
INFRASTRUCTURE FINANCE IN ASIA

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INTRODUCTION

First, I want to express my appreciation to The Banking Law Association of Australia and New Zealand for the opportunity to join you today to address the subject of *Infrastructure Finance in Asia*. It is a subject of critical importance to the developing countries of the Asia-Pacific Region, an area of direct involvement for an increasing number of Australian and New Zealand companies and financial institutions, and a field in which the Asian Development Bank is playing a leading role. As an American banking and finance lawyer who first came to Australia in the late-1970s to work on the project financing of a number of minerals projects both within Australia and offshore - German Creek, Robe River, Ok Tedi and Bougainville dominated the horizon of my professional practice for many months over a number of years - and as an international lawyer practising in Sydney in the late-1980s, I am keenly aware of the pioneering role which Australia and New Zealand have played, and the professional role which many of the Australian and New Zealand lawyers participating in this conference have played, in the early development of the project finance techniques for large scale, complex projects which are now a part of the accepted international practice of project finance. Too few people recognise that the Holy Grail of project finance was first filled with Australian and New Zealand wine. Also, on a more personal note, coming back to Australia for my wife, Jackie, and for me is very much a home-coming.

Second, I want to thank long-distance my colleagues in the Office of the General Counsel at the Asian Development Bank for their assistance in the preparation of my remarks and, in particular, the assistance of my Australian colleague Bruce Purdue, Assistant General Counsel, who has been very much involved in the bank's activities supporting private sector and joint public-private infrastructure projects in Asia.

OUTLINE

The Asia-Pacific Region is vast in scope and diversity. It ranges from the skyscraper canyons of Tokyo and Hong Kong to peasants engaged in subsistence agriculture in the Mekong Delta and on the Indian subcontinent. Its contrasts include the wealthy city-states of Singapore and Hong Kong which are now richer on a per capita basis than most European countries, and the sprawling megacities of Shanghai, Bombay, Bangkok and Manila which have served as magnets to the rural poor. It is the region of the so-called "East Asia miracle" of dramatic economic growth

* The views expressed in this paper are those of the author and do not necessarily represent the views or positions of the Asian Development Bank or any of its member countries.

by "the Asian tiger" economies and, at the same time, it is the region which is home to an absolute majority of the world's poorest people. It is the region which has attracted in recent years dramatic levels of foreign investment, and yet that investment is focused on a small number of the countries in the region while other countries of the region remain starved for foreign equity capital.

On most subjects it is difficult to generalise with any confidence across such diversity, and the subject of infrastructure finance is no exception. This morning I will attempt to provide an overview of the landscape of infrastructure finance in the Asia-Pacific Region. I will begin by describing the region's infrastructure requirements and by describing the scope of the response to date in terms of projects completed, the projects in process and the projects currently on the drawing boards. I will then turn to how the framework for project financing of infrastructure projects in the Asia-Pacific Region differs, in my view, from project financings undertaken in Australia and New Zealand, that is, to what might be termed the "distinguishing characteristics" of infrastructure project finance in the Asia-Pacific Region. I will talk about two troubled infrastructure financings in the region - the Bangkok Expressway Project in Thailand and the Dabhol Power Company project (the Enron project) in India - and explore their relationship to such distinguishing characteristics and to lessons which might be learned from their problems. Finally, I will speak a bit about the role of the Asian Development Bank in infrastructure financing in the region and, in particular, about how the bank is working with host governments, project sponsors and other financiers to deal with the "distinguishing characteristic" risks of infrastructure finance in the region.

When I was a university student, I was reasonably good in getting to my classes on time but chronically bad at being able to stay awake during early morning lectures. For those of you who suffer from a similar pre-disposition and have carried it with you into middle life, I will at this point in my introductory summary identify my thesis. The most distinctive distinguishing characteristic of the financing of infrastructure projects in the Asia-Pacific Region is a series of related risks which describe the roles of the host government and government enterprises in such projects and the concerns of project sponsors and lenders about the due performance of such roles. The roles include that of the host *government as regulator* of the infrastructure sector in which the project operates and which, invariably, involves a new and evolving regulatory regime. There is the role of the *government and government enterprises as a supplier* of goods and services which are critical project inputs, such as fuel supplies to a power project. There is the role of the *government and government enterprises as a customer* for the project's outputs, for example as the electricity purchaser from a power project. There is also the broader role of the *government as a provider of a legal framework* for the creation and enforcement of contractual rights relating to the project, including the collateral security rights of the project lenders. Closely related is the role of the *government as a provider of a broader regulatory and administrative framework for doing business*, which includes predictable and reasonably efficient regimes for the establishment and operation of companies and other business entities, for obtaining business licences, for determining and complying with environment standards, and for meeting the tax obligations of the project companies and their staff. These risks are in addition to the classic risks of governmental expropriation or the failure of the government to make foreign exchange available to a project to service its foreign debt and meet its other foreign currency obligations. These risks in the aggregate are **sovereign risk**. The principal distinguishing characteristic of the project financing of infrastructure projects in the Asia-Pacific Region is the multi-dimensional nature of the sovereign risks which must be dealt with in the project financing design and documentation. The principal task which lies ahead for the host governments concerned, for project sponsors and their financial and legal advisers, and for development finance institutions such as the Asian Development Bank is finding more effective ways of **mitigating sovereign risk** in the financing of infrastructure projects in the Asia-Pacific Region. It is only through the more effective mitigation of such risks that it will be possible for host governments and project sponsors to attract the very high levels of financing, and in particular, long-term debt financing, which are required to meet the infrastructure requirements of the region over the next decade.

ASIA'S INFRASTRUCTURE REQUIREMENTS

The infrastructure requirements of the developing countries of the Asia-Pacific Region are stunning in their magnitude.

The Asian Development Bank estimates that, in order to achieve sustainable economic growth in the next decade, the 5% of Gross Domestic Product (GDP) which is presently invested annually in infrastructure by the bank's developing member countries (DMCs) must increase to around 7% of GDP over the next decade in order for supply to keep pace with demand. The bank has estimated that the power sector alone will require investments of around US\$300 billion through the year 2000 (which is a very short time horizon). Telecommunications could require a further US\$150 billion. The investment needs for transport are estimated to be around US\$300 billion for the same period, while water supply and sanitation could require between US\$80-100 billion. Bank economists have estimated that total infrastructure investments in the region will need to be of the order of \$130 billion annually by the end of the decade.

Let me focus on the power sector for a moment. It is estimated that electric power is yet to reach 2 billion people out of the world's population of about 5.5 billion. Despite the fact that bank lending to the energy sector totalled almost \$1.8 billion last year, this represents only about 2% of our DMCs' requirements. The task of finding sufficient financing for necessary capacity expansion is, therefore, truly daunting, but the economic penalties that accompany failure to meet power demand are worse. Bank economists estimate that around 20% of all industrial equipment in the region is lying idle due to a lack of power. The economic and social cost of unserved energy needs in Asia is calculated at between 50 US cents and \$2.00 per unit - that is, up to 30 times the cost of supply. As most of you would know, the Asian Development Bank is headquartered in Manila. Each and every member of the bank's staff and each of the other 8 million residents of Metro Manila can testify to the costs of brown-outs. During the critical power shortages of 1993 much of Manila had power for only a portion of each and there were severe disruptions of industrial production and of most large-scale businesses; modern skyscrapers turned into solar ovens in the tropical heat.

The Asia-Pacific Region has been a leader in the developing world in recent years in effecting a dramatic shift in the development of infrastructure into the private sector. Traditionally, infrastructure development has been the responsibility of governments. This is reflected in the vocabulary with which we grew up: we speak of public utilities, public power, and public roads. In each country of the region infrastructure investment has failed to keep pace with the requirements of expanding economies. Most countries of the region currently are suffering an infrastructure gap between demand and installed infrastructure; in some countries of the region the gap is already so large as to constitute an infrastructure crisis. The requirements for the expansion of infrastructure are fuelled by growth of the underlying economies and, at the same time, it is recognised that the expansion of infrastructure is a pre-condition to further growth. Given the size of the financial requirements for such infrastructure and the budgetary constraints which most governments of the region face, governments have come to realise that such infrastructure requirements cannot be met or financed by the public sector alone. The question of how best to finance infrastructure requirements is being addressed by such governments in a broader policy framework of economic liberalisation, which contemplates a more limited public sector role in the economy generally, the encouragement of private sector economic activity, opening of the economy to international trade and foreign investment, and the development of deregulated domestic financial and capital markets.

Also contributing to the movement towards permitting private development of infrastructure in these countries has been the recognition that the performance record of such governments in public sector infrastructure development, construction, operation and maintenance has not been outstanding. Cost overruns, project delays, poor operation and maintenance and recurring operating losses have often plagued publicly-managed infrastructure projects. Many governments have concluded that private sector participation has become essential. However, due to the magnitude of the individual project costs, the long gestation periods for such projects, the need for large amounts of foreign debt and equity financing, and the shortness of the path of accumulated experience for such projects in the countries concerned, the new breed of

infrastructure project presents a particular mixture of risks and a particular challenge to project finance professionals.

PRIVATE SECTOR INFRASTRUCTURE DEVELOPMENT

I have said that the Asia-Pacific Region has been a global leader within the developing world of the private sector development of infrastructure. The trend began with the first projects in power generation in China and the Philippines in the late-1980s. There have been more than thirty private infrastructure projects in the Philippines which have either been completed, are currently under construction or have at least reached financial closing, most of which are in the power sector. The Malaysian market also has been quite active, with more than twenty toll roads, water supply and sewerage treatment projects financed in the private sector using Build, Own and Transfer (BOT) arrangements. The Bangkok Expressway toll road has been completed and a rural telecommunications project, also in Thailand, is reported to be progressing; both projects utilise BOT arrangements, and both are backed by Japanese sponsors. Bidding is currently in process in Thailand for 4180 MW of generating capacity in the private sector which is to be brought on stream over the next six years. In southern China two power projects and a major toll highway have been completed, sponsored and financed by Hong Kong interests. There are a number of completed highway projects in Indonesia funded by the private sector, and the financing for a major power project has just been completed. It has been estimated that about two-thirds of the private investment in infrastructure in East Asia is by investors from within the region.¹

Private sector infrastructure projects financed by the Asian Development Bank have included the Novatas, Pagbilao and Batangas power projects in the Philippines, the Khimti Khola hydropower project in Nepal, the Bangkok Expressway project, and the Fauji Kabirwala power project in Pakistan. Projects presently being processed for Board approval include the Ib Valley power project in Orissa State in India, the Balagarh power project in West Bengal in India, the Indus Grid power transmission project in Pakistan, and the Meizhou Wan power project in China. In addition, the bank has been a co-sponsor and investor in some of the investment funds established by institutional investors to invest in private sector infrastructure projects within the region.

In other parts of the developing world, the focus has been on the privatisation of existing public sector monopolies providing infrastructure services. In the Asia-Pacific Region the principal focus instead has been on private sector development of new projects.² While American, English, Japanese, Australian and New Zealand project sponsors are increasingly active, the earliest projects in the region - which had a dramatic "demonstration effect" of the viability of the private development and project financing of infrastructure projects - was a tribute to the entrepreneurial vision of a number of overseas Chinese investors, most notably Hong Kong's Gordon Wu and his companies Hopewell Holdings and Consolidated Electric Power Asia (CEPA). Today, the global action in power development is in the Asia-Pacific Region, and it is in the private sector. There is much activity, and most of the principal players on the global scene are working on projects in the region, with American and English power companies and power packagers being particularly active.

This is not, however, a full descriptive picture of private infrastructure activity in the Asia-Pacific Region. The euphoria which existed in 1994 over private development of infrastructure in the region is today balanced by a more sober assessment by many potential project sponsors and financiers, who have seen a lack of progress on many proposed projects and significant implementation problems with other projects, particularly in India and China. China's progress

¹ Harinder Kohli, "Infrastructure Development in East Asia and the Pacific: Towards a New Public-Private Partnership", The World Bank, August 1995.

² Gary Bond, "Financing Energy Infrastructure Projects in Asia: Emerging Trends from IFC's Experience", International Finance Corporation, 1995.

with private power appeared to be quite promising during 1992 and 1993, when around 40 investment proposals involving foreign firms were put forward. This followed on from the first private power project, Gordon Wu's Shajiao B power station in Shenzhen, which came on stream in 1987. To date, however, no significant progress has been achieved with the new projects³ though the effectiveness on 1 April 1996 of an Electric Power Law and the recent relaxation of inflation-dampening project and credit controls may signal a revival. In India, more than 200 memoranda of understanding for private power projects have been executed, but most are stalled in protracted negotiations and policy differences between the State and Center governments. Of the eight projects designated in 1994 for "fast track" approval, only two have reached financial closing, one of which has been the troubled Dabhol (Enron) Power Company project, which we will be exploring in further detail later in the morning.

To complete this overview of the landscape of infrastructure finance in the Asia-Pacific Region, it is necessary to describe the principal sources of finance which have been available to the projects which have to date reached financial closing. The single largest source of finance for the private power projects in the region has been the traditional export credit agencies of Japan, the United States and the principal European countries. What is notable about their support is that much of it has been on a project finance basis rather than with the support of sovereign guarantees of the host country which, at an earlier time, were a pre-condition to export financing. Thus commercial lenders and other project financiers have found the export credit agencies sitting on the same side of the negotiating table, assessing project risks and expecting to participate fully in the security of the project collateral. International development finance organisations - the Asian Development Bank and the International Finance Corporation of the World Bank - have been active as senior lenders and equity investors and, at times, as subordinated lenders. The World Bank itself has also been a participant as a guarantor of commercial lenders on at least one Asian power project and has other, similar projects under consideration.

International commercial banks still have a rather cautious appetite for financing such infrastructure projects and are particularly concerned about sovereign risks. This caution reflects the stringent capital adequacy requirements under which such banks now operate, broad diversification of developing country risk in such banks' loan portfolios which limits individual country exposures, close monitoring of such banks by their rating agencies after the recent period of financial restructuring at many such institutions, and some sobering experiences with developing country debt in the past.

Local financial institutions - industrial development banks and commercial banks - are often equity participants as well as project financiers though, given the current state of development of the financial and capital markets in many countries of the region, their participation is often smaller than that of foreign financial institutions and is almost always in the form of short- and medium-term financing. A notable exception to this generalisation is Malaysia, which has financed the overwhelming majority of its private infrastructure projects domestically, with the Employees Provident Fund playing a prominent role. Thailand has also raised more of the financing for its private infrastructure projects domestically than is the norm for the rest of the region, primarily through syndicates of Thai commercial banks.

Special purpose infrastructure investment funds have mobilised several billion dollars (US) of resources for infrastructure projects. Some are regional in focus (such as the AIG Infrastructure Fund, the Asian Infrastructure Development Company (AIDEC) and the Peregrine-sponsored Asian Infrastructure Fund; the Asian Development Bank is an investor in the AIDEC and Peregrine funds). Others are country funds focusing on infrastructure in a particular country; several such country funds are currently under development. Such investment funds typically provide partial equity financing for infrastructure projects; among the funds under development are funds which would provide mezzanine financing (most typically through convertible debt) and debt financing (both senior and subordinated).

³ Bond, *supra*.

The bond and private placement markets have to date been used only modestly in infrastructure financings in the region. Two Enron power projects - the Dabhol Power Company project in India and its Hainan Island project in China - were to be financed by Rule 144A private placements in the United States. Both transactions were withdrawn when the Mexican financial crisis of 1995 caused an allergic reaction among institutional investors to all emerging markets debt instruments. The Asian Development Bank recently used its guarantee powers to assist the National Power Corporation of the Philippines (NAPOCOR) to tap the long-term Japanese bond market with a Yen 12 billion 20 year issue to finance a public sector power project. As institutional investors increase their appetite for longer-term Asian risk and as the domestic and regional capital markets with the Asia-Pacific Region mature, greater use of capital market instruments to finance private infrastructure can be expected to develop. In the immediate future, most forays into the international capital markets by project-related companies will require credit enhancement by project sponsors, international financial institutions such as the Asian Development Bank and the World Bank, or by financial guarantee insurers.⁴

CONTRASTS TO AUSTRALIAN AND NEW ZEALAND PROJECT FINANCING EXPERIENCE

Let me turn to highlight some of the features of Asian infrastructure project financing which are similar to the features of Australian and New Zealand project financing transactions and other features which may be unique to Asian infrastructure. While it is impossible to be categoric, as each country and each project presents a combination of characteristics which defines a unique risk profile, I nonetheless think that some general comments can be made.

As I have noted, Antipodean lawyers have been at the forefront in the development of project financing techniques due to the demands of the great minerals and energy resources booms in Australia. The essential techniques of due diligence, project finance analysis and project design - risk identification, risk mitigation and risk allocation among the project parties - are characteristic of project finance transactions globally, and the current infrastructure project financings in the Asia-Pacific Region are no exception. The large-scale, complex limited recourse project financings of minerals and energy projects in Australia during the last three decades have given way to large-scale, complex limited recourse project financings of infrastructure projects in the developing countries of the Asia-Pacific Region as the leading edge of project finance practice. The wood on the project sites may be bamboo rather than gum, but the basic analytic techniques are the same.

Virtually all of the private infrastructure project financing transactions in which the Asian Development Bank has been involved have features with which you would be readily familiar. In the case of a power project, for the sake of illustration, the project would be conducted and financed through a distinct legal entity formed and operating in the project country. The shareholders may be primarily foreign parties (as was, for example, the case with the Dabhol (Enron) Power Company project in India which was wholly foreign owned by Enron, GE Capital and Bechtel) though most typical is a joint venture of foreign and local interests. The shareholders may be a combination of power industry players (such as a joint venture between a foreign power company and the local electric utility), significant local companies just entering the power sector (and looking to the foreign power company for relevant technical expertise), local and foreign institutional investors (such as the Asian Development Bank as an equity investor or investment funds such as AIDEC). It is not unusual to find that the project sponsor has required an equity investment by the principal equipment supplier, engineering firm or construction company as a condition of their being retained to work on the project.

The financing package will typically involve 20-30% shareholder equity and significant leverage, with the debt being provided by export credit agencies, international financial institutions such as

⁴ See the description of Asian Securitization and Infrastructure Assurance Limited (ASIA Limited) infra at 29.

the Asian Development Bank or the International Finance Corporation, foreign commercial banks as lenders, and local financial institutions. The security for the senior lenders is based upon the assets of the project, including contract rights and cash flows. In contrast to most Australian minerals projects and the Australian-related developing world project financings which I worked on at Ok Tedi and Bougainville, there is no offshore, hard currency revenue stream generated by export sales which can serve as the core of the debt service package and of the security. Infrastructure projects are more difficult in part because they are based on local currency revenue streams paid for their output, such as purchases of power by the local electricity company or tolls paid by local motorists. Lenders of foreign currency debt and foreign project sponsors are dependent upon the host government to assure convertibility of local currency receipts into foreign currency to meet payments due to such lenders or the sponsors.

Sponsor support is common, often in the form of subordinated funding to cover cost overruns or periodic cashflow shortfalls and in the form of completion guarantees. Increasingly, project risks are sought to be ameliorated by fixed-price, date-certain turnkey construction contracts with explicit liquidated damages provisions; by contracts with equipment vendors which contain performance warranties and guarantees; and by other firm, third-party contractual obligations, both on the "supply" side, such as for the supply of goods or services to the project, and the "delivery" side, such as off-take or take-or-pay arrangements.

Governmental support is also common, but policies differ significantly between countries. To facilitate the limited recourse financing of projects and recognising the limited financial strength of some of the governmental entities contracting, for example, to purchase power or to provide fuel, governments have been prepared to guarantee the performance of such governmental entities in the Philippines, Pakistan and in India for eight so-called "fast track" projects. In Malaysia, Thailand and Indonesia government guarantees have generally been unavailable for private infrastructure projects.

What, then, are the major differences between the financing of infrastructure in the Asia-Pacific Region and project financing in Australia or New Zealand?

Local Currency Revenues

I have already noted that infrastructure projects in the Asia-Pacific Region do not carry with them comfortable foreign currency flows of export earnings. This is characteristic of infrastructure projects generally and distinguishes them from the project financing of export-oriented minerals projects. For infrastructure projects in the Asia-Pacific Region, the picture is complicated by the relatively high level of participation of foreign financial institutions providing foreign currency financing and the relative weaknesses of the host country legal and regulatory environments.

Sources of Finance

The second major difference relates to the **sources of financing**. I have already described the typical sources of financing for an Asian private infrastructure project. The contrasts to the situation in Australia and New Zealand are severalfold. There is in Australia and New Zealand a broader and deeper network of commercial and merchant banks which, either alone or in syndicates, are available to consider significant amounts of long-term debt for an infrastructure project. There are also well-developed debt instruments available in the capital markets. There are venture capitalists and other equity providers. And all of this activity can take place in a sophisticated financial market. Australian and New Zealand financiers looking at an infrastructure project in their home markets are in a far better position to evaluate, and become comfortable with, governmental performance risks related to such a project by contrast to the evaluation of governmental performance risks in an overseas market in which the financing institution's local presence may be rather limited and its history in the local market rather short.

For Asian infrastructure projects, however, there are only limited sources of long-term debt. For example, for these projects, and whether due to country ceilings on the exposure of individual banks or otherwise, the limited commercial bank involvement in Asian infrastructure projects is a

significant constraint to financing in most of the Asian Development Bank's developing member countries. Very often, the commercial banking piece is the most difficult to organise. I have noticed that there are not many, if any, Australian or New Zealand banks involved in the provision of long-term debt for infrastructure projects in the Asia-Pacific Region. This may be due to pressures at home. I do know that the bank has made a number of forays here to encourage Australian and New Zealand banks to become involved in cofinancing opportunities with the bank; however, to date Antipodean bankers have not been attracted by these opportunities.

The evidence to date suggests that international commercial banks are still uncomfortable with the risk profile of many private infrastructure projects in the Asia-Pacific Region. The level of their appetite will vary from country to country and will also be dependent on the identity of the sponsors and of the other participating lenders. One of the principal challenges to the host governments and to international development finance institutions such as the Asian Development Bank is to assist in mitigating the risks which are of most concern to the commercial bankers which, as we shall see, are sovereign risks.

Much attention is being focused in the region on two aspects of the mobilisation of long-term debt. The first is on the further development of the local financial and capital markets to mobilise local savings and generate local currency equity and debt for investment in private infrastructure projects. Regulatory changes to permit domestic retirement funds and insurance companies to invest in, and lend to, private infrastructure projects would, in many countries of the region, significantly increase the amount and lengthen the tenor of funding available for such projects. As an example, the Employees Provident Fund of Malaysia provided one-half of the debt financing required for the US\$1.5 billion Lumut Power Project in the form of fixed-rate, long term bonds which were locally rated; Malaysian commercial banks provided the balance of the debt financing as 15 year floating rate debt.

The second focus of such attention is on credit enhancement of Asian projects and related financing instruments in order to tap the institutional investor market, particularly US institutional investors such as insurance companies and pension funds. These investors have strict investment guidelines, often linked to the rating of debt instruments. If credit enhancement techniques can be applied to Asian infrastructure projects, this will open potentially large sources of new investment funds.

Rates of Return

The **rate of return** expected by the developer of an infrastructure project in the Asia-Pacific Region is usually significantly higher than the rate which would be acceptable for a similar project in a developed country setting. This is obviously a function of risk or perceived risk. The risks which are considered distinctive are the combination of risks which I have described as sovereign risks. There is also some premium for what might be described as "pioneer risk": the risks associated with being among the first to attempt a complex private infrastructure financing in a country with limited, if any, experience of such projects and in the context of a legal and regulatory environment which is still emerging. The major global players in the market for infrastructure projects are attracted to the region because of the numbers of projects, their relatively large size and the prospect of high returns commensurate with higher risks and, possibly, more limited competition for certain projects.

Sovereign Risk

As project financiers complete their risk analysis of proposed private infrastructure projects in the Asia-Pacific Region, the risk which they find most difficult to analyse, to mitigate and to allocate is that series of related risks which describe the roles of the host government and government enterprises in such projects and the concerns of project sponsors and lenders about the due performance of such roles.

The roles include that of the host *government as regulator* of the infrastructure sector in which the project operates and which, invariably, involves a new and evolving regulatory regime. Private

infrastructure defines the end of the provision of services in the relevant sector by a monopolist provider, be it a government department or government enterprise. Project sponsors and their financiers require comfort that a regulatory regime exists for the regulation of the project enterprise - be it a power plant, highway or urban light rail system - in accordance with transparent rules, consistently applied, and effectively enforced. Tariff setting is an important element of such a regulatory regime, since it is the principal determinant of project economics. But the regulatory regime must have other critical elements. It must assure non-discriminatory treatment of market participants and the non-abuse of dominant market position by the traditional monopolist. It must ensure the independence of the regulator from the government's continuing interest as owner of the traditional monopolist: the roles of regulator and market participant must be separated within government, and the independence of the regulator assured.

In many countries of the Asia-Pacific Region the pace of development of infrastructure projects has outstripped the consideration and resolution by the host governments of broader regulatory issues and the creation of effective regulatory regimes. The licensing of private telecommunications providers in India, both for cellular service and for basic telephone service, has preceded the establishment of the independent regulator which the government's New Telecoms Policy contemplates. The creation of private power projects in the region has not awaited the development of the new electricity sector regulatory regimes in which such projects will operate. Ironically and illogically, projects have proceeded under pressure from the sponsors and, in certain sectors (such as telecommunications), under pressures within the governments to realise substantial licensing fees to help reduce budget deficits, before the broader regulatory regimes have been evolved. The project sponsors and the host governments in their project documentation have attempted to insulate the projects from the broader regulatory regime which is to follow. The Asian Development Bank and the World Bank are working closely with a number of governments to ensure that such regulatory regimes are debated, created and implemented in a timely fashion. Asian Development Bank support for new private power projects in India, for example, is effectively pre-conditioned on the relevant state regulators having implemented a restructuring of the state-level electricity regulatory regime and on financial and management reforms to ensure the financial soundness of the state-level electricity boards.

I have used the phrase the "government as regulator", but I also intend by that phrase something much broader than the nature of the regulatory regime. Private infrastructure projects in the region reflect adoption by the governments of new policies to permit and encourage such projects in the private sector. Such policies involve, in some cases, the adoption of new laws (such as the BOT laws in the Philippines), new administrative policies and procedures, and the administrative implementation of such laws and policies to give them practical effect. While we may be reassured that infrastructure will enjoy greater efficiency due to the discipline, competition and profit-maximisation of the private sector, this will not be enough. Subsequent problems in the implementation of these new government policies in a number of countries call into question the breadth of the consensus within government and within the broader political system backing such new policies and procedures. Projects have been plagued by inter-ministerial conflicts at the national level, conflicts between ministerial policy-makers and the career bureaucracy, conflicts between national policy-makers and administrators and their state or provincial level counterparts, and at times by vocal public opposition based upon hostility towards foreign investment or on concern that private infrastructure will be more expensive to the public than publicly-owned and -operated facilities.

In the minds of many, this broader risk is most dramatically demonstrated by Enron's Dabhol Power Company project in India. For some this project's problems represent a watershed, in that their approach to private infrastructure projects in the Asia-Pacific Region has been reshaped as a result of Enron's experience. In the Dabhol transaction there was a national government policy promoting private infrastructure in the power sector; the project was governed by binding agreements with the consent of all parties and which conformed generally to internationally accepted standards for such projects; the Indian legal system and the judiciary is sophisticated and experienced in dealing with complex commercial transactions; there was even a Central Government counter-guarantee of the principal obligations of the relevant State Electricity Board as power purchaser. However, even these safeguards were not sufficient to save the project from repudiation by the host government at the State level and the subsequent, substantial renegotiation of the project terms. The Enron transaction in India can be used to define and

demonstrate sovereign risk, where governmental action legally to authorise and participate in a private infrastructure project did not reflect an effective consensus within government and within the broader political system about the policies being pursued and implemented.

When I speak of the role of "government as regulator" in this broader context, we move beyond the field of law and legal analysis into a broader, qualitative assessment of the country, the sector and the specific project. That broader assessment for project sponsors and project financiers involves an analysis of broader political, public administration and commercial considerations.

There is also the role in such projects of the *government and government enterprises as a supplier* of goods and services which are critical project inputs, such as fuel supplies to a power project or basic utilities (water supplies, sewerage services, electricity or steam) to a project site. These obligations are addressed in project documentation with the governmental supplier of such services, with such obligations often being guaranteed by successively higher levels of government to maximise the likelihood of performance and, in the event of non-performance, to ensure recovery against a governmental entity of financial strength.

There is the role of the *government and government enterprises as a customer* for the project's outputs, for example as the electricity purchaser from a power project. The central document in a private power project is the Power Purchase Agreement, which sets forth the power purchase obligation and the on-going pricing formula for such purchases. The purchaser in such projects in the Asia-Pacific Region is invariably the government electricity company. In many cases, such companies are poorly capitalised, badly managed, overstaffed and generally inefficient. The contractual obligations under such agreements are guaranteed by successive levels of government, as in the case of supply agreements, to maximise the likelihood of performance and, in the event of non-performance, to ensure recovery against a governmental entity of financial strength (and, often, the governmental entity with which the foreign sponsor has dealt in making the original decision to invest).

There is also the broader role of the *government as a provider of a legal framework* for the creation and enforcement of contractual rights relating to the project, including the collateral security rights of the project lenders. Closely related is the role of the *government as a provider of a broader regulatory and administrative framework for doing business*, which includes predictable and reasonably efficient regimes for the establishment and operation of companies and other business entities, for obtaining business licences, for determining and complying with environmental standards, and for meeting the tax obligations of the project companies and their staff. These risks are in addition to the classic risks of governmental expropriation (*expropriation risk*) or the failure of the government to make foreign exchange available to a project to service its foreign debt and meet its other foreign currency obligations (*convertibility and transfer risk*).

These risks in the aggregate are **sovereign risk**.

Project finance transactions in general and project finance transactions in developing countries in particular are, in my view, the most complex legal transactions in the financial world today. Remedies for deficiencies in the domestic legal and regulatory framework for a project, for deficiencies or inefficiencies in the companies law or other laws regulating commercial activity, and incentives for a project (be they commercial incentives or tax incentives) are often built into the project documentation. Agreement of the parties and the law of contract are viewed as appropriate and effective means of addressing such deficiencies and inefficiencies in the legal and regulatory framework. Where possible, foreign investors insist on such contracts being governed by the law of an established, international commercial jurisdiction, such as the laws of New York or the laws of England, and insist on dispute resolution taking place through international arbitration under an established arbitral system in a recognised international centre, such as at the ICC Court of Arbitration in Paris or the London Court of International Arbitration. Foreign lenders insist upon such a choice of foreign law and the jurisdiction of foreign courts (typically in New York or London) as a non-negotiable condition to their participation in financing such a project. While the foreign lenders invariably "get their way" in such choice of law and choice of forum, the foreign investors' rights in respect of such a project - as shareholders and managers of the project company and as parties to the critical project documentation (such as a

Power Purchase Agreement and the agreements providing for the supply of critical project inputs) are most often governed by the laws of the host country, though generally with provision for some form of international arbitration. Even where local law governs, the project documentation attempts to address, by agreement of the parties, many of the deficiencies and inefficiencies of the domestic legal and regulatory framework.

It must, therefore, be recognised in assessing the legal risks profile of a private infrastructure project in the Asia-Pacific Region that the effective determination and enforcement of the parties' rights will be dependent upon the local courts, whether for determination in the first instance of the project sponsors' rights, let us say under a Power Purchase Agreement, or in enforcement of foreign lenders' rights under the project financing documentation as embodied in a foreign court judgment or an international arbitral award. Typically, there will be no substantial pool of offshore assets and no pool of foreign sales proceeds outside the host country to which the foreign lenders can look for satisfaction. The web of legal rights and obligations governed by foreign law is inextricably interwoven with rights, obligations and procedures governed by domestic law and which will be determined in a domestic forum.

There is a certain "leap of faith" involved in proceeding with projects and providing financing for such projects on the basis of complex legal documentation in part governed by foreign law but which is likely to depend for its effective enforceability on the interpretation of those agreements in the domestic legal system of the host country and on a court system and judges with little experience of complex commercial transactions. It is because of these concerns that international financial institutions such as the Asian Development Bank and the World Bank are increasingly engaged in law-related technical assistance to their member governments, providing consultancy services and training to enhance the integrity of the regime of economic laws which govern private sector economic activity (including private infrastructure projects) and to enhance the skills of government lawyers and judges responsible for administering and interpreting such economic laws and the contracts which govern private sector economic activity.

These concerns about legal risks become more profound when one appreciates that the host governments have multiple roles in respect of a typical private infrastructure project in the Asia-Pacific Region. The government and government enterprises are more than regulators, suppliers and customers: the government as custodian of the law-making process and the regulation-making process is capable of making changes in laws and regulations which are adverse to the project and which, to the extent that aspects of the project are governed by domestic law, become a part of the contractual web which defines the rights and obligations of the project parties. The exercise of such law-making and regulation-making powers by governments is constrained by principles of public international law and by such governments' bilateral and multilateral treaty obligations. In this respect bilateral investment protection treaties and multilateral conventions such as that establishing at the World Bank the International Center for the Settlement of Investment Disputes (ICSID) provide some protection and comfort.

To sum up these observations, the principal distinguishing characteristic of the project financing of infrastructure projects in the Asia-Pacific Region is the multi-dimensional nature of the sovereign risks which must be dealt with in the project financing design and documentation. The principal task which lies ahead for the host governments concerned, for project sponsors and their financial and legal advisers, and for development finance institutions such as the Asian Development Bank is finding more effective ways of **mitigating sovereign risk** in the financing of infrastructure projects in the Asia-Pacific Region. It is only through the more effective mitigation of such risks that it will be possible for host governments and project sponsors to attract the very high levels of financing, and in particular, long-term debt financing, which are needed to meet the infrastructure requirements of the region over the next decade.

ILLUSTRATIVE CASE STUDIES

It may be useful to look at two case studies of private infrastructure projects in the Asia-Pacific Region which have encountered major problems in implementation, and to consider how sovereign risk has played out in respect of such projects. The two projects - Bangkok Expressway, in which the Asian Development Bank was a lender and an equity investor, and the

Enron Corporation's Dabhol Power Company project, in which the bank played no role - are "successful" projects in the sense that Bangkok Expressway is operational and that the Dabhol project is about to resume construction and is one of only two of India's "fast track" projects to reach financial closing and in which there is at the moment a reasonable expectation of the project becoming operational. Most other private infrastructure projects which have not been able to mitigate sovereign risks to the satisfaction of the project financiers are "unsuccessful" in the sense that they never reach financial closing.

Thailand: Bangkok Expressway Project

Some of you may be familiar with the complex project financing which attended the Bangkok Expressway Project. Of this project it has been said that it provides earthly confirmation that "the road to hell is paved with good intentions".

In October 1990, the Asian Development Bank approved an equity investment of US\$10 million in the project company, Bangkok Expressway Co Ltd (BECL). This gave the bank an equity stake of around 4.5% in the capital of BECL (total equity: US\$220 million), with the Japanese construction company Kumagai Gumi Co Ltd investing around US\$144 million for a 65% stake in the company. Thai interests held approximately 30% of the equity, though this holding was fragmented between a number of investors.

Concurrently, the bank approved a loan of US\$30 million to BECL. This loan was part of a total long-term debt package of US\$880 million. The largest portion of the long-term debt (US\$650 million) was to be provided by local banks, an unusually large proportion of domestic financing for a private infrastructure project in the region,⁵ an additional US\$200 million was to be provided by a consortium of local and foreign banks.

BECL was promoted by Kumagai Gumi for the purpose of establishing an elevated 37 km long multi-lane toll express system in Bangkok, known locally as the Second Stage System or "SES". The project was to be implemented as a build, operate and transfer (BOT) scheme under a 30-year concession agreement (the SES Agreement) between the Expressway and Rapid Transit Authority of Thailand (ETA) and BECL. The total cost of the project was estimated at US\$1.15 billion.

The Asian Development Bank was the fifth largest creditor of the project and, with its equity investment, the project's fourth largest financier. It was anticipated that BECL would be floated on the Security Exchange of Thailand and that the bank would eventually exit as a shareholder by selling its BECL shares on the market.

As is typical of a private infrastructure project financed on a limited recourse basis, the financing structure and documentation were complex. The main project agreement, the SES Agreement, became the "backbone" of the project and set out clearly the rights and obligations of the parties during construction and in the subsequent 30-year period of operation. Among other things, the agreement defined the applicable toll structure, set out the formula for revenue sharing and explained the methodology for future toll fee revisions. The agreement had detailed provisions dealing with "exceptional events" which could undermine the agreement, including increases in inflation rates or interest rates and the inability of the Expressway Authority to effect toll fee increases as scheduled. The validity of the agreement was confirmed by a formal legal opinion of Thailand's Ministry of Justice. The loan documentation would be familiar to any lawyer involved in sophisticated project finance transactions: in addition to the loan agreements, there was extensive security documentation creating security in the shares of the project company, in all relevant project documentation and in the project company's cashflows from toll collections; intercreditor agreements were in place, and there were the usual arrangements among the shareholders of BECL. All parties were advised and represented by international and local

⁵ It should be noted that Malaysia's private infrastructure projects have also involved a relatively large proportion of the financing being provided by local, rather than offshore, financial institutions.

counsel, the documentation was heavily negotiated, and the final legal obligations of the parties were confirmed by comprehensive legal opinions.

The project documentation eloquently confirmed the urgent need for this major piece of transport infrastructure, as recognised by the Thai authorities.

For all intents and purposes, the government had taken appropriate initiatives to create a legal framework to undertake privatisation or private infrastructure in the transport sector.

The turnkey nature of the construction contracts had the project delivered at a target cost, within a target time, with these obligations supported by appropriate warranties and performance bonds. Upon completion of the complex and demanding construction phase, BECL would assume responsibility for operating and maintaining the expressway in accordance with the provisions of the SES Agreement.

The project evaluation was supported with a detailed traffic analysis and a financial analysis depending on a critical review of toll fees and revenue sharing, which was subjected to appropriate sensitivity tests. There was also an overall economic analysis for the sector.

In short, as a project financing exercise, the Bangkok Expressway Project and its financing would pass any test of sound risk assessment and mitigation, supported by appropriate legal documentation.

What went wrong?

(i) Tolls

According to a formula under the SES Agreement, BECL was to share in tolls collected for the entire Bangkok expressway system upon the achievement of certain milestones in the construction of the SES. In addition, the tolls were expected to be increased by the Thai authorities from Baht 15 to Baht 30 (that is, from approximately US\$0.60 to US\$1.20). With the toll increase and BECL's sharing of tolls, this was to provide BECL with appropriate cashflow in order to service its debt.

The proposal for toll increases became a political issue in Thailand, and there emerged a fundamental difficulty in establishing *any* increase, quite apart from the stipulated increase to Baht 30 (US\$1.20). Moreover, there was a dispute between BECL and ETA as to whether the appropriate project milestones had been achieved, such as to commence the sharing of revenues.

(ii) Operation of the SES

Although it was clear from the SES Agreement that BECL would operate and maintain the Second Stage Expressway, ETA contended that, due to certain unspecified legal constraints, BECL could not operate the SES. As a result, ETA proposed that operation and maintenance should be the sole province of ETA.

Clearly, this was inconsistent with the fundamental concepts underlying the BOT award of contract. BECL resisted strenuously any suggestion that it should be deprived the opportunity to operate and maintain the SES. To the project lenders, the ETA's position appeared to be a fundamental breach of the SES Agreement.

(iii) Suspension of works

In these rather difficult circumstances, the Thai banks which were providing the onshore credit facilities stipulated certain conditions for further drawdowns of funds to BECL. The conditions related to the perceived increase in risk as a result of the dispute between ETA and BECL. BECL could not agree to the conditions and, as a result, further disbursements from the Thai banks

were suspended. Negotiations commenced to resume disbursements; however, BECL remained starved of funds.

As a consequence, BECL defaulted in the payment of interest to the project financiers, including the bank.

In view of the lack of funds (and particularly in view of BECL's reluctance to complete the project, with the threat of a take-over by ETA), BECL suspended further works on the project. BECL argued that it could not knowingly continue to incur expenditures where it lacked the means to pay for those expenditures. ETA resorted to the Thai courts and was successful in compelling the opening to the public under ETA management of a completed portion of the Expressway on the basis of provisions in the Thai Civil and Commercial Code permitting the exercise of extraordinary powers in situations of "national emergency". BECL initiated conciliation procedures in Thailand under the terms of the SES Agreement, as the preliminary step towards the commencement of international arbitration proceedings against ETA.

The financing banks, while sympathetic with BECL's position on its right to operate the SES, believed that it would be counter-productive to suspend works. From their perspective, it was most important to complete the works, to make the SES operational, and to begin generating cashflow which would permit proper servicing of their debt.

(iv) Conflict and resolution

The offshore financing institutions faced a number of difficulties with the project:

- The preponderant amount of financing came from the onshore banking syndicate and, as such, the Thai banks very much influenced the course of events in dealing with BECL and the Thai authorities.
- As there were more than 30 offshore financial institutions involved, individual institutions each had quite a small stake in the total financing. It proved difficult to achieve consensus or agreement on an action plan among such institutions.
- Under the project documentation, the offshore financial institutions could not unilaterally exercise rights against the project security - any enforcement of security required the concurrence of the onshore banks. The Thai banks were unprepared to declare an Event of Default.

Ultimately the Thai banks, in conjunction with the Thai authorities, organised a takeover of BECL by a local Thai consortium. The shares of all foreign shareholders, including the bank, were purchased and the outstanding debts owed to the offshore banks were prepaid in their entirety, including prepayment premiums. In other words, all foreign investors and foreign financiers were taken out of the equation.

Two years later, the tolls were increased and BECL completed a very successful initial public offering of its shares on the Stock Exchange of Thailand.

What was missing here? What might have been handled differently? In retrospect it appears that, despite all formal legal approvals for the project having been obtained, there was not a consensus within the Thai Government as to the role of private infrastructure or as to the appropriateness of this project being undertaken on a private infrastructure basis with foreign investors and financiers. No such consensus appears to have existed within government (as evidenced by ETA's opposition to BECL operating the Expressway as provided by the SES Agreement) and there was insufficient consensus to ensure implementation of the increased tariffs contemplated by the SES Agreement and which were required to ensure full debt service. When difficulties arose, none of the equity investors (including the Thai investors who were co-venturers with Kumagai Gumi or the Asian Development Bank), none of the foreign lenders (including the bank) and none of the other parties to the transaction was able to bring sufficient pressure to bear on the government to ensure performance of the project documentation in

accordance with its terms. While legal proceedings were commenced, ultimately the parties adversely affected by the government's actions decided not to pursue aggressively the legal remedies available to them under the project documentation.

What has been the impact of this experience on the parties concerned? The Bangkok Expressway project has been completed and is now being operated by EAT. Kumagai Gumi remains actively involved in infrastructure projects within the Asia-Pacific Region, as do the financial institutions, including the Asian Development Bank, which participated in the Bangkok Expressway project and whose interests were bought out. The Bangkok Expressway experience has complicated the process of organising the project financing of other private infrastructure projects in the Bangkok region, most notably Gordon Wu's Bangkok Elevated Road and Train System (BERTS) which, according to press reports, has encountered significant implementation difficulties.

Dabhol Power Company

The Dabhol Power Company project in Maharashtra State of India involves the construction of a 2150 MW power project in two stages (695 MW and 1320 MW) at a projected cost of US\$2.8 billion. The project company is wholly-foreign owned, with 80% of its shares held by Enron Corporation and 10% each by GE Capital and Bechtel, which are involved with the project, respectively, as equipment suppliers and engineers.

The project was designated by the government of India as one of eight "fast track" power projects which would benefit from a Government of India counter-guarantee of various obligations of the State Electricity Board of Maharashtra (SEB) under the Power Purchase Agreement and other project documents. Such obligations of the SEB are guaranteed by the State Government of Maharashtra and are counter-guaranteed by the Central Government. As you may know, India is a federal state and the electric power sector is primarily subject to regulation at the state level and to the role of the State Electricity Boards as generators and distributors of electricity. Historically, and it is still largely true today, the State Electricity Boards are inadequately capitalised, poorly managed, overstaffed and inefficient. Some are effectively insolvent as a result of inadequate capital, inadequate rates of return on invested capital, poor operating efficiencies, and significant delinquencies in account payments by state-owned enterprises. Rate setting has been politically sensitive, and rates reflect significant cross-subsidies to rural customers and to residential customers.

The project was criticised by the political opposition in the State of Maharashtra and by civic groups. The bases of criticism were numerous: there were allegations that Enron had made pay-offs to the ruling Congress Party which then controlled the State Government, allegations that the power plant cost too much and that the purchase price agreed to by the SEB was excessive as the result of the failure of the State to use an open competitive bidding process for the plant, allegations that the proposed plant would effect environmental damage to the villages adjoining the plant site, and criticism that foreign investment should not be permitted in the power sector because of the need to protect consumers. The debate was vocal, visible and at times hysterical. The project commanded headlines in the Bombay and Indian press for many months. A total of 14 writs were brought before the High Court in Maharashtra over a period of two years, challenging various aspects of the project, including the failure to use competitive bidding and the claimed environmental damages; each of these challenges was dismissed by the courts.

The financing was completed, involving a combination of export credits and syndicated commercial loans, and construction began. As a result of State elections, the ruling Congress Party was unseated in Maharashtra and a coalition government including the Bharatiya Janata Party (BJP) gained control of the State Government. Inquiries into the Dabhol project were conducted, focusing on allegations of corruption. Such allegations were never proven. The Central Government used its best efforts to support the project. Domestic and international business groups expressed support for the project. Many in the international business community described the challenges to the project as a test of India's commitment since 1991 to economic liberalisation; many felt, and stated, that cancellation of the Dabhol project would undermine international confidence in India and dramatically affect the flows of foreign investment into the

country. The Government of the United States made strong representations to the Indian Government regarding the project, with its three American sponsors. Nonetheless, the State Government decided in August 1995 to cancel the project on the grounds that project costs and the resulting power purchase price were excessive.

The State Government's decision was greeted with shock in New Delhi, in the international business community and among some segments of the Indian business community. The decision prompted editorial comment in leading newspapers in New York, Tokyo, London and Hong Kong, and the intense debate about the project in the Indian press escalated even further. International arbitration proceedings were initiated by Enron under the project documentation. Enron claimed that cancellation of the project would cost the State US\$300 million for investment-to-date and, possibly, an additional US\$200 million in lost profits. As with the Bangkok Expressway project, the conduct of the State Government and the SEB was contrary to their express contractual obligations under the project documentation.

Arbitration proceedings were initiated by the project sponsor to establish that the governmental parties to the project were in breach of their contractual obligations. As with Bangkok Expressway, the matter was resolved outside any such legal proceedings. A negotiated settlement was reached by which Dabhol reduced the power purchase price payable by the SEB, shifted the fuel to be used in Stage I of the project to an environmentally cleaner source, and agreed to sell the SEB an equity stake in the project company. In return, it appears that Dabhol received assurances that Stage II of the project would proceed in due course, increasing the capacity of the plant and lowering the per unit sales price of power to the SEB. These matters were of particular interest to Enron, because Stage II of the project was to be fuelled by gas to be supplied by Enron from Qatar. I understand that construction work at the Dabhol site has now been resumed.

What are the lessons of the Dabhol project to date (recognising that further chapters may yet be written before the plant is commissioned)? In retrospect, the project may have fared better if it were not wholly foreign-owned. Ironically, at the same time as the Dabhol project was being subjected to such heavy public criticism in India, the exploration and production arm of Enron was proceeding with oil and gas exploration and production concessions in India, conducted through a joint venture in which Enron has a 40% interest and the remainder of which is owned by Reliance Industries (India's largest industrial group) and the state-owned Oil and Natural Gas Commission (ONGC), though with Enron as the manager of the exploration program.

Again, there was no consensus on the project or even the framework for private power within the Government (at least as between the Center and the State Government) and no broader political consensus for private power, despite the Government's clearly articulated policy and legal framework for such projects. The unsatisfactory state of the regulatory framework at the State level, the pattern of ingrained cross-subsidies in the tariff structure, and the unsatisfactory financial condition of the State Electricity Boards and their poor management will not provide a conducive environment for the success of private power projects unless and until the movement toward private power to meet the demands for new generating capacity is coordinated with policy, legal, regulatory and financial reforms in the power sector at the State level and by rationalisation of the relationship between the Center and the State Governments. Such reforms are taking place at the State level, though at very different speeds in each State. Such reforms are being encouraged by the Center and by development assistance institutions such as the World Bank and the Asian Development Bank.

One of the lessons of the Indian experience to date is probably a lesson of too great haste. When we speak of markets, we assume that private investors always make well-informed and rational decisions which are economically optimal. In fact, investors decided to proceed with projects at the earliest moment following agreement with the government agencies most directly concerned and as soon as financing could be arranged. Little attention was paid to what I have termed the lack of consensus within government and outside government on such private power initiatives. A precondition to effective consensus is relevant knowledge and information, and the levels of knowledge and information about the nature of private power and its implications was lacking among Indian government officials, at least at the State level and, most importantly, at the State Electricity Boards. In an effort to redress the balance of knowledge and information, the

Government of India is using World Bank and Japanese Government aid funds to finance the cost of international financial and legal advisers to assist the State Electricity Boards in reviewing and renegotiating all Power Purchase Agreements. The Asian Development Bank is considering technical assistance to the Government of India to provide in-depth training for a group of government lawyers in the legal aspects of private infrastructure development including, possibly, the establishment of channels for on-going access to international legal advisers who are expert in the field.

The World Bank, the Asian Development Bank and a number of bilateral donors are working with the Government of India and with various states on comprehensive policy, legal, regulatory and financial reforms to the electric power sector. These inevitably must contribute to a more secure environment for private power projects in India, reducing the sovereign risks, both political and legal, to which the Dabhol project was exposed.

MITIGATING SOVEREIGN RISK - INITIATIVES AT THE ASIAN DEVELOPMENT BANK

Returning from Thailand and India to the Asia-Pacific Region as a whole, what steps are being taken to mitigate sovereign risk? I have noted that, looking at private infrastructure projects in the region, the level of appetite of international commercial banks for such projects could be higher if their concerns about sovereign risk could be addressed more effectively. Let me identify a number of initiatives by the Asian Development Bank which address this challenge: mitigating the sovereign risk of private infrastructure projects to commercial lenders, which are the clients you as lawyers are most likely to represent in the financing of such projects.

An institution such as the Asian Development Bank is probably uniquely suited to address sovereign risk, since the sovereigns about whose risk commercial lenders are most concerned are among the shareholders of the bank and its principal borrowers.

As you may know, the Asian Development Bank was established in 1966 to help accelerate the economic and social development of its developing member countries (or "DMCs" in bank parlance). The bank seeks to achieve this goal by providing financial assistance (including technical assistance) for projects and programs that contribute to sustainable economic development and social advancement. The bank provides assistance primarily to the public sector; however, from the mid-1980s the bank has actively financed the private sector in Asia, through loans, equity investments and the provision of guarantees. The bank's structure and functions are broadly similar to those of the World Bank, but with our distinctive regional focus.

The bank is owned by its 56 member countries, 40 from the region, including Australia and New Zealand, and 16 from outside the region; there are 37 DMCs eligible for bank financial assistance. The "Asian" region includes most of the island states of the Pacific. Japan and the United States are the two largest shareholders of the bank. Australia holds slightly more than 7% of the bank's subscribed capital and enjoys a shade over 6% of the voting power. New Zealand holds a little less than 1% of capital, but enjoys around 1.1% of voting power. Both countries were founding members of the bank.

As a lawyer who has spent most of his professional career representing commercial banks and other financial institutions in their dealings with their customers in the Asia-Pacific Region, including the governments of the region, I am quite struck by the uniqueness of the relationship between the bank and its borrowing member countries. Commercial bankers like to talk about "relationship banking", and yet I have not seen in the commercial sector relationships comparable to those which exist between the bank and its public sector borrowers. The relationship has been built on thirty years' experience, during which the bank has made critical contributions to the development programs of its members. The relationship includes long-term commitments to the development of particular sectors, and a level of knowledge of such sectors at the bank which is unparalleled in the private sector. The relationship includes an on-going dialogue on government policy in such sectors which transcends even the closest relationship which such governments have with their leading commercial bankers and underwriters. The bank is far more comfortable with the sovereign risks of such countries than is the typical commercial banker. The bank's

comfort is reflected by its AAA credit rating despite a loan portfolio packed with the sovereign risks about which other financial institutions are so concerned. It is for this reason that the bank and comparable multilateral financial institutions may have a particular catalytic role to play in helping other financial institutions reach a level of comfort with the sovereign risks inherent in private infrastructure projects.

Let me discuss three approaches to mitigating sovereign risk in private infrastructure projects in the Asia-Pacific Region in conjunction with the Asian Development Bank. The first involves participation in the bank's Complementary Financing Scheme. The second involves use of the bank's guarantees, particularly its new partial risk guarantees. The third involves use of the financial guarantee insurance policies of Asia's first financial guarantee insurer, created through co-sponsorship by the bank: Asian Securitization and Infrastructure Assurance Limited (ASIA Limited).

Cofinancing with the Asian Development Bank: Complementary Financing Scheme

For some years the Asian Development Bank has offered a participatory cofinancing scheme called the Complementary Financing Scheme or CFS. This scheme involves the prearranged sale to commercial lenders of participations in a bank loan, but without credit recourse to the bank. The bank appears as the lender-of-record and arranges and administers the cofinanced or complementary loan for the benefit of the participating commercial banks on a non-recourse basis. This is very similar to IFC's "B Loan" program.

The obvious benefit of this scheme is that the complementary loan, albeit funded by commercial lenders, attracts the benefit of the bank's preferred creditor status under the bank's Charter. As the bank is the lender-of-record, the complementary loan enjoys the privileges and immunities available to the bank, including immunity from taxes (such as withholding tax) and freedom from restrictions and moratoria, which ensures the free remittance of interest and repatriation of principal.

In the usual case, the bank provides a principal loan and/or equity investment out of its own resources. As a complement to this main loan, commercial financiers participate in the funding of the complementary loan. In the past two separate documents would be used: one for the bank's loan and another for the CFS tranche; however, the bank now aims to document CFS loans to private sector borrowers with a single loan agreement which will cover both the bank's main loan and the complementary loan. In addition, recent changes will permit the participating financial institutions to accelerate the CFS loan without the bank's consent if a payment default occurs.

CFS loans are generally available in our developing member countries which have below-investment-grade credit ratings. The CFS is available for projects both in the public and the private sector; but it must be said that it is used quite selectively for public sector projects. CFS loans are available in private infrastructure projects in which the bank participates. Within the past month the Fauji Kabirwala power project in Pakistan reached financial closing, including a major CFS tranche underwritten by ABN-AMRO.

On one view, virtually all sovereign risks are addressed with a complementary loan: in effect, the participating financial commercial institutions derive the privileges of the bank's preferred creditor status. Such privileges provide assurance, as a matter of international law, that these loans will not be subject to rescheduling in the event of a debt crisis in the host country. The participating commercial banks may, in certain cases, be relieved of provisioning requirements in respect of these loans under their home country risk-weighted capital adequacy rules.

In respect of such CFS loans, the bank would ordinarily charge an arrangement or front-end fee which would be a flat rate for public sector borrowers and calculated by reference to the loan amount in the case of private sector borrowers. The bank also charges an annual administrative fee.

Typical maturities for CFS loans would be around eight years with a slightly longer period for private infrastructure transactions and a longer period again for public sector projects.

Guarantees Offered by the Asian Development Bank

In 1995 the Board of Directors of the bank adopted a new policy regarding the use of guarantees to support projects in which the bank is participating. Prior to 1995 the bank had only undertaken a small number of projects which had involved bank guarantees. Guarantees had only been made available in exceptional circumstances, and they displayed some common features: in each case the bank assumed the role of secondary obligor, with the host government being the primary obligor; the guarantees were only extended for later maturities (or maturities beyond which commercial cofinanciers were not prepared to accept additional country exposure); and the guarantees were only issued in conjunction with the bank's CFS scheme and for the benefit of the participating CFS lenders.

What are the forms of guarantee which are now available from the bank under its expanded guarantee policy, and what are the principal features of such guarantees?

Partial credit guarantees

These are guarantees of the type traditionally provided by the bank, involving a sharing of the credit risk of the underlying transaction and, typically, with the bank's guarantee lengthening the maturities available to the borrower. The guarantee would be an all-inclusive guarantee callable in case of default, irrespective of the circumstances causing the default. Typically, the bank would guarantee either principal or principal and base interest (exclusive of lenders' spreads) for those maturities that cannot be obtained from commercial lenders without such credit enhancement. Such guarantees are payable by the bank against the borrower's failure to make scheduled payments and are not subject to acceleration without the bank's consent. A notable example of such a partial credit guarantee is the bank's recent guarantee (in the form of a put option) lengthening the maturity and lowering the cost of the Yen 12 billion 20 year samurai bond of National Power Corporation of the Philippines, which I have previously mentioned. The bank's guarantee extended only to the bullet repayment of the bond's principal amount; interest payments on the bond were guaranteed by the Republic of the Philippines, but not by the bank.

Partial risk guarantees

These guarantees will be available for coverage of specific sovereign contractual obligations which are critical to the sustainability of a private infrastructure project; they will not cover commercial risks. The first of such partial risk guarantees is currently under negotiation.

Such guarantees will be designed to cover specified risks that are critical in each project. Covered risk may include discriminatory government action of various kinds, non-delivery by state-owned entities of inputs or non-payment by such entities for outputs; unavailability of essential public services; adverse changes in the agreed regulatory framework or in an agreed tax regime; the failure to provide essential complementary infrastructure; compensation for interruption or delays caused by governmental action or political force majeure; transfer risks; and damages arising from the unavailability of foreign currency or restricted transferability. In each case the covered risks will be against governmental non-performance of explicit contractual obligations, the breach of which is quantifiable and subject to pre-determination. The bank's partial risk guarantees will not cover situations in which projects are adversely affected by domestic laws which are constitutional, non-discriminatory, not arbitrary, and not in violation of express contractual undertaking of the government or government-controlled entities in respect of the project. Neither will expropriation risks be covered in circumstances in which such governmental action is not contrary to accepted principles of public international law.

The bank's guarantees are guarantees of debt for the benefit of project lenders and will not extend to protect the investment or return of a project's sponsors.

Such guarantees will need to be written so as to be very specific as to the risks covered and the trigger mechanisms for calling the guarantees. These will vary from country-to-country and from project-to-project. In order to call a partial risk guarantee, it will be necessary to establish that (1) one of the enumerated risks has materialised in contravention of an express contractual undertaking by the government or a government-controlled entity in respect of the project and (2) a debt service default has occurred as a result of the materialisation of such risk.

At the present time, there are no individual limits on the amounts which may be guaranteed, nor on the tenor of the guarantees (subject only to global or Charter limits on the bank's lending and guarantee operations). Because of Charter limitations, guarantees are only available in respect of projects in which the bank is also a lender and/or an equity participant.

Government counter-guarantees

Both in respect of partial credit guarantees and partial risk guarantees issued by the bank, the bank ordinarily will require a counter-guarantee or indemnity from the host government. Given the bank's relationship with its borrowing member countries, such counter-guarantees or indemnities should be available even in circumstances in which a direct government guarantee of the underlying obligation would not be available to the commercial banks benefiting from the bank's guarantee.

As seen by the bank, its partial risk guarantee is designed to enhance the obligations which the government has already given to an investor and to project lenders. Such obligations are under the government's control, and the counter-guarantee is intended to provide further assurance to the bank of the government's commitment to the project in respect of the obligations to the project of the government and of government-controlled entities.

Bank guarantees may be available selectively where a government counter-guarantee or indemnity is not available to the bank, though I believe such exceptions will be rare, particularly in these early days of gaining experience with the bank's new partial risk guarantee instrument.

Pricing of guarantees

In the case of partial credit guarantees of public sector borrowers, the bank applies a guarantee fee which is uniform across public sector borrowers in all countries. In such cases, where the bank is the secondary obligor and the government is the primary obligor, such guarantees are priced at 40 basis points per annum, applied to the present value of the guarantee obligations.

In the case of partial risk guarantees involving private sector borrowers, the bank will consider the extent of coverage provided, the nature of the risks and the individual project and country circumstances. In such cases, the pricing of the guarantees will be determined by the market: this will reflect the value of the guarantee to the borrower and the lenders. Where the bank provides a partial risk guarantee in relation to a private sector borrower against a counter-guarantee from the host government, the bank's guarantee fee will be divided between the bank and the government such that the bank's income would be 40 basis points per annum on a present value basis. The difference between the guarantee fee and the bank's 40 basis points would be payable to the government in compensation for its counter-guarantee.

Guarantee fees could be charged either to the borrower or to the guaranteed lenders, depending on prevailing commercial practice and the circumstances of the particular project.

Financial Guarantee Insurance

In August 1995 the bank approved a \$20 million investment in a new company called Asian Securitization and Infrastructure Assurance Limited or ASIA Limited. This is a regionally-based financial services company operating out of Singapore which will specialise in providing two key financial services: (1) bond insurance to purchasers of long-term debt instruments issued by both private and public sector entities in the bank's developing member countries; and (2)

securitisation of existing loans and other receivables of finance institutions and commercial banks in the region. The company will enhance long-term debt by effectively adding its credit rating to the instruments issued by borrowers. ASIA Limited has an equity capital of \$150 million, supplemented by reinsurance resources. Duff & Phelps has rated ASIA Ltd "AA" and Standard & Poor's has issued an "A" rating. It is expected that ASIA Limited will also be rated by local rating agencies.

The bank has entered into this investment in cooperation with Capital Markets Assurance Corporation (CapMac) of New York, a "monoline" financial insurance provider, which is the main sponsor and technical partner in the transaction. In appropriate Asian transactions requiring credit enhancement to a higher rating than ASIA Limited's single-A, financial guarantee insurance policies may be obtained from CapMac, which has a AAA rating.

It is hoped that the activities of ASIA Limited will provide greater access to debt funding for infrastructure, will lower borrowing costs and the cost of capital, will boost the marketability and liquidity of Asian debt securities, and will provide assistance and flexibility for both state-owned entities and banks and other financial institutions. ASIA Limited is already contemplating the creation of national affiliates which will engage in comparable activities in the domestic financial and capital markets of individual countries of the region. There is a particular interest in encouraging the development of longer maturities and greater secondary market activity in the local currency debt markets of such countries.

I have spoken of three ways in which the bank is addressing sovereign risk mitigation: through its CFS cofinancing program, through its guarantees, and through the financial guarantee insurance activities of ASIA Limited. The bank's efforts to mobilise greater third-party funding for private infrastructure projects in the region is also demonstrated by the infrastructure funds which it has helped to launch, such as the Asian Infrastructure Fund and AIDEC which I have previously mentioned, and by the role the bank has played in the creation of Asian-focused credit rating agencies. For example, the bank has made formative investments in India's Industrial Credit and Investment Corporation, Malaysia's Southern Bank Berhad and Thailand's Thai Rating and Information Services and has promoted technical links between such companies and the international rating agencies. The establishment of independent rating systems to evaluate local issuers is intended, over time, to encourage greater activity by international institutional investors in such debt markets, since credit ratings play an important role in the decision-making processes of many such investors.

CONCLUSION

This overview of infrastructure finance in the Asia-Pacific Region has surveyed a vast and varied landscape. The infrastructure requirements of the region are, as a product of the region's rapid economic growth, massive in scale. The related financing requirements are daunting. International commercial banks and private sector institutional investors remain highly selective in their willingness to lend long-term to private infrastructure projects on a limited recourse basis. Substantial progress in attracting greater participation by such banks and institutional investors will require the mitigation of the risks of governmental non-performance in respect of such projects. Mitigation of such risks requires action by the concerned governments in clarifying and solidifying the policy, legal, regulatory and financial frameworks for such projects. Greater attention needs to be given by project sponsors and their financing institutions to ensuring as broad a basis of knowledge and information about private infrastructure in general and about the particular features of their specific projects among ministerial and bureaucratic officials of the countries concerned, among parliamentarians and among the public more generally to ensure as broad a consensus as possible for the projects being undertaken. We as lawyers - as craftsmen of complex project finance documentation - must ply our craft with a keen awareness of the limitations of the legal systems within which such transactions must operate and a keen awareness of the need for our clients to assess sovereign risk with full consideration of the political and public administration context within which such projects must function.