Background: OTC, submarine cable and microeconomic reform

Microeconomic reform is often dated to the 1980s and occasionally to the mid 1970s picking up important reforms from the Whitlam era. A key phase in this reform period was the corporatisation of Government Business Enterprises (GBEs) which commenced from about 1985. These reforms had efficiency as their core objective and were a necessary precondition to later reforms which extended to the national competition policy. However, there were significant developments aimed at improving the efficiency of the public sector in the 1960s. Treasury published several papers which considered the link between efficient investment in the public sector and economic growth. In one paper published in 1966 Treasury provided a working guide to cost benefit analysis for public investment with a view to formalise its use for such purposes.

Treasury’s economic role developed through the post war years in parallel in some ways with the development of the Overseas Telecommunications Commission (OTC). As part of the Commonwealth Telecommunications Board (CTB) OTC participated in formal analyses of international communications investment proposals including economic and commercial evaluation of proposed investments in submarine telephone cable projects. In part this was a result of complex cost sharing arrangements between CTB members (which, if not properly evaluated may result in over or under sharing of costs) and in part to ensure appropriate capital contributions among members. Through this process OTC also came into routine contact with economic analyses of other CTB members from Britain and Canada as well as commercial analysis of private American carriers, notably AT&T.

OTC’s commercial performance and analytical ability developed through the 1950s through participation in the CTB and as it developed its own international communications operations. Established as a commission, OTC operated in a relatively business-like fashion through the 1950s acquitting itself well, for instance, in anticipating and meeting the huge demand for international traffic associated with the 1956 Melbourne Olympics. However, it was in the evaluation of a proposed Commonwealth Round the World (RTW) SMTC and evaluation and planning for the two cables that were eventually to become Compac and Seacom that OTC developed its investment skills and commercial competence in managing such investment even before it had become de rigueur at the Treasury.

Through such evaluation processes, the project management of Compac and Seacom and through commercial management of the two cables, OTC became part owner and operator of two commercially successful SMTC assets by the late 1960s.

In 1974 Sir James Vernon was commissioned by the Whitlam government to consider whether post and telecommunications should be separated from the Postmasters General’s department and established as commissions operating on stand-alone commercial grounds. Whitlam also asked the Vernon Commission to consider whether OTC should be merged with such a proposed Australian
Telecommunications Commission. Sir James Vernon as chairman recommended against merging OTC within the proposed ATC considering it may risk losing its commercial character.\(^1\) Instead, OTC’s commercial experience helped set benchmarks for the recommendations on the establishment of a domestic telecommunications commission.

Even by the time of the Vernon review OTC already met most of the reform criteria established by the Hawke Government in the GBE reform phase of its 1980s microeconomic reform program. In this paper we trace back this position as a successful commercial enterprise to OTC’s commercial development in the 1950s and its contribution to Compac and Seacom:

- First, we outline the program of microeconomic reform commenced in the mid 1980s, highlighting the efficiency objective of the GBE reform phase. We also note antecedents to such reform in Treasury’s development of microeconomic policy expertise in the 1960s contemporary with OTC’s commercial development after the opening of Compac.
- Second, we draw examples from OTC’s commercial development in the 1950s (that is in the lead up to Compac), in its contribution to developing the investment case for Compac and Seacom and its management of these projects to demonstrate how it commercial experience evolved in large part because of its work on these two projects.
- Third, we provide a brief evaluation of the commercial impact of these two investments on OTC’s commercial performance in the decade after the two projects first commenced operation and compare the commercial position of OTC in 1973 with the GBE reform checklist outlined by ministers of the Hawke Government.

**Key aspects of 1980s microeconomic reform**

The microeconomic reform process of the Hawke and Keating Governments followed several distinct phases, each building on the previous phase and each more difficult to implement than the previous given the federal government had less direct control with each step:

- from 1983, reform of the public service itself;
- from 1985, reform of commonwealth statutory authorities and government business enterprises (GBEs), with corporatisation of GBEs commencing from 1987;
- from 1989, opening to competition certain industries in which the commonwealth government had direct stakes through ownership and control through regulation;\(^2\)
- from 1992, extending similar reforms through a competition reform process agreed with state governments to state authorities and enterprises (i.e. national competition policy).\(^3\)

When the Hawke Government set the initial public sector reforms in place it drew heavily on work already done. After the 1983 election it issued several White Papers on reform of government service, including ‘The Reform of the Australian Public Service’ (Commonwealth Government, 1983) and ‘Budget Reform’ (Commonwealth Government, 1984). ‘These documents, widely debated, laid down what could be regarded as a blueprint for reform and reflected a series of prior studies going back to the Coombs Commission (1976). As a result, not only was the reform package firmly based on prior studies of the problem, it also enjoyed considerable support from the public service and the public in general’ (Mascarenhas 1993, pp. 323–324).

Efficiency was one of three broad objectives of the Coombs Commission.\(^4\) However, as the reforms it helped establish began being put into place in the mid 1980s, economic efficiency became a more important objective. ‘Although the early efforts (of the Hawke Government) at reform emphasized improvement through rationalization, the establishment of the Efficiency Scrutiny Unit (ESU) in 1986 placed greater emphasis on achieving efficiency along private sector lines’ (Mascarenhas 1993, p. 324).
In its second term after the 1984 election the Hawke Government moved its reform focus to improving the efficiency of Statutory Authorities and Government Business Enterprises (Commonwealth Government, 1986). Government’s direct involvement in economic activity had waxed and waned with political changes over the decades. By the 1980s ‘decisions over many years had led to the existence of more than 250 Commonwealth statutory authorities and 18 government business enterprises’.

The Hawke government considered that these enterprises lacked a cohesive rational having been built up almost ad hoc in response to different circumstances at different times. It ‘decided it was time for a reassessment. In 1987, after considerable consultation, a set of policy guidelines articulated a framework for their oversight by government. The guidelines recognised the diversity of these organisations but called for all of them to pay continued attention to ‘bottom-line’ performance to maximise resource allocation’. [APS 2003, p. 123]

By this stage efficiency was the clear key objective. In May 1988 Gareth Evans the Minister for Transport and Communications introduced a ‘package of reforms … aimed at reshaping these (transport and communications) enterprises and improving their efficiency’. The efficiency of GBEs, he said ‘is at the heart of the governments microeconomic agenda for the public sector’ (Evans, Gareth 1988).

The key to this reform phase was to organise GBEs to achieve capital efficiency as they would if they operated in the private sector and, having established this organisationally, to set target returns on capital. ‘In 1987 the government put government business enterprises on to a more competitive footing. We provided more freedom and demanded more accountability from GBE managers, with the expectation of a reasonable return on capital’ (Beazley, 1995 pp. 292–293).

Further corporatisation developments of transport and communications GBEs followed in 1989 including further capital restructuring and price controls. The Government, said Minister for Transport and Communications, Ralph Willis, had ‘systematically worked to put the operations of (these) enterprises on a sounder financial footing and to make them more efficient, more flexible and more businesslike. We have given that task a high priority because of the strategic importance of the GBEs in the Australian economy’ (Willis 1989, p. 1).

This corporatisation phase of reform was an essential building block for later reforms including competition and the national competition policy. In order for competition to be effective GBEs needed to operate efficiently; if they did not they may not stand up to competition, or risked undermining competition as government (as owner) may favour regulatory protection in order to protect its investment. And the commonwealth government could hardly ask the states to reform their enterprises if it hadn’t already put this reform in place for its own.

‘The government and the public sector took the lead in encouraging, exhorting and demanding a new business culture in this country. But it was not enough to exhort the private sector to compete. From the time we opened wide Australia’s doors to the world in the early 1980s, it was clear that the government had to embark on its own process of renewal, including the reform, corporatisation and privatisation of publicly owned businesses as well. As in the private sector, a key goal was to break down monopolies and introduce competition. In a number of cases, the commonwealth opened its activities to competition. In other cases, the government divested itself of businesses altogether. It was a matter of determining which activities could be regarded as central or core to the government’s role, and which activities were either better situated entirely in the private sector or at least opened to contest’ (Beazley 1995, pp. 292–293).

By the 1990s the microeconomic reform process had moved beyond corporatisation and capital efficiency of the GBEs to include promoting competition to help drive industries to improve efficiency. This necessarily included structural and regulatory arrangements to support competition, including access to essential facilities, specific regulation of anti-competitive activities where a GBE retained significant market power and separation of regulatory activities from operational
functions. Price controls and service quality targets were implemented where GBEs retained significant market power and competitive neutrality arrangements implemented to ensure government owned entities did not receive advantage arising from government ownership. This included, for instance, giving explicit recognition to any public interest, social justice or safety objectives that a GBE is required to meet and through direct budget funding of these.

A huge body of work was undertaken between 1985 and 1989 in the corporatisation phase of microeconomic reform. Given all this and the competition reforms that followed it is no wonder that microeconomic reform in Australia is usually dated to the 1980s. However, key elements of the reform process notably over efficiency of government authorities and enterprises were pursued by Treasury in the 1960s and applied as a matter of course in one GBE in the communications portfolio, the Overseas Telecommunications Commission (OTC).

**Treasury in the 1960s … antecedents of microeconomic reform**

Prior to the World War II Treasury’s main focus was finance and budget related including debt and loans council administration and federal state financial relations. Its economic policy role grew with the war and post war reconstruction as well as the Chifley government’s expansion of Commonwealth power over the economy. ‘But despite all this growing federal Government power, Treasury still had only six to eight people working on policy issues’ (Treasury 2001).

Its economic role increased through the 1950s. Among other things the post war world saw the establishment of (n)ew international institutions … and new ideas of international cooperation were tried (including) the International Monetary Fund and the World Bank had been formed and the Secretary to the Treasury, S.G. McFarlane, was the first Australian director’ (Treasury 2001).

The international focus was a development Treasury had in common with OTC which was a member of the Commonwealth Telecommunications Board and other international institutions. As well Treasury’s growing international role would have brought it into greater contact with, and awareness of, OTC as a supplier of international communications services, and perhaps more awareness of the effectiveness of its operations.

As Treasury’s economic role developed substantially in the 1950s and 1960s it also developed its reputation for economic advice. Whitwell says one reason for ‘the Treasury’s authoritative position in economic matters (was that) it acquired a reputation for unsurpassed intellectual strength and expertise’ (Whitwell 1986, p. 22).

In the mid 1960s it sought to extend its expertise from macroeconomic matters into microeconomics. It published several supplements to its Treasury Information Bulletins. In a 1964 paper it explained the economic link between capital investment and output: economic performance it said, ‘means the degree of correspondence between actual output and the maximum output that could be realized …’ (Treasury 1964, p. 5). In this paper it made its case that public assets, even though they produced goods and services which may not be market based ‘yield services to which a monetary value to the community can be imputed. The most obvious examples are public authority (as distinct from public enterprise) capital assets, such as schools or roads’ (Treasury 1964, p. 6).

To draw a link between the two points, even public assets should be undertaken and operated efficiently as they too contributed to the nation’s economic performance.

While that paper put the rationale for measuring economic growth into a broad context of policy choices including noting the limitation that economic growth was ‘but one aspect of human behaviour … and may or may not be reconcilable with other ends that a society wishes to pursue’ (ibid, p. 6) the main purpose of the paper seems to be to make the point that appropriate capital allocation is a precondition for economic growth:

The opportunity to increase the rate of growth through increasing the proportion of current output devoted to capital investment may moreover be missed, or be less than fully expected, if investment is directed into relatively unproductive projects or is pushed ahead without adequate
regard for the pattern of final demand. Thus, investment which makes use of labour and physical resources in demand elsewhere without producing a reasonable rate of return on their use is inimical to a country’s rate of economic growth, as is investment which results in increasing the output of products beyond the demand for them. (Ibid, p. 15)

Here is Treasury in 1964 calling for efficiency in capital allocation in order to better contribute to the nation’s wealth. Two of its key concerns are public rather than private investment and investment made in circumstances where performance is protected:

Examples of the first kind (i.e. investment without a reasonable rate of return) would probably be more commonly found amongst public works, partly because it is difficult to apply the normal price mechanism to the products of such works (so making evaluation difficult). Examples of the second kind tend to occur wherever distortions are imparted (such as) miscalculation of demand or supply, whether by individual businessmen or by central planning bodies: or from the creation of protected positions which permit operation under conditions of excess capacity to continue to yield a satisfactory profit. (Ibid, p. 16)

Here is Treasury in the mid 1960s laying the intellectual groundwork relevant to microeconomic reform more than two decades later. It followed this paper with another in July 1966 on the issue of investment analysis, where it outlined the constraints to efficient capital investment in the public sector noting that ‘(t)he danger in this situation is that to a degree public capital, including to some extent public enterprise capital, may come to be regarded as in some sense a free good. It is not, of course, anything of the kind …’ (Treasury 1966, p. 6). Its answer to this concern was to recommend the use of benefit-cost analysis: ‘Benefit-cost analysis can be applied, in principle, to all forms of public investment’ (Ibid, p. 10).

Benefit cost analysis had been used by then in several areas of public investment including four ‘studies published by the Bureau of Agricultural Economics … between … December 1963 and December 1965’ (Ibid, p. 23). This paper was Treasury’s attempt to make such analysis an established part of the formal evaluation process for government investment.

The commercial development of OTC

OTC had been established as a Commission in 1946, initially through the nationalisation of AWA’s international radio communications operations and, a year later, the acquisition of Cable and Wireless’s Australian cable operations. As a Commission it operated on a relatively commercial basis and operated profitably in most years of the 1950s.

In the late 1950s it commenced an economic evaluation of a major investment proposal to lay a submarine telephony cable across the Pacific Ocean linking Australia with North America and through Canada to the United Kingdom. That project eventually became known as Compac. As it was being considered a second project — which became known as Seacom — was proposed, to lay a submarine telephony cable connecting points in South East Asia to Cairns in the north coast of Australia and by microwave transmission from there to Sydney to connect with the Compac cable.

Building the case for Compac and Seacom, negotiating these with partners in the Commonwealth Telecommunications Board (CTB) and OTC’s exposure through this to evaluation processes used by British and Canadian partners and by the private US carrier AT&T to transatlantic cable helped shape OTC’s commercial skills. It was in a solid position when it took proposals, through the Postmaster General, to Treasury evaluation and into formal Cabinet submissions. The two projects were eventually approved by Cabinet and OTC reorganised itself to manage the planning and execution of the two projects and subsequent commercial operation.

Compac initially commenced service between Australia and New Zealand in July 1962 and across the Pacific to Vancouver in December 1963. Seacom followed in March 1967. Building the case, undertaking the evaluation and seeking government approval for funding were far from easy tasks given the extent of capital commitment called for. The Menzies government was reluctant to
commit to such significant capital projects, initially withholding approval and Treasury, which still managed budget processes (pre its 1976 separation of finance functions), was developing processes to test the efficiency of public sector capital allocation.

The story of the developing case for the two cables, the evaluation of proposals, negotiation with partners, project approval, planning, organisational impacts and managing of the two projects by OTC is told in some detail by Harcourt (1987, pp. 271–333) with supporting information by Barty-King (1979) and a contemporary descriptions are provided in Knightley (1962) and Petry (1963). OTC also published descriptive papers on the two projects (OTC 1963, 1967) as well as details in its various annual reports.

We draw on these descriptive works to demonstrate examples of how OTC developed a commercial approach to capital investment decision making through the Compac and Seacom investments around the same time as Treasury was developing its capital efficiency case. These left OTC by the late 1960s with a capital structure and performance well ahead of other GBEs and which largely met the GBE reform criteria set by Communications Ministers Evans and Willis two decades later.¹¹

**OTC drove initial review of commonwealth cable infrastructure**

The impetus for the submarine cable investments grew initially from a desire to upgrade and ultimately replace existing cables that were used solely for telegraphy. In the 1950s Australia’s main telegraph link to the United Kingdom was by cable across the Pacific to Vancouver, by radio across Canada and then transatlantic cable to the United Kingdom. International telephone service was offered over radio circuits direct to the United Kingdom (and elsewhere), a service that had been in place since 1930 but which suffered constraints to capacity and service quality (Given 2008).

It was OTC that took up the matter of new investment in submarine cable with the Commonwealth Telecommunications Board (CTB) the governing body for the Commonwealth’s telecommunications agreement. The Pacific cable, OTC noted, had spare capacity but lack of capacity on the Commonwealth’s Atlantic cables inhibited service. At this time also the CTB began considering a long term proposal for a new transatlantic cable making use of newly developed deep sea repeaters and providing telephone channels (Harcourt 1987, pp. 271–272).

Initially the CTB, at a meeting of 14 December 1950, left it to the two national bodies (Britain and Canada) to consider the best way to upgrade transatlantic capacity. Britain’s National Body¹² recognised the need for capacity across the Atlantic but considered additional radio channels the best short term solution. That initial approach wasn’t sufficient for OTC which considered that ‘there was urgent need for thorough review of the Commonwealth telecommunications system’ (Harcourt 1987, p. 272). Ultimately this led to a comprehensive study of the entire Commonwealth cable network, with a view to commencing a long-term programme for the progressive improvement of the network.

**Commonwealth cable review overtaken by a commercial plan for transatlantic submarine telephony cable**

The review was overtaken by a major development in February 1953 when Britain advised the CTB that negotiations with AT&T for a trans-Atlantic telephone cable were about to commence. ‘(U)sing the proven American repeaters and twin cables, 30 telephone channels could be provided at a capital cost of around UK£10 million, which might be shared 50:50.’ The development had been triggered by the 1951 enquiry into Britain–Australia services initiated by OTC (Harcourt 1987, p. 278).

After further evaluation the cost of the jointly owned system was likely to be £12.5m (later revised to £15m) to be shared equally by the American and Commonwealth parties. The British and American evaluation showed the cable was expected to yield a useful profit over a twenty year life. This transatlantic telephone (TAT) cable was the first long distance submarine cable capable of transmitting telephone traffic. Its evaluation and performance set a precedent for the CTB’s eventual
plan for COMPAC and other cables. Driven in part by the BPO but also by the commercial AT&T, TAT was designed to earn a surplus if not an economic return. This made an impression on OTC’s CTB member Trevor Housley who was soon to be appointed OTC general manager. He first heard of the proposal as a commercial investment when he was in London to conclude special arrangements for the royal tour and the Olympic games of 1956. The initial focus of OTC was to ensure sufficient supporting capacity on the other legs of the Australia–Canada–Britain route. Establishment of a radio relay station at Vancouver had been agreed by the CTB (Harcourt 1987, pp. 282–286).

TAT had an important effect in demonstrating for OTC the commercial impact of submarine telephone cable. The cable opened for service on 25 September 1956 and the radio relay station at Vancouver shortly afterwards, just in time to be tested by the games. A survey of participating committees indicated that ‘the volume of international reporting would exceed that from any previous games’ (Harcourt 1987, p. 288).

**OTC commercial operating performance improving in the 1950s**

In 1952–53 OTC’s international telegraph traffic fell by around 19%, its telephone traffic by 10% and its revenue from international services by £390,000 resulting in an overall net loss of £60,700. The following year it experienced very heavy traffic growth due to a series of special events and this, an increase in rates, and ‘strict economies applied’ (Harcourt 1987, p. 282) allowed the commission to report a net profit of £91,000 the following year.

While better operating performance followed improved commercial practices and OTC aimed for commercial operating performance, its ability to invest was outside of its own hands. But not entirely: it had an advantage over other GBEs of the time in that its investments would be considered as part of a commonwealth scheme rather than be entirely assessed against the federal government budget requirements of the period. It could leverage its obligations as part of the CTB to push for investments, and with CTB’s appraisal process (a necessary part of its complex scheme for sharing common user costs among members) and the standing of the CTB within the Commonwealth, OTC had some added authority for its investment proposals compared with other government enterprises of the period.

In the context of stronger 1953–54 operating results and the upcoming demands of the 1956 Olympics, OTC had to consider investment in equipment to strengthen poor operating performance of its radio telephony service. This service had been impacted by the ionosphere being in the most adverse phase of its eleven year cycle. OTC approved the new equipment ‘subject to endorsement by the CTB of what would be an appreciable increase in Australian common-user costs’ (Harcourt 1987, p. 282).

**Emerging interaction with private sector … by way of leased capacity**

In 1954 as a further indication of growing commercial awareness, OTC asked the CTB to study the principles for leasing telegraph channels and in charging for them. Increased radio capacity and use of multi-channelling techniques offered ‘the possibility of leasing telegraph circuits to large users, such as international press agencies and airlines’ (Harcourt 1987, p.283).

Australian Associated Press (AAP) began leasing a telegraph channel from London to Melbourne in November 1954 and was now negotiating for additional leases from New York and Singapore. As well, developments in aviation communications now encouraged international airlines to become lessees of OTC facilities. The ITU had prescribed a method of charging for leased circuits only within Europe, where telex services existed and the monthly rental for a lease had been fixed at 2000 times the unit telex charge. Elsewhere it was up to local operators such as OTC.

In 1956 OTC leased circuits to Japan via Hong Kong and for the Olympic games twenty two teleprinter channels were leased to press organisations with terminals in Britain, France, Japan,
New Zealand, the Philippines, Singapore, Sweden, West Germany and the USA. ‘Between 19 November and 9 December … 15,000 telegrams and 2200 phototelegrams were sent from the Olympic stadiums, the 22 leased channels operated for 5000 hours and broadcasts over the radiotelephone service occupied 200 hours. At the same time commercial and private international traffic was being handled at its normal level and without delay’ (Harcourt 1987, p. 289).

The US plans for Pacific submarine telephone cable spurs CTB in the Pacific

Late in 1955 America announced plans to lay telephone cables between Seattle and Alaska and between San Francisco and Hawaii. The announcement spurred the CTB to develop the idea of a Commonwealth round-the-world (RTW) cable with the initial CTB considering a route south from the UK around Africa would be economically viable and, later, extension from South Africa to Asia and Australia (Harcourt 1987, p. 286).

Rivalry also now began to play a role in capital decision making at CTB and, although probably as much geopolitical as economically competitive it did have an impact on capital allocation preferences. With the focus now moving south of the equator OTC played a central role in the CTB evaluation that followed. The 1956 report of the CTB’s cable network design committee suggested that unless speedily adapted to provide more telephone, telex and leased services, the Commonwealth system would become uncompetitive with the expanding facilities of the United States.

TAT proves enormously successful … spurs OTC and PMG evaluation

By late 1956, after the first ten weeks of operation of the TAT cable, Britain radically revised upwards its estimates of the net revenue expected from TAT. The six circuits carrying traffic between Britain and Canada were already full, and indications were that all the other circuits would be full by the end of 1958, at a level ‘considerably in excess of the loading of 26,000 units per year per circuit assumed. The revised estimates showed that over its life, the cable would be as profitable as the existing common-user system’ (Harcourt 1987, p. 291).

OTC’s enthusiasm for the RTW cable was enhanced given the ‘spectacular performance of the Atlantic cable’ and the Postmaster General (PMG) took the proposals to Cabinet ‘which agreed that the CTB’s recommendation of a Commonwealth conference (on the RTW) be accepted and that (a) revised routing configuration (extending the proposed cable from Africa to Perth, Melbourne and New Zealand) be submitted to the Board in advance of the conference’ (Harcourt 1987, p. 292).

Commercial priorities in the Atlantic intervened. Britain and Canada advised that they were planning to provide another Atlantic telephone cable and that this would not be the second transatlantic telephone cable but the third as AT&T had decided to lay a second cable between the USA and Europe. Britain and Canada had ‘concluded that their countries interests, and those of the Commonwealth, would be better served by a cable which they owned and controlled and which would provide direct communication between Britain and Canada’ (Harcourt 1987, p. 293). They estimated the cost at £8.2m and this cable, which would become known as CANTAT, and TAT together would yield a gross average annual profit of some £1.9m over the life of the new cable.

Commercial focus of CANTAT helps redirect capital backing to the Pacific Route

The Canadians now proposed that the next Commonwealth cable after CANTAT should be across the Pacific. What drove this change of view compared to the RTW cable via Africa that was still under review? The commercial interest is evident. Traffic from Australia and New Zealand crossing the Pacific to Vancouver and then across Canada to the western shore of the Atlantic would make more use of and help justify the case for CANTAT as well as offer transit traffic to increase utilisation of the trans-Canadian microwave system.

As well AT&T’s SMTC between San Francisco and Hawaii had now been completed. The US had proved that submarine telephone cable could work commercially over the longer distances of the
Pacific. The map of its SMTC which eventually continued on to Wake Island, Guam and later still to Tokyo is shaped like an index finger inviting CTB connection.

In 1956/57 OTC’s net profit had increased to £200,000 from £92,000 the previous year, in part due to the Olympics. And this profit had been equalled in the following 9 months thanks to burgeoning radiotelephone and lease services. If the TAT experience proved typical, the growth of these services would accelerate with telephone cable. In effect OTC was now more obviously commercially driven; its formal objectives were commercial but it also sought to operate with a commercial profit so that it could pursue its desire to invest in submarine telephone cable.

‘On the bases of the (1958 CTB conference in London) committees’ reports, the conference recommended implementation of a “round-the-world” system of Commonwealth telephone cables, of which CANTAT and the Britain–Canada circuits in TAT would form the first link’ (Harcourt 1987, p. 297). Various other links were considered but the timing and order of construction would be determined by the provision of the necessary capital by the relevant countries.

The nature of the proposed RTW system with different interests at stake, different abilities to contribute capital and differing values in use had the effect of prioritising capital allocation among the different RTW SMTC links along the lines in which Treasury would advocate in its 1964 paper to the most productive uses first. This was transatlantic capacity initially, in part boosted by commercial US interests, but with the long and expensive Pacific leg second.

**Evaluation of Commonwealth Pacific (Compac) cable**

In late 1958 with the Menzies Government returned after election, a draft Cabinet submission recommending Australian participation in the Pacific section of the ‘RTW’ scheme was completed by OTC. Treasury ‘had difficulty contemplating a proposal entailing investment of an amount likely to exceed the total value of the Commission’s existing assets’. The Department questioned the validity of the traffic and revenue estimates and ‘found the assumption that there would be 100 per cent stimulation of telephone traffic during the cable’s first year of operation as “staggering”’ (Harcourt 1987, p. 301).

The Cabinet submission recommended endorsement of the 1958 conference findings on the RTW system in principle, on the understanding that the only financial commitment was to the (evaluated) Pacific section. Treasury had now evaluated that Compac would offer an attractive investment given the support of the Atlantic partners. OTC invited Britain, Canada and New Zealand to a conference in Sydney to consider joint construction of the Commonwealth Pacific (Compac) submarine telephone cable.

The Pacific Cable Conference was held in Sydney in September 1959 at OTC headquarters and was opened on 28 September by Prime Minister Robert Menzies. Over 3 weeks, working through seven committees the conference ‘developed plans for an 80-telephone-channel cable connecting Vancouver–Hawaii–Fanning Island–Fiji–New Zealand–Sydney, and for its construction, operation and maintenance. Estimates of the traffic likely to be carried year by year, over 20 years, were made on the assumption that the Australian–New Zealand section would be opened for services in 1962/63 and the remainder in 1964/65, and that the stimulus given to telephone traffic by the advent of cable operation would be, as OTC had assumed, 100 per cent. It was estimated that the Pacific and Atlantic cables, taken together, would make a profit in each of the 20 years, totalling £84.7m over the period’ (Harcourt 1987, p. 304).

Knightley also highlights the economic evaluation of Compac with ‘annual costs expected to total … some £80 million … (and) revenue over the period would be in the vicinity of £84 million’, (Knightley 1963, p. 273). Although Knightley also notes a capital cost for Compac estimated initially at £33 million (subsequently revised down to £30 million), the description reads more like a budget comparison that a benefit cost assessment with discounting of cashflow to a present value and with an estimated return measured against a cost of capital.
A key issue at the conference was funding of the estimated £26.3m of capital cost (after contribution from AT&T for its IDRs between Australia and Hawaii). Overall sharing was eventually agreed as Canada 33.3%, Britain, 31.7%, Australia 25% and New Zealand 10%. Thus OTC’s capital cost was estimated at £6.6m.

**OTC as convenor/project manager of Compac … a test of organisational capability**

The 1959 Pacific Cable Conference recommended setting up a management committee to take responsibility for both the construction of the cable as a joint project and for its subsequent operation with OTC being project convenor, in effect the project manager. By February 1960 the three other governments had agreed to the Sydney conference recommendations and the first public announcement of the cable project was made on 4 February 1960.

Now that OTC was to become a joint owner and manager of SMTC facilities its operational role was to develop substantially. It commenced a review of staff resources and organisational structure. By July the Pacific cable management committee began placing orders for cable and repeaters. The committee finalised heads of agreements with AT&T granting the company an IDR throughout the life of the cable, of 16 telephone channels from Hawaii to Australia and New Zealand, in return for a proportional share of the cable’s capital cost and annual expenses.

In Sydney construction of OTC’s cable terminal building at Paddington commenced in August 1960 and this evolved into a key test of OTC’s ability to develop stand-alone responsibilities for operation of international services. A key issue was to manage the interface between the international terminal and domestic switching systems. The post office (which operated Australia’s domestic telecommunications as well as post) wanted responsibility for cable signalling and switching equipment and for this to be located at its own exchanges. OTC refused to contemplate this as it would remove from its control the handling of cable traffic including international transit traffic, and the ability to discharge its responsibilities to its Commonwealth partners. OTC’s position was eventually upheld but the interface between OTC and the PMG (and later Telecom) was to be an ongoing point of contention.

**Treasury pressure for efficient capital performance and capital return**

By 1960 as Treasury’s view of capital efficiency was being formalised the Treasurer raised the issue of the appropriate use of OTC’s profit. So far OTC’s profits had been reinvested but now with the expectation of strong commercial prospects for Compac, the Treasurer wanted a programme of return on the capital advances. OTC’s retained profit had reached £362,000 by 1959/60, ‘and could be expected to burgeon under submarine telephone cable conditions, could soon produce a situation in which the Commission could embark on major capital works without due consideration by the government’ (Harcourt 1987, p. 309). The Treasurer argued that profit should go to consolidated revenue as a matter of principle, and for major projects OTC should seek advances from the Treasury as did other GBEs.

Treasury went on to question ‘whether the Commission should aim to make any profit beyond that required to meet the cost of replacements, renewals and minor improvements; that is, whether it should seek “to recover from consumers not only the full cost of its services, but also a contribution towards the cost of expansion and improvement of services”’ (Harcourt 1987, p. 309).

**Focus turns to SE Asia Commonwealth (Seacom) cable**

By the time of the 1959 Pacific Cable conference Japan had announced agreement in principle with AT&T for an SMTC between Japan and Hawaii, and advocated SMTC be provided between Japan and Formosa, and then to Hong Kong, and Singapore via Manila, Saigon and Bangkok. This ran a risk for the Commonwealth that its SE Asian member nations might thus be served with cable outside the commonwealth system.
OTC proposed instead that the Compac cable may be used as a backbone system from which connection to Asian points could be made. The original RTW scheme had proposed a spur to the Malayan Peninsula from western Australia but with the Pacific leg now on the drawing board, it made more economic sense from an Australian viewpoint to consider a route from its east coast via New Guinea and North Borneo, which opened up connection possibilities to Hong Kong and elsewhere in SE Asia. In much the same way as Canada had promoted the Pacific cable which offered commercial gain for transmission across Canada linking with and improving utilisation prospects for CANTAT, Australia now promoted a SE Asian cable which would transit the north east of Australia and link with, and increase utilisation of, Compac.

Within Australia the SE Asian leg was investigated by interdepartmental committee. Within this Treasury raised a new caution about the impact proposed satellite communications might have on the cable. OTC did not have such doubts; demand for its services was growing strongly, especially to and from Asia. Stimulated further by telephone cable conditions, traffic was likely to fill the cable well before satellite communications became available. Satellite was not halting the laying of cable across the Atlantic, with AT&T’s cable to France (TAT2), CANTAT due soon and BPO and AT&T having now agreed to build TAT 3. Despite Treasury concerns, the PMG decided to make a Cabinet submission ‘stressing the substantial benefits to Australia which would flow from a telephone cable to Asia’ (Harcourt 1987, p. 316).

The Kuala Lumpur conference to consider Seacom recommended the Australian suggested route and accepted that the Australian landing point should be between Southport and Cairns, with connection to the COMPAC terminal in Sydney provided by the Australian inland system. The conference estimated that, with Seacom the commonwealth RTW scheme would show a surplus in each year of the cable’s life, totalling £142m (UK) over 20 years. Cabinet accepted these Seacom recommendations in October 1960.

OTC’s contribution to the planning for Compac and pitching for Seacom helped its development as a commercial enterprise. In part this came about as a result of negotiations within the CTB which had both to make its own recommendations to partner governments and the most comprehensive way to achieve this was to show that these investments would earn economic returns, as well as work out appropriate sharing of capital cost among the partners. The CTB used benefit cost analysis although it’s not clear if this was routine or how formally it was applied by 1960. In a dispute between the CTB and India over contributions to the wayleave scheme the CTB argued that relief could be provided ‘only if some way could be found to advance the long-term cost benefits of the retirement of telegraph cables made redundant by telephone cables’ (Harcourt 1987, p.319).

The increasing commercialisation of its operations and investments is also reflected in changes in OTC’s capital responsibilities to its owners, the federal Government. ‘With major capital expenditure on COMPAC about to commence, the Treasurer had given his long outstanding concurrence to the Commission retaining its profits for 1960/61 and the two previous years, but on the clear understanding that there would be a review of the financial relationship between the government and the Commission … Cabinet agreed that such a review be deferred until after COMPAC had been completed and that, meanwhile, the Commission be permitted to retain its profits for capital commitments’ (Harcourt 1987, p.318).

**Compac and Seacom, transformative for OTC**

The commission’s operating and commercial performance was formally evaluated by the Vernon Commission in 1974. International telephone minutes had grown 20 fold over the 10 years from 1963 (when Compac was completed) to 1973 from 960,000 minutes to 17,492,000 minutes, an annual growth rate of 34%. Telex had grown at 29% pa to 10m minutes and lease capacity from 157,000 hours in 1963 to 1,350,000 hours in 1973, an annual rate 24%. Only telegrams were showing signs of flagging growth having reached a peak of 140m words in 1971, they had fallen to 136m words in 1973.
Lease line services had also now become a staple product and one that offered operational as well as allocative efficiency. ‘When a business has a large enough requirement for communications between two points it quickly becomes economical to hire a telegraph leased circuit … Although the standard rate of transmission is 66 words per minute, OTC(A) also offers leased services at 33 wpm and 15 wpm. By selling ¼ speed leased circuits (15 wpm) OTC(A) can make greater use of capacity and has thus been able to offer the lower capacity circuit at a cheaper rate’ (White 1967, p. 69).

The dynamic nature of the company’s lease services was also evident: ‘Last year one company … transmit(ed) data between Melbourne and England to interrogate a computer … Business can look forward to an ever increasing volume of capacity available for communications, to the extension of existing services and the development of new ones at tariffs economical in terms of quality and capacity to transmit information’ (White 1967 p. 70).

OTC as a capital efficient benchmark for GBEs

In 1974 the Whitlam Government established the Australian Post Office Commission to inquire into and report on ‘what changes, if any, should be made in the organisation, administration and operations of postal and telecommunications services (including overseas services) provided in Australia …’ (Vernon 1974a, p. iv). The APO Commission chaired by Sir James Vernon (and so is also known as the Vernon Commission) included two other members, B.J. Calinan and J.J. Kennedy. It was asked specifically to examine a range of organisational, service and financial matters including ‘the financing of recurrent and capital costs’ of those communications enterprises (ibid).13

As for OTC, the Vernon Commission was asked to consider ‘the responsibilities of the Overseas Telecommunications Commission and the division of functions between Commission and the Postmaster General’s Department’ (Vernon 1974a, p. iv). The question was whether OTC should be merged with a proposed Australian Telecommunications Commission or remain separate from it. Vernon reported that ‘(t)he Commissioners have not been able to reach a common view on the question of whether the OTC should remain as a separate entity or whether it should remain as a separate entity or whether it should be merged with the proposed national telecommunications corporation’ (Vernon 1974a, p. iv).

OTC paid interest on Treasury advances loans from its inception, and from 1971 an equity return was applied

The Vernon Inquiry highlighted that OTC was financed by loan from Treasury on which interest was charged and payable to Treasury. This represented a recognition of cost of capital which Treasury had advocated for GBEs and other public investment in the 1960s. It was more apparent in the case of OTC than other GBEs because of the nature of cost recovery as part of the international body, the CTB within which partners had to contribute a proportion of capital. Because of this requirement OTC’s cost of capital was more explicit than say in domestic operation where taxpayers and service users contributions overlap.

Interest was payable on advances up to 31 March 1971 noted Vernon. By 31 March 1968 advances totalled $22.544m and unappropriated profits of $29.49m. Provision was made in section 48 of the OTC Act 1946–1958 for net profits to be ‘applied in such a manner as the Minister, after considering any recommendations of the Commission and with the concurrence of the Treasurer, directs’. However no profits were distributed between 1947 and 1968 (Vernon 1974a, p. 276).

The OTC Act was amended in 1971 to change these financing arrangements. Two repayments were made:

- A part repayment of Treasury advances of $5m made during FY69, leaving Treasury advances outstanding of A$17.544m.
For FY70 a payment of A$4.9m was made in lieu of taxation (for which OTC was not then liable). As well a payment of $1.57m was made in lieu of dividend. Interest and dividend paid on 1968–69 operating performance provided a government return of 7½ percent on a capital of A$35m.

And its capital was reconstructed:

- Under the new Act repayment of Treasury advances (net of the of $5m repaid in FY69) amounting to A$17.544m was capitalised, taking total capital to A$35m at 31 March 1971.
- With the change in capital from debt to equity, OTC was no longer required to pay interest but would pay a dividend as determined by the Minister with the concurrence of the Treasurer.
- The Commission became liable for income tax and paid around $7m per year in the early 1970s.
- After the recapitalisation of 1971, OTC paid a 7½ percent dividend in 1971 and 1972 earnings, increasing to 8 ½ percent in 1973.

OTC also ran Coastal Radio services as a loss making business but published separate profit and loss statements for these. Thus by 1971 and due largely to the commercial success of Compac and Seacom, OTC was already meeting the key elements of the Corporatisation phase of the microeconomic reform agenda that the Hawke government was to implement 15 years later.

**Vernon Inquiry: OTC a benchmark for a telecommunications commission**

The Committee also drew on some organisational arrangements that had proved effective at OTC when it recommended the establishment of the ATC and APO as statutory corporations, Vernon recommended that the Managing Directors of the corporations be appointed by the respective boards. ‘There are precedents for giving this power to the management of statutory corporations (e.g. TAA and OTC).’ Other operational aspects that the Committee proposed for the recommended ATO had also well established at OTC. OTC was able to acquire land directly in its own name and arrange directly for the construction of land and buildings. It could open bank accounts in its own name.

In terms of financing the Vernon Committee recommended that Treasury continue to advance sums on the corporations to meet the shortfall between expenditure and revenue but that these be in the nature of loans to the corporations on which interest would be paid (Vernon, p. 227). This was already established financial practice at OTC.

**The taxation issue**

Treasury’s concern of the 1960s about free use of capital in public enterprises was a feature considered by the Vernon Inquiry including whether telecommunications and postal services should pay tax. Various witnesses had proposed that in view of the community service nature of the APO’s operations some or all of its borrowings should be interest free, or at least charged at a nominal rate. Some suggested that charging interest to the APO amounted to double taxation.

The opportunity cost views Treasury had put in the 1960s were now sufficiently well accepted to be reiterated by the Vernon Commission: capital, it said, ‘can never be considered a ‘free’ resource … (t)he cost of foregoing alternative investments, the so-called ‘opportunity cost’, is a cost that has to be borne by taxpayers or by other groups’ (Vernon 1974a, p. 174).

Similarly it rejected the double taxation argument suggesting that there is no correlation between the two groups (users of services and taxpayers) suggesting that a cross subsidy would arise if cost (i.e. capital costs) were moved from one group to another.

However the Vernon Commission recommended that the proposed Australian Telecommunications Commission should not pay federal or state taxes including income tax, sales tax and customs duty although at the time OTC was required to pay such taxes. The different treatment would create a
difficulty for the merger recommendation of Commissioners Callinan and Kennedy; ‘to levy taxes on international calls and not on local or trunk calls is anomalous’ they said (Vernon, p. 296). So the merger recommendation, if accepted, would mean winding back taxes on international services.

**Corporatisation: Vernon looks to OTC**

The Vernon Commission examined whether the APO and its two separable services should be administered through separate departments of State or as statutory corporations. It found emphatically in favour of the latter form largely because the need for operational flexibility and independence from close political control. The Commission recommended that telecommunications services should be organised and managed in a way which:

- Relieves the Minister of responsibility for the day-to-day administration of those services;
- Gives management a reasonable freedom to make the necessary commercial and business decisions;
- Places with management the authority and responsibility for organisational and staffing matters;
- Enables persons outside Government employment to contribute their skills and experience to the overall direction of the enterprises.
- A separate career structure to that of the APS was needed.

As OTC was already organised and managed along these lines, the Commission was recommending effectively that the domestic telephone services be organised and managed along similar lines to OTC.

**OTC’s commercial character kept it as a separate entity**

The Vernon Commission agreed that telecommunications be separated from post and be established as a separate statutory corporations but couldn’t agree on the inclusion of OTC with the proposed ATC. Commissioners Callinan and Kennedy considered that a full merger between OTC and the proposed ATC ‘would be most desirable’ (Ibid). Their reason was conflict that was evident left co-ordination and entente between the two bodies insufficient at all levels. They recognised that merger may complicate the formation of the ATC but said OTC ‘is not a large organisation … and its merger with the much larger ATC employing almost 90,000 people should not present great difficulties’ (Ibid).

The Chairman, Sir James Vernon disagreed saying the disagreements between OTC and the APO were not material to the question of merger. Cross subsidy issues (i.e. payment for termination and backhaul) could be examined objectively and adjusted if needed but ‘the ability of the relatively prosperous international operation to “subsidise” the less profitable national service is very limited’.

Vernon argued that on the evidence he was not convinced a merger would be desirable because it risked undermining the businesses effectiveness. OTC he said, ‘is a well developed and compact organisation, strongly market-oriented, showing good performance and with established relationships in the international field … OTC, a well established, going concern, should not be destroyed unless or until, overwhelming advantages can be shown to attach to it merging with the very much larger ATC’ (Ibid, p. 298).

The Whitlam government favoured the merger but lacked the numbers in the Senate in 1975 to force it through. The opposition disagreed, supported the proposed ATC but not the merger with OTC. Senator Durack highlighted that the overseas services have been running independently of domestic services for 29 years and had come to satisfactory arrangements. ‘The first thing that occurs to us is “Why disturb such a highly successful body as that?”’ (Hansard, 20 May 1975, p. 1569). The Government took the merger off the table although it remained government policy and likely would have been reintroduced at a later date if the government had not lost office later.
Conclusion: OTC met most of the 1980s GBE reform checklist by the early 1970s

John Dawkins spelled out the checklist of reforms applied to government business enterprises in a review of GBE reform in 1995. ‘We gave their boards greater authority to achieve and to be responsible for performance, for example, we removed controls in the area of industrial relations, purchasing and superannuation. Boards were given responsibility for developing business strategies, directing the management of the enterprise and managing commercial risks. We expected them to achieve financial targets and pay dividends and taxes to the Government, and where necessary, meet explicit Government social obligations … Corporate plans now serve as the key accountability document between the enterprise and the Government. The dividend, pricing and service quality targets set in the corporate plan are the measure by which the Government is able to judge an enterprise’s performance’ (Dawkins 1995, pp. 242–243). Against this list OTC was meeting most of these criteria by the early 1970s with the possible exception of superannuation and meeting specified service quality targets.

To the extent it was meeting these GBE reform targets it doesn’t necessarily follow that it was capital efficient even though its return on invested capital running at over 20% by the early 1970s was well above its cost of capital. OTC’s capital performance was achieved as a monopoly provider of international services at a time of rapid growth in the demand for such services. Capital allocation in this context would have failed the efficiency test set by Treasury a few years in 1964, that is that distortions might be imparted due to the creation of protected positions which permit operation under conditions of excess capacity to continue to yield a satisfactory profit’ (Treasury 1964, p. 16).

Excess capacity wasn’t the issue with either Compac or Seacom but rather that pricing of usage and capacity upgrades may have occurred differently in a situation where supply was contested. Nevertheless, a necessary precondition for the Hawke Government’s eventual introduction of competition into such sectors was the corporatisation process which provided the enterprises with sufficient freedom to organise their capital structure to meet and take responsibility for meeting capital efficiency target. It was to this level of readiness that OTC established a benchmark around 20 years before it was set by Ralph Willis in 1989.

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1 Although the Commission itself could not reach agreement on the merger question.

2 ‘The Government has been able to use its ownership of GBEs to introduce competitive reforms in a number of sectors, e.g. telecommunications, aviation and rail’ (Dawkins 1995).

3 Borland (2001) provides a summary of microeconomic reform, also dating it as ‘the past 20 years’. For the purpose of this article we don’t need to consider other reforms of the Hawke and Keating Governments of a macroeconomic nature or reforms, reviews and refinements of the Howard Government, nor do we need to consider the efficiency implications of privatisation.

4 The Coombs Commission was established in 1974 by the Whitlam Government to consider how the public service might be structured and operated to make it more responsive to elected government. Two other objectives were to consider how to achieve greater community participation in government and how to improve the efficiency and effectiveness of the public service with devolution and a stronger emphasis on results (RCAGA, 1976).

5 For example, Borland (2001), Mascarhenas (1993) and Whitwell (1990).

6 The bulk of its budget and finance functions were separated into a new Department of Finance in 1976 after which Treasury’s role became predominantly economic.

7 The rise of the ‘Treasury economist’ after World War II is outlined in Whitwell (1986) pp. 9–15. In 1948, after the Chifley government had sought to nationalise the banks and had through referendum expanded the economic role of the Commonwealth, Treasury requested 134 graduates in economics and 23 in arts with a major in economics. It received 56 graduates in arts, 31 in economics and 27 in law (Whitwell 1986, p. 11).

8 The need to generate a capital return including profit as a return on equity investment was recognised among advocates of national ownership of business although without necessarily drawing a link between this economic return on equity investment and national economic performance. ‘Most public enterprises undertaken in Australia have ‘paid’ in the sense that private firms ‘pay’ — by showing a profit on operations’, declared Brian Fitzpatrick, an economic historian and self declared socialist in a 1945 pamphlet written in support of the Chifley Government’s policy to nationalise the airlines (Fitzpatrick, 1945). The absence of the link between return on equity and economic performance makes it hard to see that returns generated in protected areas may be less reliable indicators of investments that make positive economic contributions than returns generated where there is a contest for resources or where the value of outputs is weighed in the market against rival outputs in a competitive environment.

9 The 1966 Committee of Economic Enquiry also recommended the use of benefit cost analysis but noted that, ‘unfortunately, relatively little use appears to have been made of such analysis’ (Vernon 1965).

10 The acquisition of AWA’s assets and formation of OTC is described in Martin 2010.

11 Although not the competition reforms, as we note later in this paper.

12 The CTB operated as a management board for international communications between commonwealth members with each country having a national body which operated international communications services within that country. The British National Body was the British Post Office (BPO) while Australia’s was OTC(A) and Canada’s was OTC(C).

13 The 1965 Committee of Economic Enquiry, also chaired by Sir James Vernon, includes a suggestion that the Government may need to review future communications services (*inter alia*) and study structural relationships to ensure they were adequate to support economic growth and defence; at page 1108 of volume II.