petach-Tikva	620	0.25	8.09	0.45	0.02
Ramat Gan	666	0.22	7.16	0.40	0.02
Beersheba	671	0.22	7.10	0.40	0.02
Bene Beraq	705	0.20	6.49	0.36	0.02
<b>Total</b>		<b>3.05</b>	<b>100.00</b>	<b>5.61</b>	<b>0.29</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.9 JORDAN

### Wide Area Networks (WAN) (US\$ Million): Jordan 2004 - 2014

Year	Jordan	% of Region	% of Globe
2004	0.38	0.85%	0.04%
2005	0.40	0.86%	0.04%
2006	0.41	0.86%	0.04%
2007	0.43	0.86%	0.04%
2008	0.45	0.86%	0.04%
2009	0.47	0.86%	0.04%
2010	0.49	0.86%	0.04%
2011	0.50	0.86%	0.04%
2012	0.52	0.86%	0.04%
2013	0.55	0.86%	0.04%
2014	0.57	0.86%	0.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**Jordan: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Amman	597	0.26	55.97	0.48	0.02
Zarqa	1,068	0.09	19.09	0.16	0.01
Irbid	1,342	0.05	10.07	0.09	0.00
Salt	1,422	0.04	8.33	0.07	0.00
Ajlun	1,708	0.01	2.92	0.03	0.00
Jarash	1,777	0.01	1.99	0.02	0.00
Madaba	1,822	0.01	1.62	0.01	0.00
<b>Total</b>		<b>0.47</b>	<b>100.00</b>	<b>0.86</b>	<b>0.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**9.10 KUWAIT****Wide Area Networks (WAN) (US\$ Million): Kuwait 2004 - 2014**

Year	Kuwait	% of Region	% of Globe
2004	1.88	4.21%	0.21%
2005	1.96	4.21%	0.21%
2006	2.04	4.21%	0.21%
2007	2.12	4.21%	0.21%
2008	2.21	4.22%	0.22%
2009	2.30	4.22%	0.22%
2010	2.39	4.22%	0.22%
2011	2.48	4.22%	0.22%
2012	2.57	4.21%	0.22%
2013	2.68	4.21%	0.22%
2014	2.78	4.21%	0.22%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Kuwait: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Salmiya	241	0.78	33.77	1.42	0.07
Hawalli	252	0.73	32.01	1.35	0.07
Jahra	314	0.56	24.50	1.03	0.05
Kuwait	660	0.22	9.71	0.41	0.02
<b>Total</b>		<b>2.30</b>	<b>100.00</b>	<b>4.22</b>	<b>0.22</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.11 KYRGYZSTAN

### Wide Area Networks (WAN) (US\$ Million): Kyrgyzstan 2004 - 2014

Year	Kyrgyzstan	% of Region	% of Globe
2004	0.14	0.31%	0.02%
2005	0.14	0.31%	0.02%
2006	0.15	0.31%	0.02%
2007	0.16	0.31%	0.02%
2008	0.17	0.32%	0.02%
2009	0.17	0.32%	0.02%
2010	0.18	0.32%	0.02%
2011	0.19	0.32%	0.02%
2012	0.20	0.32%	0.02%
2013	0.20	0.32%	0.02%
2014	0.21	0.32%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Kyrgyzstan: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Bishkek	984	0.11	62.08	0.20	0.01
Osh	1,444	0.04	20.92	0.07	0.00
Dzhalal-Abad	1,761	0.01	5.80	0.02	0.00
Przhevalsk	1,772	0.01	5.50	0.02	0.00
Kyzyl-Kiya	1,858	0.01	3.14	0.01	0.00
Naryn	1,888	0.00	2.55	0.01	0.00
<b>Total</b>		<b>0.17</b>	<b>100.00</b>	<b>0.32</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.12 LEBANON

### Wide Area Networks (WAN) (US\$ Million): Lebanon 2004 - 2014

Year	Lebanon	% of Region	% of Globe
2004	0.62	1.38%	0.07%
2005	0.62	1.34%	0.07%
2006	0.63	1.30%	0.07%
2007	0.64	1.27%	0.06%
2008	0.65	1.24%	0.06%
2009	0.66	1.20%	0.06%
2010	0.66	1.17%	0.06%
2011	0.67	1.14%	0.06%
2012	0.68	1.11%	0.06%
2013	0.69	1.09%	0.06%
2014	0.70	1.06%	0.06%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Lebanon: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Beirut	406	0.43	64.82	0.78	0.04
Tripoli	851	0.14	21.61	0.26	0.01
Zahle	1,266	0.06	8.64	0.10	0.01
Sidon	1,504	0.03	4.32	0.05	0.00
Tyre	1,900	0.00	0.61	0.01	0.00
<b>Total</b>		<b>0.66</b>	<b>100.00</b>	<b>1.20</b>	<b>0.06</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**9.13 OMAN****Wide Area Networks (WAN) (US\$ Million): Oman 2004 - 2014**

Year	Oman	% of Region	% of Globe
2004	0.84	1.87%	0.09%
2005	0.87	1.87%	0.09%
2006	0.90	1.87%	0.09%
2007	0.94	1.86%	0.09%
2008	0.98	1.86%	0.10%
2009	1.01	1.86%	0.10%
2010	1.05	1.86%	0.10%
2011	1.09	1.85%	0.10%
2012	1.13	1.85%	0.10%
2013	1.17	1.85%	0.10%
2014	1.22	1.84%	0.10%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Oman: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Muscat	307	0.58	57.47	1.07	0.05
Matrah	707	0.20	19.54	0.36	0.02
Nizwa	940	0.12	11.49	0.21	0.01
Salala	941	0.12	11.49	0.21	0.01
<b>Total</b>		<b>1.01</b>	<b>100.00</b>	<b>1.86</b>	<b>0.10</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.14 PAKISTAN

### Wide Area Networks (WAN) (US\$ Million): Pakistan 2004 - 2014

Year	Pakistan	% of Region	% of Globe
2004	5.98	13.35%	0.67%
2005	6.24	13.41%	0.68%
2006	6.52	13.46%	0.68%
2007	6.81	13.52%	0.69%
2008	7.11	13.57%	0.69%
2009	7.41	13.61%	0.70%
2010	7.73	13.66%	0.70%
2011	8.06	13.71%	0.71%
2012	8.40	13.75%	0.71%
2013	8.76	13.79%	0.72%
2014	9.13	13.83%	0.72%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Pakistan: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Karachi	76	2.85	38.40	5.23	0.27
Lahore	142	1.61	21.77	2.96	0.15
Faisalabad	297	0.60	8.14	1.11	0.06
Rawalpindi	398	0.43	5.86	0.80	0.04
Hyderabad	418	0.41	5.54	0.75	0.04
Multan	427	0.40	5.38	0.73	0.04
Gujranwala	458	0.36	4.86	0.66	0.03
Peshawar	510	0.31	4.17	0.57	0.03
Sialkot	784	0.17	2.23	0.30	0.02
Sargodha	801	0.16	2.15	0.29	0.01
Islamabad	966	0.11	1.50	0.20	0.01
<b>Total</b>		<b>7.41</b>	<b>100.00</b>	<b>13.61</b>	<b>0.70</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.15 PALESTINE

### Wide Area Networks (WAN) (US\$ Million): Palestine 2004 - 2014

Year	Palestine	% of Region	% of Globe
2004	0.04	0.09%	0.00%
2005	0.04	0.09%	0.00%
2006	0.04	0.08%	0.00%
2007	0.04	0.08%	0.00%
2008	0.04	0.08%	0.00%
2009	0.04	0.08%	0.00%
2010	0.05	0.08%	0.00%
2011	0.05	0.08%	0.00%
2012	0.05	0.08%	0.00%
2013	0.05	0.08%	0.00%
2014	0.05	0.08%	0.00%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Palestine: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
West Bank	1,505	0.03	63.56	0.05	0.00
Gaza Strip	1,664	0.02	36.44	0.03	0.00
<b>Total</b>		<b>0.04</b>	<b>100.00</b>	<b>0.08</b>	<b>0.00</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.16 QATAR

### Wide Area Networks (WAN) (US\$ Million): Qatar 2004 - 2014

Year	Qatar	% of Region	% of Globe
2004	0.75	1.67%	0.08%
2005	0.79	1.69%	0.09%
2006	0.83	1.71%	0.09%
2007	0.87	1.73%	0.09%
2008	0.92	1.75%	0.09%
2009	0.97	1.77%	0.09%
2010	1.01	1.79%	0.09%
2011	1.06	1.81%	0.09%
2012	1.12	1.83%	0.09%
2013	1.17	1.85%	0.10%
2014	1.23	1.87%	0.10%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Qatar: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Doha	209	0.97	100.00	1.77	0.09
<b>Total</b>		<b>0.97</b>	<b>100.00</b>	<b>1.77</b>	<b>0.09</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.17 SAUDI ARABIA

**Wide Area Networks (WAN) (US\$ Million): Saudi Arabia 2004 - 2014**

Year	Saudi Arabia	% of Region	% of Globe
2004	7.93	17.71%	0.89%
2005	8.21	17.63%	0.89%
2006	8.50	17.56%	0.89%
2007	8.81	17.48%	0.89%
2008	9.12	17.40%	0.89%
2009	9.44	17.33%	0.89%
2010	9.76	17.25%	0.89%
2011	10.10	17.18%	0.89%
2012	10.45	17.10%	0.89%
2013	10.81	17.02%	0.89%
2014	11.18	16.94%	0.88%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Saudi Arabia: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Jiddah	58	3.52	37.31	6.47	0.33
Riyadh	146	1.57	16.59	2.88	0.15
Mecca	175	1.29	13.68	2.37	0.12
Taif	258	0.70	7.46	1.29	0.07
Medina	266	0.68	7.21	1.25	0.06
Dammam	370	0.47	4.98	0.86	0.04
Hufuf	634	0.24	2.51	0.44	0.02
Haradh	642	0.23	2.49	0.43	0.02
Tabuk	756	0.18	1.87	0.32	0.02
Buraydah	786	0.16	1.74	0.30	0.02
Al-Mubarraz	896	0.13	1.34	0.23	0.01
Khamis-Mushait	936	0.12	1.24	0.22	0.01
Jizan	1,116	0.08	0.82	0.14	0.01
Abha	1,165	0.07	0.75	0.13	0.01
<b>Total</b>		<b>9.44</b>	<b>100.00</b>	<b>17.33</b>	<b>0.89</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.18 SYRIAN ARAB REPUBLIC

### Wide Area Networks (WAN) (US\$ Million): Syrian Arab Republic 2004 - 2014

Year	Syrian Arab Republic	% of Region	% of Globe
2004	1.18	2.64%	0.13%
2005	1.22	2.61%	0.13%
2006	1.25	2.58%	0.13%
2007	1.29	2.55%	0.13%
2008	1.32	2.52%	0.13%
2009	1.36	2.50%	0.13%
2010	1.40	2.47%	0.13%
2011	1.44	2.44%	0.13%
2012	1.47	2.41%	0.13%
2013	1.52	2.39%	0.12%
2014	1.56	2.36%	0.12%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Syrian Arab Republic: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Damascus	379	0.46	33.99	0.85	0.04
Aleppo	397	0.43	31.99	0.80	0.04
Homs	812	0.15	11.34	0.28	0.01
Latakia	1,076	0.09	6.34	0.16	0.01
Hama	1,120	0.08	5.63	0.14	0.01
Dayr az-Zawr	1,465	0.03	2.42	0.06	0.00
Raqqa	1,478	0.03	2.29	0.06	0.00
Hasakeh	1,528	0.03	1.92	0.05	0.00
Tartus	1,614	0.02	1.39	0.03	0.00
Idlib	1,626	0.02	1.37	0.03	0.00
Dar'a	1,636	0.02	1.32	0.03	0.00
<b>Total</b>		<b>1.36</b>	<b>100.00</b>	<b>2.50</b>	<b>0.13</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.19 TAJIKISTAN

### Wide Area Networks (WAN) (US\$ Million): Tajikistan 2004 - 2014

Year	Tajikistan	% of Region	% of Globe
2004	0.15	0.34%	0.02%
2005	0.16	0.35%	0.02%
2006	0.17	0.35%	0.02%
2007	0.18	0.36%	0.02%
2008	0.19	0.36%	0.02%
2009	0.20	0.36%	0.02%
2010	0.21	0.37%	0.02%
2011	0.22	0.37%	0.02%
2012	0.23	0.38%	0.02%
2013	0.24	0.38%	0.02%
2014	0.25	0.38%	0.02%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Tajikistan: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Dushanbe	898	0.13	63.64	0.23	0.01
Khodzhent	1,455	0.03	17.11	0.06	0.00
Kulyab	1,710	0.01	6.63	0.02	0.00
Kurgan-Tyube	1,733	0.01	5.88	0.02	0.00
Kanibadam	1,848	0.01	2.99	0.01	0.00
Tursunzade	1,885	0.00	2.25	0.01	0.00
Khorog	1,938	0.00	1.50	0.01	0.00
<b>Total</b>		<b>0.20</b>	<b>100.00</b>	<b>0.36</b>	<b>0.02</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.20 THE UNITED ARAB EMIRATES

### Wide Area Networks (WAN) (US\$ Million): The United Arab Emirates 2004 - 2014

Year	The United Arab Emirates	% of Region	% of Globe
2004	1.87	4.17%	0.21%
2005	1.97	4.23%	0.21%
2006	2.08	4.30%	0.22%
2007	2.20	4.37%	0.22%
2008	2.32	4.43%	0.23%
2009	2.45	4.50%	0.23%
2010	2.58	4.56%	0.23%
2011	2.72	4.62%	0.24%
2012	2.86	4.69%	0.24%
2013	3.02	4.75%	0.25%
2014	3.18	4.82%	0.25%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)



**The United Arab Emirates: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Dubai	222	0.87	35.47	1.59	0.08
Abu Dhabi	235	0.79	32.40	1.46	0.07
Sharjah	421	0.41	16.67	0.75	0.04
Ras al-Khaimah	442	0.38	15.47	0.70	0.04
<b>Total</b>		<b>2.45</b>	<b>100.00</b>	<b>4.50</b>	<b>0.23</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**9.21 TURKEY****Wide Area Networks (WAN) (US\$ Million): Turkey 2004 - 2014**

Year	Turkey	% of Region	% of Globe
2004	9.17	20.49%	1.03%
2005	9.52	20.45%	1.03%
2006	9.88	20.40%	1.03%
2007	10.26	20.36%	1.04%
2008	10.64	20.31%	1.04%
2009	11.03	20.26%	1.04%
2010	11.43	20.21%	1.04%
2011	11.85	20.16%	1.04%
2012	12.28	20.11%	1.04%
2013	12.73	20.06%	1.04%
2014	13.20	20.00%	1.04%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Turkey: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Istanbul	45	4.24	38.42	7.78	0.40
Izmir	171	1.32	12.01	2.43	0.12
Ankara	176	1.27	11.51	2.33	0.12
Bursa	277	0.66	5.94	1.20	0.06
Adana	304	0.59	5.30	1.07	0.06
Mersin (Icel)	347	0.51	4.65	0.94	0.05
Antalya	357	0.50	4.54	0.92	0.05
Konya	388	0.45	4.07	0.82	0.04
Samsun	574	0.27	2.42	0.49	0.03
Gaziantep	610	0.25	2.28	0.46	0.02
Kayseri	665	0.22	1.99	0.40	0.02
Diyarbakir	672	0.22	1.97	0.40	0.02
Eskisehir	674	0.22	1.95	0.40	0.02
Sanli-Urfa	766	0.17	1.57	0.32	0.02
Malatya	819	0.15	1.37	0.28	0.01
<b>Total</b>		<b>11.03</b>	<b>100.00</b>	<b>20.26</b>	<b>1.04</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.22 TURKMENISTAN

### Wide Area Networks (WAN) (US\$ Million): Turkmenistan 2004 - 2014

Year	Turkmenistan	% of Region	% of Globe
2004	0.63	1.40%	0.07%
2005	0.66	1.41%	0.07%
2006	0.69	1.42%	0.07%
2007	0.72	1.43%	0.07%
2008	0.75	1.44%	0.07%
2009	0.79	1.45%	0.07%
2010	0.83	1.46%	0.08%
2011	0.86	1.47%	0.08%
2012	0.90	1.48%	0.08%
2013	0.95	1.49%	0.08%
2014	0.99	1.50%	0.08%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

### Turkmenistan: Wide Area Networks (WAN) in 2009, US\$ Million

City	World Rank	US \$ mln	%Country	%Region	%World
Ashgabat	399	0.43	54.82	0.80	0.04
Chardzhou	760	0.18	22.18	0.32	0.02
Tashauz	919	0.12	15.43	0.22	0.01
Krasnovodsk	1,240	0.06	7.58	0.11	0.01
<b>Total</b>		<b>0.79</b>	<b>100.00</b>	<b>1.45</b>	<b>0.07</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

## 9.23 UZBEKISTAN

### Wide Area Networks (WAN) (US\$ Million): Uzbekistan 2004 - 2014

Year	Uzbekistan	% of Region	% of Globe
2004	0.80	1.80%	0.09%
2005	0.85	1.82%	0.09%
2006	0.89	1.84%	0.09%
2007	0.94	1.87%	0.10%
2008	0.99	1.89%	0.10%
2009	1.04	1.92%	0.10%
2010	1.10	1.94%	0.10%
2011	1.15	1.96%	0.10%
2012	1.21	1.99%	0.10%
2013	1.28	2.01%	0.10%
2014	1.34	2.03%	0.11%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Uzbekistan: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Tashkent	402	0.43	41.18	0.79	0.04
Samarkand	935	0.12	11.24	0.22	0.01
Namangan	1,210	0.06	6.12	0.12	0.01
Andizhan	1,229	0.06	5.82	0.11	0.01
Bukhara	1,351	0.05	4.45	0.09	0.00
Fergana	1,404	0.04	3.97	0.08	0.00
Kokand	1,431	0.04	3.62	0.07	0.00
Nukus	1,447	0.04	3.36	0.06	0.00
Karshi	1,470	0.03	3.10	0.06	0.00
Chirchik	1,471	0.03	3.10	0.06	0.00
Angren	1,519	0.03	2.60	0.05	0.00
Urgench	1,524	0.03	2.54	0.05	0.00
Margilan	1,532	0.03	2.48	0.05	0.00
Almalyk	1,561	0.02	2.26	0.04	0.00
Navoi	1,577	0.02	2.13	0.04	0.00
Others		0.02	2.03	0.04	0.00
<b>Total</b>		<b>1.04</b>	<b>100.00</b>	<b>1.92</b>	<b>0.10</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**9.24 YEMEN****Wide Area Networks (WAN) (US\$ Million): Yemen 2004 - 2014**

Year	Yemen	% of Region	% of Globe
2004	0.75	1.68%	0.08%
2005	0.77	1.66%	0.08%
2006	0.79	1.64%	0.08%
2007	0.82	1.62%	0.08%
2008	0.84	1.60%	0.08%
2009	0.86	1.58%	0.08%
2010	0.88	1.56%	0.08%
2011	0.91	1.55%	0.08%
2012	0.93	1.53%	0.08%
2013	0.96	1.51%	0.08%
2014	0.98	1.49%	0.08%

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

**Yemen: Wide Area Networks (WAN) in 2009, US\$ Million**

City	World Rank	US \$ mln	%Country	%Region	%World
Sanaa	535	0.29	33.39	0.53	0.03
Aden	676	0.21	24.86	0.39	0.02
Taizz	926	0.12	13.92	0.22	0.01
Hodeida	997	0.10	12.12	0.19	0.01
Mukalla	1,001	0.10	12.04	0.19	0.01
Dhamar	1,599	0.02	2.35	0.04	0.00
El Beida	1,846	0.01	0.70	0.01	0.00
Hajja	1,860	0.01	0.63	0.01	0.00
<b>Total</b>		<b>0.86</b>	<b>100.00</b>	<b>1.58</b>	<b>0.08</b>

Source: Philip M. Parker, INSEAD, copyright 2008, [www.icongrouponline.com](http://www.icongrouponline.com)

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