

September 2008

Project Number: TA 4929-PAL

Facility for Economic and Infrastructure Management Project

**Privatization and Corporatization Options for Palau National
Communications Corporation**

Working Paper 1



**Prepared for:
Government of Palau and
Asian Development Bank**

**Prepared by:
Laurence Slee
Privatization Specialist, PINZ**

PALAU NATIONAL COMMUNICATIONS CORPORATION

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
PART 1: BACKGROUND	3
A. Objective of Paper	3
B. Sector Structure and Regulation	3
C. PNCC Governance and Strategic Plans	4
D. Financial Performance	4
(a) Revenue	4
(b) Expenses.....	6
(c) Other Cost Drivers	6
E. Market Size.....	7
F. Comparative Tariffs.....	7
G. Other Palau Telecommunication Studies	8
PART 2: POLICY DECISIONS REQUIRED	9
H. Privatization Objectives	9
I. Strategic issues.....	9
J. Sector Regulation.....	10
(d) Universal Service Obligations (USO)	11
(e) Debt Servicing	14
(f) Governance	15
K. Summary Strategies	16
Appendix 1: Financial Results.....	18
Appendix 2: Recent Commentaries on Telecommunications Sector	19
Appendix 3: Bibliography	20

ABBREVIATIONS

ADB	–	Asian Development Bank
GOP	–	Government of Palau
PIFS	–	Pacific Islands Forum Secretariat
PNCC	–	Palau National Communications Corporation
USO	–	Universal Service Obligation

EXECUTIVE SUMMARY

1. This Working Paper reviews the performance of Palau National Communications Corporation (PNCC) and the Palau telecommunications sector as a whole, with the objective of identifying opportunities for further corporatization, privatization or private sector involvement in the sector.
2. PNCC demonstrates the value that can be obtained from a process of introducing competitive markets and corporatization. Communication costs in Palau have reduced as PNCC has matched the lower tariffs offered by the new competitors. PNCC covers all operating expenses. It is also successfully meeting interest payments on capital investments, and funding nation-wide services through a process of internal cross subsidies.
3. At present PNCC is not likely to be an attractive proposition to private sector investors or joint venture partners. It has high debt levels; a low (3 percent) return on assets; a small customer base; and significant social obligations which interfere with pursuing fully commercial objectives.
4. PNCC is successful despite operating in an environment that leaves it at a significant competitive disadvantage. It is this competitive disadvantage that is likely to be a major deterrent to investors. There are two main causes to be addressed.
5. The first barrier to improved financial performance is the expectation that PNCC meets the Universal Service Obligation (USO) requirement to provide the full range of telecommunication services (including cable television) to all citizens, regardless of the cost of reaching the more distant, low density locations. PNCC estimates the cost of this obligation to be \$2.85 million per annum. This is currently met through cross subsidization from high value services such as long distance phone calls. If the 2007 trend of diminishing revenue from long distance calls continues, then there could be difficulties in meeting all financial obligations in the future.
6. PNCC competitors do not have to meet similar requirements. They are reported to focus on high density areas of the country only. They therefore have a more attractive cost structure and greater opportunities to achieve financial surpluses or adopt 'market stealing' pricing strategies, thus limiting PNCC's ability to self fund new investments.
7. The second competitive disadvantage for PNCC is the level of debt servicing required. The Corporation's financial structure is based on zero equity and 100 percent debt. The annual debt servicing burden is \$2.3 million, and the total outstanding debt based on the current repayment schedule is \$51.3 million. Other telecommunication providers are not similarly encumbered, and have greater flexibility.
8. The report suggests that three objectives should be considered for the sector:
 - (i) To introduce competitive neutrality, with no single service provider being advantaged or disadvantaged;
 - (ii) To ensure that PNCC remains sustainable and fully self financing;

- (iii) To make PNCC attractive to private sector investors, in order to attract future private sector investments, if required, for capital investments that upgrade technology.
9. To achieve these objectives the Working Paper recommends both short and long term strategies.
10. The **short term** strategies involve:
- (i) The introduction of an effective regulatory regime for telecommunications. This will contribute to competitive neutrality, and provide an investment climate that will give greater degrees of assurance to possible future investments. It contributes to the “enabling environment” that is so important for attracting private sector investors. Depending on the detail, it may possibly place some limitations on the ability of telecom competitors to focus only on high volume niche services, rather than providing national services.
 - (ii) Broadening the financing base for USO support. This will also contribute to competitive neutrality. The Working Paper briefly discusses some options, including improved targeting of subsidies so that they become more pro poor. Shifting some of the cost burden away from PNCC will have the effect of increasing profitability, or releasing funds for additional infrastructure investments. It will also increase transparency and improve decision making on the sustainability of USO policies, as the full costs become more evident.
 - (iii) Reducing the debt burden on PNCC, for instance by changing the financial structure and converting some debt to equity. This will be an important adjustment for the future.
 - (iv) Improving governance, in particular by (i) closer scrutiny of profit and capital investment projections; and (ii) introducing cost reduction targets, in particular in loss making locations.
11. The overall impact of these strategies is expected to be (i) a “level playing field” between all telecommunication service providers; (ii) increased profitability for PNCC, and therefore attractiveness to the private sector; (iii) a stable and assured environment that will provide potential investors with increased confidence in working in the sector.
12. In the **medium-term** new strategies will be required to actively promote PNCC as an attractive partner to investors who are interested in contributing to capital investments, and sharing some of the risk associated with such activities. Consideration can also be given to introducing contestability for USO support, if this funding is to be channelled through the telecommunication provider, rather than through a program of targeting that supports those lacking the ability to pay. The impact from this will be that Palau has the opportunity to be at the forefront of emerging telecommunications technologies, offered through a shared public-private-partnership or Joint Venture that reduces Government of Palau (GOP) risk and shares investment expenditure. The nation as a whole will, therefore, benefit from improved information and communication based technologies.

PART 1: BACKGROUND

A. Objective of Paper

13. The objective of this Working Paper is to summarize the situation relating to telecommunication in Palau, and possible opportunities for improving the existing corporatized model and some form of privatization or greater public-private-partnership in the sector as a whole.

14. The analysis has been based on (i) historical performance for PNCC; (ii) PNCC projections of requirements for future operations; (iii) wider national policy and privatization considerations across all sectors, to ensure policy consistency. Part 1 of the Working Paper sets out details of the performance of PNCC. Part 2 addresses the major actions and issues to be considered.

15. The assessment has been completed in close collaboration with PNCC, who are thanked for all their considerable assistance.

B. Sector Structure and Regulation

16. With a small population base of only 20,000, and considerable distances to connect to international land line networks, Palau faces a significant disadvantage in the field of telecommunications. This difficulty is compounded for the national operator, PNCC, by (i) the lack of a regulatory framework; (ii) a large debt servicing requirement; (iii) an expectation of equal access to a wide range of telecommunication services for all citizens, regardless of the cost of providing such a service; and (iv) high, but understandable, expectations of citizens relating to levels of service.

17. There are now three providers in the telecommunications sector as follows:

- (i) PNCC, which operates land line, cellular, internet and cable TV services on a national and international basis
- (ii) Palau Mobile Corporation, under Taiwanese ownership, and offering limited coverage national and international cellular services
- (iii) Palau Telecommunications, under Palauan ownership, offering wireless internet services in Koror only.

18. Both new operators are reported to have focused on the high volume segment of the market – Koror – and niched mobile services.

19. Sector regulation is limited to allocation of frequency distributions. PNCC is required to seek approval by the National Congress to raise tariff rates by more than 10 percent annually. It is also mandated to go through a tariff revision process. Similar requirements do not exist for competitor companies.

20. The backbone to the structure is a fibre optic cable, purchased in 1997 - 2001 at a cost of \$30 million - \$34 million. The two nongovernment-owned companies have provided their own infrastructure.

C. PNCC Governance and Strategic Plans

21. PNCC is fully corporatized. PNCC state that GOP retains considerable influence on operational and investment decisions. Anecdotal accounts suggest that members of the public perceive the Corporation to be part of Government, and subject to the same constraints as the Civil Service.

22. There are five Directors, appointed by the President and confirmed by the Senate. No particular skill requirements have been specified for Board members. The Board meets monthly.

23. The Strategic Objectives determined for 2005 – 2009 consist of five primary and four secondary objectives. PNCC also has an annual strategic plan which targets profitability, efficiency, employee development, customer satisfaction and innovation. The plans tend to be biased towards operational and customer service issues, not financial ones.

24. PNCC is following up possible strategic alliances with other international telecommunication providers, in particular to gain access to communications infrastructure. Negotiations are currently taking place with a Taiwanese provider who has spare satellite capacity.

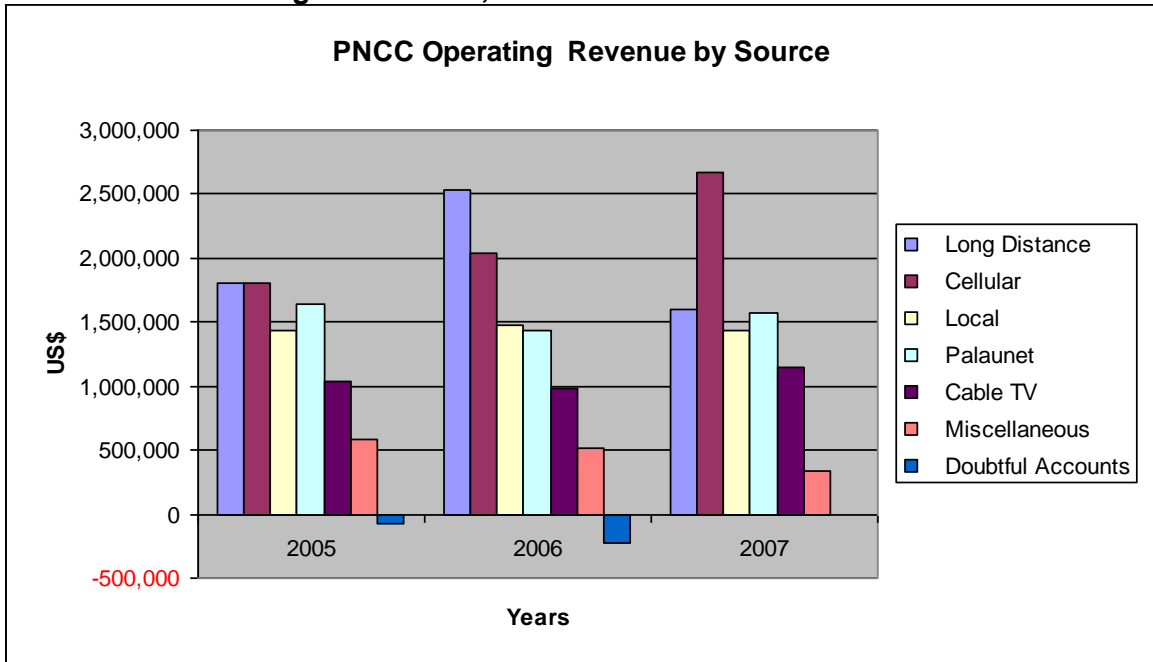
D. Financial Performance

25. PNCC produces a return on assets of only 3 percent. The Corporation has successfully reversed a loss of \$1.1 million in 2004 to a projected profit) of \$0.9m in 2007. Financial projections for 2008 were not provided to the consultant.

(a) Revenue

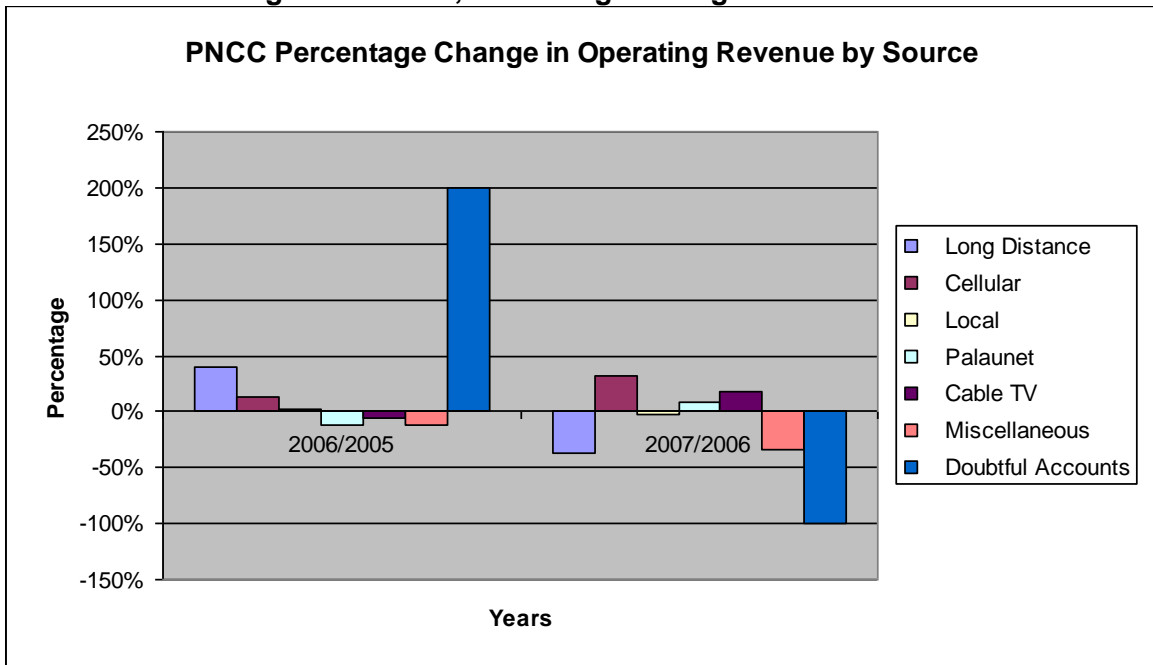
26. Thirty percent of revenue in 2007 came from the more competitive cellular segment of the market (23 percent in 2006) and 22 percent from long distance calls (29 percent in 2006). Given that PNCC is dependent on internal cross subsidization of total services from long distance revenue, the downward trend in this area will become a point of concern if it continues. Appendix 2 summarizes the detailed financial results for the period 2004 – 2007. Figures 1 and 2 show the distribution of revenue by source, and the percentage changes that have occurred over the past three years.

Figure 1: PNCC, Revenue Distribution Trends



Source: PNCC

Figure 2: PNCC, Percentage Changes in Revenue



Source: PNCC

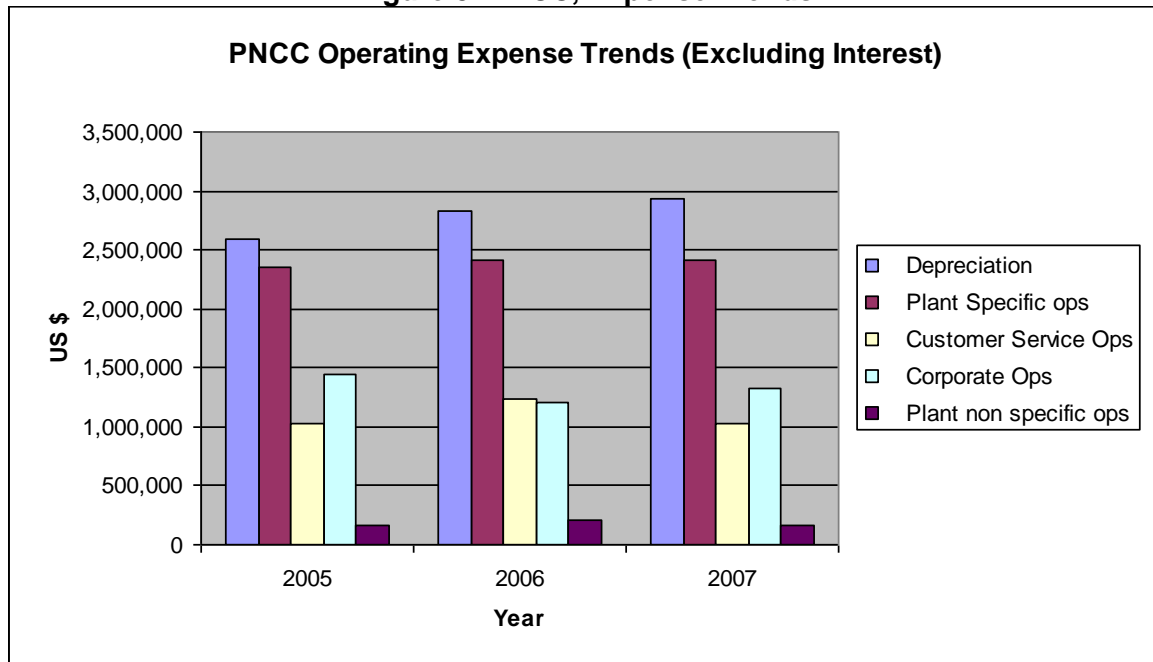
27. Because staff work across all sectors of the business, PNCC does not produce analyses of contributions to profit by service category (long distance calls, cellular calls, etc.).

28. Provision for doubtful debts increased significantly between 2005 and 2006. (\$225,000).

(b) Expenses

29. Detailed information is available at Appendix 2. The year 2007 saw an overall decline of 5 percent in operating expense items compared to 2006. Only plant specific operations and corporate operations showed small increases (\$7 thousand and \$122 thousand respectively). Interest expenses also increased marginally, by \$366 thousand.

Figure 3: PNCC, Expense Trends



Source: Audited Accounts 2004 – 2006; PNCC projections for 2007

30. A private sector investor (and GOP) will be keen to determine the extent to which the cost structure can be reduced, thus increasing profitability. Depreciation, at 35 percent of operating expenses, is considered an uncontrollable cost to the extent that it relates to existing infrastructure. Debt servicing, in particular the cost of servicing the Rural Utilities Service loan of \$39 million,¹ represents a high and ongoing cost to PNCC, accounting for a charge on the balance sheet through to 2029 that will total \$51.3 million, including \$19.2 million interest. Debt servicing payments for much of this period are \$2.3 million per annum.

(c) Other Cost Drivers

31. **Cost of Universal Service Obligation.** Based on PNCC estimates, the costs of servicing areas outside Koror amount to approximately \$3.95 million, whilst revenue amounts to \$1.05 million. The difference in costs amounts effectively to a subsidy from highly populated and high usage areas, and must be reflected in the tariffs. It also represents additional income that PNCC must earn in order to meet the USO requirements. This can be seen as an added cost imposition on customers in the high volume markets. This is discussed further in Part 2 of this report.

¹ Quoted in other sources at \$30 - \$34 million.

32. **Cost of Debt Servicing.** Debt servicing, which includes a USO component because the debt was used to provide infrastructure across the country, amounts to \$2.3 million per annum. As is the case with USO costs, the majority of this expense falls on the high volume customer base around Koror, since remote rural areas make no contribution to profit. The combined impact of both the USO costs and debt servicing places PNCC at a significant competitive disadvantage compared to the two other private sector competitors, who do not have to meet similar charges, and who can afford to use business strategies based on niche provision of services in high profit areas only. This, too, is discussed in Part 2.

33. **Staff Costs.** These represent about 25 percent of the cost structure. Staff costs are not directly attributed to individual service lines. No comparison has been made of staff productivity compared to other telecommunication operators in the Pacific or elsewhere. Staff costs typically present an area for medium-term cost reductions, by (i) eliminating non value adding positions; (ii) introducing basic productivity improvement schemes; and (iii) contracting or outsourcing some functions. The latter may include assisting employees into their own businesses, which “contract back” to their former employer. This works particularly well when workloads are light and employee utilization is low, but there are other additional private sector revenue generating opportunities that can be followed up by the former employees. This “win – win” scenario means that the organization buying the services is assured of having people with the right skill sets and motivation, while those providing the services can increase their income earning potential by doing additional work for other customers in their slack time.

E. Market Size

34. PNCC does not have any market size or market share statistics.

35. Despite the competitive tariff structure, the market for fixed line connections appears relatively saturated. Customer numbers for fixed line and internet services both declined by 8 percent in 2006, and only cellular customer numbers increased, as shown below. If these trends continued into 2007 and beyond, then further questions must be asked about how PNCC can afford to support areas with no contribution to profit, or to fund both existing interest charges and future investments in emerging technologies.

Table 1: PNCC Subscriber Numbers

	2005	2006	2007
Fixed Line Telephone	7977	7326	7474
Cellular	6051	8346	10691
Internet	1315	1209	1162
Cable TV	2956	2952	2796

Source: PNCC

F. Comparative Tariffs

36. In the absence of strong market competition and profitability comparisons, surrogate measures are required to assess performance and efficiency. Such measures may include key performance indicators such as staff numbers per customer or mile of network; network speed or outages; or tariff comparisons. A PNCC comparison of tariffs

completed in 2005 shows Palau to be highly competitive by Pacific standards for prime time services.

Table 2: Prime Time Tariff Comparisons (2005)

	USA	Europe	Asia				Population
			Philippines	Japan	Hong Kong	China	
Palau PNCC	\$0.35	\$0.35	\$0.28	\$0.35	\$0.35	\$0.35	19,717
Cook Islands	\$1.58	\$2.36			\$2.25		21,008
Marshall Islands	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	56,429
FSM	\$1.20	\$1.75	\$1.50	\$1.20	\$1.75	\$1.75	108, 143
Samoa (excl tax)	\$1.55	\$1.55	\$1.55	\$1.55	\$1.55	\$2.64	178,173
Fiji	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.96	868, 531

Source: PNCC

37. One implication from the above survey is that PNCC has a particularly low tariff structure and there is scope for tariff increases without making Palau an excessively costly Pacific Island nation for telecommunication charges. However, a tariff increase is not a realistic business strategy as long as PNCC remains a price follower, because of the need to match private sector providers in Koror. It remains necessary, therefore, to examine what other cost drivers influence the overall financial performance of PNCC.

G. Other Palau Telecommunication Studies

38. A number of other studies have been made into telecommunications in Palau. A number of these have referred to (i) a requirement to introduce a more comprehensive regulatory framework; (ii) to address the present inequality of the USO charges; and (iii) to seek loan forgiveness or universal funding support through the National Exchange Carriers Association. Further information on these conclusions is given at Appendix 3.

PART 2: POLICY DECISIONS REQUIRED

H. Privatization Objectives

39. The privatization objectives provided to the consultant to date are:

- (i) To reduce the drain on GOP funds to sustainable levels.
- (ii) To improve service levels.
- (iii) To improve maintenance.
- (iv) To improve productivity and efficiency.

40. The consultant suggests that the preceding list of objectives can be refined, and some additional requirements considered, as a guide to developing strategies for improvement. The following suggestions may have particular relevance to the communication sector:

- (i) To introduce competitive neutrality to the telecommunications sector, with no single service provider being advantaged or disadvantaged.
- (ii) To develop PNCC into a fully self financing and sustainable institution, which will be attractive to private sector investors or joint venture partners.
- (iii) To provide an enabling environment for the adoption of new emerging information and communications technologies.
- (iv) To spread the burdens imposed by telecommunication USO across all service providers, rather than solely with PNCC.

41. It is suggested that the key GOP objectives for privatization or some form of private sector investment are discussed and, if necessary weights applied to their importance. This will make selection of preferred strategies somewhat easier to achieve.

I. Strategic issues

42. The key questions to be answered are (i) “how do we achieve the above objectives?”; (ii) “what opportunities are there for privatization or greater private sector participation in the telecommunications market in Palau?” and (iii) “is the sector likely to be attractive to private sector investors (including public private partnerships), or what changes may be necessary in order to make it attractive?”

43. The initial steps towards privatization have already been completed for PNCC. It has been successfully commercialized and corporatized, and now acts as an independent corporation totally owned by GOP.

44. However, PNCC is not currently an attractive proposition to private sector investors. It has:

- (i) High debt levels.
- (ii) Significant social obligations, which create a competitive disadvantage.
- (iii) A low Return on Assets (3 percent).
- (iv) A small customer base – a reflection on population size, rather than competitiveness.

45. The present system of taxation based on gross revenue rather than profitability is also a disincentive to reducing costs.

46. Gaining private sector financing for future investments is often a key motivation for public-private-partnerships. The level of funding required from government or government institutions is reduced, and the partners share in the risk. Projected future investment needs over the next 5 years are estimated by PNCC at \$0.5 million per service segment per year, giving a total requirement of \$10 million over the five year period. It will not be easy for PNCC to meet these costs from existing revenue streams, especially in the light of USO and existing debt servicing requirements.

47. Therefore, future policy and reform, and the scope for greater private sector participation or privatization, needs to consider a number of major issues. Each is discussed below.

J. Sector Regulation

48. A number of recent studies have alluded to the lack of a sound regulatory framework for the sector. At present regulation is effectively limited to granting licenses for use of radio frequency spectrums, together with wider regulations covering foreign investment in the economy (in particular the Foreign Investment Act). The latter imposes requirements on foreign businesses to submit quarterly reports on activities and earnings, as well as initial submission of business plans and financial projections. It is understood that these are not accessible to PNCC.

49. The lack of a sound regulatory framework can be described as being “like the wild west without a sheriff”. Any plans for future privatization or public private partnerships need to comply with a wider policy environment that addresses issues such as tariffs, sustainability; interconnectivity; universal service obligations; infrastructure maintenance, requirements for ongoing investments in technology to ensure that Palau retains international communications competitiveness; data security, customer complaints; etc.

50. **The introduction of a regulatory framework for the sector is considered to be a short term, high priority need.** If the Palau telecommunications market is to be an attractive investment opportunity to investors, then it will be important to provide possible investors with the assurances available from a sound, well established and clearly defined regulatory framework for the operation of the sector. This will demonstrate GOP’s commitment to equitable long term stability for the sector. This is seen as a prerequisite to wider involvement of the private sector, since it provides some degree of certainty to investors. A suggested timetable is 6 – 9 months to complete the introduction of Regulations.

51. The regulatory framework needs to be appropriate for the size of the market and the administrative enforcement capacity of GOP. It should be compatible with acceptable regulatory frameworks of other Pacific Island nations and key elements of USA regulatory protocols. The regulatory framework should ensure competitive neutrality between PNCC and other telecommunications providers – something that does not exist at present, for reasons given below.

52. Options proposed to date to introduce a telecommunications regulatory framework are given below. In each case the costs of operating the service need to be recovered either as a government expense or from sector participants:

53. **Option 1:** To develop a regulatory model for Palau. Given the small population base and the technical issues associated with transfer pricing and connectivity, it is doubtful if Palau has the capacity to develop and operate its own regulatory supervision for telecommunications (and other utilities). One suggestion is that this model should be operated under the auspices of the Ministry of Commerce and Trade, with somewhat undefined delegated powers. A preferred regulatory model guarantees complete independence of the Regulator(s) from Ministries, who remain responsible for policy but not interventions.

54. **Option 2:** To adopt an appropriate existing Pacific Island model, such as the Marshall Islands or Samoa. The consultant is not technically qualified to comment on the suitability of these models, or the staff skills and resources necessary to introduce it to Palau.

55. **Option 3:** To seek the support of the U.S. Rural Utilities Service in providing regulatory supervision. This has the benefits of (i) using existing technical expertise, without the need for development of a specific regulatory framework for Palau; (ii) providing a fully independent assessment of technical connectivity and development proposals that may be received from potential international investors in the future; and (iii) ensuring full compatibility with a major international development partner.

56. It is recommended that:

- (i) The Privatization and Private Financing Initiatives Committee which was established by Executive Order 232 in 2005 be activated to consider sector regulation requirements.
- (ii) Option 3 be given particular consideration as the preferred solution. It is fully compatible with the broad recommendations of the National Economic Symposium, and has the other benefit that if a regulatory alliance is concluded then GOP will be well positioned to seek other assistance, such as debt forgiveness or support for new infrastructure investments.
- (iii) A proposal for support from the USA with administering a regulatory framework be considered as part of a wider review into regulatory requirements across all sectors.
- (iv) This proposal be completed within a period of 3 months, for discussion with US counterparts.

(d) Universal Service Obligations (USO)

57. PNCC provides a national telecommunications, internet and cable television service at uniform tariffs throughout the country, thus providing all citizens with equal access to these services. However, this service involves hidden cross subsidies between elements of service, and leaves PNCC at a competitive disadvantage to other telecommunication providers who are free to operate in high density segments of the market only. The so called "level playing field" does not really exist.

58. Unequal competition potentially exists in three forms: (i) new market entrants can focus services on profitable market segments only, and erode PNCC market share; (ii) PNCC can be left with responsibility for meeting the costs of national public good infrastructure that provides equal access to services for all residents, with no similar contribution from other service telecommunications service providers; and (iii) PNCC has debt servicing obligations associated with national infrastructure, in addition to ongoing costs of service provision. The latter point is addressed in the following section.

59. As indicated earlier, PNCC estimates that rural revenue services generate approximately 12 percent of revenue (\$1.1 million) while expenses attributable to rural areas account for 53 percent of costs (\$3.95 million). The difference represents an operational expense that must be recovered by tariffs, which in turn reduce PNCC's (i) ability to compete on the basis of low tariffs and (ii) fund future investment from services.

60. Community service obligations are not uncommon. Many countries have imposed such requirements on telecommunications providers. Where they have been deemed to impose an undue competitive advantage (for instance, by monopoly restrictions on interconnectivity) or disadvantage, (for instance by imposing costs on one market provider, but not others) then solutions have been imposed by a Regulator whose interest is in market competitiveness and fairness. One of the differences for Palau is the small size of the total market.

61. USO policy obligations extend beyond PNCC services. They apply also to electricity, water and sanitation in particular. Preliminary analyses of these services are still to be completed, but early indications are that it will be difficult for some of these services to operate on a full cost recovery basis without infringing citizens willingness and ability to pay. The problem is further compounded when it is considered that in very broad terms income levels correlate with remoteness. Work on income poverty by the Social Sector Specialist indicates that households with low income tend to be in the rural areas, especially the outlying islands. Household incomes in Babeldaob and Peleliu are about 25 percent lower than incomes in Koror and Airai, while incomes in Kayangel-Angaur are some 63 percent lower. The ability to pay is therefore lowest in those areas where the costs of providing services (at least for telecommunications) is also highest.

62. The policy issues for GOP are:

- (i) Whether to treat each utility on an individual basis, or to adopt a single national policy approach.
- (ii) Whether to require internal cross subsidization of services.
- (iii) Whether, in the light of the need to improve financial sustainability, the country can afford to provide the same level of services to all areas of the country.
- (iv) If services are to be subsidized, whether more specific targeting – for instance, for low income groups, would be more effective than requiring cross subsidization within an institution (as is the case at PNCC) or funding deficits at an institutional level, as in areas such as water and sanitation.

63. One approach to USO policy is to consider it a GOP responsibility to ensure equal access to these services for citizens living more remotely. Under this model, Government funds the excess costs of these services, rather than expecting them to be met by one provider (PNCC) only. PNCC would be reimbursed identified and agreed

costs associated with servicing more remote locations. The level of reimbursement would be reviewed and approved annually. Over a period of time, GOP can require PNCC to produce proposals to reduce this cost structure – for instance by training and outsourcing routine maintenance work to local communities. Under this proposal, future infrastructure investments that have “national public good” benefits would also be funded to some extent as USOs. PNCC would be required to submit proposals for such capital expenditure, and the proportion requiring subsidy, for approval – in the same way that major capital investments would normally require approval by government when it is the shareholder. This ensures full transparency. Competitors would have connectivity rights.

64. The disadvantage of this approach is that it introduces an additional cost to GOP. However:

- (i) Revenue from increased PNCC profits will be paid to GOP.
- (ii) A mandatory levy on all telecommunication providers can be introduced, giving access rights to the infrastructure, but helping to defray the GOP cost burden.

65. There are a number of benefits from the option of a GOP funded USO contribution to loan repayment. In particular:

- (i) The scheme is competitively neutral. PNCC and its competitors are on an equal footing. Each provider will have access to the common infrastructure available for more remote areas, while other investments intended to service the more profitable segments of the market will be funded entirely by the individual companies.
- (ii) To the extent that there is a correlation between remoteness and low income, the proposal is pro poor.
- (iii) The PNCC cost structure is reduced by an agreed proportion of expenses associated with the USO cost component. This will enable it to introduce more competitive tariffs. PNCC estimates that the reduction in overall costs could be in the region of \$3 million to \$4 million per annum, based on a detailed 2004 separations study.
- (iv) This does not necessarily represent an increase in costs to GOP. GOP as the only shareholder, can expect higher profits from PNCC (subject to any changes in tariff levels). This will make PNCC more attractive to private sector investors in the medium-term (say 3 years) – an important factor when considering future investment requirements.
- (v) Lower tariffs will bring associated economic benefits that are derived from efficient, low cost information and communications technology. Tariff reductions could be a prerequisite to agreement to implement a scheme of USO payments.
- (vi) Because PNCC is released from the need to fund full loan repayment and interest costs for the Rural Utilities Service loan, it will be better able to invest in evolving technologies, and ensure Palau becomes at the forefront of telecommunications technology.
- (vii) There is improved transparency in the interpretation of the USO. GOP will review the level of subsidy annually, to ensure that it is fair and reasonable. GOP can also consider the scope of services to be included under the USO. For instance, are new evolutions in Cable TV a public good, to be available

to all or should future supported investments be limited to narrower aspects of communications such as land line, cellular and internet services?

- (viii) There is the potential for further reductions in the level of payments to be met by GOP under a USO subsidy scheme. Under some models, competitive bidding can be used to cover the costs of meeting social obligations. This is not relevant for telecommunications in Palau in the short-term, given the limited number of sector providers. However, in the longer term it is possible to envisage PNCC bidding for the subsidy in competition with other telecommunications providers operating in Palau.
- (ix) Releasing PNCC from the obligation to repay the full debt gives it greater financial capacity to invest in emerging technologies over the next 22 years, which is the remaining life of the loan.
- (x) The introduction of a USO subsidy does not preclude GOP seeking debt forgiveness – but that forgiveness would relate to Government debt, not Corporation debt, which would in many cases receive less favourable consideration.

66. It is recommended that:

- (i) GOP introduces a scheme of USO subsidy at an early date.
- (ii) The scheme includes (a) the proportion of infrastructure investment directly related to provision of services to unprofitable areas and (b) maintenance costs less revenue in those areas.
- (iii) PNCC prepare a detailed analysis of breakeven levels by region, based on revenue and expenditure, to justify the level of subsidy required.
- (iv) Consideration be given to improving targeting mechanisms for USO assistance across all sectors, so that benefits reach those most in need.

(e) Debt Servicing

67. PNCC's financial performance, and its ability to offer competitive tariffs and make future investments in infrastructure are also constrained by the need to service the Rural Utilities Service loan of \$39 million.

68. This further contributes to the lack of a "level playing field", making PNCC an unattractive proposition to future private sector investors, since a proportion of future revenue (currently a cumulative \$51.3 million) is required for loan servicing.

69. The National Economic Symposium recommended seeking debt forgiveness. This is an ideal situation, but sets what might be regarded as an unfortunate precedent for future loans.

70. Three alternatives deserve consideration:

- (i) To require all participants in the telecommunications market to contribute to the sunk cost of infrastructure purchased under the Rural Utilities Service Loan. PNCC has proposed draft legislation along these lines, requiring all telecommunications operators to contribute 25 percent of gross revenue to a Universal Service Trust Fund. Based on gross revenue of \$8.7 million this would amount to a payment by PNCC of \$2.18 million per annum – only marginally less than annual loan and interest repayments of \$2.3 million.

The proposal also has implications in terms of transfer pricing, interconnectivity, decisions not to compete on a national basis, etc. The proposal has the advantage that with revenue growth, GOP is likely to receive additional payments. It has the disadvantage that the level or receipts can be manipulated by tariff changes, and the 25 percent charge will have to be factored in to tariffs of private sector providers, thus increasing likely tariffs for consumers. It is not clear whether any future investments in infrastructure made by PNCC, on behalf of the government and for the benefit of all citizens, would be funded by the proposed USO Trust Fund.

- (ii) To convert some debt to equity. PNCC would thus move towards a more balanced debt – equity ratio similar to many commercial enterprises worldwide, and would be expected to earn an adequate return on equity. In the meantime, GOP would assume responsibility for repayment of the debt that had been converted to equity. This proposal has the advantage that it more closely mirrors the financial structure of many commercial operations, which are not funded solely by debt. A change in the financial structure of PNCC will be essential if at some time in the future a decision is made to enter into joint venture partnership with the private sector, or there is a more comprehensive form of privatization. This option is favored as a requirement for the medium term – say within two years.
- (iii) For GOP to assume full responsibility for debt servicing attributable to loss making locations, on the basis these are part of GOP USO policy. This increases the transparency of the cost of the USO.

71. It is recommended that:

- (i) All telecommunication providers be required to pay an “annual infrastructure levy”, but have the right to access existing fibre optic networks in order to provide essential services.
- (ii) The levy be based on industry good practice norms relating to life of the infrastructure.
- (iii) The levy not be based on company turnover, since this can be manipulated too easily – for instance by transfer pricing. What is being paid for is the rights to provide national services, rather than operational decisions on the market segments actually serviced. This right has a value. Whether the Company chooses to use the right is a different strategic decision for the Company.
- (iv) GOP meet the costs of loan repayment and debt servicing associated with the USO to the extent that the levy is not sufficient to cover the infrastructure cost.

(f) Governance

72. PNCC is to be commended on the results it has achieved in a small, competitive market. It has successfully demonstrated how a policy of corporatization and open, competitive markets can result in price reductions for consumers.

73. As shareholder, GOP must now consider what further gains can be achieved from the perspective of the country as a whole.

74. It is recommended that GOP, as shareholder, place particular emphasis on receiving, reviewing and approving an annual Statement of Corporate Intent covering all matters expected to be seen in an annual business plan. Objectives for the following 12 months should be set out in detail, including possible major strategic alliances and their objectives; proposed capital investments; projected profitability, the costs associated with meeting USO requirements, and how these are being reduced, and general industry trends. Intentions for the following two years should be expressed in more general terms, but still include information on projected financial performance and investments. The Statement of Corporate Intent is not meant to be a mechanism to facilitate political intervention but rather to define in broad terms what is expected of the public enterprise in terms of service delivery and commercial performance as well as clearly defining subsidy arrangements. It is also meant to be a means of constraining political intervention.

K. Summary Strategies

75. The proposed strategies are intended to meet a number of the objectives set out at the beginning of this part of the Working Paper, in particular:

- (i) Achieving competitive neutrality in the sector, with a shared responsibility amongst all telecommunication providers for meeting past investment costs in the sector.
- (ii) Ensuring that PNCC remains a fully self financing and sustainable institution, able to contribute to national economic goals.
- (iii) Increasing the attractiveness of the sector to potential investors who may be interested in contributing to future capital investments, under some form of public-private-partnership, or joint venture.

76. As the preceding recommendations imply, the proposed strategies to achieve these objectives fall into short-term strategies, intended to create the environment in which PNCC can become an increasingly attractive opportunity to private sector investors, and medium term strategies intended to attract specific investments following successful implementation of short term interventions.

77. In the short-term, the focus is on creating an environment where PNCC can develop a more profitable financial track record. This will be achieved through (i) regulatory reform, to ensure PNCC is not at a competitive disadvantage; (ii) separation of business objectives (to achieve adequate returns on investment) from social obligations (to provide services to population areas even where these are unprofitable); (iii) debt restructuring, which will shift some of the burden of debt servicing to GOP, but permit higher dividends to be delivered by PNCC, or tariff reductions that will provide economic benefits.

78. Medium-term strategies are dependent on successful outcomes from implementation of short-term strategies. The short-term initiatives will demonstrate that PNCC is a leader in profitability in the Pacific, despite the handicaps of a small population base and the disadvantages imposed by distance. The medium-term strategies that will then be developed will focus on attracting private sector investors to join GOP in funding future capital expenditure that will enable enhanced services to be offered at competitive prices whilst also (i) reducing the risk for GOP by sharing it with private sector investors; (ii) sharing investment costs with private sector investors; (iii)

providing an attractive profit stream to both the investors and GOP; and (iv) improving access to new technologies for the customer base in Palau.

Appendix 1: Financial Results

Table 3. Financial Results (\$)

	2004	2005	2006	2007
Revenue				
Long Distance		1,805,667	2,536,217	1,603,242
Cellular		1,804,934	2,033,463	2,667,592
Local		1,434,519	1,473,618	1,439,755
Palaunet		1,647,042	1,438,344	1,570,447
Cable TV		1,042,869	975,874	1,152,633
Miscellaneous		585,377	513,114	342,470
Doubtful Accounts		(75,000)	(224,841)	-
Total	8,136,988	8,245,408	8,745,789	8,776,138
Expenses				
Depreciation		2,592,489	2,824,740	2,932,396
Plant Specific ops		2,350,032	2,407,029	2,414,761
Customer Service Ops		1,024,051	1,239,980	1,020,600
Corporate Ops		1,450,585	1,201,263	1,323,292
Plant non specific ops		168,582	209,376	166,846
Total	9,270,834	7,585,739	7,882,388	7,857,895
Profit / (Loss) from ops	(1,133,846)	659,669	863,401	918,243
Non Operating Income				
Interest Income		119,467	160,584	172,681
Interest Expenses		(1,446,742)	(1,449,246)	(1,457,127)
Equipment Retirement			(39,381)	(54,455)
Other, net		(21,537)	382,489	26,930
Total	(1,579,150)	(1,348,812)	(945,554)	(1,311,971)
Change in net assets	(2,712,996)	(689,143)	(82,153)	(267,597)
Depreciation		2,592,489	2,824,740	2,932,396
Interest Expenses		1,446,742	1,449,246	1,457,127
Other Expenses		4,993,250	5,057,648	4,925,499
Non Operating expenses (Net)		(97,930)	(503,692)	(1,311,971)
Total		8,934,551	8,827,942	8,003,051

Source: Audited Accounts 2004 – 2006; PNCC projections for 2007.

(Note: There are minor differences in the figures above, and some results quoted in the text, based on information provided by PNCC. The differences are not material).

Appendix 2: Recent Commentaries on Telecommunications Sector

Recent commentaries on the sector (since 2006) are as follows:

- (i) Cost of debt; benefits from competition offered by new market entrants in terms of both cost and range of services; encouraging introduction of new services; possibility of government subsidy in return for reduced tariffs.²
- (ii) Need for Community Service Obligation / USO policy.[♦]
- (iii) Lack of an effective regulatory policy. The Samoa model has been commended.[♦]
- (iv) No important maintenance issues.[♦] (However, PNCC note that environmental and geographic features create high maintenance demands).
- (v) Lack of internet bandwidth.[♦] (PNCC note that satellite bandwidth unit costs are high because of the small customer base).
- (vi) Criticism of price and quality of service, especially internet services.[^]
- (vii) Risks of future problems with interconnectivity; emerging technologies.
- (viii) Recommended deferment of draft legislation proposed by PNCC.[^]
- (ix) Introduction of an open market for telecommunications in Palau; transference of the PNCC fixed debt to government; introduction of a regulatory regime under the Ministry of Commerce and Trade.[^]
- (x) Request for loan forgiveness for the Rural Electrification Loan; seek access for US telecommunications grants and training programs; seek technical assistance for telecom policy and regulatory development; seek universal service funding through membership of the National Exchange Carriers Association; seek capital funds for various infrastructure.³
- (xi) Addressing the challenge of loan repayments.⁴

² Report of National Symposium, ADB, authored by Gerald Johnson February 2007 level of debt and USO also mentioned in Pacific Island Forum Secretariat (PIFS) report.

[♦] National Strategy and Country Report, Palau (undated) Regulatory framework also mentioned in PIFS
[^] PIFS.

³ 2007 National Economic Symposium Recommendations on Cross Cutting Issues.

⁴ 2007 National Economic Symposium – Track 1 Economy.

Appendix 3: Bibliography

ADB July 2007 Palau: Policies for Sustainable Growth, A Private Sector Assessment.

ADB February 2007 Report of National Economic Symposium Gerald Johnson, ADB.

National Strategy and Country Report Palau - Improving the Delivery of Infrastructure Services in the Pacific. (Undated)

Pacific Islands Forum Secretariat Telecommunications Development Strategy Draft October 2007 John Budden.

National Economic Symposium – Recommendations on Cross Cutting Issues.

National Economic Symposium – Track 1, Economy.