CAPACITY BUILDING FOR THE CENTRAL INSTITUTE OF ECONOMIC MANAGEMENT, HA NOI, VIET NAM

PROJECT
TECHNICAL REPORT

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and the
Central Institute of Economic Management, Ha Noi, Viet Nam

Asia Development Assistance Facility:
Round 19:

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AES	One of the principal US electricity generating companies

BCC	Business Co-operation Contract
BOT	Build Operate Transfer – Method of construction
BTO	Build Transfer Operate
CAT	Communications Authority Thailand
CIEM	Central Institute of Economic Management (Hanoi)
DGPT	Directorate General of Post and Telegraph
DISCO	Electricity Distribution Companies
EGAT	Electricity Generation Authority of Thailand
EVN	Electricité de Viet Nam
Genco	Generation Company
GOV	Government of Vietnam
GridCo	Transmission Authority Thailand
HCMC	Ho Chi Minh City (Saigon)
IAP	Internet Access Provider
IPP	Independent Power Producer
ISO	Independent System Operator (electricity market)
ISP	Internet Service Provider
KCC	Korean Communications Commission
KEPCO	Korea Electric Power Company
KT	Korea Telecommunications
MEA	Municipal Electricity Authority (Thailand)
MO	Market Operator (electricity market)
MoI	Ministry of Industry (Viet Nam)
MOIEC	Ministry of Industry, Energy and Commerce (Korea)
MOTC	Ministry of Transport and Communications (Thailand)
MPI	Ministry of Planning and Investment (Viet Nam)
OECD	Organisation for Economic Co-operation and Development
PEA	Provincial Electricity Authority (Thailand)
PPA	power purchase agreement
RPI	Retail Price Index
SA	Settlement Arrangements
SK	Korean manufacturing company
SPT	Saigon Postel
TOT	Telephone organisation of Thailand
USO	Universal Service Obligation
VAS	Value Added Services (telecommunications)
VNPT	Viet Nam Post and Telecommunications
VOIP	Voice Over Internet Protocol
VPC	Village People's Committees

Network Industries Analysis:
Capacity Building for the CIEM, Ha Noi, Viet Nam

Background

1. The purpose of the Capacity Building Project, for the Central Institute for Economic Management (CIEM), was to ensure that it is up to date with developments in network economics. The efficiency, cost effectiveness and reliability of network services are crucial aspects of the business environment in a market economy and as Viet Nam integrates with the World economy the cost of doing business is increasingly important. The health of the business environment is in turn crucial to improving living standards and ending poverty in Viet Nam.

2. In addition to this report a *Background Paper*, was prepared for participants in the Study Tour in Thailand and Korea in August and September 2000. *A Study Tour Report*, followed the Tour, as did the presentations for the Round Table Discussion in Ha Noi on the 12 October. These are available to interested persons in an electronic form

Economic Management

3. Since the launching of the "Doi moi" programme in 1986, the government of Viet Nam has overseen a policy conversion from a planned to a market economy. The principal difference between these two is that between regulating economic activity in accordance with a centrally devised economic plan, on the one hand, to a policy where economic activity is regulated primarily by competition, on the other.

4. Competition takes place between producers to supply goods and services and between buyers to obtain them. Each producer seeks the business of a buyer but faces competition from suppliers of similar, or substitute, products. Each buyer seeks the best value for money, but faces competition from buyers seeking similar products and services. These transactions comprise the market for the goods or services.

Market Prices

5. Market transactions set prices that summarise a huge amount of information. They provide information about production costs, buyers needs, the state of supply and demand for the goods or services, transport, marketing, the impact of government policies on the market and all other supply and demand information. No planner has yet discovered an alternative method to generate this quantity of information and make it widely available, free of charge.

6. Market transactions promote welfare in ways that centrally planned economies are unable to do. In a market economy:

- no transaction takes place unless both parties believe that they will be better off once the transaction is complete,
- competing enterprises organise production so that potential consumers will believe that the goods and services on offer are the best available,
- if they are the best they may command a premium price, if they are not they may be sold only if they are discounted to cost or below cost,
- prices at which transactions take place, and which clear markets leave buyers and sellers satisfied that they have done the best they can,
- the completion of each transaction creates new, unique information regarding buyers and sellers perceptions of the appropriate price for the good or service,
- this information is then used to adjust demands and supplies to levels that buyers and sellers believe to be fair given prevailing circumstances.

7. Administered prices provide quite different information. They may contain elements of the above but the information is obscured by the overlay of government policy. They reflect the priorities of the pricing agency.

Communication and Control

8. Market, are examples of communication and control systems. These systems are normally associated with living organisms and are analysed by cybernetics. In cybernetics, to achieve desired performance from human organs or from mechanical devices, information concerning the actual results of intended action must be made available as a guide for future action. In the human body, the brain and nervous system function to co-ordinate the information, which is then used to determine a future course of action; control mechanisms in machines serve a similar purpose. The principle is known as feedback, the fundamental concept of automation.

9. There is a close parallel with the role of prices in a market economy. Market price information, available automatically, almost free, each time a transaction is completed performs similar functions. It provides information on what has happened and provides incentives on which future action can be based. This is what is meant by saying markets are regulated by competition.

10. Economies function best if the information is accurate, access to information is increased and distortions are minimised. Consumers make decisions based on the merits of goods and services rather than on what some other person

believes they should like. Availability is not based on the success of the management of an enterprise in obtaining protection from competition.

Network Industries

11. Market economies need price information to work well. When economies work well, consumers benefit because additional wealth is created. Competition policies are designed to help markets work by creating and distributing more information. They are devised to overcome price distortions. However, competition policy means different things to different people:

- for some people competition policy is about controlling the emergence of dominant firms or monopolies and the conduct or behaviour of existing firms,

- for other people, competition policy is about dismantling the barriers to entry and other regulations that might otherwise give some firms a protected place free from competition,

- for other people it is about regulating existing or former monopolies such as electricity, gas, telecommunications, water and railways.

12. This assignment is concerned with electricity and telecommunications. These sectors are characterised by continuous distribution networks with high costs which make it expensive to duplicate their services and difficult for competitors to enter the business.

Competition Policy and Network Industries

13. At one time many countries prohibited competitive provision of electric power, telephone and other network services as it was thought this would undermine the profitability of the utility and make it more difficult to supply services to rural areas. With modern technologies this assumption is seldom correct and the benefits gained from making competition illegal, are outweighed by the inefficiencies encouraged.

14. The world-wide trend is away from these legal prohibitions. Deciding how to handle the natural monopoly component of networks is the key issue for the governance of deregulated network markets[1]. There are many different combinations of private and public ownership and different forms of regulation of networks. In the United States, for example, the single provider has generally been privately owned but subject to independent external

[1] *Common Elements in the Governance of Deregulated Markets*, Evans and Quigley, NZISCR, July 1998

regulation. In Australia, New Zealand and most of Europe, utilities were often government owned and self-regulating.

15. Almost everywhere, the experience of government owned networks has been the same:

- performance of self-regulating state monopolies has generally been poor.
- despite substantial government expenditure people have lacked access to service, waiting times have been long and prices high,
- poor outcomes reflect political demands on the entity, conflicts of interest between regulatory and operational responsibilities, excess labour, capital shortages and unpaid for community service obligations.

16. Ways of controlling and regulating utilities to increase competition have emerged through experience and experiments in a wide range of countries. In particular explicit budgeting for service obligations generally produces greater transparency, better debate, more accountability and stronger budget control than political directions to utility managers,

Management Transparency

17. Where competition between entities is not possible or practicable other strategies are available to increase the transparency of their operation. Structural changes, which facilitate competition, include:

- unbundling the various aspects of the entity, particularly policy, regulatory and business.
- competitive business components are separated from the monopoly components,
- Competitive tendering can be used to contract out parts of the business where competition is not possible,

18. Power generation, supply and energy marketing are potentially competitive activities. Distribution through the wire network remains in state hands, or is regulated. Contracts between the various entities force them to measure and reveal their true costs of operation giving the owners (usually the government) more, real control. Where competition in the market is not practical (e.g. in water supply) governments have created competition for the market. Firms compete for the right to supply a particular market under a long term contract. The process of competitive tendering and the subsequent reporting of commercial results forces independent assessments of true costs.

19. Competitive pressures might be created by requiring single provider firms to report to the government and the public on their performance, by way of

prices, breakdowns, installation services and to compare these performance measures with relevant domestic and international benchmarks. Although better than no change, this approach is of less benefit as the operator has much better information than the government. Competitive pressures are weak. No regulator will ever have the impact on an incumbent that a competitor has.

Yardstick Competition

20. Another way to improve performance in operations not open to competition is to undertake performance monitoring or 'yardstick[2]' competition. This requires the collection of information on indicators of efficiency (called "performance indicators") over time and, if possible, across appropriate comparable entities. It also requires willingness on the part of the owner-governments to allow managers commercial freedom to manage businesses and then hold them accountable for results. The rewards of management can be linked to such indicators through appropriate forms of contract.

21. Comparisons across similar operations within a country or across countries (often called "benchmarks[3]") can also be useful in assessing performance and attempting to improve efficiency.

Access

22. While there may be scope for contestability in production, if new producers can be denied access to the transmission grid or pipeline there would be little hope for the promotion of competition in production. Therefore, creating open access to the transmission channel, or network, has become an important feature in promoting competition and improving efficiency in utility supply.

23. Determining the basis for access to the distribution channel and the terms of access has been the subject of much recent debate as has the basis for payment to the monopolistic supplier. Access may be determined using pricing mechanisms, or quantity (capacity) mechanisms, or a mixture of both. Some countries make provision in the law requiring facility owners to grant access to competitors and determine the access price. Other countries leave these to negotiations, or provide for forms of third party mediation or arbitration.

24. Payments to the monopolistic supplier of the distribution channel may be determined by price controls, or by a regulated rate of return on the assets involved. Blanket price controls tend to be arbitrary[4] but these controls

[2] The word "yardstick" derives from the one yard ruler common under the pre-metric imperial measuring system

[3] The word "benchmark" derives from the practice of drapery shops measuring cloth by using nails (marks) hammered into the shop bench, exactly one yard or metre apart.

[4] Using political rather than economic principles to govern decisions has often been the case in market economies too, particularly in the 1970s. Between 1972 and 1975 electricity, telephone and postal

usually operate only for a short time or the finances of the utility are undermined.

25. To put management under pressure to reduce costs regulators introduced the RPI-X system. Prices are allowed to increase in line with the Retail Price Index (RPI) but are reduced by a percentage (X). Profits can expand only if efficiency increases. This is an improvement on former methods but can actually prevent prices falling where they can and should.

26. It is also possible to regulate by means of controls on rates of return on capital employed. This method has a tendency to encourage "gold plating" (an expansion of the asset base allows an expansion of profits)[5]. It can also lead to taking on additional business that may be unprofitable in the absence of the rate of return regulation. There can also be debate over whether the assets are valued at cost or replacement value.

Equitisation and Contestability

27. Those parts of the production and supply of services that can be opened to competition can safely be equitised[6]. This removes the risk of financial losses or bankruptcy from the government's books and places this risk with the private sector. The incentives to manage businesses are better in the private sector. Equitisation helps to ensure the efficient use of resources and the best quality of service at a given price. The main issue with respect to equitisation would is to ensure that the markets remain fully contestable.

28. Contestability, does not mean that there has to be more than one supplier in the market. However, it does mean that it should always be possible for a potential competitor to enter. The role of the government is to protect competition, not the business of a particular competitor.

Regulation

29. The important aspect of utility regulation is to recognise it can have five separate aspects:

- Policy development – is about deciding whether or not to regulate networks, what laws and institutions will be required to operate the chosen system; this is the role of the government advised by policy advisers, usually located in a ministry,

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charges were frozen during high inflation as a result of an unwise election pledge. In this particular case the government paid for the subsidy under the heading "Stabilisation."

[5] An examination of the rate of return price controls on the New Zealand liquid fuel industry over more than 40 years showed that the only beneficiaries of the controls were the foreign oil companies. They were protected from competition and the need to provide good service while the government guaranteed them a 16 percent rate of return on their asset base.

[6] Vietnamese term for introducing private capital to government owned businesses

- Policy enactment – is the passage of the laws and regulation that are required to provide the legal framework for the chosen method; this is normally the role of the executive arm of government and the legislature,

- Policy administration – is the day to day work of research, administration of licenses, publication of rules, providing information, responding to instructions from the government, receiving requests from potential operators. These functions can be performed by a ministry, a regulatory authority or any other agency designated to perform them, depending upon the chosen institutional set up

- Dispute resolution – is the process of adjudication of disputes over the correct application of the rules in particular circumstances. Disputes can be between operators, between an operator and the government or between customers and operators. This role is normally undertaken by a regulatory authority with appeals allowed to the courts, or in some cases directly to the courts, or to an arbitrator.

- Prescription – occurs where the regulations permit some body to prescribe tariffs or service standards, it can be performed by the regulatory authority itself (with appeals to the courts), the government on the recommendation of the regulatory authority, or by the government acting on its own motion.

30. The basic requirement of a transparent regime is usually that dispute resolution and prescriptive decisions are taken by an independent body, in the light of rules laid down in laws applying to all parties. For this reason, actions by government on its own motion are now regarded as arbitrary and non-transparent.

Appropriate Regulation

31. Ideas concerning appropriate network regulation are likely to see dramatic changes in the next twenty years. For example, the WTO has established a policy on telecommunications regulation[7]. It lays down guidelines on the appropriate contents for a telecommunications regulatory regime. The guidelines suggest that an appropriate regime should:

- Prevent anti-competitive practices, (to facilitate entry of new competitors and ensure fair competition)

- Allow non-discriminatory interconnection, (to facilitate new entry)

- Apply universal service obligations neutrally, and be imposed non-discriminatorily, (to ensure fair competition)

[7] Basic Agreement on Telecommunications Services

- Make licensing criteria publicly available, (so that everyone knows what new entrants need to do to obtain a licence and existing customers know their rights and service standards they are entitled to)

- Ensure that regulation separated from incumbent enterprises, (to minimise conflicts of interest) and

- Ensure the allocation of scarce resources, objectively, promptly, transparently and without discrimination (so that entry is determined by the merits of the commercial deals available rather than to prop up an existing state owned enterprise)

32. Similarly, the World Bank[8] has guidelines for lending to electricity utilities. Lending can occur when the borrower country has a legal framework and regulatory process satisfactory to the bank, including:

- a clear set of rules, known in advance

- rules actually in force,

- mechanisms to ensure application of these rules,

- conflicts resolved through binding decisions of an independent judicial body or arbitrator,

- known procedures for amending rules when they no longer serve their purpose,

- a framework of regulatory incentives to support competition and efficiency

33. These guidelines for regulatory frameworks imply, transparent processes, independent of suppliers and no government interference in day to day power company operations. The World Bank also suggests that country's legal framework should also provide a sound basis for open discussion of sector economic, environmental and service policies.

Subject to Regulation

34. For people familiar with the British and North American models of utility regulation it is often taken as read that "regulation separate from the enterprise" means there needs to be a "regulator" of utility activities, who will "regulate". This is not necessarily the case. Neither the WTO Basic Agreement, nor the World Bank Policy requires a "regulator," as such. In some jurisdictions, regulation is undertaken by a ministry, which has no

[8] The World Bank's Role in the Electric Power Sector, The World Bank, January 1993, page 60. This policy has now been overtaken by a general withdrawal from power sector lending on the basis is that there is adequate private sector money available given an appropriate policy framework.

operational control over the enterprise. In others, for example New Zealand, the regulatory regime is based on general competition law and the threat of price controls[9]. In Chile, utility regulation is by processes and rules. Rules and processes are proposed by the relevant ministry and enacted in the utility laws. Tariff calculations are based on the rules rather than on edicts from a specific regulatory body.

35. In these jurisdictions, people are more inclined to believe that utilities should be "subject to regulation." It is recognised that rules are required to ensure that competition is fair. The assumption is that competition should be the primary regulator of economic activity. Rules to regulate competitive utility conduct, can either be specific or based on general commercial law. This is referred to as "light-handed regulation." It can be backed up by a threat to regulate if the parties are unable to resolve issues satisfactorily within a defined timeframe.

36. Evans and Quigley[10] suggest that natural monopolies are best dealt with by private, voluntary joint ventures. These develop under light-handed regulatory regimes. Private contracts are subjected to normal commercial processes and general competition laws. Efficient private solutions resolve the special governance problems of network industries. If they cease to be efficient, these joint ventures can be replaced by the parties themselves. Viet Nam does not yet have a general competition law and its commercial legal framework is very new and incomplete. Other methods would have to be devised to gain the benefits of voluntary contracting while still encouraging competitive investment.

Market Failure

37. What all these systems seek to address is the imbalance of information between a network and its customers and competitors[11]. Regulations seek to address information failures in the network market (so called "market failures"). In addressing market failures it is important to ensure that interventions to cure information failures are not so intrusive as to create "government failures[12]."

38. The following issues are often overlooked in determining appropriate regulatory regimes:

[9] New Zealand Post Ltd operates under a "Deed of Understanding" a legal agreement which commits it minimum service levels. Competition can be shown to be much more effective in this case as competitive pressures ensure that it easily exceeds the stipulated levels of service and its prices are lower than the maximums laid down.
[10] Op. cit
[11] Usually called an information "asymmetry," or imbalance.
[12] The inefficiency of the Soviet economic system leading to the collapse of the Soviet Union can be seen as the most dramatic example of government failure.

- Management of utilities is constrained in what it can do by the need to serve customers; it is a poor manager who raises prices so much that he puts his best clients out of business.

- Modern technology means that most areas of utility businesses will soon find themselves with competition, but only if new competitors are allowed to enter the business.

- If competitors are allowed to enter and exist in the market, and if prices are too high or the incumbent network performs badly, it will soon face competition in every aspect of its business.

39. Most importantly, excessive price or conduct regulation releases managers from the responsibility to make judgements about responding to competitive pressures. It provides them with the perfect excuse for failure. This is particularly important as economies are making the transition from central planning. There is the danger that the regulator is seen as the central planner in a new guise.

40. If management can always lean on a regulator to make difficult decisions for them, they will lose the incentive to find innovative solutions to economic problems. One response to these issues is to maximise the scope for management control by constraining their activities in a defined set of circumstances, as is done in Chile. If the legal framework is inadequate to deal with competition issues and if the political system of the country does not cope well with independent regulation, an alternative is to stipulate conditions in operating licences and provide for an independent internationally compatible arbitration system.

41. If general rules, process and competition are insufficient, they can be backed up by a system of periodic investigations into the activities of the network. This periodic snapshot of its performance may produce more information and better results than ongoing interaction with a powerful regulator. The investigatory body may be a permanent body or may be called together as required. There could be a mixture of a permanent oversight body with a budget to hire competent experts to conduct regular investigations.

Static and Dynamic Efficiency

42. A related issue is the question of promoting economic efficiency[13]. One of the reasons why regulation is called for is the perception that in the short term the power of a monopoly may produce inefficient outcomes[14]. For example, there is the situation of an incumbent operator with a virtual monopoly of a market. To rapidly foster competition governments and regulatory authorities put in

[13] This discussion is found in NZISCR, Quigley and Evans, Presentation to Round Table Discussion 13 October 2000

[14] "Sub-optimal" - by inefficient arrangements society deprives itself of wealth it would otherwise have

place regulatory measures requiring the incumbent to facilitate the entry of competitors by offering them services at or below cost or by banning the incumbent from parts of the market.

43. Typically, these measures are justified in terms of competition and the efficiency benefits that it brings. "Efficiency" as an economic concept has three aspects to it:

- Productive efficiency (sometimes called technical efficiency) is concerned with the minimisation of costs. This is what makes it possible to produce the greatest possible output with the smallest possible usage of raw materials. This is frequently used as the justification for regulatory intervention as intervention results in short term reductions in the price of some services
- Dynamic efficiency concerns making timely investments to keep the cost of production as low as possible in the long-run. It is concerned with the optimisation of future investment plans. This means the avoidance of either excess capacity or a shortage of production capacity in the long-run and making investments appropriate for forecast future demands.
- Allocative efficiency occurs when the price that willing consumers are prepared to pay for an additional unit of a firm's output is exactly the same as the cost of producing that output. This is also referred to as marginal cost pricing because it measures the cost of the last or marginal unit produced. This allocates resources based on the cost of producing them[15].

44. Improving allocative efficiency is the goal of market deregulation, as it ensures that resources are distributed to their best use, using market information. Coming from a legal monopoly position, dynamic efficiency implications have to be given consideration too. If the incumbent provider of services is seen to be making large profits, political authorities are asked to intervene in the name of productive efficiency. Political authorities find the prospect of lower charges for services such as telecommunications and electricity attractive, politically and are often persuaded to intervene.

45. In doing so there are dangers that the dynamic efficiency may be harmed. Although there are many examples of deregulation and competition in sectors such as electricity and telecommunications, it is unusual for the new entrants to achieve market penetration more than 20 percent, even after ten years or so. This means that if the investment plans for the sector are to be optimal for the first ten to twenty years after deregulation, the investment plans of the incumbent are crucial to the achievement of dynamic efficiency. Significant intervention in favour of new entrants can significantly distort investment

[15] The New Zealand Electricity Market for example prices electricity at 240 nodes around the country. The pricing formula is NP = MG + L + C. The nodal price equals the price of the marginal (or last dispatched) generation unit for that time period, plus the cost of electricity lost in transmission, plus the cost of constraints which consuming electricity at that node, places on the total system (if any).

plans and lead to inferior services for some consumers, such as those in rural areas[16].

Disputes and Service Standards

46. Disputes can arise between producers using the transmission monopoly, between producers and the transmission monopoly and between consumers and producers. These need to be settled. In some countries, the regulator does this. It should be possible, however, to appeal against decisions made by the regulator to some higher tribunal to avoid the development of a too close relationship between the regulator and the regulated. In some countries, New Zealand for example, parties either settle their disputes themselves, or resort to court action.

47. The need for dispute resolution exists even in developed countries with a long history of utility regulation such as the UK and the US. There are likely to be even more disputes in environments where utility regulation is relatively new. This suggests four main strategies for those whose job it is to administer the regulations:

- first regulatory systems need to be designed with these limitations in mind, they need to be simple: KIS = Keep it simple,
- second, they might draw on outside expertise until local practices evolve
- third, there is a rapidly growing body of knowledge and practical experience around the world and regulators need to tap this resource,
- objectives of regulations need to be clarified and other ways of achieving them examined.

48. Viet Nam has set up a telecommunications regulatory authority, the Directorate General of Post and Telegraph (DGPT). However, the fact that it retains some functions inside the former monopoly company, Viet Nam Post and Telecommunications (VNPT), demonstrates the problem. In a country with an untested legal system, VNPT's competitors are unlikely to accept as fair decisions made by a body with organic links to its competitor. So far, there is no, independent regulatory authority for the Vietnamese electricity sector.

Regulatory Body

49. A society considering the establishment of a regulatory body has to determine the extent of the body's powers. Should it have the power to engage in

[16] This appears to be happening in Australia. Regulations require the incumbent to provide services to competitors at cost or below and as a result nobody is interested in upgrading rural telephone services.

prescriptive conduct regulation? Would it be better to operate through benchmark comparisons and publication? Should it be an investigatory body called upon from time to time to report to the government? Unless its job is clear and transparent, it will not be possible to judge whether it is doing its job well or not.

50. Having decided the body to do, it is then possible to decide how it should be formed. Some countries prefer a single person regulator while others might opt for a commission of 3 to 7 members. The key is to decide what it will do.

51. Network regulators are generally organised in three ways:

- Industry-specific, in which there is a separate agency for each industry - such as gas, power, water and telecommunications - as in the United Kingdom,

- Sector-wide, in which there is an agency for each more broadly defined sector, such as the energy regulator in Colombia and the transport regulator in Canada,

- Multi-sector, in which there is a single agency for all or most utility industries, such as the state-level regulators in Brazil and the United States, and the nationa1 regulators in Costa Rica, Jamaica and Australia.

52. Making an agency responsible for more than one industry allows administrative and professional resources to be shared across sectors, so that economies can be achieved. It facilitates learning across industries and reduces the possibility of one industry capturing the attention and sympathy of the regulator. It also strengthens the agency's capacity to operate independently of political control by a particular ministry. On the other hand, some would allege that a multi-industry agency might lack sufficient industry knowledge. Another concern might be that relying on just one regulator could be risky if it performs badly[17]. Having a number of agencies particularly in the early days would allow experimentation across several industries.

53. These arguments largely follow from the assumption that the regulator will impose detailed controls on the network utility. The objective of deregulation is to make ensure that regulation is the minimum necessary to ensure that competition can take place. Competition itself is the primary regulator.

Universal Service

54. An important objective underlying government provision of these services is equity in provision without directly subsidising particular groups of users. Sparsely populated or remote areas are more costly to service than densely

[17] "Why do we only have one Monopolies Commission?" – Oxford Union Debate

populated urban areas. By cross-subsidising from the less costly markets, services can be provided to all areas at a uniform price.

55. Perpetual systematic cross subsidisation is possible only if service is from a single provider. If there are competitors for the profitable business, the provider will be undercut by competitors in the market segment that is subsidising other consumers. This is called, "cream skimming" or "cherry picking." It is often cited as a fatal objection to deregulatory proposals. Providing income support or equitable access to public services through subsidised prices is a costly way of achieving these ends. Invariably non-target groups gain most benefit[18]. Direct income support or explicit subsidies from the national budget are normally more efficient at achieving social policy goals.

56. Direct income support is usually unpopular because the subsidy is more obvious, is noticed and pressure builds for it to be eliminated. In the case of the provision of services by utilities to unprofitable areas, usually outlying areas, competitive tendering processes can more be efficient. That is, tenders can be called to provide services to particular areas. Providers would tender to supply the particular service for a defined period[19]. In this way, the services would be delivered at the most competitive price. Consumers could pay the same price as consumers in more favourable areas and the government would make up the difference to the tendered price.

57. The answer to this problem may also be found in competition. The universal experience of subjecting incumbent networks to competition is that they expand their service coverage. They are usually the operators of networks with old equipment, overstaffed and are inefficient. The one thing they have which no other competitor will have in the short-term is national coverage. In the long-term, a more efficient new entrant can build up similar coverage. The incentives are in the direction of increasing coverage and improve service quality by the both the incumbent and by any new competitor.

Wasteful Duplication

58. In Viet Nam, one of the most commonly heard concerns about allowing competition in network industries is that it allows wasteful duplication of facilities, which should be prevented by regulation. The argument runs: that rather than allowing competition for profitable services it is surely better to save that money and use it to provide services for parts of the country that currently have no service at all or to allocate it to other pressing social needs.

59. This genuine concern is a natural by-product of central planning economics with the centrally determined allocation of resources. Central Planning

[18] Electricity price subsidies are often justified as a help to the poor. But the very poor do not have air-conditioners, washing machines and swimming pools.

[19] The contract may be awarded to the tender which offers to perform the task at the lowest subsidy, a so called inverted tender.

Economics was based on two central ideas: that there are economies of scale (i.e. reduced unit costs) to be obtained in mass production on a large scale and duplication is wasteful, outweighing the benefits from innovation.

60. At various times there may have been some truth in these ideas but like all good ideas, if taken out of context they can lead to inappropriate conclusions. Economies of scale are present in mass production, provided the market is large enough and close enough that the benefits of mass production are not outweighed by transport and other costs. Globalisation, specialisation, the rapidly increasing pace of innovation and micro computer based technologies have substantially increased the competitive advantages enjoyed by the small producer. Economies of scale are harder to find and easier to lose. This is particularly true with information based technologies such as telecommunications.

61. Duplication of facilities may be wasteful if there is only one owner, one source of funding and excess capacity. In a market economy, there are many owners and many sources of funding. Each potential owner has slightly different uses for the facilities proposed to purchase[20]. Although many uses may be similar to those of facilities owned by other owners, specialisation can add value where at a first glance none may appear to exist. In Viet Nam, with rapid growth in demand for both electricity and telecommunications services excess capacity is rapidly taken up.

62. If the total market is expanding rapidly the new facility, which may use newer technology, and address areas of high demand, may in fact save the incumbent the cost of expensive upgrading. If the funding for the new facility comes from overseas, it expands the total of investment capital available in the community. In the event that it ceases business, all its facilities will remain in place and the losers are the private investors and their bankers. Ceasing business is not a problem, for the host country or the party that buys the facilities.

63. The argument against duplication of essential networks may remain for some time. This should not inhibit competition for non-core services, such as construction, maintenance, accounting etc which are readily transferable and where there are substantial benefits to be obtained from greater contestability.

Viet Nam's Networks

64. Viet Nam's network industries, such as telecommunications, water, electricity, gas and rail, are dominated by small numbers of SOEs. Law restricts entry by

[20] A classic instance was the purchase of Post Bank NZ, by the ANZ Banking Group. The ANZ bid was substantially larger than the others and caught observers by surprise. The reason why ANZ could bid higher was that Post Bank needed computer systems and all other competitors had factored that need into their systems. Unlike all the other bidders, ANZ had enough spare computer capacity to absorb all the Post Bank customers, this reduced its unit cost of handling customers and as a result it could offer more money for Post Bank.

competitors. Barriers to new entry also exist in the form of favourable government treatments of SOEs over private industry. This position largely reflects Vietnamese government policy objectives. These include keeping these activities under state control.

65. These restrictions are now under scrutiny following Viet Nam's admission to ASEAN and as it moves closer to membership of the WTO. WTO commitments on services involve commitments to provide transparency, where possible and standstill agreements. Such agreements involve commitments to not introduce further restrictions on activities where restrictions have been documented.

66. Like many countries in Asia, Viet Nam needs to take decisions soon on what its strategic objectives are in network industries. Is ownership a strategic objective, or does the real strategic interest of the nation lie in having cost effective, competitive services available to businesses and individuals doing business and creating wealth for the country. This section examines the situations of Viet Nam's electricity and telecommunications sectors.

Electricity in Viet Nam

67. Electricity infrastructure enterprises in Viet Nam have been reserved for government ownership. As economic growth in Viet Nam expanded in the early 1990s, it became apparent that a government ministry was an inappropriate framework to organise and fund the expansion of the electricity sector. This has resulted in an evolution of the electric power system towards an entity more closely resembling a vertically integrated utility in a market economy. In 1995 Electricité de Viet Nam (EVN) was set up a company with policy responsibilities moved to the Ministry of Industry (MoI).

Table 1
Viet Nam Power Generation Mix 1999

Source	Total Production Mil. kWh	Total Production Percent
Hydropwer Plants	13605	57
Coal Fired Power Plants	2915	12
Oil Fired	1019	4
Gas Turbine	3596	15
Diesel PP	678	3
IPP	1950	8
TOTAL	23763	100

68. Currently the legal framework of the electricity sector is weak with only two decrees,[21] allowing minor private participation in construction, in force. An Electricity Bill was submitted to National Assembly for consideration in 1998 not passed. The revised Electricity Bill and Grid Law are under preparation.

[21] *Decree 77-CP of 18-6-1997 on domestic BOT projects, Decree 62 -CP of 15-8-1998 on foreign BOT*

The former has reached its twelfth draft but the policy principles underlying the law remain to be settled.

69. Ministry of Industry is responsible for the electricity sector in both its policy and regulatory aspects. It plays a role of regulator and state ownership representative. Currently therefore, Viet Nam does not fully meet the criteria of the World Bank for lending to power sectors which stress the need for separation of these functions and for independent and transparent regulatory mechanisms[22].

Table 2
Installed Generation Capacity 1999

Power Plants	Total Capacity MW	Total Capacity Percent	Installed Capacity MW	Installed Capacity percent
Hydropwer Plants	2913	51		
Hoa Binh HPP			1920	34
Thac Ba HPP			120	2
Tri An HPP			440	8
Da Nhim HPP			160	3
Thac Mo HPP			150	3
Vinh Son HPP			66	1
Small HPP			57	1
Coal Fired Power Plants	645	11		
Pha Lai TPP			440	8
Uong Bi TPP			105	2
Ninh Binh TPP			100	2
Oil Fired	198	3		
Thuc Duc TPP			165	3
Can Tho TPP			33	1
Gas Turbine	1152	20		
Thu Duc			112	2
Can Tho			150	3
Ba Ria			326	6
Phu My			564	10
Diesel PP	397	7		
IPP	375	7		
TOTAL	5679	100		

70. Generation plants are directly responsible to the Power Generation Department of EVN, which answers to the Vice-President for Production. The same Vice-President is also responsible for the power network department to which the transmission companies report. There are four power transmission companies. While electricity is readily available to the major centres of population, particularly the capital city Ha Noi and Ho Chi Minh City, the operational capability of the system is classed as being in poor condition. Power cuts can be frequent and are masked by ensuring that government facilities are the last to be subject to cuts. The system is typified by variations in voltage and losses are relatively high at 15.33 percent, although this has fallen from 25.5 percent in 1990. The mix of power generation and generation capacity in 1999 was as set out in Table 1 and Table 2

[22] *The World Bank's Role in the Electric Power Sector*, The World Bank, January 1993, page 60.

71. EVN currently manages seven local power distribution companies responsible for supplying power to customers all over the country. The distribution companies are also responsible for power supply and customer service, including metering, billing and repairs. At the level of villages, there are various forms of electricity distribution. Electricity boards under Village Peoples Committees (VPC) buy from regional distribution companies and sell to households. In some cases there are management contracts with VPC, on selling power through VPC network to identified customers. At present all districts, 80 percent of communes and 71 percent of all households have access to electricity.

72. Internal accounting prices are used to buy and sell electricity among EVN subsidiaries companies. Consumer supply tariffs regulated by the government. They are proposed by EVN, submitted to MoI and the State Pricing Committee and then are passed to government for approval. Retail prices are usually less than long–term marginal costs principally because amortisation of the cost of the industry's capital is not included fully in the retail prices. Distribution costs are added and this often results in Unique tariffs within counties.

73. There are relatively high tariffs for trade and businesses and relatively low tariffs for agriculture and irrigation. There is a relationship between retail prices and the revenue needs of the distribution companies although the basis on which this is determined is not a matter of public debate. Prices are adjusted as retail prices change and this has been easier since inflation has reduced sharply following the very high levels of inflation in 199-1991.

Restrictions on Competition

74. With the fall in the cost of collecting and processing information has it proven possible to give consumers a choice of electricity producer. However, as part of the GOV's equitisation programme, it banned private ownership in the electricity sector[23]. Despite this problem, one Independent Power Producers (IPP), seven build, operate and transfer (BOT) and build transfer and operate (BTO) projects are under tender for construction. The MoI manages BOTs. BOT and BTO projects represent a way of getting around the blanket ban on foreign ownership.

75. Currently there are small IPPs located in export processing zones, accounting for seven percent of capacity and seven percent of electricity production. These have Power Purchase Agreements (PPAs) with EVN. The Government approves these after consideration by the Pricing Committee. These IPPs arose because in export processing they were exempt from normal government policy. Their presence has required the system to evolve. At various times, independent producers have surpluses to sell and at other times will need backup from the incumbent operator.

[23] *Country Report on Equization*, SOE Reform Programme, Ministry of Finance, 1994

76. In 1995 the first step was made in the process of unbundling regulatory and operational aspects of the industry[24]. EVN took over operational electricity business the functions of the former line ministry. Although in theory policy, regulation and EVN are separated, EVN remains largely self-regulating. Because there is no legal framework, there are no transparent laws or rules on market entry. There are different regimes for local and foreign projects. Foreign projects gain approval by GOV after consideration by the Ministry for Planning and Investment (MPI), MoI and EVN. Approval of domestic projects is by the MoI in association with MPI. Domestic projects are primarily those sponsored by EVN. Thus EVN, has a role in deciding whether potential competitors should get a licence, giving it a say in whether it should have competition or not.

77. Private participation makes an administered pricing regime difficult to sustain. It is recognised that competition between producers can be beneficial and from 2000, the power stations have to compete to be dispatched. This process is neither clear nor transparent but is an early step towards an electricity market. Further progress will have to await the passage of the Electricity Law and decisions on a transparent framework for competition in the industry. Particular concern is felt about the concept of independent regulation, separate from political control.

Objectives of Restrictions

78. EVN strategies are now concerned to:
    1. ensure adequate power supplies with high reliability and safety for the whole society
    2. ensure contributions to the state budget from a profit-making business
    3. improve the corporation's image with customers, by[25]:
        - overload prevention work, improving power transmission
        - reducing operational costs
        - administrative reforms
        - upgrade and expand distribution

79. Of the three objectives two are seen by the GOV as being dependent on maintenance of the restrictions on competition: (1) In the 1970's it would have been widely accepted that adequate power supplies can only be sustained by a natural monopoly. Only a natural monopoly would have the ability to raise the capital required to pay for system expansion. Developments since then have shown that this is not the case. In countries with transparent regulatory systems, find there is competition to buy and build electricity systems. (2) There are also large transfers from the electricity industry to the state budget.

[24] EVN established in 1995 by the Decree No 14 of January 27
[25] EVN Annual Report 1999 (abbreviated)

Using the electricity sector to sustain the sate budget is a holdover from central planning. Cash flows of state enterprises were the principal sources of revenue for government budgets. In 1998 Viet Nam introduced a value added tax which in connection with property or incomes taxes is will replace SOE income as supports for the national budget.

80. The idea that essential industries should remain in public ownership and control derives from ideology. It reflects the belief that industries can be divided into two groups essential and inessential[26]. It is a widely held belief that the essential "strategic" industries should remain in public ownership.

Effects of Restrictions

81. Losses have been reduced and costs of pollution have been reduced over the past few years. However, when there was no competition, all losses were at the highest and pollution at its worst. Restrictions on competition created the problems.

82. The GOV was able to achieve employment targets by overstaffing electricity enterprises. In 1992 it was estimated that the Vietnamese electricity industry employed twenty three times more people than the then comparably sized New Zealand system[27]. Restrictions on competition enable jobs to be created (often lacking in content) for certain people but result in the cost being passed on to other enterprises and people who otherwise could create self-sustaining jobs. Restrictions on competition designed to create jobs do not increase the number of jobs available they redistribute them and probably reduce the total.

83. A perceived benefit of restrictions on competition and public ownership could be that the government still owns the majority of the electricity industry facilities in Viet Nam. This benefit is purchased at a price, because if the government does not own them, someone else will, service will still be provided and the government will have additional cash available to put into other urgent priorities. This is a cost that most governments around the world have now decided that they are unwilling to pay. Despite the failings of its regulatory transparency the World Bank has lent EVN (guaranteed by GOV) US$ 535 million, the ADB US$ 170 million and project and bilateral loans worth a similar amount have been obtained from other sources.

84. For those who accept that restrictions on competition will ultimately be removed, a temporary benefit could be time for the exiting industry to adjust. There is no doubt that there has been a steady improvement in electricity supplies and supply quality over last few years. EVN is adopting a more professional approach to managing its business. However, a definite timetable for ending restrictions on competition is likely to give renewed impetus to this process.

[26] *The Reith Lectures* 1985, David Henderson
[27] Contribution to World Bank Energy Sector Assessment, DB&A 1992

Costs and Benefits

85. There are few identifiable benefits to Viet Nam from continuing restrictions on competition in the electricity industry. State budget transfers can continue in a competitive environment provided they are in the form of shareholder dividends at a prudent level.

86. The principal cost of restrictions on competition in the electricity sector is, however, that electricity supplies are scarcer that they otherwise would be and for key sectors of the economy prices are higher than they should be. In Viet Nam prices for manufacturing and commercial industries are higher than they need be and prices for agriculture and irrigation are lower. It is probable that these price distortions are leading to misallocation of resources.

87. The real, strategic interest of a government in its utility sector is that it is managed efficiently and provides the services required by other sectors, as cheaply and as efficiently as possible. Government's can promote this interest by laying down ground rules and allowing others to take the business risks. Environmental, health, safety and other public policies for both corporatised government and private enterprises will need to be enforced fairly. These issues need to be dealt with rather than fatal flaws in a proposal to introduce competition into the electricity sector.

Feedback from Clients

88. To check the economic analysis and the data received from industry sources the project sought to conduct a reality check by seeking the views of consumers[28]. Findings of the survey included:

51 percent of respondents spend less than VND 2 million per month on electricity
For 70 percent of respondents lighting, air-conditioning and office equipment were among the most important uses of electricity
Electricity was less than 1 percent of total business costs for more than 70 percent of respondents
69 percent of respondents believed that electricity was expensive and only 2 percent believed it was cheap
80 percent would not change their usage much even if prices were higher, indicating that electricity is price inelastic for most businesses
27 percent made use of off peak usage of electricity and received some financial benefit for this
60 percent of consumers who had been wrongly charged did not have the problem corrected

[28] The survey was conducted by the Venus Market Research Company among Ha Noi and HCMC businesses and principally among those involved in services such as banking, tourism and others sensitive to international contacts

For those consumers who had experience with making complaints more than half had them addressed within ten days
71 percent of consumers had their own stabiliser
19 percent had their own generator
38 percent suffered from interrupted services between 3 and 10 times last year
12 percent suffered from interrupted service more than 10 times last year
84 percent had suffered from interrupted service more than three times in the previous month
69 percent received some warnings of power cuts (although warnings were improving for 64 percent
82 had a problem with voltage stability
93 percent have to curtail business activities if there is a power cut
91 percent say that continuity of service has improved in the last year
53 percent had meters with timers (allowing time of use to be calculated)
If prices were to increase 63 percent said they would engage in stronger energy conservation measures

89. On the positive side, it appears as if customers perceive that the service they are getting is improving. While most consumers thought the price of electricity is expensive, this must be seen in comparison with the unrealistic prices that were common in the years of high inflation (1990-1991). Some consumers are getting the benefit of using off peak power, although the interviews did not explore how this happens.

90. On the negative side, the continuing need for stabilisers and generators tells its own story. Whatever the listed tariff price for electricity the cost of stabilisers and self generation equipment has to be factored in as well.

91. No estimate was asked for of the cost of lost production from interrupted service such as power cuts. 84 percent of respondent have experienced more than 3 in the last month and 93 percent of these have had to curtail business activities in case of interruptions. It is evident that there is still some way to go to establish a reliable system. Metering does seem to be widespread among businesses and this offers the possibility of a relatively rapid response to marketing initiatives, such as use of off-peak power.

Alternatives

92. It is evident that the process of involving the private sector in the electricity industry is in its very early stages. Only the separation of operations and policy and the introduction of some independent power producers amounting to some seven percent of production and capacity have occurred so far. In 2000 a process of competition between generators has begun. Although BOT

projects are underway in practice, the system remains far from transparent and much will depend upon the new electricity law.

93. Many developing countries are obtaining the benefits of greater efficiency in their electricity sectors. These benefits are usually associated with innovations such as making an effective separation of business management and policy. Promoting private investment into new and existing entities, although it is recognised that the latter will not happen in Viet Nam for some time. It must be recognised that rapid improvement usually means foreign involvement in order to access new capital, new management techniques and new technologies.

94. Probably of most importance is to recognise that electricity is a major industry and its efficiency is of great strategic importance to Viet Nam. Steps have been taken in 2000 to initiate competition among generators. This shows that a Vietnamese electricity market, even among competing state enterprises, is a practical proposition in the near future. It will require a number of changes including:

- corporatisation[29] of generation, transmission, distribution and supply and
- an indicative timetable for dates at which innovations leading towards an electricity market will be introduced.

95. How these issues are being handled in two other Asian countries will be dealt with later in this report.

Telecommunications in Viet Nam

96. Telecommunications facilities in Viet Nam have been built-up in the last twelve years. They are generally of good quality and when put in place were state of the art, the North South Backbone link in particular has been modernised. Telecommunications has been one of the sectors primarily reserved for state ownership, largely on "strategic" and "security" grounds although recent political decisions on ASEAN, the WTO and the US Trade Agreement commit the government to an eventual move away from a state Monopoly.

97. The principal operator of telecommunications in Viet Nam is VNPT. It operates both fixed line and mobiles services. A sector regulator, the DGPT was created in 1997 by splitting off the regulatory and policy functions from VMPT. Despite the split, DGPT still has management functions within VNPT mainly involving senior personnel appointments. DGPT was formed in response to advice and international best practice for regulatory structures.

[29] Corporatisation is used in the New Zealand sense of placing each business (generation, transmission, distribution and supply in a company framework, subject to normal company laws and ultimately facing competition)

DGPT is also the source of policy advice to the Vietnamese government in lieu of the existence of a policy ministry.

98. Two other companies are licensed to provide fixed line services: Saigon Postel (SPT), a shareholding company with 49 percent participation from private companies, and Vietel (owned by the Ministry of Defence). VNPT has a 20 percent share of SPT and the Defence Department owns Vietel. These two companies are allowed to provide nation-wide but not international services. As a precursor to foreign and private participation in the sector, the government has pursued the option of encouraging competitive state enterprises. Currently, the principal competition in the sector is competition for capital from the government.

99. VNPT, SPT and VIETEL have licenses to operate cellular systems. Mobile services are provided by primarily by Viet Nam Mobile Telecom Services (MobiFone) and Viet Nam Telecom Services Company (Vinaphone). Both these companies are subsidiaries of VNPT and MobiFone has had a Business Co-operation Contract[30] (BCC) with the Swedish Kinnevik/Comvik Group for five years. The relationship between the incumbent fixed line provider VNPT and its subsidiaries is most important to them. MobiFone and Vinaphone have no contact whatsoever with the alleged sector regulator, all these relationships are being handled through VNPT, reducing the pertinence of this advice and complicate its task. The split of regulation from operators, although de-jure is not, therefore, defacto.

100. With respect to Budgetary Independence, there is a mixed situation. VNPT has its own budget, SPT has an independent budget but VIETEL is under Finance Ministry. VNPT is still an integrated company and a subsidy paid to the postal section of VNPT. The government does have plans to separate posts and telecoms but no timeframe exists. A funding source for assistance to reform posts is the one of the factors holding up progress.

101. For the internet services market, one Internet Access Provider (IAP) and five Internet Service Provider (ISP) licenses have been issued. Four ports are open; VNPT, SPT, VIETEL, FPT and NETNAM offer services. However, internet access services are the sole right of VNPT.

102. In September 2000, VNPT is reported as saying that about 18,000-20,000 new telephones were being installed in Viet Nam each week and the number of international calls grew by 18 percent in the first eight months of the year 2000. VNPT said that the number of telephone subscribers in the country would reach three million by the end of the September 2000[31].

Restrictions on Competition

[30] A uniquely Vietnamese method to try and stimulate foreign investment, unpopular with investors
[31] Reuters, 5 September 2000, see Appendix

103. In 1997 a Master Plan for Telecommunications was prepared and forms the basis of the "Road Map" for the development of the sector. This formed the basis of a circular from the DGPT[32], which elaborated on the decree that set up VNPT and any new companies. The Decree mandates that service facility providers are state entities. When new companies are formed they are registered as SOEs under the SOE law and receive a mandate from VNPT. This mandate sets out the requirements the government is placing on the company and specifies its powers. The document is comparable to articles of association under a standard, market economy, company registration law. This circular is the only legal framework at present. However, enactment of a Telecommunications Law is being considered.

104. Fixed line services are provided exclusively by VNPT. This company is charged with providing telephone services to the whole of Viet Nam. It is a profitable enterprise based on high access charges and very high charges for international calls. While there have been substantial improvements in the quality of services over the past ten years (due mainly to the purchase of modern equipment to replace soviet block designed installations) there are many areas where service is not available. The Universal Service Obligation (USO) is the reason quoted to justify continuing high charges and the lack of competitive services.

105. SPT and VIETEL are new entrants in the mobile market. In practice, the Scope for competition remains limited, although Vietel has been experimenting with Voice Over Internet Protocol (VOIP) long-distance services (between Ha Noi and Ho Chi Minh City (HCMC)). This has shown that it can offer services at approximately 50 percent of the current VNPT tariff, although at a reduced quality. This has caused VNPT to advance further reductions in tariffs. However, their parent company likes to see its subsidiaries competing fairly, which means that it stifles innovation by one company or the other.

106. Most of foreign participation in the sector is currently in the equipment supply and technical assistance fields through Business Co-operation Contracts. These have proven unpopular with foreign firms. The contracts limit foreign partners to financing, technology transfer and some management rights in return for a share of revenues. With the WTO accession, ASEAN membership and the US Trade Deal all occurring within two years there is bound to be additional interest by foreign investors and at present no legal or institution framework exists to allow or regulate this.

107. Obtaining a new licence is not a transparent process. Any party wishing to obtain a license must obtain government permission. On the instruction from the government, DGPT issues a license. The licence entitles the entrant to set up operations and provide services. So far, no foreign companies have been

[32] Circular No. 03/1999/TT-TCBD of May 11 1999, providing guidelines to the implementation of Decree 109/1997/ND-CP

granted a licence. SPT does have some private shareholding but in practice claims it is discriminated against by standard policies.

108. Tariffs are currently proposed by entities and set by the government on the recommendation of DGPT[33]. Basic tariffs regarding domestic mails of up to 20g, normal domestic telegram charges per word and domestic long distance telephone charge per minute (including facsimile and voice data transmission on telephone channels) are controlled by the Prime Minster on the recommendation of the DGPT. The Roadmap proposes between 2006 and 2010 to lift restrictions on domestic long-distance competition and international services. In that period, it will also allow joint ventures services other than fixed-line long-distance and international. However, since the roadmap was prepared, other events, such as accession to the WTO have overtaken the timeframe set out.

Objectives of Restrictions

109. The restrictions on competition have several objectives. These include the desire to:

- Establish secure high capacity telephone systems on major trunk routes
- Provide nation-wide access to basic telephone services across the whole country (the restrictions are designed to facilitate VNPT discharging a USO)
- Achieve low cost telephone services including value added services to the benefit of households and investors alike
- Build a high technology efficient telephone service
- Provide revenue to meet the budget needs of the Vietnamese Government
- Maintain government ownership on the grounds of national security and
- Meet the nation's need for social cohesion.

110. A high capacity telephone system on major trunk routes has been put in place. Providing nation-wide access to basic telephone services is underway but will not be completed for some time. Vietnamese telephone services are far from cheap. VNPT provides a great deal of revenue to meet the budget needs of the Vietnamese Government.

111. Social cohesion means an obligation to supply to all parts of the country including those where supply would be uneconomic. While in many countries

[33] Decision No. 99/1998/QD-TTg dated May 26, 1998 on the management of Post and Telecom prices and charges is the guiding legal authority.

this is seen as an issue that has to be handled in the reform process, to many in Viet Nam it seems to represent an insuperable obstacle to reform. The overriding objective of the restrictions on competition is keeping the system and its operation in state hands. The reasons for this are varied. Few people argue that government ownership is a matter of principle. Generally, the argument revolves around security and the need to service remote areas. The concern about remote areas is that competition will divert resources from the task of extending the boundary of service.

Effects of Restrictions

112. The objective of establishing a secure high capacity telephone systems on major trunk routes has been largely achieved, although it restrictions on competition mean that there have been periods of over investment and under investment (i.e. a lack of dynamic efficiency). The nation-wide basic telephone service remains to be achieved. In the light of the failure of the protected VNPT to achieve full coverage so far, either the restrictions on competition have not achieved this objective or other objectives, such as transfers to the state budget take precedence. The restrictions on competition mean that putting this service in place is seen as an obstacle not an opportunity. The restrictions are designed to facilitate VNPT discharging a USO. Value added services remain underdeveloped.

113. Investments have been made in the previous ten years have given Viet Nam a much improved standard of service compared with the days prior to Doi Moi. Service is good but it is not possible to describe it as low cost. International calls in particular are some of the most expensive in the world. Should the costs and prices reduce this will to the benefit of households and investors but this situation has not yet been achieved. Small reductions in total costs can make a big increase in profitability[34].

114. Technical developments in Viet Nam have largely followed those in the rest of the world. The danger is that with continued state ownership, there will be insufficient budgetary resources available to develop the system. There is a danger that VNPT will be unable to reach its true potential. The government will find itself the owner, once again, of obsolete telephone equipment and facing insistent demands from business, commercial and private sectors alike, to improve services but will not have the cash it needs to meet the demands.

115. Despite the very high level of telephone tariffs and charges, VNPT potentially faces cash flow problems. The reason is that at present it provides a large proportion of its revenue to meet the budget needs of the Vietnamese Government. There are no restraints on the extent to which the government can demand cash for VNPT, which imperils future capital investment

[34] A business in which 4 percent of total costs are telecommunications costs and makes a profit of ten percent of its turnover will get a ten percent increase in profit if telecom costs are cut by 25 percent.

programmes and are likely to lead to slower replacement of equipment and a slower uptake of new technologies.

116. While alternative service providers are licensed, there is, in fact, little real competition as they are both dependent upon VNPT and subject to official direction. Only new state owned enterprises have entered the market. ISPs are required to have government shareholding too and are dependent upon the gateways operated by VNPT.

Benefits and Costs

117. It is to be expected that in a modern high technology telephone system, operated by an agency that has only recently emerged from state control, there will be technical and management inefficiencies. VNPT's systems do not produce the sort of management information required by a modern telephone company nor do they produce the sort of information required by an independent regulatory authority.

118. Pricing rules are not clear or transparent. They are set out in Circular No.03/1999/TT-TCBD of May 11, 1999. It identifies factors that must be considered in tariff setting. The key phrase is found in article 3.4.3, "Regarding posts and telecommunications tariff and charge set by DGPT ….DGPT must discuss with the Governmental Pricing Committee concerning the proposed tariff and charge before they are officially issued." To a potential investor this may suggest that no matter what the DGPT recommend, the Pricing Committee will have the power to override the factors that have been considered in favour of unknown criteria.

119. The absence of transparency is crucial in the ongoing shortage of capital for expansion. Even if the regulatory system would allow them to enter the market, most international investors would be unwilling to invest under the current situation. Pricing policies reflect non-cost-based objectives, monopoly behaviour, low productivity from poorly developed accounting standards and manufacturing commitments and an undefined and USO for which it receives no direct payment from the government. Waiting times for service can be high (the survey of consumers showed 72 percent of current fixed lines subscribers reported waits of at least week in obtaining new connections. For new subscribers it has been reported that waits of 6 weeks is common. Access to business leased circuits also involves extensive waiting times.

120. In the absence of clear and transparent rules for tariff setting, or for the resolution of other business arrangements, Viet Nam has used BCCs to attract outside expertise and investment while retaining state ownership. While this is another way of achieving the objective, it is probable that the cost to Viet Nam is very high. In the absence of clear principles, transparent processes and independent dispute resolution, potential investors will seek financial guarantees.

121. Meeting the ownership objective has come at a high cost, telephone charges are high, Value Added Service are narrowly based, cost structures are high, management information on which productivity increases and regulatory decisions can be based are low. Given a transparent regulatory regime there are international companies which would be prepared to invest billions of dollars of the their own money developing the Viet Nam telecommunications system. At present Viet Nam has virtually no access to this capital and has to divert its own scarce resources to sustain less effective system.

Feedback from Clients

122. To check the economic analysis and the data received from industry sources the project sought to conduct a reality check by seeking the views of consumers[35]. Findings of the survey included:

74 percent of respondents spend less than VND 2 million per month on telephones and for 19 percent of respondents fixed telephone costs represented more than one percent of total business costs
Of the respondent fixed line telephone users, 35 percent also had mobile phones, 14 percent had pagers, 23 percent used faxes and 19 percent had e-mail
48 percent used MobiFone, 52 percent Vinaphone. MobiFone was most popular in HCMC and Vinaphone most popular in Hanoi. Nobody reported changing networks
52 percent of e-mail users use VCD and 39 percent use FPT, those who have changed provider have done so to get access to a faster net speed
Mobile phone costs represented less than 2 percent of business costs for 76 percent of respondents, ninety percent of respondents spent less than . 2 percent on the internet
Twenty five percent of respondents reported spending more than 2 percent of total business costs on international telephone calls last month
For 41 percent of businesses telecommunications costs were their first, second or third largest business cost
Telecom costs are not very price sensitive, only 22 percent of businesses could significantly reduce their usage of telecommunications if the prices rose
Telecom use is strongly business related as only nineteen percent of respondents make use of lower cost off peak services
While 88 percent of respondents said they had had fewer than three breaks in service in the last month, 75 percent of respondents reported that telephone services are a big problem for them and the main causes of problems are the lines
36 percent of respondents could not operate their businesses if they were without phones for lengthy periods of time
26 percent had complained about services, 4 percent had complained about bad service and sought compensation and none of these cases has been resolved

[35] The survey was conducted by the Venus Market Research Company among Hanoi and HCMC businesses and principally among those involved in services such as banking, tourism and others sensitive to international contacts

123. Most of the respondent businesses would be incurring between two and six percent of their total business costs through expenditures on telecommunications. These costs are very inflexible as most cannot do business without telecommunications. Most respondents also reported that telecommunications are a problem for them. In summary, VNPT and its subsidiaries still have some way to go to create a very good telecommunications environment for business.

Other Approaches

124. DGPT has both policy and regulatory functions, responsibilities overlap several ministries. DGPT and VNPT were formed out of the same organisation and are still organisationally related to each other. VNPT Divisions do not have sufficient accounting separation to manage business efficiently let alone for regulatory supervision. Consequently, DGPT's decisions are framed to be fair to both subsidiary companies. Mobile systems provide competition for the fixed line carrier but are prevented from competing with each other. Despite the efforts to ready the institutional framework to cope with a competitive telecommunications sector, this has yet to be achieved[36].

125. Mr. Le Nam Thang - Director General of Posts and Telecommunications Policy Department of DGPT, Viet Nam made a speech reported on December 8, 1999, in which he stated that:

- Market liberalisation and deregulation will proceed step by step.
- The market for domestic services will be opened for competition first followed by the market for international services.
- Similarly the value added service market segment will be liberalised before basic services
- To mobilise investment capital from the greater public, the Government has decided to equitise some of the state-owned companies
- Companies maintaining and operating the national backbone network (VNPT) will not be equitised. All other companies could be equitised if GOV:
  - retains a majority of the company's total shares
  - keeps control over operations and future of the company with a special share
- VNPT will implement the USO, VNPT, SPT, and VIETEL, currently provide universal service through licensing and interconnection.

[36] See Appendix

126. The combination of these policies and recent moves on the WTO and US Viet Nam Trade may result in a liberalisation. However, officials still express concern that foreign competition is inconsistent with national security, national cohesion and technical integrity. Ahead is the task of preparing VNPT for competition and ensuring that competitors (probably SPT or Vietel) are in a position to compete. All of this has to proceed in an environment where there is no general competition law, or agency, and where commercial laws, including enforcing contracts and bankruptcy are in the early stages of development.

127. The desire to provide adequately for national security is understandable in the light of Viet Nam's recent history of conflict. However, it has to be asked why government ownership of telecommunications enhances Viet Nam's security when in the United States, Thailand and South Korea it does not. In an emergency, any nation may take control of assets on its territory. Similarly, most nations have objectives that include maintaining social cohesion. They manage to do this in countries where the telephone systems are generally in the private sector. Thirty years ago it was generally believed that providing services to rural areas was possible only with an integrated utility. Experience had proved that it is no longer the case. In the event that the government wishes to provide economic services, there are many vehicles to achieve this objective with transparency and efficiency.

128. The concerns expressed about national security and cohesion express the reluctance of GOV to "let go." Under the WTO Basic Agreement on Telecommunications, an appropriate regulatory framework would have the following features:

- Prevent anti-competitive practices, to facilitate entry of new competitors and ensure fair competition, (currently Viet Nam has dominant state owned incumbent,

- Allow non-discriminatory interconnection, to facilitate new entry, (currently only state owned enterprises are allowed to enter the market, and Interconnection depends on government direction and decision),

- Apply USOs neutrally, and be imposed non-discriminatorily, (to ensure fair competition), currently all providers are required to provide universal service, but the quotation above suggests that interconnection may be sufficient to satisfy this obligation for the non dominant competitor),

- Make licensing criteria publicly available, so that everyone knows what new entrants need to do to obtain a licence and customers know their rights and service standards are entitled to. Licence conditions are set out on the World Wide Webb, but these remain opaque, and obtaining a license depends on prior government approval

- Ensure that regulation separated from incumbent enterprises, to minimise conflicts of interest. DGPT is currently separate from the enterprise but is

responsible for some personnel matters inside VNPT and both are subject to government control

- Ensure the allocation of scarce resources, objectively, promptly, transparently and without discrimination, so that entry is determined by the merits of the commercial deals available rather than to prop up an existing state owned enterprise. Competition for capital from the government is probably the most vigorous aspect of competition in Viet Nam at present

129. It is clear that there is still some way to travel before the standards expressed in these guidelines are attained.

Options:

130. Of the above criteria three relate to transparency, two are concerned with preventing anti-competitive practices and one stresses neutral administration. Investors can cope with almost any regulatory framework, but transparency of processes and decision making contribute most to building confidence, because it adds to the predictability of the business environment. Moving to a framework consistent with the WTO Basic Agreement will be difficult for Viet Nam in the short-term because of the involvement of the government in pricing decisions.

131. At present information does not exist for an independent regulator to perform the role of protecting the public interest. In the meantime, at least the most effective regulator of behaviour will be enhanced competition[37]. If the government of Viet Nam could to specify more clearly, what it means by security, USO, interconnection policy, pricing policy and disputes resolution, it could seek the assistance of the existing companies and possible new entrants in preparing guidelines for the DGPT. The DGPT would then be able achieve the government's objectives in the most cost-effective manner. In the process it will acquire many of the skills it needs to perform regulatory functions in the medium term.

132. It is an objective of GOV policy to expand services into rural areas. In areas not currently serviced, the company that can offer service the soonest could be authorised to provide it. Interconnection between the two parties should be resolved by commercial negotiation between players. In the absence of a competition law, VNPT's operating mandate can be changed requiring it not to act in an anti-competitive fashion. VNPT and other parties in dispute over the application of this provision should be required to engage in a process of arbitration by DGPT, or an international arbitration body, to resolve the disputes speedily and cost effectively.

[37] See for example in the case of Vietel's proposed service

133. The principal impediment to this approach is the lack of familiarity with commercial arrangement between competitive businesses. As demonstrated by Quigley and Evans[38], it is common for competitive businesses to share essential network facilities where it is their advantage to do so, while still competing in servicing customers. Efficient private solutions are found to the special governance problems of network industries, where the regulatory framework is sufficiently flexible to allow it. In Viet Nam, however, the experience of central planning, typified by rival business empires competing for resources, it is widely believed that businesses need to own all the facilities they use.

134. Services to remote and disadvantaged areas need not be harmed as the experience has shown that the reaction of the incumbent telephone operator to loss of market share is to expand the coverage and range of services available. Special assistance may be required in some isolated instances but these are likely to be very atypical and relatively small in total. Either government budget allocation or a small, one-off, licence fee contribution by all entities could be considered to fun these examples.

Comparison

135. The results of the consumer surveys in electricity and telecommunications have been compared. They have to be treated with caution but give an indication of the importance of alternative services and the value of competition:

- Both electricity and telecommunications represent in themselves a small part of total business costs although total telecommunications costs can reach 6 percent for some businesses
- Electricity is more important to production activities and telecoms more important for services, although electricity is crucial for both
- Off peak services are used because of cost, tariff and working conditions
- Electricity use is less sensitive to price increases than telecommunications
- Generally people have experienced improvements in service compared with past years
- Electricity's major problem is with supply, and telecommunications with wiring and cables
- Choice of service is import in the event of breakdowns

[38] *Common Elements in the Governance of Deregulated Markets*, NZISCR, July 1998

136. The consumer surveys are a useful snapshot of the market in Viet Nam. However, for a glimpse at its future the project looked at developments in two other Asian countries moving away from state monopolies.

Table 3
Survey Results Summary

	ELECTRICITY	TELECOMS	CONCLUSION
Absolute Cost	51 percent less than VN Dong 2 million per month,	74 percent less that VND 5 million per month	A small part in total costs
Relative costs	For 84 percent less than 2 percent of total costs	For 67 percent less than one percent of total costs (14 percent did not know)	These costs represent a relatively small part of total costs
Principal Use	Production and Lighting	Services and Trade	Electricity influences production and telecoms an influence on services
Importance	81 percent	66 percent	Electricity more important
Utilisation	Lighting Air-conditioning	Fixed telephone Mobile	Crucial to production processes
Off peak usage	33 percent	15 percent	Used because of cost, tariff and working conditions
Alternatives if costs increase	80 percent would reduce none, or only a little if prices increased a bit	79 percent would not decrease usage or only a little	Harder to increase the electricity cost than telecom
Quality	Satisfied with service, 91 percent say it has improved in last 2 years	Satisfied with service, improving	In comparison with past experiences
Problems	79 percent of problems with lines voltage not stable, power cuts are frequent	91 percent of problems with wiring	E: generation T: wiring and cables
Replacement services	Gas	MobiFone and Vinaphone (mobile) VNN and FPT	Choice important

Viet Nam's Neighbours

137. To provide a basis for comparison between Viet Nam and some neighbouring countries, the methods used to regulate activities of networks in Thailand and South Korea were reviewed. The review shows that both Thailand and South Korea are moving away from the centrally planned, state owned monopoly model. They are seeking to meet the regulatory framework standards of the WTO Basic Agreement on Telecommunications but each society has its own special characteristic driven by its history and culture.

Thailand

138. The East Asian financial crisis had a severe impact on the booming economy in Thailand. The financial circumstances, which gave rise to the crisis, revealed many imbalances in the Thai economy. The government has sought to address these by a mixture of economic and structural reform measures. Thailand's economic prospects have, accordingly, improved significantly. The fiscal stimulus, growing exports and the rebound in the manufacturing sector have helped the recovery.

139. Among the measures to promote Thailand's economic recovery, significant progress has been made in corporate restructuring, and improvements have been made in the areas of economic governance and social protection. This effort has been underpinned by the new Constitution, which aims to create the necessary environment for strengthening governance by improving transparency, empowering communities, emphasising decentralisation, promoting social capital, and addressing corruption issues.

140. The social impact of the crisis has been significant but less severe than anticipated. The adverse social impact of the downturn has been cushioned by effective Government intervention and the remarkable resilience displayed by Thai citizens and families. The unemployment rose in 1999 because output growth was not strong enough to absorb new labour force entrants.

141. Despite progress made thus far, faster growth is heavily dependent further progress in corporate and institutional restructuring. Sustained growth will depend on maintaining a stable macroeconomic framework, improvements in financial supervision capacity and progress in the areas of competitiveness, governance, poverty and the environment. This study revealed how the government's policy with respect to competitiveness is leading to major structural change in electricity and telecommunications sectors.

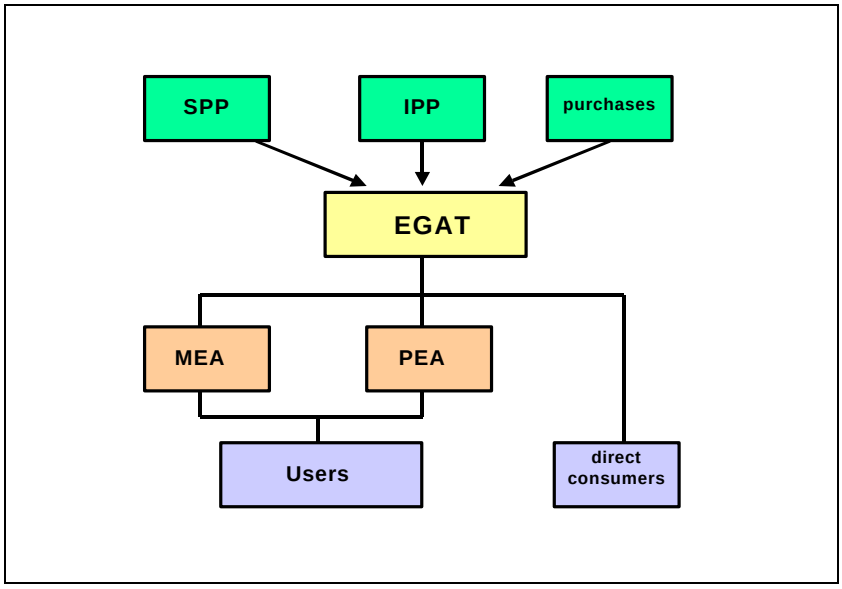
Electricity

142. Thailand still has a conventional electricity sector. It is characterised by monopolies in transmission, distribution and supply and a near monopoly in generation. Small and most large users purchase electricity from, the

Municipal Electricity Authority (MEA) if they live in the three provinces nearest Bangkok and from the Provincial Electricity Authority (PEA) if the live in the remaining 73 provinces. These authorities in turn purchase from the principal generator (and purchaser from abroad) the Electricity Generating Authority of Thailand (EGAT).

143. The objectives of the existing system are set out in the eighth National Economic & Social Development Programme. This provides for electricity to be organised so that the sector provides sufficient and reliable energy supply at an appropriate price level and achieves designated reliability targets including a reserve of 20 percent of annual maximum demand.

Figure 1
Power Market Thailand 1996



144. Although at the peak of the economic boom, before the 1997 crisis, there were power cuts, the electricity utilities carried out their basic tasks. Power is available in 98.9 percent of villages in PEA's service areas and in virtually 99 percent in MEA's. However, the well-intentioned goal of improving people's lives by connecting them to the electricity grid had been pursued beyond the point where benefits outweighed the cost. In the drive to connect people to the centralised generation systems, other, cheaper, more environmentally sensitive options, with better social outcomes had been overlooked. The traditional solution to people's electricity needs has been to increase generation capacity, including imports from neighbouring countries. Other options such as recycling, co-generation, min-hydro and solar energy were made uncompetitive by subsidised electricity tariffs.

145. In the aftermath of the economic crisis, Thailand's fiscal situation was poor. At the same time, the electric power system needed new capital for generation and a strengthened transmission system. A system characterised by state owned monopolies was not only inflexible, it was relatively costly to operate and unable to mobilise new capital from the private sector.

146. The Masterplan for the sector, which was agreed on the 13 July 2000, sets out a policy overcome these problems by deregulating the industry wherever possible and where natural monopolies are present to ensure they are regulated by an independent regulatory body. It also proposes a privatised sector but before any privatisation takes place requires that an independent regulatory body be set up. Any regulations promulgated must be transparent and allow consumer choice

Restructuring

147. Under the restructuring plan, EGAT will become a public holding company. It has already carried out the internal separation, generation and transmission, as profit centres. Therefore, EGAT will comprise:

- Transmission and generation in separate companies
- A power pool, with an ISO (independent system operator), market operator (MO) and settlement arrangements (SA)
- Shares in small generation companies which over time can be disposed of

148. PEA and MEA will be stripped to their core businesses – those connected with the delivery of electricity and may in the distant future be privatised to compete with alternative retail suppliers. Retail (supply) will be separated from wires (distribution company). Non-core business units will be kept in the one organisation. If they are viable on their own, they will be sold.

149. The liberalisation programme will entail the removal of many economic regulations. The objective is to separate regulatory, policy and operations. In future operations will largely be a matter for the private sector and co-ordination will be through the power pool.

Power Pool

150. The power pool will include an ISO. The Market Manger will be separated from ISO. There will be an independent settlement administrator. Power will be supplied to the electricity market by generators and traders and from imports from neighbouring countries. Distribution will be split between distribution companies and supply companies

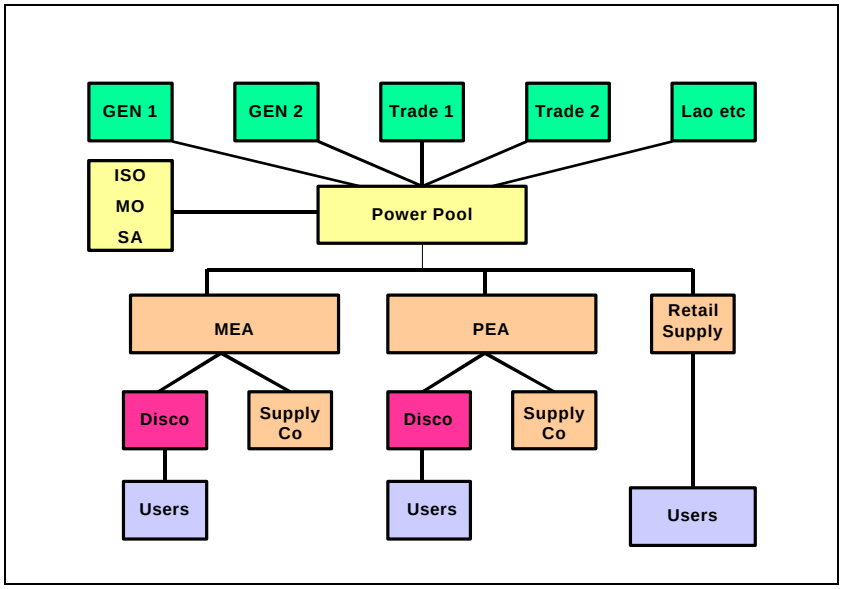
Price Setting

151. From 2003, power pool will function as an electricity market with offers and bids. Initially there will be a single buyer, EGAT, which will purchase from

its subsidiaries and a full market will develop as generation and retail are unbundled and privatised. EGAT will also own he transmission grid, GridCo.

152. The ISO will be use dispatch /spot market process. There will be a day-ahead forward market. ISO will be independent government owned, not integrated with GridCo. It will lease grid facilities from GridCo under a transmission control agreement.

Figure 2
Proposed New Power Market Thailand



Market Operation

153. Market operation will be handled by the ISO, which will in effect determine real time operation and market prices. Dispatch will be handled under a transmission control agreement between ISO and the GridCo. Reconciliation and settlement will probably be handled separately but how remains to be finally determined.

Competition Issues

154. The move to competition has been driven in part by the financial crisis and the inability of the government to meet the new capital needs of the sector, particularly for reinforced transmission lines. In addition there is widespread recognition that regulated monopolies impose costs on the community that can be avoided if independent entities are allowed to compete for the market. The biggest cost imposed is the low priority accorded to conservation and alternative energies by monopoly providers driven by engineering solutions. Conversely, the introduction of a power pool will create opportunities for alternative sources of power through real cost comparisons.

155. Government policy has been laid down, clear and planning at advanced stages. It will see the transformation of a generation monopoly and distribution monopolies into a competitive market with a regulated monopoly transmission company. The moves in the energy sector are one facet of widespread reforms that are underway in many sectors in Thailand. These reforms are fundamental and threaten the self-image of many people who have spent their lives bringing the benefits of electricity to poor rural communities. Much of the opposition to reform is coming from the staff of EGAT. What is overlooked are the many new employment opportunities in new private generation companies.

156. Given the widespread evidence of rent seeking in government contracts in Thailand there will also be opposition from groups who see competition as a threat to these activities. Reforms have already slipped the government's timetable and given opposition from within the industry could delay things further. NEPO is driving market reforms in electricity industry. The Finance Ministry is promoting widespread regulatory reform in many sectors.

Telecommunications

157. The Thai telecommunications sector is dominated by two state enterprises. Both enterprises have policy, regulatory and commercial functions. The Communications Authority of Thailand (CAT) is responsible for international telephone services but also operates, non-voice data (domestic and international), cellular telephones (shares of Advanced Information Services–Total Access Communications), pager services and Visa (leased line satellite). The Telephone Organisation of Thailand is responsible for fixed line services but also operates a cellular service. It is required to restrict itself to local fixed lines services but can provide international services via neighbouring countries, particularly Malaysia. Although formerly a local monopoly, it is now being reorganised as a holding company with a focus on a portfolio of investments.

158. The current position is described in Figure 3. There is a primary market for telecommunications occupied by CAT and Telephone Organisation of Thailand (TOT). Underneath these are some concessions to private entities, which resell services, bulk purchased from TOT and CAT as well as using facilities they have constructed themselves.

Liberalisation

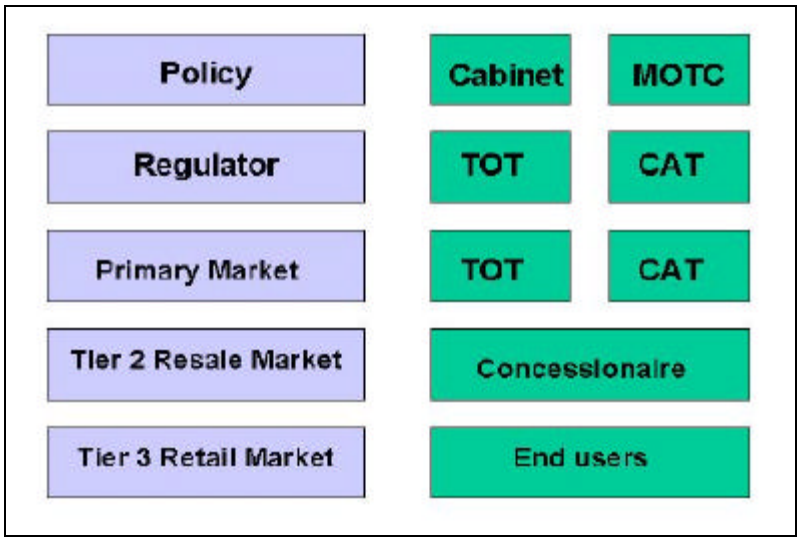
159. Telecommunications liberalisation is required in the new Thai constitution. The National Development Plan 1997 (which is the responsibility of the Ministry of Transport and Communications (MOTC) provides for step by step liberalisation of telecommunications according to a predetermined timetable.

- 1998- 2001 existing state entities license private sector competitors

- Corporatisation of CAT and TOT late 1999 –2000
- Strategic partners for CAT and TOT from 2000
- Domestic competition by Oct. 2000 (commencement of liberalisation)
- International Competition by 2006 (liberalisation complete)

The endpoint of the liberalisation programme is described in Figure 4. An independent regulatory authority will have replaced self regulation. TOT and CAT (which will have been wholly or substantially privatised) will face competition from new entrants to the market to own their own facilities. These and non-network owning resellers will be able to operate in a second tier resale market.

Figure 3
Regulation of Telecommunications Thailand 1999



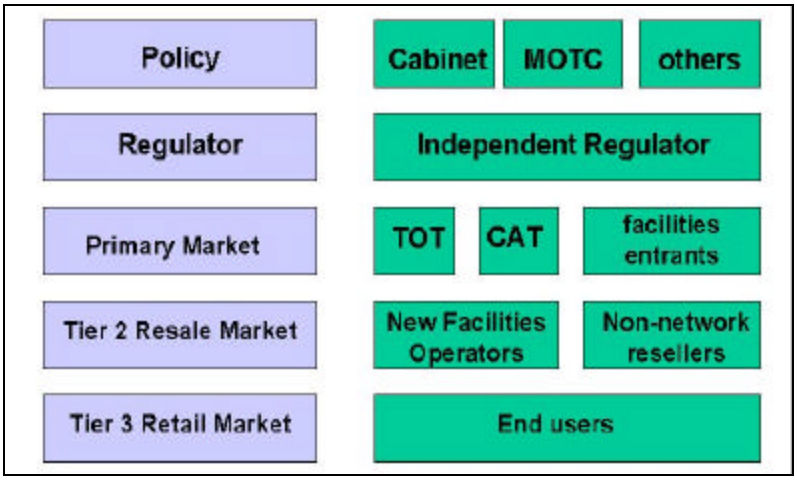
160. Under phase one of the programme, TOT issued 16 concession contracts. Since the private concessions have commenced business, they have taken 50 percent of the market share from TOT. In the cellular market, TOT has virtually a zero market share[39]. Two private cell-phone operators, occupy more than 90 percent market share. TOT and CAT are developing a joint venture cellular service using third generation technology. This will help it regain some of its lost market share.

161. While this method enable rapid entry of new service providers, the method chosen has caused problems for later stages of reform. Converting concessions into their equity value is highly contentious and resolving the disputes is holding up further stages of reform. Big money is at steak because when the concessions are converted to equity large payments will be required to the government.

[39] Its system, the NMT Nordinc analogue system is now obsolete.

162. As SOEs, CAT and TOT are currently part of the state sector. They have separate accounts but are under Finance Ministry jurisdiction. Conversion of concessions into equity will break remaining residual risks borne by the Finance Ministry on behalf of the nation. The goal of both CAT and TOT is to get the government share-holding below 50 percent. Under Thai law, once state shareholding falls below 50 percent, the company is thereafter regarded as a private company freed from the many constraints of being in the public service.

Figure 4
Liberalised Telecommunications Thailand



163. CAT and Postal are integrated and a subsidy is paid to the postal service. A plan exists to separate them but no timeframe exists. Finding an alternative funding source for postal service losses is causing delays. Until the postal service is reformed to either pay for itself of receive funding directly from the state it is unlikely that any strategic partner will be interested in investing in CAT. This will apply to TOT too, if the proposal to place all three organisations under a holding company proceeds.

Regulation

164. The seven member, independent regulator[40] to be appointed will have power of decision in a wide range of matters of regulation and policy. Any appeals against its decisions will have to be made to the commission itself. This is seen as a controversial aspect of the policy and occurred because telecommunications deregulation and formation of a regulatory authority was the first to take place following the promulgation of the new constitution. Because the senate will appoint the Commission, on non-partisan lines it is seen as being less politicised than any previous government organisation. The Ministry of Finance is playing an important role in driving regulatory policy reform. A Telecommunication Law is currently being processed by the national parliament. This will implement the new regulatory regime.

[40] To be known as the National Telecommunications Commission

165. Separation of regulation and operators is nearly complete. The incumbents are restructuring themselves to prepare for more competition in the future. For TOT this will include efforts to expand the market (by expanding the areas covered by services) in order to recapture market share. It will also require TOT to restructure its tariffs. Tariffs will need rebalancing, so that it can gain more revenue from its basic fixed network (through monopoly access charges) and offer lower tariffs where competition will come first, in long-distance and international services.

Drivers of Reform

166. The economic crisis forced the opening up of the sector. There was a need to find new capital and reduce the cost of doing business in Thailand. Greater competition, more services and new technology in telecommunications were high priorities to get Thailand out of the economic crisis. Liberalisation and the introduction of strategic partnerships were the only practicable methods to achieve these goals in a short space of time.

167. Future strategic partners in telephone companies are likely to be foreign. Although the government has adopted an open policy, foreign involvement has stimulated a new economic nationalism. This has made it difficult for the government to achieve a consensus on the way forward. Staff Associations have been prominent in opposing liberalisation.

Competition Issues

168. The future of competition in the industry will depend heavily on the work of the new regulatory authority. Efforts are being made to de-politicise it. The government is in a weak position depending as it does on a coalition of six political parties of uncertain loyalty. However, the approach to reform is also hampered by attempts to appease groups who will lose privileges following proposed changes. Not enough attention has been given to mobilising the groups that stand to gain from changes.

169. An interesting aspect of the Thai situation is TOT's reaction to competition and the loss of 50 percent of its business. The company has committed itself to expand its network to compete with new entrants. Until considerable investment takes place and management benefits from the skills of its strategic partner, it is unlikely to be able to compete with new entrants on service, technology or pricing. It has chosen instead to expand its network, thereby enhancing its main competitive advantage.

170. Thailand is looking at a regulatory model, which retains the high degree of central control of the current system. Whether it will be much closer to the requirements of the WTO Basic Agreement on telecommunications will depend on the work of the new regulatory authority. Thai legal drafting is not

very prescriptive in defining powers. Effectively, it requires to authority to make up policy as it goes along. Thailand's proposals have been criticised not only for mixing policy and regulation but also for the absence of an independent appeal authority.

Korea

171. The recession from 1997 was Korea's worst in the post-war era. It resulted in an output fall of almost 7 per cent in 1998, a tripling of unemployment and a current account surplus of almost 13 per cent of GDP, primarily due to a sharp contraction in imports. The recovery in 1999 and the first half of 2000 was led by private consumption, which was fuelled by pent-up demand, rising overtime payments and corporate profit gains, followed by a rise in fixed investment.

172. Export growth reflected the increased competitiveness of Korea following the depreciation of the won. In addition, a wide range of structural reforms has been introduced to establish a more market-oriented economy. This addressed the weaknesses that had made Korea vulnerable to a crisis. The reforms included significant changes in the financial system, the corporate sector, the labour market and government regulation of the utility sector, including network industries.

173. Regulatory reform is increasing flexibility and enhancing competitiveness in the international economy; half of the regulations in force were removed in a single year.[41] The government is now focusing on changes that will enhance competition in network sectors.

Electricity Industry

174. The government has announced a ten-year plan to introduce competition into the electricity industry. The plan includes the privatisation of the Korea Electric Power Company's generating facilities. Reform has been stimulated by the 1997 crisis and by the growing realisation that a vertically integrated utility the size of Korea Electric Power Company (KEPCO) becomes almost unmanageable.

175. Prices have been under government control and Korea has been in a situation where demand constantly exceeds supply (indicating prices are too low). KEPCO has had a constant struggle to install sufficient capacity to satisfy demand. This in turn has created a huge demand for capital and growth in the number of small private generators. The government cannot subscribe new capital and it cannot obtain capital from the private sector so it must borrow money for new projects. This means KEPCO's debt ratio is very high.

[41] See the OECD's review of Regulatory Reform in Korea

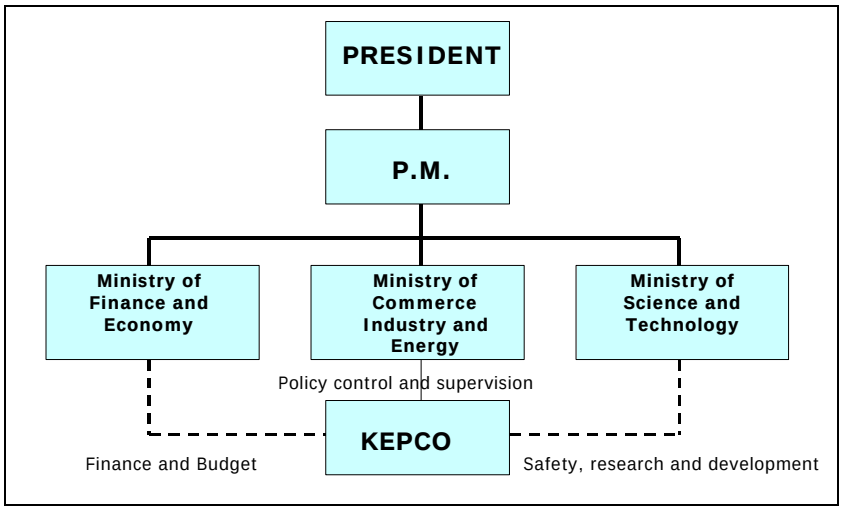
176. In future power companies will be competing with each other, price controls will go and prices will go up unless costs are reduced. KEPCO's staffing levels are already low by comparison with companies in other transition economies. Nuclear power remains in the public sector because with both the problems of waste disposal and obtaining buffer land for green-field plants government powers to purchase land are required. Pricing of nuclear power is a very important issue because if prices are too low, nobody will invest in other forms of generation.

177. Ministry of Industry, Energy and Commerce (MOCIE) is responsible for driving policy. Operations are handled by KEPCO. In addition to the policy ministry several publicly and industry funded research institutes exist. There is no independent regulatory authority at present.

Legal Framework

178. The current legal structure sets in place the respective ministries and provides for licensing of generators. In 1999 the year the MOCIE tried to get the electricity law amended to provide for the transition to the new electricity market and it will try again this year.

Figure 5
Institutional Framework Korean Electricity Industry



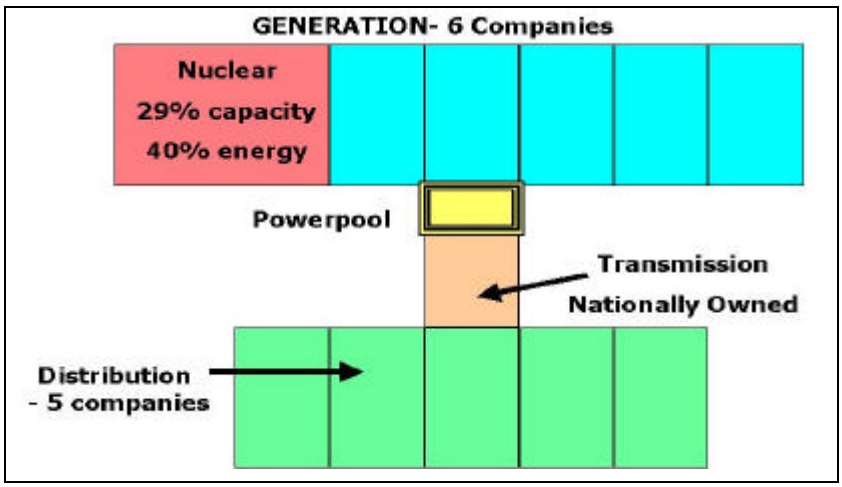
179. KEPCO is a vertically integrated monopoly. The government controls its prices. It is proposed that in the first stage of reform the price for the customer will still be regulated. In the second stage, the customer will have free choice regulation will be removed. A specialised regulatory body will be established to take over functions from MOCIE and KEPCO, oversee pool. During Stage 1 there will be an Electricity Committee with a widely representative secretariat to manage market operations. In Stage 2 there will be an electricity industry supervisory body similar to OFFER in the United Kingdom.

Market Entry

180. KEPCO currently covers generation, transmission and distribution. This will change. Constraints on private sector entry will be removed. Already moves in this direction are taking place. KEPCO Owns 94.2 percent of generation in Korea, but KEPCO itself is 48 percent owned by the private sector. In 1999 KEPCO sold two co-generation plants to the private sector. Hanhwa Refining Company (3.5%), a water utility (2%). LG-Power Generation Division is planning to construct a major new power plant, in anticipation of the changed regulatory framework.

181. Foreign investment is not specifically mentioned in the Korean restructuring plan although general post crisis liberalisation and private generation initiatives are likely to result in private investment. One generation plant was sold to a foreign joint venture LG-Caltex. AES (an American company) with SK (a Korean Company) are interested in entering the generation business. Without foreign investment, private generation development will be relatively small for some time. Pricing will be the key, in particular nuclear power.

Figure 6
Reform Plan Korean Electricity



Restructuring

182. Under the proposed law a three phase process is set out:

- Phase 1: competition will begin in generation: Generation Companies (Gencos) will compete with each other in the generation pool (bids). Some of them will be privatised. Transmission and distribution remain in KEPCO. Large customers will buy directly from KEPCO

- Phase 2: wholesale competition, distribution will unbundle from KEPCO (buying competition) and split into five REC. Gradual privatisation of companies. regional customers are captive to each REC.

- Phase 3: retail competition distribution network will be open. Customers can choose their own suppliers

183. The removal of economic regulation will proceed hand in hand with liberalisation of entry. The government will encourage private industry to participate in formerly monopoly businesses. Eventually it will encourage foreign investment and privatisation of SOEs. Already there has been substantial regulatory reform with the removal of about 50 percent of regulations. From now on regulatory reform will focus on the quality of regulatory activity rather than reducing the quantity.

Industry Structure

184. The industry will move from a vertically integrated monopoly to private ownership wholesale and retail competition. An institutional split will take place between generation, transmission and distribution. The government never directly managed KEPCO so it has a company organisational framework. The government now has 52 percent of its shares and 48 percent are held institutionally and privately. (51 percent is the legal dividing line between private and government enterprises).

Generation

185. At present generation is 60 percent of the cost of electricity. Only 4-5 percent of generation is private in specialised generators and with dedicated customers. Under the new structure KEPCO will become six generation companies (five plus nuclear). Each will be similar in size and capacity. They will compete on an even basis. Nuclear generation will remain in a separate government owned company. It currently comprises 29 percent of generating capacity and 40 percent usage. Power is currently purchased by KEPCO from independent power producers (IPPs) under power purchase agreements.

Transmission

186. Currently KEPCO is not internally separated into generation and transmission. Under the reform plan transmission will be in the hands of a nation-wide transmission SOE company. The regulatory authority will determine policy on transmission pricing.

Distribution

187. Currently distribution is a controlled monopoly. Lines and supply businesses are integrated. Phase 4 of Deregulation will see the commencement of retail competition. This will eliminate the regional monopolies in the distribution

sector with open access to the distribution network. It will introduce new types of electricity distribution business, such as consumer unions or specialised traders. Distribution is currently owned by KEPCO (40 percent private)

Power Pool

188. Currently the prices are controlled by the MCIE. Under liberalisation prices will increasingly be market determined. There will be three stages of market development.

- Corporatised power generation "one way bidding"
- Distribution and supply "two way bidding"
- Consumers can choose supplier "completely competitive market"

189. The transition process will take 9 years, until 2009. It is anticipated that the investment in the power pool will not be large, comprising mainly computer terminals, software etc. A special law will be passed to set up a new company to operate the power pool. It will own the computer, servers and metering.

System Operation

190. From 2003-2009, a sales regime based on free competition in generation and distribution. DISCOs will manage their networks and settle the tariff system. After 2009, competition based on open access to local networks. Competition will then set retail prices as well as wholesale.

191. Generation price bidding will be initiated before 2002 as a precursor to a wholesale market. In 2001 an Electricity Supervisory board will be formed. From 2000-2002, there will be preparation for a two-way competitive price bidding system. Direct sales will end in 2000.

192. The details of the Electricity Supervisory Board from 2001 remain to be settled. The interaction between scheduling and pool operation remains to be settled. The rules will be promulgated between 2000-2002. The pool operating rules will resolve dispatch issues. It is recognised that there is a need for an independent Reconciliation and Settlement system but the shape remains to be determined.

Competition Issues

193. Koreans tend to underestimate their own strength. The fact that Korea is an "Island" with no connection with the north, Japan or China is seen by some as an insuperable barrier to the existence of a market. It is recognised that

permanently subsidised prices would be a barrier to new generation entry. The related issue of the need, (until 2013) to construct new capacity at twice the rate of the current increase in supply is also seen as a barrier to the existence of a market. Inaccurate price signals as a reason for the mismatch between demand and supply are recognised but side-stepped in political discussions and debate.

194. A more substantial problem is putting market concepts into a Korean / Civil Law legal framework. It is acknowledged that the timetable is ambitious. In fact, the whole trading system will need to be in place by 2003, as only the scope of trading will increase between 2003 and 2009. It is probable that the deadline will be achieved because of the strong political support for change and the key role being played by KEPCO management who are actively campaigning for reform among members of the National Assembly. Even under current plans, most consumers will not benefit from competition and lower electricity prices until after 2009.

Telecommunications

195. The dominant factor in Korean Telecommunications policy was the social policy aspect of telecommunications. Thirty two percent of the cost of new installations was provided from government subsidies. Universal service for poor customers was a major consideration. Through a consultative process customers have a say in prices leading to a focus on low price levels and high quality service.

196. More recently policy favours achieving these goals through sector liberalisation. Korea is in the process of moving from a state owned monopoly towards competition as the prime regulator of the sector. In addition the government has introduced a timetable for an information "Super Highway" Timetable. The goal is to complete the improvement of the infrastructure backbone by the government. By the end of 2000 widening the bandwidth will be completed. By 2005, application tools will be installed aiming at universal access for advanced telecommunications. The Korean government requires the industry to invest every year, ₩ 2.4 trillion on research and ₩ 3 billion on training.

Institutions

197. Policy is the responsibility of Ministry of Information and Communications (MIC). The Korea Communications Commission (KCC) supervises deregulation. KCC is not a fully independent organisation. It is dependent for its budget and human resources on MIC. Only disputes and arbitration are handled exclusively by the KCC (the Ministry is not involved). It also reviews unfair practices in services offered by carriers. The MIC handles pricing. The lack of an independent regulatory body has been criticised by the Organisation for Economic Co-operation and Development (OECD).

Law

198. Despite the absence of a regulator, the legal framework for liberalisation is in place. The Telecommunications Act 1997 provides ministerial authority to implement liberalisation. The Telecommunications Business Act provides licensing criteria. The Radio-Waves Act 1999 regulates access to the radio waves and the Framework Information Promotion 1999 provides the legal framework for the information society programme. In addition, there are other legal provisions for workplace safety etc.

199. There were long standing controls on market entry and foreign investment and prices. All of these are gradually being relaxed. In fact much of the strength of the reform proposals in Korea depends upon the relaxed rules for market entry and foreign ownership. In other respects the regulatory ideas fail best practice tests. Key prices of two major incumbents are controlled, but none others. Although these represent considerable advances on past practice they still fails international best practice in terms of transparency and independence of regulation.

200. Market entry rules are different for different carriers, for:

- Facilities based services (35-40 market participants) entry approval is by the by MIC
- Special service carriers (250 retailers), only registration is required and so far none have been rejected. This simple process is maintained in order to protect the interests of consumers
- Value Added Services e.g. internet providers (2390) are only required to notify.

Foreign Investment

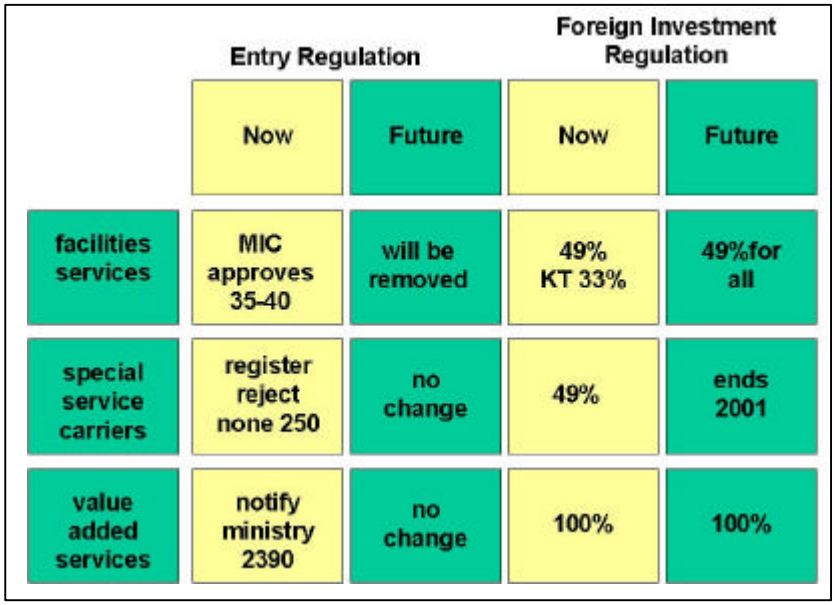
201. Controls on foreign ownership have been relaxed post the 1997 crisis. General direct investment controls remain and there are 3 types, for:

- Facilities providers, 49 percent foreign ownership is allowed, this is Korea's WTO liberalisation offer. For Korea Telecom (KT) the limit remains at 33 percent, but lifting this to 49 percent is being considered
- Special service carriers the 49 percent limit will remain until 2001
- VAS no restriction remain

Licensing

202. Allocation of licences has traditionally been by a not entirely transparent "beauty contest." This lays down a checklist of factors, which must be met by a successful applicant. One of the criteria is "experience." For non-incumbents this is an insuperable barrier without foreign partners. Licences also contain a requirement to contribute to R&D for industry. This entails a front-end payment, plus annual fee. The selection of licensees for the provision of the IMT 2000 is a big issue to be resolved. Current planning is that this two will be by beauty contest, using the same checklist. This will be a barrier to liberalisation and new entry.

Figure 7
Liberalised Access Korean Telecommunications Market



Competition

203. The Korean telecommunications market has been accused of having the appearance of competition, rather than the reality of competition. "Experience" requirement makes entry difficult for new competitors, and amalgamations among new entrants have reduced options. In 1996 27 new licences awarded. In 1997 KT and SK shares sold to the public. Three big groups have applied for IMT 2000, but already a small consortium excluded.

Fixed Line

204. The fact that KT has 99 percent of fixed line business would suggest that the market is not at all competitive. However, now, more calls are made by mobile phones than fixed means that KT's position is not so dominant as the figures would suggest. It is probable that KEPCO using its wires to compete

with KT is the most realistic source of future fixed line competition. Competition will also be enhanced by number portability, which is due to become operational by 2001.

Cellular

205. The dominant cellular player is SK. Beauty contest rules work against new entrants but there are several other significant players. SK has 45 percent market share and will merge with Sinsegi the third player and adding the two together will give it have 57 percent market share. Everyone sees mobile phone and third generation as the key to future progress.

206. Internet providers are regarded as the key Value Added Services (VAS). It is estimated that there are 2390 providers at present. No licence required and only required to notify regulators of their existence.

Comments

207. Restructuring of the sector has been progressive over the last ten years. Since 1997, the only change has been the speed of progress. General perception is that the speed of liberalisation in Korea is keeping pace with the growing market and as the market grows, regulation has to change. Deregulation has meant abolishing restraints on entry, and appropriate pricing of new entry. In the absence of a regulatory authority enhanced market entry and relaxed foreign ownership rules will be the principal methods of regulating the market.

208. Promoting competition in the telecommunications sector, a knowledge-intensive industry, is important for Korea's future development. Reducing government intervention in the business and investment plans of telecom firms and introducing an independent regulatory authority are provided for in future plans. While the opening of the market is proceeding, there remains a reluctance to "let go." Korea's market is big enough to sustain much more vigorous competition than currently envisaged.

209. Vigorous competition is likely to occur eventually as Korea sees efficient telecommunications as a significant source of competitive advantage. The superhighway policy is driven by a perception that Korea was falling behind its competitors in the use of communications technology and the internet. It remains to be seen whether a "supply driven" (as opposed to a market driven) policy of the kind is the most cost effective way of introducing new technology and enhancing competitive advantage.

Conclusions

210. Thailand and Korea are both in transition from vertically integrated telecommunications and electricity networks to networks regulated primarily

by competition with some support from structural rules and regulatory authorities. In Appendix 1 the situation in all four countries is benchmarked against the WTO policy on telecommunications and the World Bank Policy for the Electricity Sector, as examples of international best practice.

211. The position may be summarised as follows:

- New Zealand has the most deregulated Telecommunications and Electricity sectors, primarily regulated by competition, and Viet Nam is the most heavily influenced by government policy,

- Thailand and Korea are both moving from the Vietnamese end of the competition spectrum towards market models and as such will increasingly comply with international best practice,

- Both Thailand and Korea are introducing competition in phased programmes over a period of three to six years, giving incumbents and new entrants time to prepare and adjust,

- In Thailand, Korea and New Zealand competition will be the principal regulator of markets supplemented by the courts and the threat of regulation in New Zealand, regulatory authorities in Thailand and a mixed position in Korea,

- Allowing greater competition in Telecommunications in New Zealand, Thailand and Korea have been driven by the need to provide cheaper, better quality services more focused on customer needs.

- Competition policies are also driven by the need to promote and allow the uptake of new technology as a means to encourage and stimulate economic growth and international competitiveness

- Competitive reforms in Electricity have been driven by the need to achieve better balance between demand and supply of electricity, to access new sources of capital for power development, to stimulate the use of alternative electricity supplies and to minimise the financial risks to government

212. Both electricity and telecommunications services have improved in Viet Nam in the last ten years. This is appreciated by the businesses surveyed but they are also are concerned by the lack of reliability, cost and quality of service and most depend to some extent on back up services. Telecommunications services are a relatively small proportion of costs, but will represent a higher proportion of profitability. Small reductions in costs can make a big difference in profits. In this way uncompetitive telecommunications and electricity are impediments to economic growth and employment opportunities

213. In most countries, efficient private solutions can be found to resolve the special governance problems of network industries. The benefit of private

solutions is that if they cease to be efficient the parties themselves can replace them without the need for political intervention and legislation. These solutions remain subject to regulation but are not necessarily the subject of detailed regulatory intervention.

214. This study has drawn attention to the problems of excessive price or conduct regulation. These release managers from the responsibility to make judgements about responding to competitive pressures. It provides them with the perfect excuse for failure to compete.

215. At present information does not exist for an independent regulator to perform the role of protecting the public interest in telecommunications or electricity. In the meantime, at least the most effective regulator of behaviour will be enhanced competition[42].

216. In telecommunications, if the GOV needs to specify, clearly, the standards it desires in interconnection policy, pricing policy and disputes resolution. Once this is done it can seek the assistance of the existing companies and possible new entrants in preparing guidelines on avoiding anti-competitive conduct for the DGPT to include in the operating licence of each company. The parties to any disputes could be given the option of accepting the arbitration of DGPT or, if one party desires, seeking neutral arbitration over disputes or interpretations.

217. The DGPT would then be able achieve the government's competitive objectives in the most cost-effective manner. It would give that organisation an incentive to acquire the skills and reputation of an independent regulatory authority as soon as possible. In the process it will acquire many of the skills it needs to perform regulatory functions to the satisfaction of all parties.

218. Regarding expanding services into rural areas or areas not currently serviced, the company that can offer service the soonest could be authorised to provide it. Interconnection between the two parties should be resolved by commercial negotiation between players with recourse to the process sketched in the previous paragraph.

219. The principal impediment to this approach is the lack of familiarity with commercial arrangement between competitive businesses for sharing common facilities. It is common for competitive businesses to share essential network facilities where it is their advantage to do so, while still competing in servicing customers. Efficient private solutions are to be found where the regulatory framework is sufficiently flexible to allow it.

220. In Viet Nam's electricity industry steps have already been taken towards a competitive electricity market. These recent steps show that a Vietnamese electricity market is possible and corporatisation of generation, transmission, distribution and supply will be a step towards that objective. One the entities

[42] See for example in the case of Vietel's proposed service

are in a corporate form competition can be encouraged among them and with the small private sector. "One way generation bidding" is in the early stages of development already. Distribution and supply two-way-bidding should be possible within four years. Consumer choice of supplier in a "completely competitive market" should be possible within eight years.

221. Strict environmental, health and safety policies are required for both corporatised and private enterprises. Programmes should be developed to assist individual workers adjust where there need to be deployments. All these are issues to be dealt with, none of them are fatal flaws which should be allowed to prevent progress.

222. In New Zealand, Thailand and Korea, there is a realisation that large, integrated electricity utilities become unmanageable when they become so large that economies of scale become negative. In large utilities, there is an information gap as market signals are blurred by the various components of the utility either not charging for services or doing so at non-market rates.

223. The effect of liberalisation has been to stimulate moves away from large, centralised (and usually polluting) generation options towards more diverse, environmentally friendly and non-nuclear fuels. There is a focus on running a business instead of a preoccupation with technical problems. Efforts are made to reduce costs and increase revenues. Once there is a threat of competition, larger entities begin to focus outwards towards their customers instead of on internal politics.

224. The experience of New Zealand was that increased efficiency permitted reduced prices, increased profits, better service and allowed the payment of tax and dividends all at the same time. This enabled prices to be held at a time when cross subsidies from businesses and commerce to residential customers were removed. Thailand and Korea are anticipating similar results.

225. Price subsidies and cross subsidies are costly as a way of delivering support to the poor. Commercial entities or the very rich consumers capture the benefits of subsidies. Even if the target group receives subsidies, they result in wasted consumption and demands for additional investment in electricity generation and telephone lines. This leads to the use of coal and nuclear as generation energy sources and wasted capital. The result of liberalisation has been enhanced competition, a wider range of services and falling prices. Losses of government revenue from liberalisation have been offset by the taxes from privatised utilities and the VAT on a rapidly growing market.

226. Services to remote and disadvantaged areas need not be harmed, as the Thailand experience has been that the reaction of the incumbent telephone operator to loss of market share is to expand the coverage and range of services available. Special assistance may be required in some isolated instances but these are likely to be very atypical and relatively small in total. Either government budget allocation or a one-off contribution by all entities could be considered to fun these examples. In all cases if telecommunications

and electricity reform takes time. If competition is postponed the benefits are postponed too, so small special cases should not be allowed to become a major impediment in the path of progress.

227. Competition in telecommunications is a major stimulant to use of services and the market expands rapidly taking up labour released from the incumbent utility. Market growth is sufficient to offset any concerns about duplication of services. Clear, open and transparent decision making processes stimulate investment and the introduction of new technology. Competition in telecommunications, in New Zealand, Thailand and Korea, have resulted cheaper, better quality services more focused on customer needs.

228. None of Korea, Thailand or New Zealand have expressed any concerns regarding national security from liberalising electricity or telecommunications. In an emergency, any nation has the right to use the assets in its territory to meet the crisis.

229. Like many countries in Asia, Viet Nam needs to take decisions soon on what its strategic objectives are in network industries. Is ownership a strategic objective, or does the real strategic interest of the nation lie in having cost effective, competitive services available to businesses and individuals doing business and creating wealth for the country?

Recommendations For Viet Nam

- Viet Nam should speed up moves in the same direction as its neighbours by encouraging more competition in markets for telecommunications and electricity,

- Competition should be promoted in order to increase the competitiveness of its economy, to access additional development capital, to minimise the economic risks carried by the government and to facilitate economic development in other sectors,

- To facilitate progress, Viet Nam should promote corporatisation of existing entities; private investment should be encouraged into new entities, thereby creating additional employment opportunities and enabling them to cope with competitive pressures

- Viet Nam should develop electricity and telecommunications liberalisation transition plans with a time horizon of between five and ten years,

- The objective should be a clear split of policy, regulation and operations should be made to encourage competition from new entrants to the market, but transitional arrangements could be considered, providing for independent arbitration and dispute resolution,

- If rapid improvements in quality and technology are required, competition, including additional foreign involvement with new entrants, is required and this should be encouraged by relaxation of ownership requirements,

- In the electricity sector Viet Nam has commenced the competitive era but encouraging generators to compete since January 2000 and it should plan for the development of an electricity market over eight years by the introduction of:

  – Transparent “One way bidding” for generation

  – Distribution and supply “two way bidding” within four years

  – Consumers choice of supplier in a “completely competitive market” within eight years

- Clear policies of applying strict environmental and safety policies to corporatised and private electricity enterprises alike should be developed

- Programmes should be developed to assist individual workers who will have to relocate employment from existing enterprises to new enterprises or to new sectors

Appendix 1
Network Regulation Benchmarked Against World Best Practice

TELECOM	SR VIET NAM	THAILAND	KOREA	NEW ZEALAND
• Prevent anti-competitive practices, (to facilitate entry of new competitors and ensure fair competition)	• State Monopoly, competitors are subsidiary companies or partly owned ✖	• Government Policy favours competition ✣ • Rules by regulatory authority	• Government Policy favours competition ✣ • No regulatory authority and lack of transparency	• Uses general competition law ✓
• Allow non-discriminatory interconnection, (to facilitate new entry)	• Interconnection depends on government direction and decision ✖	• Government Policy but rules by authority ✓	• Government requires non-interconnection✓	• Inter-connection a matter for commercial negotiations between private parties ✣
• Apply universal service obligations neutrally, and be imposed non-discriminatorily, (to ensure fair competition)	• Universal service obligation on VNPT but some areas have limited service ✖	• Incumbent responsible will be revised by regulator ✓	• KT and SK mobile are responsible for discharging universal service obligations ✖	• Universal service obligations through the "Kiwi Share" on Telecom New Zealand ✓
• Make licensing criteria publicly available, (so that everyone knows what new entrants need to do to obtain a licence and customers know their rights and service standards are entitled to)	• Obtaining a license depends on prior government approval ✖	• Master-plan and regulatory authority ✓	• Beauty contest and "checklist" are available although criteria are discriminatory ✣	• Open entry and licence is not required ✓
• Ensure that regulation separated from incumbent enterprises, (to minimise conflicts of interest) and	• DGPT separate from enterprise but both subject to government control. DGPT controls aspects of VNPT ✓	• Regulations to be through the regulatory authority ✣	• Regulation through the MIC ✣	• Ministry of Economic Development ✓
• Ensure the allocation of scarce resources, objectively, promptly, transparently and without discrimination (so that entry is determined by the merits of the commercial deals available rather than to prop up an existing state owned enterprise)	• The issue of allocation of scarce resources remains to be addressed. The principal competition in the sector at present is competition for capital ✖	• Not a perfect process and will depend on depoliticising of the regulatory process ✣	• The process is transparent but favours incumbents ✣	• Frequency spectrum allocated by competitive bid process and then tradable ✓

✓ = complies with international best practice; ✖ = does not comply with international best practice; ✣ = practices under reform and tending towards best practice

ELECTRICITY	SR VIET NAM	THAILAND	KOREA	NEW ZEALAND
• a clear set of rules, known in advance	• Dependent on administrative discretion ✖	• Moving to a rules based system under the Masterplan of July 2000 ✓	• By 2003 the wholesale market will be in place ✣	• No restriction on entry, or incumbent expansion ✓
• rules actually in force,	• Dependent on administrative discretion ✖	• By 2003 a power pool and associated rules will be in force ✣	• Market rules are being developed ✣	• Rely on general competition law; separation of wires and supply business by law ✓
• mechanisms to ensure application of these rules,	• Dependent on administrative discretion ✖	• Planned to have an ISO to supervise the market ✣	• Market rules will provide for independent regulation following "British Model" ✣	• Commercial laws and courts are used ✓
• conflicts resolved through binding decisions of an independent judicial body or arbitrator,	• Government decisions ✖	• The market rules will provide for dispute resolution ✣	• Market rules will provide for dispute resolution ✣	• Court decisions are binding ✓
• known procedures for amending rules when they no longer serve their purpose,	• No process ✖	• The market rules will contain procedures for amendment ✣	• The market rules will contain procedures for amendment ✣	• Market rules have clearly defined procedures for amendment ✓
• a framework of regulatory incentives to support competition and efficiency	• Government monopoly ✖	• Will depend on organisational structures to ensure competition ✣	• By 2009 there will be a fully competitive market in place ✣	• Competition the prime regulatory tool ✓

Appendix 2
Contributions of Two Commentators

Comment on the report on
"Common elements in the governance of deregulated electricity markets, telecommunication markets"
By
Professor Lewis Evans, Executive Director, New Zealand Institute for the Study of Competition and Regulation
and
Professor Neil Quigley, Executive Dean, Faculty of Commerce and Administration, Victoria University of Wellington

1. In Viet Nam, the management of public utilities at present in general and network industries in particular is a debate with different views. The argument has been justified that to network industries (electricity, water, telecommunication...) the most important target is security and "welfare" for all people. And the natural monopoly is necessary to make the production cost at the minimum level and natural resources not wasted. So, the central and close management mechanism has been existed for many years. The rapid development and the expansion of the post and telecommunication industry, especially telecom network, apparently strengthens this argument. At the early October, 2000, in Viet Nam the subscribers have been 3 billion, the international telecom network have had 5,764 directly communicating channel permitting to implement simultaneously millions of call; the international call number increase rapidly, reaching more than 300 billion minutes in 8 months early year and increasing 18 percent relative to the same period in 1999. The mobile networks Vinaphone and MobiFone have 575,000 subscribers.

2. In this context, many new ideas on the reports of Professors of Evans and Quigley make us rethink views rooting in our brain that these seem to be immutable principles.

3. The most important things to be noted in their report are that the analyses of technical changes will impact on management and organisation structure of network industries. More specifically, such strongly technical and technology changes in these industries are the main pressures requiring to change the old management methods.

4. The another main part of the report is the role and importance of join venture, of the legal intervention and public ownership. These crucial factors of management have to be mentioned. The authors' view here are that technical changes allow network services to shift market mechanism, then ownership and management structure will have to change in accordance with this mechanism. And the effect of technical changes will lead to asset ownership changes, competitiveness and management structure. In addition, the removed heavy-handed regulation, e.g. price caps, is necessary condition to develop network industries efficiently.

5. The authors' solutions are that it is necessary to have private suppliers operating in standard competition environment and legal framework for enterprises have to create regulatory structure for network industries to catch up with the rapidly changing technology.

6. To prove above mentioned views, the authors have focused on the nature and implication of technical changes. Four great consequences of these changes are to reduce production cost, to change ability and quality of information, to create new markets, and to allow the competition within and across markets. These consequences, in turn, will lead to changes in management. In the legal framework, whenever reduced cost, increased profit, it is certain to appear many entities participating in market with new products and lower price. The rapid change of technology not only impacts significantly on the investment decision making and development strategy toward shortening planning process and increasing non-co-operative behaviour but also increase competing tendency.

7. The problem of governance structure has been shown rather detail and interesting. It is noted that the argument about failures of extreme form of centralised control in Eastern countries. That is characterised by the provision of centrally financial sources, subsidies as well as centrally planning process. However, if possible, we suggest the author presenting more detail about this argument, particularly the reasons that cause the failures of extreme form of centralised control in Eastern countries.

8. The authors have divided governance framework into four categories: light-handed regulation, self-regulation, heavy-handed regulation and direct public sector provision of services including state monopoly provision of services. The excessive government intervention is always explained by the worry about security and safety of services provided in markets. These are reasons that most of Vietnamese policy makers relies on to maintain central regulation to network industries. At the same time, with the light-handed regulation, there is no regulator that regulates the use of market information as well as no any legal barrier to market entry.

9. One of the lessons that Viet Nam need to refer is the participation of joint ventures in network industries, because in the near future, after joining WTO, Viet Nam will have to open to foreign partners involving in these network industries.

10. In network industries, joint ventures commonly have been established to provide inputs used to produce outputs by their members, and then that are sold in market. If market activities are controlled by individual firm that can be able to raise the potential for monopoly profits, so the establishment of joint ventures are likely to minimise cost while a the same time to solve the monopoly problem created by the market size and the prevailing technology. Hence, according to the authors, joint ventures will provide the efficient approach to vertical integration in the presence of the natural monopoly and downstream competition on product and cost variety.

11. In term of regulatory experience of electricity industry in New Zealand it is noted that so far this country still retains public ownership of electric production and transmission. The limited competition results from only 2 companies. In addition, the dominance of public enterprises in retailed sale has affected negatively to the efficiency of distribution. This situation is similar to the electric market in Viet Nam.

12. As far as regulatory structure of electric market in New Zealand is concerned, there are no regulator and no tariff control. The entry to spot market is voluntary, it means that there is no limit to the entry to and exit from market.

13. To New Zealand's telecommunication industry, there are no price control and no overall regulatory body. There are a large number of firms in the market. And the easy entry to and exit from market of firms lead the co-operation to be difficult to maintain and the competition is in need of the development.

14. In summary, it can be said that the presentation of the authors Evans and Quigley gives us many lessons, as well as suggests lots of new idea about the regulatory mechanism of network industries, helping us to avoid the "routine" thinking being created for many years ago.

Nguyen Dinh Tai,
Deputy Director of the Institute's Centre for Applied Management of CIEM

Comments on:

Report on common elements in the governance of deregulation

electricity markets, telecommunication markets.

By:- Professor Lewis Evans, Executive Director, New Zealand Institute for the Study of Competition and Regulation; and

Professor Neil Quigley, Executive Dean, Faculty of Commerce and Administration, Victoria University of Wellington.

I. General issues

1. We are policy makers, our mission is to build up the policies on foreign direct investment. We highly appreciate your report and it gives us valuable information, foundations and knowledge and experiences on electricity and telecommunication markets management. The report's focuses concentrates on changed styles of management and regulation, which are based on the grounds of technical change as its characteristics. These changes have affected the organisational structure management, State owned industries such as electricity and telecommunication.

2. The paper has been divided into three main sections as following:

   (i) Providing a framework for the economic analysis of the structure of network industries, focussing on horizontal and vertical relationships, the role of private firms, public enterprises, joint venture and governance regulation.

   (ii) Analysing the impacts of technical change which has affected the organisational structure of network industries and the governance arrangement that follow form them

   (iii) Providing a typology of network industries structures and explain the impacts of technical change to electricity and telecommunication industries in New Zealand. We are interested in author's analyse the impacts of technical change to organisational structure of network industries and governance arrangements.

3. In the report, the authors showed that: the implications of this change for industry performance are very different markets, but all have been affected by reductions in their costs, change in availability and quality of information, the creation of new markets and opening of competition between markets.

4. These changes have affected the optimal organisation and governance structures of network industries by challenging traditional public policy by making competition feasibility where natural monopolies existed before.

II. We are participating to the process of making electricity and telecommunication investment policies.
I would like to ask some questions:

5. As presenting in the Introduction: technical change has prompted a consideration of the optimal governance arrangement, including rational for regulation and public

ownership. In other words, has this change imperatively affected the governance structure in order to foster competition in markets and result in changing ownership or not?

2. The report focuses on the process by which technical change has affected the organisational structure of network industries. Which other factors influence to optimal organisational structure of network industries such as national management and development level?

3. In section 3.1: the framework for the governance of network industries may be divided into 4 categories: light-handed regulation; government recognition of industry self-regulation; heavy government regulation of private market activity and direct public sector provision of services, including community and government ownership of firms and state monopoly of the services. Which category is optimal?

4. In section 3.3: there are three types of competitive harm that may result from activities of a joint-venture: output market exclusion; input market inclusion; supporting price co-ordination. I would like to ask the author provide the analysis how the science and technology advance and competitiveness influence the process of joint venture, merging between firms.

Thank you,

Pham Manh Dung
Deputy Director of Department of Investment Legislative, MPI