CHAPTER 5: EVALUATION OF MALAYSIA'S REGULATORY STRUCTURE

There is no perfect way to design a regulatory framework. Each type of regulatory framework has its advantages and drawbacks. In this chapter, we evaluate the regulatory structure for telecommunications in Malaysia. In addition, some policy recommendations are made on how to overcome some of the existing weakness of the present regulatory structure.

5.1 Regulatory Structure

There were weaknesses in the previous regulatory structures. In the pre-privatization period there was no clear separation between the regulatory function, policy making function and operating entity. In broadcasting, the Ministry of Information was the licensing authority, the regulator as well as the operator of government owned radio and television stations. Since privatization in 1987, the telecommunications sector became more transparent but there are still some weaknesses. The operator, STM was a separate corporate entity and was listed on the KLSE. Although the regulatory authority, JTM was a separate entity, it was part of the Ministry of Energy, Telecommunications and Post. Thus, there was no real distinction between the regulator and the policy maker.

In 1998 a totally independent regulatory body, MCMC, was set up to regulate and license telecommunications, broadcasting and multimedia industries. The Commission was established by law to regulate the communications and multimedia industry in developing new and under-served market segments. The introduction of independent regulatory agency affects the level of investment. The role and function of the regulatory authority should be reviewed to meet an increasing challenge of a liberalized telecommunication regime. Decision making process of MCMC should reflect the real voice from the majority of the commissioners instead of the chairman opinion alone during the meeting. The agency should be able to restructure its own internal organisation as circumstances require. We might consider the formation of a committee comprising members from other related areas such as corporate services, legal counsel, Science and Technology (S&T) officers and etc. to assist in the development of telecommunications sector.

The Commissioners should identify the factors that affect the development of the overall sector. They should clearly identify certain elements, such as short-term goal and long term goal that includes the establishment of economic support for universal service by the introduction of competition. In order to introduce competition successfully, the regulatory framework ought to rebalance rate structure that reflects cost characteristics and technical standards that permits fair interconnection.

5.2 Market Structure

The market structure of the telecommunication industry is never static because of technological advancement. In Malaysia, telecommunication services that have undergone significant changes in recent years in terms of market structure, regulation and performance include domestic long-distance fixed telephony (trunk), international long-distance fixed telephony (international) and cellular mobile telephony (mobile). Moreover, the degree of competition varies in different segments of the market. In 1994 the government licensed four companies - Celcom, Maxis, DiGi Telecom and Time Telecom to compete with incumbent Telekom Malaysia in the local telephony market.

Cellular growth in 1997-1999 has nearly doubled the fixed line growth. TMB still dominant the fixed line market, which is totally different game in cellular scene. TMB is losing market share in International Direct Dial. It does not dominate the cellular sector despite its interest in three of Malaysia's eight cellular networks.

On the other hand, there is a high churn rate[37] due to the introduction of the prepaid services, taking its role in the postpaid market. For instance, Celcom experiencing the migration from its analogue network (ART 900) to digital GSM. At the same time, the existing customers have left for the pre-paid services offered by other operators. In addition, being the first in the market does not necessarily mean the company can secure subscribers. DiGi only started to see business rolling in when it launched prepaid mobile phone service on January 1, 1998 although it has launched digital cellular network in May 1995. Likewise, starting late did not stop Maxis from being successful. Following global trends, we are seeing the entry of new players in the Malaysian telecommunications industry. In fact, whichever player leads a particular technology will lead the market. This is a push for the players to reorganize and provide a more realistic platform to compete among themselves.

[37] Churn refers to the rate at which subscribers leave a particular player and usually go to the other.

5.3. Tariff rebalancing

As is often the case, poor pricing structure generates inefficiencies. In Malaysia's long distance (or value-added and wireless) services were used to subsidize fixed-link local services with the aim of improving the poor accessibility to telephone services. However, most of these subsidies have been captured by middle and high income households. Therefore it is a wise step for Malaysia telecommunications companies to re-balance its tariff based on cost because an innovative price structure could stop inefficient entrants from taking advantage of old regulatory rules and skimming the cream (business users).

The most distinct regulatory variable in telecommunications sector is the tariff rate. The form of price regulation differs from one service to another. There are two extreme type of price regulations. The government can offer a contract to carry out a project for a particular fixed price (price caps or high powered incentive schemes) which is specified by legislative acts. Alternatively, it can offer to pay a price that depends upon the final cost of the project, rate-of-return regulation (low powered incentive scheme).

Malaysia's tariff structure takes into account multiple parties and the Consumer Price Index (CPI). Current tariff structures have to come down in line with the opening of the explosive growth telecommunications market. There are positive externalities of network among users where the existing subscribers benefit when new subscribers join. In order to encourage new users to join the network, pricing structure would have to be justified. Unfortunately, under the Equal Access (EA) regulation, operators are only allowed to offer up to 20 per cent discount from the regular tariff, which is set by the

TMB. After a year of EA, the operators clamoring for legislation review. Foremost is the maximum 20% discount allowable that is too low to attract users to switch over to their services on long distance and international calls. Thus, the ceiling is unfair especially to new entrants as there is maximum discount limitation, even if there are attractive packages try to beat their competitors. Hence, tariffs should be rebalanced because the tariffs for local network services are not aligned to costs causing few people invest in local networks. In the long run, the country's fixed line services will also be improved as the competitors will lead players to be efficient.

Malaysia adopts the price cap approach[38] or "RPI-X"[39]. This is a high power incentive regulation. This approach is better as compared to rate-of return (R-O-R) regulation in terms of it has no incentive to increase cost because the firm bears a high fraction of its cost at the margin. Hence, a firm with price caps mechanism provides operator with powerful incentives to minimize cost and improve efficiency and set prices approximately costs.

Anyway, price cap regulation is not suitable to implement for several reasons. First, since the regulator cannot estimate future excess productivity growth perfectly in the industry, the firm may face problem with insufficient revenue to cover its costs and return on investment. The second reason is that price cap regulation has not adjusting the original price index to account for technology changes because there is no base price or base quantity for new products. Furthermore, it is costly for the firms to supply quality. They might skimp off quality if this matter did not specify in the regulatory contract. Therefore,

[38] For the discussions of price cap regulation, see Laffont and Tirole (1998 & 2000) and Noll (1999).
[39] This approach ties the dominant carrier's prices for a given basket of services to the changes of Consumer Price Index (CPI) in the general price level minus X factor, where RPI is the percentage increases in the retail price index and X reflects the carrier's expected productivity growth in percentage compared to the economy as a whole.

if the regulator is unable to monitor these standards, then the adoption of R-O-R regulation will be a better choice. Nevertheless, it provides little incentive for productivity improvements, In fact, this instrument has much criticism. The fundamental problem with cost regulation is that regulators cannot know the firm's true costs and demand. Therefore, the future revenue would be adjusted to account for errors in the previous regulatory constraint. This problem might lead to misrepresentation of information and the adoption of inefficient technologies; they also foster unproductive lobbying.

US regulatory commission has shifted gradually from rate-of-return to price cap regulation, because the previous price regulation lead to cost inefficiency, regulatory burden and exposed to capture problem. This system of regulation is good for reassuring investors that they will obtain a fair rate of return of capital invested no matter what they invested. The problem is that it encourages them to over-invest and does not provide incentives for cost cutting as well as foster unproductive lobbying.

5.4 Equal Access (EA)

An important regulatory reform in fixed line market is EA, which was introduced on 1 January 1999 with the objective of enhancing competition in long distance and international markets. Under the new law, fixed line subscribers can choose whichever operators they like for termination of their national long-distance and international calls. They are required to enter a three digit carrier selection codes (CSC) prior to dialing. If they fail to enter a CSC, calls will use the current connected network. To date, about 12% of TMB's subscribers have signed up for EA, but it is unclear to what extent these EA customer use up the services of EA operators. It is difficult to estimate the actual impact of EA on TMB's market share. But it has affected the incumbent's revenue. In 1999, its revenues from fixed line operations fell by 4.3% to MYR 4.746 billion besides, its national long distance and international call revenues also fell by 2.2% and 16.2% respectively (Datafile of Asia Pacific Telecommunications, 2000).

Competition in mobile phone services is more intense compared to fixed line services. In a move to deregulate the mobile market, the CMC has announced guidelines to guard against anti-competitive behavior as well as abolish the RM60 annual license fee with effect from 1 April 2000. This move was followed by the scrapping of 1986 Automatic Telephone Using Radio (ATUR) Regulation in an attempt to encourage operators to further reduce their prices.

EA has not taken off strongly. This is because over-capacity in the provision of trunk lines and international access has brought about the problem of incumbent's competitors undercutting their rate. The beneficiaries would be the consumers. On the other hand, there is the question of convenience on the part of callers who have to dial three digit access codes. We might need to introduce carriers pre-selection whereby access code is done automatically at the exchange level and caller can make their choice without having to dial the three digit access codes.

5.5 Interconnection Charges

Malaysia's current interconnection prices were set by the former regulator JTM. The regulatory document entitled *Determination of Cost-Based Interconnection Prices and the Cost of Universal Service Obligation (TRD006).* It takes the form of a benchmark price for the service. Operators may charge below this benchmark price provided that no discrimination and anti-competitive behavior. Different benchmark prices were set for fixed and mobile services. For fixed line services, interconnection charges are based on fully allocated cost approach which reflects entire cost of the operator. Meanwhile, prices for mobile services are set closer to long run incremental costs[40]. The issues of interconnection charges remain partly resolved as it is difficult for TMB to trace the right price for other operators access to its networks.

5.6 Licensing

The move to the new licensing structure is crucial for the industry. The old licensing structure regime is characterized by low levels of competition in domestic communications and multimedia industry as its licensing was based on a segmented market structure. In addition, the industry provides only limited choices in terms of products; low quality of services; low capital and labour productivity and less optimum utilization of resources such as limited linkages with international networks. It also inhibits growth of convergence as fees are high and inconsistent for similar license category. This high fixed rate is generally lack of incentives for proper development of the industry, such as industry innovation, R&D and capital building.

The new licensing fee structure is designed to accelerate transition to full competition as reflected by changes in its equity and business operation. Fees impose on individual licenses only, and normal registration fees for class licenses. It is much lower than the precious rates with the purpose to give priority to the providers to undertaken investment. Therefore it aims for high performance and effective competition at global level as well as promotes benefit to consumers.

[40] Refer chapter 4, Laffont and Tirole (2000) for long run incremental cost.

5.7 Consolidation of Malaysia telecommunications industry

Competition and deregulation have led to an increasing number of players in the industry. The consolidation of Malaysia's telecommunications industry is to solve the problem of over-capacity. This issue is common because of the convergence and globalization with unnecessary duplication of infrastructure assets. The problem lies in the existence of too many telecommunications companies for a country the size of Malaysia. A consolidation program should achieve cost savings and economies of scale.

5.8 Quality

Another issue is to go towards network quality which are likely to promote capital investment, line extension, and network improvement (alleviate long distance and international bottlenecks). The telecommunications companies set plans to install industry standards for site installations. New technology in the long run will result in lower charges, ultimately benefiting the users but damaging the bottomline of telecommunications companies. The ideal situation would be for them to produce and share their quality network and telecommunications plants.

5.9 USP

In Malaysia, licenses were issued without any conditions such as the number of lines to be rolled out. If the local network is not profitable, then other operators will invest as little as possible, but they will target high value customers, especially business and high-end residential customers. With USP, all telecommunications companies would jointly bear any expenses for suburban service provision. This sharing is pretty good as it could cut down cost.

By the way, the distribution of USP Fund collection should flow heavier to the most efficient provider and technology available for a fairer competitive environment. Furthermore, in line with the technology advancement, USP in Malaysia should be consistent with the public interest, such as education, public health or public safety. One way would be to explore emerging wireless technology to provide telecommunication access in low population density. Most importantly, a country should fulfill social obligation to ease the suburban areas to access to emergency service that is considered as public safety. For instance, the basic 911 in US is a public safety service.

5.10. Regulatory Commitment

Next, is the regulatory commitment. Normally, regulatory review occurs at the expiration of current regulatory contract. However, re-negotiation might take place before the next regulatory review if the firm is facing a 'soft budget constraint'[41]. At each review, regulator has the right to observe the firm's current projected operating costs, its assets, investment plans and demand forecasts as well as ensure that the fixed price is high enough so that the firm is well prepare to continue with the regulatory process until the next review. If the firm's costs are not observable, then the firms has an incentive to increase its cost artificially in a review in order to get more advantages term. On the other hand, if there is frequent price review, the incentives for cost reduction are small. Conversely, if there is a long regulatory lag, incentives for productive efficiency is greater

[41] The firm is said to face "soft budget constraint" if the initial contract prices unprofitable and makes credible to the treat of bankruptcy.

is cost saving could be taken during that period. In Malaysia, the regulatory lag is long with no regular regulatory review.

Nonetheless, lower cost will convince the regulator demands for better performance at the next review i.e. *ratchet effect*. Therefore, such re-negotiation exacerbates the condition for the firm to take high power incentives. Furthermore, regulatory capture might take place whereby the regulator is too soft to the firm and lead to rent inflated and the second is called regulatory taking, in which the regulator is too discordant and does not adequately compensate the firm for efficiency improvement.

5.11 Self regulation

CMA 1998 Act came into force on 1 April 1999, marking a new approach to both legislation and regulation in Malaysia. CMA's basic principles include the ten national policy objectives and the emphasis on transparency in decision-making and self regulation. The idea is to encourage industry growth with incentive based regulation while advancing social responsibility and protection of consumer interests. CMA established a forum to access the industry and consumers. The membership of forum is open to all relevant parties. This forum is important in terms of ensuring that the players set the rules themselves.

5.12 Others

Resale generally is viewed as an easy way of creating entry. U.S. regulators view resale as strategically important to the development of competition, with entrants using resale on a temporary basis before they install their own facilities. Conversely, OFTEL does not want to promote local competition through unbundling and resale. This is because they have no incentive to do so. Resellers pay the same retail rate as end-use customers to BT. Malaysia should promote local competition through such policy that do not duplicate the local bottleneck. However, our country seems emerge a lot of duplication, instead of implementing resale practically.

A sound regulatory structure is critical to the promotion of telecommunications sector's growth. In the long run, the benefits from privatization would accrue only if well-guided, articulated and balance regulatory policies are in placed. Hence, a well formulated policy objective will provide clarity and guidance to industry participants.