

CHAPTER V

CONCLUSION

The study has traced the progress and development of telecommunications in Malaysia from the British colonial period in 1874 until the current year of 1994. The first telephone in Malaysia was introduced in Perak in 1874. The turbulent time and urgent need of communications became the catalyst in the development of telecommunications in Malaysia. The numbers of telephones have increased to 21 in Kuala Lumpur in 1891. The telecommunications industry began to take shape. In 1894, the first submarine cables for the Singapore-Labuan-Hong Kong route in Labuan was commissioned. In 1926, the first wireless station in West Malaysia was built in Penang. A radio station was set up in Port Swettenham in 1930.

Telecommunications in Malaysia began to make swift progress after it achieved its independence. In 1960 the International Radio Telephone Service from Kuching to Peninsular Malaysia and Singapore was inaugurated. In 1962, the familiar subscriber trunk dialing (STD) facility between Kuala Lumpur and Singapore via the microwave network was introduced. In 1963, the first microwave system was installed in Malaysia. This service was later extended to United Kingdom and several other overseas destinations. In April 1970, the first international standard satellite Earth Station in Kuantan was commissioned. It was to provide overseas telephony and television transmission. In 1975, the manual telex exchange was replaced with the automatic system. In 1979, Malaysia had commissioned its first Standard Satellite Earth Station. It provided telephone subscribers the International Direct Dialing (IDD) facilities. Two years later, the second Standard Satellite Earth Station was commissioned. The advancement in computer technology and

its link with telecommunications had brought swift and sophisticated changes. This was leading to the introduction of new services in the years 1983 onwards. Besides the telephone and telex services, data communication was available only through private leased circuits. In 1983, data communication service (Datel) was introduced. Computer users could use the public switched telephone network for data communications. In the following year, Malaysia's own public data network using packet switch technology (Maypac), circuit switch network (Maycis) and video text services (Telita) were introduced. Computer users could now access foreign data bases through this network. Also, facsimile was introduced as a new service in 1984. In 1985, the first cellular mobile telephone (ATUR 450) was introduced by Jabatan Telekom Malaysia. Since the beginning until 1985, the telecommunications industries grew and expanded mainly with telephone and telex services.

The industry began to grow even more rapidly after the privatization with Jabatan Telekom Malaysia. In 1989, the second cellular mobile telecommunication system in Malaysia (ART 900) was introduced. It was aimed to overcome the capacity limitations of ATUR 450. In 1994, the third cellular mobile telecommunications system (Mobifon 800) became operational in Malaysia. It is expected that the fourth cellular mobile telephone (GSM 900) will be operational in June 1995.

In realizing the importance of telecommunication services for economic development, the Government embarked on the privatization policy in the early 1980s. On January 1, 1987, the nation's telecommunication services were privatized. A company named Syarikat Telekom Malaysia (named as Telekom Malaysia Berhad after being public listed), was incorporated to undertake the operational functions of providing, operating and maintaining telecommunications services. Jabatan Telekom Malaysia (JTM) continues the functions of managing the radio spectrum, licensing, standards setting and equipment type approval. In addition, JTM was assigned the role of a regulatory body, empowered to

regulate the nation's telecommunications sector as stated in the Telecommunications Act 1950, revised in 1985.

The privatization policy had liberalized the telecommunications industry in Malaysia. This has attracted many business opportunities and many private telecommunications companies began to exist. The major companies that have telecommunications licences were Telekom Malaysia Berhad (TMB), Sapura Holdings Sendirian Berhad (SHSB), Electronics & Telematique Sendirian Berhad (ETSB), Cellular Network Communications Sendirian Berhad (CELCOM), Mobikom Sendirian Berhad (MOBIKOM), Binariang Sendirian Berhad (BINARIANG), Time Telecommunications Sendirian Berhad (TIME), Punca Mutiara Sendirian Berhad (PMSB), Malaysian Resources Corporations Berhad (MRCB), and Syarikat Telefon Wireless (M) Sdn Bhd (STW). Today, the concept of a natural monopoly was no longer relevant. The existence of multi players has introduced competition in all segments of the telecommunications industry.

Malaysia's privatization and liberalization of telecommunications industry were said to be against the norms practiced in developed countries and almost unacceptable to some of the most developed countries. As of the year 1993, the percentage of cellular telephone subscribers to the total fixed telephone subscribers were 14.11% (Table I). It is currently estimated that cellular telephone service in Malaysia accounts would be slightly over 20 per cent of total fixed phone subscription. The number of subscribers has been increasing tremendously. From 1988 to 1993, the ART 450 subscribers have increased from 27,307 to 89,028. The ART 900 too recorded a tremendous increased. From 1989 to 1993, its subscribers have increased from 6,626 to 251,046. Table I at the appendix charted the growth of cellular mobile telephone in Malaysia.

Malaysia telephone density rate per 100 population was 7 per cent in 1988 and has continued to increase. Table I at the appendix has the details. Its telephone density rate (per 100 people) has reached 14 per cent in 1994, compared with 13 per cent in 1993.

According to the 1993's statistics compiled by the Energy, Telecommunications and Post Ministry, Malaysia ranked third in Asean. Singapore with 39.9 per cent is ranked first. And Brunei with 14.3 per cent is ranked second in Asean.

Based on the current rate of growth, with the number of telephone lines doubling every five year, the number of lines in Malaysia would increase from the present level of 1.7 million to 12 million in 2005. That will be equivalent to a penetration of 45 years behind South Korea or 15 years behind Japan, in terms of communications development. It is expected that Malaysia to have a telephone density of 29.11 per cent by the year 2000 (Syed Hussein Mohamed 1991).

The companies that have some form of research and development division are Telekom Malaysia Berhad, Sapura Holdings Sendirian Berhad, and Cellular Network Communications Sendirian Berhad. The TMB Research and Development focus are the software, operations research and networking, radio and radar, and electronics. It utilized research expertise and facilities of universities and other institutions. The two areas of new research effort were network simulation and local area network. With the networks' simulation, facility network behavior can be understood from the perspective of traffic flow, congestion and network interruption.

Sapura Research and Development division were formed in 1984. It has introduced its own-designed innovative products such as PBX's feature telephones, SCADA equipment, personal computers and many more. Its S2000 series of feature telephones designed received approval from the authorities of United Kingdom, United States, Canada, Germany, France, Austria, Netherlands, Japan, Indonesia, Singapore, Myanmar, Thailand, and Sri Lanka had attested to their international standard in quality and reliability. Cellular phones running on the 800MHz and 900MHz wavelengths and pagers are in their pipeline.

Celcom Transmission Sendirian Berhad, a subsidiary of CELCOM has embarked on various research projects to continuously upgrade its capabilities and services, such as

Frame Relay and Asynchronous Transfer Mode (ATM). These technologies will play a vital role in delivering Celcom Transmission's Virtual Private Network and Broad band services. Through CELCOM's own research and development effort, its capacity of the Radio Base Stations has increased from the system standard of 48 channels to 120 channels. Also, CELCOM had set up Celcom Academy Sendirian Berhad in January 1993 to answer the urgent call for localized, high-caliber training in business, engineering and technical skills. The other companies are yet to involve in research and development programs themselves.

The products and services that discussed are "satellite system services," "cable network," "international voice, image, video and data transfer service," "ISDN," "international gateway mobile telephone services," "fixed telephone services," "smartfon," "ART 450," "ART 900," "Mobifon 800," "GSM 900," "fixed wireless local loop service," "cellular personal communications network," "public payphones," and others. These products and services are complementing each other. They are interconnected and work very closely together harmoniously. Most of all, they are to assist in Malaysia economic progress and development and to achieve the country's "Vision 2020" objective.

The privatization policy and subsequent liberalization have formed a new era of telecommunications industry. They have created competitive environment. To stay ahead of competition, Telekom Malaysia Berhad (TMB) and all the other private telecommunications companies that are in operation have developed aggressive marketing strategies. Also they have to made inroads to overseas to increase their market portfolio, besides making heavy investments locally.

Telekom Malaysia Berhad and the major private telecommunications companies are spending a lot of effort, time and money in their advertisement and promotion programs. Their advertisements are very much focused on their products and services benefits as well as their corporate image. As an indication, MOBIKOM has budgeted RM 26 million for its advertising and promotions for the year 1995. Beside good quality

services, advertisement and promotion activities are the effective methods to increase sales and to gain corporate image. The effective advertisement and promotion strategies decide their competitiveness and profitability of the company.

It seems that the telecommunications industry is a lucrative market to enter, though competitive. Based on the performance of Telekom Malaysia Berhad and the major companies, they are making an impressive surge in turnover and good profits. Telekom Malaysia Berhad's pre-tax profit has grown leaps and bounds. It has increase from RM 366 million in 1989 to RM 1.527 billion in 1993. This was achieved on an equally impressive surge in turnover from RM 2.141 billion in 1989 to RM 3.391 billion in 1993, a growth of 15.5 per cent from 1992. TMB's earnings per share has been increasing since the year 1989 to 1993. CELCOM has reaped a profit of RM 108.841 million on a turnover of RM 387.229 million in 1993. SAPURA's pre-tax profit in 1993 has increased by 62.4 per cent over the previous year to RM 37.927 million. After taxation and minority interest, profit attributable to shareholders has risen to RM 24.695 million - a 92.6% increased over the previous year. The 1992 year's profit before taxation was RM 14.160 million, representing an increased of 32% over last year's (1991) profit before taxation of RM 10.718 million. The profit was achieved on a turnover of RM 168.809 million, an increased of 81% over the previous year. After providing for taxation and minority interests, the profit attributable to the shareholders of SAPURA amounted to RM 8.206 million and the earnings per share of the SAPURA was 19.4 sen. SAPURA's subsidiary, Uniphone Telecommunications Berhad (UTB) turnover was RM 186,585 in 1989/90 and increased to RM 373,533 in 1993/94 with profits of RM 14,812 and RM 53,012 respectively. The earnings per share was only RM 7.69 in 1989/90, and has increased to a surging figure of RM 42.50 in 1993/94 The payphone operations contribute about 90 per cent of UTB's profit. (Uniphone Telecommunications Berhad 1994). The other subsidiary, Sapura Telecommunications Berhad (STB) turnover has been increasing since it was public listed in 1991. The turnover was RM 93,048 and has increased to RM 189,908 in

1994. (Sapura Telecommunications Berhad 1991/92). Likewise, its profit before taxation was RM 10,718 in 1991 and has increased to RM 37,927 in 1994. The earnings per share was then only RM 22.50 in 1991 as compared to RM 35.80 in 1994 (Sapura Telecommunications Berhad 1993/94). Even the new player, MOBIKOM has its share of growth. Its Chief Executive Officer has confidently said as follow:

"We would be comfortable with 130,000 subscribers and would be able to break even by the first quarter of 1996. However, this depends on the average bill per month per subscriber," Mobikom Chief Executive Officer Zamani Zakaria said.

The study also found that Jabatan Telekom Malaysia has been efficient that it has recorded revenue improvement from RM 2,916,000 in 1988 to RM 34,590,000 in 1993 (Jabatan Telekom Malaysia).

All the other companies are improving, enhancing adding more efficient telecommunications services, besides Telekom Malaysia Berhad. Turnover, profits and activities of all the companies in the study have been increasing. The competitions among these companies are very strong and healthy that have steer them to be the best in the market, and to the fast and efficient development of telecommunications in Malaysia.

Over the decades, telecommunications in Malaysia have improved by leaps and bounds. Today we not only have the fixed wire telephones, cellular mobile telephones are becoming part of every Malaysian life. We can now be "in-touch" at almost every part of the country and the world!

This study will provide some form of valuable information to the people that are in telecommunications as well as to those who have the intention of going into the telecommunications industry. The study has traced the history of the telecommunications industry in Malaysia until the current year 1994. The study found that the nation's telecommunications industry leaped tremendously in the late 1980s. It is found to be a very profitable market sector too but very competitive. Many different types of services

are offered to the subscribers. Public Switched Data Network, an Integrated Services Digital Network, Cellular Networks, a Synchronous Optical Fiber Network, Intelligent Networks, a Satellite Network, Global Network and Personal Communications Network are some of the current services available today. These represent not only new products and new systems, but are really entirely created new approaches and concepts. Technology advancement and consumers demand have paved the way to a more competitive market. The demand and cost characteristics of telecommunication markets have been radically altered by technology and consumer demand. Telecommunications companies must meet these changes in order to be successful. They must be willing to spend on research and development programs. A continuous improvement current system and new investment in technology are important. This is to ensure prompt and quality services to their subscribers. A well planned marketing strategies, advertisement and promotion activities are important to increase their subscribers' base. The study has highlighted that the trends towards globalization are evident in the telecommunications industry. Thus, telecommunications companies must make inroads overseas to increase their market portfolio, besides making big investment locally. As such, telecommunications network operators and telecommunications companies accommodate the market changes and demand to be successful.

Limitations of the Study and Suggestions for Future Study

Although the study has traced and found that progress and development of telecommunications industry in Malaysia has been tremendous, the study has some limitations. This study is confined to the telephone services sector. It has excluded the other forms of telecommunications especially the usage of computers, pagers and radio. The advancement of computers will make data communications important in today's information need. The study has relied and limited to the consideration of the progress of

Telekom Malaysia Berhad and of the few private telecommunications companies. The result might not reflect the expected growth.

The study did not look into the development of telecommunications industry in our neighboring countries like Singapore and Thailand. The foreign investors and foreign telecommunications influences and involvement were not well looked into. The result can be opened for debate as to how much really that Malaysia's telecommunications have really progressed when compared with another country's.

The data collection method is mostly indirect and has mainly relied from the reported news and information published in the mass media and annual reports. This method was sought because of the difficulties of accessing any primary data from the selected companies for this study. The result cannot show the current and future plans of the telecommunications companies. The future research should incorporate primary data as well. It may use survey method to acquire the data needed.

The study could be too descriptive. It uses very little numbers, figures and tables to illustrate the growing trend of the development of telecommunication services in Malaysia. The future research needs to ensure that more quantitative data are used. This is to provide a clearer picture of the development and comparison purposes.