



Panama Bunker Market Study
Estudio del Mercado de “Bunker” de
Panamá

Fearnley Consultants A/S

Febrero del 2003

Contrato No. 81531

Introducción y Conclusión
(No existe Resumen Ejecutivo)

Panama Bunker Market Study

Prepared for the
Panama Canal Authority

February 2003

Prepared by
Fearnley Consultants

PANAMA BUNKER MARKET STUDY

Present and Projected Supply/Demand for Bunkering Services in Areas Adjacent to the Panama Canal's Ends.

Introduction

The **objective** of this study is to determine present and projected supply and demand of bunkering services in area adjacent to the Panama Canal's ends due to the expansion of the waterway, and the cost/benefit to the Republic of Panama as a result of the potential growth of this activity.

This study is divided into 5 main parts, which cover the following issues:

1. **Current Market assessment:** Analysis of bunker suppliers & service providers in Panama, and in the region, bunker sales volumes, delivery infrastructure, bunker quality and price structure. This section also includes an overview/analysis of competitors/bunkering alternatives to Panama Canal bunker operations today and in the future.
2. **Forecast of future Canal bunker market potential: Analysis and forecasts for 3 case scenarios: best, worst and most probable case for the existing and for the expanded Canal. Included in these forecasts are forecasts on the following:**
 - Number of vessels serviced by size
 - Number of vessels serviced by type

The study includes a volume and revenue forecast of overall bunkering activity, and an analysis of trade routes of vessels serviced. The study will also evaluate demand for new bunker suppliers for this activity and a break-even analysis for this activity.

3. **Cost/benefit analysis to the Rep. of Panama** basis results from 2.) above in this study, we will look at the contribution which bunkering activity will make to the Panamanian economy, due to the expanded Canal after 2010. Included here will be contribution to GDP, Panama's balance of payments, capital inflows to the Panamanian economy, incremental employment opportunities, etc., etc.
4. **Environmental impact:** Assessment of expected environmental impact from ship bunkering, including oil spills from bunker handling, possible generation of fumes and/or odors, risk from ship-to-ship bunkering, etc.
5. **Appendix:** we have extensively used the appendix for detailed information on actors and competitors in this market.

Sources for this study are mentioned after each section, and to complete this task we have used a wide variety of information, including telephone discussions with relevant industry people.

CONCLUSIONS – Bunker Study

The four main routes to increasing bunkering volumes in the Panama Canal are:

- Increased shipping traffic
- Better price
- Better service
- Better quality products

The two latter are clearly up to the local suppliers, but shipping traffic and to a certain degree, bunker price, depend upon forces beyond their control.

The industry players we have talked to mention the same improvement areas in particular for Panama's bunker market:

- Bunker quality
- Price
- Delivery system
- Less bureaucracy

Panama **bunker quality** is of “acceptable” quality, but it is *not* of such great quality that the Panamanian bunker industry is able to leverage on its reputation as a high-quality bunker port. Now, with Panama's refinery closed, and we do not foresee it being rebuilt in the near future, Panama has no possibility to produce top-quality bunkers by itself, but is dependent on sourcing from other regions. A well-managed sourcing strategy plus a well-functioning bunker quality inspection regime must be assured. Our conclusion is, however, that the quality is acceptable and that there is more to be gained by efforts to improve pricing and service.

The **bunker price** in Panama is high, but not very high, compared to neighbouring bunker regions. However, both Venezuela and Ecuador have changed their pricing policies in recent years and this has increased their competitiveness.

There is not much Panama as a country can do with bunker prices in their region. Taxes are already at very low levels. However, with large storage capacity large quantity purchases may assist in reducing costs. Solid financing may also help to reduce inventory costs.

Further, Panama's bunker **delivery system/service** may be due for a revamp. The “first-come-first-served” strategy for barges works most of the times, but is it good enough for all vessel trades?

One shipowner in the Ro-Ro/Car carrier trade mentioned to us that they usually do not take the chance of using Panama as their preferred bunker station on the way from Europe to the U.S. West Coast because of concerns about losing his Canal transit slot, i.e. the bunker barge is on the way; the vessel is cleared for Canal transit, the vessel may choose to bunker instead of transiting, and by such a choice the vessel loses its place in the Canal convoy. Other shipowners have indicated the same as a concern to them when planning bunker purchases, while others again are quite happy with the delivery system/service in Panama. Our conclusion is that this has to do with which type of trade each owner is involved in.

At present, a shipowner is not guaranteed that the bunker operation is completed prior to the start of a Canal transit, and a lost slot means lost time and money. Although ship agents play an important role in organizing bunker supplies, the first-come-first-serve strategy could be reconsidered amongst the bunker suppliers and barge operators. Especially for vessels with a tight schedule, for instance vessels in liner trade, a system with better bunker delivery guarantees may increase overall sales, but it does also increase cost levels in Panama since there is costs attached to giving delivery guarantees. Our traffic forecast indicate especially more container trades and more dry bulk trades with an expanded Canal.

Some bunker suppliers/agents/terminal owners in Panama also complain about excessive bureaucracy, and the need for modern oil terminals and better infrastructure. This is partially solved now, though, after the new modern fuel storage terminal at Taboguilla Island opened, bettering fuel availability, increasing storage capacity and possibilities for blending and quality control of fuels.

Location is, without doubt, Panama's biggest advantage, and with only one in five transiting vessels bunkering in Panama today there should be room for further growth.

An expansion of the Canal is expected to lead to increased traffic and will also attract larger vessels. This may lead to a potential need for larger barges in the future.

Increased traffic will also lead to increased bunker volumes, as we see it. Panama's bunker market in fiscal year 2000 was some 1.7 mmt. We have estimated that this figure will grow to above 2.7 mmt and above 3.0 mmt in 2025 respectively for an unexpanded and an expanded Canal. This may demand a new storage facility. Although the best location for bunker operations from an environmental view is the Pacific side, near Panama City/Balboa, the increased demand is foreseen on the Atlantic side. Increased bunker sales will benefit the Panamanian economy and create some additional 45-55 positions within this industry.

Environmental impact assessment is performed to determine the risk of oil spill from bunkering operations - shuttle operation, terminal-to-barge, and barge-to-cargo ship. The fuel transfer operation from barge to cargo vessel is the main risk contributor. Expected accident costs for the bunker operation (500.000 mt per year) in Panama are about usd 278.000 per year. This is not a high-risk industry, yet the environment is very vulnerable to oil spills. We would, therefore, suggest a national oil pollution preparedness plan with modern equipment and trained personnel available at both ends of the Canal.