



THE NATIONAL
RESEARCH INSTITUTE
PAPUA NEW GUINEA

DISCUSSION PAPER

STATE OWNED
ENTERPRISES IN PAPUA
NEW GUINEA:
PUBLIC POLICIES AND
PERFORMANCE

John Fallon

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- (a) the promotion of research into Papua New Guinea society and the economy
- (b) the undertaking of research into social, political and economic problems of Papua New Guinea in order to enable practical solutions to such problems to be formulated.

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Ch. 1 Introduction

This research paper has been prepared for the National Research Institute (NRI) of Papua New Guinea.

There are two main components:

- (1) an overview of historical developments of State Owned Enterprises (SOEs) in Papua New Guinea, since independence, including key challenges and legislative and policy changes, and their impact on the performance of SOEs; and
- (2) an analysis of topical issues in relation to the performance, management and regulation of major SOEs that provide essential services.

The rest of this paper is structured as follows:

- Section 2 reviews the relevant literature to identify principles and experiences relevant for developing a framework to assess governance, regulation and performance of SOEs in both commercial and economic development contexts. It includes best practice principles for governance for SOEs based on ADB, OECD and World Bank studies of a range of different country-specific circumstances. This framework is then drawn on to assess the governance arrangements and performance of SOEs in PNG.
- Section 3 outlines the evolution of policies and legislative and governance arrangements for SOEs in PNG, their performance since independence and critical issues they have faced. The focus is on SOEs providing essential services or undertaking economic development projects that the private sector is unwilling to undertake without substantial government support. This section also draws on the framework and principles in Section 2 to highlight issues in the governance framework and note some considerations for reform that are developed in more detail in Section 4.
- Section 4 focuses on current and prospective developments. It provides an evaluation of policies and governance arrangements for SOEs drawing on the framework developed in Section 2, particularly in relation to corporate governance and economic regulation principles for SOEs.
- Section 5 contains recommendations for further research.

Ch. 2 Corporate Governance and Regulatory Principles for SOES

STATE OWNED ENTERPRISES IN PAPUA NEW GUINEA: PUBLIC POLICIES AND PERFORMANCE

This paper focuses on the evolution of the policies and performance of SOEs providing essential services in PNG and provides some suggestions for improving their performance assuming that they remain majority-owned by the State.

With State ownership of businesses, the key issue with respect to policy and performance relates to the governance of SOEs, and in particular the extent to which there is an effective contracting process that defines the relationship between the government and its SOEs.

For SOEs to perform well, their relationship with government needs to incorporate well defined contracts with clear and non-conflicting objectives, but subject to management autonomy and accountability arrangements to ensure they meet their objectives. In short, ensuring the effective performance of SOEs, including those providing essential services, is essentially a contracting problem (Gomez-Ibanez 2003; Megginson and Netter 2001; Shleifer 1998; World Bank 1999; World Bank 2014a). This naturally leads to consideration of a focus on corporate governance and economic regulation principles and experience relevant to SOEs.

Thus this section reviews the relevant literature on policies for managing SOEs to identify principles and experiences relevant to developing a framework; that is, benchmark to help assess and improve performance. The principles, frameworks and experience outlined in this Section provide information to help assess current and proposed policies for SOEs in PNG in Sections 3 and 4.

2.2 Corporate Governance — definition and relevance

2.2.1 Definition

Corporate governance refers to the arrangements by which corporations (companies) are controlled and directed (OECD 2004 p.11, World Bank 2014a, p.12). Corporate governance includes the processes and structures through which a corporation's objectives are defined, implemented and monitored and the arrangements for ensuring accountability to relevant stakeholders.

2.2.2 Relevance

Good corporate governance is important for facilitating economic growth and development. The OECD (2004 p.11) explains:

“Increasingly, the OECD and its member governments have recognised the synergy between macroeconomic and structural policies in achieving fundamental policy goals. Corporate governance is one key element in

improving economic efficiency and growth as well as enhancing investor confidence. Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. As a result, the cost of capital is lower and firms are encouraged to use resources more efficiently, thereby underpinning growth.”

Good corporate governance is important for ensuring good performance for SOEs as well as private enterprises. SOEs providing essential services are important for the competitiveness of business using their services as well as access and affordability for the general public.

The principal-agent framework developed in the economic literature is relevant for understanding the difficulties and policies for ensuring good performance from SOEs. The principal-agent framework focuses on the explicit and implicit contract between the principal who engages an agent to act in the principal's interest and the agent. The principal may own assets and want those assets operated by an agent to achieve certain objectives. This naturally leads to the design and implementation of a contract to ensure the agent has appropriate incentives and that the agent can be effectively monitored to ensure optimal effort is exerted in the interests of the principal. There is an information problem that complicates the specification of optimal contracting and monitoring arrangements. In situations where information about performance is readily available and there is effective competition the contracting problem is more readily addressed. This applies for example to listed companies in developed country markets (see Megginson and Netter 2001 and Eatwell, Milgate and Newman 1998, vol 3, pp.966–72).

However, the governance of SOEs typically faces more difficulties than that of private enterprises. This is because for a private enterprise the primary goal of owners is to achieve the best financial performance; market mechanisms (including the threat of takeovers and bankruptcy in the ‘market for corporate control’) can operate to help ensure competitive outcomes and private enterprises have more freedom (for instance in relation to employment) to determine their actions. In contrast, SOEs typically have multiple, poorly defined and potentially conflicting objectives, ineffective accountability arrangements, greater political involvement and protection from competition (World Bank 2014a, p.13). For example, as highlighted by Megginson and Netter (2001, pp.330–331) there are severe limits on the contracting ability of government provision because of an inability to commit to commercial success as the profit motive does not fully apply, so that effective rewards and sanctions cannot be developed and there is more scope for ad hoc political intervention.

The corporate governance problems that are typically associated with SOEs occur in both developing and more developed economies. For example, in a landmark review of government supplied goods and services in Australia, undertaken prior to the reforms of the 1990s, the main causes of poor performance of public enterprises were traced to (Industries Assistance Commission 1989, p.xii):

- the pursuit of unclear and sometimes conflicting objectives;
- the absence of effective competition in the markets in which they operate; and
- reliance on ineffective control and performance monitoring mechanisms.

2.3 OECD guidelines on corporate governance of SOEs

2.3.1 Status

The Organisation for Economic Cooperation and Development has developed guidelines on corporate governance of SOEs (OECD 2005) and is currently in the process of updating the guidelines (OECD 2014b). The update retains most of the original material developed in 2005 but includes a new section on the rationale for State Ownership. The Guidelines for SOEs are also consistent with corporate governance principles that apply more widely to the private sector, first released in 1999, and that are also currently being reviewed (OECD 2014a).

Although not developed specifically in the context of a developing country, the guidelines are considered to be a relevant benchmark as they effectively entail an explicit and transparent contracting approach and they have been revised with the involvement of several large developing countries and the World Bank (OECD 2014b, p.2). Many aspects of the SOE corporate governance guidelines have been incorporated into a toolkit for assessing corporate governance of SOEs developed by the World Bank (2014a).

The OECD's SOE corporate governance guidelines have also been drawn on in numerous other studies relating to various aspects of SOE governance. This includes a recent OECD (2015) study on SOEs in the development process, which focuses on SOE experiences in Singapore, Brazil, India, China and South Africa. That study also contains findings relevant to PNG and is discussed in section 2.5.

2.3.2 The Guidelines on Corporate Governance of SOEs

There are seven main guidelines and various sub-guidelines on corporate governance of SOEs, as described below. A more complete description is provided in OECD (2014b).

I. Rationales for State Ownership

The state exercises the ownership of SOEs on behalf of the general public. It should therefore carefully evaluate and disclose the public policy objectives that motivate state ownership and subject these to a recurrent review.

Relevant sub-guidelines include:

- Multiple and contradictory objectives of state ownership should be avoided as they can lead to either a very passive conduct of ownership functions, or conversely result in the state's excessive intervention in matters or decisions which should be left to the company and its governance organs.
- In order for the state to clearly position itself as an owner, it should clarify and prioritise its objectives for state ownership by developing a clear and explicit ownership policy.
- The ownership policy should ideally take the form of a concise, high level policy document that outlines the state's overall objectives for owning enterprises.
- In developing and updating the state's ownership policy, governments should make appropriate use of public consultation.

II. The State's Role as Owner

The state should act as an informed and active owner, ensuring that the governance of SOEs is

carried out in a transparent and accountable manner, in accordance with the ownership policy and with the necessary degree of professionalism and effectiveness.

Relevant sub-guidelines include:

- The government should not be involved in day-to-day management and should allow SOEs full operational autonomy to achieve their defined objectives.
- The exercise of ownership rights should be centralised in a single ownership function or co-ordinating body which should be held accountable to representative bodies and have clearly defined relationships with public bodies.
- The state should set and monitor the broad mandates and objectives for SOEs, including financial targets, and develop an appropriate disclosure policy.

III. SOEs in the Market Place

Consistent with the rationale for state ownership, the legal and regulatory framework for SOEs should ensure a level playing field in markets where SOEs and private sector companies compete in order to avoid market distortions.

Relevant sub-guidelines include:

- There should not be legal or financial advantages for SOEs vis-à-vis private competitors.
- SOEs' commercial and public policy or regulatory activities should be separated where feasible and efficient.

IV. Equitable Treatment of Shareholders and Other Outside Investors

Where SOEs are listed on stock exchanges or otherwise include non-state investors among their owners, the state and the enterprises should recognise the rights of all shareholders and ensure shareholders' equitable treatment and equal access to corporate information.

Relevant sub-guidelines include:

- SOEs should be highly transparent with all shareholders and develop an active policy of communication and consultation with all shareholders.

V. Stakeholder Relations and Sustainable Business

The state ownership policy should fully recognise SOEs' responsibilities towards stakeholders and request that they report on their relations with stakeholders. It should make clear any expectations the state has in respect of responsible business conduct by SOEs.

VI. Transparency and Disclosure

SOEs should observe high standards of transparency and disclosure and be subject to the same high quality accounting and auditing standards as listed companies.

Relevant sub-guidelines include:

- Internal and annual independent external audits should be undertaken.
- SOEs should disclose material financial and non-financial information in line with high quality, internationally recognised standards including in areas of significant concern to the State and the public. This would include clear statements of company objectives and their fulfilment, financial and operating results, information on board member remunerations, qualifications and selection process and any material transactions with the state.

- The ownership entity should develop consistent reporting on SOEs and publish annually an aggregate report on SOEs with web based access for the general public.

VII. The Responsibilities of the Boards of State Owned Enterprises

The boards of SOEs should have the necessary authority, competencies and objectivity to carry out their functions of strategic guidance and monitoring of management. They should act with integrity and be held accountable for their actions.

- and their fulfilment, financial and operating results, information on board member remunerations, qualifications and selection process and any material transactions with the state.
- The ownership entity should develop consistent reporting on SOEs and publish annually an aggregate report on SOEs with web based access for the general public.

VII. The Responsibilities of the Boards of State Owned Enterprises

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2.3.3 Implementation of Reforms

As noted by the World Bank (2014a, p.xxv) the entire package of good governance guidelines may not be feasible or be necessary to put in place all at once and phasing of reforms and hybrid arrangements may be necessary given political and institutional constraints.

However, this should not be an excuse for redressing clear deviations from key aspects of the guidelines. For example, transparency of SOE objectives and performance is an essential feature for effective contracting and monitoring of performance and should be feasible even where capacity to adopt many aspects of the guidelines is very constrained. Transparency of performance can also help build support for improvements among stakeholders and the public.

The World Bank also highlights that reforming governance alone will not solve SOE problems, noting (World Bank 2014a, p.xxvii) that complementary actions include: public private partnerships where privatisation is not a preferred policy; the removal of entry barriers; and broader reforms to develop the private sector.

2.4 State Ownership arrangements for SOEs

2.4.1 Implementation of Reforms

The term ‘ownership arrangement’ refers to the way the state organises itself to exercise its ownership rights over SOEs. This sub-section discusses the experience of countries with different forms of state ownership and in particular decentralised versus centralised forms and advisory and coordinating arrangements in relation to SOEs. It draws on material in the World Bank (2014a) toolkit paper, which advocates centralised ownership arrangements where the State’s ownership functions are separated from its policy-making and regulatory functions. This is considered essential for achieving effective contracting and accountability for SOEs.

2.4.2 Implementation of Reforms

The World Bank (2014a, p.70) notes there are four broad categories of ownership arrangements: the decentralised model where ownership is dispersed among different line ministries; the dual model, where in addition to the line ministries a second ministry such as the ministry of finance may have certain responsibilities; the advisory model, where ownership remains dispersed but an advisory or coordinating body advises on ownership matters and may undertake coordinating functions; and the centralised model, where ownership responsibilities are centralised in an entity that may or may not be independent of government. There may also be hybrid versions of these models combining different aspects or functions of the different models. The decentralised and dual models represent more traditional forms, and there is a tendency to move towards the advisory and centralised models as these are better able to deal with the underlying weaknesses that characterise SOEs.

Where a more centralised approach is not feasible the main steps to improve traditional models include (World Bank 2014a, p.74):

- Limiting line ministries to formal core ownership functions and providing SOEs with more autonomy.
- Developing concrete standards against political interference in commercial decision making.
- Strengthening existing monitoring units in ministries of finance.
- Encouraging greater public oversight through public disclosure of information.
- Creating an advisory or coordinating body.

2.4.3 The Advisory Model

Under a centralised ownership model, a specialised entity serves as the shareholder representative with oversight responsibility for SOEs. The main features of the centralised model compared with the advisory model are that:

- There is more distinct and transparent identification of the state's ownership functions and separation from policy-making, regulatory, and supervisory functions.
- There is more direct exercise of the state's ownership rights from a shareholder and governance perspective.
- There is autonomy in developing and implementing strategy and in day-to-day decision making.

The specific functions typically include (World Bank 2014a, pp.78–87):

- Contributing to the development of laws, regulations and policies covering SOEs.
- Assisting or managing the board nominating process.
- Monitoring financial and operational performance.
- Monitoring and (potentially) recommending SOE remuneration levels.
- Monitoring regulatory compliance.
- Coordinating activities with other government agencies.
- Providing training programs.

- Preparing for shareholder participation at annual shareholders' meetings.
- Promoting and guiding SOE reform.
- Maintaining consolidated information and reporting on company performance.

These aspects of the centralised model are increasingly viewed as good practice. According to the World Bank (2014, p.93):

“Centralized arrangements are expected to make the state a more professional owner of its assets, to give SOEs operational independence, and to insulate these enterprises from political intervention, while the state maintains an arm’s-length relationship with SOEs and resists the temptation to intervene in day-to-day affairs. Centralization is also seen as a way to monitor, consolidate, and disclose information across all government shareholdings, thereby enhancing transparency and accountability.”

Two broad types of centralised entities are widely used: (1) government ownership agencies that are under the direct authority of the government; and (2) company-type structures, such as holding companies or investment companies, that have separate legal identities and greater independence from the government.

Table 1 provides examples of types of centralised ownership arrangements under each of the government and company-type structures.

The company-type structures broadly fall into two broad categories: (1) a holding company responsible mainly for managing the assets in the portfolio; and (2) an investment company that also acts as the government’s strategic investor. Holding companies typically approve annual budgets, regulate company activities and manage income generated from the companies. Investment companies generally adopt a more active role as the state’s strategic investor. The World Bank (2014a, p.88) notes that investment-company-type structures are found in a few developed and emerging market economies that have better performing SOEs and greater institutional capacity.

TABLE 1: Types of Centralised Ownership Arrangements

Country	Name of entity	Location of entity
Ownership under government		
<i>Ownership ministries</i>		
Indonesia	Ministry of State Enterprises	Ministry of State Enterprises
<i>Ownership departments in ministry</i>		
Finland	Ownership Steering Department	Prime Minister’s Office
France	Agence des Participations de l’État	Ministry of Economy and Finance
Norway	Ownership Department	Ministry of Trade and Industry
Poland	Department of Ownership Supervision	Ministry of Treasury
South Africa	Department of Public Enterprises	Ministry of Treasury
United Kingdom	Shareholder Executive	Department for Business

<i>Ownership agencies</i>		
Chile	Sistema de Empresas	Ministry of Economy
China	State-Owned Assets Supervision and Administration Commission	State Council
Company-type structure		
Bhutan	Druk Holding and Investments	Ministry of Finance
Hungary	State Holding Company	Directed by the National State Holding Board
Malaysia	Khazanah Nasional	Ministry of Finance
Mozambique	Institute for the Management of State Holdings	Ministry of Finance
Peru	Fondo Nacional de Financiamiento de la Actividad Empresarial del Estado Holding company	Ministry of Finance
Singapore	Temasek Holdings	Wholly owned by Ministry of Finance
Vietnam	State Capital Investment Corporation	Wholly owned by Ministry of Finance

Source: Official websites and annual reports, World Bank (2014a, p.82).

Temasek in Singapore is an example of an investment-company type structure with an active, growth oriented approach. It has a large, internationally diversified portfolio and intends to have no more than one-third of its holdings in Singapore. The role of SOEs in the development process and the case of Temasek are considered in the following sub-section.

2.5 SOEs in the Development process

2.5.1 The Role of SOEs in Economic Development

In the early stages of economic development there are many situations where private enterprises are not likely to be profitable unless they in effect are able to operate as monopolies or are subsidised, but where private monopolies are not desirable because of limited regulatory capacity (See Gomez-Ibanez 2003, Chapter 1).

This is particularly the case where large investments need to be made and the associated costs are “sunk” in the sense that they cannot be diverted to other purposes, and the services provided by those investments are of an essential nature for businesses and consumers or the investments generate external benefits that do not accrue to the investor. In these circumstances there is a rationale for establishing a public enterprise supported by substantial state funding. These factors were relevant in establishing or sustaining SOEs in most countries in the past century or so. Thus in the early stages of development SOEs can be characterised as public institutions that are needed to address various market failures (natural monopoly, public goods and externalities in particular) and achieve certain social objectives, with public ownership providing a default form of contracting and regulation to help achieve the various economic development objectives.

However, as economies and markets within them develop there is greater scope for private enterprises to undertake activities that in the past were largely the preserve of many SOEs. Furthermore, once the main market failure that justified the SOE can be better addressed because of economic development and improved institutional capability, there can be more scope to separate the commercial, regulatory and policy functions of public enterprises. This in turn leads to the SOE focusing more directly and effectively on commercial success. These factors are reflected in the general consensus on how to improve SOE performance by more explicit contracting, autonomy and accountability, with the key best practice features discussed in the foregoing sections of this chapter. However, there is a need to consider how those features should be amended or developed when SOEs in effect are primarily ‘development’ institutions or responsible for major development functions rather than just delivering essential services that could be provided under contract by a private enterprise.

Although there is a widespread consensus that market development and the incentives of well-functioning markets are essential for supporting economic growth and development, the success of some countries, that have placed heavy reliance on public enterprises and state investments, is offered as an alternative strategy that could be effective particularly when there is a role for an SOE with a ‘development’ objective.

This and subsequent sub-sections consider the role of SOEs in delivering developmental and (to a lesser extent) industrial policy objectives, drawing on key findings of a recent OECD (2015) study of SOEs in the Development Process. It is relevant given recent policy developments with respect to the establishment of the Kumul structure for State investments in PNG and the interest in PNG in the Singapore Temasek experience.

2.5.2 Success Criteria for SOEs with Development Strategies

The following criteria were developed in the OECD study based on experiences in Singapore and other ASEAN countries¹, Brazil, India, China and South Africa (OECD 2015, p.11, 34–35).

- The state should be backed by a competent bureaucracy that is empowered to exercise the ownership function effectively, rewarding success and punishing failure.
- The areas in which SOEs are expected to operate should preferably be free of concentrations of commercial, financial and other market powers. Some of the success stories occurred because countries started from a position of relative equality, whereas in other countries attempts to define industrial and developmental policies were quickly captured by existing interest groups.
- The developmental objectives need to be clearly spelt out and, in particular, not interspersed with social policy objectives. At the root of the demise of many potentially trail-blazing SOEs in emerging economies has been an expectation that, because of their state ownership, they should contribute to social policy goals unrelated to their stated purpose.
- The usefulness of SOEs changes, and usually diminishes, as a country becomes more highly developed. SOEs are generally less efficient than comparable private companies. In the early stages of development this is usually immaterial because

¹ The other ASEAN (Association of Southeast Asian Nations) countries in the study were Indonesia, Malaysia, the Philippines and Thailand.

the alternative to SOE activities is no activity, and in any case the benefits of the commencement of commercial activities in a poor country would normally outweigh, in the short term, the efficiency concerns.

The OECD study also noted that the role of SOEs in development strategies varied dramatically across these countries and depended on the level of economic development (for example, SOEs formed to exploit the catch-up productivity factor exhibited success) and were highly path dependent in an historical sense (with SOEs often playing a ‘default’ role). The study offers cautions about readily transferring strategies from some of these experiences.

2.5.3 The Experience of Singapore’s SOE Temasek

The experience of Singapore’s state owned investment company Temasek is of interest given its widely touted success. Temasek was formed in 1974 as a fully owned company of the Ministry of Finance. It took ownership of a number of companies previously subject to a state body and this allowed the government to separate regulatory authority from state ownership. Temasek owns stakes in a large number of companies, together accounting for a high proportion of the Singaporean economy (20 percent or more) and has substantial foreign investments.

It is important to understand some of the political, cultural and economic background to the evolution and success of the company and in particular the extent to which Temasek has clarity and autonomy in pursuing its objectives.

In terms of the economic, cultural and political background, it is notable that the government of Singapore at first sought to emulate earlier and contemporaneous experiences of Japan and Korea in attracting large amounts of foreign direct investment as a source of international integration, knowledge transfer and much-needed jobs. However, in contrast to those countries, the government of Singapore was unsure if a domestic industrial sector would evolve rapidly enough to serve as an equal partner to the foreign-owned companies and it decided that the state should fill the gap and act as Singapore’s largest owner of commercial enterprises.

In terms of clarity of objectives, a key reason why the Singaporean model was so successful was that it did not burden its SOEs with multiple objectives. Their role in the development of certain sectoral activities was clearly defined, and social obligations such as providing health care and affordable housing were assumed by the government alone.

Since 2004 Temasek has been subject to a charter and has improved its transparency by publishing annual consolidated accounts. The Temasek Charter includes: a commitment to manage assets on commercial principles; autonomy from the Government for its own decisions; and autonomy for the boards of, and management in, its portfolio of companies. Temasek thus has full flexibility to own up to 100 percent of a portfolio company or in deploying most of its investments into a country or sector. Temasek monitors the companies, and for their main investments they meet the boards on a regular basis as well as informally.

2.6 Economic regulation principles

The focus of this study is on SOEs that are providing essential services and have market power, that is, they have the ability to set prices above competitive levels, in the absence of some form of price regulation — known generally as economic regulation. Economic

regulation focuses on key economic aspects of a relationship between investors or owners of service with market power and consumers (households and firms) of that service. At a high level a sustainable and effective regulatory system must credibly satisfy the demands of both investors and consumers.

2.6.1 Regulatory governance

There is literature on best practice principles for economic regulation¹. There is a distinction in the literature on regulatory governance (similar principles to corporate governance) and regulatory content (that is, specific methods and substance), which was first made in the seminal paper by Levy and Spiller (1999).

Levy and Spiller focused on regulatory governance and emphasised the importance of a credible regulatory commitment in facilitating private investment. They found that a wide range of regulatory procedures can achieve this commitment provided that all three of the following complementary mechanisms are in place: (a) substantive restraints on the discretion of the regulator; (b) formal or informal constraints on changing the regulatory system; and (c) institutions that enforce the relevant formal constraints.

It is also important to recognise that the credibility of the regulatory system for facilitating investment also needs to be balanced by being credible to consumers as well. In the extreme if regulatory decisions are not considered or viewed as legitimate by consumers as a group there is a likelihood there will be political pressures to change the regulatory decision which in turn may impact on the stability of the regulatory arrangements and hence credibility from the perspective of investors.

According to Stern (2010, p. 241) the ultimate goal for a regulatory best practice system is:

“a regulatory system that transparently provides investors with credible commitment and consumers with genuine protections”.

This perspective is recognised in the World Bank’s Handbook for Evaluating Regulatory Systems (Brown et al 2006). The Handbook sets out relevant principles and frameworks for regulatory evaluation and design. On governance, the Handbook suggests a hierarchy of three meta principles. The meta principles are considered to be relevant for all regulatory entities irrespective of whether they are independent or not. More detailed principles and standards cover independence, accountability, conduct and institutional characteristics.

The meta principles are:

1. Meta principle 1: Credibility – Investors must have confidence that the regulatory system will honour its commitments.
2. Meta principle 2: Legitimacy – Consumers must be convinced that the regulatory system will protect them from the exercise of monopoly power, whether through high prices, poor service or both.
3. Meta principle 3: Transparency – The regulatory system must operate transparently so that investors and consumers ‘know the terms of the deal’ or ‘rules of the game’.

2.6.2 Economic efficiency

¹ For example, see Levy and Spiller (1999), Brown et al (2006), and Fallon, Kelley and Blake (2014).

As noted, the above meta principles focus on regulatory governance and there is also a need to have regard to regulatory content or regulatory substance which can be covered by pricing principles designed to achieve the various aspects of economic efficiency. To some extent some pricing principles linked to economic efficiency correspond to aspects of the meta principles but they are usually specified separately in legislative mandates.

Economic efficiency corresponds to the economic concept of net social benefit (for the community as a whole) which can be defined as the present value of the gross value that consumers derive from products less the present value of all costs incurred in their provisions and hence is consistent with the objective of maximising the long term benefits of end users.

Economic efficiency has various dimensions including allocative (resources and outputs are allocated to their highest value uses), productive (costs are minimised) and dynamic (efficient investment occurs and productivity growth is maximised)¹. Economic efficiency also requires transparent and stable regulatory arrangements that are consistent with the overall regulatory objective and encompasses administrative feasibility and efficiency as well.

Overall economic efficiency abstracts from income distributional considerations and effectively relates to the impact on the overall wealth of consumers as a group. The regulatory arrangements need to help ensure the various aspects of economic efficiency are achieved in the regulated market, recognising there are trade-offs for the various components as well as promoting competition and hence economic efficiency in related, dependent, more competitive markets.

The regulatory governance and economic efficiency principles set out above are relevant in assessing the regulatory arrangements for SOEs in PNG.

¹ See Fallon, Kelly and Blake 2014.

Ch. 3 Evolution of Policies and Performance of SOEs in PNG

3.1 SOEs Providing essential services

The focus of this study is on the majority-owned SOEs providing essential services. These are PNG Power Limited (formerly Electricity Commission (ELCOM)), PNG Ports Corporation Limited (formerly Harbours Board), Eda Ranu (provides water and sewerage in Port Moresby), Water PNG (provides water and sewerage services in several towns other than Port Moresby), and Telikom PNG (formerly part of Posts and Telecommunications Corporation).

Elcom and the Harbours Board were established in the early 1960s and Posts and Telecommunications were part of a government department until 1982. Eda Ranu took control of the water and sewerage system in Port Moresby from the National Capital District Commission in 1996. Water PNG commenced operations in 1987 taking over from the National Water Supply and Sewerage Board, which had operated under a government department.

3.2 1975-1983 – No explicit SOE policy

From independence until 1983 PNG had no explicit public enterprise policy (Whitworth 1992, 1993). Many SOEs were part of government departments although ELCOM and the Harbours Board had a reasonable degree of management autonomy. SOEs were typically exempt from import duties and company taxes and faced little monitoring by central agencies. At the time, the SOEs were described as commercial statutory authorities (CSAs).

However from 1978 ELCOM (and Air Niugini) ran into serious financial and operational difficulties due to a combination of management problems, price controls, rising oil prices and a drought that affected hydro power. Pleas for substantial government assistance motivated the design and implementation of a more coherent public enterprise policy.

An IMF report in 1978 (IMF 1979) provided a theoretical framework for a public enterprise policy that was adopted in 1983. The report emphasised clarification and quantification of non-commercial objectives, qualifications for board membership and price reforms. The report reflected the general consensus in economic policy advice at the time to applying the maxim “get the prices right”. There was considerable support in the central agencies for the diagnosis and policy prescriptions in the IMF report. Their general view was that the CSAs were run as independent “empires” and paid too little attention to financial matters.

3.3 1983–1991 – Focus on commercial performance

The PNG Finance Department and the National Planning office developed and implemented a policy with the following features drawing on the IMF framework (Whitworth, 1992, pp. 71–76), namely to:

- Establish clear (preferably commercial) objectives for CSAs;
- Establish a single set of rules for all CSAs;
- Increase central government control over CSAs through their boards and investment approval;
- Follow economic pricing principles (eliminate tax exemptions and concessional borrowing advantages; require transparent, separately funded subsidies and a commercial return on investment).

There was resistance to these measures from key CSAs but strong political support from the Ministers for Finance and Planning.

In relation to objectives, in his 1984 budget speech the Finance Minister announced that the government “*affirms that the primary aim of the authorities is to be commercial profit making organisations*”, consistent with the view that social and development objectives were to be secondary to the commercial objective. To establish the objectives, CSAs were required to draw up a role statement and set of objectives for approval by their boards and the Cabinet.

The removal of exemptions from taxation and the implementation of economic pricing represent application of the competitive neutrality principle that CSAs should operate under similar tax and pricing principles as the private sector. This also helped in providing financial discipline to those responsible for managing and operating CSAs. The requirement to pay company tax was also considered preferable to a discretionary dividend policy applying to any surplus for CSAs, as it would guarantee a non-negotiable minimum return to public investment.

CSAs were required to submit applications to Cabinet for approval for a budget subsidy to fund non-commercial investments. Although a formal rate of return was not set, a real economic rate¹ of return on assets of 10 percent² was generally adopted for new investments. For investments that had already been made, the bottom of the range set by the Price Controller of a nominal accounting rate of return of 16–22 percent was set by the Minister of Finance, that being 16 percent.

The 1983 package also included the setting of prices by the Price Controller operating under clear guidelines. This removed the setting of prices by CSAs with monopoly power from Cabinet approval where there was a reluctance to change prices for long periods despite cost increases. This reluctance to adjust prices subsequently led to financial difficulties and substantial catch-up price increases that had adverse economic and social impacts.

The 1983 package also included a dividend requirement. Over time this was specified as a maximum of 50 percent of after-tax profits with the decision on the amount to be paid to be made jointly by the Finance Minister and the Minister responsible for the CSA. This approach differed from the approach in the private sector, where the board determines dividends, but reflected concerns that the boards would not focus adequately on the budgetary needs of the shareholder.

¹ An economic rate of return can differ from an accounting rate of return by taking account of relevant indirect effects not captured in accounting information.

² The real rate of return of 10 percent was interpreted as operating profit before interest and tax relative to the total value of the investment (equity value plus debt value).

In relation to the on-lending of concessional loans from international agencies, the bulk of the concession was retained by government based on the principle that the concessional benefit should largely accrue to all the people of PNG and not just the beneficiaries of certain essential services.

The 1983 package also required the preparation of five-year corporate and financial plans with the details to be agreed by the management of CSAs and the Department of Finance and National Planning Office and subject to approval by Cabinet. This approach enhanced the CSAs' capacity to appraise projects themselves.

In relation to board membership, the boards at that time contained representatives from the Finance Department and the National Planning Office on many CSAs but qualifications were not specified for other appointments. The presence of government officers on boards of SOEs is considered to be problematic in a principal-agent optimal contracting framework. To avoid the scope for informal Ministerial direction it is normally preferable if there are no public officials or Ministers on boards of public enterprises. However, in the case of PNG at the time, representatives from the central agencies were considered critical to ensure there was capability to assess investment proposals at the Board level; and in any case private representatives still outnumbered government representatives.

The public enterprise policy package adopted in 1983 is consistent with a contractual perspective for the relationship between government and a public enterprise, where it is the role of government to clearly specify and contract for the objectives for its public enterprises. In particular, it should be the role of government and not management to determine the extent to which CSAs should pursue social and development objectives. In addition, the requirement for agreement by the whole Cabinet to pursue non-commercial objectives was a means of preventing individual Ministers from requiring non-commercial objectives or activities to be pursued. An example of the policy was a subsidy to ELCOM of K2.35 million in both 1983 and 1984 to cover anticipated losses from a hydro project.

There were however some weaknesses and points of disagreement about the package. A key weakness was that apart from the Finance Minister's statement about the primary objective of commercial success, the government policy objectives were never made explicit.

Another issue was in relation to contract approval. Until 1983 all CSA contracts exceeding K100,000 had to be approved by the Minister of Finance. This was increased to K300,000 but was a source for frustration to the CSAs. There were also restrictions on wages and employment conditions. However, some entities were able to replace senior management with contract staff, for example ELCOM, which enhanced their technical capacity.

Another weakness was the form of regulation of prices which was in effect what is known as 'cost of service' or 'rate of return' regulation. This form of regulation provides no incentive to reduce costs and can lead to over investment. This was addressed by undertaking management reviews of CSA performance but these faced various degrees of resistance from CSAs.

The approach that was adopted in this period had many features that are still broadly regarded as best practice (ADB 2014) but effective implementation requires appropriate government support for the policy package.

In terms of outcomes, there was a clear improvement in the financial performance of CSAs from 1980 to 1991 (see Table 2). This is highlighted by a shift from being a drain on the budget in the 1980–1983 period to being a net contributor every year in the 1984–1991

period.¹ However, the combined effects of the Bougainville Copper Ltd mine closure, devaluation of the Kina and an economic recession led to a decline in profitability of CSAs as a whole in the early 1990s (Economic Insights 1994, p. 121).

Table 2: Commercial statutory authority financial performance, 1980–1991

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Operating profit (before interest and tax) (kina millions)	1.7	21.9	29.2	17.2	28.2	37.2	48.1	49.0	53.6	64.8	46.9	46.7
Average net fixed assets at historic cost (kina millions)	..	203.3	215.0	256.0	283.9	293.3	311.0	346.9	401.9	461.0	494.2	555.7
Net flow to government (kina millions)	-2.02	-10.3	-6.4	-2.0	5.5	17.5	12.0	24.2	19.1	24.1	24.3	14.3
Return on assets (percent)												
Average	..	..	..	6.8	9.9	12.7	15.5	14.1	13.3	14.1	9.5	8.4
Elcom	-3.1	8.0	12.8	10.1	13.7	13.1	13.1	12.0	10.4	11.9	10.6	9.0
Post and Telecommunications Corporation	..	14.6	21.3	8.8	6.9	9.3	12.9	13.1	15.0	17.9	16.9	10.1
Harbours Board	1.1	13.0	12.6	13.9	6.4	8.2	29.9	26.0	19.8	16.0	-2.5	-5.9
Air Niugini	-15.4	8.7	-7.8	-26.8	-3.8	31.1	40.4	28.0	22.0	14.2	0.4	8.5

Source: Whitworth (1993)

There is more limited information to assess the productivity performance of CSAs; however, there is some information on real prices and labour productivity for key CSAs from 1980 to 1991. Real prices are affected by both productivity improvements that lower costs as well as allowed price increases to meet rate of return targets.

The following real price changes were observed from 1980 to 1991 (in Economic Insights 1994, p. 123):

¹ The net cash flow in Table 1 is the sum of CSA payments to government (tax, dividends, duties and levies) less government payments of equities and subsidies to CSAs.

- The real price for electricity increased by about 80 percent from 1980 to 1983 and then declined by about 60 percent from 1983 to 1991.
- The real price for a telephone call declined by about 17 percent from 1980 to 1983 before increasing by about 20 percent from 1983 to 1991.
- The real price for services from the Harbours Board declined by about 15 percent from 1982 to 1984, increased by about 40 percent from 1984 to 1986 and declined by about 18 percent from 1986 to 1991. This amounted to a decline of about 2 percent from 1982 to 1991.

The following labour productivity changes were also observed:

- Labour productivity (GWh/employee) at ELCOM improved by almost 90 percent from 1980 to 1991, exhibiting steady improvement over most of the period.
- Labour productivity (tonnes/employee) at the Harbours Board declined by about 27 percent from 1982 to 1985, increased by almost 60 percent from 1985 to 1989 and then declined by about 13 percent from 1989 to 1991.

Clearly the financial objectives of the public enterprise policy package were largely achieved for CSAs on average and productivity increased significantly at ELCOM. However, the extent to which there were productivity improvements across the other CSAs is not clear. This conclusion is consistent with that of Whitworth (1992).

Privatisation was part of the reform agenda from 1985 (World Bank 1993b); however, progress was irregular. Early successes included privatisation of the PNG Shipping Corporation and liquidation of the Food Marketing Corporation, both in 1986. The Niugini Insurance Corporation Limited was sold but the sale was rescinded after a change of government.

A National Privatisation Committee was established in 1991 that developed a structured program for commercialisation, contracting out and privatisation.

3.4 1992–2002 – Privatisation in progress

In August 1992 the Government of Prime Minister Paias Wingti established the Papua New Guinea Holdings Corporation to develop and implement policy on privatisation, as part of a structural adjustment program. The Corporation was incorporated under the Companies Act with a board of directors responsible to government and the requirement to develop a privatisation program for approval by Cabinet. The Holdings Corporation became the statutory owner of the government's non-mining public enterprises with full powers to proceed with privatisation and retain all proceeds for its purposes. It also had the authority to undertake special projects as certified by the responsible Minister.

In March 1993 the Prime Minister gave a speech at a conference on corporatisation and privatisation where he emphasised that the ultimate test of privatisation was whether it was in the national interest (Millett 1993, pp. 42–43) with various subsidiary objectives including that: privatised operations should not be monopolies; ideally shares should only be sold to PNG citizens; and job security of employees should be considered.

However, most of the focus in the period of the Wingti Government from 1992 to 1994 was on the government's interests in mining and oil projects (Curtin 2009, pp. 352–355) and there was little direction and progress on privatising CSAs. Some entities were cor-

poratised under the Companies Act, the scope for commercialisation of other public enterprises was investigated and plans were developed to reduce the government's minority shareholdings in oil palms, forestry and marine products. The Niugini Insurance Corporation sale was rescinded and it remained under public ownership until absorbed by the Papua New Guinea Banking Corporation in 1998.

One of the remaining problems was that there needed to be progress on clarifying industry and regulatory policies that would apply following privatisation as this would affect the sale price (Millett 1993, p. 44).

In this period there was also some ambiguity and confusion over the role of the Holdings Corporation and the Commercial Investments Division of the Department of Finance and Planning. The latter had formal responsibilities for monitoring the performance of CSAs and advising on the government's commercial investments. Reflecting the scope for overlap and ambiguity, independently of the Holdings Corporation, the Finance Department sold the government's equity in PNG Forest Products Pty Ltd and PNG Marine Products (Curtin 2009, p. 355, 367).

The replacement of the Wingti government by the government of Prime Minister Julius Chan in 1994 saw the winding up of the Holdings Corporation but continued interest in privatisation which was also supported by international aid agencies. Responsibility for privatisation reverted to the Department of Finance. In 1998, a Privatisation Council and Office of Public Enterprise were established.

Most of the interest in public enterprises continued to be in the privatisation of the government's shareholdings in mining and petroleum ventures through the Mineral Resource Development Corporation, which held the state's equity in various ventures. This culminated in the float of Orogen Minerals Limited in October 1996. Orogen Minerals held interests in various mining and petroleum projects that entailed partial privatisation of the State's interests in these ventures. The government also successfully sold its interests in New Britain Palm Oil in a trade sale. The government's net receipt from these two transactions was K68 million (Curtin 2009).

There was no privatisation of the CSAs providing essential services and they were adversely affected by the depreciation of the kina after it was floated in 1994. The depreciation increased the value of their debts in kina terms, raising costs without raising revenues given the domestic focus of these entities. The price controller limited tariff increases to the rate of inflation of the consumer price index thereby leading to considerable financial difficulties for CSAs providing essential services.

The controls on prices effectively precluded privatisation and a policy of corporatisation was pursued where CSAs ceased to be statutory authorities under their own Acts, and were incorporated under the Companies Act. The CSAs also ceased to be exempt from terms and conditions for staff and were freed from rate of return targets and minimum dividend payments, but the latter was less relevant given their financial positions. There seemed to be an assumption that incorporation under the Companies Act with supervision by the Securities Commission was all that was needed in terms of monitoring and accountability arrangements.

Table 3: Return on Assets: ELCOM, Posts & Telecommunications, Harbours Board, 1992 to 1999, percent

	1992	1993	1994	1995	1996
Elcom	5.0	2.2	..	3.6	5.9
Post and Telecommunications	7.2	11.5	9.8	4.0	10.5
Harbours Board	..	..	2.0	0.3	0.2

Source: World Bank 1999

The government of Prime Minister Bill Skate, which was in place from 1997 to 1999, retained an interest in privatisation and in the 1999 budget announced privatisation of large areas of the traditional public sector such as research institutes and training colleges and withdrew public funding (Curtin 2009, p. 359).

During most of the 1990s there was a lack of clearly defined reporting and accountability arrangements. Corporate objectives were not defined and agreed with government, there were no performance agreements between boards and chief executives, there were numerous examples of government interference in public enterprises, and there was no systematic performance reporting to the Departments of Treasury and Planning (World Bank 1999, pp. 145–147).

The data in the 1990s are incomplete but the information presented in Table 2 highlights the low returns that were realised from 1992 to 1996, contrasting with the much better performance of the 1980s (Table 1). In addition, service performance at ELCOM deteriorated, with power outages occurring. However, part of the reason for the low returns on assets for the Harbours Board is that they adopted a policy of valuing assets based on replacement values every three years with CPI adjustments for intervening periods (World Bank 1999, p. 149).

The government of Prime Minister Mekere Morauta (July 1999–July 2002) developed a more structured and wider ranging program on privatisation (Privatisation Commission undated, circa 2001), again as part of a structural adjustment program. It established a Privatisation Commission in 1999 to develop and implement the government’s privatisation program. The Privatisation Commission had similar powers to the PNG Holdings Corporation. However, there were various implementation difficulties and delays in establishing and funding the Commission and confusion over roles in oversight of SOEs including the relationships between the Commission and SOEs and the central agencies (World Bank 1999, p.151).

In February 2000 the Government clarified its objectives for the privatisation program, determined priorities and key institutional arrangements and provided guidance on important implementation issues. The objectives were to:

- Maximise sale proceeds;
- Improve economic efficiency;
- Develop national capital markets; and
- Involve PNG citizens.

The main priority was to privatise the Finance Pacific Group. The Papua New Guinea Banking Corporation (PNGBC) (the main asset of the Finance Pacific Group) was sold in a trade sale to the Bank of South Pacific in December 2001 for cash and equity valued at

K233 million (Curtin 2009, p. 359). Several other public entities had shares in the Bank of South Pacific (National Provident Fund, Defence Force Retirement Fund, Public Officers Superannuation Fund and Motor Vehicles Insurance Limited). However, the sale of the PNGBC was the first privatisation of a wholly owned public enterprise and is generally regarded as a substantial success, particularly given the political resistance, as reflected in student protests, and the financial state of the bank at the time. The Bank of South Pacific has a track record of independence from government interference and a very good financial performance, especially after it was listed on the PNG stock exchange.

Several other public enterprises were prepared for sale. In April 2001, Air Niugini was put up for sale but bids acceptable to the government were not received. By early 2002, audits and sales documents had been completed for a number of enterprises including the Harbours Board, Telikom PNG and ELCOM but privatisation of these entities did not proceed. Proposals were also developed to establish a People's Unit Trust to provide a vehicle through which ownership of privatised entities could be more broadly distributed, however this never proceeded (IMF 2002, p. 12).

In March 2002, responsibility for the regulation of public utilities was vested in the newly created Independent Consumer and Competition Commission (ICCC) which took over the powers of the Price Controller.

The government also sold its 51 percent interest in Orogen Minerals to Oil Search Ltd in April 2002 but retained an interest in Ok Tedi (with 63 percent subsequently owned by the PNG Sustainable Development Program, a non-profit entity established to pursue development objectives). The government also retained an administrative role for the Mineral Resource Development Corporation which continues to hold equity stakes for land owners and provincial governments in the Lihir, Porgera and Kutubu projects.

3.5 2002-2015 – Independent governance and regulatory institutions

3.5.1 Overview of SOE Policies and Performance

This section provides a brief overview of SOEs, relevant governance and regulatory institutions and performance from 2002 to 2015.

The Independent Public Business Corporation (IPBC) was established in 2002 to take over the powers and functions and assume ownership of the assets and liabilities of the Privatisation Commission. The Independent Consumer and Competition Commission (ICCC) was also established in 2002 as an independent statutory authority with economic regulation responsibilities. The National Information and Communications Technology Authority (NICTA) was established in 2010 as the sole converged regulator and licensing authority of the ICT industry in PNG. The objects, powers, functions and key issues in relation to these institutions are discussed further below.

The Government of Prime Minister Sir Michael Somare (2002–2011) did not pursue privatisation and decided not to finalise the Morauta Government's near completion of the sale of Telikom PNG. There is a view that from 2002 to early 2012 there was little apparent concerted effort to improve the accountability and performance of SOEs (INA 2013, p. 5).

However, the Somare government did allow the entry of Digicel as a competitor to Telikom PNG in the mobile telephone and internet services markets. Digicel is considered to have been very successful in enabling access to telecommunications for many people across the

country including in more remote regions. Following the liberalisation of the telecommunications sector in 2007, call rates reduced by approximately 60 percent (Horton 2011 in ADB 2015, p. 52).

The Government of Prime Minister Peter O’Neill came into power in August 2011. Since coming to power it has developed and begun implementing a policy of increasing the role of SOEs in the economy (Ministry of Public Enterprises and State Investments 2014). A Kumul trust structure and management initiatives and the proposed role of SOEs in the economy are discussed in more detail in Section 4.

The ADB (2014) recently released a report on benchmarking the performance of SOEs in Island Countries, including PNG, covering the period 2002 to 2012. The countries that were studied were: Cabo Verde, Fiji, Jamaica, Marshall Islands, Papua New Guinea, Samoa, Solomon Islands and Tonga. Key financial indicators for the PNG SOEs that were studied are presented in Table 4.

The ADB study found that PNG’s SOE portfolio that it reviewed recorded the highest average return on assets and return on equity in the countries studied between 2002 and 2012 but that this masked a decline in absolute and relative performance since 2007. The average return on equity for the PNG portfolio was 3.3 percent for the period from 2002 to 2012, which is low when inflation is taken into account.

Table 4. Papua New Guinea: State-Owned Enterprise Performance Indicators, FY2012

State-Owned Enterprise	Return on Equity (%)	Return on Assets (%)	Total Assets (K’000)	Total Revenue (K’000)	Average Return on Equity FY2002–FY2012 (%)
Air Niugini Limited	18.2	8.1	886,970	1,131,624	4.7
Eda Ranu Limited	10.6	8.5	125,875	104,209	4.4
National Development Bank	2.5	2.3	369,863	30,780	(12.2)
PNG Water Board	7.4	2.5	303,565	60,424	1.0
PNG Ports Corporation	7.5	5.3	1,290,842	276,556	4.5
PNG Power Limited	7.5	3.4	1,457,214	734,016	3.3
Post PNG Limited	0.2	0.1	185,692	56,224	(6.0)
Telikom PNG Limited	(8.0)	(4.7)	1,257,350	356,078	6.0
Portfolio	4.7	2.7	5,877,372	2,749,911	3.3

Source: ADB 2014

The ADB (2014) study also noted the following issues (p. 20):

- Corporatization has not prevented political interference in SOEs’ operations and a number of examples were cited that were considered to undermine the SOEs’

commercial mandate as well as regulatory independence (p. 20).

- Deficiencies in the legal and governance framework and non-compliance contributed to the poor commercial performance of SOEs in the period reviewed. Amendments to the IPBC Act in 2012 have reversed previous changes that had weakened the legal framework. But there is still an absence of an explicit commercial objective for SOEs.
- The IPBC has consistently failed to publish annual reports with audited financial statements for the IPBC, General Business Trust (GBT), and individual SOEs. Greater transparency would strengthen the performance incentives for the SOEs.

In a more recent study of the economic environment for private sector development in PNG, the ADB (2015) provided an update on SOEs where it reiterated many of the concerns expressed in the earlier report and also expressed concerns about private sector participation in relation to policies for SOEs and the need to develop a clear framework for expanding private sector participation (ADB 2015, pp. 8–9).

There is currently a focus on the electricity sector and expanding access to electricity. The Development Strategic Plan seeks to raise the rate of electrified households from 13 to 70 percent by 2030 (Government of Papua New Guinea 2010). This is likely to require major subsidies for investment. The Government's approach (Department of Public Enterprises and Department of Petroleum and Energy 2015, pp. 103–104) entails unbundling of certain assets and functions of PNG Power but with retention of transmission as an SOE monopoly and the creation of various regional business units. Access regulation, PPPs and CSOs will be used to help ensure competitive but viable supply. One of the principles in the strategy (Department of Public Enterprises and Department of Petroleum and Energy 2015, p. 6) is: "Principle 5: Encourage involvement of the private sector in the development and provision of energy services". However, despite considerable documentation, details on the proposed restructuring and the coordination of access and the management and balancing of power across the systems are not clear.

3.5.2 Independent Public Business Corporation Maintenance costs

The Independent Public Business Corporation (IPBC) was established in 2002 to take over the powers and functions and assume ownership of the assets and liabilities of the Privatisation Commission. The governing legislation was the IPBC Act (2002) and the IPBC Amendment Act (2012). In August 2015 the IPBC Act (2002) was amended to change the name of the Independent Public Business Corporation Act 2002 to the Kumul Consolidated Holdings Authorisation Act 2002 and to change the name of the IPBC to Kumul Consolidated Holdings. The amendments also included some changes to the powers of, and governance arrangements for, Kumul Consolidated Holdings (particularly the relationship with government) for the appointment of Directors of Kumul Consolidated Holdings and SOEs and for requirements for annual plans (IPBC (Kumul Consolidated Holdings) (Amendment) Act 2015).

This sub-section discusses the powers and functions of the IPBC from 2002 until the recent changes that were made in August 2015. Section 4.2 discusses the recent changes.

Essentially the IPBC had the responsibility and authority, on behalf of the State, to exercise trustee ownership and overarching business and financial management of certain SOEs and other State investments. This included the authority to set objectives for and give operational directions to SOEs on any of their activities, and to buy, sell, plan, coordinate, manage and restructure State assets (subject to provisions for an annual plan approved

by the NEC), and enter into financial and other arrangements that in the opinion of the IPBC advance the financial or development interests of the State. The authority was circumscribed by provisions in the IPBC Act in relation to borrowing and an annual plan to be approved by the NEC (IPBC 2014, pp. 4–7, p. 17).

Following a range of concerns about government intervention and non-compliance with the Act, a number of amendments were made to the IPBC Act in 2012 with the aim of strengthening the independence and accountability of the IPBC and SOEs for which it is accountable (Morauta 2012).

The IPBC Amendment Act (2012, part II, Section 6) specifies the IPBC shall pursue its objectives and perform its functions and duties and exercise its powers and authorities independently of direction from the State, Ministers or members of the National Parliament or other provincial and local governments or officers other than as specified in the Act. This provision had previously been removed but was reinstated in 2012.

The amendments also included a provision for the Minister to issue policy directions to the IPBC following approval of the National Executive Council and with the requirement that any such direction be of no effect until it is published in the National Gazette. According to the legislation (IPBC Act (Consolidated Copy of 15 May 2012)) the “Minister” means the Minister designated by the Prime Minister to be responsible for matters dealing with the management of SOEs and State investments.

The amendments also included provisions for: the NEC to appoint Directors directly to SOEs on the recommendation of the responsible Minister, whereas previously the IPBC appointed Directors with the NEC having the right to object; reinstatement of auditing of the IPBC and its Trusts by the Auditor General; and to deem non-compliance with certain reporting, finance and other directions to be a breach of the Companies Act, with associated penalties to apply.

Other prominent or more specific legal provisions that applied include (IPBC 2014, pp. 8–20 and IPBC Act Consolidated Copy of 15 May 2012):

- Requirements for 9 Directors, comprising 3 ex officio appointments (including the Managing Director appointed by the Head of State), one each nominated by the PNG Institute of Bankers, PNG Chamber of Commerce and Industry, PNG Institute of Directors, and Transparency International and two nominations by the responsible Minister.
- The Public Finances Management Act (1995) does not apply to the IPBC or SOEs or State Investments held by the IPBC but as noted the Audit Act (1989) including annual audit requirements, does apply to the IPBC, as well as internal audit requirements.
- The IPBC was required to submit a completed annual plan to the responsible Minister no later than three months before the end of the financial year for approval by the National Executive Council. The annual plan needs to include a financial plan including proposals for infrastructure and for financing.
- A borrowing proposal was to be submitted to the responsible Minister and Treasurer simultaneously and subject to the approval of the National Executive Council.
- The IPBC was required to submit an annual report covering operations and finances to the Minister and National Executive Council and quarterly

management accounts to the Departmental Head responsible for treasury matters.

- Majority owned SOEs were subject to the provisions of the IPBC Act (2002) and its amendments and also the Companies Act (1997).
- Majority owned SOEs were required to submit an annual plan to the IPBC no later than four months before the end of each financial year. The annual plan had to include a business plan and relevant financial information. The annual plan for each SOE was subject to approval of the Board of the IPBC.
- SOEs were also subject to limits on contracts and sale or lease of assets and borrowings.

These legislative arrangements in effect provided the IPBC with considerable autonomy and authority to oversee the performance of SOEs. The IPBC had reporting requirements to government and its annual plan had to be approved by the National Executive Council. As noted, the IPBC was subject to formal Ministerial Directions approved by the National Executive Council and gazetted; however, it is understood that not all policies in PNG are gazetted, so that Ministerial Directions to SOEs do not occur.

It is also relevant to note that the majority of SOEs providing essential services, where there is scope for the exercise of monopoly power, are subject to price regulation by the ICCC or in the case of telecommunications services by the National Information and Communications Technology Authority (NICTA). These institutions are discussed further below.

It is understood that the governance and regulatory provisions for the IPBC were developed to try to balance management autonomy and authority with strict accountability for performance, while being subject to independent economic regulation where relevant, and transparent formal direction by Government. Broadly these arrangements reflect the application of many of the governance principles endorsed by the ADB (2014), OECD (2014b; 2005) and World Bank (2014a).

However, there were aspects where there was scope for improvement and in particular the clear specification of the objectives for SOEs and transparency in the monitoring arrangements (see Section 3.5). In a recent report on strengthening the private sector in PNG the ADB (2015, p. 55) concluded:

“The corporate governance environment is defective, contributing to SOEs’ poor commercial performance. The SOE portfolio is held in a trust managed by the Independent Public Business Corporation (IPBC). IPBC is both trustee and SOE monitor. Amendments to the IPBC Act in 2012 reversed previous changes that weakened the legal framework. Yet, notable remaining deficiencies include the absence of an explicit SOE commercial objective. Since 2002, noncompliance with the Act’s key elements has led to weak governance and accountability. IPBC has also consistently failed to publish annual reports with audited financial statements for both itself and individual SOEs. Greater transparency and accountability would strengthen SOE performance incentives.”

Some of these points have validity but some were not correct given the amendments that were made in 2012 and others need further explanation.

For example, it is understood that following the amendments made in 2012 there was a substantial improvement in compliance with the Act with respect to reporting by SOEs.

In addition, it is not clear that the role of the IPBC as both trustee and SOE monitor was a problem, as a trustee needs to be able to assess the performance of the entities that it has responsibility for in terms of financial and development contributions. In addition, the IPBC

model entailed centralisation of asset holdings, monitoring and advisory capacity which is considered to be an advance over decentralised, less transparent and less accountable models as described in Section 2. However, as discussed below there can be conflict of interest and accountability issues where the centralised entity responsible for monitoring assets and advising on policy also has executive or project management responsibilities.

In relation to the issue of an explicit commercial objective for SOEs, it should be noted that the objectives of the IPBC (IBPC 2015, Part II, 7) included requirements for it to enhance the financial position of SOEs or the development of the State and that the IPBC had to have an annual plan approved by the National Executive Council. This provides the opportunity for the National Executive Council and the IPBC to agree on explicit commercial and non-commercial objectives for SOEs and monitoring arrangements. Ensuring clarity of objectives is consistent with the adoption of a contracting perspective for the governance of SOEs (see Section 2). The efforts by government to develop effective policies for community service obligations are also a feature of an effective contractual framework (see Section 4). The objects of the amended Act, responsibilities and the requirements for an annual plan for Kumul Consolidated Holdings, have been retained but its powers have been amended so there is more scope for direct government control.

However, in preparing this report, it was not possible to obtain access to the latest annual plan of the IPBC, to confirm the clarity of objectives and monitoring arrangements. In addition, the websites of the main SOEs did not contain relevant information to confirm explicit commercial objectives or their performance. It is clear that there is a need for more explicit and transparent setting of objectives and monitoring of performance by the IPBC and, going forward, Kumul Consolidated Holdings.

There is also an issue of the extent to which the IPBC and now Kumul Consolidated Holdings should have the authority to advise on objectives for SOEs, monitor performance, give directions on any operational matters for SOEs and have wide scope to plan, coordinate and manage infrastructure investments. There is conflict between being a monitor of performance and having operational responsibilities for SOEs and State investments. To resolve such conflict requires greater transparency and further independent reporting.

The scope for operational responsibilities also creates overlap and tension with respect to the management of SOEs. Although there are examples where the centralisation of authority for holding and monitoring state investments as well as executive or project management responsibilities exist within the one entity, there is potential for conflict. It may well be the case that the IPBC has too many different responsibilities that both stretch resources and create conflicts. However, this needs further investigation to determine the extent of the problem and the nature of improvements that could be made.

The Ministry of Public Enterprises and State Investments (2014, chapter 3) prepared a white paper that discussed the State's objectives for SOEs and State investments which included an assessment of the IPBC and many recommendations for improvements in governance of SOEs.

Key concerns identified in relation to the IPBC included:

- (1) IPBC is both a Trust Management Company and a Holding Company; its constitution does not adequately define this dual function and it operates without a Trust Deed.
- (2) The legislation does not expressly say the State is the shareholder in the IPBC.
- (3) If the State is not the shareholder in the IPBC why does it appoint the board

members of SOEs?

- (4) The NEC can only appoint two board members directly.
- (5) There is ambiguity of Ministerial Responsibilities with respect to policy and financial matters.
- (6) It is not clear whether the SOE boards are subject to the IPBC board and if so why his is justified. It also leads to conflict and delays.
- (7) SOE managerial autonomy is undermined by requirements for approval of expenditures over K1 million.
- (8) Given the legislative restrictions how can the IPBC meet the greater policy goals and directives of the PNG constitution and Government development plans?
- (9) Some SOEs have not separated their technical regulation and commercial functions.

Some of the above concerns could have been addressed by legislative amendments to address ambiguities. Others could be addressed, under the existing legislation, by an improved process for agreement on the annual plan submitted by the IPBC to the NEC for approval. And as noted there is clearly a greater need for more explicit and transparent targets and transparent reporting on performance. However, some of these issues have not been effectively addressed with the recent amendments to the IPBC Act and there are concerns about some of the changes as discussed further in Section 4.2.

In considering these concerns and developing responses it is important to keep in mind that effective governance arrangements for SOEs need to ensure clarity of objectives but also recognise that market forces do not operate to monitor SOEs and hold them accountable to their owners for their performance as occurs for privately owned businesses.

In addition, many of the SOEs have market power and operate with both special advantages and disadvantages that do not apply in the private sector. Although the governance arrangements may have weaknesses it is considered that their intent was to try to help address the facts that:

- SOEs in practice are often subject to commercial and non-commercial development or community service objectives that are potentially in conflict;
- They are vulnerable to political intervention that restricts commercial performance;
- They need to be monitored by a mechanism that is a substitute for the absence of market forces; and
- They are owned by government on behalf of the community and it is the role of government to set appropriate objectives and hold SOEs accountable for their performance in the best interests of the community.

The material on governance and regulatory principles in Section 2 suggests that the most promising approach to the management of SOEs providing essential services is one that recognises the potential for conflicts between commercial, development and community service objectives by a contracting approach which entails clarity of objectives but also managerial autonomy balanced by transparent and effective accountability mechanisms. In the principal-agent framework a key issue is to ensure that the accountability mechanisms provide effective incentive and monitoring mechanisms.

The role of government should be to set the objectives and constraints and monitor performance of SOEs but allow them the managerial autonomy to perform their tasks. The monitoring function requires regular reporting to an entity well equipped to assess performance. However, where there are weaknesses in the accountability mechanisms one can expect greater involvement by intermediaries established by the government to help ensure better performance. These kinds of forces and considerations may help explain why the IPBC was structured as it is and the adjustments in the legislation in 2012.

However, there may be a case for separating the roles of monitoring and operational involvement of Kumul Consolidated Holdings, as there is a conflict in these roles and separation would be consistent with an effective contracting perspective.

As noted, some of the recommendations in the White Paper on Principles of State Ownership and Participation in Commercial Activities were incorporated into recent legislative amendments. The main changes are discussed under the section on the Kumul Concept and SOEs in Section 4.2.

3.5.3 Independent Consumer and Competition Commission

The Independent Consumer and Competition Commission (ICCC or Commission) is an independent statutory authority that administers the Independent Consumer and Competition Act 2002 (ICCC Act), the Prices Regulation Act (PRA) (Chapter 320 amended), Commercial Advertisement (Protection of the Public) Act (CA Act) and the Trade Measurement Act and various other pieces of legislation.

The focus for this report is in relation to its functions with respect to economic regulation of SOEs providing essential services.

The primary objectives of the ICCC (2002, p. 6) are to:

- enhance the welfare of the people of Papua New Guinea (PNG) through the promotion of competition, fair trading and the protection of consumers' interests;
- promote economic efficiency in industry structure, investment and conduct; and
- protect the long term interests of the people of PNG with regard to price, quality and reliability of significant goods and services.

The ICCC regulates several SOEs with market power. The main exception is Telikom PNG, which is regulated by the National Information and Communications Technology Authority (NICTA).

The ICCC uses 'regulatory contracts' to regulate the prices of SOEs that have been declared for regulation. The regulatory contracts apply for periods of up to 10 years but are often for 5 years.

Concerns have been expressed in the past about the effectiveness of the regulatory contracts, however reforms have been undertaken as is evident in reviewing the recent regulatory contracts for PNG Ports (ICCC 2014) and for PNG Power (ICCC 2012). A brief review of the criticisms of the regulatory contracts is provided in Section 4.

The ICCC (2014) has also developed a third party access code to facilitate the scope for independent power producers to access the network of PNG Power in contracting with retailers of electricity. This will facilitate the development of more competitive generation options and is an important component of plans to unbundle key functions and assets of PNG Power and introduce more competition (Department of Public Enterprises and Department of Petroleum and Energy 2015).

3.5.4 National Information and Communications Technology Authority

The National Information and Communications Technology Authority (NICTA) was established on 29 October, 2010, following the passing of the National Information and Communications Technology Act 2009 in November 2009.

The primary objective of the Act is to ensure the ICT industry contributes to the greatest extent possible to the long term economic and social development of Papua New Guinea. There is reference to good economic regulatory principles relevant to achieving the objective (NICTA 2009).

PNG has gradually liberalised its telecommunications sector since 2007. The previous state monopoly, Telikom PNG, was reincorporated as an SOE and operating licenses issued to other telecommunications providers. Telikom PNG's mobile service provider arm was spun out into Bemobile Limited (trading as Bemobile) and partly privatised. In March 2014, the government established a new SOE, PNG DataCo, the wholesale provider for the new National Transmission Network.

NICTA has been developing and implementing policies supporting greater coverage of services including the Universal Access Scheme to improve access in rural areas, reforming the operator license scheme to enable providers to supply multiple services, regulating to facilitate competition (NICTA 2012, ICT Appeals Panel 2012) and developing a national broadband policy. However, concerns have been expressed about internet access and pricing, partly because Telikom PNG owns the only licensed international gateway for internet services (ADB 2015, pp. 52–53). The status of the national broadband policy and details are also not clear.

Ch. 4 Reform Proposals for SOEs in PNG

4.1 Wholesale

The Government of PNG's current policies for SOEs are set out in the latest national budget documents (Government of PNG Treasury Department 2015). The 2015 national budget confirms that SOEs have a critical role to play in contributing to the development objectives set out in the Medium Term Development Plan 2011–2015, Development Strategic Plan 2010–2030 and PNG Vision 2010–2050 as well as in other supporting sectoral plans and strategies. It describes the objectives for SOEs as follows (Government of PNG Treasury Department 2015, p. 110):

“The following are four broad measurable objectives for state investments endorsed by the Government:

- improve SOE service delivery in telecommunications, electricity, water and sanitation, seaport and airport services, banking and finance and motor vehicle insurance;
- improve PNG's share of revenue from the extractive industries, government investments, and public enterprises assets;
- enhance the governance frameworks supporting SOEs and government investments; and
- improve recapitalisation of SOEs and government investments.

These objectives have been promoted to encourage cost-effective performance, enhance competitiveness and embed accountability by SOEs. SOEs must work in close collaboration with government agencies, the private sector, and other strategic partners in pursuit of PNG's ultimate development agenda: “improved standard of living and quality of life of all Papua New Guineans”.

The Government's SOE policy imperatives provide the broad guidance in managing and administering SOEs and enabling them to actively participate in the economy. The specific SOE policies include the Community Services Obligation Policy (currently in the pilot stage), the Dividend Policy, the Guarantee and On-Lending Policy, and the Public Private Partnership Policy.

The On-Lending, Dividend and Guarantee policies aim to ensure subsidies are not provided to SOEs through discounted equity finance or cheap credit enhancement. Community Service Obligation is particularly important to ensure that Papua New Guineans are able to obtain access to vital public infrastructure that they are unable to afford. It ensures that Parliament can transparently use tax payer money to provide services if appropriate.”

In addition to these policy objectives and associated arrangements, the government is in the process of implementing changes in the governance arrangements for SOEs in PNG including substantial changes to the responsibilities, functions and operations of the IPBC.

Many of these changes were canvassed in a recent white paper prepared by the Ministry of Public Enterprises and State Investments (2014) on Principles of State Ownership and Participation in Commercial Activities. Some changes have been reflected in recent legislative amendments to the IPBC Act (Independent Public Business Corporation of Papua New Guinea (Kumul Consolidated Holdings) (Amendment) Act 2015), certified on 12 August 2015). These changes are discussed under the following sub-section on the Kumul Structure. Subsequent sub-sections discuss CSO, PPP and economic regulation policies.

4.2 The Kumul concept and SOEs

4.2.1 Recent Developments

The National Executive Council (NEC) Decision No. 85 of 2013 specified that all SOEs are to be consolidated through a holding company to be called Kumul Consolidated Holdings Limited. All mining interests of the State will be consolidated and held through a company to be called Kumul Minerals Holdings Limited and all petroleum interests will be consolidated and held through a company to be called Kumul Petroleum Holdings Limited.

The current PNG General Business Trust established by the IPBC 2002 Act will be replaced by a new trust called the Kumul Trust which will hold the shares of the three holdings companies. According to the White Paper (Ministry of Public Enterprises and State Investments, 2014, p. 74) the Kumul Trust will be managed by independent managers and administered by a Kumul secretariat.

Key changes in the amendments to the IPBC Act (dated 12 August 2015) include:

- changing the name of the Independent Public Business Corporation of Papua New Guinea to Kumul Consolidated Holdings (the Corporation).
- including additional clauses in relation to compliance with constitutional requirements linking the Act to constitutional provisions that mean that constitutional protections for compulsory taking of property do not apply to non-citizens (1. (4)) and where the Act gives rise to different rights between citizens it is intended to assist less advanced sections of the community (1. (5)).
- repealing the provision for the IPBC to set policies or give directions for the SOEs (46I and 9(3)(s)) and replacing it with a provision to allow the Minister, following the approval of the NEC, to set policies or give directions in any matter concerning the activities of SOEs (new 46I).
- repealing 46J which specified failure of SOEs to comply with contract limits (46B), submission of an annual plan to the IPBC (46E), capital expenditure limits (46G) and Directions and Policies (46I) to be a contravention of the Companies Act 1977 with respect to the duties of Directors.
- repealing the provisions in relation to Directors of SOEs (9A) and for the Corporation (10) which contained specific requirements for Directors in terms of qualifications and representation to more general requirements based on relevant qualifications and experience; with no Directors to be an officer of the public service, member of parliament or candidate for election or office holder in a registered political party (new 11 and 12).
- changing the provision for the Head of State to appoint the Managing Director

of the Corporation to the NEC to appoint (23).

- introducing a provision covering expenditure limits for the Corporation up to K10 million or otherwise approved by the NEC (34(7)) and dividend requirements (34(8) and (9)).
- requiring SOEs to submit annual plans to NEC in place of submission to the IPBC subject to NEC approval; with no changes to the plan to be acted on or considered valid until approved by the NEC (46E). This also replaces the provisions for no material departure without approval by the IPBC (46E(3)) and also adds a provision in relation to solvency.
- changing the expenditure limits for SOEs, not made pursuant to the plan from K1 million or other amount approved by the Minister up to K10 million (46B) to expenditure in accordance with the plan or a cap of K10 million or other limit as approved by NEC (add 46F).
- introducing provisions in relation to the payment of dividends by majority SOEs such that a dividend must be paid each year equal to the amount of reserves of the SOEs less any amount to meet requirements of the approved annual plan (46G).

It is also relevant to note that the sections on the Objects (7) and Functions (8) of the corporation were not changed. In summary, in terms of Objects the Corporation is to act as trustee of relevant trusts on behalf of the State, to act as a financial institution for the benefit of SOEs and the State and to enter into arrangements that advance the financial interests of SOEs or the development of the State. In terms of Functions, the Corporation continues to have the authority to monitor, plan, coordinate and manage State assets and projects and to determine policies and organise and manage finance for SOEs. However, in terms of Powers (9), as noted above, some powers relating to the Objects and Functions were repealed and in particular the powers of the Corporation to set policies and give directions to SOEs were removed and replaced by provisions to allow the Minister, following approval of the NEC, to set policies and give Directions.

4.2.2 Evaluation

This sub-section evaluates the policies and governance arrangements for SOEs, the IPBC (now Kumul Consolidated Holdings) and the KUMUL concept with reference to the OECD's corporate governance principles for SOEs and experiences in the use of SOEs to pursue a mix of development and investment objectives. Subsequent sub-sections consider complementary policies including community service obligations (CSOs), public private partnerships and economic regulation and competition policy.

I. Rationales for State Ownership

The state exercises the ownership of SOEs on behalf of the general public. It should therefore carefully evaluate and disclose the public policy objectives that motivate state ownership and subject these to a recurrent review.

Relevant sub-guidelines include provisions to clarify and prioritise objectives in a concise manner and to make appropriate use of public consultation.

In recent years, the Government has led or supported a number of initiatives to develop SOE policies and governance arrangements. The National Research Institute was engaged to develop a Strategic Policy Framework and hold a public forum to facilitate the formulation of policies for SOEs. The Strategic Policy Framework interpreted the policy intentions

of the government (Yala et al 2012, p. 6) as, to:

- (i) maximise access to basic services to the general population; and
- (ii) maximise PNG's share of the incomes generated from the development of the country's natural resources.

Many of the themes and principles documented from this exercise to help achieve these objectives are consistent with the governance and regulatory principles identified in the literature as important for improving SOE performance. A core principle was that public enterprises should maximise profits subject to: regulatory delivery standards; operating within hard budget constraints; and operating within a competitive regulatory framework under the purview of the ICCC. The principles included divestment options to ensure greater private sector and foreign participation with appropriate skills and governance systems, avoidance of political interference and policy inconsistency, enforcement of statutory compliance and transparency to help assess performance, and establishment of a People's Unit Trust to facilitate Papua New Guinean ownership.

Some of the themes from this exercise were subsequently incorporated into a White Paper prepared by Ministry of Public Enterprises and State Investments (2014). However, the White Paper diverged from the suggested Strategic Policy Framework by proposing a more active role for government in ownership and operation of SOEs and other State Investments. It was recommended that the State become an active investor with a 51% controlling interest in all SOEs, with an additional 34 percent owned by national interests and 15 percent by foreign interests through a strategic partnership (for example as operator). It was also recommended that the State should diversify into other sectors where it had not traditionally participated. Various recommendations were also made to improve corporate governance and management of SOEs.

The motivation for increasing State participation, as expressed in the White Paper, was linked to provisions in the Constitution in relation to the third goal directive with respect to national sovereignty and self-reliance, which inter alia calls for: "(4) citizens and governmental bodies to have control of the bulk of economic enterprise and production". It was further noted that this approach was consistent with concerns expressed by the people in the development of the long-term strategic development approach documented in Vision 2050.

The Government has also been developing policies for CSOs (Government of PNG Treasury 2012a; 2012b) and PPPs (Public Private Partnership Task Force 2008) for some time that are part of its approach to the governance and management of SOEs.

Thus there has been considerable documentation and consultation with respect to the government's proposed approach to the governance of SOEs.

There have been criticisms of the approach set out in the White Paper (ADB 2014, pp. 56–60) for example arguing that there is no well-developed or consistent strategy for expanding private participation and realising efficiency gains in SOEs.

The PPP and CSO policies are mechanisms for facilitating greater private sector involvement. However, the ownership restrictions specified in the White Paper and the process requirements for the PPP and CSO policies are likely to be a deterrent to private sector involvement at an economical price (as discussed below).

This paper is taking the policy objectives with respect to ownership as given and focusing on governance arrangements and supporting policies to improve SOEs. These aspects are

covered in more detail in the other corporate governance principles and complementary policies discussed in the rest of this section.

II. The State's Role as Owner

The state should act as an informed and active owner, ensuring that the governance of SOEs is carried out in a transparent and accountable manner, in accordance with the ownership policy and with the necessary degree of professionalism and effectiveness.

Relevant sub-guidelines include the exercise of ownership rights through a centralised, co-ordinating body, with clear, well-defined mandates and objectives set by the state but with provisions to avoid political intervention and allow full operational autonomy.

The IPBC (now Kumul Consolidated Holdings) is a centralised, co-ordinating entity. The IPBC 2002 Act and the amended Act of 2015 specify various objects including advancing the financial interests of the SOEs or the development of the State or any part thereof (IPBC Act 2002, p. 5). There is also a requirement for an annual plan to be prepared and submitted to the Minister to be approved by the NEC. There are also provisions in the Act which allow considerable operational autonomy in planning, coordinating, managing and monitoring state assets and specific provisions that restrict Ministerial directions.

These mechanisms at first sight seem to accord with the OECD principles in relation to the State's Role as Owner. However, it may be the case that some of the mechanisms were not used effectively and, for a time, compliance was a major weakness (Morauta 2012). The ADB (2015, p. 55) considered that a notable deficiency in the corporate governance environment for SOEs is the absence of an explicit commercial objective. In addition, some of the original provisions relating to independence and accountability were removed after 2002 but then reinstated in 2012 along with other changes to strengthen transparency, accountability and compliance (Morauta 2012). It is understood that compliance by SOEs with respect to provisions in the IPBC Act improved after 2012 but there are concerns about the relationship between the government and the IPBC and there are also concerns about some aspects of the recent amendments.

The Kumul concept does not necessarily offer a structural improvement of the IPBC concept, as it does not change the objects or functions of the IPBC, or the requirement for an annual plan; and it allows for stronger Ministerial involvement, subject to NEC approval, in giving directions. It would be better if such directions were set in broad terms before the start of each year and made transparent by tabling them in parliament.

III. SOEs in the market place

Consistent with the rationale for state ownership, the legal and regulatory framework for SOEs should ensure a level playing field in markets where SOEs and private sector companies compete in order to avoid market distortions.

Relevant sub-guidelines include removing advantages for SOEs vis-à-vis private competitors and separating commercial, public policy and regulatory activities.

SOEs that are incorporated under the Companies Act are required to pay company tax and there is a policy to limit access to preferential finance when SOEs borrow from government entities. The separation of commercial, public policy and regulatory activities is well advanced in SOEs.

IV. Equitable Treatment of Shareholders and Other Outside Investors

Where SOEs are listed on stock exchanges or otherwise include non-state investors among

their owners, the state and the enterprises should recognise the rights of all shareholders and ensure shareholders' equitable treatment and equal access to corporate information.

The SOEs providing essential services in PNG are not likely to be listed on stock exchanges in the foreseeable future but the experience with the privatisation of the Papua New Guinea Banking Corporation has not led to any major concerns about the treatment of non-state investors.

However, a more general concern is the extent to which foreign investors in the SOE sector perceive they could be treated differently from PNG citizens.

V. Stakeholder Relations and Sustainable Business

The state ownership policy should fully recognise SOEs' responsibilities towards stakeholders and request that they report on their relations with stakeholders. It should make clear any expectations the state has in respect of responsible business conduct by SOEs.

This guideline is something for the centralised entity to promote and enforce in the management of SOEs. It is not clear the extent to which it is applied currently.

VI. Transparency and Disclosure

SOEs should observe high standards of transparency and disclosure and be subject to the same high quality accounting and auditing standards as listed companies.

In addition to the requirements for SOEs the sub-guidelines include a recommendation that the ownership entity should develop consistent reporting on SOEs and publish annually an aggregate report on SOEs with web based access for the general public.

As noted in the period from 2002 to early 2012, there were compliance problems for SOEs but it is understood that has improved following adjustments to the IPBC Act in 2012.

However, the performance of SOEs is not transparent and the annual plan of the IPBC is also not transparent. It was not possible to obtain current information on SOE performance in writing this report except by making use of information on the ICCC website in relation to regulatory contract reviews.

VII. The Responsibilities of the Boards of State Owned Enterprises

The boards of SOEs should have the necessary authority, competencies and objectivity to carry out their functions of strategic guidance and monitoring of management. They should act with integrity and be held accountable for their actions.

The main concern in relation to this guideline is the extent of autonomy of the board of Kumul Consolidated Holdings and each SOE given the greater scope for Ministerial Directions under the proposed legislative changes.

4.3 PPPs

4.3.1 Recent developments

Public-private partnerships (PPPs) refer to arrangements where the government and the private sector are involved in joint ventures which share risks primarily based on the premise that risk should be allocated to the party best able to manage the risk. Generally, with PPPs, the private sector bears financing, operation and project completion risks while the government bears risks associated with land acquisition and ensuring there is minimum

revenue to ensure financial viability of the project.

The ownership of the project can take various forms including ownership by the private sector for a specified period (for example in the form of a concession) before transfer to the government or total ownership by government subject to agreed compensation for costs and risks. This approach can take advantage of private expertise and skills in risk assessment and management, financial management and innovation. It can also apply the principles of good governance to assist in efficient public procurement.

The government passed legislation in August 2014 (the Public-Private Partnership Act 2014) to facilitate PPPs. The Act also creates a PPP centre (secretariat), PPP Steering Group (oversight by relevant departmental heads) and PPP Forum (for stakeholder involvement). Relevant regulations were being drafted and the PPP centre was being established in 2015. According to the ADB, PNG's PPP policy reflects best practice (ADB 2014, p. 36). The 2015 Budget Volume 1 (Government of PNG 2015, p. 114) notes the following advantages of the PPP policy:

“The PPP Law makes the principles of good governance, transparent decision making competition and efficiency central to the PPP procurement and tendering process.

The Government has promoted this legislation recognising that private sector participation in infrastructure and service delivery will lead to efficiencies as the Government utilises private sector capital, management, innovation and technology. Greater use of PPP arrangements can help improve SOE efficiency and profitability.”

4.3.2 Evaluation

Although the PPP policy provides clarity in terms of process for assessing a PPP project, it is effectively a basic framework for assessing tenders for specified projects and given the administrative requirements will only be suitable for large projects. The development and procurement process set out in the policy document (Public Private Partnership Task Force 2008, p. 8) is very involved requiring 14 steps from concept stage to awarding of a winning bid. This raises the issue of the cost of preparing bidding documents by private entities. For an effective tender, numerous bidders are required; but unless there are many projects and bid documents can be readily modified for other tenders, bidders will likely incur significant costs but with limited prospect of success. It is not clear how this issue will be addressed.

In addition, there is no consideration of issues with respect to on-going operation of a facility by the private sector, associated maintenance to maintain specified asset conditions, the need for tendering for replacement or expansion capital expenditure, or to the length of concessions.

The success of the PPP policy will also depend on the general governance and policy environment, confidence in the legal system to enforce contracts and foreign investment policy. The ADB (2012, p. 47) highlighted that amongst the World Bank's indicators for the ease of doing business PNG fares worst in contract enforcement.

In the most recent World Bank (2014b) survey on Doing Business, PNG was ranked 181 out of 189 countries for contract enforcement compared with a ranking of 163 in 2011. It took 591 days to enforce a contract in both periods. In addition, the policies documented in the White Paper, prepared by the Ministry of Public Enterprises and State Investments (2014) on Principles of State Ownership and Participation in Commercial Activities, indicate there will be significant restrictions on foreign ownership. These factors plus bidding

costs are likely to reduce the pool of entities that are likely to be interested in bidding for contracts.

In evaluating the likely success of the PPP policy it is important to recognise the concept of binding constraints in affecting economic development (Hausmann, Rodrik and Velasco 2008). There are many constraints to development and growth but not all constraints bind equally and making progress with respect to some policies may not make any difference if there are binding constraints that in effect make those policies irrelevant. In this respect prospective private sector investors may be reluctant to invest because of various factors impacting on the business environment and in particular governance issues relating to SOEs and PPPs.

4.4 CSOs

4.4.1 Recent developments

A community service obligation (CSO) is defined as government requirement for an SOE to undertake activities that it would not elect to do on a commercial basis. In order to ensure effective clarity of objectives and accountability for performance for SOEs, CSOs ideally need to be separately identified, separately costed and transparently funded.

Various SOEs in PNG (and other countries) have been required to deliver CSOs by cross-subsidies in their commercial activities. Examples include uniform pricing of water, power, telecommunications, port and postal services. A formal CSO policy for SOEs was approved by the NEC in December 2013 (Government of PNG Treasury Department 2012a; 2012b). The policy document notes that to implement and give effect to the CSO policy it will be necessary to establish the principal objective for all SOEs is to (Government of PNG Treasury Department 2012a, p. 6):

“operate as a successful business and to that end to be as profitable as comparable businesses not owned by the state.”

The policy document states that when the government directs an SOE to provide a CSO the government and the SOE will enter in to a binding CSO contract that will specify the goods and services to be provided and the amount payable by the government (PNG Treasury 2012a, p. 6). The policy document also states that no SOE shall provide a CSO unless it has been specifically directed to do so by the NEC and subject to an agreement that has been documented in a CSO Contract (PNG Treasury 2012a, p. 7).

The CSO Guidelines provide details on requirements for applying for a CSO. These include requirements for costing, for a cost-benefit analysis to be undertaken for the CSO, for proposals to show how the cost of the CSO will be reduced over time, and for performance monitoring arrangements. It is intended that the IPBC would review CSO applications which would then be assessed by the Departments of Treasury and National Planning and Monitoring. The IPBC would be required to maintain a register of CSOs that would be publicly available. The preferred funding method would be through the national budget but there is scope for the government to decide on a different funding method.

4.4.2 Evaluation

The ADB (2015, p. 56) considers that this CSO policy follows international best practice. The main issue will be the ability of government to commit to and execute the policy as it is potentially wide ranging in terms of resource requirements and impact. A pilot program

was well underway for the National Airports Corporation at the time of preparing this report to help inform the broader roll-out of the policy.

An issue that needs further consideration is funding. This is because the economic cost of public funds raised through taxation revenue is very high in developing countries. There is a high marginal cost (deadweight loss) from raising funds in developing countries. The deadweight loss in developed countries is typically 0.3 cents in the dollar, meaning that it costs the economy 1.3 cents for every cent raised by taxation. In developing countries, the deadweight loss has been estimated to be much higher for instance 1.2 to 2.5 meaning that it costs 2.2 to 3.5 cents for every cent raised by taxation (Laffont 2005, pp. 1-2).

The CSO policy will be most effective where it can be used in conjunction with the PPP policy in order to help reduce the cost of non-commercial obligations. However, even where it is not feasible to implement a PPP arrangement, the CSO policy has the advantage of making costs of CSOs more transparent and subject to regular review in the budget process, thereby helping to improve accountability.

4.5 SOEs as vehicles for economic development

As discussed in Section 2.5, when markets and supporting institutions are not well developed, SOEs providing essential services are in effect a default form of organisation which are often assigned multiple objectives, many of which are not likely to be commercially viable. Some of these objectives may also be a substitute for independent regulation.

As markets and supporting institutions develop it becomes more feasible to identify and separate commercial from non-commercial objectives and establish independent regulatory arrangements. The non-commercial objectives can be clearly defined and delivered through contractual arrangements in the form of community service obligations. The governance and institutional arrangements in PNG have evolved with these characteristics.

However, there are still major development tasks to be undertaken that raise the question of the role of certain SOEs as vehicles for economic development and the associated role of Kumul Consolidated Holdings. Examples include who will be responsible for extending and facilitating access to electricity or coordinating and extending the development of ports. Activities along these lines effectively require substantial public funding and the support of government in accessing land and coordinating plans and investments. Kumul Consolidated Holdings (as did the IPBC) has the authority to be involved in these sorts of activities.

The main issues relate to the need to ensure an effective and transparent relationship between government and the coordinating entity responsible for the specified development task. Experience documented by the OECD (2015) and World Bank (2014a) confirms the importance of clarity of objectives, clear lines of accountability and management autonomy and authority.

Some of the recent changes to the IPBC Act raise concerns that these governance requirements are not clearly recognised and in particular there seems to be too much discretion for government interference in meeting assigned tasks.

4.6 Economic regulation

As noted, the ICCC regulates several SOEs with market power. The ICCC uses 'regulatory

contracts' to regulate the prices of SOEs that have been declared for regulation. Concerns have been expressed in the past about the effectiveness of the regulatory contracts.

A recent ADB (2015, p. 55) report was quite critical as follows:

“Regulatory contracts are oblivious to efficiency considerations. The Independent Consumer and Competition Commission (ICCC)-agreed regulatory contracts for monopoly service providers militate against realizing productivity gains. The ICCC regulates all non-financial enterprises, except the telecommunications sector. Regulatory contracts of up to 10 years establish a largely cost-plus price path tied to agreed performance standards and investment plans. They have no productivity performance requirements or other incentives to save costs. Frustration at SOEs' slow improvement in services has encouraged changes in market regulation, such as enhanced performance monitoring. However, this is likely to be ineffective without fundamentally restructuring regulatory contracts. The best approach is greater contestability through increased private sector participation, backed by hard SOE budget constraints.”

A brief review of some elements of the regulatory contracts for PNG Ports (ICCC 2015) and PNG Power (ICCC 2012) suggests that this assessment for regulatory contracts is not correct for PNG Ports or PNG Power. Although there are some aspects of these contracts that could be improved they do represent application of a building blocks model leading to a price cap that does allow for efficiency considerations and incentives to reduce costs and expand. In addition, the ICCC has proposed changes to these regulatory contracts for the next regulatory period so that future contracts could be more effective.

The building blocks model first requires a view of efficient costs over the regulatory period and the ICCC is well aware of this requirement. If efficient costs are allowed in the cost base, then productivity improvements are already reflected in allowed prices without a further need for an efficiency adjustment.

The ICCC undertook some benchmarking of operational costs for PNG Ports in its most recent regulatory review but was unable to do so for PNG Power given difficulties in finding relevant comparators. Instead it used its judgement in assessing forecast spending for PNG Power. It also found that the current set of performance measures laid out in the Electricity Regulatory Contract were not adequate and set new targets in relation to electricity reliability.

In addition, both PNG Ports and PNG Power are regulated by price caps, which is a form of regulation that provides incentives to reduce costs and expand volumes as this leads to higher profits. However, it should be noted that the strength of the profit incentive is reduced in government entities compared with private entities, as managers of SOEs do not usually share in increased profits.

The ICCC also made some changes to the regulatory principles for these entities as they were considered difficult to interpret and too prescriptive in terms of methodology (particularly with respect to asset valuation) and precluded the use of other approaches and improvements in the way regulatory prices are set. It is reasonable to conclude that the existing principles were poorly written and too tied to a particular regulatory view.

The reasons the ICCC has identified to change the regulatory principles are considered to be consistent with good regulatory practice. The new principles emphasise the need to ensure revenues are sufficient to facilitate efficient investment, service performance is efficient, and costs are economically efficient. In addition, the principles allow the regulatory contract to be adjusted for changing circumstances and require it to be consistent with

relevant government policy and regulatory requirements. Consistent with the regulatory contract arrangements, substantive changes cannot be made for the period 2015 to 2019 but it is proposed that the new principles will apply for the period 2020 to 2024.

The ICCC does appear to largely meet the governance requirements of an effective independent regulator. There are constraints on its discretion that seem to be largely effective, including an appeals body, and formal changes to its powers require changes in legislation. There also do not seem to be issues with respect to enforcement of its decisions and it is transparent with respect to making its decisions publicly available.

It has also adopted regulatory approaches that help assure credible regulatory commitment to ensuring revenue is sufficient to fund efficient investment (to help achieve dynamic efficiency). It is also aware of the importance of productive efficiency in reviewing allowed costs and in implementing price cap regulation.

However, one aspect of the regulation of ports that could be questioned relates to the ICCC decision to disallow price discrimination between cargo types. Prior to the change there were differences in coastal versus international charges, outward and inward charges, weight or volume, empty versus full containers, and also for different agricultural and building products. The ICCC justified this decision based on the proposition that generally pricing structures should reflect cost drivers as this would promote allocative efficiency (ICCC, 2015, p. 51). However, setting an average price to recover average costs by itself entails an allocative inefficiency; as in order to achieve allocative efficiency, prices should reflect marginal costs with no component for the recovery of capital costs.

More importantly, the ICCC decision is contrary to a fundamental proposition in regulatory economics (and optimal taxation theory) which is that if prices cannot reflect marginal costs and need to recover average costs then they need to be set based on the sensitivity of demand to prices in order to minimise allocative efficiency losses. Such prices are known as Ramsey prices.

In allowing Ramsey prices in a regulatory context, an overall (weighted average) price cap would be set for the regulated firm and the firm would be given the freedom to price its individual products to reflect demand conditions (and not cost conditions) but subject to the constraint that the overall price cap cannot increase. (When there is a need to set an overall price cap where subsequent revenue is required to cover both marginal and fixed costs.)

Ramsey prices are economically efficient (see Church and Ware 2000, pp. 788–799 for a more detailed exposition). Thus the situation where charges differed for other than cost conditions could have been an example of Ramsey pricing in practice, which is effectively precluded by the ICCC decision to disallow price discrimination between cargo types.

It would be useful to review the decisions and regulatory approaches of the ICCC and NICTA in more detail to identify if improvements could be made.

Ch. 5 Further Research

This section suggests some options for further research. All of the options are relevant for improving regulatory and public policy decisions in relation to SOEs. The first three would require cooperation and considerable consultation with relevant authorities.

5.1 Economic Regulatory decisions and methods of the ICCC

A brief assessment of some aspects of recent regulatory decisions of the ICCC was provided in this paper. However, it would be useful to undertake a more thorough review of ICCC decisions and methods.

In late 2014, the Department of the Treasury appointed an expert review team to examine the laws and institutions that protect consumers and competition in PNG. Some details about the review can be accessed at <http://www.ccfreview.info/>

The initial focus of the consumer and competition review that is under way is more on consumer protection, fair trading and competition than on economic regulation. An issues paper on economic regulation is due for publication in late 2015. It is intended that it will cover PNG Power, PNG Ports, PNG Post and Third Party Motor Vehicle Insurance in PNG. However, the work program appears to be behind schedule.

A paper highlighting issues in relation to various regulated entities providing essential services could be used as the basis for a submission by the NRI to the review. The paper could cover PNG Power, PNG Ports, Eda Ranu and Water PNG.

The paper should also look at the issue of what is an appropriate rate of return for essential services. In this respect it is noted from the PNG Power website (<http://www.pngpower.com.pg/index.php/2012-01-10-03-09-38/rural-electrification>) that rural electrification projects are specified as requiring a 10 percent real financial rate of return. This is unrealistic even if CSO policy is effectively implemented. Recognition needs to be given to a wider concept of an economic rate of return that recognises wider benefits to the economy but while still ensuring a meaningful risk-adjusted financial rate of return.

The paper could draw on the World Bank's Handbook for Evaluating Infrastructure Regulatory Systems (Brown et al 2005) and the Levy and Spiller (1999) emphasis on regulatory credibility to help evaluate regulatory performance. It would cover both regulatory governance and regulatory content.

It would be useful to liaise with the review team to ensure that the research paper does not duplicate work they intend to do.

As an alternative to a research paper, the NRI could prepare a submission to the review when relevant issues papers and a draft report are released.

5.2 Economic Regulatory decisions and methods of the NICTA

Similar to the proposal for the ICCC, a research paper could be prepared covering the regulatory decisions of NICTA. There is no indication that the review team for consumer and competition review will examine NICTA in detail.

The approach could be similar to that outlined for 5.1 but it could be expanded to review telecommunications policy more broadly including the success of reforms to date and proposals for a national broadband policy. Alternatively, the project could focus more on telecommunications policy rather than specific regulatory decisions.

The paper could also form the basis of a useful submission for the review.

5.3 Restructuring PNG Power and facilitating competition

During the 1990s, many countries reformed their electricity sectors to rely on competitive wholesale and retail markets to replace supply and marketing functions that were traditionally undertaken within regulated, vertically-integrated monopolies. While several of these programs achieved some of their goals for performance improvements, there have also been a number of common problems that have emerged across many countries.

These problems have necessitated major ex post changes to market and/or regulatory institutions to mitigate them. Indeed, wholesale electricity market design appears to be a never-ending work in progress.

It is fairly clear that short-run generator dispatch and congestion management in these new wholesale markets are less efficient than were vertically integrated utilities in performing these functions. This reflects the physical and coordination externalities that can be realised in an integrated electricity supply system. There is in effect a trade-off between the benefits of competition in potentially reducing costs and the coordination benefits for investment and security of supply from an integrated entity.

When vertical separation and other reforms occur, a range of problems occurs that were not a feature of the old arrangements. These include market power problems in the generation sector particularly when there is congestion, coordination difficulties between the generation, transmission, and distribution segments, sub-optimal investments in transmission capacity, and excessive consumer prices. Costs may be lower but prices may be higher.

As is well known in economics, efficient economic outcomes require a complete set of markets and in electricity this requires effective spot and contract markets. But it is difficult to develop effective spot markets in developing countries so that more limited benefits of competition have to come through competition in contracts. But then this raises the issue of who coordinates and purchases the contracts and who is in charge of making use of those contracts to ensure efficient physical dispatch. What will be the role of PNG Power given it will be both a competitor and potential purchaser from competitors?

These issues are discussed in more detail in Joskow (2008) and Kessides (2004). The point is that if vertical separation is being pursued, considerable thought needs to go into developing contractual, coordination and regulatory mechanisms to make sure that the outcome delivers on expectations for lower prices and better service.

There does not seem to have been any careful consideration and documentation of these concerns or how they would be effectively addressed in the National Energy Policy and associated documents.

The research paper would document the status of reforms and identify potential problems based on the literature and experiences in other jurisdictions and suggest options to help overcome the potential problems.

5.4 Survey of Private sector views on PPPs and the Kumul structure

As identified in this paper a problem with the PPPs is that the policy will be far from a panacea for ensuring greater private sector participation. The economic literature on 'binding constraints' and 'growth diagnostics' highlights the importance of ensuring that the most binding constraints in relation to an economic development challenge are identified and given appropriate priority.

A research project could undertake a survey of private sector views on PPPs and the Kumul Structure. The paper would also review relevant literature. This project could be done in cooperation with the Institute of National Affairs given their links to the private sector and experience in undertaking surveys of private sector views on economic policies and development constraints.

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