

# **ICT Sector Performance Review**

## **For the Philippines**

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### **List of Abbreviations**

CICT – Commission on Information and Communication Technologies

DOTC – Department of Transportation and Communications

EO – Executive Order

ICT- Information and Communication technologies

LGU – Local Government Unit

NEDA – National Economic Development Authority

NCC- National Computer Center

NTC – National Telecommunications Commission

PLDT – Philippines Long Distance Telephone Company

SAS – Service Area Scheme

TELOF – Telecommunications Office

TRE – Telecommunications Regulatory Environment

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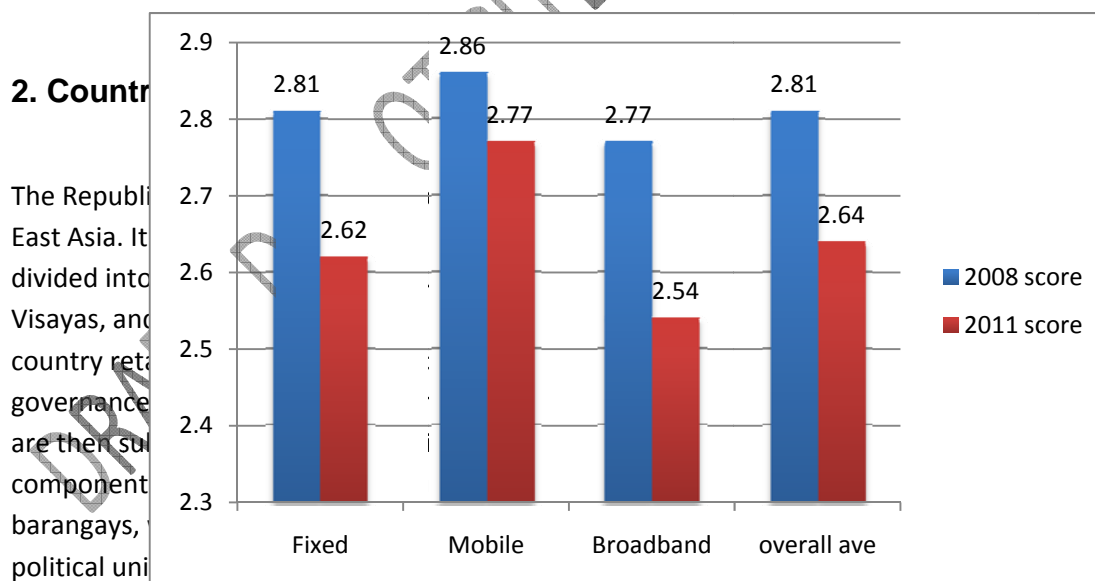
## 1. Executive Summary

Between February 2010 and January 2011, the most significant event in the telecommunications regulatory environment in the Philippines was the political change in the nation's leadership. On May 2010, Benigno Aquino III became the President of the republic. The change of leadership meant that the President could appoint new officials to the National Telecommunications Commission (NTC) and the Commission on Information and Communication Technology.

President Aquino chose to retain the NTC Commissioner from the previous administration, while also appointing a new Chairman to the CICT, Atty. Ivan Uy. In his first State of the Nation address, President Aquino also asked Congress to prioritize the passage of an anti-trust bill.

Results of the TRE Survey for 2011 shows that stakeholders perceive the TRE in the Philippines to have declined overall, and in every segment (Fixed, Mobile and Broadband) (see Fig. 1 below). More specifically, only market entry and interconnection for Mobiles had a better score compared to the last survey conducted in 2008. The segment with the biggest decline, and with the lowest overall score was in the broadband sector. This is indicative of the area where most of the telecommunication providers see as their primary growth area. This is also the service that a growing segment of the market is increasingly becoming more concerned with. As an emerging field, it is also the area where policy has not yet caught up with the issues associated with the technology. Emerging concerns include access to frequencies, establishing standards for service quality, and the perennial question of universal access.

Figure 1: Philippine TRE 2008 vs. 2011



The Republic of the Philippines is located in Southeast Asia. It is divided into three main regions: Luzon, Visayas, and Mindanao. The country's governance is a unitary system, where the national government is the primary authority, and the local government units (LGUs) are the primary component units. The LGUs are divided into provinces, cities, municipalities, and barangays, which are the smallest political units.

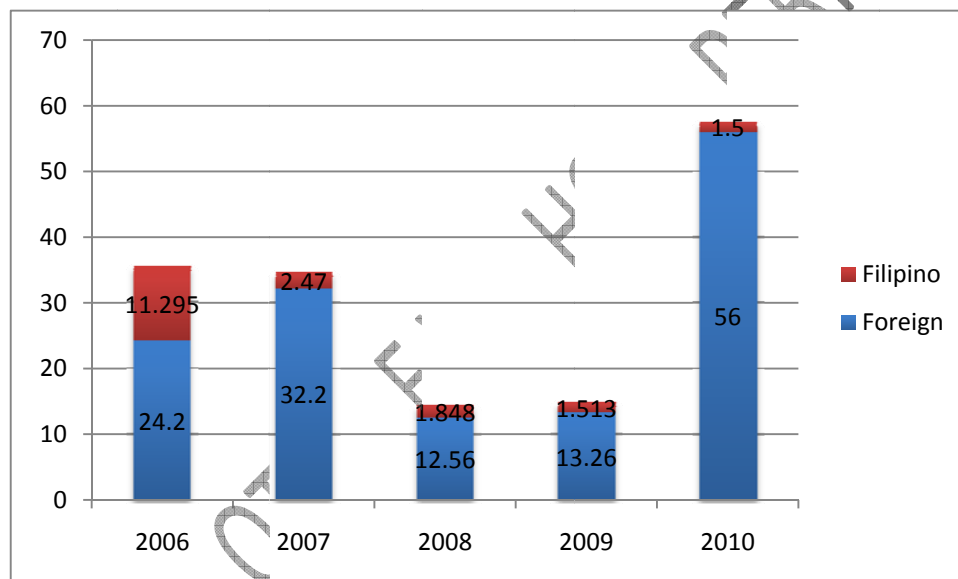
The Philippines has a population of approximately 102 million in 2011. Economic growth in the Philippines has averaged 4.5% per year since 2001. In 2010, the National Economic Development

Authority (NEDA) reported that country's GDP grew by 7.3%, while its GNP grew by 7.2%. This was a big improvement from the 1.1% in GDP and 4.0% in GNP growths posted in 2009.

### The Role of ICT in the economy

The government considers the information and communication technology (ICT) sector as an important driver towards national development. From 2006 to 2010, more than Php156 Billion was invested in ICT-related industries in the Philippines. More than 88% of this ICT-related investments were invested by foreigners (see Fig. 2).

**Figure 2: ICT Investments in Billions (Pesos)**



Source: NCSB

ICT-related investments declined in 2008 and 2009 due to the global economic depression. However, even then, with reduced investments, revenues in the industry continued to rise, earning US\$7.2B in 2009. In 2010, with the global economy slowly recovering, investments in the sector made by foreign and Filipino nationals increased almost four-fold to PhP 57.5 billion. Out of this amount, PhP 56.0 billion or 97.4 percent came from foreign investors.

### 3. Market Structure and Market Dynamics

For most of the 20<sup>th</sup> century, the Philippine telecommunications industry was a private monopoly of the Philippine Long Distance Co. (PLDT). Over this period, the sector was characterized by low telephone penetration rates and by the long waiting time to own a telephone. Due to underinvestment in the

sector, a huge telephone backlog existed, telephone service was generally unavailable and where it was, the service was unreliable (Aldaba 2011)<sup>1</sup>. Over the years it consolidated its monopoly on the industry while having little incentive to expand its network and improve services. During those years, however, it was complemented by a government backbone that provided limited services to underserved regions in the country. During this 'monopolistic period', the country's telecommunications sector was characterized by very low telephone density and inefficient management, with waiting times for telephone installations measured in years (Townsend & Alampay 2011).

In 1990, the government's National Telecommunications Development Plan (1990-2010) sought to divest the state of its role in the delivery of telecommunications services through privatization and to encourage growth through more competition. At the same time, however, the plan was for government to continue facilitating official development assistance (ODA) for telecom projects in underserved and economically unviable areas.

While there were liberalization initiatives for the sector in the 1980s, only in 1993, with the issuance of Executive Orders (EO) 59 and 109, did real competition emerge. The former required mandatory interconnection among telecommunication providers, while the latter introduced service obligations among international gateway facility (IGF) providers and cellular mobile telephone service (CMTS) providers through a "service area scheme" (SAS). Under the SAS, new telecommunications franchises that were granted had an obligation to construct 300,000 to 400,000 fixed lines at a ratio of one line in a rural area for every ten in an urban area.

These policies to liberalize the provision of basic telecommunication services, brought with it the entry of new players. This led to a much faster growth in the industry as foreign investment increased and new services emerged. This though would not have happened had not technological advances in mobile technology made real competition in the sector possible (See Figure 3).

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<sup>1</sup> <http://www.bworldonline.com/content.php?section=Opinion&title=PLDT-Sun-acquisition&id=29109>

**Figure 3: Fixed, Mobile and Internet Subscription 1992-2008**

However, despite the entry of new players (ie Bayantel, Globe, Digitel, SMART), PLDT continued to dominate the industry having owned the backbone network and accounting for the largest share in the total number of fixed lines. With this, it was able to influence the speed, terms, conditions for interconnection and for revenue-sharing arrangements (Aldaba 2011a).

Eventually, as mobile technologies improved, the mobile phone industry then started to grow exponentially faster than the fixed line business. This transformed the landscape in the sector. The First Pacific group, which owned SMART, became the leader in the cellular market. It then bought control of PLDT and consolidated its position in the Philippine telecommunications industry by synthesizing the operations of PLDT and Smart. Combined with PLDT's Piltel, it also then had a combined share of 68% of the total number of cellular mobile telephone subscribers and 43% of the total number of installed lines, or about 48% of all phone subscribers (mobiles and fixed combined).

After the consolidation, PLDT-Smart and Globe, emerged as the top two telecommunications companies in the country. Competition was limited as the two telecommunications giants offered basically the same prices for their services. For instance, text messages cost P1 each. In 2003, Sun Cellular of Digitel entered the market. A couple of years thereafter, Sun started offering 24/7 unlimited call and text messaging. It can be noted in the Figure above that this offering, along with the Pasaload (peer-to-peer passing of credit) stemmed the apparent plateauing of subscribership and helped push access/mobile phone ownership even further as more and more people at the bottom of the market gained access to a line, if not get a second line.



With Sun introducing bucket pricing, SMART and Globe accused Sun of 'predatory pricing' and petitioned the National Telecommunications Commission (NTC) to stop Sun's service offers, fix call rates at P5.50 per minute and bar Sun from charging lower rates (Aldaba 2011a). However, the NTC ruled in Sun's favor, and both SMART and Globe also eventually began to offer fixed rate or "bucket" plans for voice and text services.

With the increase in competition in the sector, the telcos' profit margins have come under pressure even as demand for more network services increased. Competition is also coming from various fronts, with Internet services such as Skype forcing companies to keep prices low (Montecillo 2011).

While daily outbound text messages increased from 800-900 million text messages to 1.2 billion, yields declined from 18 centavos to 13 centavos/text. In 2010, revenues from cellular data/text dropped 13% to P31 billion despite a 25% increase in text volume (Reyes, 2010). Globe's postpaid average revenue per unit (ARPU) fell to P1,168 while Smart's postpaid ARPU remained steady at P1,257 (*Business Monitor* 2010). This trend has continued on to the first quarter of 2011. PLDT reported that its ARPU, had dropped 13 percent year on year, leading to net profit slipping 6 percent to P10.7 billion in the first quarter. In a separate statement, Globe Telecom Inc. on the other hand said its net profit rose 1 percent in the January-to-March period. This, however, was their first increase in quarterly profit since the start of last year (Montecillo 2011).

As of the end of 2010, the three main telecommunications providers in the Philippines were PLDT/SMART, Digitel, and Globe Telecommunications, Inc. They all provide mobile, fixed line as well as Internet and broadband services. A fourth operator, Bayantel, as well as several smaller operators such as members of the PAPTELCO, are also active in the market.

Given the decreasing revenue from mobiles, telcos are looking for other revenue streams, and foremost among their strategic plans for expansion is broadband. Likewise, there's also a trend towards consolidation, as evidenced by PLDT's acquisition first of CURE and more recently of Digitel, thereby fueling discussions of an emerging duopoly between PLDT and Globe.

## **5. Applications and Services**

### **Applications and Services**

The Philippines has been at the forefront of many innovative mobile applications, especially in the area of SMS and m-commerce (Mendes, et.al 2007).

Among the reasons for these are the following: Filipinos are highly literate, and short messaging system (SMS) use was a driver to the early growth of the mobile industry in the mid-1990s. Eventually, SMS was embraced to the point that the Philippines was among the first countries to directly make use of it for services like complaints and feedback (see Lallana 2004, CSC 2003) , and exchanging load credits for payment which would become a precursor to mobile money. Innovation is being driven by a large and

well-educated pool of ICT software development specialists, with each major telecom company having their own dedicated units for developing new mobile applications (Intelecon 2010b). However, innovative use for m-services is not purely commercial driven, as some innovation is also developed by the country's extensive base of government agencies and non-governmental organizations. Examples of these include a Farmer's texting service (Pascua et.al. 2010) a police reporting system (Alampay 2003) and complaints about government services (CSC 2003).

The Philippine telecommunication operators were one of the first developers of mobile currencies, particularly with SMART-Money, and then later, G-Cash (Alampay & Bala 2010). Currently a third offering has been introduced, Sun-Cash. These different platforms, allow competition, even in the m-money field, that also allows for innovation in how they can be applied. Some of these innovations, especially in transactional use online, are driven by users themselves (Alampay 2008b). At present, the three different m-currencies are not directly interchangeable.

One of the primary applications of mobile money in the Philippines is in the area of money-transfers and remittances. This is because the Philippines has a large internal and external migrant workforce. This has lead to the need for greater use of ICTs to communicate between families that have been separated, and the need to coordinate financial transactions. This, in turn, has helped not only in the innovation in the area of financial transfers using mobile phones, but also make it more feasible given the large numbers of transactions being made. The need for this alternative is also coupled with the poor banking penetration in the countryside that is hampered by the archipelagic nature of the country having more than 7000 islands (Alampay & Bala 2010).

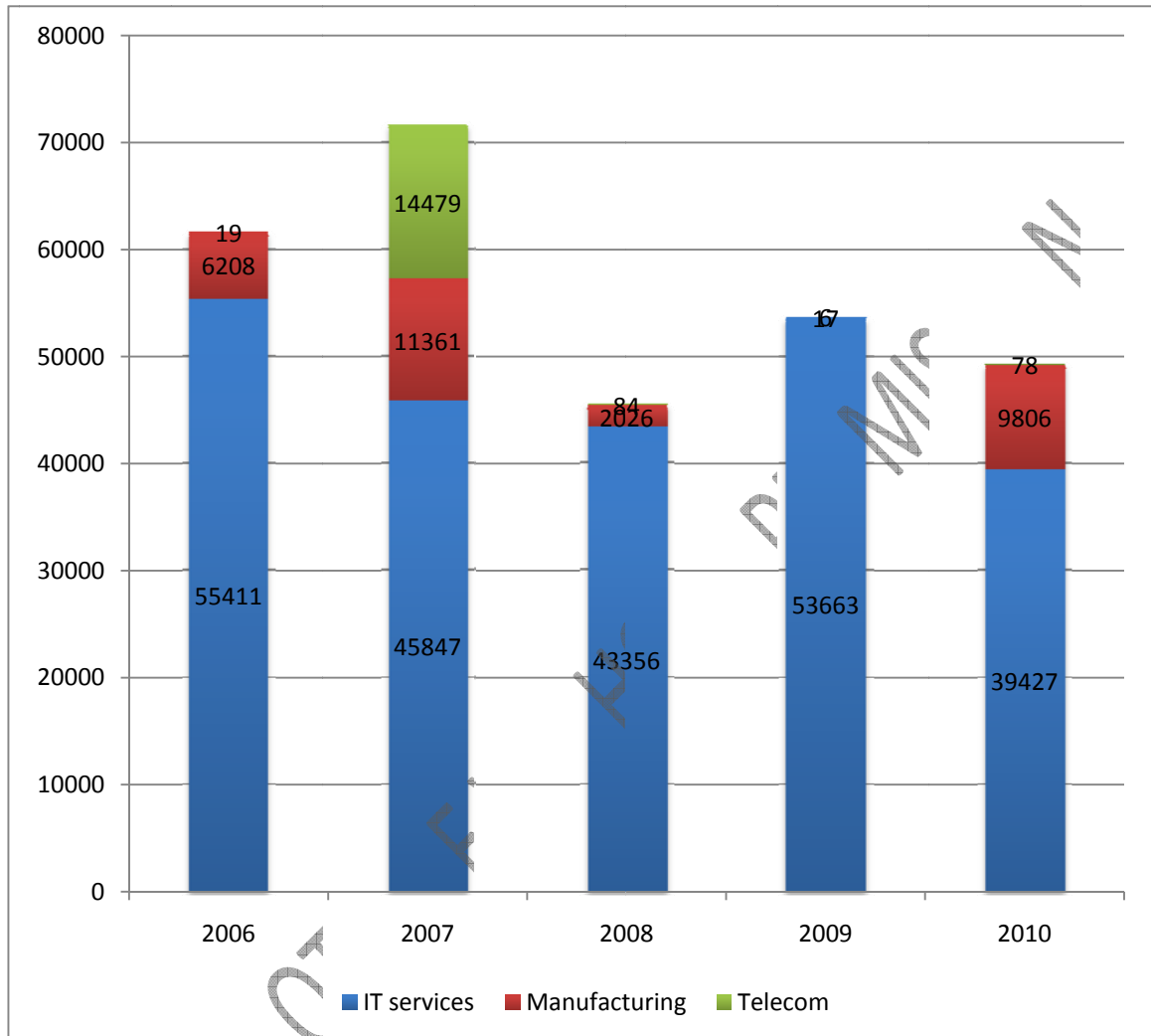
The Philippine Central Bank has also been quick in recognizing the importance of e-money and have already made policy circulars that defines what e-money is, and have regulatory authority over e-money issuers, including those that provide m-money services (BSP 2009). Hence, this helps address some of the financial issues that telecommunication regulators do not normally address.

## Human Resources and Innovation

The Philippines is one of the top off-shoring and outsourcing destinations in the world, with a 5% market share at the end of 2006, By then, it was already contributing roughly 2% of the country's GDP. The country's inherent advantage is its highly educated work-force, with a good command of the English Language, and low-cost base (BPAP 2007). In its 2010 roadmap, the country targeted to grow this market share to 10%.

The thrust to develop this sector further is reflected in the sustained growth in number of jobs created since. Currently, employment in the ICT-sector is largely services-based. Approximately 47,500 new jobs in the ICT-services sector have been created annually from 2006-2010. This represents 84% of all jobs created in the ICT sector for the period (see Fig. 4).

**Figure 4: Employment from ICT Investments, 2006-10**



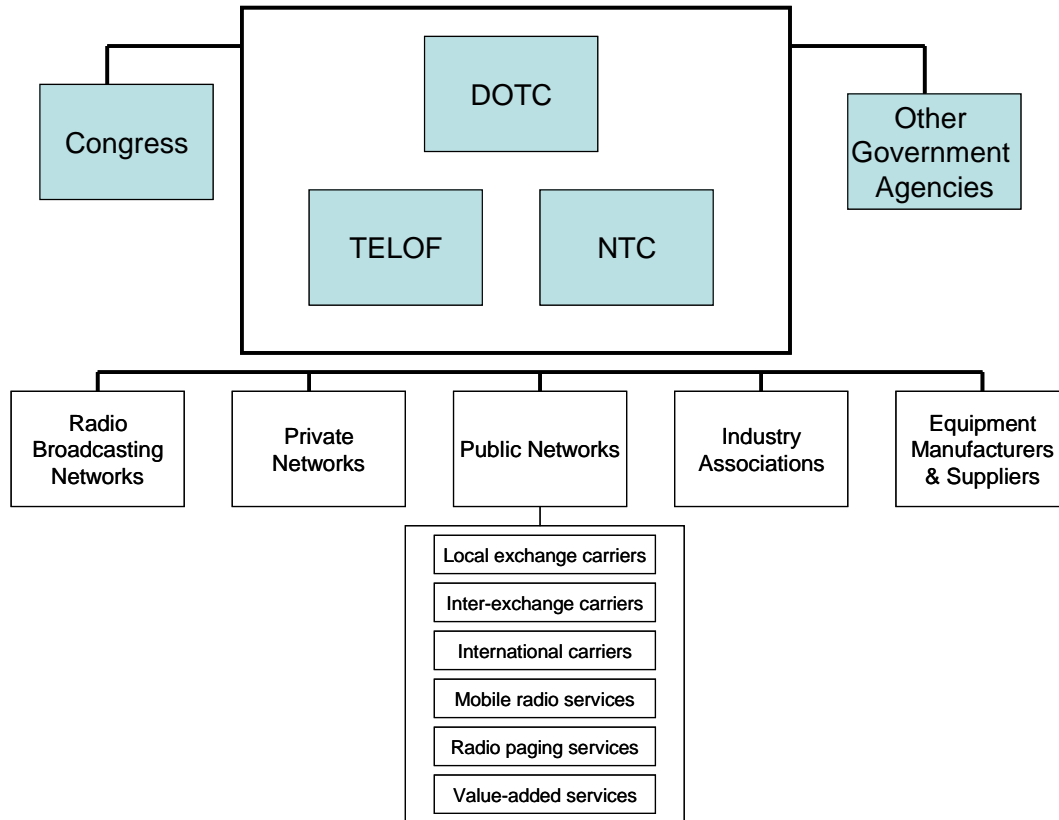
Source: NCSB

## 6. Institutions and the Policy & Regulatory Environment

The main government players that have been responsible for the evolution of the Philippines telecommunications sector over most of the past few decades are illustrated in Figure 5 below.

**Figure 5: Philippine Telecommunications Industry (pre-CICT)**

Source: DOTC (from Mingos, et.al. 2002)



Congress has an important role in the policy environment, foremost because of market entry. In order to operate in the country, a telecommunication company must first secure a congressional franchise as provided for in the Constitution. This franchise must get the approval of both houses of Congress (Salazar 2007).

On the other hand, while the Philippine Congress also develops broad legislation that can impact on telecommunication laws, the Department of Transportation and Communications (DOTC) is the Executive branch's policy-making body for telecommunications. The Administrative Code of the Philippines provides that DOTC's mandate is to be "the primary policy, planning, programming, coordinating, implementing, regulating and administrative body of the Executive Branch... in the promotion, development, and regulation of dependable and coordinated networks of ... communication systems as well as in the fast, safe, efficient and reliable... communication services" (Sec. 2, Title XV). The DOTC also works with the National Economic Development Authority (NEDA) to set the country's telecommunication development goals and strategies.

The industry's regulator is the National Telecommunications Commission (NTC), created in July 1979 by Executive Order 546. It was created as an attached agency of the DOTC with quasi-judicial powers, and

responsibilities for developing tariff regulations, licensing conditions, technical regulation, competition and interconnection requirements, and similar regulatory measures. With the creation of the Commission on Information and Communication Technologies (CICT), the NTC is now an attached agency of the Commission. Commissioners to the NTC is appointed by the President of the Philippines and it draws its funds from the general appropriations of the government. As such, it is easily influenced by the incumbent administration, and Congress which deliberates on the budget.

The Telecommunications Office (TELOF), a sectoral agency that used to be under the DOTC, is now also under the CICT. TELOF is the only publically operated telecommunications service provider and is responsible for providing telephone and telegraph services in regions in the country that are unserved or underserved by commercial providers. Some of these services have been converted to provide Internet services as well.

Aside from the national agencies, local government units (LGUs) have also been provided by the Republic Act 7160, also known as the Local Government Code of 1992, to “exercise powers and discharge such other functions and responsibilities as are necessary, appropriate, or incidental to efficient and effective provision of the basic services and facilities enumerated herein... (which) include, but are not limited to, the following:... (3) For a Province: (XI) Inter-municipal telecommunications services, subject to national policy guidelines.... (4) For a City: adequate communication and transportation facilities.” (Philippine Congress 1992: Sec. 17).

The consensus is that the role of the government is “1) to provide the correct policy environment to private investments in ICT development; and 2) to be a lead user of info-communications services, and as such, to stimulate economic activities” (DOTC 2000b:9). By becoming less of a provider, the government’s work now involves maintaining more inter-organizational relations to ensure the delivery of services by the private sector, and to create incentives for universal access without direct operational or funding involvement.

## **Commission on Information and Communication Technology (CICT)**

The Commission on ICT (CICT) was created under Executive Order 269 in January 2004 to serve as the primary policy, planning, coordinating, implementing, regulating and administrative entity of the executive branch of the Government with respect to the ICT sector. It was tasked to promote, develop, and regulate integrated and strategic ICT systems and reliable and cost-efficient communication facilities and services. The National Computer Center (NCC), Telecommunications Office (TELOF) and the Communications component of the Department of Transportation and Communications (DOTC) were integrated to form parts of the CICT, with the National Telecommunications (NTC) and the Philippine Postal Corporation (PPC) as attached agencies.

### *Organization of the CICT*

The CICT is headed by a Cabinet-level ranking Chairman. He is assisted by the Director General of the NCC and the Chief of the TELOF, who, in addition to their current responsibilities also concurrently serve as Commissioners. Aside from them, there are two (2) additional Commissioners who shall assist the Chairman, who are appointed by the President at the recommendation of the Chairman. At present the Commissioners are in charge of four key pillars in the CICT. The Head of the NCC is in charge of the E-government development group, the Chief of the TELOF is in-charge of Infrastructure Development Programs, one Commissioner is responsible for developing Cyber Services and Business, and another Commissioner is in charge of the Human Capacity and Development Group (HCDG). The HCDG also includes the training institute of government employees or the National Computer Institute (NCI).

Furthermore, previously existing units in the DOTC that directly support communications, including the Telecommunication Policy and Planning Office, were directly consolidated under the Office of the Chairman. Under EO 269 the NTC receives policy guidelines from the Commission “provided that the Commission shall not exercise any power which will tend to influence or effect a review or a notification of the NTC’s quasi judicial functions.” (EO 260, Sec. 5).

EO 269 also mentions the transitory nature of the CICT. At present, there is a pending legislation being proposed in Congress for the creation of a Department of ICT (DICT). As the development champion of the Cyber Corridor Super region, the CICT has been directed to oversee all programs and projects related to activities being implemented in the Corridor. Aligned with this, CICT is tasked to ensure the competitiveness of the ICT industry, develop human capital, advocacy for universal access/service, and promote the use of ICT in government. However, the creation of the proposed new Department of ICT remains uncertain as newly elected President Aquino has expressed the belief that another department is unnecessary given the existing size of the bureaucracy. Also, after a year in office, the President has yet to complete the appointment of new Commissioners in the CICT.

## **7. Effectiveness of the Telecom Policy and Regulatory environment**

The TRE survey is a tool to measure and compare regulatory risk due to policy maker’s and regulator’s actions. The 2011 survey was administered in the Philippines from February to March 15, 2011.

The survey was a part of a regional study (also conducted simultaneously in India, Pakistan, Sri Lanka, Bhutan, Maldives, Afghanistan, Bangladesh, Indonesia, and Thailand) in order to understand how key stakeholders in the sector viewed the regulatory and policy environment in the Philippines.

Known as the TRE Survey (or the Telecom Regulatory Environment survey), it asked senior stakeholders to evaluate the effectiveness of the regulatory and policy environment in three telecom subsectors (fixed, mobile and broadband) along seven dimensions: market entry, access to scarce resources, interconnection, tariff regulation, anti-competitive practices, universal service obligation (USO), and quality of service (QoS) for the past year (January, 2010- January, 2011).

The survey respondents were grouped into three categories:

**Category 1:** Stakeholders directly involved and can be affected by telecom sector regulation, such as operators, industry associations, equipment suppliers, etc.

**Category 2:** Stakeholders who analyse the sector with broader interest, such as lawyers, telecom sector consultants, equity research analysts, etc.

**Category 3:** Stakeholders with an interest in improving the sector to help the public, such as people from academia, research organizations, journalists, civil society organizations, etc.

All in all, there were 59 respondents broken down into the following per Category:

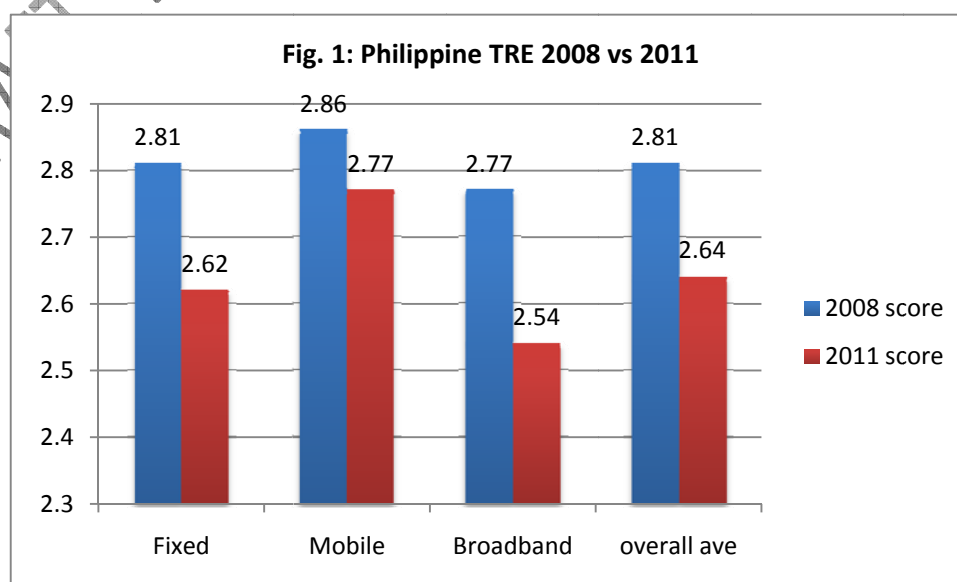
**Table 1: Respondent Breakdown**

Category	No. of Respondents
Category 1	19
Category 2	11
Category 3	29
TOTAL	59

Most of the respondents for the survey answered online. Only eleven (11) people answered the survey manually.

In the course of writing the TRE results, an important policy issue came about pertaining to the acquisition by the leading telecommunications company, PLDT of Digitel-Sun, which is the third largest operator in the country. Some of the comments by stakeholders in that forum is included in this analysis, even as the period in which the forum was held, was a couple of weeks after the actual survey.

In general, the results of the TRE Survey for 2011 shows that stakeholders perceive the TRE in the



Philippines to have declined in overall average, and in every segment (Fixed, Mobile and Broadband) (see Fig. 1 below). More specifically, only market entry and interconnection for Mobiles had a better score compared to the last survey conducted in 2008.

The segment with the biggest decline, and with the lowest overall score was in the broadband sector. This is indicative of the area where most of the telecommunication providers see as their primary growth area. This is also the service that a growing segment of the market is increasingly becoming more concerned with. Telecommunication companies recognize the need to invest in broadband in order to remain competitive.

As an emerging field, it is also the area where policy needs to keep pace with many issues associated with the technology. Convergence, for one, means competition is no longer between fixed operators, or between mobile operators, as some stakeholders mention Skype as now being the largest carrier of international voice traffic. Emerging concerns include access to frequencies, establishing standards for service quality, and the perennial question of universal access.

## 7.1 Market Entry

Market entry into the telecommunications industry in the Philippines is heavily regulated and involves two important processes. First, a company that wants to operate in the sector is required to secure a congressional franchise as provided for in the Constitution. This franchise must get the approval of both houses of Congress (Salazar 2007). The Constitution also limits foreign ownership of a telecommunication company to 40 percent with the life of a franchise not more than 50 years. This explains why all the major telephone companies are owned by commercially powerful and politically influential families, and have strong partnerships with overseas investors (e.g. NTT Docomo, Singapore Telecom, Deutsche Telecom) (Ure, 2004). As such, it is difficult and costly to enter the industry due to these barriers.

After securing a franchise, a company also has to apply to the National Telecommunications Commission (NTC) for a Certificate of Public Convenience and Necessity (CPCN) for the type of service that it wants to offer. Through the CPCN, the NTC assigns the area of operation, determines the allowable rate that could be charged for a service, and manages the allocation of radio spectrum or frequency.

Moreover, access to radio spectrum is another constraint that new entrants have to consider, especially if this is concentrated in the hands of only one player. Until these entry barriers are addressed, competition will be limited and the industry would continue to reap oligopoly rents (Aldaba 2011b).

**Figure 6: TRE Scores for Market Entry**



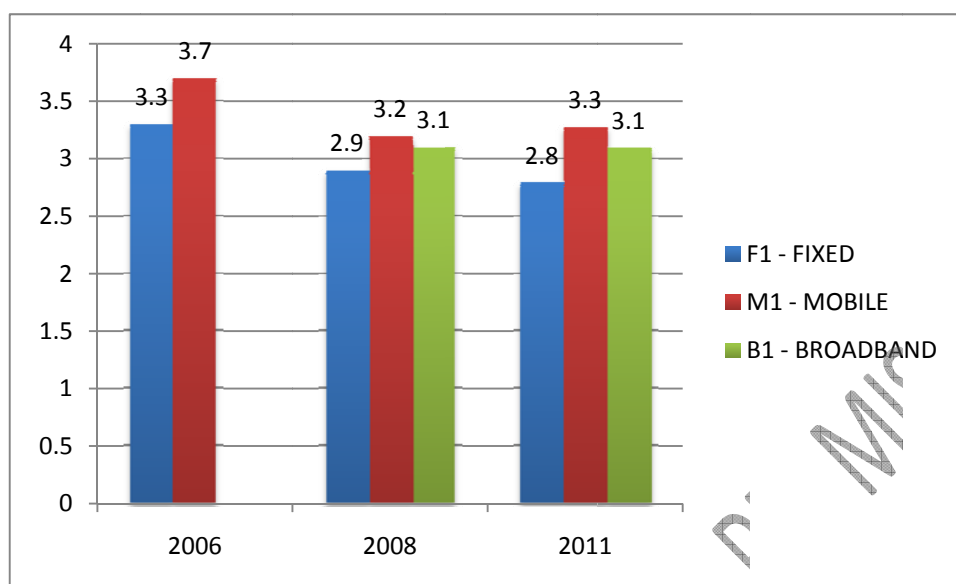


Figure 6 shows that the perceived regulatory environment for market entry for the fixed sector has continued its decline from 2006 and 2008. No new players have entered the fixed line market, as competition has mainly been on the mobile and broadband front.

Market entry in the mobile sector is perceived much better than the fixed line sector, and better than the broadband sector. Also, it is one of the few TRE scores that improved from 2008. Perhaps this is because there have been a number of new players (e.g. Sun, Cure, San Miguel) who have entered the market since 2000. However, it should also be noted that the mobile sector has also experienced a number of consolidations, over the same period. PLDT acquired and consolidated SMART and Piltel in 2000 while Globe Telecom acquired Islacom. In 2003, Digitel formally launched its mobile service under the brand name, Sun Cellular. In 2008, SMART purchased CURE and subsequently launched another wireless brand, Red Mobile. During the same year, San Miguel Corporation partnered with Qatar Telecom and bought interests in Liberty Telecom Holdings, Inc., and announced plans to enter the mobile and broadband businesses. In 2009, Schutzengel Telecom, Inc. was granted a congressional CMTS franchise. It filed an application with the NTC for a provisional authority (PA) to construct, install, operate and maintain a nationwide 3G mobile telecommunications system in February 2010 (Townsend and Alampay 2011). At present, the recent acquisition by PLDT of DIGITEL/Sun is being reviewed by the NTC.

The broadband sector is rated higher than the fixed line sector. These differences may also have to do with perceived market potential, as growth in the fixed sector has been relatively flat, in comparison to both mobile and broadband. Also, providing broadband Internet access, which is classified as a value added service, is easier because it does not require a legislative franchise. This however is different

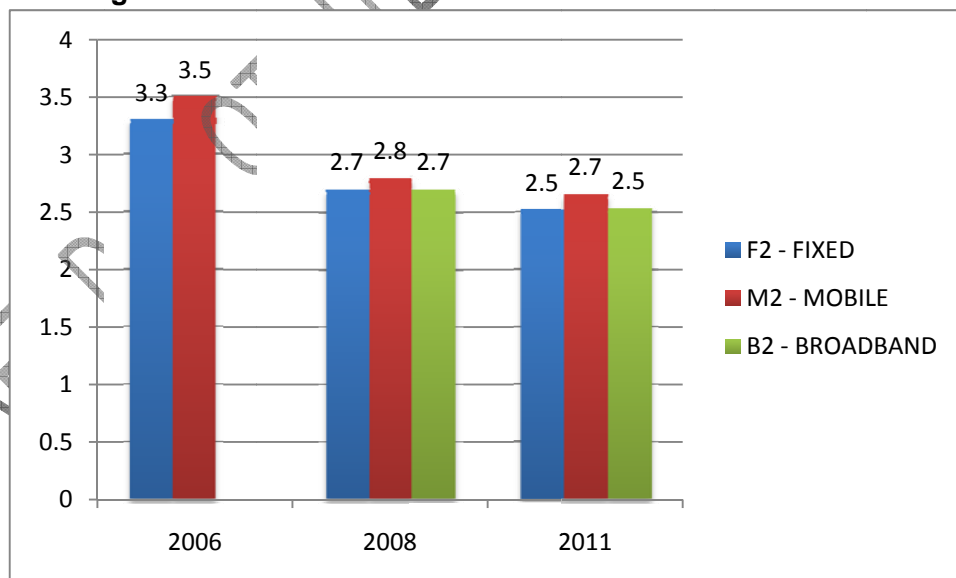
when considering mobile broadband, which is technically part of the franchise given to mobile companies.

## 7.2 Access to Scarce Resources

This section analyses stakeholder's perceptions with respect to regulating access to scarce resources. Access to scarce resources is defined here as the timely, transparent and non-discriminatory access to spectrum allocation. It includes the numbering and rights of way, frequency allocation, telephone number allocation, and tower location rights.

Republic Act 7925 states that "radio frequency spectrum is a scarce public resource that shall be administered in the public interest and in accordance with international agreements and conventions to which the Philippines is a party and granted to the best qualified. The government shall allocate the spectrum to service providers who will use it efficiently and effectively to meet public demand for telecommunications service and may avail of new and cost effective technologies in the use of methods for its utilization." Furthermore, the allocation of radio frequency spectrum allocation and assignment shall be subject to periodic review and its use is subject to reasonable spectrum user fees. Where demand for specific frequencies exceeds availability, the open tenders for the same and ensure wider access to this limited resource (Sec 15) (Salazar 2007).

**Figure 7: TRE Scores for Access to Scarce Resources**



For this round of the TRE survey, access to frequencies was a major concern among stakeholders. Notable is that stakeholder perceptions with regard to access to resources for both Fixed and Mobiles

(for all actually) has been trending downwards for the past 3 TRE surveys. One of the main issues is spectrum. The dominant player remains PLDT/SMART. PLDT, now owning Smart, Talk & Text, Cure Mobile and if this pushes through by getting the NTC's and Congress's approval - Digitel & Sun - they will have control over a larger portion of the wireless spectrum compared to other entities. (Insert Aldaba table here)

In the mobile sector, the biggest concern is that PLDT/SMART has gained control over more frequencies than its primary competitors. A more recent development that occurred after the survey, was in fact PLDT gaining control over Digitel/Sun, which not only gave it a bigger size of the pie in terms of subscribers, but also more control over the national backbone, and frequencies.

Compared to other parts of the world like Europe, the Philippines, according to some stakeholders is not a spectrum-scarce environment. However, the reason for the hype and spectrum-grabbing is to stymie new telco players who may wish to enter the market, or even existing players (e.g. Globe) who may wish to expand relatively cheaply.

Currently, the PLDT group controls a disproportionately large chunk of the currently available 3G/4G frequencies. This was the case when they had acquired CURE, and became even more pronounced a few weeks after the TRE survey when they gained majority control over DIGITEL/Sun. Some see this as effectively being "in restraint of trade" in the telecommunications market. Its primary competitor, Globe is now asking the NTC to "level the playing field" by looking into the possibility of redistributing communications frequencies evenly among competing telecommunications companies<sup>2</sup>. They pointed out that the ratio of the spectrum holdings of Globe and PLDT on the 3G 2100 MHz spectrum now stands at 1:3.5 in favor of the latter given its acquisition of Digitel-Sun. Further, with PLDT controlling more than thrice as many 3G frequencies than Globe — it would be difficult for the latter to improve its services because of limited resources.

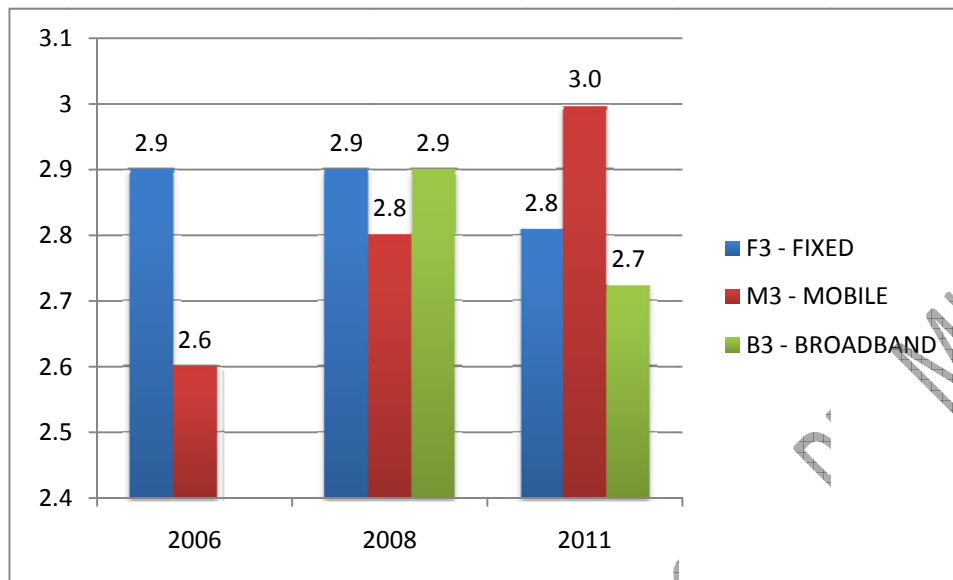
### 7.3 Interconnection

This section looks at how interconnection issues are addressed by the regulator. Respondents were asked to rate whether interconnection with major operators is adequately ensured at any technically feasible point in the network. They were asked to consider whether there are reasonable rates for interconnection, there is unbundling of interconnection, and if these are offered without delay. Other interconnection issues that they were asked to consider include the sharing of incoming and outgoing IDD revenue, the payment for cost of interconnection links and switch interface and penalties for cost of technical disruption of interconnection.

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<sup>2</sup> <http://ph.news.yahoo.com/globe-ntc-redistribute-pldt-digitels-frequencies-201420341.html>

**Figure 8: TRE Scores for Interconnection**



In practice, interconnection rates are mutually negotiated between telecommunication operators. Although the government can impose rate ceilings, as in the case of SMS between operators, it cannot intervene extensively because of the provisions of RA 7925 also known as the Public Telecommunications Act. Hence, interconnection rates are more or less set because of the non-discrimination clause in RA 7925 (Alampay 2008).

One of the few areas where perception has trended upwards in the past three TREs has been in Mobile Interconnection. In 2006, when the major concern was interconnection issues with the then new and upcoming third player, Sun Cellular. With better TRE scores this is reflective of how Interconnection issues among them has been resolved.

Perception with landline interconnection, has declined slightly in the fixed line business.

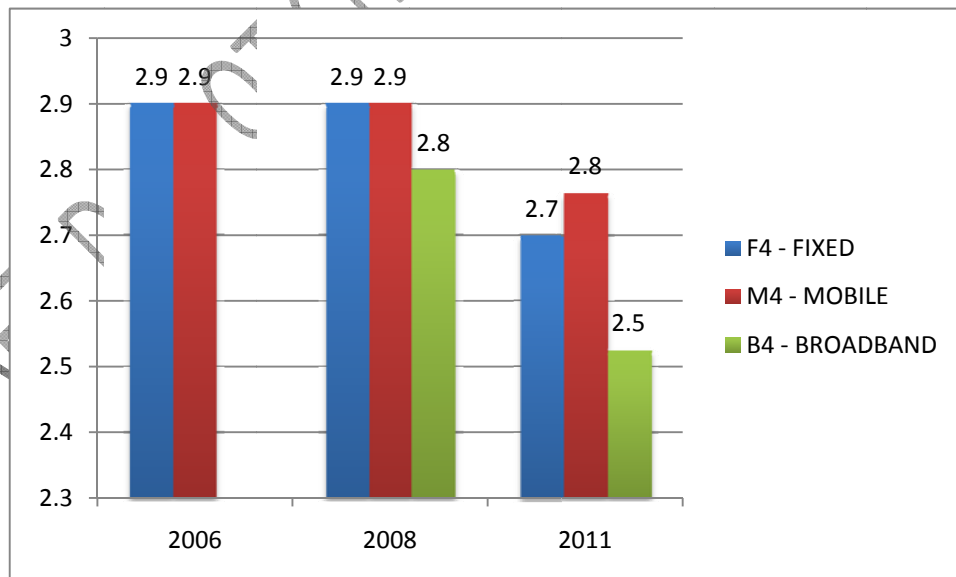
A larger decline, however, was seen in the broadband business. In the Philippines, there are a number of Internet Exchanges in operation. The first is PhIX which stands for the Philippine Internet eXchange, and was launched in July 1997. It is an interconnection or a network access point established by the Philippine Long Distance Telephone Co. (PLDT) that allows local Internet Service Providers (ISPs), with a primary connection to the global Internet, to access and exchange local Internet transactions. The second telco-run exchange is the Manila Internet Exchange (MIX), which is operated by the Eastern Telecommunications Philippines (ETPI) (Paraz & Yu 2002). Both exchanges offer network monitoring and security and are also peered together. Although this should make for faster traffic between the two, network congestion has been a problem in the past (Alampay 2008). A third exchange was called CORE (Common Routing Exchange) which was operated by the Philippine Internet Foundation (PHNet). It had a lower level of service, although it was completely free of charge. It was also actually the very

first ISP in the Philippines, having started in 1994 (Paraz & Yu 2002). The most recent addition to the network was made through the initiative of the Applied Science and Technology Institute (ASTI), the research and development arm of the Department of Science and Technology (DOST) to operate the Philippine Open Internet exchange (PHOPENIX). It was meant to be operated as a neutral institution, as it is maintained by a consortium of commercial, non-government, academic and government institutions. Launched in January 2007, and operated in April of the same year. The significance of the project is that Philippine-based Internet service providers will be able to route their traffic locally without depending on their telecommunications providers, especially during major disasters (Alampay, 2008).

Given that there are a number of exchanges, problems of interconnection among them is still apparent. A stakeholder illustrated the problem it creates with respect to the gaming industry in Internet cafes. He said: Bayantel is losing customers to PLDT because most of the players are on PLDT and because there is a lack of local data exchange PLDT & Bayantel (meaning they don't talk to each other straight - data from Bayantel must first leave the country and pass through international servers and before they can look back to the Philippines and talk to PLDT's servers). Effect: when you're on Bayantel, you can barely play with someone who's on PLDT because of the high lag/latency.<sup>3</sup>

#### 7.4 Tariff Regulation

**Figure 9: TRE Scores for Tariff Regulation**



<sup>3</sup> taken from e-group exchanges.

Overall, competition in cellular mobile service intensified with the entry of Sun Cellular. But, as mobile services become a mature market— with more than 80 percent of consumers already using wireless devices, almost all of the marketing from existing providers targets customers of their competitors. Customers threatening to switch, force providers to offer steeply discounted retention deals that are often infinitely renewable.<sup>4</sup> The telecommunications companies (telcos) have continued to fight for market share, particularly in the mobile sector largely focused on unlimited plans and aggressive bucket offers<sup>5</sup>.

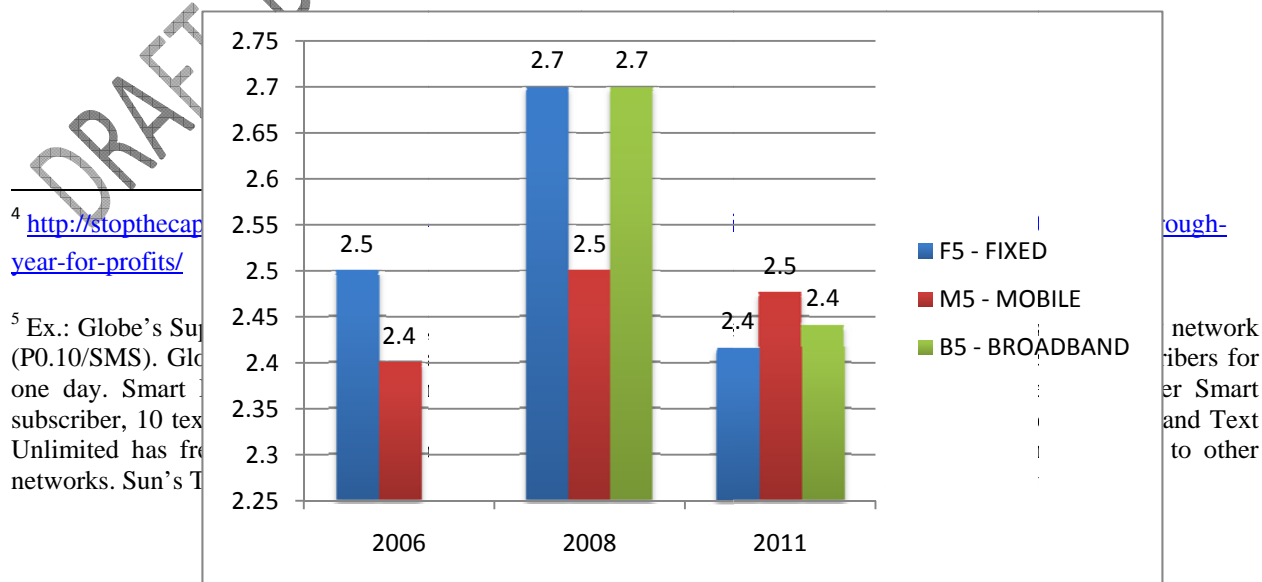
While traditional revenue sources like international and national long distance (IDD and NDD) are already on a decline, demand has been strong for new revenue sources, broadband Internet services whose prices have also been declining due to unlimited plans and bucket offerings (Aldaba, 2011). For P50 a day, a Globe subscriber is given unlimited access to the Internet using a Globe Tattoo Broadband USB or mobile phone for one day. Smart also offers unlimited mobile surfing for P50 per day while Smart Broadband has its unlimited Internet access promo at P200 for five days. Sun Broadband prepaid has a similar offering (one day unlimited for P50) (Aldaba, 2011).

While all three sectors registered lower TRE scores compared to 2008, it was in broadband where there was the largest decline. This is ironic, since the major players have also started to offer bucket prices, and prices in internet cafes have also dropped, but perhaps perception of tariffs is also connected to perceptions of value (e.g. price vis-à-vis the quality and speed of connections).

## 7.5 Regulation of Anti-competitive practices

Perceptions regarding Anti-competitive practices were very low in all three areas, Fixed, Mobile and Broadband. There was also a significant drop in both Fixed and Broadband from 2008 scores, while in the Mobile segment it retained the same low overall mark of 2.5 (see Figure 10).

**Figure 10: TRE Scores for Anti-Competitive Practices**



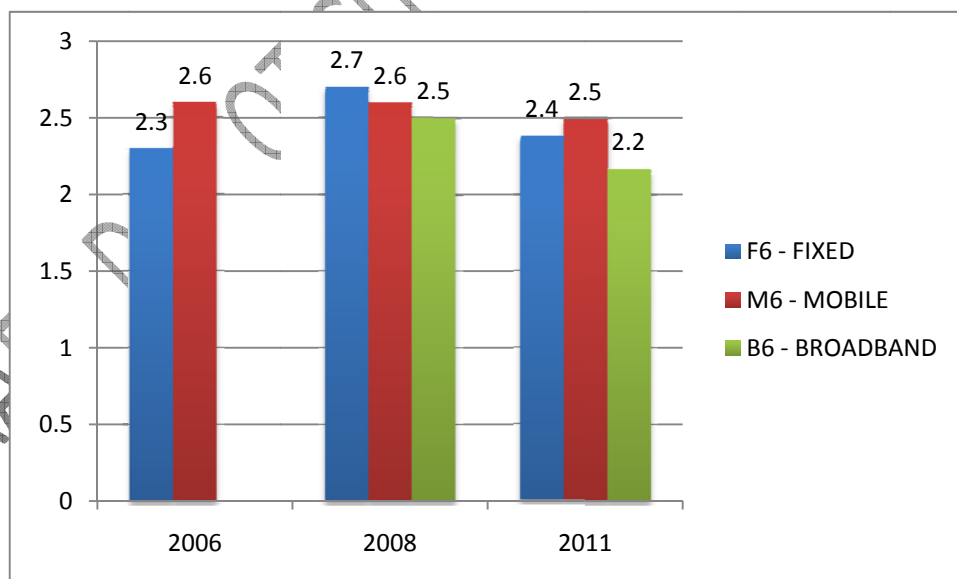
The Philippines currently does not have any anti-trust legislation. Hence, in President Aquino's first State of the Nation Address to Congress, this was one of the legislations he wanted to prioritize.

At present, the key institution involved in resolving disputes remain to be the National Telecommunications Commission. However, given the growing trend of mergers and acquisitions, Congress is also becoming a key actor, given that it is Congress that grants franchises and some lawmakers argue that the franchise Congress gives one company can not be simply transferred through acquisition.

## 7.6 Universal Service Obligations

This section evaluates whether the administration of the universal service program is transparent, non-discriminatory and competitively neutral and is not more burdensome than necessary for the kind of universal service defined by the policymakers. In the Philippines, the policy is not that of universal service, but that of universal access.

**Figure 11: TRE Scores for Universal Service Obligation**



The Philippine government defines universal access as the availability of a minimum set of reliable and affordable telecommunications services in all urban and rural areas (DOTC 2000). This definition seems to have been left intentionally broad/vague to allow for targets to be adjusted with technological and national developments. Based on nationally set indicators (MTPDP, ICT Strategic Roadmap of CICT),

with a wide set of access types and services. Further, the purpose for access is defined as access to “basic government services”, information, and quality education through ICTs”. However, it is not very clear what constitutes the basic services and information that the government aims to provide (Lallana and Soriano 2007).

The TRE scores for universal access all declined for the three sectors. The score for Fixed services has significantly declined. This could be because since the SAS, in 1993, there has really been no new policy for universal access to the fixed phones, and this issue has already been superseded by the dramatic increase in access to mobile phones.

The score for Mobiles is the highest among the three, and also showed the slightest decline from 2008. In fact, for the past three TREs, the score for mobiles has remained practically the same. This could be because there are no policies that call for universal access to mobiles, given that even in the absence of such a policy, there has been a high penetration rate with respect to access to mobiles and access continues to rise (see Figure 3).

It is universal access to broadband services that had the lowest score. This is indicative of the challenges and real state to broadband in the country today. Access to broadband services is dependent on the fiber infrastructure and mobile broadband services in the country. Access to the backbone infrastructure of these networks is crucial for connecting to the last mile. Table 2 summarizes the availability of broadband infrastructure in Philippine provinces. It shows that more than a fifth of provinces in the country do not have a fiber infrastructure for Broadband services, and a third (33%) do not have access to 3G/HSPA Mobile services.

**Table 2: Summary of Fiber Infrastructure and Mobile Broadband services**

Provinces w/ Fiber Infrastructure			Provinces w/ 3G/HSPA Mobile Services		
At least one operator	None	2 or more operators	At least one operator	None	2 or more operators
63	17	38	54	26	18
79%	21%	48%	68%	33%	23%

*Source: Intelcon 2010*

Highlighted in the next table (see Table 3) are the demographic conditions of those provinces that still do not yet have fiber connectivity. As would be expected, these tend to be among the lowest income and lowest population density locations in the country. The absence of connectivity in these Regions are reflected in the problems faced by some projects and programs, such as connecting schools and in the government’s Community e-Center (CEC) program (Townsend and Alampay 2011).



According to CICT Commissioner Frank Perez the government is currently in the process of drawing up a telecoms/broadband roadmap. He says that this process will be more transparent and will be done with the open consultations with the public.<sup>6</sup>

**Table 3: Provinces without Fiber connectivity**

Region		Provinces	Per cap income (Php) (National average: Php 27,442)	Population
II	Cagayan Valley	Batanes, Quirino	29000-33000	180,000
III	Central Luzon	Bataan	31000	662,000
IV-B	MIMAROPA	Palawan, Marinduque, Oriental Mindoro	17000-20000	1,858,000
V	Bicol	Catanduanes	18000	233,000
VII	Central Visayas	Siquijor	24000	88,000
VIII	Eastern Visayas	Eastern Samar	16000	405,000
XI	Davao	Davao Oriental	18000	405,000
XII	SOCSARGEN	Sarangani	16000	475,000
	CARAGA	Surigao del Norte, Surigao del Sur, DInagat Islands	18000-19000	1,072,000
	ARMM	Basilan, Tawi- tawi, Sulu	6000-12000	1,708,000

Source: Intelcon 2010

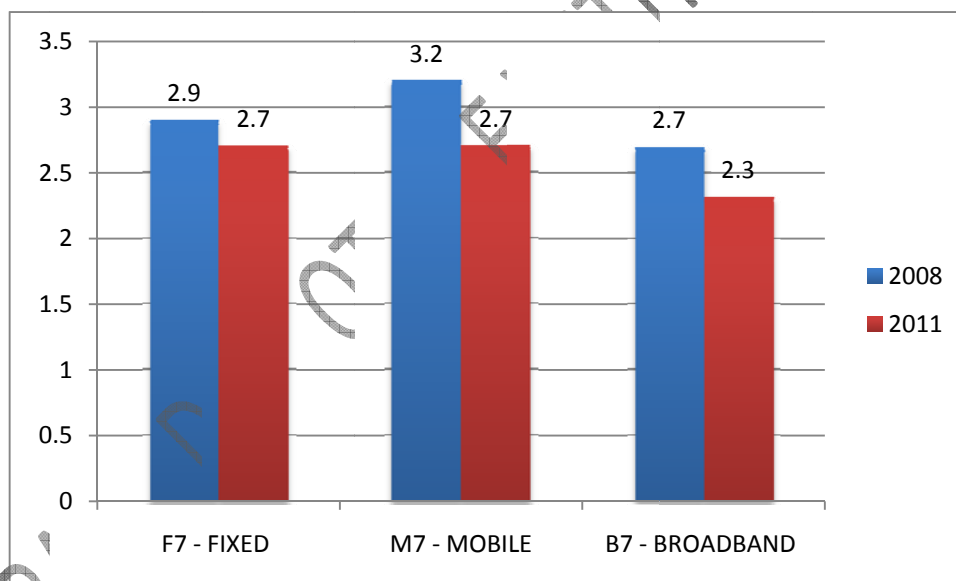
<sup>6</sup> Commissioner Perez said this in the Forum about the PLDT-Digital Deal and Beyond: Public Interest Implications and Alternatives, held on 11 April 2011, at the National College of Public Administration and Governance, U.P. Diliman, Quezon City

## 7.7 Quality of Service

Quality of Service was a recent metric that was added to the TRE survey in 2008. Hence, this is only the second time the metric has been asked. In all three categories, perceptions regarding quality of service has declined, with very large drops in the scores for mobile and broadband service quality.

One problem with Mobile and Broadband sector is that clear standards for measuring their quality has either not been set, or has not been measured or reported with regularity. Likewise, the distinctions between the two are also blurring as mobile broadband becomes more and more popular. In the recent national elections, for instance, where access to mobile services was crucial in the transmission of electoral results, the COMELEC noted that 30% of the country did not have any reliable cellular signal that was needed for the transmission of results.

**Figure 12: TRE Scores for Quality of Service**



With

respect to mobiles, the current CICT Chairman, Atty. Ivan Uy has been quoted as saying that there is a need to look into: “the deteriorating service availability or accessibility due to network congestion brought about by the unlimited plans. Customer dissatisfaction has been rising because of higher frequency of dropped calls, delayed SMS, and line unavailability.”<sup>7</sup> As such, while access to mobiles has

<sup>7</sup> <http://stopthecap.com/2011/01/10/the-real-reasons-for-the-philippines-Internet-overcharging-2010-was-a-rough-year-for-profits/>

improved significantly, network congestion and bucket offerings may have started to affect the quality of services.

For broadband, recent tests on the quality of broadband access in the Philippines are also indicative of poor quality of services. LirneAsia, in its latest Quality of Service Experience (QoSE) report), compared download speeds, Round Trip Time (RTT, or the time delays in data transfer), Jitter (the variation in time between the arrival of data packets) and Packet Loss (the percentage of data packets that did not reach its destination) of broadband packages in 11 cities across 7 countries in South and Southeast Asia. In this test, Smart's 2 Mbps package in Manila failed to deliver the download speed advertised. Also, from a regional perspective, the BayanDSL package failed to impress with a maximum of just 35 Kbps per US\$. This is consistent with Internet world statistics that find that in terms of average Internet broadband download speed alone, the Philippines lags behind roughly two-thirds of the world. The country is bested not just by world superpowers such as China and the U.S., it is also surpassed by small countries such as Lithuania and Kenya, and ranks 139 out of 185 countries.<sup>8</sup>

Further, with respect to broadband, there have been a series of consultations from late 2010 to early 2011 about service standards (See Annex on Key regulatory events). In December 2010, the NTC drafted a Memorandum Order on the Minimum Speed of Broadband Connections. In this draft order, it was proposed that broadband service providers shall specify the minimum broadband/Internet connection speed and service reliability and the service rates in their offers to consumers/subscribers/users in their advertisements, flyers, brochures and service agreements and service level agreements. The minimum service reliability shall be 80%. It also said that service providers may offer broadband/Internet connection on a "best efforts" basis. What became controversial, was the provision that said service providers "may set the maximum volume of data allowed per subscriber/user per day." However, on January 12, 2011, with mounting public pressure, the NTC removed the Internet Data Cap provision from the proposed memorandum circular on minimum speed of broadband connections saying it is counter-productive to increasing the Internet usage in the country.

Given that these issues were being discussed only a few weeks before the TRE, respondents may have retained stronger sentiments about it. As such, this explains the very large drops in perception for both mobile and broadband Quality of Service. A few months after the TRE, given the absence of a law that actually prohibited them from doing so, Ayala-led Globe Telecoms still pushed ahead with data capping by invoking a "fair use" doctrine in imposing a data limit on the Internet subscription of its customers as a supposed way to curb unrestrained use of just a few broadband users.<sup>9</sup>

That said, it is interesting that not only does the Philippines lag behind most countries in terms of Internet speed but now some telecom companies are limiting downloads. Some stakeholders view these daily download caps to be due to deficient infrastructure or over-subscription. This kind of strategy is a

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<sup>8</sup> <http://www.gmanews.tv/story/210108/infographic-the-state-of-broadband-Internet-in-the-philippines-and-the-world>

<sup>9</sup> <http://www.gmanews.tv/story/216965/technology/globe-moves-to-cap-Internet-data-volume>

stop-gap that does not cost the telcos while temporarily improving Quality of Service for subscribers. Some see it as another mechanism to protect companies from investing in costly upgrades in its infrastructure.<sup>10</sup>

## Summary/Conclusions

For this TRE, broadband seems to be the major concerns among all stakeholders. Business sees this as the next growth areas, while consumers are demanding and becoming more discriminating about the quality and cost of this service. Further, as what has happened in voice, access to broadband in a archipelago of many islands such as the Philippines, would most likely spread faster through wireless technologies. Hence, in some cases, distinction between mobile and broadband issues emerge.

Recent developments, particularly the acquisition of PLDT/SMART of Digitel, a few weeks after the TRE also raise important concerns about the telecommunications regulatory environment. Foremost among these are issues about access to scarce resources, particularly control over 3G frequencies. This issue then connects to other issues LinneAsia is concerned about in the TRE: such as fair competition, whether it would actually improve the quality of services, whether it leads to lower costs, and in the long run, whether it leads to the country getting universal access to broadband in a faster and more efficient manner.

Definitely, given the trend towards mergers and acquisition in the telecommunications industry, not only in the Philippines, but in other places as well, the landscape is changing and how the NTC, and to some extent Congress, handles it and developments thereafter would be worth watching. This is also why, the President's push for anti-trust legislation is also important in the long-run.

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<sup>10</sup> <http://stopthecap.com/2011/01/10/the-real-reasons-for-the-philippines-Internet-overcharging-2010-was-a-rough-year-for-profits/>

## **Annex 1: TRE Survey Methodology**

The TRE asks senior level stakeholders to assess the Telecom Regulatory Environment in a country across a number of dimensions (listed below).

It makes considerable effort to keep to a small number of questions because the ideal respondents are senior managers, including CEOs of operators. A lengthy questionnaire runs the risk of being ignored or passed to more junior staff to complete.

The respondents are asked to rate the quality of the regulatory environment for each dimension on a scale ranging from 1 (highly ineffective) to 5 (highly effective). So the respondent has to select a score (1, 2, 3, 4 or 5) and simply circle it (or click, in the case of a web-based survey). Posing questions in this format ensures that responses can be easily analysed without losing any qualitative information as often occurs when using open-ended questions.

The TRE survey is administered at the same time in multiple countries (nine in the 2008 survey, six in the 2006 cycle) by a team of researchers. The survey questionnaire is sent out with a cover letter stating that participation is voluntary and that respondent's confidentiality is guaranteed.

Each survey questionnaire is accompanied by a short narrative statement describing each of the dimensions, using language from the accompanying Reference Paper as much as possible. A brief summary of significant telecom policy and regulatory actions that were taken within the previous 12 months is also included.

Questionnaires are sent to large number respondents representing agreed-upon sector categories. Follow-up emails and phone calls are made to ensure a high response rate.

While the TRE Scores are the most direct output of a TRE study, more meaningful analysis is done by analysing the TRE scores in light of actual sector performance indicators for a particular country.

### **The three sectors**

From 2008 onwards, TRE surveys are designed to address three sectors – fixed, mobile and broadband (prior to 2008, only the mobile and fixed sectors were surveyed).

It has been argued that with increased fixed-mobile convergence, the separation between the fixed and mobile sectors is irrelevant. While this was apparent in the 2008 survey findings, regulation of fixed sectors still remains different to the regulation of the mobile sector in several countries. Therefore analyzing them separately may be quite important. Indeed, the convergence of fixed and mobile TRE scores will be one of the best pieces of evidence on actual (as opposed to wishful) fixed-mobile convergence. On the other hand, India has now converged regulation of the two sectors; so, for this country, the two sectors are treated as one and it may be appropriate to send out a joint “fixed + mobile” questionnaire instead of two separate questionnaires.

As previously mentioned, in addition to the fixed and mobile sectors, the broadband sector was added to the 2008 survey. In the developing world, broadband access is emerging as a new

ground for policy making and private sector service provision. Unlike the developed world, broadband may not mean the traditional fat pipe is reaching homes. Instead, most access may come from mobile broadband. Therefore, the term broadband refers to multiple modes of accessing the higher speed Internet – be it through mobile phones, other mobile devices, Internet kiosks or home PCs. Given that the survey is predominantly conducted in emerging economies, we take the lowest (slowest) commonly accepted definition of Broadband, which defines it as “an ‘always on’ Internet connection with a minimum download/upload speed of 256kbps” (OECD 2007).

As noted above, all three sectors may not be applicable to all countries. Furthermore, other minor definitional changes may also need to be made. These country-specific variations to the methodology should be discussed with LIRNEasia/RIA/DIRSI or the relevant coordinator and agreed upon prior to conducting the survey.

### **The seven dimensions**

For each of the three sectors mentioned above, the respondent will assess (i.e. provide a score on a scale of 1 – 5 for) each of the following seven dimensions:

1. Market entry
2. Allocation of scarce resources
3. Interconnection
4. Regulation of anti-competitive practices
5. Universal service obligation
6. Tariff regulation
7. Quality of Service

Of these, the first five dimensions are based on the *Reference Paper of the Fourth Protocol of the General Agreement on Trade in Services* and reflect the broadest international consensus of the most important aspects of telecom regulation.<sup>11</sup>

Tariff Regulation was added following pilot studies and input from researchers.

Based on early 2008 discussions at LIRNEasia, it was agreed that Quality of Service (QoS) is increasingly important. While the traditional (incumbent-led) fixed sector always had basic QoS measurements, increasingly QoS for mobile is becoming important – for example, completing a financial transaction via the various m-payment methods is only feasible if the mobile signal does not drop half-way through the transaction. Similarly, depending on the application being used, Broadband QoS becomes increasingly important (e.g. simply browsing can tolerate higher levels of latency that VoIP applications simply cannot). At the moment, objective measures for

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<sup>11</sup> The WTO Reference Paper also contains a dimension for independence of the regulator. However because it is seen as a process variable different from the other outcome variables, it is not included in the TRE dimensions.

measuring Broadband and Mobile QoS are neither common nor standardised. However, meaningful perception measures about regulation relating to QoS can go a long way in putting QoS on the regulatory and policy agendas.

### **The Likert Scale**

Using the Likert Scale, each of the seven dimensions is scored on a scale of 1 to 5, where 1 is Highly Ineffective and 5 is Highly Effective. The Likert Scale is a well-known psychometric response scale often used in questionnaires.

The raw data collected for the survey using the Likert Scale is ordinal data and, therefore, the distinction between neighbouring points on the scale is not necessarily always the same. For instance, the difference in effectiveness expressed by giving a score of 4 rather than 3 might be much less than the difference in effectiveness expressed by giving a score of 5 rather than 4.

Since the data collected is summarised in the final TRE scores, it is possible to transform the 1 to 5 scale to a different scale like -2 to 2 which makes it easier to interpret. However, there is a possibility that a transformed scale portrays a different level of perception to the respondent. For example, giving a score of 3 in a 1 to 5 scale and giving a score of 0 in a -2 to 2 scale might not appear the same for some respondents. Therefore it is recommended that the 1 to 5 scale be kept constant in doing the TRE survey.

Clearly, the Likert Scale may be subject to distortion. Respondents may avoid extreme scores (*central tendency bias*); or may try to portray themselves or their organisation in a more favourable light (*social desirability bias*).

### **The Respondents: Categories, Weights, Minimum Numbers**

#### **Categories**

The different stakeholders that are involved in the TRE have been grouped into three categories according to their common interests.

- **Category 1:** Stakeholders directly affected by telecom sector regulation
  - E.g. Operators, Industry associations, Equipment suppliers, Investors
- **Category 2:** Stakeholders who analyse the sector with broader interest
  - E.g. Financial institutions, Equity Research Analysts, Credit Rating Agencies, Telecom consultants, Law firms
- **Category 3:** Stakeholders with an interest in improving the sector to help the public
  - E.g. Academics, Research organisations, Journalists, Telecom user groups, Civil society, Former members of regulatory and other government agencies, Donors, Current government employees from organizations related to the telecom sector EXCLUDING those in the telecom regulatory & policy hierarchy (i.e. excludes anyone from the regulatory agency, policy making body (often Ministry of Post and Telecom or similar), the Minister in charge of Telecommunications etc.)

Note that certain Financial Institutions (listed in category 2) may take an equity stake in an operator and, thereby, may also be an Investor (category 1). It could also be that within the same financial institution, respondents from one unit (say, the Equity Research division) falls into Category 2 (since they analyse the sector as a whole) while another unit (say, the Investment/Asset Management division that owns shares of the operator) falls into Category 1. In such instances the researcher must deal with the categorisation of respondents on a case-by-case basis.

## Weights

Contributions from each category are of identical importance to the final TRE scores. Therefore, if there are an equal number of respondents for each category, the TRE Assessment will reflect the views of the respondents of each category in an equal manner.

However, if response rates differ and the sample selection procedure does not produce an equal numbers of respondents from each category, then an overrepresentation of some categories and underrepresentation of others will result. This will cause problems in comparison.

Ideally, each category should make the same contribution to the final result. In order to achieve this balanced representation, overrepresented categories are given a weight of less than one and underrepresented categories are given a weight of greater than one, in such a way that all three categories equally contribute to the final score.

## Minimum number of respondents

Even though weighting deals with numerical imbalance, it is important to have a sufficient number of respondents for all three categories because the sample size determines the precision with which population values can be estimated; i.e. the larger the sample, the more precise the estimate. As a practical matter, sample size is often the dominant factor in determining the precision because very few respondents from a particular category will make the final TRE score highly sensitive to each respondent's input in that category.

Having taken the above factors in to account, as well as the practical constraints associated with the survey, it is necessary to have a minimum of 15 respondents from each category in any country (for a minimum of 45 total respondents). Only in micro-states (e.g. Bhutan, Maldives and countries with populations of under or around 1 million), a minimum of 5 respondents from each category is accepted (for a minimum of 15 total respondents).

Having a larger number of respondents per category also allows more sophisticated analysis without compromising the respondent's anonymity. For example, category 1 represents players who are already in the market. Certain regulatory regimes may unduly favour those who have already passed (by whatever means) the barrier to entry. For these respondents, overly cumbersome market entry procedures may indeed serve as a positive and keep new entrants out. However to analyse at the level of respondent categories, a larger data set is required.

All in all, there were 59 respondents broken down into the following per Category:



**Table \_: Respondent Breakdown**

<b>Category</b>	<b>No. of Respondents</b>
Category 1	19
Category 2	11
Category 3	29
TOTAL	59

Most of the respondents for the survey answered online. Only eleven (11) people answered the survey manually.

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**Annex 2: Summary of Regulatory and Policy Events for the Philippines January 2010-January 2011**

Date	Subject
26 Jan 2011	An Act Providing for the Establishment of the No Calls and No Text Registration System was filed in the Lower house.
26 Jan 2011	Some groups debate prepaid SIM registration amidst terrorist bombing of a public bus in Manila.
21 Jan 2011	President Aquino is reported to have retained NTC Commissioner Gamaliel Cordoba as Head of the NTC.  Also, Carlo Jose A. Martinez was named deputy commissioner while Delilah F. Deles was appointed as acting commissioner for the NTC.
12 Jan 2011	The NTC removes the Internet Data Cap provision from the proposed memorandum circular on minimum speed of broadband connections saying it is counter-productive to increasing the Internet usage in the country.
12 Jan 2011	A House Resolution was filed 'Urging the NTC to Scrap Its Proposed Imposition of a Ceiling on Internet Speed and on the Amount of Data Broadband Users Can Download Per Day'.
11 Jan 2011	NTC continues public consultation regarding the minimum speed of broadband connections
21 Dec 2010	NTC holds public consultation regarding the minimum speed of broadband connections
December 2010	NTC proposes to cap broadband data (see below)  Draft memo: MEMORANDUM ORDER on the MINIMUM SPEED OF BROADBAND CONNECTIONS 1. Broadband service providers shall specify the minimum broadband/Internet connection speed and service reliability and the service rates in their offers to consumers/subscribers/users in their advertisements, flyers, brochures and service agreements and service level agreements. The minimum service reliability shall

	<p>be 80%.</p> <p>Service Reliability is measured over a period of one (1) month and calculated as :</p> <p><u>(Hours in a day x Days in a month) – (Time Internet connection speed is below minimum) (Hours in a day x Days in a month)</u></p> <p>The service offers shall specify the service rates for a minimum broadband/Internet connection speed and the service reliability, e.g., PhP900.00/month for 512Kbps minimum connection speed and 80% service reliability, PhP1,000.00/month for 512Kbps minimum connection speed and 85% service reliability, etc.</p> <ol style="list-style-type: none"> <li>2. Service providers may offer broadband/Internet connection on a “best efforts” basis.</li> <li>3. The subscribers/consumers shall be properly informed of the broadband/Internet connection service being offered to them.</li> <li>4. Service providers offering committed information rate (CIR) shall comply with NTC MC No. 12-19-2004.</li> <li>5. Service providers may set the maximum volume of data allowed per subscriber/user per day.</li> </ol>
26 August 2010	House Bill 02858/An Act Abolishing the Interconnection Charges Imposed by Telecommunications Companies, Amending for the Purpose RA No. 7925, Otherwise Known as the ‘Public Telecommunications Policy of the Philippines’, was filed.
10 August 2010	House Bill 02380/An Act to Prohibit Cell Phone Network Companies from Sending Unsolicited Material to their Subscribers via Text or Short Message Service (SMS), was filed.
09 August 2010	House Bill 02253/An Act Mandating the NTC to Install a Regulatory Metering Device to Interlink with the Telecommunications Industry Players as an Enhancement to Its Supervisory Functions, and for Other Purposes, was filed.
August 2010	Lawmaker proposes to regulate Facebook and Twitter use in government agencies

July 2010	Atty. Ivan Uy is appointed new CICT Chair by President Aquino
May 2010	Benigno Aquino III is elected President of the Philippines
27 July 2010	Senate Bill No. 2100 or the "Anti-Cable Television and Cable Internet Pilferage Act" (An Act Prohibiting and Penalizing the Pilferage and Theft, Unauthorized Use, Interconnection or Reception of any Signal or Service Offered over a Cable Television or Cable Internet System and/or Network or through Any Unauthorized Installation, Access or Connection through the Use of Cable or Other Equipment and Prescribing Penalties) was filed.
13 July 2010	Senate Bill No. 1407 or the IT Venture Capital Fund of 2010 (An Act to Accelerate the Development of Information Technology Start-up Companies by Providing an IT Venture Capital Fund) was filed.
08 July 2010	Senate Bill No. 828 or the Philippine VOIP Act of 2010 (An Act to Promote and Govern the Development of Voice Over Internet Protocol in the Philippines) was filed.
07 July 2010	House Bill 1011 (An Act Promoting the Development and Use of Free/Open Source Software [FOSS] in the Philippines, Amending RA 8293 Otherwise Known as the 'Intellectual Property Code of the Philippines', Providing Penalties Thereof, and for Other Purposes) was filed.
07 July 2010	House Bill 01030/An Act Requiring Cell Phone Companies to Set Up Local Assembly and Packaging Plants for the Manufacture of Cell Phone Units for the Purpose of Taxation
July 2010	RP logs highest Facebook penetration rate
11 June 2010	NTC issues Memorandum Circular No. 02-06-2010 Subject: Standard for Digital Terrestrial Television (DTT) Broadcast Service
May	Philippine holds first national electronic polls
29 April 2010	NTC holds public hearing regarding proposed Memorandum Circular Regarding Guidelines to protect Children from Child Pornography

7 April 2010	NTC issues Draft Guidelines to protect Children from Child Pornography
Feb 2010	COMELEC reports 30% of RP has no reliable cell signal
19 Feb 2010	NTC issues updates on Memorandum Circular regarding Rules on the Assignment of the remaining allocated 3G radio Frequency Band
18 Feb 2010	The NTC conducts public hearing regarding Rules on the Assignment of the remaining allocated 3G radio Frequency Band
4 February 2010	The NTC issues Memorandum Order 001-02-2010 on the Prohibition of Cellular Phone Jamming Devices

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