Independent Consumer & Competition Commission

Stevedoring & Handling Services Pricing Review

ISSUES PAPER

April 26, 2013
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<th>Glossary Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
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<tr>
<td>Habours Act</td>
<td>Habours Act (Chapter 24)</td>
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<tr>
<td>ICCC Act</td>
<td>Independent Consumer and Competition Commission Act 2002</td>
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<tr>
<td>ICCC/Commission</td>
<td>Independent Consumer and Competition Commission</td>
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<tr>
<td>PNG Customs</td>
<td>Papua New Guinea Customs</td>
</tr>
<tr>
<td>PNG Ports</td>
<td>Papua New Guinea Ports Corporation Ltd</td>
</tr>
<tr>
<td>NAQIA</td>
<td>National Quarantine and Inspection Authority</td>
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<tr>
<td>NSO</td>
<td>National Statistical Office</td>
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</table>
FOREWORD

The Independent Consumer and Competition Commission (ICCC) is a statutory body established under the provisions of the Independent Consumer and Competition Commission Act 2002 (ICCC Act). The Commission’s roles and responsibilities are to promote competition and fair trading, regulate prices of declared goods and services, promote economic efficiency, protect consumers’ interests and other related purposes.

The Commission is made up of three Commissioners:

- Commissioner & Chief Executive Officer  - Dr. Billy Manoka
- Associate Commissioner (Resident) - Dr. Eric Omuru
- Associate Commissioner (Non-Resident) - Mr. David Dawson

As part of its role of regulating prices of certain declared goods and services, the Commission is responsible for regulating charges for stevedoring and handling services. The Commission undertook the first major review into the stevedoring and handling services and completed it in June 2008 with the release of the Final Report. The current determinations, which are contained in the Final Report, will expire on May 31, 2013. Hence, the Commission is required to undertake a review to decide whether it is necessary to continue to regulate charges for stevedoring and handling services and, if so, the form of such regulation.

This Issues Paper is the first step in the review process and it is designed to help interested parties understand the issues, develop and provide submissions on the issues discussed and on any information relevant for consideration.

The Commission encourages wide public participation in this review and therefore requests all stakeholders including providers and users of stevedoring and handling services and any other interested persons to provide comments and submissions to the Issues Paper.

Submissions will be available for public inspection unless the Commission agrees that all or part of the submission should remain confidential, under section 131 of the ICCC Act. However, in accordance with the general intent of the ICCC Act, it is intended to make the review process as transparent as possible and submissions would normally be available for public inspection unless there is commercial-in-confidence information meriting the grant of confidentiality.

The tentative schedule for the review process is provided below.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Release of Issues Paper</td>
<td>April 26, 2013</td>
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<tr>
<td>Receipt of submissions on Issues Paper</td>
<td>May 27, 2013</td>
</tr>
<tr>
<td>Receipt of submissions on Draft Report</td>
<td>July 26, 2013</td>
</tr>
</tbody>
</table>
Submissions to this Issues Paper should be received by 4pm on May 27, 2013 and should be directed to:

Dr. Billy Manoka, (PhD)
Commissioner & CEO
Independent Consumer & Competition Commission
1st Floor Garden City, Angau Drive Boroko
P.O. Box 6394
BOROKO
National Capital District

For further enquiries contact Mr. Roy Daggy on telephone 325 2144 or by fax on 325 3980, and or via email to rdaggy@iccc.gov.pg.

Authorized by

Dr. BILLY MANOKA, (Ph.D)
Commissioner & CEO

April 26, 2013
1 INTRODUCTION

1.1 Review Requirement

The Commission is undertaking this review under the PR Act and the ICCC Act. In so doing, the Commission has to consider;

- Whether it is necessary to recommend to the Minister to continue to subject the charges for stevedoring and handling services to price control under Section 10 and or 32A of the PR Act (Ministerial declaration of a good or service that is subject to price regulation or price monitoring respectively), or whether changes to the existing declarations are required;

- How the Commission proposes to implement price regulation or price monitoring depending on the Minister’s adoption of the Commission’s recommendation, and where the Commission decides to control charges for stevedoring and handling services then it will have regard to;
  - Sections 20A of the PR Act (Commission’s intention to determine maximum prices) & 20B (Commission’s duty to publish reasons for a pricing order made under Section 21);
  - Section 21 of the PR Act (Commission’s determination of maximum prices); and

- Section 131 of the ICCC Act provides for the Commission’s decision-making process on confidentiality and public disclosure of information submitted to the Commission during this review process.

1.2 Review Process

This review is initiated and conducted in a transparent manner and is intended to incorporate broad public participation. The review process will consist of:

- the release of this Issues Paper and invitation for comments and submissions on issues that the Commission should consider;
- release of a Draft Report containing the Commission’s Draft Determinations and invitation of submissions on that Draft Report;
- possible Public Hearings on the Draft Report and Determinations
- release of a Final Report and Determinations.

The Commission encourages relevant stakeholders including users and providers of stevedoring and handling services and any other interested parties to participate in this review process to assist the Commission to make informed decisions.
2 STRUCTURE OF STEVEDORING AND HANDLING INDUSTRY

Consideration of the structure of the stevedoring and handling industry is necessary as it identifies the participants in the industry and service providers from other industries that influence or are influenced by the stevedoring and handling industry.

The shipping, ports and stevedoring industries play a very pivotal role in the ongoing economic development of PNG. These key sectors facilitate trade both within PNG and between PNG and the international community, ensuring that PNG continues to have efficient access to international markets for both imports and exports. These industries contribute to the economy by supporting economic activity and thereby contributing to economic growth, employment and development.

The following sections first discuss the participants in the stevedoring and handling industry and related industries and their inter-relationships with and influence on the stevedoring and handling industry.

2.1 Stevedores

Stevedoring companies, (now generally known as ‘stevedores’) facilitate transfer of goods to and from and within vessels, temporary storage of goods awaiting shipment or delivery to consignees, and the receipt and delivery of cargoes to and from road operators. Table 1 below provides the names of stevedores in each port.

Table 1: Names of stevedores in each port

<table>
<thead>
<tr>
<th>Port</th>
<th>Stevedore Company</th>
</tr>
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<tbody>
<tr>
<td>Port Moresby</td>
<td>JV Stevedoring</td>
</tr>
<tr>
<td></td>
<td>United Stevedoring Limited</td>
</tr>
<tr>
<td>Lae</td>
<td>Lae Ports Services Ltd</td>
</tr>
<tr>
<td></td>
<td>United Stevedoring Limited</td>
</tr>
<tr>
<td></td>
<td>Nikana Stevedores Ltd</td>
</tr>
<tr>
<td></td>
<td>Riback Stevedores Ltd</td>
</tr>
<tr>
<td>Madang</td>
<td>Madang Port Services Ltd</td>
</tr>
<tr>
<td>Kokopo</td>
<td>East New Britain Port Services</td>
</tr>
<tr>
<td>Alotau</td>
<td>Alotau Stevedoring &amp; Transport Ltd</td>
</tr>
<tr>
<td>Kavieng</td>
<td>Kavieng Port Services Ltd</td>
</tr>
<tr>
<td>Kimbe</td>
<td>Kimbe Bay Shipping Agencies Ltd</td>
</tr>
<tr>
<td></td>
<td>Zilarous Stevedores Ltd</td>
</tr>
<tr>
<td>Popondeta</td>
<td>Oro Agencies Ltd</td>
</tr>
<tr>
<td>Wewak</td>
<td>Sepik Coastal Agencies</td>
</tr>
<tr>
<td>Kiunga</td>
<td>Kiunga Stevedores Co</td>
</tr>
<tr>
<td>Manus</td>
<td>RL &amp; VJ Knight Shipping Agencies Limited</td>
</tr>
<tr>
<td>Buka</td>
<td>Makerio Stevedoring Limited</td>
</tr>
<tr>
<td>Vanimo</td>
<td>Vanimo Agencies</td>
</tr>
</tbody>
</table>
Apart from the above, other smaller ports in PNG also have operational stevedores. These include the ports at Aitape, Kieta, and Samarai Island.

The Commission requests stevedores to provide;

- Names of the ports at which they are currently operating; and
- Views on the possibility of offering services in ports which they do not currently operate.

2.1.1 Stevedoring services

The Commission, in its 2008 Final Report, defined stevedoring services as the;

- discharging and loading of overseas, domestic and coastal cargoes undertaken on:
  - full and empty containers;
  - I.S.O approved containers;
  - Shifting of containers and operation of vehicles for this purpose;
  - Break bulk cargo;
  - Vehicles; and
  - other containers such as “A”, “D” and “J” boxes;
- loading and discharging a vessel including lighters or barges;
- provision and operation of various types of forklifts onboard a vessel;
- strapping of cargo; and
- tarpaulin hire.

Apart from these services, stevedores undertake auxiliary activities, which as a whole, are also categorized as stevedoring services. The Commission notes that in each of the above services, stevedores undertake a range of different activities. During the current monitoring period, stevedores have not provided a detailed listing of all activities which comprise stevedoring services to the Commission.

In the current regulatory period, stevedores have introduced a raft of new services and charges beyond those services and charges specified in the 2008 report. The Commission was not informed of the introduction of these new services or their charges. The Commission is also aware of stevedores using different names for a particular service interchangeably overtime which caused some difficulty in the Commission’s monitoring of services.

Therefore, should the Commission decide to continue apply some form of price regulation to stevedoring services, it shall apply regulation to all activities related to the provision of stevedoring services.
The Commission proposes to expand its determination and regulatory ambit to encompass any additional stevedoring service that may be introduced during any further term of regulation, if such regulation is ultimately decided to be implemented.

<table>
<thead>
<tr>
<th>The Commission requests each stevedore to;</th>
</tr>
</thead>
<tbody>
<tr>
<td>• provide a full, description of all stevedoring activities, identifying the function of each on a port-by-port basis</td>
</tr>
<tr>
<td>• match the terminology of their various stevedoring services to the Commission’s list of services described in its 2008 Final Report on a port-by-port basis;</td>
</tr>
<tr>
<td>• list every stevedoring service not included in the Commission’s list of services (‘each additional service’) for each port;</td>
</tr>
<tr>
<td>• provide the date of introduction of the charge for each additional stevedoring service in each port;</td>
</tr>
<tr>
<td>• provide the amount of the charge for each additional service in each port at the date of introduction; and</td>
</tr>
<tr>
<td>• in respect of any change in the charge for each additional service in each port, provide the date of the change and the amount of the change, indicating whether the change is an increase or decrease in the charge at the relevant date.</td>
</tr>
</tbody>
</table>

### 2.1.2 Handling services

The Commission, in its 2008 Final Report, defined handling services as the:

- transferring containers from the stacking area to the consignee’s vehicle and the returning the empty container from the consignee’s vehicle;
- delivery of containers directly from ship hook to the vessel operator’s nominated transport contractors outside port area and return of empty container to stack including issuing of appropriate documentation;
- delivery of container direct to ship’s hook from vessel operator’s nominated transport contractors outside port area and return of empty container to stack including issuing of appropriate documentation;
- cleaning containers, internally and externally;
- strapping cargo;
- provision of tarpaulin;
- receiving and delivering general cargo; and
- receiving or delivering palletized cargo to and from vehicle.

As with stevedoring services, stevedores, who are generally providers of handling services, handle different types of cargoes and sizes of containers. The Commission became aware
that during the current period additional charges have been applied for handling services which have not been provided to the Commission for monitoring.

Therefore, should the Commission decide to continue apply some form of price regulation, it is necessary for the Commission to be informed of all handling activities undertaken by stevedores. Also, the Commission seeks to understand why different time slots are provided for overtime receival and delivery of cargo.

The Commission proposes to expand its determination and regulatory ambit to encompass any additional handling service that may be introduced during any further term of regulation, if such regulation is ultimately decided to be implemented.

The Commission requests each stevedore to:

- provide a full description of all handling activities undertaken identifying the function of each on a port-by-port basis;
- match the terminology of their various handling services to the Commission’s list of services described in its 2008 Final Report on a port-by-port basis;
- list every handling service not included (each additional service) in the Commission’s list of services for each port;
- provide the amount of the charge, and the date of introduction of the charge for each additional handling service in each port; and
- in respect of any change in the charge for each additional service in each port, provide the date of the change and the amount of the change, indicating whether the change is an increase or decrease in the charge at the relevant date.
- provide justification for having different time slots for over-time receival and delivery of cargo.

2.2 PNG Ports

PNG Ports is a state owned corporation licensed to provide essential port services. An essential port service is defined under the Habours Act as a port service consisting of:

- providing port facilities for loading and unloading vessels at a declared port; or
- providing berths and berth reservation services for vessels at a declared port.

The specific service PNG Ports provides to stevedores is the provision of facilities for loading and unloading vessels. Apart for this, PNG Ports also licenses stevedores to conduct their operations at the 15 declared ports, under a delegated power. The Commission considers that the capacity of port facilities for loading and unloading vessels at any declared port is a key constraint on the number of stevedores able to compete in each of
the declared ports, but not the only constraint. The Commission understands that landowner companies who are shareholders in stevedores strongly resist new entry. If that is so, that may well constitute a breach of the ICCC Act. Other constraints are the economic and regulatory barriers to entry.

PNG Ports has lately purchased Mobile Harbor Cranes (MHC) to load and unload cargoes and Rubber Tyred Gantries (RTG) to position and stack containers before and after being loaded from vessels. The MHCs and RTGs are being used in the ports of Port Moresby and Lae. PNG Ports suggests that the use of MHCs and RTGs will improve the rate of loading and unloading vessels and thereby increase berth availability and reduce waiting time. The Commission understands that PNG Ports currently makes the MHCs and RTGs available to stevedores at no charge.

The Commission has recently been made aware through PNG Ports’ publication of advertisements seeking expression of interest (EOI), that it intends to implement Stevedoring Access Agreements, under which PNG Ports would enter into agreements with interested stevedores for access to the port facilities and use of the MHCs and other equipment. The Commission is not aware of the terms and conditions of these agreements and is concerned that they may give rise to significant competition issues. These agreements are also likely to have a significant impact on the operations of the stevedores.

The Commission is also aware that PNG Ports’ has sought EOIs from parties interested in entering into Terminal Management Contracts including the use of RTGs and other handling equipment. The Commission notes that the proposed Terminal Management Contracts would have significant implications for the provision of handling services.

PNG Ports has not provided the Commission with draft terms of agreement, draft criteria for allocation of licences; or draft planning documents identifying the objectives and process of grant of such licences and rights under both types of agreements.

The Commission is of the preliminary view that the Stevedoring Access Agreements and Terminal Management Contracts have the potential, on the one hand, to damage competition and efficiency; and, on the other, to increase competition and efficiency, if properly designed, and, thereby, reduce costs for users and enhance national economic growth.

Section 50 of the ICCC Act prohibits the entering into or giving effect to any contract, arrangement or understanding or any covenant that has the purpose or effect, or is likely to have the effect of substantially lessen competition. It also prohibits entering or giving effect to any contract, arrangement or understanding that contains an exclusionary provision.

Under Section 53, arrangements between persons that have the purpose or effect, or are likely to have the effect, of fixing, controlling or maintaining the price for any good or
service or any discount, allowance, rebate or credit for any good or service, are deemed to substantially lessen competition for the purposes of section 50.

Section 58 prohibits a firm that has a substantial market power from taking advantage of its market power for the purpose of restricting entry into that or any other market; preventing or deterring a person from engaging in competitive conduct in that or any other market; or eliminating a person from that or any other market.

A copy of each of the above sections is attached.

Section 58 conduct is not capable of authorization, but section 70 provides for authorization of agreements to which section 50 may be applicable.

The Commission reserves all its rights in relation to the proposed stevedoring access agreements and terminal management agreements.

The Commission invites comments on;

- whether the agreements have the potential to damage competition, and if so, how?
- Whether the agreements would enhance competition, and if so, how?
- Whether the Commission should investigate the proposed arrangements in relation to the possible application of section 50, section 53 and/or section 58.

Furthermore, the Commission is concerned that the use of MHCs and RTGs by PNG Ports enables PNG Ports to effectively act as a stevedore and is considering whether PNG Ports should be subject to stevedoring and handling regulation.

The Commission is seeking comments from stevedores and PNG Ports on:

- the capacity of port facilities and its impact on the number of stevedores conducting business in any declared port;
- whether capacity needs to be increased in any port to adequately serve demand volumes, and, if so, by how much in each case;
- whether capacity could reasonably have been expanded where needed;
- if capacity could reasonably have been expanded, what form should capacity expansion have taken e.g. whether by yard space; quay length; technology upgrade etc.;
- where capacity should have been expanded, but was not, the obstacles to such possible expansion in each case;
- does PNG Ports provide stevedoring and handling services;
• should PNG Ports be subject to stevedoring and handling regulation and how, given that the current regulatory contract restricts regulation to berth reservation services; berthing services and wharfage services;

• the impact of the proposed stevedoring access agreements and terminal management contracts on stevedoring and handling services;

• if there is any requirement or compulsion to use the MHCs and RTGs; and

• the arrangements preferred by stevedores and other interested parties (including pricing) for the use of the MHCs and RTGs.

2.3 Shipping companies or ‘ship operators’ (including owners or charterers of vessels)

Shipping companies transport international cargoes in and out of the country and also transport domestic cargoes within the country. Stevedores act as middle men who load and unload cargoes on and off the vessels and temporarily store cargoes between transfers using the port facilities.

Stevedores contract with ship operators for services they provide them. However, the efficiency with which they operate has a direct effect on the costs and efficiency of cargo consignors and consignees. The lack of a contractual relationship between stevedores and cargo consignors and consignees removes any direct accountability by stevedores to cargo consignors and consignees for the costs and efficiency of services involved at the interface between them.

Furthermore, there appears to be a significant degree of vertical integration between coastal ship operators and stevedores in most ports. This has the potential to impact on the conduct of the stevedores, especially in relation to non-integrated ship operators. This situation, therefore, calls for close monitoring of the costs and efficiency of stevedores; and assessment of the structural and behavioral characteristics of the market for anti-competitive consequences.

While cargo consignors and consignees contract with ship operators, who are accountable to them for the overall ocean transport task, the efficiency with which that is delivered depends on the degree of competition in the ship operating market. In respect of stevedoring efficiency, the ‘responsiveness’ of ship operators to their customers depends upon the level of competition in stevedoring and whether ship-operators can ‘choose’ their stevedores in each port or otherwise secure efficiency in stevedoring. Not only can the responsiveness of ship-operators to their customers, the cargo consignors and consignees, therefore, be attenuated by the degree of competition in stevedoring, but the latter can also affect the level of competition in relevant ship operating markets, arising from the degree of vertical integration between those two sectors of the industry.
The Commission is requesting shipping companies, stevedores, cargo consignors and consignees and other interested parties to:

- provide the names of stevedoring companies in which ship-operators wholly or partly own shares, and the extent of each such shareholding;
- submit views on the efficiency with which stevedoring and handling services are provided, with reasons for their assessment, in each of the major ports;
- comment on the level of competition in stevedoring; and
- their views of the proposed Stevedore Access Agreements and Terminal Management Contacts.

### 2.4 PNG Customs

PNG customs manages the security and integrity of PNG’s borders and to detect the unlawful movement of cargoes across the nation’s borders. Custom officers work with stevedores and PNG Ports to ensure border protection in a manner that minimizes the impact on trade.

Cargo consignors and consignees have agents who deal with PNG customs and stevedores, as ‘middlesmen’ to process Customs documentation and clearance of cargoes, in those Ports that serve international trade.

### 2.5 NAQIA

The NAQIA provides quarantine inspection for cargo arriving in PNG, and inspection and certification for a range of agricultural products exported from PNG. Officers of this agency work with stevedores and road operators to ensure that the external inspection of containers is done in an efficient and timely manner and requirements such as washing of containers and fumigation of cargoes are carried out to the requisite regulatory standards.

### 2.6 Users of stevedoring and handling services (consignees and consignors)

Users of the stevedoring and handling services are those that the cargoes are consigned or shipped to and those who send cargoes. These users of stevedoring and handling services include high end users such as resource companies, businesses who are involved in general merchandising of goods and individuals who import/export or ship cargoes domestically.

The Commission is interested in understanding the means by which users access stevedoring and handling services.

The Commission is requesting users of stevedoring and handling services, ship operators, stevedores and other interested parties to indicate:
• whether end users access the services directly or through agents;
• if through agents, provide names of agents and state how efficient these agencies are in doing their jobs;
• whether there is vertical integration between customs agents and stevedores/ship-operators/land transport operators;
• indicate the type and level of prevalence of problems experienced with stevedoring and handling Customs agency services over the last five years; and
• are stevedoring and handling charges shown separately by the ship operators you use? Please identify ship operators by name, indicating which ones show such charges separately and which ones do not?
3 COMPETITION ANALYSIS

The rationale for competition analysis is to establish whether there is sufficient competition in the market to drive prices towards competitive levels and thereby improving efficiency in the market. Assessment of competition assists the Commission in providing a recommendation to the Minister on the form of price control, if any. It also informs the Commission on the most effective approach to price control or price monitoring, should such regulation appear warranted.

3.1 Definition of the relevant market(s)

A market can be defined in terms of product(s)/service(s), geographic area(s), and temporal dimensions. A market is the ‘area of rivalry’, where the supply or acquisition of a product/service is considered in the context of a geographical area, within a time period, usually of about one to two years. Finally, more than one market may be involved and overlapping markets are common.

Market definition is a purposive task – that is the task of defining markets is not an end in itself, but a means to the end of assessing competition.

Because market definition becomes necessary to analyse competition in some product or activity, it is the product or activity itself, such as a business acquisition, that is the starting point, with expansion of the boundaries in the various dimensions, taking account of substitution possibilities in both demand and supply, to establish the degree of constraint to which the parties or products/services, are subject. Substitution possibilities are assessed on the basis of a hypothetical small but significant non-transitory increase in price (‘SSNIP’) being applied. Such an increase can be applied either by a ‘hypothetical monopolist’ or by one or more players (known as the ‘hypothetical monopolist test’ or the ‘SSNIP test’). It is the reaction, either in the way of additional suppliers emerging to supply at or below the new price; or additional quantities supplied by existing suppliers at or below the new price; or customers succeeding in obtaining supply outside the existing number of suppliers below the new price; or outside the existing geographic region of acquisition; or substituting other products or services for the subject ones, that determines the effective limits of the various dimensions of the market in a practical sense. Precise ‘white line’ delineations are unrealistic to expect and some blurring at the edges of market boundaries are usual. Essentially, if the SSNIP can be profitably maintained for a sustained period without disproportionate loss of profits, then that, in effect, defines the market.

Because there is no direct relationship between suppliers of stevedoring and handling services and the ‘effective’, customer, the consignor or consignee, rather than the ‘contractual’ customer, the ship operator, there is little sensitivity in terms of prices or service quality of stevedoring services, although ship operators do wish to turn around their vessels quickly to earn revenue from their literally ‘floating’ assets. Nevertheless, the
ability to pass on costs to end users mutes the pressure of ship operators on stevedoring companies, particularly in circumstances where the level of vertical integration is high.

Stevedoring and handling demand is a ‘derived’ demand and, hence, is not directly responsive to the price and efficiency of services supplied. Consequently the economic analytical framework to be applied in assessing market boundaries, through the SSNIP test, is affected, and must be considered, as must the state of competition, when that is assessed.

The Commission is requesting stevedores and any interested parties to provide their views and comments on the definition of relevant market(s) for stevedoring and handling services.

Postulated markets are those for stevedoring and handling services in individual ports and nationally.

Interested parties are invited to submit their views about the relevant market or markets involved.

3.2 Market concentration

Establishing market concentration estimates the number and size distribution of stevedores in the market. This is a starting point for assessing the possibility for the exercise of unilateral or coordinated market power, which is the anti-thesis of competition. A high level of concentration is a necessary, but not sufficient condition for market power. Other factors, listed in section 69 (5) of the ICCC Act, contribute to an assessment of the level of competition.

The mostly commonly used measures used to assess concentration are the Herfindal Hirschman Index (HHI) and concentration ratio.

The Herfindahl Hirschman Index (HHI) measures the level of competition that exists within a market or industry and it gives an indication of how the distribution of market share occurs across the companies included in the index. It is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. The closer a market is to being a monopoly, the higher the market’s concentration and the lower its competition.

The key advantage of the HHI is that it not only shows the aggregate level of concentration, but reflects the relative size distribution of the leading firms, which is an important indicator of the likely existence of unilateral or coordinated market power.
When the HHI value is less than 100, the market is highly competitive, and when the HHI value is between 100 and 1,000, the market is said to be not concentrated. When the HHI value is between 1,000 and 1,800, the market is said to be moderately concentrated. When the HHI value is above 1,800, the market is said to be highly concentrated.

A concentration ratio is the total market share of the top $k$ firms, where $k$ is normally taken to be 4, 5 or 8. i.e.; CR4, CR5 or CR8. This is normally expressed as a percentage of the market as a whole. Concentration ratios, especially the CR4, are designed to measure industry concentration, and by inference, the degree of market control and range from a low of 0 percent to a high of 100 percent. At the low end, a 0 percent concentration ratio indicates an extremely competitive market. At the high end, a 100 percent concentration ratio means an extremely concentrated oligopoly. Between these two extremes, concentration ratios can fall into low, medium, and high concentration.

### The Commission requests each stevedore to provide;

- Its market share in the relevant geographic markets (each port and nationally) in which it operates;
- Annual volume of domestic cargoes/ revenue for each year from 2008 to 2012; and
- Annual volume of international cargoes by twenty-foot-equivalent unit containers or revenue ton for each year from 2008 to 2012.

#### 3.3 Barriers to entry to the market

Under competitive market conditions, potential entry of new stevedores may be sufficient to ensure that any market power held by existing stevedores is not applied to lift prices to unacceptable ‘monopoly profit’ levels. However, certain circumstances in the market may act to limit new entrants to the market. Barriers could be in the form of government regulations such as licensing, which is understood to prevail in stevedoring and handling, cost of entry to the industry in the way of capital or otherwise establishing a customer base e.g. by advertising (‘sunk costs’) or difficulty of securing customers (e.g. because most demand is tied up in long term or exclusive contracts), capacity of ports facilities to allow additional stevedores to operate, or anti-competitive behaviour of existing stevedores.

In describing the factors to which regard must be had in assessing competition, the Australian Competition Tribunal\(^1\), said, after listing the various factors similar to those in

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\(^1\) In re: Queensland Co-operative Milling Association and Defiance Milling Ltd. (Proposed merger with Barnes Milling Ltd) (1976) ATPR40-012, cited from Paclii case download
section 69(5) of the ICCC Act; “of all these, the most important is No. [2]; the condition of entry.”

<table>
<thead>
<tr>
<th>The Commission requests comments and submissions from any interested parties on the following:</th>
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<tr>
<td>• The ability of existing stevedores to engage in anti-competitive behaviour to hinder new entrants seeking to enter the market.</td>
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<tr>
<td>• Does the capacity of port facilities enable potential stevedores to enter the market?</td>
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<tr>
<td>• Is the cost-structure of establishing a stevedoring and handling business a barrier to entry for potential entrants?</td>
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<td>• Are customers easily available and contestable or not?</td>
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<td>• Are regulatory barriers significant?</td>
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<td>• Do the actions or potential actions of landowner groups operate as a disincentive to entry?</td>
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<tr>
<td>• What other barriers exist which may deter entry by potential stevedore?</td>
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### 3.4 Degree of countervailing power

Countervailing power, often referred to as buyer power, is an important consideration in competition analysis as it focuses on business to business dealings. In essence, countervailing power is defined as the ability of one or more buyers who are able to constraint supplier(s) from increasing prices with threats of bypass. In most cases, only large customers have countervailing power.

In terms of the geographic market for stevedoring and handling service, buyers (users) of stevedoring and handling services are consignees or consignors who could be an individual who ship cargoes on an ad-hoc basis as and when need arises and may not have countervailing power. Those who would have a degree of countervailing power are those that ship cargoes on a regular basis as part of their business operations. These consignors are likely to be wholesalers and retailers of goods including pharmaceuticals, projects owners (mines), etc. Therefore, the issue to consider is whether one or more of these consignors are able to constrain a stevedore from increasing its prices with threats of bypassing it and using services from other stevedores within the same geographical market.

It is a curious feature of stevedoring that the customer is the ship-operator, who, while initially paying for the service, is not the end customer who bears the economic cost of the service, because ship-operators can and do pass on the cost of stevedoring to consignors or consignees, the ‘end-customers’, in their invoices for the service of carrying the cargo by sea, upon payment of which the bill of lading, which is effectively the ‘title document’ to the
goods, is released to the consignor or consignee, as the case may be. Hence, the normal bargaining process, and market constraint, does not apply, because the end customer does not have a legal 'buyer' relationship with the service provider, being the stevedore.

| The Commission is requesting consignees, stevedores and any interested parties on the following on a port-by-port basis: |
| --- | --- |
| • Whether bypassing a stevedore is commercially viable? |
| • Whether effective bypass is likely? |
| • Proportion of the market that is capable of effective bypass? |
| • Who can institute effective bypass? |

3.5 Nature and extent of vertical integration in the market

Vertical integration is the process in which several steps in the production and or distribution of a product or service are controlled by a single company. One of the advantages of vertical integration is that the reduction in costs and improved efficiency for the firm. However, vertical integration does not always result in reduced costs and improved efficiency as it may lead to increased market power and consequently higher prices for the services. Consideration of the nature and extent of vertical integration in each of the geographic market for stevedoring and handling services will enable the Commission to establish the market power of each of the stevedores.

In the stevedoring and handling industry, vertical integration can occur when a shipping company also provides stevedoring and handling services either directly, or through a wholly owned or partially owned subsidiary. The Commission is aware that some shipping companies own or have shares in stevedoring and handling businesses such as Steamships Trading Company Limited (Steamships) and Consort Express Lines Limited (Consort) shipping companies.

Most of ports throughout PNG have one stevedoring firm providing stevedoring and handling services except for ports of Port Moresby and Lae where a number of stevedores are providing the services.

3.6 Innovation and growth of the market

3.6.1 Demand determinants of stevedoring

The stevedoring industry is currently made up of 15 stevedores who provide service at the declared ports in PNG, loading and unloading cargoes from and onto the ships. Stevedores handle bulk, general and containerized cargoes at the ports from coastal and overseas
shipping companies, operating sophisticated machinery and systems and handling hazardous goods.

The fortunes of this industry are directly linked to freight volumes, which are largely determined by factors outside of the industry and, as a ‘derived’ function, the demand for it depends on the demand for shipping cargoes. In a marginal sense, however, the costs and efficiency of each link in the sea transport chain influence freight volumes, each cost increment making particular export or import cargo types less competitive and, therefore, affecting their volumes and, consequently, total volumes. Therefore the demand for stevedoring and handling services is dependent on the demand for shipping, which in turn depends on the level of general economic activity, not only the movement of machinery and equipment for mineral and other related sectors, but also for consumer goods not produced in the country. The demand will also depend on the level of competition from other forms of transportation such as road and air although the use of these forms of transport can be complementary to that of shipping as one feeds to another. It is safe to conclude, however, that air and road transport modes are not competitive with shipping due to the cost differentials involved, and the poor condition and availability of road infrastructure. Where air transport is used, time, cargo value and location of uplift and delivery are more influential drivers. Sea transport, therefore, has no effective substitute.

The Commission seeks views and comments from stevedores, the shipping companies, key stakeholders and any interested persons on the factors affecting the demand for stevedoring and handling services in PNG.

3.6.2 Future growth & development of the industry

The macroeconomic sustainability of PNG’s economy and sectoral demand underpin the future growth and development of the shipping and stevedoring industry. The future growth and development of the stevedoring and handling services at all ports will directly impact the fortunes of downstream industries; other sectors of the economy; national economic growth, and the overall standard of living of citizens.

The Commission seeks views and comments from the stevedores, the shipping companies, key stakeholders and any interested persons on the expected future growth and development of the stevedoring industry in PNG.
4 FORM OF REGULATION

During the first year of the current regulatory period, stevedoring and handling charges were set by the Commission. For the following years, the form of regulation for stevedoring and handling services has been by price monitoring. Under this arrangement, the Commission monitors the stevedoring and handling charges applied by all licensed stevedores in PNG at various ports against the movements of a comparator series comprising CPI and retail diesel fuel prices ex Lae. The CPI comprises of both the Headline and Underlying CPI (excluding alcohol, betelnut and tobacco) released by the NSO on a quarterly basis whilst the diesel fuel prices ex Lae are the monthly prices of diesel that the Commission announces every month. The comparator price index comprises of 45% Headline CPI for the All Groups, 45% Underlying CPI excluding betelnut, alcohol and tobacco and 10% diesel fuel prices ex Lae.

Under the current monitoring arrangement, the stevedores provide to the Commission their prices for the services at the commencement of each quarter and that list to be provided to the Commission by no later than the 15th day of the new quarter (e.g., 15th January for the price list applying from 1 January). The Commission analyses these charges and then uses the comparator series explained above to monitor the movement in prices for the regulated services over the regulatory period. If at any time the Commission observes a significance divergence in the movements of charges against the comparator price indexes, the Commission can seek explanation and justification from the stevedores for such deviation and, in the event it is not satisfied, can propose to the Minister that price control be considered.

Under the current monitoring arrangement the Commission only monitors the service and handling charges of Steamships JV Stevedoring’s stevedoring companies because that those companies provide services in all the declared ports that are subject to monitoring by the Commission and have significant market share in the relevant ports and nationwide, and also the company provides the necessary data to the Commission on time for monitoring purposes. Hence, the Commission is of the view that the charges applied by other smaller stevedoring companies would follow the similar price trend to those of the JV Stevedoring companies. However, should the Commission continue with price monitoring, all stevedores will be subject to monitoring.

The Commission has the power under Section 12 of the PR Act to demand information and failure to comply may result in the person being guilty of an offence and the Commission may take legal action to obtain the required information. Furthermore, under Section 14(4) of the Act, information providers are required to submit a statutory declaration in respect
of the truth, completeness and accuracy of the information, which the Commission will, in future, require to be provided by the Chief Executive Officer of the company. These proposals are a direct reflection of the below expectation performance of stevedores during the current regulatory period, in delivering information required and/or requested under the current price monitoring arrangements.

If the Commission after having considered the above competition issues and forms a view that regulation is still required for the stevedoring and handling services, it has to consider whether to continue to apply price monitoring or shift to price control. Each of these forms of regulation is discussed below.

4.1 Price monitoring

Price monitoring is a less stringent form of regulation. Under this approach, stevedores can set their own charges without the need for the Commission’s approval. The Commission will monitor these charges against benchmark prices. In situations where charges have increased above the benchmark price, the Commission will ask stevedores to provide justification for such increase. If the Commission is not satisfied with the justifications and has reasons to believe that stevedores are unnecessarily increasing charges, it could request the Minister for Treasury to declare the subject charges for stevedoring and handling services to direct price control under Section 21 of the PR Act.

The Commission has made use of the monitoring approach for price regulatory purposes in a number of other markets (e.g. including Rice and Flour prices) as well as for charges for stevedoring and handling services. The Commission has found that this form of regulation is effective where there are a limited number of suppliers in a market, and the Commission can readily identify a ‘comparator’ against which movements in the regulated product or service’s prices can be benchmarked. A monitoring arrangement in these circumstances is the least costly form of regulation. This has proved effective in the PNG context in the time that the Commission has used this approach.

Over the current regulatory period, the Commission observed that stevedores have increased charges for their services. In addition, stevedores have introduced new services but have not informed the Commission of the new service definitions or their charges. The Commission is not satisfied that the information provided shows the costs of stevedoring properly, nor the economic efficiency of service delivery, such as time taken to stevedore a vessel; crane rates; ‘dwell times’ for cargo in ports etc. and that such objective measures are necessary in future. This raises concerns about how stevedores are setting their charges and whether the process is transparent. Should the Commission, in the course of this review, find that the conduct of stevedores are anti-competitive and contribute to higher prices, it could recommend to the Minister to subject stevedoring and handling services to price control.
The Commission seeks views and comments from the stevedores, the shipping companies, key stakeholders and any interested persons on:

- Whether the current monitoring arrangement applied by the Commission in the stevedoring industry is sufficient and practicable; and
- If the current monitoring arrangement is not sufficient, what would be the alternative regulatory strategy(s)?

### 4.2 Price control

Under direct price control the Commission is required to set a maximum price under a price control arrangement after having regard to section 21 (2A) of the PR Act (see Appendix 1). Consideration of matters it shall have regard to under Section 21 (2A) is to ensure that an appropriate balance is kept between the interests of consignees and the stevedore companies, in the Commission’s decision making processes.

This process is similar to a price monitoring arrangement in terms of establishing the starting price. The process of considering the makeup of the cost of providing the regulated good or service would be the same for a price control arrangements at the start of the regulatory period as it would be for a price monitoring arrangement. The only difference would be in the declaration of charges under the price control mechanism (as opposed to a price monitoring regime), and the specification of the mechanism by which that charges would be adjusted over time. The Commission would then declare the initial price and the price adjustment mechanism in a pricing order under Section 21 (1) of the PR Act. Then for a period of no more than five years, the Commission would apply the price adjustment mechanism at appropriate time intervals to adjust the regulated price levels. Effectively, charges for stevedoring and handling services could be adjusted at a pre-agreed time using a pre-determined price adjustment mechanism that would be known to all parties, and the public.

This form of regulation is often referred to as incentive regulation, because it uses a standard price adjustment mechanism to apply to prices. If the provider of the regulated service can deliver the service at a cost below that pre-determined price adjustment level, then the service provider is able to retain any additional profits that this would imply. The price adjustment mechanism is usually expressed in the form of a CPI+/−X equation. CPI is the Consumer Price Index or it can be some other indicator of movement in relevant costs and X factor is an adjustment for, amongst other things, changes in productivity over time. The Commission uses this form of regulation to regulate movement in the charges for electricity, PNG Ports services, postal services, etc. The Commission usually sets these ‘price paths’ and ‘price determinations’ for periods of up to five years. This provides the service provider with a degree of certainty as to how charges will be adjusted for a reasonable period of time to allow efficient business planning and decisions to be taken.

For this form of regulation to operate, the Commission would need to consider the efficient costs of providing the regulated services, the likely efficiency savings that the industry may be able to achieve over a period of say five years, the appropriate price path to adopt for
the different services, and the timing of the price adjustments. The regulated charges could be applied to all declared ports within the country. These rates would be gazetted for purposes of meeting the requirement of price control under Section 21 (1) of PR Act. The adjustment mechanism would however be automatic, in line with the movement in the price path formula to be devised by the Commission. Should the Commission decide to adopt this form of regulation, it has to consider costs, revenues, and capital expenditure, to arrive at an efficient cost of product or service delivery.

The Commission is seeking views and comments from users of stevedoring and handling services, stevedores and any interested parties on:

- Whether the prices being charged by stevedores are reasonable?
- Whether the process of setting the prices is transparent?
- Whether it is appropriate to continue apply price monitoring to stevedoring and handling services or to resort to price control?

The Commission is seeking comments and views from all interested parties on the merits of subjecting charges for stevedoring and handling services to price control rather than price monitoring and the reasons for such views.
5 LENGTH OF REGULATORY PERIOD

The Commission envisages resetting the subsequent regulatory period through this Review process and prior to the expiry of the current regulatory period. The following sections discuss the Commission’s current decision for stevedoring and handling charges as well its decision regarding other industries.

5.1 Preliminary view on length of regulatory period

The Commission has considered the potential for using regulatory price control or price monitoring arrangements for anywhere between three years and ten years. In practice there needs to be a balance between the level of certainty provided to the regulated entities and the need to respond to external economic and business events which may have an impact on the regulatory settings. While the Commission believes that ten years may be too long a regulatory period in the current circumstances, it can see that periods anywhere from three to five years have worked well in PNG and in other similar regulatory environments.

The Commission is seeking views and comments from stevedores and any interested persons on the appropriate length of the forthcoming regulatory period.
Appendix 1

Section 21 (2A) Prices Regulation Act

When making an order under Subsection (1), the Commission shall have regard to -

a) The need to protect customers and users of the declared goods or services from misuse of market power in terms of prices, pricing policies (including policies relating to the level or structure of prices) and the standard of the declared goods or services; and

b) The cost of making, producing or supplying the declared goods or services; and

c) The desirability of encouraging greater efficiency in relation to making, producing or supplying the declared goods or services; and

d) The need to ensure an appropriate rate of return on any investment in relation to the declared goods or services; and

e) The borrowing, capital and cash flow requirements of person making, producing or supplying the declared goods or services; and

f) Consideration of demand management and least cost planning; and

g) Existing standard of quality, reliability and safety of the declared goods and services; and the desirability of encouraging improvements on those standards; and

h) The effect any proposed order on general price inflation over the medium term; and the economic and social impact of any proposed order; and

i) Any other matters that the Commission considers necessary or relevant