TELECOMMUNICATION SECTOR IN ASEAN: "ASEAN ECONOMIC INTEGRATION AND ITS IMPLICATIONS FOR LABOUR IN THE REGION"

By Steven Truong Trong Vu (National University of Singapore, NUS)

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Introduction

In December 1997, the Association of Southeast Asian Nations (ASEAN) Heads of States and Government in Kuala Lumpur, Malaysia have promulgated the ASEAN Vision 2020 charting a new direction for ASEAN through the turn of century towards the year 2020. The vision is of an outward and forward looking ASEAN, living in peace, stability and prosperity, bonded together in partnership in dynamic development and in a community of caring societies. One year later, the Hanoi Plan of Action (HPA) was adopted to realize the ASEAN vision. The HPA is a series of plans of action to strengthen macroeconomic and financial cooperation, advance economic integration, and to promote social, science and technology and information technology infrastructure as well as human resources development.¹ Along with many other initiatives and plans, ASEAN over the past decade has witnessed strong economic integration, which has significantly impacted its members in many respects.

This study, which focuses on telecommunication sector, is part of a research project by the Global Union Federations (GUFs), the ASEAN Service Employees Trade Union Council (ASETUC) and the Friedrich Ebert Stiftung (FES), which attempts to analyze the impacts of ASEAN economic integration on workers and unions in the community in four sectors: telecommunication, construction, healthcare, and finance.

Due to inefficient information on telecommunication sector in Brunei Darussalam, Cambodia, Laos and Myanmar, the paper covers only six out of ten ASEAN members, namely Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. It comprises three main parts. The first part delves into mapping and analysis of major telecommunication companies in ASEAN and ASEAN efforts to promote regional integration of telecommunication sector. An overview of economy and telecommunication industry in each country is also included in this part. The second part draws direct and indirect impact assessments of ASEAN economic regionalism on its workers and trade union development. This part also mentions efforts by ASEAN and telecommunication-related trade unions in the region to deal with challenges caused by regional economic integration. Conclusion and policy recommendations about employment generation, income security, and skill development in mentioned telecommunication companies in ASEAN are contents on the last part.

This study primarily uses secondary data. Most data in this paper come from Telecommunication Quarterly reports by respective country and Asia Pacific Telecommunication reports published by the Business Monitor International.

¹ ASEAN Secretariat, "Recent development in ASEAN economic integration," <u>http://www.aseansec.org/7661.htm</u> (accessed Dec 8th, 2009)

PART 1

A. Overview of ASEAN Economies and Telecommunication Industries 1. Indonesia

Indonesia is the largest economy in Southeast Asia and also a member of G-20 major economies. Indonesia joined ASEAN when it was founded in 1967 and since has been playing an important role in the regional economy. In 1990s, Indonesia emerged as a fast-growing economy with an average annual GDP growth at 8.0%. Later 1990s, Indonesia was severely affected by the Asian financial crisis, however. In 1998, Indonesian GDP growth hit the low at -13.1%. In recent years, Indonesia has bounced back with the growth rates ranging from 5.0% to $6.1\%^2$. Key indicators suggest that the Indonesian economy is faring reasonably well. Tight fiscal and monetary policies has reduced inflations, lowered interest rates and even modestly appreciated the value of the rupiah. However, Indonesia has still faced many problems such as legal system and corruption which discourage foreign investors from returning.

Telecommunication industry in Indonesia can be best understood by seeing from two different phases. The first phase is from 1989 to 1999 when Indonesia adopted Telecommunication Law No. 3, state-owned telecommunication companies like Telkom and Indosat were partially privatized, and the government introduced the 'KSO' build, operate, transfer (BOT) investment arrangements with foreigners. The second phase is from 1999 to present with adoption of Telecommunication Law No. 36, creation of an independent regulator, lifting of the respective monopolies for Telkom and Indosat, allowing limited competition in local, long distance and international services, introduction of competition in all services in recent years, and offer to the WTO for telecommunication services.³

In the first phase, Indonesian government did not have enough capital to raise network teledensity even to the world emerging market average at the time (2.5% in 1992). To deal with the problem, Indonesia for the first time allowed foreigners to make direct equity investments in value-added services. As a result, many foreigner telecommunication operators jumped in shortly after that. US West and Telstra, NTT, France Telecom, Singapore Telecom and Cable & Wireless all invested in this highly potential market. However, when the Asian financial crisis broke out, most of the above investors quit the market.⁴

In 1999, the Indonesia government issued the Telecommunication Blueprint. Together with Law No. 36, it marked the second phase of telecommunication industry of Indonesia. This

² CIA The World Factbook, "Indonesia," <u>https://www.cia.gov/library/publications/the-world-factbook/geos/id.html</u> (accessed Dec 12th, 2009)

^{3,4} Ken Zita, *Indonesia Brief*, <u>www.ndaventures.com/**Indonesia_Telecom_Brief**.pdf,(accessed</u> Dec 11th, 2009)

phase witnessed the return of foreign investors. Indonesia also welcomed new global operators to its market such as KPN (The Netherlands), Duetsche Telkom and Telekom Malaysia. Since 2002, the government further pushed privatization and competition in telecommunication industry.

2. Malaysia

Malaysia is the 29th largest economy in the world by purchasing power parity with gross domestic product estimated at \$357.9 billion in 2007. Malaysia is one of the co-founders of ASEAN and has one of the fastest growing economies in Southeast Asia. With a GDP per capita of \$15,700 (2008), Malaysia is considered a newly industrialized country (NIC). Like Indonesia, Malaysia was severely hit by the Asian financial crisis but quickly recovered. It expanded 5.3% in 2003 and 7% in 2007, driven by solid growth in manufacturing and services.⁵

In recent years, Malaysia has worked quietly at positioning itself as a technologically progressive economy. Today, Malaysia prides itself on having built advanced telecommunication networks, especially when comparing with other developing countries. The country's telecommunication sector has been seen going through a period of consolidation with telecommunication companies battling in an increasingly competitive and changing market. The last decade has witnessed a strong growth in Malaysia's telecommunication sector. The 2007 Southeast Asia Telecom Statistics and Market Overview Report shows that the mobile penetration of Malaysia had passed 85% mark in the first half of 2007. Mobile subscribers also reached 21 million at the time.⁶

3. The Philippines

As one of the newly industrialized emerging economies, the Philippines' economy was ranked by the International Monetary Fund (IMF) as the 37^{th} largest economy in the world according to purchasing power parity. As one of the co-founders of ASEAN in 1967, the Philippines has been playing an important role in the community. The Philippines is also a big player in the regional economy. In recent years, the Philippines is one of the fastest-growing economies in Asia with high GDP growth rate $(7.3\% \text{ in } 2007)^7$.

Over the last decade, there has been a concerted effort by the Philippines' government working with the country's telecommunication operators to expand the national fixed network. Despite this, the Philippines found it difficult to extend its basic telephone network

⁵ CIA The World Factbook, "Malaysia," <u>https://www.cia.gov/library/publications/the-world-factbook/geos/my.html</u>, (accessed Dec 12th, 2009)

⁶ Paul Budde Communication Pty Ltd., "2007 South East Asian – Telecoms Statistics and Market Overview," <u>http://www.dri.co.jp/auto/report/bud/budseasiasta07.htm</u> (accessed Dec 8th, 2009)

⁷ CIA The World Factbook, "Philippines," <u>https://www.cia.gov/library/publications/the-world-factbook/geos/rp.html</u>, (accessed Dec 12th, 2009)

to reach more population. The fixed-line teledensity has been way below its target. The fixed-line teledensity in 2002, for instance was only 5% which lagged far behind the target of 12%. Paradoxically, the mobile penetration in the Philippines developed fast. It passed 50% mark early 2007 and has been growing at an annual rate of 26% since. The future of telecommunication in the Philippines is optimist as more foreign investors see opportunity and invest in the industry. In recent years, telecommunication sector has contributed around 10% to the national GDP. ⁸

It can be argued that privatization in communication industry in the Philippines is stronger than any fellow countries in ASEAN. It is a challenge for the Philippines' government as it has few substantial levers of control over the industry. The government's role has been primarily to issue licenses and mange competition rather than to guide specific investments.

4. Singapore

Singapore has a high developed economy and is one of the highest GDP per capita in the world. Before the recent global crisis, Singapore had maintained high GDP growth rates for many years. From 2003 to 2007, Singapore experienced an average of 7.3% growth rate. Singapore is one of the financial centers in Asia and its economy well depends on trade and export. Singapore therefore was severely hit by the 2008 financial crisis. Its growth rate slid from 7.7% in 2007 to mere 1.1% in 2008. Singapore economy is recovering and predicted to continue being one of the highest developed economies in the region. ⁹

Singapore is well-known for its high quality and progressively regulated telecommunication environment, which has generated a very competitive market. Currently, Singapore still maintains its status as a world leader in telecommunication. Over 98% of homes have fixed-line telephone connections. Singapore was one of the very first countries in the world to have a fully digital telephone network. Even though the Singapore Telecommunications (SingTel) still dominates the Singapore telecommunication sector, liberalization has opened opportunity for new operators to enter the market. SingTel is the strongest telecommunication company in ASEAN and it has successfully established a considerable presence in the regional telecommunication market. ¹⁰

5. Thailand

Thailand is the second largest economy is Southeast Asia after Indonesia. The economy of Thailand is an emerging economy which depends heavily on exports. Exports often account for more than two thirds of GDP of Thailand. Thailand had a very high average growth rate

^{8,10} Paul Budde Communication Pty Ltd., "2007 South East Asian – Telecoms Statistics and Market Overview," <u>http://www.dri.co.jp/auto/report/bud/budseasiasta07.htm</u> (accessed Dec 8th, 2009)

⁹ CIA the World Factbook, "Singapore," <u>https://www.cia.gov/library/publications/the-world-factbook/geos/sn.html</u>, (accessed Dec 12th, 2009)

of 9.4% from 1985 to 1996. The 1997 Asian financial crisis hit the Thai economy heavily until it regained momentum in 2001. In recent years, due to political instability, the GDP growth of Thailand has settles at around 4-5% from 5-7% in early 2000s¹¹.

Thailand's telecommunication sector has been displaying a lot of energy, despite some economic uncertainty and questions about the government's progress on a range of national projects. During the last five years, Thailand has witnessed high annual growth rates of mobile market. Thailand reported that by 2007, the country's mobile penetration was 67% and the annual subscriber growth rate had lifted to 35%. A feature of government's telecommunication reform efforts had been a general tardiness in implementing key changes. The National Telecommunications Commission (NTC) finally came into being in late 2004. The NTC began its task and there were promising signs of major reforms being implemented. However, momentum was lost when a military coup overthrew Thaksin Shinawatra's government in September 2006.¹²

6. Vietnam

By adopting market-oriented economy in 1986, Vietnam over the past 20 years has experienced rapid growth. Vietnam is one of the fastest growing economies in the world with an average growth in GDP of 7.1% per year from 2000 to 2004. The GPD growth rate of Vietnam even reached 8.4% in 2005.¹³ Vietnam became a full member of ASEAN in July 1995 and has since played an important role in the community.

Vietnam has set itself many ambitious targets for the expansion of its telecommunications infrastructure. Initial efforts to fast-track the expansion of the national network have their shortcomings. However, the introduction of a limited level of competition into the telecommunication market, coupled with a generally improved economic climate, has seen strong growth in the sector. In 2007, Vietnam officially became a member of the World Trade Organization and this has opened more opportunities for the telecommunication sector to grow. In recent years, Vietnam has pushed its deregulation and liberalization of the sector, which results a more competitive telecommunication market than ever before. ¹⁴

B. Major Telecommunication Companies in ASEAN Countries

1. Indonesia

 ¹¹ CIA the World Factbook, "Thailand," <u>https://www.cia.gov/library/publications/the-world-factbook/geos/th.html</u>, (accessed Dec 12th, 2009)
¹² ¹⁴ Paul Budde Communication Pty Ltd., "2007 South East Asian – Telecoms Statistics and Market Overview,"

 ^{12 14}Paul Budde Communication Pty Ltd., "2007 South East Asian – Telecoms Statistics and Market Overview,"
<u>http://www.dri.co.jp/auto/report/bud/budseasiasta07.htm</u> (accessed Dec 8th, 2009)
¹³ Indexmundi, "Vietnam GDP – Real Growth Rate,"

http://www.indexmundi.com/vietnam/gdp_real_growth_rate.html, (accessed Dec 12th, 2009)

PT Telkom (Telkom)¹⁵

Telkom is the dominant local fixed wireline operator with over 90% of the market, facing limited opposition from Batam Bintan Telecom (BBT). The fixed wireless market is more competitive with Telkom Flexi competing against Ondosat StarOne and Esia. Telkom is 51.19% owned by the government, 46.43% owned by the public and the rest of 2.38% is on treasury as of September 2008.

Telkom, as a holding company, has several affiliated subsidiary companies such as mobile provider Telkomsel, PT Metra (Multimedia, Pay TV, Call Centers), PT Infomedia (Yallow Pages), PT Indonusa (Pay TV, Internet), PT Napsindo (Network access point) and PT Pro Infokom Indonesia (B2B, E-government). In order to raise its international network traffic, Telkom signed deals with nine telecom operators in July 2008 including Singapore's Asiakomnet, Incaccess, Shine Town, StarHub and Sunvone; Korea Telecom; Taiwan Fixed Network; Telecom Italia Sparkle; and Hong Kong's Huchinson Global Communications.

Telkom's fixed line subscribers are reported at 22.056 million, of which wireline accounts for 8.657 million. The rest, 13.399 million is made up of fixed wireless.

Telkom's operational indicators	Telkom's financial data
No. of fixed lines in services (2007): 15.048mnAnnuaNo. of fixed lines in services (2008): 21.355mnAnnuaNo. of fixed lines in services (Q1 of 2009): 22.056mnRevenNo. of fixed wireless subscribers (2007): 4.716mnNet prNo. of fixed wireless subscribers (2008): 12.725mnNet prNo. of fixed wireless subscribers (2008): 12.725mnNet prNo. of fixed wireless subscribers (Q1 of 2009):Net pr13.399mnNo. of broadband subscribers (2007): 241,000No. of broadband subscribers (2008): 645,000No. of broadband subscribers (Q1 of 2009): 716,000No. of employees: 24,884 (as of March 2009)	al revenues (2007): IDR59.440trn al revenues (2008): IDR60.690trn nues Q1 of 2009: IDR14.702trn rofit (2007): IDR12.857trn rofit (2008): IDR 10.619trn rofit (Q1 of 2009): 2.458trn

Telkomcel¹⁶

Founded in 1995, Telkomsel is now the leading mobile operator in Indonesia with 50.2% market share as of the March 2009. Telkomsel provides GMS services through its nation-

^{15,16} Business Monior International Ltd, *Indonesia Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

wide dual-band 900/1,800 MHz network and internationally through its 283 international roaming partners in 147 countries.

Telkomsel provides network coverage to more than 90% of Indonesia's population and is the only operator in Indonesia to cover all provinces and cities. Telkomsel offers GMS Dual Band, GPRS, Wi-Fi and EDGE technology. In 2006, Telkomsel secured a 10-year 3G license for which the operator paid an upfront fee of IDR436 billion and a frequent fee of IDR32 billion for the first year.

Originally Telkom owned 77.7% stake in Telkomsel. The remainder was shared between KPN International (17.3%) and Setdco (5.0%). After the Asia financial crisis, KPN collapsed and the government absorbed its stake. In 2001, the state offered SingTel 22.3% share in Telkomsel via tender and one year later, SingTel increased to 35.0%.

Telkomsel's operational indicators	Telkomsel's financial data
No. of subscribers (2007): 47.890mn No. of subscribers (2008): 65.30mn No. of subscribers (Q1 of 2009): 72.13mn No. of 3G subscribers (2007): 3.30mn No. of employees: 4,128 (as of March 2009)	Annual revenues (2007): IDR38.80trn Annual revenues (2008): IDR37.20trn Revenues Q1 of 2009: IDR9.25trn Net profit (2007): IDR13.620trn Net profit (2008): IDR 11.42trn Net profit (Q1 of 2009): 2.58trn

Indosat¹⁷

Established in 1967 as Indonesia's international telecommunication service provider, Indosat is now the country's leading IDD operator and the second largest mobile operator with 33 million subscribers as of March 2009.

In 1980, the Indonesia's government acquired Indosat before selling 40.81% stake to STT of Singapore in 2002, later sold to Qatar Telecom in June 2008. The latest data in March 2009 shows that Qatar Telecom owns 65% of Indosat's stake. This is the maximum percentage that a foreign investor can hold in an Indonesian mobile operator. The government currently holds 14.29% stake in Indosat. The remainder is in the hands of public and an assortment of financial institutions.

Indosat closely cooperate with foreign telecommunication companies such as Thelas Alenia Space France (TASF), NEC, Ericssion and Nokia to provide a wide range of services

¹⁷ Business Monior International Ltd, *Indonesia Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

including mobile service, fixed wireless service, and converged services such as video valueadded services.

Indosat's operational indicators	Indosat's financial data
No. of Cellular subscribers (2007): 24.50mn No. of Cellular subscribers (2008): 36.51mn No. of Cellular subscribers (Q1 of 2009): 33.30mn No. of fixed wireless subscribers (2007): 627,934 No. of fixed wireless subscribers (2008): 761,589 No. of fixed wireless subscribers (Q1 of 2009): 698,774 No. of employees: 7,356 (as of March 2009)	Annual revenues (2007): IDR16.50trn Annual revenues (2008): IDR18.659trn Revenues Q1 of 2009: IDR4.497trn Net profit (2007): IDR2.0trn Net profit (2008): IDR 1.879trn Net profit (Q1 of 2009): 119.5bn

Excelcomindo¹⁸

Joined Indonesia's telecommunication in 1995, Excelcomindo has quickly become one of the biggest telecommunication companies in Indonesia. Excelcomindo is now the third largest mobile operator. Apart from cellular services for voice and data, Excelcomindo also offers VoIP services while its Business division provides leased line and packaged GMS cellular services to corporate clients and some ISPs.

The 100% owned by Telekom Malaysia Indocel Holding accounts for 66.98% (2007) of Excelcomindo's stake. Other shareholders include Khazanah Nasional Bhd (16.8%) and the UAE's Etisalat (15.97%).

Excelcomindo is well-known for its innovative services. In June 2009, Excelcomindo launched a new mobile social networking application, XL fun which allows its subscribers to share content with other social networks such as Facebook, Friendster and Photobucket. The year 2008 witnessed an impressive mobile subscription increase of 29.3% to 26 million, which placed Excelcomindo the third biggest player in the Indonesia's mobile market.

Excelcomindo's operational indicators	Excelcomindo's financial data
No. of mobile subscribers (2007): 18.398mn	Annual revenues (2007): IDR8.365trn
No. of mobile subscribers (2008): 26.016mn	Annual revenues (2008): IDR12.156trn
No. of mobile subscribers (Q1 of 2009): 24.90mn	Net profit (2007): IDR251.0bn
No. of employees: 1,995 (as of March 2009)	Net loss (2008): IDR15bn

¹⁸ Business Monior International Ltd, *Indonesia Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

2. Malaysia

Telekom Malaysia¹⁹

Telekom Malaysia is the leading telecommunication operator with presence in fixed-line and internet sub-sectors. Founded in 1984, Telekom Malaysia was publicly listed in 1990, with the government currently retaining 45% of stake. Although competition has been permitted in the fixed-line market since late 1990s, Telekom Malaysia still controls more than 90% of the local market.

In September 2006, the dominant shareholder Khazanah Nasional accounced its plan to issue MYR2.76 billion in five-year bonds to be convertible into shares in the operator. It seems that the state investment agency, which owns 40.15% of the company, is paving the way for a sale of the government's holdings. Singapore's Temasek Holdings, which initially owned 5% of stake in Telekom Malaysia decided to sell 3.3% share in 2007.

Telekom Malaysia streamlined its operation. Its mobile and fixed businesses are separated by two different entities, which are Axiata Group (formerly known as Telekom Malaysia International – TMI) including international mobile operations under Celcom, and Telekom Malaysia including TM's domestic interests in fixed-line voice, data and broad-band, Global Business and other non-telecommunication related services under TM Ventures.

Telekom Malaysia's operational indicators	Telekom Malaysia's financial data
No. of fixed-line subscribers (2007): 4.43mn	Annual revenues (2007): MYR17.843bn
No. of fixed-line subscribers (2008): 4.297mn	Annual revenues (2008): MYR8.675bn
No. of mobile subscribers (Q1 of 2009): 4.290mn	Revenues Q1 of 2009: MYR2.105bn
No. of broad-band subscribers (2007): 1.265mn	Net profit (2007): MYR2.548bn
No. of broad-band subscribers (2008): 1.603mn	Net profit (2008): MYR229.3mn
No. of broad-band subscribers (Q1 of 2009): 1.333mn	Net profit (Q1 of 2009): MYR27.7mn
No. of employees: 15,228 (as of March 2009)	

Maxis Communications²⁰

Established in 1995, Maxis Communications is now the largest mobile operator in Malaysia with 46% market share. It has a fast-growing 3-G network with 1.3 million subscribers as of March 2008, an increase from 350,000 reported in the previous year.

¹⁹ Business Monior International Ltd, *Malaysia Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

²⁰ Business Monior International Ltd, *Malaysia Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

Backed by many financial institutions, Maxis Communications launched GMS network in 1995. In July 2002, Maxis Communications was listed on the Kuala Lumpur stock exchange (KLSE) and quickly raised MYR3.05 billion which was the largest public offering (IPO) in history of Malaysia. In 2003, the company acquired competitor Timecel and subsequently became the biggest player in mobile market in Malaysia.

In May 2007, 99.44% of Maxis Communication's stake was owned by Binariang GMS, which belongs to Malaysian business tycoon Ananda Krishnan. The rest was owned by Saudi Telecom

Maxis' operational indicators	Maxis' financial data
No. of subscribers - Group (2006): 12.576mn	Annual revenues (2006): MYR7.707bn
No. of subscribers - Group (March 2007):	Revenues – Group (Q1 of 2007): MYR2.175bn
14.047mn	Revenues - Malaysia (Q1 of 2007):
No. of subscribers - Malaysia (2006): 8.063mn	MYR1.837bn
No. of subscribers - Malaysia (2008): 11.263mn	Net profit (2005): MYR1.70bn
No. of subscribers - Malaysia (March 2009):	Net profit (2006): MYR2.10bn
12.508mn	Net profit - Group (Q1 of 2007): MYR572mn
No. of 3G subscribers (2006): 220,000	Net profit – Malaysia (Q1 of 2007):
No. of 3G subscribers (March 2007): 350,000	MYR561mn
No. of 3G subscribers (March 2008): 1,30mn	

Celcom²¹

Celcom, which founded in 1988, is the second largest mobile operator in Malaysia. It occupies over one-third of the mobile market. Celcom is now under control of the Axiata Group, which was renamed from Telekom Malaysia's international mobile operations unit Telekom Malaysia International (TMI) in March 2009. Celcom was initially a private limited company under the name of Telekom Malaysia International but was converted into a public company named TM International Berhad (TMI) in 2001.

Axiata Group's major shareholder is Khazanah Nasional Berhad with 44.51% stake while its other significant shareholders that own more than 5% holdings are the Employee's Provident Board (14.22%) and Amanah Raya Nominees (8.52%).

Celcom has worked closely with multinational vendors such as Ericsson of Sweden and Huawei Technologies of China to provide a wide range of mobile and 3G services. Following footsteps of fellow regional company SingTel, Celcom has been looking abroad to

²¹ Business Monior International Ltd, *Malaysia Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

spark profit growth. Celcom has investment in many countries including India, Indonesia, Sri Lanka, Bangladesh and Cambodia.

Celcom' operational indicators	Celcom' financial data
No. of subscribers (2007): 7.202mn No. of subscribers (2008): 8.80mn No. of mobile subscribers (Q1 of 2009): 9.176mn	Annual revenues (2007): MYR5.157bn Annual revenues (2008): MYR5.60bn Revenues Q1 of 2009: MYR1.476bn Net profit (2007): MYR1.052bn Net profit (2008): MYR1.3mn Net profit (Q1 of 2009): MYR357mn

DiGi Telecommunications²²

Though lagged far behind by Maxis and Celcom, DiGi Telecommunications is still a major player in Malaysia's telecommunication industry. Founded in 1994, DiGi Telecommunication, which is well backed by Norway's Telenor, was the first mobile operator in Malaysia to fully operate a digital cellular network.

DiGi Telecommunication is 61% owned by Norway's Telenor. The local company Berjaya Group owns 20% and the remainder is publicly listed. Unlike Maxis and Celcom, DiGi has no intention to expand abroad but primarily focuses on the domestic market.

DiGi also provides a wide range of mobile, voice and data, and 3G services. DiGi has decided to spend a significant amount of MYR1.1-1.3 billion on developing 3G networks. Also, to compete against Maxis and Celcom, DiGi puts emphasis on market segmentation in the immediate term to capitalize the youth market.

DiGi' operational indicators	DiGi' financial data
No. of subscribers (2007): 6.40mn No. of subscribers (2008): 7.062mn No. of mobile subscribers (Q1 of 2009): 7.230mn No. of employees: 1,400	Revenues (2007): MYR4.363bn Annual revenues (2008): MYR4.184bn Revenues Q1 of 2009: MYR1.281bn Net profit (2007): MYR1.06bn Net profit (2008): MYR1.141mn Net profit (Q1 of 2009): MYR275mn

²² Business Monior International Ltd, *Malaysia Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

3. The Philippines

Philippine Long Distance Telephone Company (PLDT)²³

Established in 1928, PLDT is the leading fixed-line provider in the Philippines with 183 central office exchanges serving Metro Manila and 188 other towns and cities, representing about 70% of the country's access lines. PLDT is also the only operator that provides fixed-line services nationwide. There were 1.782 million fixed lines in services as of 2008.

PLTD organizes its business into three segments which are: wireless which is provided by cellular service providers, Smart and Piltel, and by satellite and very small aperture terminal (VSAT) operators Mabuhay Satellite, ACeS Philippines Cellular Satellite and Telesat; fixed-line which is provided mainly by PLDT but also by subsidiaries PLDT Clark Telecom, Subic, PLDT-Maratel and Bonifacio Communications; and ICT which is provided by PLDT subsidiary e-PLDT and call centers.

Major shareholders of PLDT include Hong Hong-based investment firm First Pacific (30.0%) and Japan's NTT Communications/NTT DoCoMo (20.03%).

PLDT has signed an agreement with Hutchison Global Communications for the deployment of an MVNO in Italy. PLDT has also an MVNO in Hong Kong named 1528 Smart a similar one in Singapore under the name of Smart Pinoy. All these services target at Filipinos residing in the mentioned countries. Also, the operator has plans to launch its MVNO services in Japan, Macau, Taiwan and even Europe.

PLDT' operational indicators	PLDT' financial data
No. of fixed-line subscribers (2007): 1.725mn No. of fixed-line subscribers (2008): 1.7820mn No. of mobile subscribers (Q1 of 2009): 1.776mn No. of cellular subscribers (2007): 30.041mn No. of cellular subscribers (2008): 32.225mn No. of cellular subscribers (Q1 of 1009): 36.927mn No. of broad-band subscribers (2007): 579,000 No. of broad-band subscribers (2008): 996,000 No. of broad-band subscribers (Q1 of 2009): 1.084mn No. of employees: 27,780 (as of March 2009)	Annual revenues (2007): PHP135.50bn Annual revenues (2008): PHP95.597bn Revenues Q1 of 2009: PHP36.814bn Net profit (2007): PHP36.0bn Net profit (2008): PHP35.298bn Net profit (Q1 of 2009): php9.832bn

²³ Business Monior International Ltd, *Philippines Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

Smart Communications²⁴

Established in 1991, Smart Communications is now the leading mobile operator with 36.9 million subscribers as of March 2009, accounting for 52% of market share. Smart Communications is a wholly owned subsidiary of PLDT. It has a GMS network with 8,678 base stations (March 2009) covering 99% of the population. The network also supports Piltel's prepaid GMS service Talk N Text, and acquired CURE, a wireless start-up company.

Smart Communications is one of the four 3G service providers in the Philippines. Services include TV streaming, music and video clip downloads and video calling. It reported in 2006 that it had 350,000 3G users. Smart Communications also provides a wide range of mobile and wireless broad-band services.

Smart Communications' operational indicators	Smart Communications' financial data
No. of mobile subscribers (2006): 24.20mn No. of mobile subscribers (2007): 30.041mn No of mobile subscribers (2008): 35.20mn No. of mobile subscribers (Q1 of 2009): 36.90mn	Annual revenues (2007): PHP82.30bn Annual revenues (2008): PHP87.518bn Revenues Q1 of 2009: PHP23.90bn

Globe Telecom²⁵

Joined the telecommunication industry in Indonesia in 1934, Globe Telecom is now the second largest telecommunication operator in the Philippines. It is also a leading fixed-line (domestic long-distance and international) and wireless operator, as well as a key operator of data communications and Internet services. Globe Telecom also proactively engages in non-voice data service such as mobile TV as WiMAX.

As of June 2008, SingTel owned 47.3% of Globe Telecom's stake while Ayala Corporation and public shared 33.5% and 19.2%, respectively.

Globe Telecom' operational indicators	Globe Telecom' financial data

^{24,25} Business Monior International Ltd, *Philippines Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

No. of fixed-line subscribers (2007): 420,182	Annual revenues (2007): PHP63.20bn
No. of fixed-line subscribers (2008): 422,895	Annual revenues (2008): PHP62.894bn
No. of fixed-line subscribers (Q1 of 2009): 423,447	Revenues Q1 of 2009: PHP16.0bn
No. of broad-band subscribers (2006): 51,426	Net profit (2007): PHP13.30bn
No. of broad-band subscribers (2008): 234,000	Net profit (2008): PHP2.504bn
No. of broad-band subscribers (Q1 of 1009): 287,000	Net profit (Q1 of 2009): PHP4.0bn
No. of mobile subscribers (2007): 20.318mn	
No. of mobile subscribers (2008): 24.702mn	
No. of mobile subscribers (Q1 of 2009): 25.737mn	
No. of employees: 3,884 (as of March 2009)	

Digital Telecommunications Philippines Inc (Digitel)²⁶

Digitel was established in 1987 and is now the largest fixed-line provider in Luzon, the biggest island in the Philippines. In 1994, the company started providing domestic, long-distance and international phone services throughout the Philippines with a total of 459 regional exchanges. Degitel has also provided mobile services on a GSM1800 network via its Sun Cellular brand since 2003. Philippines conglomerate JG Summit Holdings currently holds 47.43% of total stake of Digital.

To compete against the two market leaders Smart and Globe, Sun Cellular announced to plan of spending US\$300 million each year on improving its 3G and broad-band services. Digitel also plans to offer mobile internet services in the near future.

Digitel' operational indicators	Digitel' financial data
No. of mobile subscribers (2007): 5.5mn No of mobile subscribers (2008): 8.154mn No. of mobile subscribers (Q1 of 2009): 9.2mn	Annual revenues (2007): PHP8.268bn Annual revenues (2008): PHP11.271bn Revenues Q1 of 2009: PHP3.214bn Net profit (2007): PHP1.170bn Net loss (2008): PHP1.978bn Net loss (Q1 of 2009): PHP287mn

4. Singapore

Singapore Telecommunications (SingTel)²⁷

²⁶ Business Monior International Ltd, *Philippines Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

²⁷ Business Monior International Ltd, *Singapore Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

Established in 1992, SingTel is an integrated domestic telecommunication service provider. SingTel is the leading domestic fixed, mobile and broad-band operator. SingTel was listed on the Singapore Stock Exchange in 1993 and is now the supplier of communications services in more than 20 countries.

SingTel provides a wide range of services including national fixed-line services, mobile services (via SingTel Mobile), broad-band, IP and internet access, and international phone services. Also, SingTel operates ADSL network across the island and has four satellites earth station.

SingTel has huge investment in strategic regional markets such as India, Indonesia, the Philippines, Thailand and Bangladesh. Singapore is still looking to invest in other potential markets in the region. All these investments are carried out by its international unit, SingTel International (STI), which accounts for over 50% of the group's revenue. Temasek Holdings, the Singapore government's investment arm is the dominant owner of SingTel with 56.3% of its stake.

SingTel' operational indicators	SingTel' financial data
SingTel' operational indicators Group Mobile subscribers (2007): 171.539mn Mobile subscribers (2008): 232.422mn Mobile subscribers (Q2 of 2009): 262.153mn Local No. of fixed-line subscribers (2007): 1.763mn No. of fixed-line subscribers (2008): 1.713mn No. of mobile subscribers (2008): 1.713mn No. of mobile subscribers (2006): 2.330mn No. of mobile subscribers (2006): 2.330mn No. of mobile subscribers (2008): 2.942mn No. of mobile subscribers (2008): 2.942mn No. of mobile subscribers (2007): 471,000 No. of broad-band subscribers (2007): 471,000 No. of broad-band subscribers (2008): 639,000 No. of broad-band subscribers (Q1 of 2009): 673,000 No. of 3G subscribers (2008): 1.140mn No. of 3G subscribers (Q1 of 2009): 1.210mn	SingTel' financial data Group Group revenues (YE March 2007): SGD13.151bn Group revenues (YE March 2008): SGD14.844bn Group revenues (YE March 2009): SGD14.934bn Group net profit (YE March 2007): SGD3.779bn Group net profit (YE March 2008): SGD3.960bn Group net profit (YE March 2009): SGD3.448bn Group EBITDA (YE March 2009): SGD3.448bn Group EBITDA (YE March 2007): SGD6.692bn Group EBITDA (YE March 2008): SGD7.089bn Group EBITDA (YE March 2009): SGD6.482bn Local Local revenues (YE March 2007): SGD4.205bn Local revenues (YE March 2008): SGD4.904bn Local revenues (YE March 2009): SGD5.547bn Local net profit (YE March 2007): SGD3.149bn Local net profit (YE March 2008): SGD3.254bn
No. of broad-band subscribers (2007): 471,000 No. of broad-band subscribers (2008): 639,000	Local revenues (YE March 2007): SGD4.205bn
No. of mobile subscribers (Q1 of 1009): 2.976mn	Group EBITDA (YE March 2008): SGD7.089bn Group EBITDA (YE March 2009): SGD6.482bn
No. of broad-band subscribers (2007): 471,000	Local Local revenues (YF March 2007): SGD4 205bn
No. of broad-band subscribers (2007): 471,000 No. of broad-band subscribers (2008): 639,000	Local Local revenues (YE March 2007): SGD4.205bn
No. of broad-band subscribers (2008): 639,000 No. of broad-band subscribers (Q1 of 2009):	Local revenues (YE March 2007): SGD4.205bn Local revenues (YE March 2008): SGD4.904bn
673,000	Local revenues (YE March 2009): SGD5.547bn
No. of 3G subscribers (2008): 1.140mn	Local net profit (YE March 2007): SGD3.149bn
No. of 3G subscribers (Q1 of 2009): 1.210mn	Local net profit (YE March 2008): SGD3.254bn
No. of 3G subscribers (Q2 of 2009): 1.280mn	Local net profit (YE March 2009): SGD1.439bn
No. of employees, Singapore: 12,807 (2008)	
No. of employees, Group: 23,446 (2008)	

StarHub²⁸

Established in 1998, StarHub is the largest cable TV operator and in January 2007 became the first operator in Southeast Asia to launch HDTV services commercially. StarHub offers fixed-line, mobile and internet services as well as operating a broad-band network, which supplies cable TV, data, voice, and internet access. The operator launched its 3G mobile network in April 2005. StarHub currently operates its mobile services from a GMS/GPRS network.

Singapore Technologies Telemedia (STT) is the majority shareholder in StarHub with 49.67% followed by Singapore's MediaCorp and Japan's NTT Communications with 13.71% and 10.3%, respectively.

StarHub intends to focus on promotions aimed at its growing prepaid segment, which it hopes will increase usage levels. To compete against SingTel, StarHub pushes investment in non-voice services, including data services and transactional activity.

StarHub' operational indicators	StarHub' financial data
StarHub' operational indicators No. of cellular subscribers (2007): 1.757mn No. of cellular subscribers (2008): 1.765mn No. of cellular subscribers (2008): 1.765mn No. of 3G Subscribers (2007): 391,000 No. of 3G Subscribers (2007): 391,000 No. of 3G Subscribers (2008): 632,000 No. of 3G Subscribers (2008): 632,000 No. of broad-band subscribers (2007): 346,000 No. of broad-band subscribers (2008): 373,000 No. of broad-band subscribers (21 of 2009): 383,000 No. of Pay-TV subscribers (2007): 504,000 No. of Pay-TV subscribers (2008):524,000	StarHub' financial data Annual revenues (2007): SGD2.014bn Annual revenues (2008): SGD2.128bn Revenues Q1 of 2009: SGD531mn EBITDA (2007): SGD643mn EBITDA (2008): SGD644mn EBITDA (Q1 of 2009): SGD168mn Net profit (2007): SGD330mn Net profit (2008): SGD311mn Net profit (Q1 of 2009):SGD78mn
No. of Pay-TV subscribers (Q1 of 2009): 527,000	

MobileOne (M1)²⁹

M1 is the third-largest domestic mobile operator, with approximately 1.7 million subscribers. M1 launched its dual-band GSM 900/1800 MHz network in 1997 ended SingTel's monopoly

^{28,29} Business Monior International Ltd, *Singapore Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

of Singapore's mobile sector. Apart from cellular services, M1 provides international call services to mobile and fixed-line customers.

In December 2002, M1 was listed on the Singapore Stock Exchange. Its founding shareholders, Keppel Telecoms, SPH Multimedia and SunShare Investments, jointly own 55.5% of the operator while the rest is owned by institutional and public investors.

M1 acquired ISP Qala Singapore in September 2009. The acquisition allows M1 to enter the corporate fixed-line market and build on its broad-band subscriber base, which has been eclipsed by the two market leaders SingTel and StarHub.

M1' operational indicators	M1' financial data
No. of cellular subscribers (2007): 1.535mn	Annual revenues (2007): SGD803mn
No. of cellular subscribers (2008): 1.631mn	Annual revenues (2008): SGD801mn
No. of cellular subscribers (Q1 of 2009): 1.619mn	Revenues Q1 of 2009: SGD186mn
No. of 3G Subscribers (2007): 561,000	Net profit (2007): SGD172mn
No. of 3G Subscribers (2008): 702,000	Net profit (2008): SGD150mn
No. of 3G Subscribers (Q1 of 2009): 721,000	Net profit (Q1 of 2009):SGD42mn

5. Thailand

TOT Corporation Public Company Limited (TOT)³⁰

State-owned TOT Corporation Public Company Limited, formerly known as Telephone Organization of Thailand (TOT), was established in 1954. TOT is the leading fixed-line operator with market share of about 50%.

The company provides fixed-line and mobile services through Thai Mobile, including domestic long-distance calls, regional services to neighboring countries, internet access and public telephone. Though TOT has exclusive rights to operate the domestic fixed-line network, it has granted concessions to two private operators, which are True Corporation and TT&T.

In 2005, Chairman of TOT claimed that the company would be listed on the Stock Exchange of Thailand (SET) before the end of the year but it has not happened until today. TOT selected Credit Suisse First Boston Corp and Phatra Securities as lead arrangers for the initial public offering (IPO), with Morgan Stanley and SCB Securities as co-lead underwriters.

³⁰ Business Monior International Ltd, *Thailand Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

The latest statistics (2007) reported that TOT had approximately 19,000 employees.

TOT's financial data
Annual revenues (2005): THB61.90bn
Annual revenues (2006): THB60.69bn
Annual revenues (2007): THB52.79bn
Net profit (2003): THB11.30bn
Net profit (2004): THB9.90bn
Net profit (2005): THB6.70bn
Net profit (2006): THB6.98bn
Net profit (2007): THB6.23bn

True Corporation³¹

True Corporation was established in 1990 as TelecomAsia (TA) by the Charoen Pokphand (CO) Group, a Thai agro-industrial conglomerate in partnership with the US telecommunications group Verizon. Though True Corporation is neither the dominant operator in fixed-line nor mobile sectors, it is a big player in Thailand's telecommunication industry because it is the only Thai operator that offers a fully integrated service including fixed-line, mobile, internet, data application and broadcasting.

CP Group is the majority owner of True Corporation with 34% stake. In 2003, Verizon sold its 10% stake in TA, ending its long-standing relationship. Its holding was acquired by Golden Tower Trading.

True Corporation's financial data
Annual revenues (2007): THB60.47bn
Annual revenues (2008): THB61.265bn
Revenues (Q1 of 2009): THB15.568bn
Net loss (2007): THB516mn
Net loss (2008): THB3.385bn
Net loss (Q1 of 2009): THB360mn
EBITDA (2007): THB19.75bn
EBITDA (2008): THB11.131bn
EBITDA (Q1 of 2009): THB5.183bn
True Corporation's operational indicators
No. of fixed-line subscribers (2007): 1.955mn

^{31,32} Business Monior International Ltd, *Thailand Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

No. of fixed-line subscribers (2008): 1.903mn No. of mobile subscribers (Q1 of 2009): 1.889mn No. of mobile subscribers (2006): 12,080mn No. of mobile subscribers (2008): 14.757mn No. of mobile subscribers (2008): 14.757mn No. of broad-band subscribers (2007): 548,000 No. of broad-band subscribers (2007): 548,000 No. of broad-band subscribers (2008): 632,000 No. of broad-band subscribers (Q1 of 2009): 641,000 No. of Pay-TV subscribers (2008): 1,469mn No. of Pay-TV subscribers (Q1 of 2009): 1,580mn No. of employees: 13,612(as of March 2009)

Advanced Info Services (AIS)³²

AIS was established in 1990 with a concession granted by TOT to provide mobile phone services on the GSM 900MHz spectrum. AIS is now the mobile market leader of Thailand with 44% market share. AIS is 43% owned by Shin Corp, which is now under control of Singapore's Temasek Holdings.

AIS' operational indicators	AIS' financial data
No. of mobile subscribers (2007): 24.11mn No of mobile subscribers (2008): 27.310mn No. of mobile subscribers (Q1 of 2009): 25.582mn No. of employees: 4,700	Annual revenues (2007): THB108.45bn Annual revenues (2008): THB110.792bn Revenues (Q1 of 2009): THB26.300bn Net profit (2007): THB16.29bn Net profit (2008): THB16.409bn Net profit (Q1 of 2009): THB4.567nm

DTAC³³

Total Access Communication (DTAC) was established in 1989 and provides mobile services in the 800MHz and 1800MHz bands, through a BOT concession granted by CAT. DTAC is the second largest mobile operator in Thailand, accounting for one-third of market share. Main shareholders of DTAC are UCOM with 41.64% stake, followed by Telenor with 32.90% and TOT with 9.03%.

³³ Business Monior International Ltd, *Thailand Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

DTAC' operational indicators	DTAC' financial data
No. of mobile subscribers (2007): 17.0mn No of mobile subscribers (2008): 18.682mn No. of mobile subscribers (Q1 of 2009): 27.31mn No. of employees: 4,000	Annual revenues (2007): THB65.590bn Annual revenues (2008): THB67.695bn Revenues (Q1 of 2009): THB16.501bn Net profit (2007): THB5.841bn Net profit (2008): THB9.325bn Net profit (Q1 of 2009): THB1.47bn

6. Vietnam

Vietnam Post & Telecommunications (VNPT)³⁴

Wholly owned by the government, VNPT is the main post and telecommunication service provider in Vietnam. It is the country's leading telecommunication operator with presence in fixed-line, mobile and internet sectors. VNPT operates in all 63 provinces and cities, and indirectly controls the two leading mobile operators, which are Vietnam Telecom Company (GPC-VinaPhone) and VMS MobiFone.

At the end of 2007, VNPT served approximately 8.8 million fixed-line telephone subscribers and almost 19 million mobile telephone customers. By the end of August, VNPT's total mobile customer base had risen to 50.6 million, giving the operator a market share of more than 52%. VMPT also had about 1.8 million broad-band internet subscribers at the end of August 2009, which was equivalent to 67% of the total market.

VNPT' operational indicators	VNPT' financial data	
No. of fixed-line subscribers (December 2005): 6.3mn	Annual revenues (2006): VND38.3trn Annual revenues (2007): VND45.3trn	
No. of fixed-line subscribers (July 2006): 7.2mn		
No. of fixed-line subscribers (December 2006): 8mn		
No. of fixed-line subscribers (December 2007):		
8.82mn		
No. of ADSL subscribers (2008): 1.3mn		
No. of ADSL subscribers (August 2009): 1.8mn		
No. of cellular subscribers (December 2005): 6.7mn		
No. of cellular subscribers (December 2006):		
10.18mn		
No. of cellular subscribers (May 2007): 18.7mn		
No. of cellular subscribers (June 2008): 15.75mn		
No. of cellular subscribers (December 2008): 35mn		
No. of cellular subscribers (August 2009): 50.6mn		

³⁴ Business Monior International Ltd, *Vietnam Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

Viettel³⁵

Viettel established a radio trunking in 1998 before launching domestic and international VoIP services in 2001. Its major breakthrough came in 2003 when it began offering local access and internet services and started rolling out a GMS mobile network.

By the end of 2008, Vietnam had a total of 24.75 million mobile customers and became the leader in mobile market. Customer base of Vietnam reached 35 million in August 2009, much more than VinaPhone or MobiFone alone.

Viettel' operational indicators	Viettel' financial data
No. of mobile subscribers (2006): 5.0mn No of mobile subscribers (2007): 10.4mn No. of mobile subscribers (June 2008): 19.55mn No. of mobile subscribers (December 2008): 24.75mn No. of mobile subscribers (August 2009): 35mn No. of fixed-line subscribers (December 2007): 600,000	Annual revenues (2006): VND26.22trn Annual revenues (2007): VND33.0trn Gross profit (2008): VND8.0trn

MobiFone³⁶

Vietnam Mobile Telecom Services (VMS) is a subsidiary of the incumbent fixed-line operator VNPT. It operates a GSM-based digital cellular telephone network under the MobiFone brand name. At the end of 2007, it served approximately 10 million customers (equivalent to 27% of the total mobile market). By the end of August 2009, MobiFone was estimated to have over 29 million mobile customers.

MobiFone is now the second largest mobile operator in Vietnam. MobiFone plans to prepare for an IPO of the company's shares, expected to take place in 2009. Between 10-15% is expected to be offered to the public, with a similar shareholding will be sold to a strategic investor. An additional 19% could be sold off, leaving the government with a majority of 51% stake in the operator.

^{35,36}Business Monior International Ltd, *Vietnam Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

MobiFone's operational indicators

No. of mobile subscribers (2006): 5.0mn No of mobile subscribers (2007): 9.9mn No. of mobile subscribers (June 2008): 13.55mn No. of mobile subscribers (December 2008): 22mn No. of mobile subscribers (August 2009): 35mn

VinaPhone³⁷

Like MobiFone, VinaPhone is a wholly owned subsidiary of VNPT, GPC-Vinaphone operates a nationwide GSM-based digital cellular telephone network under the VinaPhone brand name. The network was launched in June 1996.

VinaPhone is the third-largest mobile operator in Vietnam. At the end of 2007, it was estimated that VinaPhone had 9.1 million mobile customers (equivalent to 26% of market share). By the end of August 2009, VinaPhone reportedly served 21.5 million customers.

VinaPhone's operational indicators

No. of mobile subscribers (2006): 5.5mn No of mobile subscribers (2007): 9.1mn No. of mobile subscribers (June 2008): 12.2mn No. of mobile subscribers (December 2008): 14.5mn No. of mobile subscribers (August 2009): 21.5mn

C. ASEAN Efforts to Promote Integration and Development in Telecommunication

The 33th ASEAN Ministerial Meeting in July 2000 emphasized challenges and opportunities for ASEAN members in information and communications technologies. The meeting affirmed "ASEAN countries must embrace technology, its development and use, if it is to remain competitive – not even to catch up with the industrialized world but simply to stay in the running. This is a call not for ASEAN necessarily to undertake basic, pioneering scientific research but to adapt, develop and utilize science and technology to strengthen the

³⁷ Business Monior International Ltd, *Vietnam Information Technology Report*, Retrieved December 13, 2009, from ABI/INFORM Trade & Industry.

region's economies and improves lives of its people."³⁸ Over the last decade, through the annual Chairmanship of the ASEAN Telecommunications Ministers Meeting (TELMIN) and the ASEAN Telecommunications Senior Officials Meeting (TELSOM), ASEAN has played a key role in:

a. Developing, coordinating and implementing work plans to enhance cooperation in telecommunications and IT

b. Providing a mechanism to promote participation from the private or business sector, regional/international organizations and non-governmental organizations; and

c. Establishing working groups with clear terms of reference and specific time frames, assisting in the development and implementation of its policies and work plans.

1. The Chairmanship of the ASEAN Telecommunications Ministers Meeting (TELMIN)³⁹

The first TELMIN was held in July 2001 in Kuala Lumpur, Malaysia. The meeting focused on key areas such as: narrowing the digital divide among ASEAN members and between ASEAN the world, development of skills and expertise, promotion and enhancement of the use of information and communication technology (ICT), development of local and regional content for the ASEAN region, and ensuring a well-coordinated network security. At the meeting, ASEAN members signed the Ministerial Understanding on ASEAN Cooperation in Telecommunications and Information Technology. The meeting also implemented the e-ASEAN Framework Agreement.

The second TELMIN was held in August 2002 in Manila, the Philippines. The meeting stressed the vital role of telecommunications in the integration of the regional economy, in attracting investments into the region, and in developing the economies of the ASEAN members. The ministers agreed to establish the ASEAN ICT Centre to foster ASEAN cooperation in ICT. The meeting also implemented the agreement to engage China, Japan and the Republic of Korea in ICT cooperation individually and in the ASEAN+3 framework.

The third TELMIN was held in September 2003 in Singapore. The ministers showed commitment to initiatives of enhancing regional cooperation in cybersecurity. The ASEAN ministers also endorsed initiatives to advance ICT market integration and trade facilitations, promote universal access to ICT infrastructure and services, and develop ICT skills and competencies. The meeting also marked the launch of ASEANconnect, which is a publicly accessible digital divide database to house key data statistics and measurement indicators, analysis of initiatives to bridge the digital divide and other relevant information.

³⁸ Report of the ASEAN Secretary-General to the 33th ASEAN Ministerial Meeting, July 2007, <u>http://www.aseansec.org/6264.htm</u> (accessed on Dec 10th, 2009)

³⁹ Telecommunications and IT Press Releases, <u>http://www.aseansec.org/19875.htm</u>, (accessed Dec 12th, 2009)

The fourth TELMIN was held in August 2004 in Bangkok, Thailand. The meeting promoted the e-Learning culture towards a knowledge-based ASEAN to make ASEAN competitive in the world economy. The ASEAN ministers also established the ASEAN ICT Fund to accelerate the implementation of the ASEAN ICT Work Program.

The fifth TELMIN was held in September 2005 in Hanoi, Vietnam. The meeting again emphasized the importance of cooperation in telecommunication among ASEAN members. The meeting also witnessed the adoptions of the Hanoi Agenda on Promoting Online Services and Applications to Realize e-ASEAN and the ASEAN ICT Focus 2005-2010.

The sixth TELMIN was held in September 2006 in Bandar Seri Begawan, Brunei Darussalam. The ASEAN ministers implemented the Brunei Action Plan which outlined a program of action in building ASEAN capacity to enhance the region's competiveness in the ICT sector. The ministers also agreed to revitalize the e-ASEAN Youth Forum and the e-ASEAN Business Council.

The seventh TELMIN was held in August 2007 in Siem Reap, Cambodia. The ministers stressed that strong human and institutional capacity and private sector participation will transform the telecommunications and IT sector into an important enabler for economic growth and poverty reduction. The ministers adopted the Siem Reap Declaration on Enhancing Universal Access of ICT Services in ASEAN. The ministers also highlighted the importance and possibility of cooperation with the ASEAN Dialogue Partners such as China, India, Japan and Korea.

The eighth TELMIN was held in August 2008 in Bali, Indonesia. The meeting emphasized that a secure and well-established information infrastructure among ASEAN countries is crucial for the region's economic growth and competitiveness. The ASEAN ministers adopted the Bali Declaration in Gorging Partnership to Advance High Speed Connection to Bridge the ASEAN Digital Divide.

The ninth TELMIN was held in October 2009 in Vientiane, Laos. The ministers adopted the Vientiane Declaration on Promoting the Realization of Broadband across ASEAN." Also, the ministers agreed that the vision the ASEAN ICT Master Plan will be "Towards an Empowering and Transformational ICT: Creating an Inclusive, Vibrant and Integrated ASEAN" to being the ASEAN ICT to a higher level and to reinforce the role of ICT for ASEAN integration.

2. Agreements and Declarations among ASEAN Members:⁴⁰

⁴⁰ Telecommunications and IT Press Releases, <u>http://www.aseansec.org/19875.htm</u>, (accessed Dec 12th, 2009)

The e-ASEAN Framework Agreement

The e-ASEAN Framework Agreement was signed by ten ASEAN members at the Fourth ASEAN Informal Summit in November 2000 in Singapore. The objectives of this Agreement are to:

a. Promote cooperation to develop, strengthen and enhance the competitiveness of the ICT sector in ASEAN

b. Promote cooperation to reduce the digital divide within individual ASEAN Member States and amongst ASEAN Member States

c. Promote cooperation between the public and private sectors in realizing e-ASEAN; and

d. Promote the liberalization of trade in ICT products, ICT services and investment to support the e-ASEAN initiative.

The Ministerial Understanding on ASEAN Cooperation in Telecommunications and Information Technology

The Ministerial Understanding on ASEAN Cooperation in Telecommunications and Information Technology was signed by 10 ministers, representing 10 ASEAN members at the first ASEAN Telecommunications Ministers Meeting in Kuala Lumpur, Malaysia in 2001. The objectives are to:

a. Develop the ASEAN telecommunications and IT sector as a catalyst to foster regional economic integration

b. Enhance the overall competitiveness of the ASEAN region through a vibrant telecommunications and IT industry; and

c. Develop the ASEAN Information Society, where its citizens are able to work, communicate and recreate in the knowledge-based economy

The Vientiane Action Program on Telecommunications and IT Sector

The Vientiane Action Program on Telecommunications and IT Sector was signed by all ten members of ASEAN in 2004. The Action Program is to leverage on information and communications technology (ICT), via public-private sector partnerships and strong external linkages, to build a connected, vibrant and secure ASEAN community by:

a. Striving for universal access to ICT infrastructure and service.

b. Encouraging the development of a pervasive, inter-connected and secure ASEAN information infrastructure

c. Strengthening the cooperation and assistance on regulatory policy and strategy issues.

d. Creating digital opportunities through e-government, e-commerce and e-society initiatives

e. Enhancing the competitiveness and dynamism of the ASEAN ICT sector by promoting and facilitating trade and investment in ICT services; and

f. Developing highly skilled ICT human resources.

The ASEAN Sectoral Integration Protocol for e-ASEAN

The ASEAN Sectoral Integration Protocol for e-ASEAN was signed by all ASEAN members in 2004. This Protocol is to spell out measures to be taken by Member States on a priority basis to enable the progressive, expeditious and systematic integration of the e-ASEAN sector.

The Brunei Action Plan "Enhancing ICT Competitiveness: Capacity Building"

The Brunei Action Plan was signed by ten ASEAN members in 2006 in Bandar Seri Begawan, Brunei. The Brunei Action Plan's objectives are:

a. Building ASEAN capacity, which is a vital component in enhancing ICT competitiveness.

b. Developing the ASEAN Information Infrastructure as the foundation for the sustainable development of an information society.

c. Achieving broader economic and social benefits through wider access to ICT.

d. Facilitating ICT trade and electronic commerce by addressing non-tariff barriers to trade, as well as to lay the policy and legal infrastructure for electronic commerce.

e. Exchanging information on, and where appropriate harmonize, policies and regulations to increase ASEAN's ICT competitiveness and welcoming the implementation of the ATRC 2006-2007 work plan.

f. Engaging the private sector and youths.

g. Forging links with partners and key ICT international organizations to pool our resources and expertise.

h. Strengthening institutional foundations to achieve the programs elaborated above.

The Siem Reap Declaration on Enhancing Universal Access of ICT Services in ASEAN "ICT Reaching out to the Rural"

The Siem Reap Declaration was signed by ten ministers representing ten ASEAN members at the Seventh ASEAN Telecommunications and IT Ministers (TELMIN) Meeting in August 2007 in Cambodia. The Declaration is the efforts of ASEAN members to build a connected, vibrant, and secure ASEAN Community.

The Bali Declaration in Forging Partnership to Advance High Speed Connection to Bridge Digital Divide in ASEAN.

The Bali Declaration was signed by all ten ASEAN members at the Eighth TELMIN Meeting in August 2008 in Indonesia. The Declaration aims to deepen and strengthen regional initiatives and activities towards enhancing the infrastructure of the ASEAN information society, and to establish the foundation for ICT applications, services and solutions in the region.

The Vientiane Declaration on Promoting the Realization of Broadband across ASEAN

The Vientiane Declaration was signed by ten ASEAN members at the Ninth TELMIN in October 2009 in Laos. The Vientiane Declaration is a guide to promote broadband initiatives to enable ICT to become a major empowering and transformative force in the ASEAN information society.

PART 2

A. Regional Economic Integration and Challenges for Workers and Trade Union Development in ASEAN

Regional economic integration has transformed ASEAN economies in general and telecommunication industries in particular. Development of telecommunication sector in the region has proved that each and every country in ASEAN have benefited from it. However, it is also worth noticing that economic regionalism has posed many challenges on workers and trade union development in ASEAN that they had never encountered before.

Privatization and Unemployment

In ASEAN countries except Myanmar, privatizing the state-owned telecommunication enterprises (SOTE) is seen as one of the important steps in telecommunication sector reform. Therefore, privatization has been widely promoted as a way to tap into a wider pool of investible funds and as a milestone on the route towards a greater responsiveness to the market. Privatization had indeed created a very dynamic and competitive telecommunication markets in ASEAN. However, as privatization goes hand in hand with employment reduction, it has led to substantial staff reductions (some of it technologically-induced, much of it market-driven), even at times when the industry was expanding rapidly. For example, according to International Telecommunication Union, in late 1990s, Singapore Telecom shed 30% of its employees when privatization had been introduced for only a few years.

Trade liberalization, which is a part of privatization, through Free Trade Agreements (FTAs) has also made telecommunication markets very competitive. To compete in those competitive markets, companies must try to cut costs and labor reduction is often an option.

This is especially the case when companies fail to compete and have to exit the markets. As a result, their workers will be laid off. Hutchinson Telecommunications International Ltd. In 2005, for instance, laid off 250 employees among a total of 1,200 employees it laid off in Hong Kong, Thailand and Israel.

Telecommunications Sector Reform and Privatization in Southeast Asia ⁴¹	
Singapore: liberalization anno	Partial privatization 1993; a second cellular license awarded; further unced.
Indonesia: operating scheme (Partial privatization's 1994, 1995; liberalization on a SOTE joint-KOS) basis 1996.
Malaysia:	Partial privatization of PSTN 1990; liberalization of VANS.
Philippines:	Liberalization of private PSTN 1994 and VANS.
Thailand:	BTO schemes 1990; privatization under policy review.
Vietnam:	Business co-operation contracts with foreign companies

Skill Development

Touch competition in telecommunication sector requires high-skilled workers. Companies that possess high-skilled employees always have advantages compared to companies that do not. Competition for high-skilled labors therefore becomes crucial for telecommunication companies. And in such competitive markets, low-skilled workers are very unlikely to secure jobs and they will become unemployed. Many of low-skilled workers work subcontracted works, which do not offer many of the rights and benefits that apply to regular workers. High demand for high-skilled workers in the industry also widens the wage gap among telecommunication workers. Training and skill development programs therefore are pretty much needed for workers to survive in competitive telecommunication market.

Gender Gap

⁴¹ John Ure and Araya Vovorakij, *"Privatization of Telecoms in Asia,"* <u>www.trp.trpc.com.hk/publications/private1.pdf</u>, (accessed Dec 13th, 2009)

As telecommunication requires tech-savvy workers, and strong competition for high-skilled workers push female workers, who tend to be less tech-savvy compared to their male fellows, out of the telecommunication markets. When telecommunication companies lay off workers to reduce costs, female workers are often on the list. According to Infocomm Development Authority of Singapore (IDA), the number of female workers in telecommunication industry in Singapore decreased 3% from 33% in 2005 to 30% in 2006⁴². Gender issues are definitely a concern, especially when the industry is now increasing competitive.

Occupational Health and Safety

Occupational health and safety issues in telecommunication projects primarily include: electrical safety, electromagnetic fields, optical fiber safety, elevated and overhead work, fall protection, confined space entry and motor vehicle safety. Excavation, construction, and repair of some components of a telecommunication system may result in worker's exposure to existing aboveground or underground utilities, including aerial or buried electric transmission lines or buried gas and petroleum pipelines. In 2004, The Vietnam Ministry of Labor, Invalids and Social Affairs reported that there were 137 accidents in telecommunication projects, in which 81 were dead and 150 were injured⁴³.

Occupational health and safety is a major concern when privatization leads employers to a competition of cutting costs, and thus tend to pay less attention to the issue. Also, employers in the industry often refuse their responsibility when it comes to safety of subcontractors.

B. Telecommunication-related Trade Unions and ASEAN in the Effort to Deal with Challenges Posed by Regional Economic Integration in Telecommunication Sector

Telecommunication-related Trade Unions

There are a number of telecommunication-related trade unions in ASEAN countries. In Malaysia, there are the National Union Telecommunication Employees (NUTE), Sabah Union of Telecommunication Employees (SUTE) and Union of Telecommunication Employees Sarawak (UTES). The State Enterprise Worker's Union of the CAT and TOT Public Limited Workers Union are the two prominent telecommunication workers' unions in Thailand. Vietnam is arguably the country that has the most well organized telecommunication workers' union with the existences of the Vietnam National Union of

<u>http://www.antoanlaodong.gov.vn/Desktop.aspx/NghienCuu-</u> <u>Thongke/Bao_cao_thong_ke/Thong_bao_Tinh_hinh_tai_nan_lao_dong_nam_2004/, (accessed Dec 13th, 2009)</u>

 ⁴² IDA Singapore, "Total Employed Infocomm Manpower by Gender, 2000-2008, Annual,"
<u>http://www.ida.gov.sg/Publications/20070822122857.aspx#manpower3</u>, (accessed Dec 13th, 2009)
⁴³ The Vietnam Ministry of Labor, Invalids, and Social Affairs, "Report on working accidents in 2004,"

Post and Telecommunications Workers (VNUPTW) and its branches in all provinces and cities across the country. The VNUPTW was formed in 1947 and now has more than 80,000 members. In Singapore, there is the Union of Telecommunications Employees of Singapore (UTES), which was formed in 1982 as a house of representing employees of the Singapore Telecommunication Group.

Although each union has different functions and roles, they all share some similarities such as: representing its members in dealing with their employers, safeguarding their member's interests, helping improve the standard of living, the quality of life and the working conditions of members and promoting an environment in which their members are able to cooperate in raising productivity.

Telecommunication-related Trade Unions and ASEAN in the Effort to deal with Challenges

Of the four challenges mentioned above, most of the efforts that telecommunication-related trade unions and ASEAN, through TELCOM and TELMIN have put so far are to deal with skill development and occupational health and safety. Little have been done to protect employees from losing jobs because of privatization and to resolve gender issue in telecommunication sector.

TELMIN has many times emphasized the importance to develop skills for telecommunication workers to create a competitive market through nine annual meetings. At the fourth TELMIN, the ASEAN ministers established the ASEAN ICT Fund of USD 5 million, of which a big proportion will be used for skill development for telecommunication workers in each and every ASEAN member.

A number of policies in ASEAN countries have been implemented to deal with occupational health and safety for telecommunications workers such as the Telecommunication Act of Singapore, the Giving Instructions for the Administration of Occupational Health, Employees' Health, and Occupational Diseases for Telecommunication Employees of Vietnam, and the Occupational safety and Health Act of Malaysia.

As mentioned above, there was little has been done to deal with gender and unemployment caused by privatization issues. Both ASEAN and trade unions in the region have not paid enough attentions to the issues and therefore they still persist. Vietnam has one of the first programs in Southeast Asia to deal with gender gap in telecommunication sector. The Vietnam National Union of Post and Telecommunications Workers has annual training program for female workers in the industry.

PART 3

Conclusion and Some Recommendations about Employment Generation, Income Security, and Skill Development

ASEAN economic integration has had significant impacts on telecommunication sector in each and every country in the region. Although the impacts on any particular country are different, there are two trends of how the economic regionalism affects ASEAN countries can be seen obviously. First, due to economic integration, ASEAN members open its door to foreign investors and therefore there has been a strong inflow of foreign investments into telecommunication sector in ASEAN countries. Second, privatization in telecommunication sector has been adopted by all countries in the region except Myanmar. These two trends have made the telecommunication market in Southeast Asia more dynamic and competitive than ever before, and all countries have thus far benefited from it. Efforts by ASEAN through the annual Chairmanship of the ASEAN Telecommunications Ministers Meeting (TELMIN) and the ASEAN Telecommunication sector in Southeast Asia.

Regional economic integration, however, has posed many challenges on workers and trade union in telecommunication sector in ASEAN, of which unemployment due to privatization, skill development, gender gap, and occupational health and safety are the four major concerns. Though telecommunication-related trade unions and ASEAN itself has implemented a number initiatives, programs and policies, those challenges still persist.

To be able to deal with those challenges, I would recommend that:

- ASEAN and its members' governments must have more in institutions and policies to protect workers from losing their jobs when privatization expands. As majority of ASEAN members (if not all) do not have unemployment subsidy scheme, such scheme should be considered by ASEAN and governments to protect income security for workers.
- More institutions and policies are also required to protect workers' freedom of association, dispute settlement, and social dialogue on labor issues.
- ASEAN and its members should provide greater financial resources to strengthen education and training programs to order to have an advanced skilled labor force to compete more effectively with multinational enterprises. Education and training programs should targeted more at female workers to narrow the gender gap in telecommunication sector.

- Social dialogue plays a critical role. Effective dialogue between workers, employers and governments is a critical ingredient to achieve mutual benefits. This is best done through trade union. A good environment for the development of trade unions is required.