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Malaysia and Indonesia: Telecommunications Restructuring

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The inability of their governments to provide sufficient capital to further the development of the telecommunications industry and meet public demand has provided most of the impetus for the restructuring that has taken place in Malaysia and Indonesia. This chapter looks at the development and implementation of structural changes, including an account of interest group reactions in Malaysia—public reaction in Indonesia has been limited.

Privatization, first announced in 1983, is the center of changes in Malaysia. Under two laws adopted in 1985 the property, rights, and liabilities of the Telecommunications Department were transferred to a private corporation wholly owned by the government; part of the new corporation was subsequently sold to the public. Things have been more complex in Indonesia: During the past thirty years wholly government-owned enterprises have been established and evolved so that by the 1980s there were four state corporations, each providing a different service—domestic, international, equipment manufacturing, and postal.

The countries are looked at separately. There are cultural similarities and historical relationships between the peoples of Malaysia and Indonesia. Forms of Malay are official languages in both, and Islam is the dominant, but not the only, religion. These commonalities, however, have not produced much in the way of similarities in development of telecommunications policies except at the most general level. The most obvious similarity is the close relationship between telecommunication firms and ruling elites. However, in Malaysia ethnicity is the principal element in this, while in Indonesia, it is more family connections.

7.1 Malaysia

After independence in 1957 Malaysia extensively reorganized the Telecommunications Department by replacing British expatriates with Malaysians as tech-

nical and managerial staff and decentralizing it into regionally autonomous units. The department is known as Jabatan Telekom Malaysia (JTM), its name in Malay. The next chapter provides more on the department's early history.

JTM's operations were profitable on a current basis, but earnings were not enough to cover the costs of developing an enhanced telecommunications infrastructure. The government covered the shortfall until 1986 when, as revenue growth slowed because of a recession, it too suffered a deficit. Substantial reductions were made in development sector expenditures, including a 6.4 percent cut in the communications development budget in the Fifth Malaysia Plan (1986–1990). Telecommunications expenditures were to have increased from M\$2.9 billion during the period 1981–1985 to M\$9.6 billion in 1986–1990, but it reached only M\$3.9 billion instead.

It was against this backdrop of poor economic performance that the government launched a policy to privatize some of its departments. The first indication of this was in 1983 when JTM parceled out turnkey contracts for the installation of 1.78 million lines. Even more projects were subsequently contracted out. In 1987 JTM telecom operations were transferred to a newly created company, the first public sector organization commercialized with a view toward being privatized.

7.1.1 Legal Framework

During the postwar colonial and early independence periods the Telecommunications Act of 1950 provided the industry's legal framework. There were revisions in 1970, 1972, and 1977. The 1970 revision set out the exclusive privilege of the Malaysian government to establish, maintain, and operate telecommunications in the country. It also stipulated the rights of the telecommunications minister to grant licenses to any person or contractor deemed qualified to undertake contracts for installation, erection, and maintenance of telecommunications works in Malaysia.

The 1972 amendment authorized the establishment of a telecommunications fund, permitting financial semiautonomy to JTM. Such provisions (e.g., imposing commercial accounting) made privatizing JTM an evolutionary, rather than revolutionary, approach.

7.1.2 The Denationalization Process

The first direct step toward actual denationalization came in 1984 when the Arab Malaysia Merchant Bank was appointed to conduct a study of the financial implications of a transfer, in cooperation with London-based Kleinwort Benson (the same company that helped privatize British Telecom) and Hanafiah Raslan Mohamad Associates, a Malaysian accounting firm. The study, which has never been made public, set forth procedures for evaluation of assets as well as the accounting procedures involved in the transfer of assets and liabilities. Following the guidelines in the report, which was completed in 1985, was the recommendation that JTM be converted into a corporation called Syarikat

Telekom Malaysia Bhd. (STM), to be wholly owned by the Ministry of Finance, effective January 1, 1987.

Two sets of laws were passed in 1985 to provide the legal framework for privatization. Amendments to the Telecommunications Act further listed the regulatory functions of JTM's director general, and the Telecommunications Services (Successor Company) Act legitimized transfer of JTM property, rights, and liabilities to STM. An international consulting firm, Arthur D. Little, was engaged in 1988 for the purpose of determining the organizational structuring of STM.

The next step was the granting of a license by the Ministry of Energy, Posts, and Telecommunications to STM on December 1, 1986. The license listed thirty-seven conditions. The initial duration of the license is twenty years, for which STM is required to pay M\$500,000 on issuance. The annual renewal fee is not more than 0.5 percent of STM's gross turnover in its previous financial year. Other provisions include:

1. A committee representing the government would be set up to specify the financial provision for the development and maintenance of telecom services in rural areas (condition 2).
2. JTM's director general was to be notified by STM regarding charges, terms, and conditions of service not less than twenty-eight days before any proposal becomes effective. If the director general made any suggestions to change the proposal, it had to put into effect within twenty-eight days from the time of notification (condition 11).
3. The director general may direct steps to be taken to remedy any cross-subsidizing situation affecting the apparatus supply business or the provision within the country of value-added services (condition 13).
4. Rate increases were limited to being not more than the arithmetic mean of the annual increases in the consumer price indices for Peninsular Malaysia, Sabah, and Sarawak, using 1980 as a base. Notwithstanding this, rate changes are subject to approval by the Ministry (condition 18).

JTM became a regulatory body. Its responsibilities were to coordinate and control all telecommunications activities in areas such as frequency management, licensing, international affairs, rates, and tariffs. Part of STM was sold to employees and the public in 1990.

7.1.3 Views of Constituent Groups

The process has had its critics and met opposition from a number of sources. Three major groups involved—Parliament, unions, and academics—are taken up in this section.

7.1.3.1 Parliament

The government coalition held more than a two-thirds majority, so there was no question that any bill would pass. It was thus a situation where opposition views could be totally ignored except for eventual appeal to the electorate.

These were two ways that formal parliamentary procedures were strictly observed. Members were given only two days notice of the vote, and copies of the Amendment Bill and the Successor Company Bill were not actually distributed until the day before they were to be voted on (and passed) in the July 1985 session. No caucus was held with any members, or with the Malaysian Technical Services Union or National Union of Telecom Employees (NUTE). A formal debate, such as it was, took place. A motion to postpone consideration was defeated. Opposition views were predictable. Comments concerned whether a private monopoly would be efficient, and whether a profit-oriented company would act in the public interest.

Following denationalization of JTM, several members pressed the ministers with questions on whether privatization would benefit the rural populace, consumers, and workers, how the policy would be implemented, and new services. Policies must generally have a rural bias (rural, predominantly Malay votes are weighted five times more heavily than urban, predominately Chinese votes) so many questions centered on this.

Would rental rates for rural phones be higher? How quickly would damaged rural phone booths be repaired? What about STM's desire to have deposits reflect usage? There were also queries regarding cross subsidization of domestic and international calling.

Questions reflecting worker interests focused on lay-offs and the number of JTM workers who had refused to join the privatized company—499 out of 28,000. Of these, 102 decided to stay with JTM while another 397 opted for early retirement.

Consumer issues included billing complaints about overcharging, nonresponsiveness of STM toward complaints, new housing developments not served with telephones, illegal recording of telephone conversations, and commencement of detailed billing to various parts of the country.

Members also asked the minister of energy, telecommunications, and posts to come in on November 17, 1987, to explain the banning of satellite broadcasts. He gave three reasons. First, such transmission requires prior agreement and payment. Second, the government must differentiate between information that is useful, necessary, and important toward the building of a united nation and information that would poison the thinking of the people and affect the harmony and security of the nation. Third, the government feels it is necessary to restrict the possibility of the recording and retransmission of such broadcasts.

7.1.3.2 Unions

The unions were not pleased with the prospect of privatization. NUTE, with a claimed 22,000 paid-up membership, issued strike ballots and picketing was organized. The unions complained that regional directors harassed workers to agree to join STM. Union leaders took every opportunity to criticize privatization, and called for its postponement. Rumors, such as one claiming that 20 percent of staff would be let go, were used.

Prior to denationalization—in the Successor Act creating STM—the government gave JTM employees quite favorable terms. Workers were assured of

employment on terms not less than those at JTM. STM had to employ every member of the JTM staff who chose to join the privatized company, and there was an assurance of no lay-offs for the first five years.

In 1985 the Pensions Act of 1980 was amended to give JTM civil servants the right to continue being eligible for government pension and other benefits should they opt for the privatization plan. Employees contributing to the Employees Provident Fund would have their contributions matched so their net salaries would remain the same. This meant the new company was required to contribute to the government Consolidated Fund at the rate 17.5 percent of their monthly salary.

7.1.3.3 Academics

Malaysian academics have been critical of the degree and extent of government involvement in the privatized STM. The Successor Act stipulates a long list of specific conditions, including one that is the catch-all statement that the energy, telecommunications, and posts minister has the power to "give directions to the privatized company." Ongoing government control through appointment of the directors and chief executives is feared. Thus, the chief executive of STM resigned in protest over introduction of nontelecommunications executives (Vong 1987). (It is also believed that several people vied for the STM chairmanship before appointment of the present chairman.)

Another criticism is that a privatized but heavily regulated STM was not that different in practice from JTM: all that has been done is the conversion of a public monopoly to a private one. Indications are that the government intends to retain at least 30 percent of STM (Rita 1986, p. 82). Other observers claim privatization eliminates the social obligations and aims of the civil service providers. However, social obligations are imposed on STM under both the acts creating it and its operating license.

7.1.4 Rule Making

Besides transforming most of JTM into STM, Malaysia made three significant decisions in the mid-1980s with far-reaching effects on its marketplace. These relate to changes in rates, definitions, and boundaries between basic and value-added services—particularly regarding mobile telephone service, and the selling off of public pay telephones to a private company.

STM's charges for installing and maintaining telephones are subject to approval by the government. This has generally been on an ad hoc basis. That is, there are no formal procedures involving hearings or specified periods for comments by the public and other interested parties. Reconnection fees were increased to M\$50 in to discourage late payment, which had become a major problem, and metered charges for local calls experienced a 30 percent increase in August 1985. These were seen as attempts to alleviate the M\$4.5 billion in loan liabilities STM inherited from JTM (Noor 1988).

In 1985, the first cellular system—known as ATUR, for automatic telephone using radio—was introduced by JTM. Three years later STM replaced JTM. In

partnership with Fleet Communications, a local company, STM also incorporated Celcom to provide a second mobile telephone network.

Although no public announcements have been made, it is surmised that a high-level decision was made that cellular will not be regarded as a value-added service, and thus will not be opened to competition. There is speculation that ATUR has spin-offs for extending telephone service to rural areas without laying cable. The system uses one mobile phone connected to a private branch exchange (PBX) capable of providing up to forty-eight extensions. The cost of renting such a system is comparable to that of an ordinary telephone system, but the call fees are high. The high rates for mobile service can provide a considerable element of cross subsidy for telephone systems in rural areas. Sapura Holdings has been licensed to develop the rural ATUR systems, with implementation costs borne by STM.

A not unrelated decision was granting a license to Uniphone to operate and maintain urban public pay telephones throughout Malaysia for fifteen years beginning in January 1989. The decision has been criticized by NUTE, which fears such cherry-picking will shrink STM's profit margin and thereby adversely effect union member salaries, bonuses, and other benefits. No details have been released on the revenue-sharing ratio between the two companies. It was charged that Uniphone claimed excessive metered charges from public pay phones, and that they did agree to pay STM M\$1.5 million to avoid litigation (Rema 1989).

7.1.5 *The 1983 Turnkey Contracts*

The decision to award private companies M\$2.4 billion in contracts to install 1.76 million lines throughout Malaysia during 1983–1988 had been seen as an early indication of the government's intention to privatize JTM. Upgrading of the network through these turnkey contracts was part of a five-year plan that also envisioned new value-added services being provided by joint ventures between local *bumiputera* (ethnic Malay) companies and foreign partners. All these firms were established by former JTM staff, and the four contracts were awarded without an open tender. However it was claimed, probably on the basis of the foreign partners' experience, that the recipients had proven track records.

The contracts were written to provide maximum help to the contractors. Thus, advances were made to them. In addition, no planning fees were charged for work already done, and, although materials had to be ordered from JTM's available inventory, transport costs were absorbed by the government.

Experienced or not, none of the contractors met the interim target for the end of 1985, let alone the overall completion date of the end of 1986. Moreover, the companies did not even come close to the contract price of M\$1,433 per effective cable pairs (see Rita 1986, pp. 68–73). The government and others involved have been reluctant to release data on subsequent performance, but it seems not all the lines were installed, as shown in Table 7.1.

The contractors attributed nonperformance to several reasons. First, the

Table 7.1. Completed Telephone Lines by Contractor

Percentage of target for the year		Cumulative lines completed by yearend		Contractor
1985	1985	1986	1991	
72.5	49.7	220,918	333,330	Binaphone
55.1	37.8	167,728	336,176	Electrosccon
70.1	48.1	213,475	292,063	Sri Com
83.9	57.6	255,562	485,277	Uniphone
70.4	48.3	857,773	1,446,846	Total

Source: Data for 1985 and 1986 are from *JTM Annual Report 1986*, p. 14; those for 1991 are unpublished STM data.

The target at yearend 1985 (the second full year of the project) was 304,669 lines for each company. The project was to be completed by the end of 1986, with each firm installing 440,000 lines for a total of 1,760,000.

agreement was signed in October 1983, but it was back-dated to January 1983, shortening the actual available work time. Second, they claimed three government departments—the National Electricity Board, the Municipal Council, and the JKR (the public works department)—were slow in approving permits for construction (*New Straits Times*, Sep 10, 1985). The contractors also claimed that JTM's staff opposed use of turnkey contracts because it saw them as an obstruction to the departments' expansion. This last reason would explain the contractors' claim that JTM held up the final detailed designs for a year (Krishnamoorthy 1985). For its part, the JTM claimed that their officers had to supervise the planning and installation work.

There were so many problems that the deputy minister of Energy, Telecommunications, and Post (ETP) announced JTM would revert back to using small cabling contractors instead of turnkey contracts. At the beginning of the contracts a hierarchy of committees had been formed for monitoring projects. It started at the regional level and culminated with an interministerial Steering Committee chaired by the ETP minister.

7.1.6 Upgrading the System

Not all the projects have been as contentious as the turnkey-line contracts and public telepay phone agreement. A number of others have been undertaken by local and foreign firms (often in joint ventures with domestics partners).

Work to upgrade the radio relay microwave system was begun in 1984 under a M\$250 contract with Standard Elektrik Lorenz (SEL) and ITT's German subsidiary (Knor 1988). A digital fiberoptic submarine cable project worth US\$100 million to link the peninsula with Sabah and Sarawak was awarded in 1989 to a consortium of NEC and Fujitsu.

Paging systems were privatized in 1986. In 1987 telephone directory services were taken over by GTE in a joint-venture with the local Melewar Corporation.

In 1987, a M\$5 million high-speed data network using a satellite was established to serve some thirty-eight banks and their over 800 branches. Packet and circuit switched data transport systems and telemail have also been introduced through joint-ventures of local and foreign companies (see, e.g., Raj 1988).

In March 1991, as part of a plan to expand and digitize the system, the government asked for bids on 4 million new lines. The process was very contentious and controversial. The winners were announced in March 1992—five of them, sharing equally in the M\$2 billion (US\$780) project.

One concern is that the systems will be incompatible—although one condition is that each supplier provide mutually interoperable equipment. However STM will have the expense of adapting the new equipment to the existing network, as well as making the various vendors' equipment work together. The low bid (made by Ericsson) must be matched by the other four.

Beyond technical considerations have been political ones. One of the successful bidders (Alcatel) has as a local partner a foundation affiliated with the Penang chapter of UMNO, the ruling political coalition, and the Finance Minister in particular. Because the Finance Ministry owns 76 percent of STM it had final say on the winners. It is known that the second-low bidder was Siemens, but it was not one of the firms selected, despite a recommendation from STM that it be included.

Sapura Holdings is the local partner of Nokia, the fifth-highest bidder but among the winners. One of Fujitsu's partners has ties to UMNO. Public controversy involving alleged favoritism surrounded another major tender in Malaysia in 1991 (gas turbines for the electric board).

7.1.7 Information Technology Policy

STM's research and development efforts in establishing ISDN are in line with the aims of the Malaysian Administration Modernization & Manpower Planning Unit (MAMPU) incorporated in the Prime Minister's Department. The unit started as the nucleus of the government's drive to automate its own data processing functions. In 1985 MAMPU was elevated to a national-level committee responsible for formulating, promoting, coordinating, and controlling computer technology policies for modernization, management, and national development.

STM is facing pressure to speed up implementation of an ISDN model. In a 1988 seminar on computerization for development, it was suggested that STM adopt a three-pronged approach (Mazlan 1988):

1. Provision of digital transmission and switching.
2. Introduction of basic ISDN services leading toward provision of specialized packet-switched and circuit-switched networks.
3. Services integration of packet-mode, broadband services and multimedia services.

Participants felt STM was much too slow in offering customers an integrated multipurpose network system. STM planned to introduce a pilot ISDN setup

by the end of 1989 with commercial service to be available in 1992 (see Westlake 1989). The goal was partially met.

7.1.8 Domestic Companies

The dominant local telecommunications firms are Binaphone, Sri Com, Electrosccon, and Uniphone—the four holders of the turnkey-line contracts discussed earlier. They have been quite unfazed by the brouhaha over those contracts, and their businesses have continued to expand. There is a good deal of interlocking shareholding among them and by UMNO, the dominant party in the governing coalition. Table 7.2 shows some of the relationships.

Manufacturing telecom equipment for domestic use in Malaysia is largely in the hands of Sapura Holdings, a private company. Sapura conducts research and development without funding from the JTM. In the late 1980s it produced a wholly Malaysian-made telephone set known as the S2000 series. There are two models, one aiming at the third-world market and the other—more sophis-

Table 7.2. Nongovernment Malaysian Telecommunications Companies

Holding Companies

AZH Holdings plc. parent of Binaphone.

Fleet Group. Wholly owned by UMNO, the dominant party in the governing coalition (see Seaward 1987). Holds 25 percent of Sistem Televisyen. Involved in Celcom—a joint venture with STM to provide mobile phone service (see Sabri 1988).

Sapura Holdings. Twenty-four subsidiaries, including Electronics & Telematique and Uniphone. Combined 1988–1989 revenues of M\$200 million. 100 percent bumiputera. See Lee (1989).

The Four Majors

These were all established by former JTM staff members and shared equally in the 1983 contract for installing 1.76 million phone lines (see text).

Binaphone Sdn Bhd. Subsidiary of AZH Holdings plc. Owns 25 percent of Britarafon. Joint-venturer with Philips Electronics NV.

Electrosccon Sdn Bhd. Joint-venturer (after first year of operation) with LM Ericsson.

Sri Communications Sdn Bhd. Joint-ventures on an each-job basis.

Uniphone Telecommunications Bhd (formerly Malayan Cables). Majority-owned by Sapura Holdings through the latter's control of Electronics & Telematique. Owns 20 percent of System Television. Has public pay telephone contact (see text). Joint-venturer with Sumitomo Denki Kogyo.

Others

Britarafon Sdn Bhd. Reportedly formed to purchase shares in STM when they were floated (Loh 1986a). Owned equally by Binaphone, Arab Malaysian Development, Electronics & Telematique, and British Telecom of London (see Lee 1986).

Electronics & Telematique (M) Sdn Bhd. Established in 1981 as an associate company of Sapura Holdings (see Lohn 1986b). Majority shareholder of Uniphone.

Sistem Televisyen Malaysia Bhd. The commercial television station in Malaysia: 20 percent owned by Uniphone; 25 percent owned by Fleet Group.

ticated—directed at first-world markets. The company anticipates capturing 1 percent of the annual market of 200 million sets (Lee 1989).

7.1.9 Overview

If profit making is the central criterion, the corporatization of Malaysian telecommunications could be considered a success, although STM did report a M\$96 million loss its first year. This has helped make STM (also often called Telekom Malaysia in the press) become something of a stock market darling, with many foreign investors acquiring shares as a way of “playing” overall Malaysian economic development. The government has attributed STM’s success to privatization models seen in Japan (described in Chapter 23) and the United Kingdom. One similarity between the United Kingdom and Malaysia is retention by government of a “golden share”—the power to veto policies. Overall, however, the Malaysian government has actually increased regulation and changed the industry into a private monopoly rather than a public one.

7.2 Indonesia

Indonesia’s principal telecommunications entities, Perumtel (renamed PT Telekom after early 1991) and PT Indosat, are state-owned corporations, with no indication of an intention to infuse private capital into them. They are under the jurisdiction of the Department of Tourism, Post, and Telecommunications. Both are operated as private companies and subjected to income taxes like other corporations. However, the government exercises its role as the only shareholder through direct involvement in management and decision making. The companies are also required to consult with other government departments on technical and financial matters.

In 1980 PT Indosat, which had been an IT&T subsidiary operating a satellite system under a twenty-year license that had nine years to run, was nationalized and became the monopoly international service provider. At the same time Perumtel was made sole provider of domestic public telecommunications. (The preceding chapter provides more details on structure and history.)

Perumtel recently has been having trouble. By 1986 it had managed to complete only half of the projects carried forward from its third five-year plan (known as Repelita 3); these projects were to have been finished by March 1983. Moreover, only one of the nine projects stipulated in Repelita 4 was done. Work on three projects had not even commenced. According to Willy Moenandir, then Perumtel director general, funds allocated for telecommunications development were inadequate in both of the plans (Nasution et al. 1988b).

In 1984 there was an average of only 0.48 trunk lines per hundred people (compared with 5.7 in Malaysia). At yearend 1987 Perumtel faced a waiting list of 400,000, compared with 668,000 existing subscribers, at a time when there was a population of some 170 million (Nasution et al. 1988a).

These were undoubtedly factors in the government decision to implement

build–operate–transfer schemes, contracting out, and obtaining “soft” loans from donor countries for telecom projects. All of these unfortunately appear to have done as much to create profit opportunities for suppliers as they have to improve the telecommunications system.

7.2.1 Equipment Procurement

PT Inti is the wholly government-owned principal supplier of such equipment as digital telephone exchanges, mobile phone units, and satellite stations. Throughout the 1970s and 1980s it had technical cooperation ties with several foreign companies including Siemens and Bell Telephone Manufacturing of Belgium (Hukill and Jussawalla 1989). Advanced equipment such as digital telephone exchanges, mobile phone units, and satellite ground stations were produced in Indonesia for local and foreign markets.

Presidential Decree 6/1988, which amended decree 24/1984, stipulated a more liberalized approach to procurement of telecom equipment. Beginning in 1988 Perumtel and PT Indosat were allowed to procure equipment through several alternatives, such as open or limited bids, direct determination, or direct purchase. Two requirements stipulated in the decree were the mandatory involvement of Indonesians in contracts awarded to foreign suppliers and a certificate of contractor capability. Direct procurement of equipment from foreign countries is only allowed if the technical specifications laid down by the appropriate regulatory bodies in the country of origin are fulfilled. However, a type approval from PT Telkom is required for any terminal equipment used.

7.2.2 Local Companies

Three major telecommunications firms are controlled through the Bimantara Group by Bambang Trihatmodjo, a son of Indonesian President Suharto. PT Elektrindo Nusantara (40 percent owned) produces equipment for PT Telkom under license from Hughes Aircraft, the company that provided the technical expertise for the Palapa A satellite in 1976. Cakra Nusa is a trading company, while Sattel Technology, based in the United States, conducts research and development to support Elektrindo's operations.

In 1987 Sattel purchased Indonesia's Palapa B2 satellite from Merritt Holdings, the underwriter for Lloyd's of London that became the owner after the satellite went into the wrong orbit when launched in January 1984. It was recovered by the U.S. space shuttle that October. Critics claim Sattel was incorporated to facilitate the sale and prearranged purchase of the Palapa B2 by Perumtel (see Nasir 1987).

In the late 1980s the government embarked on a “user-credit system” to install about 30,000 telephone lines in the cities of Jakarta, Solo, Surabaya, and Pontianak. These projects incurred sixfold cost overruns compared to those built by Perumtel.

A contract for installing 10,000 Ericsson mobile telephones was offered to PT Rajasa Hazanah Perkasa by Perumtel in 1985 without going through an

open tender. The company subsequently failed because of the relatively low demand for mobile telephones in Indonesia (Ahmed 1988). This is somewhat ironic, as substantial later demand for cellular service has been driven by the general poorness of Perumtel's wireline system.

7.2.3 Parceling Out Business to Foreigners

In its 1988–1989 report Indonesia announced a list of ten projects to be offered to donor countries for financial assistance (see Chapter 6). Under this scheme, the donor countries would offer financial assistance in erecting and installing telecommunications networks, entitling them to annual profit sharing once the networks commence operation. This resulted in intense lobbying of government officials by foreign governments in support of their suppliers (*Tempo* Apr 1988, p. 26).

The 1990 awards to NEC and AT&T to provide switching and other equipment for 350,000 lines each require collaboration with local joint ventures. For both bidders, the soft loan credits are reported to exceed the value of the bids (for AT&T, \$193 million in credits on a \$103 million bid; for NEC, credits total \$174 million, versus a \$77 million bid). There is considerable speculation as to who will benefit. Considerable maneuvering took place to be the domestic partners—there was no open tender and AT&T and NEC did not have a free hand in the matter, which delayed the contracts and, therefore, the work. Companies associated with President Suharto's family subsequently emerged the choices—AT&T partners with PT Citra Telekomunikasi Indonesia (CTI), NEC with PT Elektrindo Nusantara. CTI is 25 percent owned by the younger brother of the minister of research and technology and was not formed until a few months before the contracts were awarded (see, e.g., *Far Eastern Economic Review* Jan 24, 1991, p. 41).

7.2.4 Overview

Telecommunications in Indonesia appears quite politicized, and the build–operate–transfer scheme and “soft” loans are anticipated to further aggravate the situation. Thus, the use of private investors to spearhead telecommunications expansion has resulted in preference being given to entrenched interests. Moreover, soft loans appear to be routinely used as facilitators to ensure equipment is bought from donor-country suppliers. With a liberalized approval mechanism for equipment and pressure to develop networks, a wide variety of gear has been put on the system. Despite equipment having to be approved by PT Telkom, varied standards and specifications have caused difficulties in network integration. This is a factor in the call-completion rate being below 30 percent.

7.3 Conclusion

One significant effect of restructuring in Malaysia is that it has reinforced existing bureaucratic capitalism. Many ownership interests ultimately lead to

UMNO, the major party in the governing coalition. Another observation is that these companies are owned by bumiputera. Ethnic discrimination is less obvious in Indonesia; however, politicalization is present.

A second observation is that the governments of both Indonesia and Malaysia retain tight control of their telecommunications provider. In Malaysia it is possible (but unlikely) that the regulator could be overwhelmed by STM's greater manpower and financial resources or lose its high level of political support. What appears fairly clear is that the system will continue to protect bumiputera interests. Indonesian insistence that foreign interests have local proxies is not too dissimilar. Any policy reforms must conform with local political and administrative styles.

In Malaysia, one possible future is to give STM the role of carrier and introduce competition among "big players." Another is to have controlled, restricted, or paced competition, as in the public pay telephone case. Whatever the eventual shape of the marketplace, it is fairly certain that commercial dynamism will be somewhat dampened by the political reality of having to give bumiputera stakes in new businesses and the requirement of providing services in (largely Malay) rural areas despite the low level of demand.

In Indonesia there was a belief that the build-operate-transfer scheme and soft loans from foreign countries would spearhead network expansion and relieve government financial constraints. Further "reforms" depend on whether local elites are in a position to benefit from them.

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