EXPORTING AUSTRALIAN TRANSPORT CONSULTANCY AND CONTRACTING SERVICES TO SOUTHEAST ASIA: PROGRAMME CONTINUOUS

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ABSTRACT: Bi-lateral and multi-lateral aid documents and other privately funded development projects with a transport component provide the opportunity for Australian consultancy, contracting and educational services to participate in the knowledge/based, "high" technology international industry that has grown since the Second World War.

Compiled from Australian Government sources and a survey of engineering, planning and management consultants, 131 transport projects in the ASEAN region between 1958-1980 are listed and interpreted.

Three distinct phases in the political and economic fortunes of the region are identified and Australian involvement is explained. This historical perspective is essential background to any assessment of australian Government policy on the export of technological services (the Export Expansion Grounds Act and the Development Import Finance and Facility), and on the future direction for the Australian transport consultancy industry.

> There is another dimension of Australian aid which is more elusive - the contribution of individual Australian experts. We think that, besides their technical expertise, they bring to the countries in which they serve the national spirit of making do - a pragmatic and practical approach to life which has been burnt into our national consciousness in settling and developing this continent. Australian experts have a willingness to get their boots dirty and an ability to improvise in difficult circumstances which is perhaps even more important than the professional and technical skills for which they are primarily selected. That this is not a conceit on our part is shown by the clear desire of our neighbours to place a very high priority on Australian expertise as compared with that available from many other sources.
>
> A.S. Peacock,
> Address to World Bank, UN
> Assoc. of Aust. and Joint
> ACFOA Seminar
> 17 October 1977

THE WIZARD OF OZ

There is a close analogy between the cinema and consulting and contracting industries in Australia. Both contain elements of invisible trade and sell their products on lucrative world markets where overseas competition represents challenges of enormous proportions. 'Powerful governments, international financiers, nationals from many countries, and some of the world's most renowned professionals compete against each other. There exist few rules that are acknowledged by all -- the stakes are high, as [successes] signify prestige and profits' (Guttman, 1976:19-20).[1] A low budget film/supply of vehicles and equipment costs $50,000; a documentary/feasibility study or air navigation equipment $500,000; and a feature film/integrated rural development project $30,000,000. Both industries are anxious for government subsidies. However, beyond using film titles to recreate the changing post-war mood, there the analogy must end as our script is exclusively on the industry that supplied technical services in the field of transport and

1. World-wide project financing by international aid agencies, such as the World Bank, the Asian Development Bank and other specialised development agencies, involved loans of more than $US 11,000,000,000 and disbursements in excess of $US 4,000,000,000 from existing loans and payments in 1979. Loan commitments and disbursements have been increasing at an average annual rate of more than 20 per cent. A major part of this activity is centred in Asia: new loans committed by the Asian Development Bank to member countries in 1979 totalled $US 1,250,000,000 while new loans by the World Bank in the same year amounted to $US 4,200,000,000 (Australia, Department of the Special Trade Representative, 1980:1).

development, embracing aviation, railways, roads, waterways and coastal shipping, and terminal facilities, such as ports and airports.

As significant business opportunities are derived from internationally-financed development projects -- the planning, design, supply or installation of equipment or facilities, the construction of works, and the broader socio-economic development of urban or regional areas -- the Australian consulting and contracting industries have been given a series of incentives by the Commonwealth Government to develop and expand the export of their services.[1] The rationale for these grants has to be explored because under perfect competition consultants from all over the world should converge on those areas where proposals within their professional competence are expected to develop. Although there appears to be no adequate theory of international trade in services, Magee (1977:317-40) considers that the theory of comparative advantage applies equally well to trade in information. Given Australia's proximity to the Association of South-East Asian Nations (ASEAN) -- Indonesia, Malaysia, Philippines, Singapore and Thailand -- suppliers of technical services in the field of transport should have a strong stake in the region. (Indeed, the Committee on Australia's Relations with the Third World [The Harries Report], 1979:124, stresses that it is in our daily dealings with the countries of Southeast Asia, more than anywhere else, that the Third World becomes a living reality for Australia.) Thus, three interrelated questions are raised: why has it been necessary to bolster the export of these services to our neighbours; to what extent have transport consultants participated in the global aid programme to ASEAN; and how have they responded to government initiatives in the 1970s and 1980s?

Before these questions can be tackled Australia's export of technical services in the field of transport has to be put into an historical context. This focus involves relating Australia's contribution since the Second World War to changes in the nature of international aid (i.e. the transfer of resources and technology on concessional terms) and the type of transport services offered. Ideally, projects should be analysed according to the functional classification established by the Development

1. The Export Market Development Grants Act 1974 (as amended by Export Market Development Grants Amendment Act 1978) offers cash grants to suppliers of transport consultancy services to seek out overseas markets. New legislation embodied in the Export Expansion Grants Act 1978 provides for grants to suppliers of transport consultancy and contracting services based on certain promotional expenditures incurred by a claimant in a grant year over the average of exports in the immediately preceding years). Technical services in the transport field and development projects are eligible for grants under this legislation. In the 1980 Budget, the Commonwealth Government announced a Development Import Finance Facility (DIFF) as part of its aid programme, for the payment of grants to ASEAN governments towards the costs of importing capital goods or services of Australian origin for use in development projects.

Assistance Committee (DAC) of the Organisation of Economic and Co-operative Development (OECD), but this historical perspective stretches back well before a consistent international classification was adopted by Australia. The interpretation of the Australian involvement identified by our survey of projects[1] leads to an examination of three phases in Southeast Asia's post-war political and economic development following the initial recovery from war damage in the late 1940s:

(a) the 1950s witnessed token Colombo Plan assistance for the rehabilitation of war-damaged railways and ports, and the initial and continuing concern about improving the safety of civil aviation in Southeast Asia;
(b) the 1960s saw Australian presence in the construction of all-weather highways in Malaysia and Thailand as a means of facilitating national security, the subsequent development of feeder roads and urban transport planning studies in Kuala Lumpur and Singapore;
(c) the 1970s continued to see the expansion of roads by incorporating them into 'integrated rural development projects' in Indonesia, Malaysia, Philippines and Thailand and witnessed more urban and regional planning assistance, especially in Malaysia, and a concern about traffic management in the big cities, despite a strong challenge from Japan.

This historical background helps define the nature of the Australian consulting industry offering engineering and planning services, why it was created, where it has been and how it has gone about its task. Indeed, only by knowing its antecedents and the political, economic and social context of its operations can we put ourselves into a position to discuss the Commonwealth Government's support for transport service exports and the likely response to these initiatives by the Australian consulting industry during the 1980s.

1. The list of projects is compiled from an unpublished Commonwealth Government Report 'Colombo Plan Economic Development Programme Status of Australian Aid as at 30th June 1963'; the published annual reports of the Australian Development Assistance Agency; the published annual reviews by the Australian Development Assistance Bureau (see, for example, Australian Development Assistance Bureau, 1981a, 1981b) and from information supplied by principals of those engineering and planning consultant firms listed by the Australian Professional Consultants Council in Consult Australia (Anderson, 1980) and the Directory of Consultants and Practices (Royal Australian Planning Institute Journal, 18, 1980:40-1). As of June 1981 one-third of the practices listed as corporate members of the Royal Australian Planning Institute and all but one of the practices listed by Anderson had conducted work overseas. The commencement dates of projects are not as precise as one would have wished (some refer to the signing of the contract and others to the commencement of the particular task).

THE 1950s: EAST OF EDEN

> Instead of living in a tranquil corner of the globe, we are now on the verge of the most unsettled region of the world.
>
> R.G. Casey
> Com.Parl.Debs.(H.of R.)
> 27 October 1954
> Vol.5, p.2382

Australia's aid programme during the 1950s was motivated by her preoccupation with security (even fear) and hostility to 'international Communism' -- twin concerns permeating her relationships with 'great and willing friends' namely Britain (and the Commonwealth) and the United States -- the latter receiving unstinting support in the Cold War. However, the roots of the modern concept of aid can be seen in the 'Lend Lease' arrangements between the United States and its allies in 1941. Indeed, Fortune Magazine (May 1942:59-63) prophesied that 'American imperialism can afford to complete the work the British started; instead of salesmen and planters, its representatives can be brains and bulldozers, technicians and machine tools'. With hindsight, Fortune Magazine's prophecy erred on the conservative side: it excluded the Mr Hyde representative who dropped in on Hiroshima and Nagasaki on 6 and 9 August 1945 respectively and Dr Jekyll's 'constructive vein' in promoting multilateral aid. The latter resulted from a meeting of delegates from forty-four nations at Bretton Woods, New Hampshire, which led to the establishment of the International Monetary Fund and the International Bank for Reconstruction and Development (Australia becoming a member in 1947). As these institutions were primarily established to reconstruct war-ravaged Europe rather than to assist the development of underdeveloped countries much of the initial 'charity' to Southeast Asia was bilateral.

During the Cold War the United States dispensed its largesse as part of a worldwide strategy to contain and combat international Communism. The front-line states in Asia -- Indo-China, Korea and Taiwan -- received the bulk of bilateral aid from the United States. However, after the Korean War, it was also funnelled to Thailand and newly-independent states in Southeast Asia battling internal 'insurgents' and external subversion -- areas at risk if the 'dominoes' continued to fall. Australian-proposed provision of economic aid in the Southeast Asia Treaty Organisation (SEATO) was to improve their resistance to international Communism. Although much of the aid was earmarked for transport infrastructure the objective was military manoeuvrability not economic development. Apart from Australian aid to Papua New Guinea -- 'its most important and strategic bulwark' -- a major initiative was co-sponsoring moves at the Commonwealth Foreign Ministers Conference in 1950 to establish the Colombo Plan; initially, Ceylon (Sri Lanka), India and Pakistan were the major recipients but later it extended to non-Commonwealth countries in Southeast Asia as a 'good neighbour policy'. Emphasising that Australian aid was not divorced from

non-economic considerations Sir Percy Spender described the Colombo Plan as an 'attack on poverty, social unrest and political instability and to discourage extremist ideologies' (quoted in Australian Senate Joint Committee Foreign Affairs, 1972:5). However, the Australian Development Assistance Agency: First Annual Report 1974-75 commented that economic aid at this time was at an 'insignificant level'. Official development assistance to underdeveloped countries (excluding Papua New Guinea) amounted to only $73.5 million between 1946 and 1960 -- (27 per cent was bilateral aid; the rest went to the United Nations development aid programmes and the International Bank for Reconstruction and Development). Little aid was channelled from the International Bank for Reconstruction and Development to Southeast Asia during the 1950s -- Brazil, India and Japan being major recipients of funds for transport (and electricity). Nevertheless, its role in orchestrating multilateral aid gave it a leading role in developing techniques for resource surveys and pre-investment testing. Loan funds for aid for transport projects are similar to the AASHO Manual on Benefit Cost Analyses for Highway Improvements, which was based on the pioneering work of the United States Bureau of Reclamation in the economic evaluation of water-resource projects in the public sector (Blunden, 1971:291) -- the basic techniques being borrowed from commercial practice. The other strand drew its inspiration from the early functions of state highways in the United States aimed at getting the farmer out of the mud. This rural emphasis from the 1920s onwards and the experience gained in developing the Interstate Highway System (1956) in the United States was carried over to the Bank by the American consultants engaged to undertake its feasibility studies in Japan (and later in Southeast Asia). This partially explains the post-war emergence of the international transport consultant although contemporary professionals are often unaware of the pre-war contribution of railway engineers in determining route locations and estimating construction costs and revenues (see Rimmer, 1980).

In fact railways claimed a disproportionate share of foreign loans to transport in Southeast Asia as they had invariably a majority of the nation's top administrative and planning personnel at their disposal. Until the late 1950s the highways were considered as feeders to the railway network rather than an inter-regional system in their own right. In Thailand, for example, the largely unpaved highways did not provide a reliable all-weather system outside the Central Plain. The first sign that this situation was altering was the completion of the initial all-weather highway in Thailand -- the Friendship Highway between Saraburi and Nakhon Ratchasima opened on 10 June 1958 -- which was built by the United States. Indicative of the state of highways in Southeast Asia during the 1950s it cut 180 km in distance from the alternative route and saved 8 hours in travelling time (Rimmer, 1971a:11).

As for Australian involvement in transport in Southeast Asia interest in highways emerged only at the end of the decade with a road survey on the islands of eastern Indonesia. The IBRD techniques did not infuse the projects supported by Australian

aid during the 1950s. Most Southeast Asian nations gave preference in their transport sector development -- despite their newly-acquired independent status -- to advisers domiciled in the countries of their former rulers or protectors. Not only did this limit the market for Australian private sector consultants but the Commonwealth Government had a policy of using advisers from her own departments and statutory authorities (Boxer, 1969).

TABLE 1 COLOMBO PLAN ASSISTANCE TO SELECTED SOUTHEAST ASIAN COUNTRIES -- TRANSPORT AND COMMUNICATION PROJECTS 1951-1960

Year	Country	Transport mode	Project description
1958	Indonesia	Public transport	250 diesel buses to Jakarta Municipal Authority.
1959	Indonesia	Roads	Survey of Timor, Flores, Sumba, Sumbara and Lombok
1959	Philippines	Airports	6 VHF transmitters and receivers -- Manila, Cebu and Tagajtay Ridge
1960	Indonesia	Airports	Aeronautical fixed telecommunication network to link 9 airports and Darwin, Manila and Singapore
1960	Indonesia	Airports	Training of officers in air traffic control
1960	Indonesia	Ports	Cargo handling equipment-- at Tandjung Priok, Balikpaga, Semarang and Banjarmasin
1960	Thailand	Railways	2 diesel locomotives and 8 hopper railwagons
N/A	Thailand	Railways	One hundred 25-ton wagons for State Railways of Thailand
N/A	Indonesia	Roads	Equipment and expertise for Minahasan road rehabilitation

Source: Colombo Plan Economic Development Programme Status of Australian Aid as at 20th June, 1963.

The nine Australian projects in Southeast Asia listed in Table 1 were supported under the Colombo Plan and involved government officials. Requests for assistance by foreign countries emphasised the supply of equipment and rolling stock. The Commonwealth Government's Department of Civil Aviation (DCA) provided a succession of experts for training and improvements in air traffic control in the Philippines and Indonesia -- safety considerations for aircraft overflying the area to and from Australia being a prime motive. Nevertheless, the country's lack of experience in transport planning and economics during the 1950s was in the process of being remedied: in 1956, the Australian Automobile Association's foundation Chair of Traffic Engineering at the University of New South Wales was the first of its kind in the British Commonwealth. The fruits of this graduate study in transport planning, traffic and highway engineering became evident in the 1950s, especially when Australia was assuming greater responsibility in Southeast Asia.

THE 1960s: THE ROAD TO UTOPIA

> We want to see an Asia in which the free nations of that continent, whether newly independent or long established, will be able to develop their own way of life in a state of security from aggression.
>
> P.M. Hasluck
> Com.Parl.Debates (H. of R.)
> 23 March 1965
> Vol.45, p. 234.

Changes in Australian aid, technical assistance and consultancy services in the transport field occurred in the 1960s to match the varying political fortunes of Southeast Asian countries -- a battleground between 'wars of liberation' and 'counter insurgency'. As United States involvement in the Second Indo-China War escalated there was increased Australian support for Thailand and newly-independent Southeast Asian states struggling to achieve and maintain national unity among their ethnically-fragmented populations in the face of internal threats from 'subversive elements'. Indonesia's confrontation policy with the Netherlands over West New Guinea and Sukarno's order that Malaysia was to be `crushed` in Borneo only served to heighten tensions. However, following the downfall of the Sukarno administration in 1965 Australia welcomed confirmation that confrontation was to be terminated: it trebled its aid in 1967-68 to restore the Indonesian economy and rehabilitate essential services in return for an 'open door' policy on foreign investment; it also marked greater regional co-operation and the formation of the Association of South-East Asian Nations (ASEAN) in 1967.

In response to these political demands Table 2 shows that Australian aid was increased threefold during the 1960s compared with the 1946-1960 period. Technical assistance continued to be supplied exclusively by experts from Commonwealth Government departments or from statutory bodies such as Qantas Empire

Airways Ltd and the Snowy Mountains Hydro-electric Authority until 1963 when consultancy services emerged with urban and rural road planning in Malaysia, urban renewal in Singapore, port and airport management, and structural engineering work on bridges in Sarawak. Towards the end of the 1960s private sector consultancy firms were competing successfully for contracts with IBRD, United Nations Commission for Asia and the Far East, and the Asian Development Bank (established 1966); -- Australian consultants participating in the Asian Development Bank's regional transport study of ASEAN.

TABLE 2 OFFICIAL AUSTRALIAN DEVELOPMENT ASSISTANCE TO LESS DEVELOPED COUNTRIES 1961-1970 ($'000)

Year ended 30 June	Multilateral aid	Bilateral aid Papua New Guinea	Bilateral aid Other	Total
Total 1946-1960	109,099	202,000	73,529	275,529
1961	9,403	38,200	11,266	58,869
1962	8,186	44,400	12,281	64,867
1963	10,428	49,800	14,925	75,153
1964	11,175	61,204	14,041	86,420
1965	5,657	68,156	24,048	97,861
1966	8,545	75,362	25,717	109,624
1967	13,166	84,321	28,175	125,662
1968	14,633	92,432	34,242	141,307
1969	13,419	100,829	37,499	151,747
1970	11,934	116,248	39,541	167,723
Total	106,546	730,952	241,735	1,079,233

Source: Australian Development Assistance Bureau (1979).

The content of aid was as if Utopian development was to be found at the end of a road. Operational improvements to airports in Malaysia, Philippines and Singapore, the selection of suitable sites for ports along the Thai and Sulawesi coastlines, and port dredging and railway rehabilitation in Indonesia maintained the pattern set in the 1950s but highway construction was superimposed. Table 3 confirms the shift towards roads especially in Thailand and, initially in East Malaysia (over 42 per cent of the 32 projects commenced between 1961 and 1970 were for road as and bridge construction) -- the road being perceived as an instrument for assisting social cohesiveness and maintaining internal security.

TABLE 3 AUSTRALIAN CONSULTING AND CONTRACTING IN THE ASSOCIATION OF SOUTH-EAST ASIAN NATIONS (ASEAN) -- TRANSPORT AND COMMUNICATIONS PROJECTS 1961-1970

Date commenced	Country	Transport mode	Project description	Client funding
1961	Thailand	Roads	Khon Kaen feeder road project	Colombo
1962	Malaysia	Aviation airports	Advise on 'bush' air service and desirability of airfield construction at Lundu, Suratok, Sarikei Kapit and Ba Kalala/Long Samedo	Colombo
1963?	Indonesia	Roads	Equipment and advice on Minahasa road rehabilitation	Colombo
1963	Malaysia	Roads	Site investigations for bridge designs for roads in Sarawak	Colombo
(*)1964	Malaysia	Urban transport	Traffic study and forecasts of transport and parking requirements in Kuala Lumpur	Malaysian government
1964	Thailand	Roads	Construction of highway between Tak and Mae Sot	Colombo
* 1965	Malaysia	Roads	Aerial surveys, route selection and costing of Rompin-Batu Balik road	Malaysian government
1966	Malaysia	Roads	Investigation of 3 alternative routes to link Sandakan and Jesselton (Kota Kinabalu)	Colombo
* 1966	Malaysia	Roads	Site visits to bridges in Sarawak	Colombo
* 1966	Malaysia	Ports	Management services for operations at Port Kelang and Pinang	IBRD
* 1967	Philippines	Airports	Management services for airline operations in Manila	Government of Philippines
* 1967	Singapore	Urban transport	Urban Renewal & Development Project for State of Singapore	UNDP
* 1968	Indonesia	Ports	Feasibility studies for harbour dredging at Surabaya, Palembang and Banjarmasin	Colombo
1968	Indonesia	Railways	Provision of materials to rehabilitate track for Indonesian State Railways	Colombo
1968	Malaysia	Airports	Departmental reorganisation, staff and air traffic control at several airports	Colombo
1968	Thailand	Roads	Construction of Lom Sak-Chumpae highway	Colombo

TABLE 3 (continued)

Date commenced	Country	Transport mode	Project description	Client funding
(*) 1969	ASEAN	All modes	Southeast Asian Regional Transport Survey	ADB
* 1969	Indonesia	Ports	Plan for an industrial estate and port rehabilitation at Cilacap	Other
1969	Malaysia	Roads	Feasibility study of east-west highway Ipoh-Gerik-Butterworth and Kota Bharu	Colombo
* 1969	Malaysia	Roads	Report on 8 bridges (2nd series 1969) in Sarawak	Colombo
* 1969	Malaysia	Roads	Traffic study of Sandakan	Malaysian government
1969	Singapore	Airports	Survey of airworthiness control facilities and management services	Colombo
* 1969	Singapore	Ports	Management services to improve productivity and to train staff	Singapore government
1969	Thailand	Roads	Construction of roads around Prachuap Khiri Khan	Colombo
* 1970	Indonesia	Airports	Management services for an airline	Indonesian government
1970	Indonesia	Ports	Survey to establish suitable site for a port in Sulawesi	Other
* 1970	Indonesia	Shipping/ roads	Evaluation of proposed ferry services and road links between Sumatra and Java	Non-ASEAN government
* 1970	Malaysia	Roads	Survey of industrial estate in Brunei Town including considerations of access roads	Malaysian government
* 1970	Malaysia	Roads	Feasibility study of Route 1	IBRD
1970	Malaysia	Roads	Malaysia-Australian Road Survey Project at Kuantan, Bahau-Segamat and Gopeng Ringlet	Colombo
1970	Malaysia	Roads	Malaysia-Australia Road Project in Sabah	Colombo
1970	Thailand	Ports	Engineering investigations for Thai Coastal Ports Study	IBRD

Note: * Consultant; (*) Sub-consultant.

Source: See footnote page 3.

For instance, Australia and her allies in the Southeast Asia Treaty Organization (SEATO) were concerned that the Thai peasant farmer might be susceptible to external subversive influences exploiting his anxiety over economic problems and rising expectations particularly in the more depressed and neglected areas contiguous to the country's borders. A reliable transport system at that time promised to allow police and the military to respond quickly to 'insurgent acts' in border areas near Burma, Laos, Cambodia (Khmer Republic) and Malaysia. In conjunction with well-conceived investments in irrigation and power all-weather highways promised to cement relations with villages long isolated from contact with government officials (Rimmer, 1971b, 1973).

Australian involvement with roads in Thailand dates from August 1961 when United States military advisors to the Royal Thai Government wanted rural areas to be linked by roads to the railheads thereby stimulating agricultural production. Following an inspection of an area in Northeast Thailand near Khon Kaen by an engineer from the then Commonwealth Department of Works the then Commonwealth Department of External Affairs authorised the Snowy Mountains Hydro-electric Authority (SMHEA) to train Thais in the organisation of road construction and in the operation and maintenance of equipment. Once this Thai-Australian Feeder Road Project was completed attention turned westwards to the 87 km highway from Tak to Mae Sot (on the Burmese border) which was upgraded and realigned along an 18 km section.

SMHEA also constructed the Lomsak to Chumphae Highway. Originally proposed as part of the Asian Highway network by Sverdnup and Parcel Engineering Company in 1960 and again by Louis Berger Inc. of the United States in 1967, it was later recognised to have military benefits. With help from the United States Overseas Mission (USOM) SMHEA were also involved with the Southeast Asian Treaty Organization (SEATO) highway project at Prachuap Khiri Khan. Many of these investments were unquestioned because of user savings in time and cost (Table 4). However, traffic on the road network was only high in the vicinity of Bangkok (8,000-12,000 AADT) and provincial cities; average annual daily traffic (AADT) on the Central Plain was between 500 and 1,500 vehicles and the majority of provincial roads had daily flows of less than 200 vehicles with buses and trucks dominating (Rimmer, 1977). While it could be argued that whereas initial surplus capacity is unavoidable in planning for long-term economic growth, the further extension of a poorly patronised highway system, at the expense of investment in congested Bangkok, was a waste of resources. However, this issue was sidestepped at the time.

TABLE 4 NATIONAL HIGHWAYS AND PROVINCIAL ROADS MAINTAINED BY THE THAI HIGHWAY DEPARTMENT FOR SELECTED YEARS

Year	National highways		Provincial roads	
	Paved km	Unpaved km	Paved km	Unpaved km
1961	3,108	5,392	(a)	(a)
1966	4,996	4,643	427	2,569
1970	8,623	1,781	1,479	4,413

(a) Responsibility for provincial roads was not transferred to the Thai Highway Department until 1965.
Source: Thai Highway Department (pers.comm.).

The preoccupation with feeder roads to boost traffic on all-weather strategic highways led to the widespread neglect of the cities, where population was bourgeoning and transport was notoriously unreliable. Paradoxically, the techniques that lent support to substantial investment in urban transport systems, pioneered in Detroit and Chicago during the 1950s, were available, yet their diffusion was first to other advanced capitalist countries before finding their belated way to underdeveloped countries. Consequently, the involvement of Australian consultants (albeit with United States collaboration) in Kuala Lumpur's transport planning in 1963 -- a first in Southeast Asia -- ran counter to the dominant international flow and requires explanation.

The high technology associated with comprehensive transport planning -- computers, system engineers, mathematical-model builders, and programmers -- makes it an obvious product for a convenient transfer between places. Initially, the Americans were concerned with fulfilling the requirements of the Federal Aid Highway Act 1963 (which specified that cities with populations above 50,000 were required to conduct comprehensive transport planning studies by 1965, in order to qualify for federal funding). However, as the domestic market was becoming saturated, the ideas were exported. The timing of the American pitch was perfect because Australian metropolitan areas were experiencing similar traffic problems stemming from increased motor vehicle ownership and the suburbanisation of economic and social activities. Outmanoeuvring their British rivals -- traditional suppliers of transport consultancy services in Australia -- studies were commenced in Brisbane and Canberra in 1960. Indeed, the studies of Australian cities were permeated by prime contractors whose names run like a lexicon of the American engineering profession: de Leuw Cather, Alan M. Voorhees and Wilbur Smith (Black, 1975:234-35).

There was a rapid assimilation of the techniques by the Australian firms equipping them to export the transport planning package. When Malaysia achieved the status of an independent federation of states and Kuala Lumpur became the Federal Capital

in 1963 Crooks Michell Peacock and Stewart, with a branch office in Malaya since 1961, were well placed to secure what must be one of the first consulting contracts of Australian firms in Southeast Asia (E.E. Peacock, pers.comm.). Experience gained in conducting urban traffic surveys and making recommendations for roads, parking and public transport in Kuala Lumpur proved valuable in capturing the prestigious $1,000,000 United Nations Development Programme (UNDP) to undertake the Urban Renewal and Development Study of the Republic of Singapore in 1967. Surveys of land use, traffic, roads, and public transport facilities provided the data to model mathematically the interaction between land use and transport and to forecast traffic requirements. A long-term strategic concept plan for the island was formulated which continued to provide the framework for Singaporean urban policy. In acknowledgement of an impressive five-volume report the firm was given a Merit Award by the Association of Consulting Engineers Australia.

Transport planning experience was also being accumulated back in Australia; state highway departments assimilated the new planning techniques (the Queensland Main Roads Department was responsible for several studies in urban areas) and the Commonwealth Bureau of Roads, established in 1967, developed its own economic evaluation methods to advise the federal government on the allocation of money to the states for road construction. These opportunities allowed Australian transport consultants to refine and hone their techniques. Underpinning these changes were courses on highway engineering at Melbourne University to complement those at the University of New South Wales. Significantly, the latter had trained twenty-nine postgraduate students from the ASEAN region alone by 1970 to supplement the practical training of overseas engineers initiated when three Thai highway engineers on the Khon Kaen project visited Australia to study design and construction methods. Australians also assisted in the establishment of the SEATO Graduate School of Engineering in Bangkok and offered advice at symposiums run by international agencies: the stage seemed set for increased Australian involvement in the 1970s.

THE 1970s: APOCALYPSE NOW

> Effective relations with the five countries of ASEAN are essential to the Government's continuing efforts to promote regional stability and economic development. The logic of our geographical position, and the economic and political vigour of these close neighbours, gives ASEAN a particular importance for Australia. We support the Association as an example of the best sort of practical regional self-help and co-operation.
>
> A.S. Peacock,
> Parliamentary Statement
> 9 May 1978.

> Clearly, it is in our interest to foster all these co-operative activities. The ASEAN economies will continue to grow and there are thus good prospects for raw materials, industrial and agricultural suppliers. Opportunities for industrial investments on a modest scale will also arise. But continuous promotion and exploratory work both by industry and the Trade Commissioner Service will be required if we are to succeed in these competitive markets.
>
> R.V. Garland
> Speech to Sydney Chamber of Commerce
> 7 February 1979.

Australian aid increased almost fourfold between 1971 and 1980 compared with the previous decade (Table 5). However, the growth

TABLE 5 OFFICIAL AUSTRALIAN DEVELOPMENT ASSISTANCE TO LESS DEVELOPED COUNTRIES 1971-1980 ($000)

Year ended 30 June	Multilateral aid	Bilateral aid Papua New Guinea	Bilateral aid Other	Total
Total 1961-1970	106,546	730,952	241,735	1,079,233
1971	12,261	125,040	43,285	180,586
1972	13,012	136,536	50,971	200,519
1973	14,495	144,302	60,038	218,835
1974	17,969	177,076	65,712	260,757
1975	49,568	168,835	109,740	328,143
1976	43,448	211,930	91,519	346,897
1977	59,742	226,377	92,175	378,294
1978	79,212	219,441	119,844	418,497
1979	68,800	237,196	154,370	460,466
1980	89,300	235,624	175,267	500,191
Total	447,807	1,882,357	962,921	3,293,185

Source: Australian Development Assistance Bureau (1979).

in aid was uneven reflecting the apocalyptic happenings in Southeast Asia (including the withdrawal of the United States from Vietnam in 1975) and changes in government within Australia. (Britain -- Australia's 'second crutch' -- had begun her military pull-back east of Suez in 1971.) During the 1970s a change of government from the Liberal-Country Party coalition to the Australian Labor Party, which was less concerned with the Communist bogey, led to Australia's precipitate withdrawal from the Second Indo-China War, the establishment of diplomatic relations with China and other communist countries, ratification of the nuclear non-proliferation treaty, discarding the forward defence strategy and greater emphasis on economic assistance through government agencies. New initiatives established the Australian Development Assistance Agency (ADAA) in December 1975

(it became a statutory body a year later) to administer the aid programme which hitherto had been scattered through a number of Commonwealth Government departments. During the late 1970s, following the return of the Liberal-Country Party coalition, ADAA was replaced by the Australian Development Assistance Bureau and re-integrated into the Department of Foreign Affairs -- a reflection of the hasty attempt to fill the vacuum left by the withdrawal of the United States from Indo-China by boosting aid to ASEAN, despite the constraints on the public sector, to ensure that its future was not jeopardised by a belligerent Vietnam (see Camilleri, 1979, and Renouf, 1979, for discussions of Australia's foreign policy in the 1970s).

The early 1970s

Back in Australia there was a domestic battle to alter the type and effectiveness of foreign aid, but it is easy to see from the list in Table 6 of new transport projects commenced between 1971 and 1975 how difficult it is for reforming governments to disturb the inertia behind previous governments' aid programmes. Development assistance often involves many years of funding through planning, design and implementation so the style of aid usually lags behind intellectual theories of appropriate development strategies. Thus, sixteen (including one parking study) out of thirty-three projects were for road construction -- the same thrust as in the 1960s.

The main difference for the early 1970s was increased Australian involvement with as many new proposals in five years as there had been in the previous ten. This was not entirely a result of the Whitlam government initatives because coincidentally, 1973 and 1974 were fat years for Australian consultants in ASEAN feeding on contracts from the World Bank, the Asian Development Bank, private clients and foreign government agencies. In fact, multilateral funding supported 30 per cent of the projects and other funding (excluding bilateral aid) supported a further 36 per cent of projects started between 1971 and 1975 (Table 7). Compared with the period between 1961 and 1970 this represents a dramatic reduction in the proportion funded by the Commonwealth Government -- a decline from 53 per cent to 28 per cent. However, this analysis is somewhat misleading because it understates the more ambitious and costly nature of government projects undertaken in the 1970s.[1] They not only required feasibility studies but careful planning and the teamwork of specialist consultants wedded to the traditional

1. Bilateral aid flows (major items of expenditure) for the DAC sector indicators economic planning (A1-2), transport and navigation (A2-12) and integrated rural development for ASEAN between 30 June 1976 and 30 June 1980 totalled $94,157,867. The breakdown by country was Indonesia $41,957,882 (44.6 per cent); Malaysia $6,618,218 (7.0 per cent); Philippines $25,952,700 (27.6 per cent); Singapore $7,222 (0.0 per cent) and Thailand $19,621,867 (20.8 per cent) (Australia, Department of Foreign Affairs, Australian Development Assistance Bureau, Statistics Section, 1981).

TABLE 6 AUSTRALIAN CONSULTING AND CONTRACTING IN THE ASSOCIATION OF SOUTH-EAST ASIAN NATIONS (ASEAN) -- TRANSPORT AND COMMUNICATIONS PROJECTS 1971-1975

Date commenced	Country	Transport mode	Project description	Client funding
* 1971	Indonesia	Urban planning	Preliminary town planning study to locate Pertamina oil refinery and an industrial estate	Colombo
* 1971	Indonesia	Ports	Feasibility of port rehabilitation	Colombo
* 1972	Indonesia	Roads	Feasibility study of highways in the North Sulawesi	IBRD
* 1971	Indonesia	Roads	Feasibility study of roads in Southeast Sumatra (Telak Betung)	IBRD
1971	Indonesia	Roads	Project mission to investigate roads on Kalimantan	Colombo
* 1972	Philippines	Ports	Engineering and economic feasibility of Cotabato Port Development Study	ADB
* 1972	Singapore	Ports	Planning, design and construction of dry dock	Other
* 1972	Thailand	Ports	Management services to improve cargo handling and to train staff	IBRD
* 1973	Indonesia	Ports	Engineering investigations for oil and LNG terminals at Badak	Other
* 1973	Indonesia	Ports	Engineering investigation for a port on Gag Island	Other
* 1973	Indonesia	Regional planning	Review of ecnomic development (including transport sector) for the West Kalimantan Planning Study	Indonesian government
1973	Malaysia	Airports	Air traffic control equipment for Subang (Kuala Lumpur) and Kota Kinabalu airports	Colombo
* 1973	Malaysia	Roads	Terengganu Coastal Study (dams with access roads)	Colombo
* 1973	Singapore	Urban planning	Feasibility study of N-9 housing and commercial development	Other
* 1973	Singapore	Terminal	Economic evaluation of alternative sites for physical distribution	Other
1973	Thailand	Roads	Feeder Roads Investment Appraisal in southern and west-central region	IBRD
* 1973	Thailand	Roads	Feeder Roads Investment Appraisal in north and east-central region	IBRD

TABLE 6 (continued)

Date commenced	Country	Transport mode	Project description	Client funding
* 1973	Thailand	Roads	Feasibility study of roads between Sing Buri and Khao-Soi	Non-ASEAN government
* 1974	Indonesia	Airports	Runway extension for Den Pasar International airport	Indonesian government
* 1974	Indonesia	Roads	Economic survey (including access roads) of an industrial estate in Medan	N/A
* 1974	Indonesia	Ports	Feasibility study for a new port at Bengkulu	Indonesian government
* 1974	Malaysia	Airports	Feasibility studies and design for port extensions at Surabaya, Panjang and Belawan	ADB/Non-ASEAN government
* 1974	Malaysia	Roads	Management services at major airports	N/A
* 1974	Malaysia	Roads	Feasibility, planning and design of industrial estate - Gebeng Growth Centre	Colombo
* 1974	Philippines	Roads	Kuala Lumpur-Petaling Jaya Traffic Dispersal Study	IBRD
* 1974	Singapore	Parking	Zamboanga del Sur Development Project - integrated rural development project agriculture, farm-to-market roads and irrigation	Colombo
* 1974	Thailand	Roads	Feasibility and design of car park at Collyer Quay	Other
1975	Indonesia	Roads	Appraisal of intermodal cost comparison of road, river and rail transport services	ADB
* 1975	Malaysia	Railways	Kalbar Indonesia-Australian Roads Project to upgrade and construct feeder roads	Colombo
* 1975	Malaysia	Roads	Investigation of goods traffic at alternative locations for a marshalling yard in Kuala Lumpur	Malaysian government
* 1975	Philippines	Terminal	Traffic surveys on Federal Route 1, south of Ipoh	IBRD
1975	Thailand	Roads	Bulk handling facilities for physical distribution	Other
			Equipment and technical assistance for Lampang-Denchai highway link	Colombo

Note: * Consultant.

Source: See footnote page 3.

implementation agencies, such as the Commonwealth Department of Construction and the Snowy Mountains Engineering Corporation (SMEC). A 1973 amendment to the Act that created SMEC three years earlier permitted consulting and contracting services to be offered on a commercial basis to government and private organisations both within Australia and overseas. (An overt recognition that foreign policy was being geared to securing markets not only for Australian processed products but also for its technology and management services.) Searching for a distinctive Australian contribution rural roads and agricultural extension services became suitable bedfellows for the large-scale, integrated rural development projects.

TABLE 7 AUSTRALIAN ASSISTANCE TO ASSOCIATION OF SOUTH-EAST ASIAN NATIONS (ASEAN) -- FUNDING ARRANGEMENTS FOR TRANSPORT AND COMMUNICATIONS PROJECTS 1971-1975 AND 1976-1980

	1971-1975		1976-1980	
	number	per cent	number	per cent
Bilateral aid	9	28	20	35
Multilateral aid	10	30	14	25
Other funding	12	36	21	37
Not known	2	6	2	3
Total	33	100	57	100

The appeal of large, capital-intensive projects is explained by the Australian Senate Joint Committee on Foreign Affairs (1972) in their Report on Australia's Foreign Aid in terms of Australia's comparative advantage. First, roads are an area of Australian expertise founded on experience in overcoming the 'tyranny of distance' on a vast continent with widely different climatic zones, developmental roads to tap agricultural regions and road construction in difficult mountainous terrain. Second, the continent was transformed from an uncultivated land mass to a major agricultural nation, including overcoming problems of tropical agriculture and animal husbandry -- and the marketing of farm commodities -- so relevant for ASEAN.

With these projects the formal agreement is for Australia to cover the foreign exchange costs of the project (primarily the cost of equipment which is two-thirds tied to purchase in Australia) and to supply technical personnel -- with dirty boots and all -- not available locally. These features are highlighted with reference to a Philippines-Australia joint government venture, the Zamboanga del Sur Development Project, which officially commenced in April 1974, because it contains all of the characteristic features of large-scale integrated rural projects. Feasibility studies identified two major agricultural extension programmes, rehabilitation of an existing irrigation scheme, construction of a new irrigation scheme and 357 km of roads. The estimated cost was $27,237,000 up to June 1980 (the Commonwealth Government has subsequently announced aid beyond

1980). Australia has supplied workshop equipment, vehicles and spare parts, together with technical assistance (25 staff in June 1980) and training. The Philippines Government has provided manpower (1712 employees in June 1980), fuel, oil, tyres and locally-manufactured materials. The 254 km of feeder and farm-to-market roads and the 46 km of the national highway constructed by 1980 are expected to stimulate agricultural production, boosted also by better crop technology, and the coconut and livestock development projects. The Sibuguey Valley Irrigation Project will eventually irrigate 3000 ha of rice-growing land of which only one-third is presently under cultivation.

The Zamboanga del Sur Development Project also illustrates the involvement of consultants in the typical 'project cycle': first, project identification, feasibility studies, appraisal, approval and inter-governmental negotiations; second, project implementation, supervision and monitoring; and finally, project evaluation and any follow-up action. Field missions and inter-governmental discussions identified the project in a region of relative backwardness and one where Muslim guerillas were causing internal security problems. Representatives from the implementation agencies, the Snowy Mountains Engineering Corporation and Leighton Contractors Pty Ltd constitute the management board which directs Australian involvement and consults with the Philippines Government on the project identification and feasibility study. Experts on transport planning, economics and agriculture were subcontracted on the project identification and feasibility study. A hydro-geologist advised on well-drilling, agronomists carried out extension programmes in cash cropping, and sociologists studied the impact of the project.

The rural 'feeder roads' are features of projects funded by the World Bank, Asian Development Bank and the Australian Government in the Philippines, Indonesia, Thailand and Malaysia -- there is also recognition that access roads to major schemes like the multi-purpose dam at Khao Laem (Thailand) could become developmental roads -- so it is apposite to comment on the appropriateness of this form of aid. For instance, pre-feasibility studies of roads in south and central Thailand by Australian consultants highlighted that some of the projects would not realise increased agricultural production because they were in areas already interlaced with a dense road and waterway network and development benefits had already been exploited. Anticipated savings in transport costs were small in comparison with product price variations and hence the range of entrepreneur expectations. The important consequences for the development of improved access recognised by Australian consultants were not simply, or even largely, measured cost reductions but the greater reliability and frequency of market access and the resulting diffusion of economic and technical information. These findings suggested the need to know more about the utility of information, value of time and the role of uncertainty in affecting expectations (Rimmer, 1977).

The late 1970s

The way in which the aid programme was administered became the characteristic feature of the late 1970s rather than any change in its transport content. Budget appropriations increased substantially and there was a relative shift from Papua New Guinea to other countries, particularly ASEAN -- the 'linchpin' of Australia's Asian policies (the actual disbursements to ASEAN between 1974 and 1979 being greater than the total amount in the previous twenty-nine years). This beneficence resulted in twenty-four more transport projects than in the previous five years. Yet, this deeper involvement in ASEAN coincides with the government's policy of staff reductions in the Commonwealth Public Service -- heavily criticised by Alan Renouf (1979:499) because it slashed the Department of Foreign Affairs staff by 19 per cent for reasons of inter-departmental jealousy and resentment over the growth of functions under the Whitlam government.

Consistent with the Liberal-Country Party coalition's general economic philosophy an increased use of private sector consultants was justified, to provide 'improved scope and access to technical resources, greater flexibility in the timing of inputs, centralised administrative responsibility defined by contractual arrangements, and fully identified administrative costs' (Australian Development Assistance Bureau, 1979:33). As part of increased assistance to the private sector the government amended the Export Market Development Grants Act 1974 (EMDG) in 1978 and simultaneously brought in new legislation embodied in the Export Expansion Grants Act 1978 (EEG) to encourage consultants to develop and seek out new markets. In the 1980 Budget the Commonwealth Government bolstered its 'Export Now' campaign incorporated in EEG and EMDG schemes with the Development Import Finance Facility (DIFF) Scheme for the payment of grants to ASEAN governments towards the costs of importing capital goods or services of Australian origin for use in development projects. With big booty at stake, it is essential to investigate how these organisational changes have affected the consulting industry.

Comparing the early and late 1970s Table 8 shows that in terms of transport project numbers there was little change in funding arrangements. Indeed, the content has remained the same despite changes in development aid fashions and the emphasis on appropriate technology. One-half of the projects are for roads. The changes worth noting are the shift from ports to urban and regional planning, especially in Malaysia from 1977, and the re-emergence of urban transport planning and modernising urban public transport systems.

Although official government aid has been responsive to the Malaysian request for assistance with urban and regional planning, Australian consultants have also captured part of the traditionally British market. (Corbett, 1973:185-88 notes that former British colonies in Southeast Asia did not accept Australian engineering qualifications until the mid-1950s.) Physical town planning was part of the colonial system but, since

TABLE 8 AUSTRALIAN CONSULTING AND CONTRACTING IN THE ASSOCIATION OF SOUTH-EAST ASIAN NATIONS (ASEAN) -- TRANSPORT AND COMMUNICATIONS PROJECTS 1976-1980

Date commenced	Country	Transport mode	Project description	Client funding
* 1976	Indonesia	Ports	Construction of wharves, roads and port services at Tanjung Batu	Indonesian government
* 1976	Indonesia	Ports	Feasibility study for upgrading port at Pontianak	Colombo
* 1976	Indonesia	Roads	Economic analyses of highway improvements forming 5-year rolling program of Indonesian government	Indonesian government
* 1976	Indonesia	Roads	Services in project management, budgeting and training for Bina Marga (Highways Dept.)	IBRD
(*)1976	Malaysia	Ports	Estimation of transport investment requirements for Port Kelang as part of Kelang Master Plan	Malaysian government (Selangor)
* 1976	Malaysia	Ports	Planning and engineering design for Gebeng port	IBRD
* 1976	Thailand	Ports	Feasibility studies for port at Songkhla-Phuket	ADB
(*)1976	Thailand	Roads	Feasibility study for multi-purpose dam project at Khao Laem	Colombo
* 1977	Indonesia	Public transport	Feasibility study of providing 200 buses for Jakarta	Colombo
* 1977	Indonesia	Roads	Re-evaluation of rural roads in East Java	Indonesian government
* 1977	Indonesia	Roads	Regional survey and road feasibility studies in west Kalimantan	Colombo
* 1977	Indonesia	Roads	Survey and analysis of pavement design and road user costs related to commercial vehicles	IBRD
* 1977	Malaysia	Roads	Planning, layout and management of parking at Angkasa Raya retail-commercial centre	Other
* 1977	Malaysia	Urban planning	Feasibility study for a new suburb in Kota Kinabalu	Other
* 1977	Malaysia	Urban planning	Strategic planning for Bintulu including port facilities and heavy industry	Colombo
* 1977	Philippines	Airports	Supply of Doppler VOR equipment and training at Manila international airport	Colombo

TABLE 8 (continued)

Date commenced	Country	Transport	Project description	Client funding
* 1977	Philippines	Roads	Planning, design and implementation of Traffic Engineering and Management Study in Manila	IBRD
1977	Thailand	Roads	Road design, supervision and training as part of North-east Thailand	N/A
* 1977	Thailand	Roads	Screening and evaluation of Lampang-Denchai road	Colombo
(*)1977	Thailand	Roads	Workshop training centre at Hat Yai and construction of roads in Songkhla, Satun and Trang	Colombo
* 1978	Indonesia	Roads	Economic evaluation of road proposals in Yogyakarta	IBRD
* 1978	Indonesia	Roads	Feasibility study of Cirebon-Palimanan bypass	Australian government
* 1978	Indonesia	Roads	Screening and evaluation methods for highways	IBRD
* 1978	Indonesia	Shipping	Feasibility study and conceptual designs for ferry improvements	Colombo
* 1978	Malaysia	Roads	Location, economic analyses and preliminary designs for Sungei-Kuantan Bridge	Malaysian government
* 1978	Malaysia	Urban planning	Integrated physical and socio-economic development plans for towns of Kuala Terengganu and Chukai	Colombo
* 1978	Malaysia	Urban planning	Technical assistance to Bintulu Development Authority	Colombo
* 1978	Philippines	Roads	Integrated rural development with improvements in agriculture irrigation, roads, ports, and airports in Northern Samar	Colombo
* 1978	Philippines	Roads	Monitoring of Philippine-Aust. Development Assistance Program in Zamboanga del Sur	Colombo
* 1978	Philippines	Transport planning	Land-use and transport study for metropolitan Cebu	Colombo
* 1978	Thailand	Public transport	Organisation of operations of Bangkok Mass Transit Authority	IBRD
* 1978	Thailand	Roads	Construction supervision of roads in southern and central regions	IBRD
* 1978	Thailand	Roads	Technical assistance to Urban Transport Planning Office on traffic management techniques	IBRD
* 1979	Indonesia	Ports	Potential for redevelopment of 48 minor ports	IBRD
* 1979	Indonesia	Roads	Feasibility of Bandung toll road by-pass	Commonwealth government

TABLE 8 (continued)

Date commenced	Country	Transport mode	Project description	Client funding
* 1979	Indonesia	Roads	Material for 118 prefabricated steel bridges in Kalimantan and Sulawesi	Colombo
* 1979	Malaysia	Airports	Installation of aircraft control system at Subang (Kuala Lumpur) International Airport	Colombo
* 1979	Malaysia	Public transport	Advice on procurement of horse carriages in Johor Tenggara	Other
* 1979	Malaysia	Public transport	Commuter transport requirements for agricultural workers in Terengganu Tengah	Malaysian government
* 1979	Malaysia	Public transport	Feasibility and pilot study of replacing pedal trishaws with motorised vehicles	Malaysian government
* 1979	Malaysia	Roads	Feasibility study for north-south highway and feeder roads in Terengganu	ADB
* 1979	Malaysia	Urban planning	Structure plan (incl. roads) for Chukai-Dungun	Malaysian government
* 1979	Philippines	Urban planning	Technical assistance to Melaka State Planning Team	Colombo
* 1979	Philippines	Airports	Installation of navigational equipment at Manila International Airport	Government of Philippine
* 1979	Philippines	Public transport	Study of the economic structure of motorised tricycle industry	Government of Philippine
* 1980	Indonesia	Ports	Engineering, planning design and construction of facilities at Tanjung Priok port	Indonesian government
* 1980	Indonesia	Roads	Road identification and construction in Kalimantan	Non-ASEAN government
1980	Indonesia	Roads	Route location and planning of Sangkulirang-Muara Wahau Road	Non-ASEAN government
* 1980	Indonesia	Roads	Screening and evaluation methods of rural roads	IBRD
(*)1980	Malaysia	Roads	Feasibility and preliminary design for suburban development at Gunong Bayu	Other
(*)1980	Malaysia	Roads	Master plan for roads and parking as part of Genting Highlands Development Plan	Other
(*)1980	Malaysia	Transport planning	Transport planning aspects of Kota Setar Planning Study	Malaysian government
(*)1980	Malaysia	Transport planning	Transport planning aspects of Seremban Master Plan	Malaysian government
* 1980	Malaysia	Urban planning	Long-term comprehensive development plan for Kota Bharu	Malaysian government
(*)1980	Philippines	All modes	Five-year investment program in Philippines National Transportation Study	IBRD

TABLE 8 (continued)

Date commenced	Country	Transport mode	Project description	Client funding
* 1980	Philippines	Ports	Rationalisation of coal handling facilities and the design of port and barge facilities	Colombo
(*)1980	Philippines	Public transport	Preliminary design of light rail transit for metropolitan Manila	Government of Philippines

Note: * Consultant; (*) Sub-consultant.
Source: See footnote page 3.

Independence, Malaysia has continued to follow trends in British planning practice noticeably the concept of the structure plan. Contracts include strategic planning for Bintulu, Chukai, Dungun and Kota Bharu and technical assistance to the Melaka State Planning Team. The supply of buses for Jakarta (a re-run of the 1950s) is a reminder, along with the rehabilitation of the Indonesian railways and bridging over Sarawak rivers, of the continuous nature of many projects.

By the 1970s the urban transport planning process had become truly 'international' (Ben Bouanah and Stein, 1978). Yet, despite early participation in Kuala Lumpur, Australian consultants were not represented in studies being undertaken in ASEAN's primate cities. Bangkok and Jakarta were studied by the Germans; Manila by the Japanese and then the Americans; and Kuala Lumpur by the Americans. However, the World Bank urban transport sector policy paper (1975), critical of the capital-intensive nature of recommendations from comprehensive land use and transport planning studies ushered in a new era of incremental transport system management. The World Bank funded a traffic engineering and management study of metropolitan Manila by Australians countering a strong Japanese thrust in the smaller cities (Black and Rimmer, 1981). Australians are participating in transport planning studies in Cebu (Philippines), Seremban, Kota Bahru and Kota Setar (Malaysia).

Government re-appraisal of aid during the past two decades suggests that future projects should place more emphasis on training and institution building (Australian Development Assistance Bureau, 1981b:72). Willingness to share Australian knowledge and experience has always existed but the Australian Science Technology and Research Co-operation Program provides an administrative focus for educating and training 'the kids next door'. New initiatives taken in the late 1970s include the Australian Development Assistance Courses given by The South Australian Highways Department and the University of New South Wales. In total, sixty-six engineers from ASEAN have studied

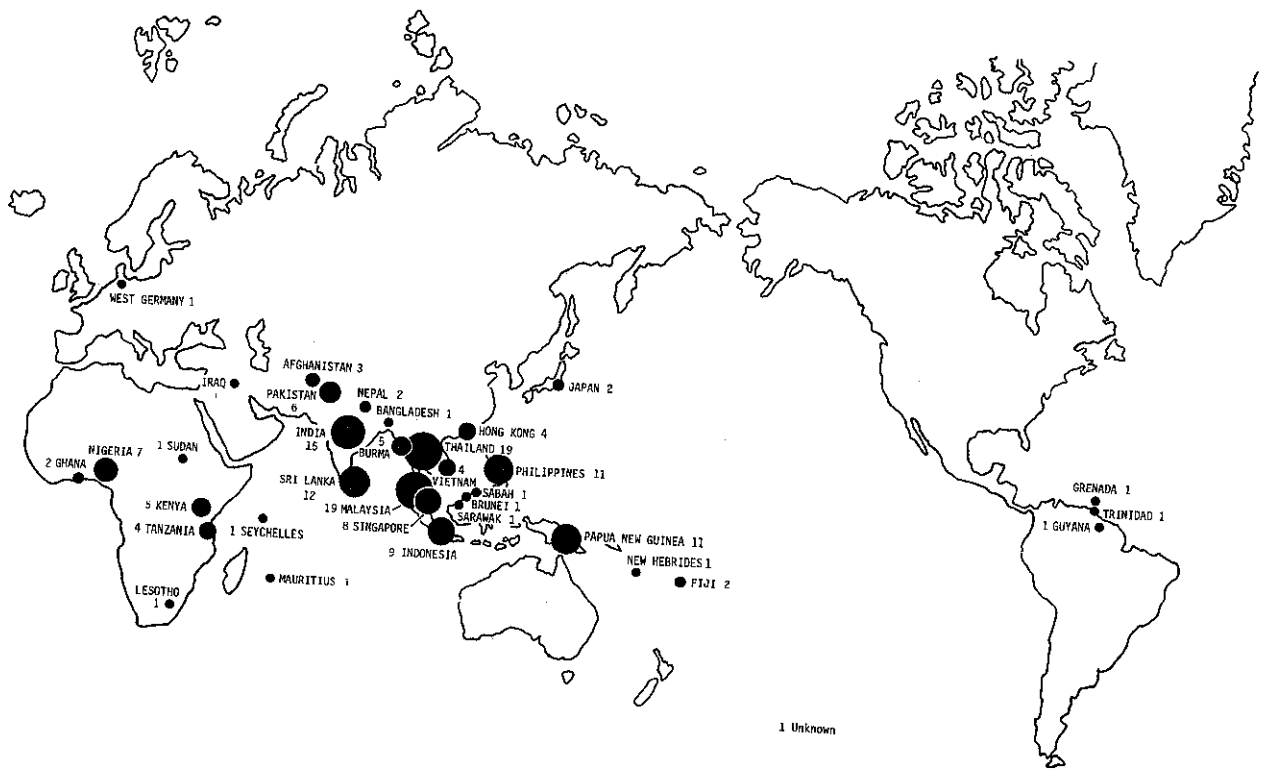

Figure 1 Origins of overseas students who have studied transport at the University of New South Wales between 1960 and 1980.

transport at the University of New South Wales between 1960 and 1980 (Fig. 1). As part of institutional support, the Commonwealth Government provides the Asian Institute of Technology (AIT) in Bangkok with a cash grant for the award of scholarships and payment of expatriate teaching staff used, for instance, in the Division of Geotechnical and Transportation Engineering. The increasing emphasis on training aid -- apart from fostering international goodwill and opening doors for the smoother export of services and goods -- offers challenges in the 1980s not only for academic institutions but for the consultants, given that there is a conscious effort to increase the role played by private sector organisations.

Figure 1 Origins of overseas students who have studied transport at the University of New South Wales between 1960 and 1980.

THE 1980s: STAR WARS AND THE EMPIRE STRIKES BACK

> The process of spotting and then zeroing in on foreign prospects is a difficult and challenging one. It requires a special kind of spirit, tenacity, tact, and strength of character. To identify a forthcoming undertaking and then to maneuver in a professional manner in order to become the client's choice to perform professional services with the expenditure of reasonable costs is a most gratifying accomplishment for any international consultant.
>
> H.P. Guttman
> The International Consultant
> 1976, pp.52-53.

The Australian transport experts at the threshold of the 1980s can look back over thirty years of involvement in Southeast Asia -- a period of dramatic change in the political economy of both Australia and the region. The rise of the engineering and planning consultant is intimately associated with Australia's transition from a junior imperialist partner in a world centre-periphery system (distinguished domestically by foreign-owned import-substituting industrialisation) into a multinational matrix within the Asia-Pacific region in which she appears destined to lose a substantial part of her manufacturing industry as she is slotted into the grid (Alford, 1979; Camilleri, 1979). She is also associated with the successive transformation of Southeast Asia from colonialism, through neo-colonialism to post-colonialism -- changes that have led to frictions with Australia as she has found it difficult to adapt her paternalistic attitudes to the changed realities (see Committee on Australia's Relations with the Third World, 1979:124-29). In addition, there have been changes in the consulting and contracting industries themselves.

Initially, market preference and coverage in international consulting reflected the fact that: colonies, trust territories and small countries in the shadow of large developed nations gave preference to consultants of their rulers, protectors, and important neighbours; newly independent and relatively inexperienced nations count on the continued support of their former rulers and frequently prefer to continue to look

for continuing support from the same sources; and sovereign and fully-independent states, new and old, select their advisers from among the most advanced and progressive consultants they can find (Guttman, 1976:15). However, the recent history of Southeast Asia shows that political, financial and, to some extent, local considerations have been paramount rather than past co-operation and performance. Past expertise, experience and availability is often secondary to the selection of consultants from friendly countries, availability of the necessary financial assistance and participation of nationals.

In the global battle for consulting and contracting services Australians have to compete with North Americans, Europeans, and the Japanese considered by Guttman (1976:16) to be 'most persistent in their quest to excel in the exports of services and goods'. The common American complaint is that the international market place for services is not competitive. Guttman (1976:17) notes that the French Government has a proprietary interest in consultants and industries and promotes them in carefully identified markets; the British support their consultants from introductions to recommendations with diplomatic pressure added for good measure where necessary; the German Government allows its industries and banks to use consultants to tout their interests with the bonus of free services if equipment is purchased; and the Japanese Government's consultants are invariably connected with the trading companies (Sogoshosha) and their prime aim is to participate in upcoming projects by engaging in either construction or the provision of capital goods. These protectionist attitudes had not permeated the United States Government by 1976 and their private sector consultants were at an apparent disadvantage because they received assistance in only one of the eight categories detailed in Table 9 and had not been allowed to form consortia because of

TABLE 9 EXPORT INCENTIVES OFFERED CONSULTANTS IN SELECTED COUNTRIES OVERSEAS 1975

	USA	France	Germany	Britain	Japan	Italy
Insurance against currency fluctuation	no	yes	yes	yes	yes	yes
Tax rebate on exports	no	yes	yes	yes	no	yes
Indirect tax incentives for exports	no	yes	yes	yes	no	yes
Tax exemptions	no	yes	no	yes	yes	yes
Protection against export losses	no	yes	yes	yes	yes	no
Direct export tax incentives	no	yes	no	yes	yes	no
Partial or total exemption of foreign branch income	no	yes	yes	no	no	no
Deferral of export income	yes	yes	yes	no	yes	no
Summary of eight export incentives	1	8	6	6	5	4

Source: Guttman (1976:19).

anti-trust legislation (though it should not be forgotten that much United States assistance is tied and only available to nationals). However, Australia's position was even more unenviable until the government offered incentives to develop and expand consultancy and contracting services. Indeed, it would appear that the Commonwealth Government had little option but to offer her consultants and contractors parity with their competitors. Nevertheless, the policy is not without its contradictions.

Australia's policy on international aid -- 'the global dole' -- appears paradoxical. On the one hand the Commonwealth Government, underscored by The Harries Report (Committee on Australia's Relations with the Third World, 1979) and the Australian Senate Standing Committee on Foreign Affairs and Defence (1980), has endorsed the redistributive emphasis put forward in international forums by underdeveloped countries acting in their collective capacity under the banner of the New International Economic Order (NIEO). Yet, on the other hand, Australia has maintained high protection despite arguments that a more suitable form of aid to improve ASEAN economic growth would be to afford more liberal access to Australian markets (Renouf, 1979:8). The Commonwealth Government's strategy has been to spotlight the highly-visible, capital-intensive 'Australian' transport infrastructure/agricultural extension project. But this emphasis downplays 'self-help' and 'appropriate technology' which stresses that Southeast Asia requires 'tractors not bulldozers, pumps not dams...' (Rimmer, 1971a:14).

These inconsistencies have been heightened by the strategy of exporting consultants. In the case of underdeveloped countries, local consultants have to resolve a dilemma; either stick to techniques well-known locally, perhaps perpetuating technolgical backwardness, or keep up with international developments, in which case consultancy risks being reduced to technological dependency (Roberts and Perrin, 1975:228). The latter process, assisted by a push from the Commonwealth Government, is pulling Australian consultants 'off-shore'. However, there may be a shortage of professionals at home to deal with regional transport developments triggered by the resource boom. There is also the apparent contradiction in the recent emphasis on training and institution building. Raising the standards of ASEAN in urban and regional planning and transport engineering will (if one takes a static view of a dynamic situation) undermine in the long-run the very services that the Commonwealth Government is trying to promote by sapping Australia's comparative advantage.

Such a loss would be mitigated if Australian suppliers of manufactured goods and services could take more advantage of the openings afforded by her consultants and contractors. Rather than bemoaning the loss of employment at the cheaper end of the textile, clothing and footwear industries and in whitegoods and motor vehicles, the recurrent advice to government is that Australia should be gearing up her knowledge-based industry to take advantage of opportunities and challenges posed by the industrialisation and economic development of ASEAN and East Asia

(Study Group on Structural Adjustment [The Crawford Report], 1979). However, it would appear that Australia's 'trojan horses' -- her consultants and contractors -- have been bereft of a following army. As manufacturers have been too slow to restructure their organisations to take advantage of the openings created in ASEAN (Bureau of Industry Economics, 1980). Although Australia has yet to develop a package (consulting, technology, construction and management) to rival that developed by the Japanese government there are signs that she is recognising the importance of international trade in transport, technology, finance, and management consultancy services (Bureau of Industry Economics, 1978). Indeed, as witnessed by recent developments in the contracting industry, Australia is making a determined bid for overseas business.

The Commonwealth Government responding to the request of private enterprise -- concerned that their contractors and consultants won less than 1 per cent of the value of international (largely Third World) project business estimated at over $30,000,000,000 in 1978 and that the British and Canadian governments assisted industries in overseas markets -- established the Australian Overseas Projects Corporation (AOPC) with authorised capital of $2,000,000 when its Act was proclaimed on 23 November 1978. The AOPC provides a framework through which Australian industry can launch a co-ordinated attack on the world market for contracting and consulting services. By acting as an agent for (or as a member of) a consortium or group of companies, an aid in negotiating complex contracts and, particularly, as a prime contractor this statutory body hoped to overcome previous calibre defects, such as large-scale projects that hitherto were beyond the financial resources of individual firms and firms lacking experience in forming consortia.[1] This corporate front is hamstrung by the more intimate way of doing business in Asia and the need to acquire a deeper understanding of local customs and practices. Indeed, if we are -- to return to our original cinematic analogy -- to go beyond the celluloid images of Southeast Asia we have to learn more about local mores, economies and politics, and put international aid, consulting and training in transport into its societal context.

1. By 1981, the AOPC had submitted pre-qualifications for consultancy, contracting and turn-key business relating to a military air-base in Malaysia and three civil air ports in the Philippines.

REFERENCES

Alford, J. (1979) Australian labour, multinationals and the Asian-Pacific region', Journal of Australian Political Economy Vol. 6 pp. 4-23.

Anderson, G.W. (ed.) (1980) Consult Australia. Sydney, The Australian Professional Consultants Council (2nd ed.).

Australia, Department of the Special Trade Representative, (1980) Overseas Development Projects: A Market Survey -- Mission Report by the Department of the Special Trade Representative. Canberra, Australian Government Publishing Service.

Australian Development Assistance Bureau (1979) Australian Development Assistance Annual Review 1977-8. Canberra, Australian Government Publishing Service.

Australian Development Assistance Bureau (1981a) Development Co-operation: Australia's Program of Support for Social and Economic Development in the Third World -- Annual Review 1979-80. Canberra, Australian Government Publishing Service.

Australian Development Assistance Bureau (1981b) Development Co-operation: Australia's Program of Support for Social and Economic Development in the Third World -- Bilateral Program 1980-81. Canberra, Australian Government Publishing Service.

Australian Development Assistance Bureau, Statistical Section (1981) Functional Classification of Australian Official Development Assistance to Developing Countries: Bilateral Flows by Project and Major Items of Expenditure 1975/76 to 1979-80. Canberra, Central Statistics Section, Australian Development Assistance Bureau.

Australian Senate Joint Committee on Foreign Affairs (1972) Report on Australia's Foreign Aid: What is the Most Effective Form of Aid - Bilateral or Multilateral. Canberra, Government Printer.

Australian Senate Standing Committee on Foreign Affairs and Defence (1980) The New International Economic Order Implications for Australia. Report from the Senate Standing Committee. Canberra, Australian Government Publishing Service.

Ben Bouanah, J. and Stein, M.M. (1978) 'Urban transportation models: a generalized process for international application', Traffic Quarterly, Vol. 32, pp. 449-70.

Black, J.A. (1975) 'A review of the technical aspects of Australian urban land use/transportation studies'. In G.R. Webb and J.C. McMaster, Australian Transport Economics. Sydney, Australia & New Zealand Book Co. Pty. Ltd, pp. 307-36.

Black, J.A. and Rimmer, P.J. (1981) Occidental ideas and oriental transport landscapes: the Japanese connection. Unpublished seminar presented in Department of Human Geography, Research School of Pacific Studies, The Australian National University, 15 April 1981.

Blunden, W.R. (1971) The Land-Use/Transport System: Analysis and Synthesis. Oxford, Pergamon.

Boxer, A. H. (1969) Experts in Asia: An Inquiry into Australian Technical Assistance. Canberra, The Australian National University Press.

Bureau of Industry Economics (1978) Research Report 1: Industrialisation in Asia - Some Implications for Australian Industry. Canberra, Australian Government Publishing Service.

Bureau of Industry Economics (1980) Research Report 5: Features of the Australian Service Sector. Canberra, Australian Government Publishing Service.

Camilleri, J. (1979) 'Foreign policy'. In A. Patience and B. Head (eds), From Whitlam to Fraser: Reform and Reaction in Australian Politics. Melbourne, Oxford University Press, pp. 251-282.

Committee on Australia's Relations with the Third World (1979) Australia and the Third World: Report of the Committee...[The Harries Report]. Canberra, Australian Government Publishing Service.

Corbett, A.H. (1973) The Institution of Engineers Australia: A History of the First Fifty Years 1919-1969. Sydney, The Institution of Engineers & Angus and Robertson.

Guttman, H.P. (1976) The International Consultant. New York. McGraw-Hill.

Magee, S.P. (1977) 'Information and the multinational corporation an appropriability theory of direct foreign investment'. In J.N. Bhagwati (ed.), The New International Economic Order: The North-South Debate. Cambridge (Mass.), M.I.T. Press:317-340.

Renouf, A. (1979) The Frightened Country. Melbourne, Macmillan.

Rimmer, P.J. (1971a) Transport in Thailand: The Railway Decision. Department of Human Geography Publication HG/6. Canberra, Research School of Pacific Studies, The Australian National University.

Rimmer, P.J. (1971b) 'Government influence on transport decision-making in Thailand'. In G.J.R. Linge and P.J. Rimmer (eds), Government Influence and the Location of Economic Activity. Department of Human Geography Publication HG/5. Canberra, Research School of Pacific Studies, The Australian National University. Reprinted in M.E. Eliot Hurst, Transportation Geography: Comments and Readings. New York, McGraw-Hill, 1974, pp. 292-313.

Rimmer, P.J. (1973) 'Freight transport in Thailand'. In R. Ho and E.C. Chapman (eds), Studies of Contemporary Thailand. Department of Human Geography Publication HG/8. Canberra, Research School of Pacific Studies, The Australian National University:313-344.

Rimmer, P.J. (1977) 'A conceptual framework for examining urban and regional transport needs in South-east Asia', Pacific Viewpoint, Vol. 18, pp. 17-26.

Rimmer, P.J. (1980) 'The British expert cometh: the imprint of the individual on Australia's economic landscape'. In J.N. Jennings and G.J.R. Linge (eds), Of Time and Place. Canberra, Australian National University Press:48-71.

Roberts, J. and Perrin, J. (1975) 'Engineering consultancy in India: the public sector steel industry'. In H. Radice (ed.), International Firms and Modern Imperialism. Harmondsworth, Penguin:215-219.

Study Group on Structural Adjustment (1979) Report Vol. 1. Canberra, Government Printer.

World Bank (1975) Urban Transport: Sector Policy Paper. Washington, D.C., World Bank.