World Maritime University

The Maritime Commons: Digital Repository of the World Maritime University

World Maritime University Dissertations

Dissertations

2012

Enhancing service quality in the maritime industry: a case study of Tema Port

Baffour Ofori-Atta Kena World Maritime University

Follow this and additional works at: https://commons.wmu.se/all_dissertations



Part of the Infrastructure Commons

Recommended Citation

Ofori-Atta Kena, Baffour, "Enhancing service quality in the maritime industry: a case study of Tema Port" (2012). World Maritime University Dissertations. 22.

https://commons.wmu.se/all_dissertations/22

This Dissertation is brought to you courtesy of Maritime Commons. Open Access items may be downloaded for noncommercial, fair use academic purposes. No items may be hosted on another server or web site without express written permission from the World Maritime University. For more information, please contact library@wmu.se.

WORLD MARITIME UNIVERSITY

Malmö, Sweden

ENHANCING SERVICE QUALITY IN THE MARITIME INDUSTRY

A case study of Tema Port

By

BAFFOUR OFORI-ATTA KENA Ghana

A dissertation submitted to the World Maritime University in partial Fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE In MARITIME AFFAIRS

(Shipping and Port Management)

2012

Copyright © Baffour Ofori-Atta Kena, 2012

Declaration

I certify that all the material in this dissertation that is not my work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own views, and are not necessarily endorsed by the University.

(Signature)

(Date): 22nd October, 2012

Supervised by: Patrick Donner

Associate Professor, Shipping and Port Management

World Maritime University

Assessor: Shou Ma

Professor, Shipping and Port Management

World Maritime University

Co-assessor: Dr. Bernard Francou

Acknowledgements

I am extremely grateful to Dr. Kofi Mbiah, the Chief Executive of the Ghana Shippers' Authority, and the entire Management for taking such a bold decision by offering me this opportunity and sponsorship to study at the World Maritime University (WMU).

I am also appreciative of Messrs. Nestor Ghalley (former Director General of GPHA), Cletus Kuzagbe of Meridian Port Services, Danquah Addo Yobo of Maersk, Dr. Michael Manuel of the Regional Maritime University and Captain William Amanhyia of Ghana Institute of Freight Forwarders for taking time off their busy schedules to grant interviews for my work.

I would also like to extend my gratitude to Messrs Fred Asiedu-Dartey, E.K Arku, Mrs Naa Densua-Aryeetey and Mrs. Agnes Asamoah-Duku all of the Ghana Shippers Authority and Messrs Ntow Kummi and Reginald Seshie of Ghana Ports and Harbours Authority for their invaluable support, by providing me with some relevant materials for the dissertation. Additionally, I would like to express a ton of thanks to my colleagues at the Ghana Shippers' Authority: Messrs Matthew Edmond Sackey, Bashiru Abdul Haki, Ekow Hagan, Paa Kwesi Saforo and Jacob Okine for their immense contribution in the collection of data for my work.

I am beholden to some colleagues of mine at WMU: Messrs Lawrence Kuroshi and Smart Wilson Udomisoh, Emmanuel Agbor, Mrs. Philippa Amanda Armah and Mrs Janet Cho for furnishing me with useful information and encouragement throughout the course of my work.

Messrs Bill Butler and Richard Dasi Addopleh, two good friends of mine, also made some noteworthy contribution to my work, and for this I am grateful to them. I would also like to express thanks to the staff of Ghana Shippers Authority, Tema Branch, for the morale support they gave me during my stay in WMU.

I am highly indebted to my supervisor, Professor Patrick Donner, for his critical and meticulous supervision, which has made the work what it is. I also wish to render thanks to Professor Daniel Moon for making some useful inputs to the work.

Many thanks also go to Ms Inger Battista for her professional linguistic supervision, as well as the affable WMU library Staff: in the persons of Messrs Chris Hoebeke, Chris Fitzpatrick and Ms Anna Volkova for their invaluable assistance.

Above all, I give God the glory for His protection and guidance throughout my stay in WMU. My wife, Mrs Gloria Ofori-Atta Kena and the newest addition to my family, my daughter Nana Abena Amankwa Ofori-Atta, have been my top cheer leaders during the course of my work, and my heartfelt thanks goes to them. I am also very grateful for the support of my parents: Kofi Kena Ofori-Atta and Beatrice Ofori-Atta, my siblings, Bamfoa Ofori-Atta and Dokua Ofori-Atta and in-laws throughout the pursuit of my course.

To all who contributed in diverse ways to make this dissertation and my stay in WMU a dream come true, I say many thanks for your efforts and may the good Lord richly bless you.

Abstract

Title of Dissertation: Enhancing service quality in the maritime industry:

a case study of Tema Port.

Degree MSc

This dissertation is an analysis of service quality in the maritime industry with emphasis on enhancing service quality in Tema Port in Ghana. A general overview of service quality is examined at the beginning of the study. This is further narrowed down to service quality amongst the various service providers in the maritime industry with specific focus on those operating in Tema Port.

To gain a holistic understanding of the existing service quality in Tema Port and how it can be enhanced: the study, obtained information from shippers/freight forwarders and leading executives in the maritime industry in Ghana, from operational and managerial perspectives.

The study revealed that, on a whole, service quality in Tema Port was at best average. Thus for it to be enhanced, the industry had to adopt a mix of both short and long term seaside and shore-side solutions.

This study helps to provide an informative and well-rounded view of service quality in Tema Port. The study also brings together the various fragmented writings on improving service quality in Tema Port. It also demonstrates how service quality is assessed in the maritime industry and how the recurrent problems of port congestion, lack of equipment, delays in the clearance of goods, poor customer services, uncapped shipping agency charges, allegations of bribery and corruption and lack of innovation bedeviling service providers in Tema Port can be tackled. Additionally, it shows how the Ghanaian maritime industry can be positioned as a model of excellence in West Africa and beyond.

KEY WORDS: Service Quality, Tema Port, service providers, Ghanaian maritime industry

Table of Contents

| Declaration | i |
|--|-----|
| Acknowledgements | ii |
| Abstract | iv |
| Table of Contents | v |
| List of Tables | x |
| List of Figures | xi |
| List of Abbreviations | xii |
| Chapter One | 1 |
| Introduction | 1 |
| 1.1 Aim of Research | 1 |
| 1.2 Statement of Problem | 2 |
| 1.3 Objectives | 3 |
| Chapter 2 | 4 |
| Service quality in Tema Port | 4 |
| 2.1 Characteristics of services | 4 |
| 2.1.1 Intangibility | 4 |
| 2.1.2 Inseparability | 4 |
| 2.1.3 Heterogeneity | 4 |
| 2.1.4 Perishability | 5 |
| 2.2 Service Quality | 5 |
| 2.2.1 Definitions for Service quality | 5 |
| 2.2.2 Components of service quality | 6 |
| 2.3 Service quality amongst various service providers | 9 |
| 2.3.1 Service quality amongst shipping lines (agents) and port operators | 9 |
| 2.3.2 Service quality amongst freight forwarders | 11 |
| 2.3.3 Service quality amongst customs | 14 |
| 2.3.4 Service quality amongst shippers' councils | 17 |
| 2.3.5 Service quality amongst destination inspection companies (DIC's) | 19 |
| 2.3.6 Service quality in GCNet | 20 |

| | 2.3.7 Service quality in national maritime administrations | 2 3 |
|----|--|------------|
| Ch | apter three | 26 |
| M | ethodology | 26 |
| | 3.1 Introduction | 26 |
| | 3.2 Research Design | 26 |
| | 3.3 Population of the study | 26 |
| | 3.4 Sampling technique | 26 |
| | 3.5 Reasons for the choice of interviewees: | 27 |
| | 3.5.1 The Customer Services Manager of Maersk | 27 |
| | 3.5.2 The former Director General of GPHA | 28 |
| | 3.5.3 The Operations Manager of Meridian Port Services | 28 |
| | 3.5.4 National Administrator of Ghana Institute of Freight Forwarders (GIFF) | 28 |
| | 3.5.5 The Dean of Maritime Studies for Regional Maritime University | 29 |
| | 3.6 Other Secondary Sources | 2 9 |
| | 3.7 Limitations of study | 29 |
| Ch | apter four | 30 |
| Dа | ta analysis | 30 |
| | 4.1 Secondary research analysis | 30 |
| | 4.2 Impact of the GCNet system on cargo clearance procedure in Ghana | 30 |
| | 4.2.1 What has the performance of the GCNet been since its inception? | 30 |
| | 4.2.2 Has the GCNet System been able to eliminate paper work involved in cargo clearance procedures? | 30 |
| | 4.2.3 Is it easy to use the GCNet (Is the GCNet customer friendly)? | 31 |
| | 4.2.4 What is the rating of the GCNet in revenue collection since it started operations? | 32 |
| | 4.2.5 What suggestions do you have to improve the GCNet system? | 33 |
| | 4.3 Impact of Destination Inspection Scheme in Ghana on cargo clearance process | 34 |
| | 4.3.1 Which cargo clearing steps create problems for shippers in Tema Port? | 34 |
| | 4.3.2 How long does it take DI Companies to issue a Final Classification | 35 |
| | Valuation report? | 35 |
| | 4.3.3 Which Government institutions/Service Providers create problems for DIC's | 3. |

| | Port? | |
|-----|--|------|
| | 4.3.5 Has the DI Scheme brought benefits to the cargo clearing system? | 37 |
| | 4.3.6 What is the overall performance rating of DIC's in Ghana? | 38 |
| 4 | . 4 Primary Research Analysis | 38 |
| | 4.5 Respondents | 38 |
| | 4.6 Assessment of the service quality of selected shipping agents | 39 |
| | 4.7 Assessment of the service quality of GPHA in Tema Port | 46 |
| | 4.8 Assessment of the service quality rating of MPS | 52 |
| | 4.9 Assessment of service quality in the freight forwarding business in Tema Port | 54 |
| | 4.10 Assessment of the service quality of the Ghana Shippers' Authority | 59 |
| | 4.11 Assessment of service quality in CEPS | 61 |
| | 4.12 Ghana Maritime Authority (GMA) | 64 |
| | 4.13 The number of days it takes to ship cargo through Tema Port | 65 |
| | 4.14 The case for an existing or new organization to monitor service standards in thin industry | |
| Cha | npter five | |
| | ws of leading maritime executives on enhancing service quality in Tema Port | |
| | 5.1 Responses of the Operations Manager of the Meridian Port Services | |
| J | 5.1.1 Assessment of the state of service quality in Tema Port | |
| | 5.1.2 Major challenges facing the Tema Port | |
| | 5.2 What innovative services have you put in place to enhance service quality in yo | |
| | organization? | |
| | 5.3 What should be done to make the Ghanaian maritime industry a model of excellence in West Africa? | 70 |
| 5 | 5.4 Responses of the Customer Service Manager of Maersk | |
| | 5.4.1 Assessment of the state of service quality in Tema Port | |
| | 5.4.2 Major challenges facing Tema Port | |
| | 5.4.3 How can these challenges be addressed? | |
| | 5.4.4 What innovative services have you put in place to enhance service quality in y | your |
| | organization? | 72 |

| 5.4.5 What should be done to make the Ghanaian maritime industry a mode excellence in West Africa? | |
|--|-----|
| 5.5 Responses of Nestor Ghalley, former Director General of GPHA | 72 |
| 5.5.1 Assessment of the state of service quality in Tema Port | 72 |
| 5.5.2 Major challenges facing Tema Port | 73 |
| 5.5.3 How can these challenges be addressed? | 73 |
| 5.5.4 What innovative services have you put in place to enhance service que organization? | |
| 5.5.5 What should be done to make the Ghanaian maritime industry a mo | |
| 5.6. Responses of the National Administrator of GIFF | 73 |
| 5.6.1 Assessment of the state of service quality in Tema Port | 73 |
| 5.6.2 Major challenges facing Tema Port | 74 |
| 5.6.3 How can these challenges be addressed? | 74 |
| 5.6.4 What innovative services have you put in place to enhance service your organization? | |
| 5.6.5 What should be done to make the Ghanaian maritime industry a excellence in West Africa? | |
| 5.7 Responses of the Dean of Maritime Studies (Dr. Michael Manuel), Region | |
| 5.7.1 Assessment of the state of service quality in Tema Port and major charactering Tema Port | _ |
| 5.7.2 How can these challenges be addressed? | 75 |
| 5.7.3 What measures have the Regional Maritime University put in place that graduates are service oriented and well trained to meet the needs of Ghanaian Maritime Industry? | the |
| 5.7.4 What should be done to make the Ghanaian Maritime Industry a more excellence in West Africa? | |
| Chapter six | 78 |
| Summary of Findings, Recommendations and Conclusion | 78 |
| 6.1 Summary of Findings | 78 |
| 6.2 Recommendations | 84 |
| 6.2.1 Organizational Context | 84 |

| 6.2.2 National context | 90 |
|---|----------------|
| 6.3 Concluding Remarks | 90 |
| References | 91 |
| Appendix 1a (Questionnaire) | 100 |
| Appendix 2a (Interview questions) | 112 |
| Appendix b (Tariff Information on stevedoring Charges of selected port au | thorities) 113 |

List of Tables

| Table 2-1 | Standards of services of Angola Customs | 15 |
|------------|--|-----|
| Table 4-1 | le 4-1 GCNet's elimination of paper work in cargo clearance | |
| Table 4-2 | Rating of the ease/otherwise in the usage of the GCNet | 31 |
| Table 4-3 | Rating of the GCNet in revenue collection | 32 |
| Table 4-4 | Suggestions for improving the GCNet system | 33 |
| Table 4-5 | Cargo clearing steps which create problems in Tema Port | 34 |
| Table 4-6 | Duration for issuing FCVR in Tema Port | 34 |
| Table 4-7 | Service providers that create problems for DIC's in Tema Port | 35 |
| Table 4-8 | Problems created by CEPS for DIC's in Tema Port | 36 |
| Table 4-9 | Problems created by shipping agents for DIC's in Tema Port | 36 |
| Table 4-10 | Problems created by GPHA/terminal op. for DIC's inTema Port | .36 |
| Table 4-11 | Problems with the scanning system in Tema Port | .37 |
| Table 4-12 | Schedule reliability results of selected shipping agents in | |
| | Tema Port | 40 |
| Table 4-13 | Ranking of local and demurrage charges in Tema Port | 41 |
| Table 4-14 | Comparison of shipping line charges in Tema Port | 42 |
| Table 4-15 | Ranking of selected shipping agents commitment to service quality. | 44 |
| Table 4-16 | Problems encountered in dealing with selected shipping agents | |
| | in Tema Port | 46 |
| Table 4-17 | Comparison of stevedoring charges of selected Port | |
| | Authorities in West Africa in | 47 |
| Table 4-18 | Cumulative imports and exports summary of Tema | |
| | Port 2009-2010 | 49 |
| Table 4-19 | Ranking of the challenges in Tema Port | 50 |
| Table 4-20 | Reasons for MPS' success | 53 |
| Table 4-21 | Problems which affect the freight forwarding industry in Ghana | 55 |
| Table 4-22 | Ranking of the challenges which impede CEPS' progress | |
| | in Tema Port | 62 |
| Table 4-23 | The case for an organization to monitor service standards in the | |
| | Ghanaian maritime industry | 65 |

List of Figures

| Figure 1 | Model of service quality gaps | 7 |
|-----------|---|----|
| Figure 2 | Percentage of stakeholders viewing Russian customs positively | 16 |
| Figure 3 | Performance of the GCNet since its inception | 30 |
| Figure 4 | Rating of the performance of GCNet in revenue collection | |
| | since its inception | 32 |
| Figure 5 | Overall performance rating of DIC's in Ghana | 38 |
| Figure 6 | Percentage distribution of respondents for the research | 39 |
| Figure 7 | Schedule reliability of selected shipping agents in Tema Port | 40 |
| Figure8 | A comparison of shipping agency charges of major shipping | |
| | agencies in Tema Port | 43 |
| Figure 9 | Ranking of the commitment of selected shipping agents | |
| | in Tema Port | 45 |
| Figure 10 | A comparison of stevedoring charges on containerized imports | |
| | and exports for NPA, GPHA and APMT Liberia Ltd | 48 |
| Figure 11 | Challenges which reduce effectiveness in Tema Port | 51 |
| Figure 12 | Reasons for MPS' success | 53 |
| Figure 13 | Number of FIATA Diplomas by countries from 1996-2011 | 57 |
| Figure 14 | Challenges impeding the progress of CEPS | 62 |
| Figure 15 | The case for an organization to monitor service Standards in the Ghanaian maritime industry | 66 |

List of Abbreviations

RMU Regional Maritime University

FIATA International Federation of Freight Forwarders Associations

SERVQUAL Service Quality

IFF International freight forwarder

OSRA Ocean Shipping Reform Act

GIFF Ghana Institute of Freight Forwarders

CUBAG Customs Brokers Association of Ghana

CEPS Customs Excise and Preventive Service

UNCTAD United Nations Conference on Trade and Development

ESC European Shippers' Council

GSA Ghana Shippers' Authority

DIC's Destination Inspection Companies

WTO World Trade Organization

GSL Gateway Services Limited

FCVR Final Classification Valuation Report

TIN Taxpayer identification number

ASYCUDA Automated System for Customs Data

ECOWAS Economic Community of West African States

GCNet Ghana Community Network

SGS Société Général de Surveillance

GMA Ghana Maritime Authority

STCW Standards of Training, Certification and Watch keeping for Seafarers

GCMS Ghana Customs Management System

MPS Meridian Port Services

GPHA Ghana Ports and Harbours Authority

IRS Internal Revenue Service

ISAG Intermodal Shipping Agency Ghana

MSC Mediterranean Shipping Company

GPHA Ghana Ports and Harbours Authority

MISE Maersk International Shipping Education

NPA Nigerian Port Authority

PFSP Port Facility Security Plan

ISPS International Ship and Port facility Security Code

ICT Communications Technology

CEPA Centre for Policy Analysis

JIT Just- in-time

FDB Food and Drugs Board

MOU Memorandum of Understanding

Chapter One

Introduction

William Forster opined that quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives. The word quality in the service industry is a front burner issue with the maritime industry making appreciable progress to embrace the concept, despite an inauspicious start. Quality transcends the profitability of companies to determining the viability of national economies.

The fluctuating nature of seaborne trade creates the need for the various players in the Ghanaian maritime industry to position themselves to work in a coordinated manner to help facilitate the seamless flow of trade, thus providing shippers with the desired service quality, and in the end, make the Tema port attractive all year round. International organizations like the International Maritime Organization, World Trade Organization, World Customs Organization and the International Federation of Freight Forwarders Associations (FIATA) have been preoccupied over the years with creating a conducive environment for trade facilitation globally through the implementation of minimum standards across the entire trade and maritime strata. The maritime industry, which is service oriented in nature, plays a germane role in the Ghanaian economy with the nation annually generating a sizable amount of its revenue through its Tema and Takoradi ports and in the creation of employment opportunities for the country's workforce.

1.1 Aim of Research

In this era of just in time logistics, positioning of ports as logistics centers, promoting global minimum standards amongst workforce, e.g. "FIATA Minimum Standards (FMST)" (www.fiata.com), customer orientation, total quality management, innovations in trade facilitation and the protection of the marine environment from ship source pollution have all been introduced with the aim of enhancing the service quality delivery in the maritime industry.

Owing to the important role played by the maritime industry in the generation of government revenue, the creation of employment opportunities, the creation of shareholder value and towards the positioning of Tema Port as a gateway to the West African sub-region for trade facilitation, an enhanced service quality delivery in the industry will be pivotal in providing the twin benefits of both organizational and national success. This research aims to look into the present state of service quality in the industry and how it can be improved and sustained.

There has been some research on service delivery in parts of the shipping, port and clearance chain in Tema Port, for example, "the impact of customer service on cargo clearance: a case study of freight forwarders at Tema Port" (Abiaw, C. 2011), and also on the international stage, "Service quality gaps in the transportation industry an empirical investigation" (Hopkins, Strasser, Hopkins, & Foster, 1993) and of service quality in maritime transport: conceptual model and empirical evidence (Thai, 2007), but there has been no work examining the service quality delivery in the whole shipping, port and clearance chain. It is hoped that this research work would help bridge this gap by apprising the industry of the indicators of service quality, the present state of service quality in Tema Port and how to improve the existing standards to make the goal of positioning Tema Port as the gateway for trade in the West African sub-region a reality.

1.2 Statement of Problem

The issue of enhancing service quality in Tema Port is an old problem, and although there have been some improvements in this regard, Tema Port continues to be faced with issues such as:

- Port congestion
- Lack of equipment
- Uncapped shipping line charges
- Delays in the clearance of goods
- Poor customer services provided by a number of service providers.
- Allegations of bribery and corruption leveled against some service providers

• Lack of innovation

All these problems limit the potential of Tema Port than into realizing its goal of becoming the gateway to West Africa. It is on the heels of these problems that the objectives below have been developed to identify the prevailing situation and determine the way forward, towards improving the service quality and making Tema Port earn its place as the real gateway to West Africa.

1.3 Objectives

The objectives of the research are to determine:

- How shippers/freight forwarders rate the service quality being delivered by the various service providers in Tema Port.
- The major bottlenecks in the maritime industry, which hinder the free flow of trade in Tema Port.
- The minimum service expectations as well as the value added services required by shippers from the various service providers operating in Tema Port.
- Is having an organization to monitor and improve service standards necessary?
- How Ghana's maritime industry can become a model of excellence in Africa and beyond.

Chapter 2

Service quality in Tema Port

2.1 Characteristics of services

According to Gronroos (1990) as cited by Chang, Chen and Hsu (n.d) a service is an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and /or systems of the service provider, which are provided as solutions to customer problems(p. 27). Some of the characteristics of services include the following: intangibility, inseparability, heterogeneity and perishability (Chartered Institute of Marketing Steering Group, 2002)

2.1.1 Intangibility

"Services yield psychological experiences more than they yield physical possessions." (Schneider &Bowen, 1995, p.19). As services are actions rather than physical objects, they cannot be seen, felt, tasted or touched. For example, when a shipper walks into the Ghana Shippers' Authority to have a complaint solved, he does not leave the offices of Ghana Shippers' Authority holding a tangible solution, but rather a service experience, which provides a solution to his complaint.

2.1.2 Inseparability

Inseparability means that the person delivering the service is intimately involved in the service itself and becomes part of the service. A customer service officer of a shipping agency providing an importer with information on the arrival of his shipment, is an example of this.

2.1.3 Heterogeneity

Because services represent the performance of an action, no two services are ever alike. For example, the cargo clearance services provided by a freight forwarder will differ from that provided by another freight forwarder and even from the service provided by the same freight forwarder to another customer.

2.1.4 Perishability

Perishability means that services cannot be stored, saved or returned. They cannot easily be changed. They must be used by the customer at the time that they are delivered by the service provider. For example, a booked space on a ship allocated to a shipper, which the shipper fails to utilize, cannot be transferred to another shipper when the ship has left the port.

According to Lawrence Fogli (2006, p.7) when a customer enters into a customer service relationship with an organization, he brings along certain expectations. Schneider and Bowen (1995, p.3) state that "customers are generally aware or easily become aware of what they expect" as cited by Lawrence Fogli. Drawing on expectations from similar situations, the customer develops expectations for such things as response time, courtesy, empathy, and reliability. If these expectations are not met during the service encounter, the customer is likely to judge the service as poor and is likely to feel dissatisfied. Expectations are based on many sources, including prior exposure to the service (or similar services, word of mouth and market signals such as price (Steenkamp &Hoffman, 1994). For instance, a customer may never have shipped cargo through the Tema Port, but the shipper has expectations of service levels based on experiences with other ports, what others have said, the port and clearance charges and the length of time involved in the clearance of cargo.

2.2 Service Quality

2.2.1 Definitions for Service quality

There are various definitions for service quality: Bitner and Hubbert (1994, p.77) defined service quality as "the consumer's overall impression of the relative inferiority/superiority of the organization and its services". Nitecki and Hernon (2000) defined service quality in terms of "meeting or exceeding customer expectations, or as the difference between customer perceptions and expectations of service".

2.2.2 Components of service quality

Gronoos (1978; 1982; 1984), who is credited with undertaking pioneering work on service quality suggested that service quality comprises three dimensions, namely the technical quality of the outcome of the service encounter, the functional quality of the process itself and the corporate image.

Sasser, Olsen and Wyckoff (1978) listed seven service attributes, namely

(1) security (2) consistency (3) attitude (4) completeness (5) condition (6) availability and (7) training.

There is also the erstwhile gap model by Parasuraman et.al. (1985; 1988) which later developed into the SERVQUAL. Below is a pictorial representation of the SERVQUAL model.

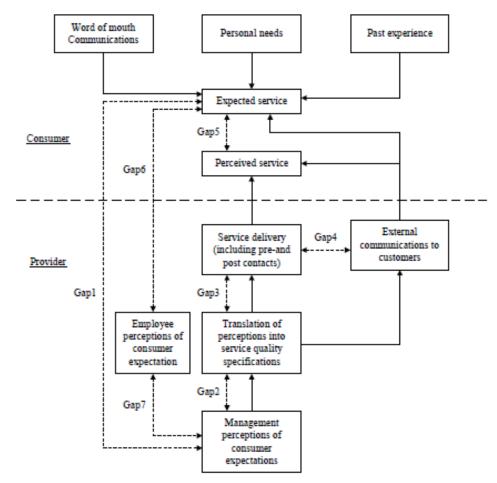


Figure 1. Model of service quality gaps (Parasuraman et al., 1985; Curry, 1999; Luk and Layton, 2002)

SERVQUAL as the most often used approach for measuring service quality has been used to compare customers' expectations before a service encounter and their perceptions of the actual service delivered (Gronroos, 1982; Lewis & Booms, 1983; Parasuraman et al., 1985). The SERVQUAL instrument has been the predominant method used to measure consumers' perceptions of service quality. It has five generic dimensions or factors and are stated as follows (van Iwaarden, Van der Wiele, Ball&Millen, 2003):

- (1) Tangibles: Physical facilities, equipment and appearance of personnel.
- (2) Reliability: Ability to perform the promised service dependably and accurately.
- (3) Responsiveness: Willingness to help customers and provide prompt service.

- (4) Assurance (including competence, courtesy, credibility and security). Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- (5) Empathy (including access, communication, understanding the customer). Caring and individualized attention that the firm provides to its customers (Shahin, n.d).

Contrary to the claims of Parasuraman et al (1988) that their five service quality dimensions are generic, it has been illustrated that this might not necessarily be the case, and that the definition of service quality dimensions might be different owing to the context.

Vin Thai (2007) in his work on service quality in the maritime industry opined that service quality can be generally classified into six dimensions:

- (1) Resources-related quality dimension: "relates to physical resources, financial resources, condition of facilities, equipment, location, infrastructures, etc."
- (2) Outcome-related quality dimension: "involves the product or core services being received by the customers, for instance, service accomplishment such as the on-time delivery of a shipment, or the price of a service offered".
- (3) Process-related quality dimension: "basically relates to factors of interactions between employees and customers, for example, how customers perceive the behaviour of staff in dealing with customers' requirements, staff's knowledge of customers' wants and needs, as well as application of technology in better serving the customers".
- (4) Management-related quality dimension: "involves the selection and deployments of resources in the most efficient way so as to ensure meeting/exceeding customers' needs and expectations, knowledge, skills and professionalism of employees and their understanding and transforming customers' needs and requirements into what they really want. This also relates to the feedback system from customers as new inputs for the new quality management cycle, as well as continuous improvement, as suggested by various quality gurus".

- (5) Image/reputation-related quality dimension: "relates to the overall perception of customers about the service organization".
- (6) Social responsibility-related quality dimension: "involves the ethical perception and operations of an organisation to behave in a socially responsible manner".

2.3 Service quality amongst various service providers

The issue of service quality is percolating through the entire maritime strata, with the recognition by the various players in the industry that they all play a germane role in providing quality for shippers throughout the entire shipping, port and clearance legs of their shipments.

2.3.1 Service quality amongst shipping lines (agents) and port operators

Over the past decades, there has been increasing recognition from transport operators that improvement in transport service quality is critical in achieving a differential advantage over competition (Cotham, Cravens& Hendon, 1969). However, little literature directly addresses the dimensions or determinants of service quality in transport. Such dimensions or determinants are reflected only through the service factors in the selection criteria of transport elements, such as carriers or modes. Pearson (1980) found the most important criteria are flexibility, first on the quay, speed of transit, reliability and regularity. The issue of carrier selection decisions in liner shipping was examined by Brooks (1985, 1990), in which the carrier selection criteria were frequency of sailings, transit time, directness of sailings, on-time pickup and delivery, cost of service, cooperation between personnel, carrier flexibility, fast claims response, tracing capability of the carrier, sales representative, carrier's reputation for reliability, past loss and damage experience, informational nature of advertising and carrier appropriateness. Slack (1985) is probably the pioneer scholar who examined the criteria that shippers use in their port selection decisions, which include size of port, port equipment, proximity of port, port charges, port security and congestion. Studies by Murphy, Dalenberg & Daley (1989, 1991, 1992) showed that equipment availability, shipment information and loss and damage performance are the three most important carrier selection factors among freight forwarders, while for international ports the selection factors are equipment availability, loss and damage performance, large shipment capabilities and convenient pick-up and delivery time. Lopez and Poole (1998), meanwhile, indicated three dimensions contributed to the quality of port services, namely, efficiency, timeliness and security. Meanwhile, Frankel (1993) found that the following nine criteria indicate the major quality concerns with regards to liner shipping services: 1. reliability of service, 2. time of service and maintenance of delivery time, 3. availability of promised or advertised capacity, 4. cargo safety, security and maintenance, 5. cargo flow control and tracking, 6. documentation and information flows' effectiveness (timeliness and accuracy), 7. cost control, billing and cost management, 8. service status control and projection, and 9. intermodal management. The notion of service quality in maritime transport nowadays has far exceeded the scope of selection criteria decisions on carriers or ports. In a range of literature on quality in shipping, or "quality shipping", quality has a broader definition than purely providing quality services, and contains many other elements. Quality shipping in practice is closely related to safety and environmental protection issues, as emphasized in Hawkins (2001), Bengtson (1992) and MPA Singapore (2000).

The critical importance of safety and environmental protection concerns also sheds light on a new and indispensable dimension of maritime transport services: corporate social responsibility. The shipping community and society nowadays are very concerned with the safety and environmental protection awareness and responsible behaviour of service providers in maritime transport. Undeniably, when an accident such as an oil spill occurs, it is not only the company's shareholders who suffer loss of property, but also other stakeholders, for instance fishery and tourism industries, who have to bear the consequences of such an accident. It is no surprise then that in the shipping industry, corporate social responsibility is associated with the concept of quality, and quality services of maritime transport must incorporate this dimension. This viewpoint has been increasingly acknowledged by professionals, academia,

international governing bodies and stakeholders in the maritime transport industry, as reflected in the works of Ruiter (1999), Gratsos (1998) and Eliades (1992), and by some initiatives such as the Green Award (Green Award, 2004) and the Ecoports port project (Ecoports, 2004). It can be seen from the above that service quality in maritime transport means not only safe, reliable, efficient transport services, but also socially responsible behaviour and activities regarding safety and environmental protection concerns.

The concept of service quality dimensions in maritime transport can be summarized as follows: tangibles (infrastructure, availability of equipment and facilities), reliability of service performance (timeliness, accuracy, safety and security), responsiveness and empathy, and social responsibility. Consequently, the competitiveness of Tema Port can be categorized under the following: Reliability of service performance (quick turnaround time, quick delivery of cargo, efficient cargo handling, competitive tariffs), tangibles (good roads and trucks), responsiveness (good customer service), Assurance (social and industrial stability, good security) (Ansah, n.d).

2.3.2 Service quality amongst freight forwarders

An international freight forwarder can be defined as "...an international trade specialist who can provide a variety of functions to facilitate the movement of cross-border shipments" (Murphy et al., 1992). Coyle, Bardi, and Langley (1996) suggest that "for a company with little international shipping expertise, the foreign freight forwarder is the answer." Today, "integrated freight forwarding" involves reporting information on shippers' movements to clients, with implications for production schedules and taking responsibility for all stages in the transport chain (Bardsley, 2000). An IFF may also perform traditional import/export administration (BIFA 1997), or increasingly "integrated logistics company" functions (Murphy & Daley, 2001). "Breadth of service" defines an IFF's ability to satisfy a wide variety of shippers, both geographically and functionally. "Depth of service" defines capabilities in meeting expectations of shippers requiring a similar service or service

package. Small forwarders compete in specialist markets, serving particular countries or commodities (Murphy et.al., 1992). In the case of Ghana, freight forwarders provide a number of services during the initial planning phase of exporting, which help decide:

- Which carriers to use
- Best days of the week to ship
- The best route
- The most economical shipment size

More so, at the beginning of a sale, they can also provide the exporter with a quotation on:

- Freight costs
- Port charges
- Consular fees
- Cost of special documentation
- Insurance costs
- Freight forwarder's fees, especially at destination (if required)

This information can be used in the preparation of an accurate price quotation to foreign customers. At the shipper's request, the freight forwarder can make the actual arrangements and provide the necessary services for expediting the shipment to its overseas destination. This can include:

- Booking space with the carrier
- Completing export documentation
- Arranging for cargo insurance
- Advising on foreign import regulations
- Providing guidance on packaging, marking, and labeling

• Arranging for products to be packed and containerized at the exporter's request (Ghana Institute of Freight Forwarders, n.d)

The breadth of services provided above are aimed at improving the quality of service enjoyed by shippers. Although freight forwarder associations in Ghana like GIFF (Ghana Institute of Freight Forwarders) and CUBAG (Customs Brokers Association of Ghana) are committed towards improving the professionalism of freight forwarders, the following complaints were received by the Ghana Shippers' Authority regarding the performance of freight forwarders during its port surveys:

MSC stated that some freight forwarders retarded the progress of their work by entering wrong port codes, inconsistent consignee details and TIN numbers (Ghana Shippers' Authority, third quarter report 2011). Freight forwarders reported late en masse to the CEPS Offices in the submission of their release documents and this put CEPS Officers under enormous pressure (Ghana Shippers' Authority, first quarter report 2011).

When evaluating and selecting a logistics service provider (freight forwarder), shippers consider their service requirements in operational terms, including performance on chosen dimensions. These include price/cost, transit time and precision of inventory control, the overall contribution to performance, and risk and cost criteria (Schary & Skjott-Larsen, 1995). Expertise may pre-dominate (Murphy & Daley, 1997), and while the quality of management and its control processes, its flexibility in meeting new, unforeseen requirements, and financial stability are issues, precise criteria vary between asset-owning third-party operators and managers of service provision. Currently, there is a wind of consolidations blowing in the freight forwarding industry globally in its quest to be competitive. The size issue may be one manifestation of the dynamic business environment currently facing international freight forwarders. This dynamism results from various factors, including changing regulations and technological advances. A pre-eminent concern with respect to changing regulations involves the Ocean Shipping Reform Act (OSRA) of 1999. Some industry observers believe that OSRA will hasten both consolidation among

international freight forwarders and the necessity for forwarders to become providers of multiple logistics services (Cotrill, 1999). Furthermore, technological advances present a lot of vista for the freight forwarding industry, the explosive growth of the Internet means that users of forwarding services themselves often can carry out many of the forwarder's traditional value-added services, such as booking vessel space (American Shipper, 1999).

2.3.3 Service quality amongst customs

Service quality in customs administration the world over is becoming important. The World Customs Organization, which is the global voice of the customs community, in its quest to make customs more customer –focused, has come up with a performance measurement tool, which among others looks at Service Charters and Perception Indexes.

2.3.3.1 Service charters

Service Charters relate to Customs treating economic operators as clients rather than the regulated. In the Customs context, clients or customers can be assumed to be the economic operators. Some customs administrations have rolled-out Service Charters. For example:

According to the Singapore Customs Service Charter constitutes various service standards to promote timely responses. In its Citizen Charter, Indian Customs has committed to achieving minimum compliance level of 80% of time norms for Customs services related to 1. remit drawback, 2. clear import/export goods, 3. release, 4. seized documents, 5. acknowledging complaints, and 6. Communications (Ireland, Cantens& Yasui, 2011)

A key component in this process relates to the institutional capacity to continuously measure performance.

Table 2-1 Standards of services of Angola Customs

STANDARDS OF SERVICES

| | Task | Deadline [1] |
|--------------------|--|---|
| Activity | | |
| | Answer general correspondence, inquiries or | 5 days |
| Public Attendance | complaints written. | |
| Fublic Attendance | | |
| | | |
| | Time of service | Monday to Thursday: from 8 H: 00 to 15H: 30 <u>Min</u> |
| | | Friday: from 8 H: 00 to 15H: |
| | | |
| | Processing Orders | 1 day |
| | Issuance of Notice Payment / Notice of Rejection / Notice of Non-acceptance of DU | 1 day after submission |
| Processing | | |
| Orders with Single | Correction according to the response to the Notice of Rejection of DU | 1 day |
| bocament | Processing Order of goods with preferential | 8 hours |
| | treatment (fresh, hazardous materials, etc. | o nouis |
| | 7 | |
| | Issuance of the Questionnaire for Verifying Documentary | 1 day after allocating |
| | | |
| | Verification Document | 1 day after allocation |
| | Amendments to Notes and Notes Payment Clearance | 1 day after complaint |
| | | |
| | Processing of Orders | 1 day |
| | | |

(National Customs of Angola, n.d)

The information in Table 2-1 is part of the service charter of the Angola Customs, which spells out time limits for various services to its clients. By complying with the service charters, it helps Customs Administration to maximize the utility of their time and make them customer-driven.

2.3.3.2 Perception indexes

Perception Indexes relate to the aggregation of subjective survey responses submitted by stakeholders on the quality of service delivered by customs or other government agencies. Perception Indexes help the Customs administration to obtain feedback from users of its services and with this knowledge work on improving their service quality. A perception index survey (Customs Development Project) conducted in the Russian Federation revealed the following:

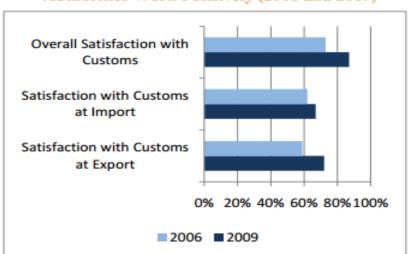


Figure 2: Percentage of Stakeholders Viewing Customs Authorities Work Positively (2006 and 2009)

Figure 2: Percentage of Stakeholders viewing Russian Customs Authorities work positively (2006 and 2009) (Kimberly, Kristensen& McLinden, 2011)

The Ghanaian customs (CEPS) was established as far back as 1839 when it became necessary for the country to enforce the payment of local duty from shipping at the sub-ports by the Colonial government. Over the years it has been the government institution solely responsible for the collection of duties at the country's seaports.

Its quality policy statement is:

- Provide service that is efficient, fair and transparent
- Provide sufficient resources to ensure effective performance in the discharge of its duties
- Recruit, train and maintain a highly qualified and motivated workforce
- Ensure the public is aware of its contribution to the nation.

CEPS quality policy statement is a pointer towards providing shippers with quality service. The Ghanaian Customs, like Customs in other nations has found it

difficult, transitioning from a regulatory agency to a service provider outfit. However, it has currently increased its cooperation with other actors in the maritime industry to improve the service quality provided to shippers. CEPS' commitment to service quality made it embrace the GCNet single window concept and destination inspection services, which have contributed greatly to improving cargo clearance times. In spite of the gains made above by CEPS in improving service quality, there are some soft issues which have to be addressed. CEPS, Officer-in-Charge at the GSL scan, in an interview with the Ghana Shippers' Authority during the first quarter of 2011, highlighted the following as the challenges beleaguering the performance of CEPS officers at the GSL scan:

- 1. Training: Staff had not undergone any professional training in a long period of time and thus still used outdated working methods, frustrating trade instead of facilitating it.
- Attitudes: Officers had also imbibed certain poor customer practices such as delaying freight forwarders, lateness to work and this had affected the pace of work.
- 3. CEPS Officers duplicate functions already performed by other CEPS Officers at the Compliance Unit and this created further delays (Ghana Shippers Authority, first quarter report 2011).

2.3.4 Service quality amongst shippers' councils

The inability of small and medium shippers to use their size to leverage for better rates and improved service levels, like the big shippers, have resulted in them routing their concerns through Shippers' Councils by becoming members. Shippers' Councils are a creation of UNCTAD's code of conduct for Liner conferences formulated in 1970. UNCTAD identified two main purposes for such councils: (i) to unite shippers and to give them the necessary bargaining strength to obtain adequate and efficient services at minimum cost; and (ii) to provide shipowners, government agencies, and port authorities with a means of communicating with shippers, and of

obtaining an authoritative shipper viewpoint (UNCTAD, 1975). In the African context, councils have primarily served the first objective, whereas European shippers' councils are consultative bodies and do not engage in freight rate negotiations (Sletmo & Holste, 1994). For instance, the European Shippers' Council (ESC) acts as the "eyes and ears" for its member organisations – the national shippers' councils - in respect of EU legislative activity. The ESC represented the various national shippers' councils in the EU during negotiations on the new sulphur directive (European Shippers' Council, 2012). The Ghana Shippers' Authority, as part of its efforts to increase its service quality to its shippers, has put the following measures in place:

2.3.4.1 Shipper Education- the GSA upholds the need to educate and sensitize both shippers and service providers and improve upon their knowledge and skills and help them improve upon their business. The education programmes are in the form of maritime seminars, conferences and workshops. They are held for importers, exporters and the shipping community to update them on developments in the dynamic international shipping environment. It also gives the maritime community free access to its online publications to keep them up to speed with the fast changing industry.

2.3.4.2Advisory Services

The GSA provides advisory services to importers, exporters and the shipping community free of charge. Shippers walk into the offices of the Council on a daily basis seeking advice on various issues concerning their businesses. Issues such as, which shipping line or freight forwarder to engage, documentations on shipments among others are handled on a daily basis

2.3.4.3 Shipper Complaints and Support Units

The GSA has commenced the establishment of Shipper Complaints and Support Units at strategic points of the country's entry points in order to provide real-time assistance to shippers who use those points and find solutions to challenges confronting them in the course of their business transactions. Three of the Units at

the Elubo border, Takoradi port and the Aflao border have been established and are in full operation. Other ongoing projects, which would help facilitate trade in and outside Ghana, include the Boankra Inland Port Project which has the following amongst its objectives:

- To bring import and export services closer to the doors of shippers in the northern half of Ghana, as well as in the landlocked neighbouring countries of Burkina Faso, Mali and Niger
- To enhance the operational efficiency of both the Tema and Takoradi ports, through decongestion (Ghana Shippers' Authority, n.d).

2.3.5 Service quality amongst destination inspection companies (DIC's)

Destination Inspection (DI) services are designed to assist Customs authorities in facing challenges related to the rise in trade volumes worldwide and to the significant increase in illegal trafficking of goods and people. The WTO Agreement and the Kyoto Convention both place significant emphasis on the simplification and harmonization of Customs procedures to effectively contribute to the development of legitimate international trade.

The following are some of the benefits of (DI) services:

- Improve Customs efficiency and revenue collection
- Increase security
- Encourage and facilitate legitimate trade
- Decongest ports and land borders
- Speed up and facilitate clearance process
- Transfer of technology

(Cotecna Government Services, n.d)

In Africa, Destination Inspection Companies are widespread owing to bottlenecks in preshipment and valuation of goods, which results in increased delays in the clearance of goods in ports. Destination Inspection was introduced in Ghana in April 2000 to facilitate trade, enhance efficient verification of imports, protect and ensure that right revenue is collected and a high security regime is maintained in the import clearing system of the country. The scheme introduced computerised risk management systems, X-ray scanning and the development of a transaction price database. By 2003 there were four destination inspection companies mandated to carry out inspection activities at different entry locations, and each company's operations covered specific geographical areas. The Gateway Services Limited (GSL), GSBV Company Limited: a joint venture of Ghana Standards Board and BIVAC, and Ghana Link Network Services. As at December 2008 a new joint venture company, the Ghana Customs Inspection Company Ltd, came into being through an agreement between the Ministry of Trade, Industry, Private Sector Development and Presidential Special Initiative, the CEPS and the Ghana Link Network System to manage and perform destination inspection services for a period of 8 years (Ghana Shippers' Authority, DIC report, 2012). Since their introduction DI companies have come under criticism for delays in the issuance of Final Classification Valuation Reports (FCVR) and the rejection of the DI values by CEPS. Also DI companies, such as GSL and Ghana Link Network Services, have been put on the spot on several occasions for poor service quality owing to frequent breakdowns of the GSL scan in the Tema Port (Ghana Shippers' Authority, first quarter report, 2011) and slow pace of obtaining chits for truck drivers to go through the scanning process conducted by both companies (Ghana Shippers' Authority, third quarter report, 2010). This creates a gap between the expected service and the perceived service (SERVQUAL Gap 5).

2.3.6 Service quality in GCNet

Prior to the introduction of ASYCUDA in ECOWAS countries in the early 1980s, customs across the West-African sub-region used a manual documentation for the

clearance of goods in ports which led to weeks of delay, congestion, revenue leakages, bribery and corruption. It was in response to this laborious clearing system that the ASYCUDA was introduced to facilitate the clearance of goods. Between 1991 and 2002 Ghana Customs used ASYCUDA in the processing of declarations at the major ports of entry. Declarations were presented in hard copy by declarants and these were keyed into the ASYCUDA software for further processing.

In 2001 the Ghana TradeNet was established to provide a fully integrated customs management software connected over a network to various operators who interact with Customs in the processing of import and export consignments to and from Ghana. Some of these operators are banks, shipping lines, certification and licensing agencies as well as users of trade information. In July 2003 the Tema Port was connected to the Ghana TradeNet for processing customs declarations (United Nations Department of Economic and Social Affairs, 2004). The Ghana TradeNet and Ghana Customs Management System (GCMS) were rolled out in 2002.

GCNet services include, among others:

- Submission and distribution of cargo manifests
- Submission and distribution of customs declarations
- Confirmation of duty and tax payments at commercial banks
- Provision of a risk management module that effectively profiles consignments into risk categories

The benefits of the GCNet system include:

- Facilitate legitimate trade and clearance of goods through Customs in a secured manner
- Enhanced mobilization of trade-related revenue for government
- Reduce malpractices associated with import and export Trade

- Reduce transactions costs and delays trade operators encounter in clearing consignments

from the ports (United Nations Economic and Social Commission for Asia and the Pacific,n.d).

The GCNet has been one of Ghana's most successful private public partnerships, made up of Société Général de Surveillance (SGS) S.A., Ecobank Ghana Ltd, Ghana Customs, Ghana Shippers' Authority and Ghana Commercial Bank.

Some of the achievements of the GCNet include:

2.3.6.1 Simplified customs procedures

There was a significant ease in clearance of goods through customs.

- a. The clients' shuttling to and from one agency to the other to procure certain permits, licences, or exemptions, which are required as part of the clearance process, have been largely eliminated.
- b. Thirteen manual processes within the Customs "Long Room", which used to take approximately two to three days to complete, have all been eliminated.

2.3.6.2 Faster clearance times

There has been a significant reduction in time for clearance of goods at the main port of Tema, which prior to the implementation of the project used to take on average two weeks, but now takes an average of two to three days.

2.3.6.3 Increased revenue collection

There has been a surge in revenue collection by Customs since the project was implemented. Since 2003 when the project started, there was an average annual growth in revenue of 33 percent for Port of Tema and 32 percent for the Kotoka Airport. Critical success factors, which have accounted for an increase in service quality, have been identified as follows:

• Training, sensitization and extensive capacity building

The sensitization and training of users as well as the provision of extensive capacity building to the various stakeholders have been key to the success of the project. As at 2007, three thousand users were trained in the usage of different functionalities of the system.

Responsiveness to emerging trends / exigencies

The capacity to respond promptly to emerging trends and exigencies also served as another critical success factor. In its bid to address stakeholder needs it discarded the ineffective escort system for a more sophisticated satellite tracking system, among other solutions to its stakeholders concerns. (International Trade Centre, n.d). A company's ability to respond to changing customer demands is germane to improving its service quality. Nonetheless, in spite of the progress made by the GCNet in improving the quality of the service, there still remain some challenges:

- The system's reliability has been questioned by shippers because it breaks down too often.
- It is unable to detect fraudulent invoices.
- It is not easy to pass post-entries or correct mistakes in declarations made via the system.

(Ghana Shippers Authority, GCNet Report, 2012)

2.3.7 Service quality in national maritime administrations

Though National maritime administrations do not deal with shippers, their activities impact indirectly on the service quality shippers receive.

Maritime administrations (flag states) perform a number of roles, which flow out of this main duty in controlling shipping and other maritime activities. These roles are:

- (i) Registration of ships and seafarers
- (ii) Certification of seafarers

- (iii) Ships surveys and inspections
- (iv) Casualty investigations
- (v) Co-operation
- (vi) International activities

(Abdalla, 2009)

2.3.7.1 Registration of ships and seafarers

The Ghana Maritime Authority (GMA), which is Ghana's flag state administration, is responsible for monitoring, regulating and coordinating activities in the Ghanaian maritime industry. As indicated above, GMA like other Maritime Administrations is responsible for registering seaworthy vessels and competent seafarers. By performing this function, GMA ensures that shippers are transporting their cargo on seaworthy vessels and it is under the custody of competent crew. This helps to improve the service quality shippers get to enjoy in the transport of their cargo.

2.3.7.2 Certification of seafarers

The GMA, in line with the International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW), helps to maintain professional standards by organizing exams for seafarers and it helps to keep seafarers abreast with developments in the industry creating a sense of professionalism which they bring to bear in their service delivery.

2.3.7.3 Ships Surveys and Inspections

It is the duty of the GMA and other national maritime administrations to undertake ship surveys on flag ships and inspections on foreign ships, which call Ghanaian ports, in ensuring that they must comply with the requirements of all applicable international conventions, statutes and regulations with respect to ship safety and protection of the marine environment. Even though the GMA and other maritime administrations might delegate this responsibility to classification societies, the

responsibility and accountability always remains with the administration. The performance of this function helps to maintain the professional standards in the industry, and reduce accidents and pollution of the marine environment. For instance, on the occurrence of an oil spill, it is not only the shipping line that is subjected to bad press, but the shipper as well. Thus by the GMA or other national maritime administrations performing this function judiciously, shippers benefit from improved service quality from the shipping agents/shipowners and the latter keep their good corporate reputation intact.

Chapter three

Methodology

3.1 Introduction

This chapter presents a description of the methods that were used to collect and analyze the data. It spells out the research design, the population, sampling techniques, data collection and the data analysis procedures that were used to obtain insight into the existing state of service quality in Tema Port and how it can be enhanced.

3.2 Research Design

Two kinds of research were used for the study: secondary as well as primary. Information was extracted from two researches conducted by the Ghana Shippers' Authority on the Impact of GCnet on cargo clearance procedure in Ghana and the Impact of the Destination Inspection Scheme (DI) in Ghana especially on the cargo clearance process. A survey research was also conducted for this study, and this basically had to do with administering questionnaires to shippers, freight forwarders and conducting interviews with top executives in the Ghanaian maritime industry.

3.3 Population of the study

The population for this study were shippers, freight forwarders and top executives in the maritime industry. Out of this population, eighty (80) respondents made up of shippers, freight forwarders and others in the industry who did not fall strictly into any of these categories, but were well informed on the issues were chosen. Additionally, five (5) top executives in the maritime industry were also selected to be interviewed.

3.4 Sampling technique

Sampling has to do with selecting a part of the population to represent the entire population. In both researches conducted by Ghana Shippers Authority on the GCNet and Destination Inspection Companies the sample population was (150) and the respondents were shippers, freight forwarders/clearing agents and other stakeholders

in the maritime industry. From both samples (103) and (89) questionnaires were received respectively. Both researches used random sampling technique to sample the population. In the primary research undertaken for this study, a random sampling technique was also used to sample eighty (80) out of the population. The reason for using this sampling technique was to have a rich array of views from the subgroups chosen for the research. This sample was chosen because in the case of the freight forwarders, a sizable number of them were not well educated enough to provide the needed responses. Also, most of shippers were not well informed on the workings of the various service providers in Tema Port, thus the inability to have a larger sample. Although the sample might not necessarily be representative of the entire population, the responses they provided will be shared by a large section of the population, because of the day to day operational rapport these respondents have with the various service providers in the industry. Out of the sample of eighty (80), fifty two (52) respondents: thirty (30) shippers and twenty (22) clearing and forwarding agents completed the questionnaires owing to the reasons cited earlier. The decision to interview the selected interviewees was to have a good appreciation of the topic from a decision making (managerial) standpoint. Another reason for the diverse choice of interviewees was to obtain the feedback from a broad spectrum of the industry.

3.5 Reasons for the choice of interviewees:

3.5.1 The Customer Services Manager of Maersk

Maersk Ghana Ltd is the leading shipping agency in Ghana accounting for a sizable amount of the tonnage that is shipped in and out of Tema Port annually. The decision to interview the Customer Service Manager of Maersk (Mr. Danquah Addo-Yobo) was informed by the following:

- To have a sense of direction of where the industry's is headed from the shipping agents' point of view.
- To obtain information on the bottlenecks that shipping agents face in their work and how they can be addressed.

To find out the innovative services that have been developed by Maersk, which other shipping agents operating in Tema Port, can learn from, to enhance the quality of their service to shippers.

3.5.2 The former Director General of GPHA

Tema Port is the nerve centre of the Ghanaian maritime industry where the various port, shipping, customs, freight forwarding and logistics activities take place. The former Director General (Mr. Nestor Ghalley) of Tema Port has over 30 years experience working with the GPHA. Before his appointment as the DG of GPHA in 2009 he led the restructuring of the Free Town Port in Sierra Leone. His longstanding experience in the industry influenced greatly the decision to interview him for the research.

3.5.3 The Operations Manager of Meridian Port Services

Meridian Port Services Limited is a joint venture between Ghana Ports and Harbours Authority and Meridian Port Holdings Limited, which in turn is a joint venture with Bolloré Group and APM Terminals as the two main shareholders. Meridian Port Services Limited has been granted a concession to operate Tema Port container terminal for a period of 20-years. It began operations in 200 (Zoominfo, n.d). MPS has been credited by a number of industry sources as being customer oriented. The Operations Manager of MPS (Mr. Cletus Kuzagbe) spent a greater part of his working life with the GPHA before joining MPS to help in setting the container terminal up. His extensive experience in port management was a key in the decision to interview him.

3.5.4 National Administrator of Ghana Institute of Freight Forwarders (GIFF)

The Ghana Institute of Freight Forwarders is the main association for freight forwarders in Ghana. The decision to interview Captain William Amanhyia was based on the fact that he is the National Administrator of the Ghana Institute of Freight Forwarders and is a contact person of FIATA in Ghana (Fiata,n.d). He is also

at the forefront of promoting professional standards amongst freight forwarders in Ghana.

3.5.5 The Dean of Maritime Studies for Regional Maritime University

The Regional Maritime University is the only University in Ghana specialized in the training of maritime professionals. Dr. Michael Manuel is the Dean of Maritime Studies and has represented the University at various local and international fora. He is a graduate of World Maritime University which is a global centre of excellence for training maritime professionals at the postgraduate level; and was the first graduate of the University's PhD in Maritime Administration programme. His experience in academia and knowledge of the Ghanaian maritime industry made him an obvious choice to be interviewed.

3.6 Other Secondary Sources

Moreover, port surveys on a number of service providers prepared by the Ghana Shippers' Authority also served as an invaluable source of information for this project. Additionally, information from the websites of the various service providers offered a useful source of information for the research.

3.7 Limitations of study

The sample size for the research could have been larger. However, owing to the required extensive knowledge of respondents on service providers, many respondents were not in the position to complete the questionnaires. Notwithstanding this fact, the limited time for the research made it impossible to augment the number of questionnaires that were completed.

Chapter four

Data analysis

4.1 Secondary research analysis

4.2 Impact of the GCNet system on cargo clearance procedure in Ghana

In a study conducted by the Ghana Shippers' Authority on the impact of the GCNet system on cargo clearance in Ghana which was targeted at shippers, clearing agents/freight forwarders, shipping lines/agents, MDA's and other regulatory agencies the following responses were received:

4.2.1 What has the performance of the GCNet been since its inception?

27% of respondents indicated that the performance of the GCNet system has been good since it started, while 72% indicated its performance has been average since commencement of operations. Figure 3 shows a graphical representation of the opinion expressed.

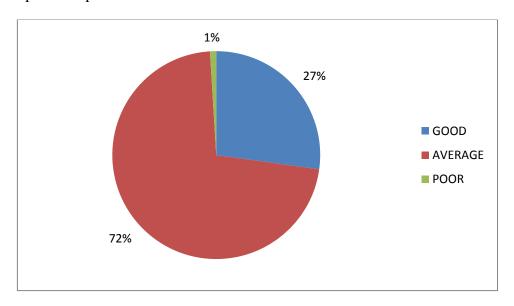


Figure 3 Performance of the GCNet since its inception

4.2.2 Has the GCNet System been able to eliminate paper work involved in cargo clearance procedures?

92% of respondents stated yes, that paper work in the clearance regime has been eliminated, while 7% of the respondents indicated no, that the introduction of the GCNet system has not eliminated paper work in the cargo clearance procedures. Table 4-1 captures the responses received.

Table 4-1 Responses on GCNet's elimination of paper work in cargo Clearance procedures

| Has the GCNet system been able to eliminate paper work involved in the cargo clearance procedures? | No. of resp. | %share |
|--|--------------|--------|
| yes | 95 | 92 |
| no | 7 | 7 |
| none of the above | 1 | 1 |
| no idea | 0 | 0 |

4.2.3 Is it easy to use the GCNet (Is the GCNet customer friendly)?

90% of respondents found the usage of the GCNet system easy, whereas 7% replied otherwise. Table 4-2 provides a tabular representation of the opinion expressed.

Table 4-2 Rating of the ease or otherwise in usage the GCNet system

| Is it easy t | to use the GCNet system? No of resp. | | %share |
|--------------|--------------------------------------|----|--------|
| yes | | 92 | 90 |
| no | | 7 | 7 |
| none of the | above | 1 | 1 |
| no idea | | 3 | 3 |

4.2.4 What is the rating of the GCNet in revenue collection since it started operations?

53% of respondents indicated that the performance of the GCNet system in revenue collection since it started operating has been good while 46% described the performance as average. Table 4-3 and Figure 4 give an illustration of the responses received.

Table 4-3 Rating of the GCNet in revenue collection

| How would you rate the role of the GCNet in revenue collection since it started operations? | No. of resp. | %share |
|---|--------------|--------|
| GOOD | 55 | 53 |
| AVERAGE | 47 | 46 |
| POOR | 1 | 1 |

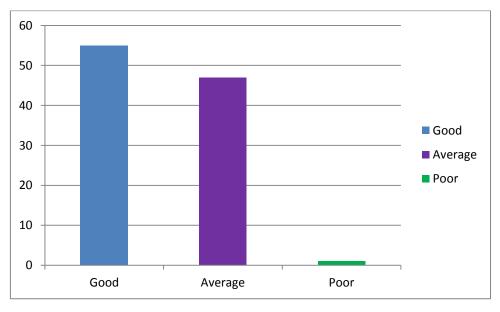


Figure 4: Rating of the performance of the GCNet in revenue collection

4.2.5 What suggestions do you have to improve the GCNet system?

Table 4-4

| What suggestions do you have to improve the GCNet system? | | |
|--|-----|--|
| Should all government agencies whose work impact on the cargo clearing process be linked to operate on the GCNet system automatically? | | |
| YES | 101 | |
| NO | 2 | |
| Should the GCNet make the front end data entering system more user friendly? | | |
| YES | 102 | |
| NO | 1 | |
| Should the GCNet make fields (spaces for filling information) have pull downs which will show all the required information to choose from? | | |
| YES | 100 | |
| NO | 3 | |
| Should the GCNet make data entering system more user friendly by making fields to reject information that is not in the pull down menu? | | |
| YES | 103 | |
| NO | 0 | |
| The GCNet system should be able to determine automatically the appropriate rates relating to various items/HS codes and fees of government agencies? | | |
| YES | 102 | |
| NO | 1 | |
| Should the GCNet system be used to determine the value of imports instead of destination inspection companies? | | |
| YES | 103 | |
| NO | 0 | |

4.3 Impact of Destination Inspection Scheme in Ghana on cargo clearance process

In another research study conducted by the Ghana Shippers' Authority on the impact of the Destination Inspection Scheme (DI) in Ghana especially on the cargo clearance process, questionnaires were administered to the freight forwarders/clearing agents, shipping agents and other stakeholders in the maritime industry and the following responses were obtained:

4.3.1 Which cargo clearing steps create problems for shippers in Tema Port?

This question sought to find what the problems were in the cargo clearance process. Most respondents indicated more than one step as being obstacles to the importer. From the analysis, one (1) respondent thought the process was fine and none of the steps was problematic. Fourteen (14) of the respondents indicated that the security agencies posed problems to the system, while eight (8) of them saw the whole process of clearing cargo as cumbersome and fraught with problems. However, three (3) respondents stated that if shippers had the right documentation they will encounter no problems in the cargo clearance process.

Table 4-5 Cargo clearing steps which create problems in Tema Port

| Which Cargo Clearing Steps Create Problems | | |
|--|---|-----------------------|
| Responses | | No. of Respondents |
| A | Submit invoice, IDF, B/L to DI Company for FCVR | 19 |
| В | Make declaration to GCNet with invoice, IDF, B/L, FCVR | 3 |
| С | Shipper issued with CUS(toms) RES(ponse) indicating taxes and duty to be paid if declaration is accepted | 0 |
| D | Shipper makes payment to CEPS and other agencies through designated banks for a bank receipt to issued | 0 |
| E | Shipper submits CUS RES, bank receipt and B/L to CEPS Compliance Section for verification | 8 |
| F | Shipper submits all documents to CEPS physical examination section after verification | 12 |
| G | Shipper applies to shipping line for release of cargo through completion of Delivery Order for issue of invoice | 21 |
| Н | Shipper makes payment to shipping line after receiving invoice | 21 |
| I | Shipper pays terminal and port charges to port and terminal operator | 2 |
| J | Shipper sends document and/or receipts to CEPS Task Force for scrutiny and for release | 12 |
| K | Shipper issued with port/terminal operators waybill and given release for cargo | 1 |
| L | Shipper given final check by CEPS, GPHA, other security agencies and permission to exit | 14 |

From Table 4-5 the cargo clearing steps which create the most problems include:

- Shipper applying to shipping line for release of cargo through completion of delivery order for issue of invoice.
- Shipper making payment to shipping line after receiving invoice.
- The issuing of FCVR by the DI companies to shipper.

4.3.2 How long does it take DI Companies to issue a Final Classification Valuation report?

Table4-6 How long does it take for an FCVR to be issued?

| How Long Does It Take For An FCVR To Be Issued? | | | |
|---|-------------------|------------|--|
| Response | No of Respondents | Percentage | |
| 1. One Day | 1 | 1 | |
| 2. Forty Eight Hours | 1 | 1 | |
| 3. Three-Five Days | 32 | 36 | |
| 4. One Week | 23 | 26 | |
| 5. Two Weeks | 20 | 22 | |
| 6. Between 1 and 2 months | 2 | 2 | |
| 7. It varies from DI company to another | 2 | 2 | |
| 8. It depends on how genuine the document is | 1 | 1 | |
| 9. No answer/No idea/Not certain | 7 | 8 | |

From table 4-6 the majority of the respondents (36%) were of the view that it takes between 3-5days for an FCVR to be issued.

4.3.3 Which Government institutions/Service Providers create problems for DIC's

Table 4-7

| Government Institutions/Service Providers Which Create Problems For the DI Scheme | | | |
|---|--------------------|--|--|
| Government Institutions/Service Providers | No. of Respondents | | |
| 1.CEPS | 37 | | |
| 2. GPHA/Terminal operators (container terminals) | 17 | | |
| 3. Clearing and Forwarding Agents | 10 | | |
| 4. Shipping Lines and Shipping Agents | 17 | | |
| 5. Internal Revenue Service (IRS) | 0 | | |
| 6. None of the above/No Idea | 17 | | |

4.3.3.1 Reasons for citing the major institutions as culpable for problems of the cargo clearance system were as follows:

Table 4-8

| CEPS | | |
|--|-----------------------|--|
| REASONS | No. of Respondents | |
| 1. Reject valuation by DI companies and impose their own | 30 | |
| 2. Change/interpret HS code rules to favour themselves without any information | 3 | |
| 3. Create delays because they want to take over the valuation job | 2 | |
| 4. Create problems to demand favours | 2 | |

Table 4-9

| Shipping Lines/Agents | | |
|--|-------------|--|
| REASONS | No. of | |
| | Respondents | |
| 1. Approving release of cargo takes too long because there is only one approving signatory | 10 | |
| 2. Assigning wrong weight to consignment on bill of lading | 2 | |
| 3. Charges are too high | 1 | |
| 4. Poor handling of groupage containers | 1 | |
| 5. Takes too long to refund container deposit fees | 1 | |

Table 4-10

| GPHA/Terminal Operators | | |
|---|----------------------|--|
| REASONS | No of Respondents | |
| 1. Delays due to lack of and breakdown of equipment | 11 | |
| 2. Poor handling of groupage container s | 3 | |
| 3. High Charges | 1 | |
| 4. Delays due to not being connected to the cargo clearing electronics system | 1 | |

4.3.4 What are the major problems associated with the scanning system in the Tema Port?

Table 4-11 Problems associated with the scanning system in Tema Port

| What are the problems associated with the scanning system | | |
|--|--------------------|--|
| Responses | No. of Respondents | |
| 1. No Problems | 17 | |
| 2. No Ideas | 1 | |
| 3. System Breakdowns | 9 | |
| 4. Delays due to light off, physical examination after scanning | 39 | |
| 5. Congestions due to limited space at scanning yard | 19 | |
| 6. Human Factor - extortion, duplication, etc | 5 | |
| 7. Interpretation is not transparent leading to arguments & delays | 4 | |
| 8. Height of Trucks creates problems | 1 | |

4.3.5 Has the DI Scheme brought benefits to the cargo clearing system?

The question demanded a 'Yes' or 'No' answer with explanations if possible. Fifty three (53) of the 89 respondents, amounting to about sixty percent (60%), indicated that the DI scheme has brought benefits to the cargo clearing system. Thirty percent (30%) were of the opinion it has not brought any benefits while ten percent (10%) did not give any response. Some of the explanations given in support for the benefits of the DI scheme include:

- It helps to curtail demurrage since you can get the customs valuation before the cargo arrives
- There is more clarity in the process than before
- It has standardized the cargo clearing system
- It helps to check under invoicing thus securing more revenue for the government.

Those who saw it as not beneficial said that sometimes the DI values are rejected by CEPS resulting in delays.

4.3.6 What is the overall performance rating of DIC's in Ghana?

In assessing the overall performance of the DIC's 56% of the respondents stated that the performance of the DIC's had been good, while 16% rated it as good and 6% described it as excellent. However, 18% viewed the performance as average and the remaining 4% qualified it as poor.

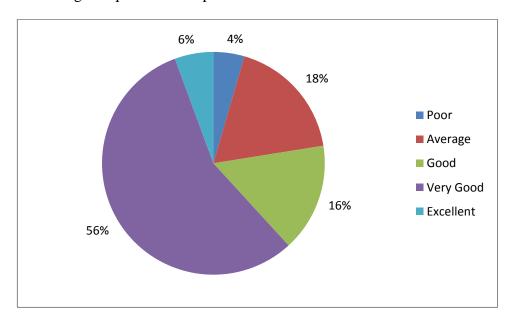


Figure 5 Overall performance rating of the DIC'S in Ghana

4. 4 Primary Research Analysis

4.5 Respondents

In Ghana like in most countries the world over, freight forwarders are responsible for the clearance of goods on behalf of shippers. Big and medium shippers are allowed by law to handle their own declarations, thus the term self-declarants, and have their own in-house freight forwarders. For purposes of this research, shippers and freight forwarders were better placed to provide the information required, because of their working knowledge of the various service providers in the Port of Tema. Thirty (30) shippers and twenty two (22) freight forwarders completed the 80 questionnaires administered. The breakdown of the respondents is pictorially represented in Figure 6.

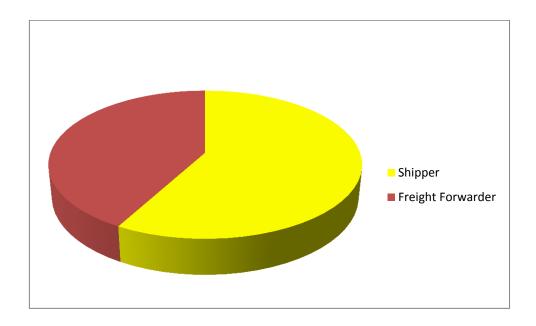


Figure 6 Percentage distribution of respondents for the research

4.6 Assessment of the service quality of selected shipping agents

4.6.1 Schedule reliability of selected Shipping Agents

Schedule reliability remains an important benchmark in determining the quality of performance of carriers globally.

The six shipping agents selected for this research included:

- Maersk Ghana Ltd (agents of Maersk)
- Mediterranean Shipping Company Agency (agents of MSC),
- MOL Ghana Ltd (agents for Mitsui O.S.K),
- Intermodal Shipping Agency Ghana Ltd (agents for Zim Lines),
- Hull Blyth Ghana Ltd (agents of Elder Dempster, Blue Funnel, etc.)
- Delmas Ghana Ltd(agents for the CMA CGM Group)

In terms of schedule reliability of the shipping agents Table 4-12 and Figure 6 depicts the results that were obtained:

Table 4-12 Schedule reliability results of selected shipping agents in Tema Port

| SHIPPING AGENT | Schedule Reliability Results | Ranking |
|------------------------|------------------------------|---------|
| Mediterranean Shipping | 2.35 | 4 |
| Company Agency(MSC) | | |
| Hullblyth | 2.56 | 5 |
| Isag | 2.65 | 6 |
| MOL | 2.29 | 3 |
| Maersk Ghana Ltd | 1.46 | 1 |
| Delmas | 1.98 | 2 |



Figure 7 Schedule reliability of the vessels for selected shipping agents in Tema Port

The results of the research support industry wide schedule reliability results, which jumped from 72.3% in the first quarter of 2012 to 75.7% in the second quarter of

2012 with Maersk Line retaining the top spot with an on-time score of 91.4 percent in the second quarter, up from 89.8 percent in the previous quarter. Dewry attributed the improvement in schedule reliability to the settling down of schedules that followed the large network changes in April caused by the new vessel-sharing alliances between the Grand Alliance and the New World Alliance and between CMA CGM and Mediterranean Shipping Co. Another container industry analyst, SeaIntel, which also tracks schedule reliability, said carriers have been trying to improve because they can reduce costs by being more punctual (Leach, 2012)

4.6.2 Local and demurrage shipping charges

Shipping agents in Ghana, apart from charging for freight on the cargo carried, also levy local or administrative charges for the booking/shipment/release services they provide shippers. These charges have been described by the Ghana Shippers' Authority as illegal, because it is supposed to be part of the freight. Another criticism leveled against the local charges is that they are uncapped and shipping agents could introduce components to satisfy their own whims and caprices. Local and demurrage charges constitute an important consideration for shippers in the choice of a shipping agency. Table 4-13 shows a ranking of the local and demurrage charges levied by the selected shipping agents in the Tema Port as obtained from the research.

Table 4-13 Ranking of the local and demurrage charges of selected shipping agents as per research

| Shipping Agency | Average weighting for local and demurrage charges | Ranking | Description |
|------------------|---|---------|-------------|
| MSCA | 1.96 | 1 | Very High |
| Hull Blyth | 2.42 | 3 | High |
| Isag | 2.96 | 6 | Average |
| MOL | 2.60 | 5 | Average |
| Maersk Ghana Ltd | 2 | 2 | High |
| Delmas | 2.44 | 4 | High |

Table 4-14 A comparison of shipping line charges (administrative& container deposit charges) of the major shipping agencies in Ghana (2011)

| Shipping Agency | 20 footer(USD) | 40 footer(USD) | Ranking |
|-----------------|----------------|----------------|---------|
| Isag | 186.9 | 368.3 | 1 |
| Scanship | 233.5 | 467 | 2 |
| Grimaldi | 236.6 | 473.1 | 3 |
| Antrak | 250 | 500 | 4 |
| Delmas | 306.1 | 612.2 | 5 |
| Maersk | 328.1 | 656.3 | 6 |
| Msca | 368.6 | 737.2 | 7 |
| MOL | 368.8 | 737.5 | 8 |
| PIL | 372.5 | 745 | 9 |
| Hull Blyth | 454.1 | 908.1 | 10 |

Rate of exchange: 1 US Dollar= 1.6 Ghana Cedi

Source: Ghana Shippers Authority

The ranking of the Shipping Lines is in ascending order. The charges were slightly affected by the differences in the rate of exchange. All container deposits charged by Shipping Agencies are refundable.

NB: This research was gathered from the shipping agencies invoices and information from staff of the shipping agencies above.

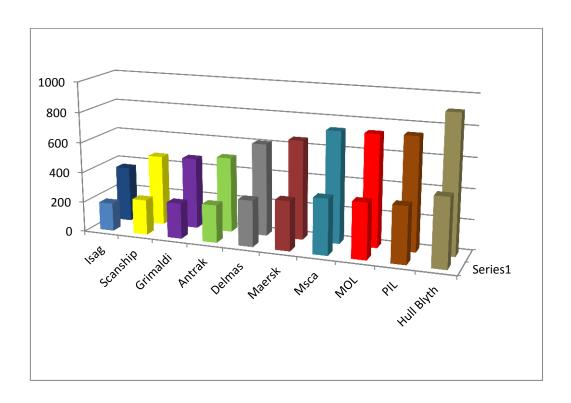


Figure 8 A comparison of the shipping agency charges of major shipping agents operating in Tema Port, 2011

From Table 4-14 and Figure 8 it is evident that ISAG charges the lowest in terms of shipping agency and demurrage charges amongst the major shipping agents researched on. Delmas, Maersk and MSCA in the Shippers' Authority report fell in the highly priced tier while MOL and Hull Blyth were in the very high category. From the analysis of the responses received on shipping agency and demurrage charges: Maersk, Delmas and Hull Blyth were in the high category, while MSCA was in the very high group. Consequently, this research and the GSA report correspond with the exception of MOL, which was classed under the average category in the analysis of the responses received, but found itself in the very high category in the GSA report, as well MSCA, which fell in the high category in the GSA report, but came under the very high group in the analysis of the responses received. In addition, Hull Blyth, which was in the very high category in the GSA report, was classed in the high category in the analysis.

4.6.3 Commitment to service quality

Service quality as examined by Parasuraman(1988) et al has five generic dimensions:

- (1) Tangibles: Physical facilities, equipment and appearance of personnel.
- (2) Reliability: Ability to perform the promised service dependably and accurately.
- (3) Responsiveness: Willingness to help customers and provide prompt service.
- (4) Assurance: (including competence, courtesy, credibility and security). Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- (5) Empathy: (including access, communication, understanding the customer). Caring and individualized attention that the firm provides to its customer.

Furthermore, a shipping agency's innovativeness also helps to enhance its service quality.

The following results in Table 4-15 and Figure 9 were obtained from the research in determining the shipping agents commitment to service quality.

Table 4-15 Ranking of selected shipping agents commitment to service quality

| Shipping Agent | Average weighting for | Description | Ranking |
|------------------|-----------------------|-------------|---------|
| | commitment to service | | |
| | quality | | |
| MSCA | 2.44 | Good | 3 |
| Hull Blyth | 2.65 | Average | 5 |
| Isag | 2.87 | Average | 6 |
| MOL | 2.46 | Good | 4 |
| Maersk Ghana Ltd | 1.60 | Very good | 1 |
| Delmas | 2.15 | Good | 2 |

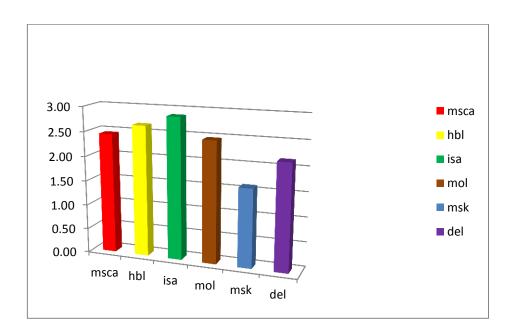


Figure 9 Ranking of the commitment of selected shipping agents to service quality in Tema Port

From the responses received on service quality, respondents stated the following as value added services provided by some of the shipping agents:

- Maersk has an application where shippers/freight forwarders can download invoices and proceed to make payments at the Maersk Office.
- Delmas, Maersk and MSCA and others have a track and trace application which helps shippers to monitor the movement of their shipments.
- The premium placed on hiring and training employees shows in the quality of service they offer. For instance Maersk's competitive recruitment process and international shipping education programme(M.I.S.E) (APM Terminals, n.d), shines through the service quality it offers.

4.6.4 Problems encountered in dealing with shipping agents

Table 4-16 provides a list of persistent problems, which freight forwarders/shippers face in their dealings with the selected shipping agents:

Table 4-16 Problems encountered in dealing with selected shipping agents in Tema Port

| Shipping Agent | Problems | |
|---------------------|--|--|
| MSCA | Poor response to customer complaints Bureaucracy in documentation | |
| Hull Blyth | Office location too far from port | |
| Isag | Release process takes too long | |
| MOL | Non-refundable demurrage payments Do not pick up phone calls | |
| Maersk Ghana Ltd | Do not pick up phone calls | |
| White Six Shana Etc | Delays in releasing delivery order | |
| Delmas | Do not pick up phone calls Extra staff needed to facilitate release process | |

4.7 Assessment of the service quality of GPHA in Tema Port

4.7.1 Performance rating of the service delivery of GPHA in Tema Port

The Ghana Ports and Harbours Authority is responsible for operating Tema Port with the assistance of private stevedoring companies. It has as its vision to make Tema Port the preferred port in the sub-region. It handles about 80% of Ghana international cargo (World Port Source, n.d).

The competitiveness of Tema Port can be categorized under the following:

- Reliability of service performance (quick turnaround time, quick delivery of cargo, efficient cargo handling, competitive tariffs),
- Tangibles (good roads and trucks),

- Responsiveness (good customer service)
- Assurance (social and industrial stability, good security)

As per the Likert scale used for the questionnaire, the service quality rating of the Tema Port was weighted at **2.75** which can be expressed as **3** for purposes of the research, connoting an **average performance rating**. This was largely affected by congestion in the port, which has driven GPHA to look at port expansion measures. Furthermore, the lack of equipment in the port also stifles the progress of work, which slows down port turnaround time. In terms of the competitiveness of the GPHA tariff, Table 4-17 and Figure 9 show a comparison of the former with the tariffs of Nigeria Port Authority and AP Moller Terminal Liberia Ltd.

Table 4-17 Comparison of stevedoring charges in (USD) on containers of selected Port Authorities in West Africa

| Type of container | NPA | GPHA | APMT Liberia |
|---------------------|-----|--------|--------------|
| | | | Ltd |
| Laden(20ft,import) | 90 | 82.69 | 175 |
| Laden(20ft, export) | 70 | 82.69 | 175 |
| Empty(20ft, | 19 | 65.63 | 35 |
| import) | | | |
| Empty(20ft, | 16 | 65.63 | 35 |
| export) | | | |
| Laden(40ft,import) | 130 | 156.19 | 240 |
| Laden(40ft, export) | 100 | 156.19 | 240 |
| Empty(40ft,import) | 32 | 118.13 | 56 |
| Empty(40ft, | 28 | 118.13 | 56 |
| export) | | | |

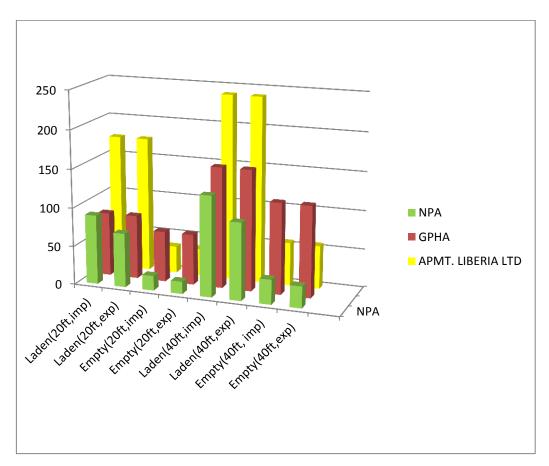


Figure 10, A comparison of stevedoring charges on containerized imports and exports for NPA, GPHA and APMT Liberia Ltd

Source: Nigeria Port Authority, Ghana Port Authority and APMT Liberia Ltd Tariffs

From the information in Figure 10, it is quite clear that Ghana Port and Harbours Authority has a fairly competitive port tariff on stevedoring of containerized laden imports and exports compared to APMT Liberia Ltd and the Nigeria Port Authority. However, in the case of empty containers for imports and exports, GPHA stevedoring charges was the highest of the three Port Authorities. Also, with the exception of Nigeria Port Authority, which had different stevedoring charges for containerized imports and exports, GPHA and APMT Liberia Ltd had the same stevedoring charges for containerized imports and exports. Furthermore, as stated earlier, GPHA has introduced electronic harbour passes to improve the security of Tema Port. This is complemented by security personnel and CCTV within the port

area to protect goods and people. Tema Port is increasingly becoming an attractive destination for trade because of the relatively stable political and business climate in Ghana.

Table 4-18 Cumulative imports and exports summary of Tema Port from 2009-2011

| | 2009 | 2010 | 2011 | Percentage | Percentage |
|---------|-----------|-----------|-----------|------------|------------|
| | | | | Diff(2009- | Diff(2010- |
| | | | | 2010) | 2011) |
| | | | | | |
| Imports | 5,694,280 | 6,823,488 | 8,431,531 | 16.6 | 19.2 |
| Exports | 981,075 | 1,154,826 | 1,532,139 | 15.05 | 24.6 |

Source: GPHA Statistics

In the area of responsiveness, quite a number of respondents upbraided GPHA for the lack of customer intimacy and empathy creating a gap between the expected service and the perceived service, which corresponds with gap 5 in the SERVQUAL model. Examples of complaints raised by respondents include:

- employees at the customer service/counter not being customer oriented
- bureaucracy
- too much documentation e.g. manual booking of documents
- failure to land containers within the 24 hours stipulated period
- lack of space for devanning containers
- unlike Meridian Port Services (MPS), which works for 24hours, GPHA had limited working hours 9:00am-4:00pm.

4.7.2 Problems which reduce the effectiveness of Tema Port

Tema Port was built in 1962. The Ghana Ports and Harbours Authority, which operates Tema Port was formed in 1986 following a merger of three companies Ghana Port Authority (GPA), Ghana Cargo Handling Cargo Company and the

Takoradi Lighterages Company. In 2000 GPHA began a programme to increase private sector participation in the port in line with the government's strategy to transform Tema Port from a service port to a landlord port. The privatization has led to the introduction of a number of private stevedores to support GPHA in the cargo handling operations as well as the running of a container terminal by a private consortium (Meridian Port Services,n.d). Some bottlenecks that have been identified as reducing the effectiveness of the Tema Port include:

- Lack of equipment
- Lack of competent personnel
- Congestion in port
- Lack of automation
- Lack of customer orientation

With regards to the impact of these bottlenecks on the effectiveness of the Port, the following responses in Table 4-19 and Figure 10 were received:

Table 4-19 Ranking of the challenges which reduce the effectiveness of Tema Port as per the research

| Challenges | Average weighting of | Ranking | Description |
|--------------------|----------------------|---------|--------------|
| | the result | | of challenge |
| Lack of equipment | 2.21 | 2 | High |
| Lack of competent | 2.48 | 4 | Average |
| personnel | | | |
| Congestion in port | 1.77 | 1 | Very High |
| Lack of automation | 2.62 | 5 | Average |
| Lack of customer | 2.23 | 3 | High |
| orientation | | | |

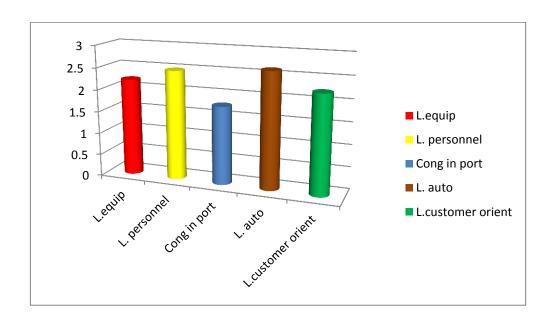


Figure 11 Ranking of challenges which reduce the effectiveness of Tema Port

4.6.3 New initiatives introduced by GPHA and suggestions for improvement in service delivery

From the responses obtained, GPHA had been lauded for new initiatives such as:

- Alerting freight forwarders/shippers with text messages to notify them of the positioning of their containers for devanning.
- Increase in the number of freight stations to help in decongesting ports
- Introduction of new electronic harbour passes to improve security in the port.

The introduction of electronic harbour passes is a requirement of the Port Facility Security Plan (PFSP) under the International Ship and Port facility Security Code (ISPS Code) which helps to monitor the flow of permanent and temporary employees as well as visitors into the port (Confederation of European Security Services,2008). Moreover, respondents suggested the following to help improve the service quality in Port of Tema:

- Mobile scanners must be acquired by the freight stations to ease congestion at the scan.
- o A bigger parking space needs to be created for trucks at the scanning area

- To purchase more forklifts and top loaders, to augment the present equipment capacity.
- o The need to expand the port to improve vessel turnaround time.
- o Dredging of existing berths to allow vessels with big drafts into the port.

4.8 Assessment of the service quality rating of MPS

4.8.1 The service quality rating of MPS

The Meridian Port Services mission statement is:

MPS is a dynamic, modern container terminal with an overall commitment to excellence. MPS expects continued improvement in everything we do, we want to lead, not follow in all areas of our operations". Its vision is "to establish and operate a hub container terminal that will become a centre of excellence and the port of choice in West Africa. This will be achieved through acquisition of the most modern and industry best equipment coupled with a dedication to constant and ongoing process and people improvement (Meridian Port Services Tema,n.d).

The average weighted duration for clearing cargo through MPS as per the responses received from the questionnaires was **three days.** The company's service quality rating from the respondents was 2.32, which is equivalent to 2 and corresponds to a **good rating** based on the Likert scale used for the research.

4.8.2 Reasons for MPS' Success

Since its establishment, MPS has been viewed by some industry sources of having been successful. Possible reasons surmised for its success include: investment in equipment, employment of competent personnel, customer orientation, high technological usage and effective management practices. In ranking the reasons stated above, Table 4-20 and Figure 11 are an expression of the responses provided.

Table 4-20 Reasons for MPS' Success

| Reasons | Average weighting of result |
|--------------------------------|-----------------------------|
| Investment in equipment | 2.10 |
| Competent personnel | 2.23 |
| Customer orientation | 2.46 |
| High technological usage | 2.19 |
| Effective management practices | 2.23 |

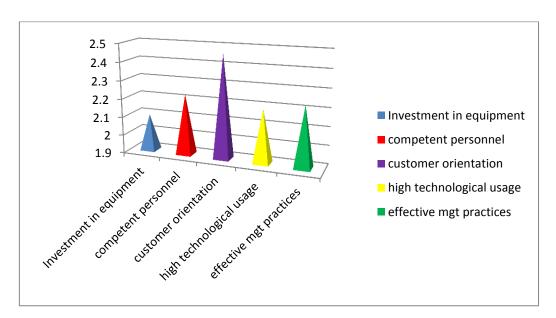


Figure 12 Reasons for MPS' success

From Table 4-20 and Figure 12, the cardinal reason for MPS' success was its investment in equipment, which can be traced to its vision. This was supported by a high technological usage, employment of competent personnel, having in place streamlined and effective management practices and customer orientation. In line with the equipment capacity of MPS in 2010, the company took delivery of two new

state of the art mobile cranes. The container terminal planned to augment its equipment capacity fleet in 2011 by adding three (3) new reach stackers, two (2) empty container handlers and two (2) ship to shore gantry cranes (Ghana Shippers 'Authority, second and third quarter reports, 2011). The customer orientation of MPS was buttressed by comments such as its good container stacking in place, which easily helps in the identification of containers, which prior to the advent of MPS was fraught with delays. The company's high technological usage can be seen in its introduction of electronic invoices and its automated gating system, all with the aim of facilitating customer transactions.

4.8.3 New initiatives introduced by MPS and suggestions for improvement in service delivery

MPS has been lauded by a majority of the respondents for new initiatives such as the use of electronic invoices, the issuing of permits on behalf of shippers prior to entering the port and a 24 hour working schedule. These initiatives are aimed at facilitating the clearance of cargo at the terminal. Nonetheless, there were suggestions by some respondents for:

- a quicker issuing of permits and invoices
- quick transfer of containers to other terminals
- an improvement in container arrangements for higher stacks for easy accessibility
- a better motivation of staff to help in retaining them.

4.9 Assessment of service quality in the freight forwarding business in Tema Port

4.9.1 Overall service quality of freight forwarding in Tema Port

Freight forwarders or customs house brokers play an important role in the Ghanaian Maritime Industry. By law, no shipper can deal directly with a shipping agency without using the services of a freight forwarder. In Ghana most of the customs house brokers are into clearing and forwarding, which involves carrying out all

required documentation procedures and paying all required taxes and duties on the goods. This differs from freight forwarding, which has to do with moving of goods from one point to another (Ghana Freight Forwarders, n.d). The efficiency and effectiveness of freight forwarders are judged based on their ability to negotiate competitive rates for shippers, providing a reliable and timely service and the delivery of a diverse range of value added services for shippers, such as warehousing, trucking, insurance arrangements etc. The weighted average service quality rating from the responses was 2.54, which can be stated as 3, equal to an **average rating** as per the Likert scale used for the questionnaires.

4.9.2 Problems which negatively impact on the freight forwarding industry in Tema Port.

The problems impeding the progress of the freight forwarding industry in Ghana i.e. Tema Port have been identified in Table 4-21, and the extent to which they affect service delivery have been rated by the respondents in the same Table.

Table 4-21 Ranking of the problems which impact on the freight forwarding industry in Ghana

| Problems | Average weighting of results | Ranking |
|---|------------------------------|---------|
| Lack of competent personnel | 2.83 | 5 |
| Lack of cooperation from stakeholders | 3.45 | 3 |
| Increase in the number of unprofessional freight forwarders | 3.89 | 2 |
| Failure of industry to weed out charlatans | 3.96 | 1 |
| Lack of training | 3.15 | 4 |

From Table 4-21 it emerged that the failure of industry to weed out charlatans was the topmost problem, which negatively impacted on freight forwarding in Tema Port. The Ghana Shippers' Authority has been inundated with complaints of freight forwarders defrauding unsuspecting shippers of their monies, for example by presenting false documents or un-itemized bills during the clearance process. This is in breach of the code of conduct for the Ghana Institute of Freight Forwarders (GIFF), which states that it is a professional misconduct for a member to "act or be involved directly or indirectly in any conduct which is clearly fraudulent or has the appearance of being fraudulent" (Ghana Freight Forwarders,n.d). Although it is worth stating that these fraudulent forwarders might not necessarily be members of GIFF or CUBAG, the issue of charlatans has culminated in bad reputation issues for the freight forwarding industry in Ghana. Furthermore, freight forwarders have decried the extortion and bureaucracy they are subjected to at the hands of various agencies in the port, especially CEPS Officers, in the day to day conduct of their business. This was referred to by, Captain William Amanhyia, the National Administrator of GIFF, in a presentation to CEPA (Centre for Policy Analysis) "as delays occasioned by regulations, custom and practices of the port" (Amanhyia,n.d). However, the training of freight forwarders in Tema Port has experienced a marked improvement. This is being spearheaded by the Ghana Institute of Freight Forwarders, which organizes FIATA diploma programmes to enhance the customs proficiency of its members, with the ultimate goal of enhancing the quality of service rendered to shippers. Figure 13 is a graphical representation of the FIATA Diploma training for freight forwarders, which revealed Ghana as one of the countries making appreciable progress in freight forwarding education.

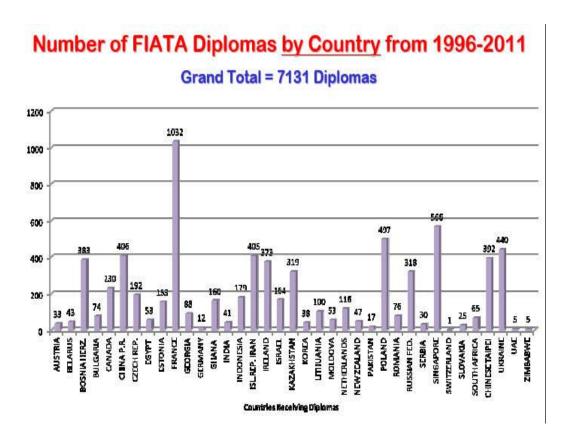


Figure 13 Number of FIATA Diplomas by Country from 1996-2011

Source: (Ghana Institute of freight forwarders report, n.d)

4.9.3 Suggestions for improvement in the service quality of freight forwarders

The following were some of the proposals proffered by respondents on raising the standards of freight forwarding in Tema Port.

Continuous capacity building

The global freight forwarding industry is growing at a breathtaking rate with technological advances revolutionizing the work of forwarders through the provision of value added services. However, the Ghanaian freight forwarding industry is still at the incipient stage with most forwarders involved in clearing and forwarding. Moreover, the use of ICT is at the rudimentary stage, limiting the possibility of exploiting the opportunities for the provision of value added services and plugging into the global trade network. Consequently, GIFF and CUBAG will have to make a

concerted effort for the industry to transition into a freight forwarding one, as well as ensure that the training programmes they provide cover customer service and ICT.

• An urgent need for regulation of the freight forwarding industry by government

The Ghanaian freight forwarding industry continues to be confronted with bad reputation issues. This stems from cases of fraud perpetrated by charlatans involved in quoting arbitrary charges, presenting false documents and providing sub-standard services to unsuspecting shippers. A majority of the respondents proposed the empowering of an autonomous organization to regulate the activities of freight forwarders to raise the service standards in the industry. Furthermore, all freight forwarders should be obliged to register with one of the recognized associations to help weed out charlatans. In addition to this, the respondents recommended that tough sanctions should be meted out to fraudulent forwarders to deter others from joining in.

Relationship building between CEPS and freight forwarders to enhance revenue collection

It is imperative that CEPS views freight forwarders as partners in revenue collection and collaborate with them to maximize this all important function. CEPS should constantly seek feedback from freight forwarders on how they can expedite the customs clearance experience. More so, there should be a deepening of the inter agency relationship amongst the various service providers in Tema Port to enrich the quality of service rendered to shippers.

Mergers and acquisitions should be encouraged to raise the service quality level

The freight forwarding industry in Ghana is characterized by a sizable number of small forwarders. The Ocean Shipping Reform Act (OSRA) of 1999, which predicted the mergers and consolidations of international freight forwarders, might have contributed in a number of Ghanaian freight forwarders partnering with

overseas associates to plug in effectively and efficiently into the global trade network. On the local stage, the status quo continues to persist, stifling the quality of service provided to shippers. Thus, there is the need to promote mergers and acquisitions to shore up the competitiveness of the freight forwarders and enhance the quality of service enjoyed by shippers.

4.10 Assessment of the service quality of the Ghana Shippers' Authority

4.10.1 Service quality rating of the Ghana Shippers' Authority

The mission of the Ghana Shippers' Authority is to be a state-of-the-art organization utilizing the available human resource to effectively and efficiently manage the demand side of shipping with a view to protecting and promoting the interests of Ghanaian shippers in relation to port, ship, inland transportation problems and the provision of ancillary shipping services. The vision is to ensure for the Ghanaian Shipper, quick, safe and reliable delivery of import and export cargoes by all modes of transport at optimum cost. The weighted average service quality rating of the Ghana Shippers' Authority computed from the questionnaires received was 2.5 which can be expressed as 3 and translates to an average performance as per the Likert scale. The service quality rating of the Ghana Shippers' Authority was examined based on the following:

• Abolition of uncapped shipping agency charges

The foremost concern of most shippers is to pay predictable shipping line charges. However, in the Ghanaian maritime industry, shipping agents have the latitude to levy uncapped charges. From the responses gathered, shippers were of the opinion that the Ghana Shippers' Authority had been unable to protect them from paying arbitrary charges levied by some shipping agents.

Solution of shipper complaints

The Ghana Shippers Authority was lauded by the majority of the respondents for its proactiveness in solving shipper complaints. As highlighted by a multinational

company" the Ghana Shippers' Authority follows through on an issue till an action is taken"

• Promotion of shipper education

From the responses received, the Authority was given plaudits for its commitment to shipper education. Its annual Shippers' Day and Judges seminars contribute greatly to enhancing service quality in the maritime industry. Furthermore, the Authority's publications (Shipping Review, Maritrade and Admiral) are an invaluable source of information for the shipping public.

Provision of infrastructure and technological innovation to enhance trade facilitation

GSA also received favourable feedback from the respondents for its shipper complaint units in Elubo and Aflao borders and the Takoradi Port, all aimed at promoting and protecting shipper interests. Also, the Authority was congratulated for its introduction of the e-cargo tracking service in the Tema Port and Mobiship service, which gives shippers the ability to access the vessel arrival information via their mobile phones.

4.10.2 Suggestions for improvement in the service quality of GSA

GSA should be given the needed legal mandate to represent shippers more effectively

The Ghana Shippers' Authority is constrained by its existing mandate to effectively represent the interest of shippers. As noted above, the GSA has been unable to effectively deal with front burner concerns of shippers, such as paying competitive shipping line charges, and this can be traced to its weak legal mandate.

• Good relationship building with other stakeholders

The GSA occupies an important role in the industry as representatives of shippers. To be able to maximize this role, it has to collaborate with the various service providers on a day to day basis. Unfortunately, the GSA has had a hostile relationship with the GIFF built on mistrust. Consequently, this has short-circuited

the ability of the GSA and freight forwarders to represent the interests of shippers well.

• Increase the educational empowerment of shippers

The GSA is carving out a good image for itself in the maritime industry through the various educational fora and workshops it organizes, as well as its publications. Such forums provide an invaluable learning experience for stakeholders on efficient and effective ways of catering to the needs of shippers as well as the emerging trends in the industry. The respondents called for a lot more educational empowerment to help shippers and other service providers to build the needed capacity to improve the service delivery in Tema Port.

The operations of GSA should be kept free from the politicking of government

For the GSA to effectively improve its service quality to shippers, some respondents were of the view that its operations must be completely insulated from political interferences. Some government organizations in the port have had their future and leadership altered by the cronyism of political leaders. This reduces the motivation of staff and stifles the quality of service to shippers.

4.11 Assessment of service quality in CEPS

4.11.1 Service quality rating of CEPS

The weighted average service quality of CEPS was 2.78, which can be stated as 3, connoting an average performance. CEPS has embraced destination inspection companies and the Ghana TradeNet/ (GCNet) to help in facilitating the clearance of cargo in the ports. Notwithstanding these changes, CEPS has had a notoriety for bureaucracy, bribery and corruption, weak reporting lines among other things. These drawbacks, impede the wheel of cargo clearance from moving expediently as expected

4.11.2 Major challenges affecting CEPS

The major challenges affecting CEPS have been categorized as follows:

Weak reporting lines

- Lack of competent personnel
- Bureaucracy
- Bribery and corruption
- Poor remuneration of staff

Table 4-22 and Figure 14 represent the responses received.

Table 4-22 Ranking of the challenges impeding progress of CEPS as per the research

| CHALLENGES | WEIGHTED | RANKING OF |
|----------------------------|----------------|------------|
| | AVERAGE RESULT | RESULT |
| Weak reporting lines | 3.60 | 3 |
| Lack of competent | 2.64 | 5 |
| personnel | | |
| Bureaucracy | 3.96 | 1 |
| Bribery and corruption | 3.88 | 2 |
| Poor remuneration of staff | 3.42 | 4 |

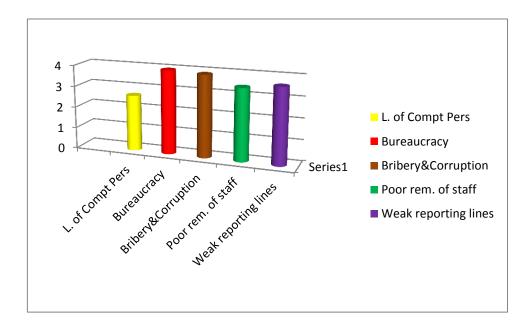


Figure 14 Ranking of the challenges impeding the progress of CEPS

Bureaucracy

Bureaucracy was cited by the respondents as the main deterrent of service quality in CEPS. Some CEPS officers, use this tool of bureaucracy to extort monies from freight forwarders by delaying their documentation.

Weak reporting lines

CEPS has a convoluted structure and owing to this, information flow amongst the various departments is often slow, which does not make the organization easily adaptable to the needs of shippers. There is also a lack of accountability and supervision and as such some officers are able to vacate their post during working hours, resulting in delays, and extort monies from freight forwarders without being sanctioned.

Motivation

Hezberg in his work on motivation identified two factors for understanding employee motivation and satisfaction and these are hygiene factors and motivator factors. Hygiene factors are basically those job factors which are essential for existence of motivation at workplace. These do not lead to positive satisfaction in the long-term. But if these factors are absent, then they lead to dissatisfaction at work. Examples of these include: poor remuneration, quality of supervision and bad working conditions. Motivator factors, on the other hand, create positive satisfaction and consist of training and advancement opportunities, challenging/stimulating work and a sense of personal achievement in a job (Dixon, 2003). As surmised by the Officer in charge of CEPS at the GSL scan, most CEPS officers have not undergone any professional training in a long period of time and thus still use outdated working methods. Also, some officers have spent years working on non-stimulating tasks and this, coupled with poor remuneration, results in them frustrating trade instead of facilitating it.

Bribery and Corruption

CEPS was hit by a major scandal in 2011 following an exposé on bribery and corruption at Tema Port by an investigative journalist. In an apparent state of

disapproval the then President of Ghana, Professor Mills remarked "this is the gateway. When people want to invest in Ghana they come to the gateway and they are met with corruption..." (New Crusading Guide, 2011) Respondents were of the view that bribery and corruption ranked as the second major bottleneck, impeding the effectiveness of CEPS from providing quality service to shippers.

Lack of Competent Personnel

The least severe reason impeding the performance of CEPS was stated by respondents as the lack of competent personnel. This implies that CEPS has an effective mechanism for recruiting the required employees. What seems to be lacking, might be having a human resource development strategy in place to promote service quality.

4.11.3 New initiatives introduced by CEPS and suggestions to improve service delivery

From the respondents, in reaction to tackling the issue of bribery and corruption and providing employees a fresh perspective on their jobs, CEPS has presumptively introduced a policy to transfer its staff every two years. It also provides services to clearing agents/freight forwarders on Saturdays to help fast track their operations in the Port. CEPS' introduction of the GCNet has also radically improved its cargo clearance process from an average of two weeks to three days.

4.12 Ghana Maritime Authority (GMA)

As anticipated, the majority of the respondents were not in a position to provide responses on the service quality rating of the Maritime Authority. Some respondents advised that GMA should

- Stay within the confines of its mandate
- Collaborate with other service providers to enhance the service standards in the industry.
- Increase the awareness of its activities

4.13 The number of days it takes to ship cargo through Tema Port

The average number of days it takes to ship cargo through Tema Port, as per the responses received, was five (5) days. However, this number could sometimes be less or more depending on the prevailing situation. This number of days consists of all the processes from CEPS compliance, through MPS/GPHA all the way till the goods are scanned and finally released to the importer.

4.14 The case for an existing or new organization to monitor service standards in the industry

A debate that has been raging on in the industry for some time is whether there should be an organization to monitor the service quality provided to shippers. The organization in question would be empowered to check the shipping line charges levied by shipping agencies and other service providers. It would also spell out what is expected from service providers in terms of their services to shippers. The following responses shown in Table 4-23 and Figure 15 were obtained from the respondents on the case for an existing or new organization to monitor service standards in the industry.

Table 4-23 The case for an organization to monitor service standards in the Ghanaian maritime industry as per the research

| Type of organization | Number of respondents | Percentage |
|----------------------------|-----------------------|------------|
| Existing | 35 | 67 |
| New | 9 | 17 |
| Things should stay as they | 8 | 16 |
| are | | |
| Total | 52 | 100 |

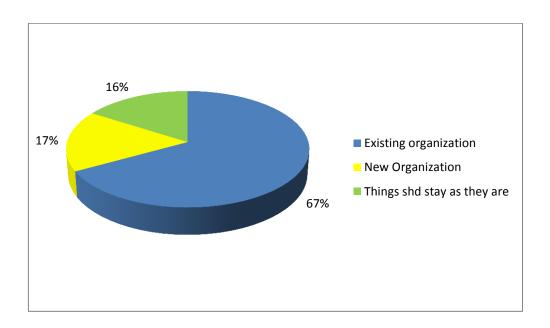


Figure 15 The case for an organization to monitor service standards in the Ghanaian maritime industry

From the responses gathered the majority of the respondents (67%) are in support of an existing organization monitoring service standards in the industry, whiles 17% favour a new organization being formed to perform this role and 16% believe that the status quo should be allowed to exist.

Chapter five

Views of leading maritime executives on enhancing service quality in Tema Port

As part of the research, it was important to obtain the views of leading maritime executives in Ghana on how service quality can be enhanced in Tema Port. Below are the questions that were asked and the feedback that was obtained from the interviewees.

5.1 Responses of the Operations Manager of the Meridian Port Services

5.1.1 Assessment of the state of service quality in Tema Port

In his assessment of the state of service delivery in Tema Port, the Operations Manager of MPS was of the view that the port was performing quite well, albeit it was faced with some serious challenges too. He added that there was a lot of room for improvement and that customers were not satisfied with the service level. According to him, the Port has too many stevedores working in it; ten (10) Stevedores including GPHA. Owing to this, most of the stevedores have rather little to do and as a result do not invest much in cargo handling equipment and prefer to hire. In the end, this adds up to the cost and delay of vessels in the port. Additionally, the Port has a weak human resource pool to rely on in the daily discharge of operational duties, which contributes to a reduction in its efficiency and effectiveness. Also, there is a strong aversion for open competition. Currently, there is no competition, especially when it comes to handling of cargo in the terminals/yards. Moreover, bureaucracy, the lack of equipment availability, deficiency in staff training and the absence of effective management systems have placed a lid on the potential of Port of Tema in making it the gateway to West Africa.

5.1.2 Major challenges facing the Tema Port

The Operations Manager of MPS was of the opinion that the foremost challenge that faced Tema Port was infrastructural constraints. He highlighted the following infrastructural constraints:

- 1. Shallow access channels and berths which does not allow bigger vessels in. The current depth of the port is about 8-9.4 meters.
- Limited capacity of container stacking yards. Although, the inland container depots were introduced to decongest the Port, GPHA has taken back this role, resulting in an increase in congestion
- 3. Lack of equipment availability, for example there are limited quay cranes
- 4. Poor hinter land conditions. The major connecting roads to the Port (Sakumono and Tema General Hospital Roads) are all in a bad condition and the port approach roads are congested.
- 5. The absence of a rail system in the port
- 6. Poor cooperation between the port authority and city authority (municipal authority). Both parties are often involved in disputes over lands.
- 7. Lack of funds for major port investments, such as port expansion and the purchase of equipment.
- 8. Cumbersome cargo clearing procedures

5.1.3 How can these challenges be addressed?

To address these challenges, the Operations Manager of MPS recommended the following measures:

There is the need to expand the Port; with the cargo growth rate hovering around 20-25%, the current cargo volume has outgrown the size of the Port. Consequently, the government and the Port Authority will need to source for funding to undertake the expansion. Alternatively, building a third port with about 30 or 50 meters depth will ease the congestion significantly. This will also help support the assertion that Ghana is the maritime hub in the Sub region. Dredging and deepening of the existing berths should also be considered. Moreover, the expansion of the approach roads to the Port is germane. In solving the problem of congestion in the Port, the City and Port authorities will have to relocate companies, which do not necessarily have to be in the port in order to free more land for port development.

In addition to the above, it would be expedient to reduce the licensing of stevedores. This will make the stevedores efficient and effective in the performance of their duties. Furthermore, to enhance the competitiveness of the Port, a reform of the institutional and regulatory frameworks will have to be done. This might mean making GPHA solely the landlord and privatizing the other functions. To facilitate the clearing of cargo in the Port, the use of professional and competent clearing freight forwarding agents is extremely vital. Likewise, there has to be good ICT platforms to facilitate clearance procedures and movement of goods through the port. For example, MPS issues waybills electronically while GPHA produces waybills manually. The latter leads to human interventions with the bribery and the delays associated with it.

5.2 What innovative services have you put in place to enhance service quality in your organization?

The Operations Manager of MPS provided the following responses:

MPS has a terminal operation system which is IT supported and this helps to relocate and identify containers as quickly as possible. The Company has also introduced an electronic way billing system, which fast tracks customer payment processes. It has also taken delivery of more equipment and these include cranes, mobile harbour cranes, ship-to-shore gantry cranes and rubber tyre cranes, all with the aim of facilitating the service delivery in the port. Additionally, MPS has set its sights on creating a pedestrian-free terminal. Presently, there are less people working on the ground and the era of tally clerks tallying in the terminal is a thing of the past. Furthermore, shuttle buses have been introduced to pick people up from the terminal to avoid them driving around the terminal in their private cars. Also, staff training to improve service quality is an ongoing development. Lastly, the terminal has taken security precautions by fixing CCTV's to monitor cargo and people movement.

5.3 What should be done to make the Ghanaian maritime industry a model of excellence in West Africa?

In response to the question above, the Operations Manager recommended the following:

The expansion of Tema Port as well as the option of building a third Port, which is about 30-50 meters deep to position Ghana as the real gateway to West Africa. Also, there is the need to support port and terminal operations with an effective IT system. The construction of good access roads to the nation's ports is a must. Moreover, various service providers will have to place a premium on recruiting and training their personnel. The level of human intervention in customs clearance procedures should be minimal. Above all, the entire Ghanaian maritime strata should become customer oriented.

5.4 Responses of the Customer Service Manager of Maersk

5.4.1 Assessment of the state of service quality in Tema Port

The Customer Services Manager of Maersk was of the view that GPHA, which is the landlord and main operator in Tema Port, inspite of all its capacity was limited in its efficient flow of work owing to manual operations. Comparatively, MPS' operations seem more planned and offered a better service than GPHA and the other stevedoring companies. Also, there were delays in the transfer of containers amongst terminals, affecting how quickly shippers can take delivery of containers. For example, MPS containers must be moved within 72 hours to the various terminals but that is not the case in reality. In his estimation, the performance of CEPS had improved over the period: CEPS has put in place a standardized response to specific issues, which is very important. Thus how quickly an importer clears his shipment would be largely dependent on the CEPS officer he deals with, and with the new sense of professionalism being exhibited by CEPS officers, importers are now faced with fewer bottlenecks in their dealings with CEPS. However, there is still ambiguity with the levying of custom duties on goods; while some customs officers charge as far back as the date of when a vessel was rotated, others charge from date of discharge.

In the case of clearing and forwarding agents, quite a number of them are not transparent in their transactions with shippers, i.e. the amount they have to pay and the documents they need in the clearance process. This, in the end, compromises the integrity of the clearance process. He stated that the Food and Drugs Board was culpable for delays in their checks, resulting in congestion in the Port. Also, the work of the National Security seems mysterious, despite their involvement with every container that is shipped in and out of the port, they are not seen undertaking any checks and yet go through the formality of endorsing shipping documents. In the case of shipping lines he added that on their failure to release a shipment during the intended period, the whole port process is delayed.

5.4.2 Major challenges facing Tema Port

He stated that the traffic volume of the Port had shot up considerably, but the cargo handling equipment was limited to meet the increase, leading to congestion. He also corroborated the assertion by the Operations Manager of MPS that the Port had draft and vessel size restrictions. Additionally, there was limited availability of trucks to move cargo from the shipside to the terminals, as well as between terminals. Furthermore, the Port's efficiency is constrained by manual processes and there is an urgent need to embrace a fully electronic management platform.

5.4.3 How can these challenges be addressed?

To address the challenges above, the Customer Service Manager of Maersk proposed the following:

- An expansion of the port, investment in additional cargo handling equipment as well as an increase in the truck capacity.
- The need for the existing berths to be dredged to allow vessels with bigger drafts to call the Port.
- Training of the key companies, especially state institutions, scheduled to migrate to the electronic platform in the port.

5.4.4 What innovative services have you put in place to enhance service quality in your organization?

According to him, Maersk had introduced ATM style self-service computers, which allow customers to track their vessels and use them to make bookings. The Company is involved in training clearing and forwarding agents on the use of computers and certificates are issued to them on completion of the programme, with the aim of equipping them to utilize Maersk's online processes. He added that Maersk had developed software to monitor the whole release process and the company is able to put measures in place to address any delays detected in the process. This has been done to ensure that clearing and forwarding agents are served in good time. Moreover, the Shipping Agency has introduced a ticketing system, which controls and creates orderliness in the release process and provides data on the services. Lastly, Maersk undertakes surveys to obtain feedback from customers on their service delivery.

5.4.5 What should be done to make the Ghanaian maritime industry a model of excellence in West Africa?

According to him, port expansion was very germane. Also, the various service providers have to be proactive in dealing with the challenges catalogued above. Lastly, there has to be clear regulations in the industry for predictability in transacting business in Ghana's ports.

5.5 Responses of Nestor Ghalley, former Director General of GPHA

5.5.1 Assessment of the state of service quality in Tema Port

Mr. Ghalley believed that service quality in the Port had seen a marked improvement, and was still improving compared to the early 1980s and mid 1990s. He recounted in the 1980s when it took months to work on a vessel manually. But now, there are equipment and trained personnel who are able to work on vessels within hours and maximum a week, on vessels that are docked in the ports.

5.5.2 Major challenges facing Tema Port

He opined that the major challenge at Tema Port was congestion due to limited space. He conceded that proper planning was not done given the limited land available to the port.

5.5.3 How can these challenges be addressed?

He recommended that there would be the need to redesign the port area to enhance effective operations.

5.5.4 What innovative services have you put in place to enhance service quality in your organization?

According to him, under his watch the equipment base of Tema port was enhanced and he also vigorously pursued private sector participation in the ports operation, because of the financial capacity of the private sector.

5.5.5 What should be done to make the Ghanaian maritime industry a model of excellence in West Africa?

The former Director General (DG) stated that there has to be proper and efficient regulation on service standards and competitive freight rates.

5.6. Responses of the National Administrator of GIFF

5.6.1 Assessment of the state of service quality in Tema Port

Service quality of the Tema Port according to the National Administrator of GIFF was average. He added that information flow amongst the various stakeholders was very poor. Furthermore, there was too much bureaucracy in port operations. He highlighted the four hours issue of delay in the port when vessels arrive before discharging their cargo. Moreover, he decried the political interferences of various governments in determining who becomes the Director General of the Port as this sometimes alters the service quality direction of the Port. Captain Amanhyia stated that, it was unfortunate that the relationship amongst the various service providers in the Port was hostile instead of cooperative.

5.6.2 Major challenges facing Tema Port

Captain Amanhyia reiterated the claim by the other interviewees of the draft restrictions of Tema Port. He added that about 14-16 meters is needed, instead of the current 12 meters. According to him, there was an erroneous impression by GPHA that Tema Port serves only Ghana's landlocked neighbours instead of looking at attracting customers all over the sub-region. He complained of the spate of pilferage in the Port. Furthermore, there was a supply chain security problem where cargo does not leave the port after 8 p.m. This creates a backlog of activities the next morning, thus slowing the movement of cargo in the port. Moreover, the difficulty in locating containers in the port should be a thing of the past. He was also of the view that Destination Inspection Companies had to be scrapped, because they had not achieved their purpose.

5.6.3 How can these challenges be addressed?

He advised that the various service providers should make the recruitment, training and motivation of their staff a front burner issue to enhance the quality of service they provide to shippers. In addition to this, various service providers should utilize modern and efficient methods and technology in their day to day business. Moreover, he proposed the creation of more gates in the port to facilitate the movement of cargo and humans.

5.6.4 What innovative services have you put in place to enhance service quality in your organization?

GIFF has started a massive training programme and as a result most freight forwarders are now acting professionally. Modern methods in freight forwarding are being applied now.

5.6.5 What should be done to make the Ghanaian maritime industry a model of excellence in West Africa?

Ghanaian ports should make use of modern and efficient methods and technology. Presently, most organizations choose managers based on the fact that they have been in the organization for a long time. That is very wrong. Also, benchmarking of the various service providers in the Ghanaian maritime industry with those in other countries needs to be practiced.

5.7 Responses of the Dean of Maritime Studies (Dr. Michael Manuel), Regional Maritime University

5.7.1 Assessment of the state of service quality in Tema Port and major challenges facing Tema Port

Dr. Manuel opined that service delivery in Tema Port was plagued by shallow berths and limited equipment capacity thus barring bigger vessels from calling the Port and also resulting in slow turnaround time for vessels. He added that most private stevedores do not have the wherewithal to purchase straddle carriers, reach stackers etc. and end up borrowing equipment from GPHA to be able to carry out their functions. In the case of CEPS, he was of the view that the use of Tema Port as main collection point for taxes and duties on imported goods, leads to the port becoming a chokepoint instead of an area for the facilitation of the clearance of goods. The issues of trucking being the main modal service in Tema Port and undertaking of devanning activities within the precincts of the Port have contributed greatly to congestion in the Port. Additionally, the scanning of containers in Tema Port is detached from the handling process lengthening the clearance process instead of shortening. Furthermore, in his view, Ghana has few customs brokers who qualify to be referred to as freight forwarders and that the chunk of them are actually clearing agents. Some clearing agents, in their bid to exploit shippers, use fake documentation and quote arbitrary charges.

5.7.2 How can these challenges be addressed?

He stated that the challenges facing the port could be tackled in two ways: the national and port contexts. According to him, the seaside solutions will involve port expansion, the deepening of berths and the purchase of more equipment. However, the shore side solutions will require the creation of transport mode transitions that allow for devanning and other services beyond the confines of Tema Port. Examples

will be the construction of the railway links to Boankra and to Akosombo to ease the congestion in the Port and facilitate the transport of goods to Ghana's landlocked neighbours. In addition to this, CEPS should come up with an efficient and effective means of collecting taxes and duties on imported goods, which is removed from the clearance process to help facilitate the clearance of goods. Also, Tema Port should be looking at incorporating the scanning of goods into the handling process rather than making it a separate function. A good example to learn from is the innovation in United States ports which will allow for the scanning of containers to be done alongside with the handling process (Cargo Security International, 2008). Underpinning these solutions will be the education and sensitization of the human resources of the various service providers on being customer oriented in all their operations to understand the implications of their role in the logistics chain.

5.7.3 What measures have the Regional Maritime University put in place to ensure that graduates are service oriented and well trained to meet the needs of the Ghanaian Maritime Industry?

Dr. Manuel stated that the University has signed Memoranda of Understanding with shipping companies such as MSCA and SDV to give their students internship opportunities. Although what exists in these shipping companies might not necessarily be best practice of service quality, it will help them to juxtapose it with what they are taught in the classroom and learn from them. The university has started a BSc Logistics Management programme, which is delivered in partnership with Shanghai Maritime University. During the third year of the programme students travel to Shanghai Maritime University to study and are given practical attachment opportunities at Shanghai Port. He added that this experience helps students to minimize the shortfalls in the Ghanaian maritime industry with the Shanghai example and gives them a more professional outlook in approaching their roles in future.

5.7.4 What should be done to make the Ghanaian Maritime Industry a model of excellence in West Africa?

Dr. Manuel postulated that there was the need to articulate a good maritime policy which has a clearly spelt out vision which takes into account all stakeholders. According to him, the current transport practice is hardly known by most practitioners in the maritime industry. Also, the bane of the maritime industry over the years has been taking ad-hoc measures towards handling issues, if Ghana wants to be a model of excellence, the country will have to adopt a long-term approach. Furthermore, the country should have educated people who are committed towards fulfilling the objectives of the maritime policy over the long term.

Chapter six

Summary of Findings, Recommendations and Conclusion

6.1 Summary of Findings

This study, which is a thorough examination of enhancing service quality in the Tema Port, covered the following major topics:

- The existing service quality in Tema Port
- Views of clearing agents/freight forwarders and shippers on the current state of service quality in Tema Port and how it can be enhanced.
- The opinions of leading maritime executives on the present state of service quality in Tema Port and how it can be improved.
- A summary of the findings, conclusion and recommendations on how service quality can be enhanced in the Tema Port.

The study revealed that in terms of schedule reliability, which is an important indicator of service quality, major shipping lines such as Maersk, CMA CGM, Mitsui O.S.K and MSC have a good on-time performance in the Ghanaian market, and this is a reflection of their on-time performance internationally. Moreover, considering shipping agency charges, as per the Ghana Shippers' Authority report on shipping agency charges, it was observed that, with the exception of ISAG, whose shipping agency charges were the lowest, the remaining five being considered for the research were high. The only source of conflict between the Ghana Shippers' Authority report and the responses obtained from the respondents on the demurrage and shipping agency charges was the fact that the former ranked MOL as very high, while that of the latter was average. In doing an overall assessment of the service quality of the shipping agencies: Maersk, Delmas, MSCA, MOL, Hull Blyth and ISAG were ranked from best to worst respectively. Furthermore, some persistent problems with the service delivery of the shipping agencies which were made known by the study include: delays in the release process (ISAG), office location too far from the Port

(Hull Blyth), failure to pick up phone calls (Maersk, MOL,Delmas), non-refundable demurrage payments(MOL) and delays in releasing delivery order (Maersk).

The Ghana Ports and Harbours Authority was given an average rating for service quality by the respondents. This was largely due to congestion and the lack of equipment among other problems in Tema Port. Also, a comparative analysis of the stevedoring charges of GPHA, Nigeria Port Authority and the AP Moller Terminal Ltd Liberia showed that GPHA's tariff was fairly competitive for containerized laden imports and exports compared to APMT Liberia Ltd and the Nigeria Port Authority. However, in the case of imported and exported empty containers, GPHA stevedoring charges were more expensive than those of APMT Liberia Ltd and the Nigeria Port Authority. Also, the study revealed that GPHA has introduced new initiatives such as the use of electronic harbour passes in Tema Port and alerting freight forwarders/shippers with text messages to notify them of the positioning of their containers for devanning. Nonetheless, it emerged from the study that GPHA had a lack of customer intimacy and this was accentuated by employees at the customer service (counter) not being customer oriented, limited working hours (9:00am-4:00pm), and lack of space for devanning containers, among others. With regards to the assessment of service quality in Tema Port the issues of the efficient flow of work being hampered by GPHA's manual documentation, CEPS new lease of proactiveness in resolving shipper problems, albeit it still has an ambiguity in levying custom duties, the lack of transparency in the operations of clearing/freight forwarding agents, Food and Drugs Board's delays, National Security's alleged nonperformance of role, and the need for shipping agents to accelerate their release processes were highlighted by the interviewees. Common threads which run through the interviewees' assessment of service quality in Tema Port were the delays in port processes caused by GPHA's manual documentation and bureaucracy and the lack of transparency in the operations of clearing agents/freight forwarders. These were also confirmed by the responses received from the questionnaires.

Additionally, suggestions made by interviewees and respondents on how to deal with the major challenges facing Tema Port can be divided into two: sea side and shore side solutions. The sea side solutions include, dredging of existing berths, port expansion and building of a new port. The shore side solutions consist, on the other hand, consist of creation of transport mode transitions that allow for devanning and other services beyond the confines of Tema Port, purchase of more equipment, the introduction of an effective ICT management platform for port processes, the need for CEPS to devise a system for levying duties on goods outside the precincts of the Port and the continuous education and training of staff of the various service providers to improve their service output.

From the responses obtained from the questionnaires, it was revealed that the number of days it takes to clear cargo through MPS was **two days** and overall MPS has a **good service rating**. This was made possible by its investment in equipment, high technological usage, effective management practices, competent personnel and customer orientation. The high technological usage was lauded by the Customer Services Manager of Maersk who juxtaposed it with GPHA's manual documentation process. The study also revealed that MPS had new initiatives such as the use of electronic invoices, 24 hour working schedule and the issuing of permits to clearing agents/freight forwarders prior to their entering the port. Nevertheless, from the study, MPS was challenged to develop more efficient container stacking methods, quicken the transfer of containers to the terminals and to motivate their staff better in order to retain them.

The clearing agency/freight forwarding industry in Tema Port received an **average rating** in the study. The failure to weed out charlatans emerged as the major obstacle confronting the freight forwarding business; this claim was supported by the Customer Services Manager of Maersk and the Dean of Maritime Studies of the Regional Maritime University. Other challenges include lack of cooperation from other stakeholders, the deficiency in competent personnel and the lack of training of clearing/forwarding agents. The respondents' proposals for improved service

delivery in the business were continuous capacity building, urgent need for the industry to be regulated, foster good relationship building with CEPS to enhance revenue generation and the need to encourage mergers and acquisitions. Moreover, from the study, Ghana Shippers' Authority was assessed as **average** in its service quality. This was largely influenced by its failure to bring to an end the uncapped shipping agency charges in Tema Port, which from all indications is the foremost need of shippers. The GSA however, received good reviews for its promotion of shipper education, solutions for shipper complaints and the provision of infrastructure and technological innovation to enhance trade facilitation. Suggestions made to improve the service delivery of GSA comprise the following: GSA should be given the needed legal mandate to represent shippers more effectively, operations of GSA should be free from political interference, and visits to shippers should be increased and the building of good relational ties with other stakeholders.

In the study CEPS was rated as an average performer in terms of service delivery. It was encumbered with bureaucracy, bribery and corruption, weak reporting lines, the need to motivate staff and the lack of competent personnel, in terms of severity. These challenges were ranked from the highest to the lowest. An issue which was raised by the Dean of Maritime Studies in the Regional Maritime University on the operations of CEPS was the need for it to develop a way of levying duties on cargo outside the precincts of the Port to facilitate cargo clearance. In terms of new initiatives, CEPS has introduced a policy to transfer its staff every two years to help combat corruption and to prevent them from getting rusty on the job. Also, CEPS provides services on Saturdays for clearing agents/freight forwarders to help fasttrack their operations in the Port.It emerged from the study that overall, the GCNet is an average performer. Also, the introduction of the GCNet has led to the elimination of paper work in CEPS' cargo clearance. Majority of the respondents were of the view that CEPS' revenue collection has increased since the advent of the GCNet. With the Destination Inspection Companies majority of the respondents (36%) were of the view that it takes 3-5 days for an FCVR to be issued. More so, CEPS was cited as the service provider which frustrates the work of the DIC's by rejecting their

values and imposing their own. The scanning system which is manned by DI Companies was said to be largely stifled by power failure and physical examination after scanning. Furthermore, more than 50% of the respondents were of the view that the DIC's have been largely beneficial to the cargo clearance process in the Tema Port, for example it helps to curtail demurrage since you can get the customs valuation before the cargo arrives. This is in sharp contrast with the view of Capt Amanhyia who recommended that the destination companies be scrapped for failing to live up to expectation.

The study also revealed that freight forwarders/clearing agents knew very little about the operations of the Ghana Maritime Authority. The few suggestions on improving the service quality of Ghana Maritime Authority proffered by the respondents include: working within the confines of their legal mandate and increase awareness of their activities and collaborate with other service providers to enhance the service standards in the industry. Also, there have been varying views on the number of days it takes to clear cargo through Tema Port. From the responses obtained, it takes 5 days on average to clear cargo through Tema Port. Moreover, a topical debate, which has been causing waves is whether there is a need for an organization, existing or new to monitor the service standards in the industry. It transpired from the study that the majority (67%) of the respondents were in support of an existing organization, while 17% preferred an entirely new organization to be created entirely to perform this function, and the remaining 16% wanted the status quo to be retained. The study also sought to find out the innovative services put in place by the various service providers to improve the service quality they provide to shippers. In line with this, MPS has a terminal operation system which is IT driven, an electronic billing system to accelerate customer payments, increase in equipment capacity, an ongoing employee development programme, security systems, such as CCTV to safeguard cargo and people in the Port and has adopted measures to become a pedestrian free terminal. In the case of Maersk Ghana, the study showed that it had introduced ATM style self-service computers to help in tracking their vessels and in effecting bookings. Also, Maersk Ghana carries out training programmes for clearing/ forwarding agents to maximize the utility of its online processes. Moreover, it has software to monitor the whole release process with the aim of reducing delays in clearance process, as well as a ticketing system to create orderliness in the release process. In order to stay customer oriented, Maersk Ghana undertakes regular customer surveys. Additionally, on the issue of innovation, the previous Director General of GPHA stated that under his watch GPHA had increased its equipment capacity and had also opened the port to private sector participation to enhance service quality.

Ghana Institute of Freight Forwarders in positioning itself to be innovative and service oriented has made the education of its members a front burner issue as per the FIATA standards. In addition to this, the Regional Maritime University in its quest to turn out graduates that are service oriented and well trained to meet the needs of the industry has signed MOU's with the Bollore Group (SDV) and MSCA to provide internship opportunities for their students. The University believes that although what pertains in these organizations might not necessarily be best practice, it would help their students to relate their experience with what they are taught in school. Also, RMU has introduced a BSc Logistics Management programme in partnership with Shanghai Maritime University to furnish students with a practical working environment and professional exposure. On the question of what should be done to make the Ghanaian maritime industry a model of excellence in West Africa, the study highlighted the following responses. The Operations Manager of MPS outlined the following actions: port expansion, building a third port, supporting port and terminal operations with an effective IT system, construction of good access roads to the Ports, coupled with raising the bar on recruitment and training of personnel and most of all the whole maritime strata working in synergy to enhance customer satisfaction. The issue of port expansion was corroborated by the Customer Service Manager of Maersk, as well as the need to have clear regulations in the industry to ensure predictability in doing business in the Ghanaian maritime industry. The former Director General of GPHA on his part supported the need to have clear regulations on service standards and competitive freight rates. The Dean of Maritime Studies of the Regional Maritime University said for this to happen the country should develop a good maritime policy which has a clearly spelt out vision, which takes into account the activities of all the stakeholders. The country should also refrain from employing only short term measures in addressing the challenges of the industry. Above all, the industry should have educated and enterprising people who are committed to fulfilling the objectives of the maritime policy.

6.2 Recommendations

In the context of the overall study analysis and findings, it is clear that measures to enhance service quality in the Ghanaian maritime industry will require various service providers to tailor their services to meet the needs of shippers. Moreover, there will be a need for a collaborative effort amongst the various service providers to make this possible. To achieve this, the following immediate and short to long-term immediate actions are recommended:

6.2.1 Organizational Context

6.2.1.1 Shipping Agencies

Shipping Agencies such as Hull Blyth and ISAG should work on improving their ontime performance. In an era of Just-in-time (JIT) logistics, most manufacturers would
prefer to use shipping agents that work in tandem with their estimated time of arrival,
and as stated by Sea Intel, shipping lines/agents can reduce costs by being more
punctual (Leach, 2012). Also, problems that have been raised by shippers/freight
forwarders, such as some shipping agencies (Maersk, Delmas and MOL) not picking
up phone calls, office location being too far from the Port (Hull Blyth), poor
response to customer complaints and bureaucracy in documentation (MSCA), and
delays in release process (ISAG and Delmas) have to addressed urgently.
Furthermore, shipping agencies should be looking at innovative means of serving
customers, such as the use of electronic invoices, track and trace, online bookings, all
with the aim of enhancing service quality.

It is also recommended that, shipping agencies in Ghana become good corporate citizens by making environmental protection and corporate social responsibility,

front burner issues, in order to endear themselves to the community and as a result increase the patronage of their services. Most of all, shipping agencies service quality initiatives will be largely supported by having in place the right recruitment, training and motivation schemes.

6.2.1.2 Ghana Ports and Harbours Authority

GPHA would have to develop certain seaside and shore-side measures to be able to enhance its service quality to both shipping lines and shippers. As stated by the Operations Manager of MPS the current cargo volume growth in Tema Port is around 20-25%. This signals the need for an expansion of the Port. In an interview, with the GSA (Ghana Shippers Authority, 2011) the General Manager for Corporate Planning at GPHA indicated that were plans in the near future to reclaim land from the sea for port expansion as well as dredge existing berths to allow for bigger vessels into the port. It is recommended that GPHA should take immediate steps to implement these measures. Furthermore, to enhance the service quality provided by stevedores in the Port, GPHA may need to consider scaling down their number based on their current output, and extend the contracts of the shortlisted stevedores in order to motivate them to make the needed investment in equipment and set performance benchmarks for them to work with. In addition to this, GPHA has to augment its equipment capacity as well as have an IT supported terminal operation system and an electronic billing system to help facilitate its operations in the Port. GPHA will also need to take a second look at having separate scanning units in the Port and see how the scanning process can be married with the handling process as is being done by ports in the US (Cargo Security International, 2008). Such a move will help keep the delays in cargo clearance in the Port to a minimum. Moreover, GPHA would improve on its services a great deal by learning from the best practices of top performing ports such as Singapore, Rotterdam and Hamburg among others. It came as a surprise to many, that GPHA after allowing the establishment of the inland container depots to ease congestion has taken a sizable amount of the cargo back from them, aggravating the congestion situation in Tema port. In the long term, GPHA should consider transitioning into a Landlord Port and privatizing other functions to enhance its competitiveness and service quality.

6.2.1.3 Meridian Port Services (MPS)

Though MPS received a favourable assessment from respondents for its service quality initiatives, there are still issues it needs to address. It would need to come up with a quicker means of issuing permits and invoices and transferring containers to other terminals. In addition to this, the company needs to improve its container stacking arrangements for easy accessibility. MPS has also had labour issues in the past leading to a disruption in its services. It must seriously look at staff motivation in order not to lose its skilled staff. To keep up with the changing trends in terminal management, MPS must continually innovate and learn from best practices in the industry and constantly offer customer enhancing solutions.

6.2.1.4 Clearing agency/freight forwarding

The clearing agency/freight forwarding in Tema Port is beset with charlatans swindling unsuspecting shippers of their monies as well as submitting fake documentation all with the aim of exploiting the system. This has led to persistent calls for regulating the activities of clearing agents/freight forwarders. In view of this, the proposed new regulations of the Ghana Shippers' Authority will require freight forwarders to provide 'minimum standard and quality of service' requirement to be able to operate in the industry (Citifmonline.com, 2012). Although this has been met with animosity from the freight forwarders, this regulation will help bring sanity into the freight forwarding business and go a long way to benefit shippers and freight forwarders alike. Furthermore, the move by GIFF to build capacity in freight forwarding by organizing FIATA Diploma programmes is a step in the right direction and should be encouraged. GIFF should also focus on developing clearing agents into freight forwarders, thereby positioning them for the opportunities of the international freight forwarding market. Additionally, mergers and consolidations should be encouraged in the freight forwarding industry to make it more competitive and enhance the service delivery.

6.2.1.5 Ghana Shippers' Authority (GSA)

GSA was rated as an average performer by the respondents. For most of the respondents they were quite satisfied with the work of the GSA. But, it was obvious from the responses received that they were very concerned about the GSA's inability to provide a solution to the varying shipping agency charges in the industry. Shippers will have their interests protected if the Ghana Shippers' Authority is actively involved in the negotiation of shipping line charges with the shipping agents. Moreover, it is important that the GSA has a presence in the Port to acquaint itself with the day to day port operations, in order to familiarize itself with the challenges faced by shippers and provide them the needed assistance. Also, visits to shippers should be increased and GSA should encourage a lot more of them to participate in the shipper committee meetings to help deepen the Authority's relationship with shippers. Furthermore, in line with efforts by the GSA to monitor the service standards in the freight forwarding business, it should release a service quality assessment report annually on the various service providers in the industry. This will help shippers make informed decisions on the choice of service providers and drive the various players to improve on their service delivery. It is worth adding that, the sterling contributions being made by the GSA in promoting the education of the shipping community and judges on pertinent maritime issues and the provision of mobiship services, among others are worth celebrating.

6.2.1.6 CEPS

The challenges confronting CEPS have been identified earlier as lack of training, unprofessionalism of some officers i.e. lateness to work, delays, bribery and corruption among others. To improve the service quality being provided by CEPS, there will be a need for a shift in organizational identity i.e. from a regulatory agency to a customer service agency. This will involve organizing customer service orientation programmes for staff, providing attractive remuneration and using job rotation and job enlargement strategies to motivate staff, increased monitoring and supervision of staff and encouraging self-clearance of goods by importers as

practiced in most developed nations. Moreover, to enhance CEPS' revenue collection, freight forwarders should be seen by CEPS as partners and not to be victimized. Also, the issue of levying duties on goods outside the Port needs to be seriously looked at.

6.2.1.7 GCNet

In order to improve the GCNet system performance in the cargo clearance process the Ghana Shippers Authority's report on the GCNet recommended:

that full automation of the clearance regimes be pursued with the needed urgency so that delays are reduced and turnaround time improved at the port.

It would also be crucial for all agencies involved in the clearance regime to be hooked up to the GCNet system. The system should also be made user friendly and continuous education on new features of the system should vigorously be pursued among users (shippers). The introduction of the Ghana Integrated Clearance Regime (GICR) by the GCNet, which is to be piloted in Tema port, would also be welcome news to importers and exporters. It is a system that is intended to give full automation to the clearance process thus eliminating the manual procedures so as to enhance the speedy clearance of cargo at the ports. This will in effect help forestall the payments of surcharges such as demurrage and high rent. On the way forward, the GCNet system should be streamlined to mitigate the challenges identified in the study. The system should also be strengthened against any manipulation in order to guarantee the integrity of the system among shippers. Moreover, the frequent breakdown of the system should be reduced as much as possible. The full automation of the GCNet system can only be the guarantee to a speedy and cost effective regime of cargo clearance in the country. This has been done in Singapore and China successfully.

6.2.1.8 Destination Inspection Companies

The GSA report on the DI Companies highlighted the following suggestions for improved service quality. It was observed that the location of the DICs do not augur

well for the speedy acquisition of FCVRs, especially when invoices are rejected due to the suspicion that they may have been manipulated or created by buyers themselves. Thus the issues of the DICs being located within the port area would be of utmost importance to the clearing process. GCNet's proposed automation of the whole cargo clearance process will help bridge this gap. Also, the automation of the operation of the DICs such that the human element in determining the duties payable on goods can be eliminated should be urgently looked at. Furthermore, the issue of combining the scanning and handling processes together, recommended above, will help reduce the delays associated with scanning of goods by the DIC.

From the study most shippers were of the view that Customs does the valuation itself or there should be several DICs from which they can choose. The belief is that if there are a number of DICs to choose from, there would be competition among them and thus result in an improvement in their service quality or Customs resumption of the role of conducting valuations will help avoid the back and forth in the process. Although there might be contrasting views on how to conduct valuations, the underlining opinion was that operations of the DICs should be automated such that the human element may be minimized.

6.2.1.9 Other allied agencies

In reinforcing the prescriptions of the respondents above, it is worth stating that Ghana Maritime Authority should work within the legal confines of its mandate, collaborate with other service providers on raising service standards in the industry and work on improving its brand awareness in the industry to enhance its service quality.

The Food and Drugs Board should find out reasons for the delay in its processes and work to correct them. National Security also needs to justify their role in the Port by not just performing pro forma endorsements of documents as alleged but must really be involved with the port processes.

6.2.2 National context

As mentioned earlier by the Dean of Maritime Studies, RMU, Ghana needs a good maritime policy with a clearly spelt out vision. Such a maritime policy must factor the activities of various service providers and have well-defined milestones. The maritime policy ought to be supported by a group of educated and enterprising people who are committed towards its fulfillment. For the country to become a model of excellence in the maritime industry in Africa and beyond, there is need not to resort to only short term solutions in addressing challenges in the industry but to adopt long term solutions as well. Also, the government should work assiduously on raising funds for the rail way links to Boankra and Akosombo, all with the aim of creating devanning centres outside Tema Port, thereby helping facilitate the transit trade and ease congestion in the port. In addition to this, the government should look at empowering an existing organization to monitor service standards in the maritime industry, and as per the discussions on this subject, Ghana Shippers' Authority seems well placed to carry out this function. Furthermore, the promotion of maritime education should become central in the government's development agenda. In view of this, it is recommended that the government should establish a campus of Regional Maritime University in the Western Region to serve Takoradi Port, which is poised to develop into a major maritime centre in Ghana owing to the discovery of oil in the area.

6.3 Concluding Remarks

This research project has attempted to examine service quality in the maritime industry with focus on Tema Port. Even though, it is not exhaustive of all the issues relating to service quality in the maritime industry, the study did provide a sufficient and necessary overview of the service quality in Tema Port. It can serve as a working document on enhancing service quality in the Ghanaian maritime industry and some valuable lessons can be drawn from it, for ports in Africa and in other developing countries. In view of the limited time and resources available to conduct this research, it is recommended that further research be conducted on the subject.

References

- Abdalla,S.,(2009).Maritime Law and Legislation in the Context of Administration of Maritime Affairs: A Case Study of Zanzibar in Comparison with the Territories under the Sovereignty of British Crown. Retrieved on September 6, 2012 from
 - http://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=1555379&fileOId=1563639
- Abiaw, C. (2011). The impact of customer service on cargo clearance: a case study of freight forwarders at Tema Port. (Unpublished Master's dissertation), Regional Maritime University, Accra
- Amanhyia, W.K.(n.d). The freight forwarder and trade facilitation. Retrieved on September 6, 2012 from www.cepa.org.gh/researchpapers/Trade-facilitation-freight-Forwarders-200533.pdf
- American Shipper (1999). Internet offers promise, threat, Vol. 41 No. 4, p. 44.

 Retrieved on September 6, 2012 from:

 http://search.proquest.com/docview/232594251/139DCA883705C557DC3/3?accountid=43722
- Ansah, P.A. (n.d). Developing Ports-the Case of Ghana, Retrieved on September 6, 2012 from http://www.ichca.com/about_us/Post%20Conference%20Info/Paul%20Asare%20Ansah%20-%20Developing%20Ports.pdf
- APM Terminals (n.d). MISE Program. Retrieved on September 6, 2012 from http://www.apmterminals.com/careers.aspx?id=6691&image=8463
- APMT Liberia Ltd (n.d).APMT Liberia Ltd Tariff. Retrieved on September 6, 2012 from http://www.apmterminals.com/uploadedFiles/africa-mideast-india/monrovia/Tariff%20of%20APM%20Terminals%20Liberia.pdf
- Bardsley, N. (2000). Freight forwarding: Marketing Report, 12th edition, (London: Key Note), 41. Retrieved on September 6, 2012 from http://search.proquest.com/docview/204587017/139DC8024062D66176E/1?accountid=43722

- Bengtson, S. (1992). Safety and quality standards in shipping: the challenge of the 90s. Retrieved on September 14, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- BIFA (1997). The International Freight Guide, (London: British International Freight Association, Lloyds of London Press), 1. Retrieved on September 6, 2012 from http://search.proquest.com/docview/204587017/139DC8024062D66176E/1?accountid=43722
- Bittner, M.J., and Hubbert, A.R. (1994). Encounter Satisfaction Versus Overall Satisfaction Versus Quality: The Customer's Voice. In R. Rust and R.L. Oliver (eds.), Service Quality: New Dimensions in Theory and Practice. Thousand Oaks, Calif.: Sage, 1994. Retrieved on September 12, 2012, from http://www.kenexa.com/Portals/0/Downloads/Customer%20Service%20from%20the%20Customer's%20Perspective.pdf
- Brooks, M.R. (1985). An alternative theoretical approach to the evaluation of liner shipping. Part II: choice criteria, Maritime Policy and Management, Vol. 12 No. 2, pp. 145-55. Retrieved on September 14, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Brooks, M.R. (1990). Ocean carrier selection criteria in a new environment,
 Logistics and Transport Review, Vol. 26 No. 4, pp. 339-55. Retrieved on
 September 14, 2012 from:
 http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Chartered Institute of Marketing Steering Group (2002). Services Marketing.

 Retrieved on September 12, 2012, from: http://www.pdfio.com/k-1132690.html
- Citifmonline.com (2012), Freight forwarders cry foul over new regulations.

 Retrieved from
 http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=22
 8871
- Confederation of European Security Services (2008). European Training Manual for Maritime Security Personnel/ISPS Code. Retrieved on September 6, 2012 from: http://www.aproser.org/pdf/coess/COESS-ISPSmanual.pdf

- Coyle, J.J., Bardi, E.J. and Langley, C.J., The Management of Business Logistics, 6th edition, (Minneapolis/St. Paul: West Publishing, 1996), p. 504. Retrieved on September 6, 2012 from http://search.proquest.com/docview/204591438/139DC7A53AF6EFBBF9E/1? accountid=43722
- Cotecna Government Services (n.d.). Retrieved on September 6, 2012 from http://www.cotecna.com/en/Services/Government-services/~/media/Documents/Infosheets/Infosheet_DI-en.ashx
- Cotham, J.C., Cravens, D.W. and Hendon, W.M. (1969). Measuring the quality of transport services, Transport Journal, Vol. 9, pp. 27-32. Retrieved on September 12, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Cotrill, K. (1999). Preparing for battle, Traffic World, Vol. 257 No. 7, pp. 28-32.

 Retrieved on September 6, 2012 from:

 http://search.proquest.com/docview/232594251/139B4B109632ACDB83A/1?accountid=43722
- Curry, A. (1999). Innovation in public service management. Managing Service Quality, Vol.9, No.3, pp. 180-190. Retrieved on September 12, 2012 from: http://www.proserv.nu/Docs/Servqual.pdf
- Dixon, R. (2003). The management Task (third edition). Oxford: Butterworth Heinemann (pp. 119-120)
- Ecoports (2004), available at: www.ecoports.com/. Retrieved on September 6, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Maritime and Port Authority of Singapore (2000). Quality Shipping Seminar, 2000: A Global Perspective. Retrieved on September 6, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Eliades, M.G. (1992). The contribution of international open registries towards the development of a quality shipping industry the challenge ahead. Retrieved on September 14, 2012 from

- http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- European Shippers Council (2012). EU takes off sharp edges Sulphur Directive. Retrieved on September 6, 2012 from: http://www.europeanshippers.com/
- Fiata (n.d). What are the projects realized until today? Retrieved on September 6, 2012 from http://www.fiata.com/index.php?id=203.
- Fogli, L (2007). Customer Service Delivery Research and Best Practices. San Francisco: Jossey-Bass (pp. 5). Retrieved on September 12, 2012, from: http://books.google.se/books?id=sUGD7IUY4SIC&printsec=frontcover&hl=sv&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Frankel, E.G. (1993). Total quality management in liner shipping. Marine Policy, Vol. 17 No. 1, pp. 58-63. Retrieved on September 14, 2012 from: http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Ghana Institute of Freight Forwarders (n.d). The Statistics Speak for themselves- A Center of Excellence. Retrieved on September 6, 2012 from http://www.ghanafreightforwarders.org/report.htm
- Ghana Port Authority (n.d), Unpublished Ghana Port Authority Tariff
- Ghana Shippers' Authority (2011). Unpublished third quarter report
- Ghana Shippers' Authority (2011). Unpublished first quarter report
- Ghana Shippers' Authority (2010). Unpublished second quarter report
- Ghana Shippers Authority (2012). Impact of the GCNet System on Cargo Clearance Procedure in Ghana. Unpublished report.
- Ghana Shippers' Authority (2012). Impact of the Destination Inspection Scheme (DI) in Ghana especially the cargo clearance process. Unpublished report.
- Gratsos, G.A. (1998). Quality shipping: myth or reality? in Haralambides, H.E. (Ed.), Quality Shipping: Market Mechanism for Safer Shipping and Cleaner Oceans, Erasmus Publishing, Rotterdam. Retrieved on September 14, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722

- Green Award (2004), available at: www.greenaward.org/home.htm. Retrieved on September 14, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Gronroos, C. (1992). Service Management: A Management Focus for Service Competition. In Lovelock, C.H. Managing Services: Marketing, Operations, and Human Resources (Eds.). Englewood Cliffs, NJ: Prentice Hall, 9-16. Retrieved on September 12, 2012, from:

 http://www.thesportjournal.org/article/review-service-quality-corporate-and-recreational-sportfitness-programs
- Hawkins, J. (2001). Quality shipping in the Asia Pacific Region. International Journal of Maritime Economics, Vol. 3 No. 1, pp. 79-101. Retrieved on September 14, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?ac countid=43722
- Hopkins, S., Strasser, S., Hopkins, W.E., Foster, J.R. (1993). Service quality gaps in the transportation industry: An empirical investigation, Journal of Business Logistics Retrieved on September 12, 2012, from:

 http://search.proquest.com/docview/212640263/139B3EAC8DA3EDB95F/1?accountid=43722
- International Trade Centre (n.d). Public –Private Partnership on Integrated Customs Services in Ghana. Retrieved on September 6, 2012 from www.intracen.org/WorkArea/DownloadAsset.aspx?id=50096
- Ireland, R., Cantens, T., and Yasui, T., (2011). An Overview of Performance Measurement in Customs Administrations, WCO Research Paper No.13

 Retrieved on September 6, 2012 from:

 http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/resear-ch/13 Performance Measurement 2011.pdf
- Kimberly, J., Kristensen, J.K., McLinden, G., (2011). Russian Federation Customs
 Development Project: Measurable Progress, Knowledge Brief, Volume
 41.Retrieved September 6, 2012 from:
 http://siteresources.worldbank.org/INTECALEA/Resources/KB_41_Russia_C_DP.pdf

- Leach, P., (2012). Vessel Schedule Reliability Reaches Record High. Retrieved on September 6, 2012 from http://www.joc.com/container-shipping/vessel-schedule-reliability-reaches-record-high
- Lewis, R.C. and Booms, B.H. (1983). The marketing aspects of service quality, in Berry, L., Shostack, G. and Upah, G. (Eds), Emerging Perspectives on Services Marketing, American Marketing Association, Chicago, IL, pp. 99-107. Retrieved on September 12, 2012 from: http://www.proserv.nu/Docs/Servqual.pdf
- Lopez, R.C. and Poole, N. (1998). Quality assurance in the maritime port logistics chain: the case of Valencia, Spain. Supply Chain Management, Vol. 3 No. 1, pp. 33-49. Retrieved on September 14, 2012 from:

 http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Luk, Sh.T.K. and Layton, R. (2002). Perception Gaps in customer expectations: Managers versus service providers and customer. The Service Industries Journal, Vol.22, No.2, April, pp. 109-128. Retrieved on September 12, 2012 from: http://www.proserv.nu/Docs/Servqual.pdf
 - Meridian Port Services Tema(n.d). About us. Retrieved on September 6, 2012 from: http://www.mps-gh.com/en/about-us/mission-and-vision.php
- Murphy, P.R., Dalenberg, D.R. and Daley, J.M. (1989). Assessing international port operations. International Journal of Physical Distribution and Materials Management, Vol. 19 No. 9, pp. 3-10. Retrieved on September 14, 2012 from: http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Murphy, P.R., Dalenberg, D.R. and Daley, J.M. (1991). Selecting links and nodes in international transport. Transport Journal, Vol. 31 No. 2, pp. 33-40. Retrieved on September 14, 2012 from: http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Murphy, P.R., Dalenberg, D.R. and Daley, J.M. (1992). Port selection criteria: an application of a transport research framework. Logistics and Transport Review, Vol. 28 No. 3, pp. 237-55. Retrieved on September 14, 2012 from: http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722

- National Service of Customs, Angola (n.d). Retrieved on September 6, 2012 from http://www.alfandegas.gv.ao/servicos.aspx
- New Crusading Guide (2011). President storms Tema Harbour over Anas video...we promise not to take bribes we have repented. Retrieved on September 6, 2012 from http://www.modernghana.com/news/315349/1/president-storms-tema-harbour-over-anas-video-we-p.html
- Nigeria Port Authority (n.d), Unpublished Nigeria Port Authority Tariff
- Nitecki, D.A, & Hernon, P. (2000). Measuring service quality at Yale University's Libraries, Journal of Academic Librarianship, vol.26 (4) pp. 259-273. Retrieved on September 12, 2012, from http://www.tarupublications.com/journals/jios/full-text/JIOS-27-1-2006/jios134.pdf
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985). A conceptual model of service quality and its implication. Journal of Marketing, Vol. 49, Fall, pp. 41-5 Retrieved on September 12, 2012 from:

 http://www.proserv.nu/Docs/Servqual.pdf
- Ruiter, W.D. (1999). Towards quality shipping. Retrieved on September 14, 2012 from http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Sasser, W.E., Olsen, R.P. and Wyckoff, D.D. (1978), Management of Service Operations, Allyn &Bacon,Boston,MA. Retrieved on September 12, 2012 from:

 http://www.iei.liu.se/fek/frist/722g04/722g60/gruppernas_artiklar_och_present_ationer/1.149265/GruppD3-Determinantsofservicequality..avRobertJohnston.pdf
- Scary, P. B. & Skjøtt-Larsen, T. (1995). Managing the Global Supply Chain,
 Handelshøjskolens Forlag, København. Retrieved on September 6, 2012 from
 http://search.proquest.com/docview/204586923/fulltextPDF/139DC906E2B7D604B42/1?accountid=43722
- Schneider, B&Bowen, D (1995). Winning the service gameUSA:Harvard Business School Press(pp. 19). Retrieved on September 12, 2012, from http://books.google.se/books?id=kGdX_my240cC&printsec=frontcover&hl=sv&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

- Slack, B. (1985). Containerisation, inter-port competition and port selection.
 Maritime Policy and Management, Vol. 12 No. 4, pp. 293-303. Retrieved on September 14, 2012 from:
 http://search.proquest.com/docview/227370461/139D8EE71971405A56D/1?accountid=43722
- Sletmo, G. K., Holste, S. (1994). Shippers' Councils: Role and Responsibility-A WesternView. Maritime Policy and Management. Vol. 21. No. 4. Retrieved on September 6, 2012 from:

 http://www4.worldbank.org/afr/ssatp/Resources/SSATP-WorkingPapers/SSATPWP16.pdf
- Steenkamp, J., & Hoffman, D. (1994). Price and Advertising as Market Signals for Service Quality. In R. Rust and R.L. Oliver (eds.), Service Quality: New Directions in Theory and Practice. Thousand Oaks, Calif.: Sage. Retrieved on September 12, 2012, from http://www.kenexa.com/Portals/0/Downloads/Customer%20Service%20from%20the%20Customer's%20Perspective.pdf
- Thai, V.V. (2007). Service quality in maritime transport: conceptual model and empirical evidence. Asia Pacific Journal of Marketing and Logistics. Retrieved on September 12, 2012, from:

 http://search.proquest.com/docview/227370461/139D83506B023D2C7CC/1?accountid=43722

UNCTAD (1975) .Protection of Shipper Interests: Shippers' Councils. TD/B/C.4/127/Supp. 2. Retrieved on September 6, 2012 from: http://www4.worldbank.org/afr/ssatp/Resources/SSATP-workingPapers/SSATPWP16.pdf

- United Nations Department of Economic and Social Affairs (2004), Country Presentation Customs Ghana. Retrieved on September 6, 2012 from http://unstats.un.org/unsd/trade/WS%20AddisAbaba04/Country%20presentations%20on%20paper/CountryPresentationCustomsGhana.pdf.
- United Nations Economic and Social Commission for Asia and the Pacific (n.d).

 Promoting Trade Facilitation Measures. Retrieved on September 6, 2012 from http://www.unescap.org/tid/publication/tipub2574_chap3.pdf
- Van Iwaarden, J., van der Wiele, T., Ball, L., and Millen, R. (2003). Applying SERVQUAL to websites: An exploratory study. International Journal of

- Quality & Reliability Management, Vol.20, No.8, pp. 919-935. Retrieved on September 12, 2012 from: http://www.proserv.nu/Docs/Servqual.pdf
- World Port Source (n.d). Port of Tema Review and History. Retrieved on on September 6, 2012 from http://www.worldportsource.com/ports/review/GHA Port of Tema 2242.php
- Zoominfo(n.d). Meridian Port Services, Company Background & Description.

 Retrieved on September 6, 2012 from

 http://www.zoominfo.com/#!search/profile/company?companyId=348256799&targetid=profile

| Appendix 1a (Questionnaire) |
|--|
| This questionnaire seeks to elicit information on enhancing service quality in the Maritime Industry in Ghana. The information provided is for research purposes only and will be treated as private and confidential. |
| What category of the Shipping Industry do you belong to? |
| a. Shipper b. Freight Forwarder c. Other (please state organization) |
| |
| SHIPPING AGENTS |
| 2. How would you describe the schedule reliability of vessels of the following Shipping Agents? |
| MSCA |
| Hull Blyth |

| Isag |
|--|
| MOL |
| Maersk |
| Delmas |
| (Scale: Very Good - 1, Good- 2, Average- 3, Poor- 4, Very Poor-5) |
| 3. In your estimation how would you rate the local and demurrage charges of the following Shipping Agents? |
| Maersk |
| Delmas |
| MSCA |
| Hull Blyth |
| Isag |
| MOL |
| (Scale: Very High- 1, High-2, Average- 3, Low-4, Very Low- 5) |
| 4. What problems do you encounter in your dealings with the following Shipping Agents? |
| Maersk |
| Delmas |
| MSCA |

| Hull Blyth |
|---|
| Isag |
| MOL |
| 5. Rank the following Shipping Agents based on their commitment to service quality? |
| Delmas |
| Hull Blyth |
| MSCA |
| Isag |
| MOL |
| Maersk |
| (Scale: Very Good - 1, Good- 2, Average- 3, Poor- 4, Very Poor-5) |
| 6. a. What minimum service expectations do you require from shipping agents? |
| |
| |
| |
| |
| |
| |
| b. What value added services do you require from shipping agents? |

| • • • • • • • | |
|---------------|---|
| 7. | What are your suggestions for improved service delivery amongst the |
| Shippi | ing Agents in the Port of Tema? |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| GHAN | NA PORTS AND HARBOURS AUTHORITY (GPHA) |
| | |
| 8. | How would you rate the Port and rent charges levied by the Tema Port? |
| (Scala | : Very High- 1, High-2, Average- 3, Low-4, Very Low-5) |
| (Scale | . Very High- 1, High-2, Average- 3, Low-4, Very Low-3) |
| | |
| 9. | What is your performance rating for the service delivery of GPHA? |
| (Scale | : Very Good - 1, Good- 2, Average- 3, Poor- 4, Very Poor-5) |
| | |
| 10 | What problems have you identified in the service delivery of CDUA? |
| 10. | What problems have you identified in the service delivery of GPHA? |
| | |
| | |
| | |

| 11. Tema | The following are possible problems which affect the effectiveness of the Port; rank them in order of importance? |
|----------------|---|
| (Scale | : Very High- 1, High-2, Average- 3, Low-4, Very Low-5) |
| a. | Lack of equipment |
| b. | Lack of competent personnel |
| c. | Congestion in the port |
| d. | Lack of automation |
| e. | Lack of customer-oriented operations |
| 12. deliver | What new initiatives/projects has GPHA introduced to enhance its service ry to shippers? |
| | |
| | |
| | |
| 13. | a. What minimum service expectations do you require from GPHA? |
| | |
| | |
| | |

| 13b. | What value added services do you require from GPHA? |
|----------|--|
| | |
| | |
| 14. | Suggest ways for improving service delivery in the Tema Port? |
| | |
| | |
| | |
| MER | IDIAN PORT SERVICES (MPS) |
| 15. | How long does it take to clear cargo at the MPS Terminal? |
| 16. | How much do you pay as terminal and demurrage charges to MPS? |
| | WILL COUNTY CAMPGY TO 124.9 |
| 17. | What is your performance rating of MPS' service quality? |
| (Scale | e: Very Good - 1, Good - 2, Average - 3, Poor - 4, Very Low - 5) |

| | sful since its establishment. The following are possible reasons for its successment based on the responses provided below. | | | |
|--------|---|--|--|--|
| (Scale | : Very High- 1, High-2, Average- 3, Low-4, Very Low-5) | | | |
| I. | Increased investment in equipment | | | |
| II. | Employment of competent personnel | | | |
| III. | Customer-oriented operations | | | |
| IV. | High level of technological usage | | | |
| V. | Effective management practices | | | |
| reason | b. If you are of the opinion that MPS has not been successful what could be the reason(s) for it? | | | |
| | | | | |
| | | | | |
| | | | | |
| 19. | What new initiatives/projects has MPS introduced to enhance its service ry to shippers? | | | |
| | | | | |
| | | | | |
| | | | | |
| 20. | What minimum service expectations do you require from MPS? | | | |
| | | | | |
| | | | | |
| | | | | |

MPS has been described by some Industry Sources as having been fairly

18.

| 20b. | What value added services do you require from MPS? |
|---------------|--|
| | |
| • • • • • • • | |
| | |
| | |
| | |
| | |
| | |
| 21. | What are your suggestions for improvement in service delivery at MPS? |
| | |
| | |
| | |
| FREI | GHT FORWARDERS |
| 22. Tema | |
| (Scale | e: Very Good - 1, Good - 2, Average - 3, Poor - 4, Very Poor - 5) |
| 23. freigh | Below are some possible reasons which negatively impact on the quality of t forwarding in Ghana? Rank them based on the following responses: |
| Strong | gly Disagree-1 Disagree-2 Neutral-3 Agree-4 Strongly Agree-5 |
| a. | Lack of competent personnel |
| b. facilit | Lack of cooperation from CEPS and other stakeholders in the port in ating cargo clearance |
| c. forwa | Increase in the number of fraudulent and mediocre freight rders |
| d. | Failure of Industry to weed out charlatans |
| e. | Lack of training for freight forwarders |

| 24. | What minimum service expectations do you require from freight forwarders? |
|----------------|--|
| | |
| | |
| | |
| | hat value added services do you require from freight forwarders? |
| | |
| ••••• | |
| 25. | What can be done to raise the standards of freight forwarding in Ghana? |
| | |
| Ghana | Maritime Authority (GMA) |
| 26. | What are some of the major functions performed by GMA? |
| | |
| | |
| 27. | What is the overall service quality rating of GMA? |
| (Scale: | Very Good-1, Good-2, Average-3, Poor-4, Very Poor-5) |
| 28. deliver | What new initiatives/projects has GMA introduced to enhance its service y to shippers? |

| | Very Good-1, Good-2, Average-3, Poor-4, Very Poor-5) |
|---|---|
| | How would you rate the overall service quality of Ghana Shippers' |
| | |
| 31. | What are the major functions performed by the Ghana Shippers' Authority? |
| GHAN | A SHIPPERS' AUTHORITY (GSA) |
| | |
| | |
| | |
| 30. GMA? | What are your suggestions to improve the standards of service delivery at |
| | |
| | |
| | What minimum service expectations do you require from GMA? |
| | |
| | |
| • | |

| | hat new init shippers? | tiatives/project | s has GSA inti | oduced to enh | ance its service |
|------------|---------------------------|-----------------------------------|-----------------|----------------|----------------------------|
| | | | | | |
| | | | | | |
| 34. W | hat minimu | m service expe | ectations do yo | u require from | |
| | | | | | |
| | | ed services do | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Authority | ? | lone to improv | | | |
| | | | | | |
| | | AND PREVE | | | |
| 36. In | your estima | ation what is th | e service qual | ity performanc | ee rating of CEPS? |
| (Scale: V | ery Good – | 1, Good- 2, A | verage- 3, Poo | r- 4, Very Poo | r-5) |
| | _ | g are some of the ggestions, rank | | | es faced by CEPS, if ases. |
| Strongly I | Disagree-1 | Disagree- 2 | Neutral-3 | Agree-4 | Strongly Agree-5 |

| a. | Lack of competent personnel |
|---------------|--|
| b. | Bureaucracy |
| c. | Bribery and Corruption |
| d. | Poor remuneration of staff |
| e. | Weak reporting lines |
| | |
| 38. | What new initiatives/projects has CEPS introduced to enhance its service |
| aenve | ery to shippers? |
| | |
| | |
| | |
| 39. | What minimum service expectations do you require from CEPS? |
| | |
| | |
| | |
| 39b. \ | What value added services do you require from CEPS? |
| | |
| | |
| 40. | What are your suggestions for improved service delivery of CEPS? |
| 10. | what are your suggestions for improved service derivery of CEFS. |
| | |
| | |
| GENI | ERAL QUESTIONS |

41. It has been proposed that an existing organization or a new organization should be charged with/ created to maintain service standards in the Ghanaian Maritime Industry.

Which of the following will you subscribe to?

- a. An existing organization
- b. A new organization
- c. Things should stay as they are
- 42. How long does it take to clear your cargo through the Tema Port?

Appendix 2a (Interview questions)

- 1. What is your assessment of the state of service quality in Tema Port? Your views should be based on the various service providers in the industry.
- 2. What would you say are the major challenges facing Tema Port?
- 3. How can these challenges be addressed?
- 4. What innovative services have you put in place to enhance service quality in your organization?
- 5. What should be done to make the Ghanaian maritime industry a model of excellence in West Africa?

Appendix b (Tariff Information on stevedoring Charges of selected port authorities)

FOREWORD

In exercise of the powers conferred on the Board of Directors of the Ghana Ports and Harbours Authority by Section 75 of the Ghana Ports and Harbours Authority Law 1986 (P.N.D.C.L. 160) and by Section 6 of the Board of Directors (Public Board and Corporations) Law 1983 (P.N.D.C.L. 6), and with prior approval of the Minister of Transport, these Regulations are made this 1st June 2011.

- 1.1 The Ghana Ports and Harbours Authority shall, subject to the Conditions and exemptions set out in the Schedules to these Regulations, collect and pay into the fund of the Ghana Ports and Harbours Authority the Dues, Rates, Rents and Charges fixed herein.
- 1.2 Every ship or vessel, which enters a port, shall pay in US Dollars or equivalent convertible currency to the Ghana Ports and Harbours Authority the appropriate Dues, Rates and Charges specified in said Schedules.
- 1.3 Every ship or vessel, which does not earn foreign exchange and enters a port, shall pay to the Ghana Ports and Harbours Authority the cedi equivalent of the appropriate Dues, Rates and Charges specified in said Schedules.

- 2.1 The Ghana Ports and Harbours Authority may, in special circumstances, adjust the dues, rates, rents and charges specified in said schedules to these regulations to accord with the special nature of the actual services rendered except that no adjustment shall in any case exceed fifty per centum of the maximum Dues, Rates, Rents or Charges so specified.
- 2.2 Where in these regulations no charges for any service have been prescribed the Ghana Ports and Harbours Authority shall in each case determine the rates or amounts payable.
- 2.3 Any increase in Rates for each service rendered by other organizations shall have corresponding increases in the Rate chargeable under these regulations.

In these Regulations unless the context otherwise requires:

- "AUTHORITY" means the Ghana Ports and Harbours Authority established under Section 2 (1) of the Ghana Ports and Harbours Authority Law 1986 (P.N.D.C.L. 160)
- "WHARF" or "BERTH" is the place where a ship lies other than anchorage and includes a quay, pier, jetty or other landing place.
- "PORT DUES" is the toll or charge assessed against goods:
- a) for the use of any berth or wharf of the Authority while awaiting removal there from;
- b) for passing over or through any berth or wharf of the Authority;
- 2 | P a g e
- c) for passing to or from a vessel while such vessel is:
- made fast to a wharf belonging to the Authority
- moored in any mooring basin, channel, or canal belonging to the Authority
- made fast to another vessel, made fast to a berth or moored in any moorings, channels or similar facilities.
- "STEVEDORING" is the handling/movement of cargo between the ship's hold and the stacking or storage area and vice versa. This includes stacking and de-stacking of cargo at the storage facility.
- "DRIVEABLE VEHICLE" is any vehicle that moves on its own motive power from the vessel to the pre-storage area or vice versa.

"NON-DRIVEABLE VEHICLE" - is any vehicle that is unable to move by its own motive power and would have to be towed, forklifted, pushed etc. from the ship to the pre-storage area or vice versa.

The Ports (Dues and Rates) Regulations, 1984 (L.I. 1308) and GPHA Tariff October 2009 are hereby revoked.

INFORMATION AND ENQUIRIES

Enquiries relating to the application and interpretation of this tariff; and all matters relating to the services, management, operations and facilities of the Seaports of Ghana should be addressed to any of the following offices of the Ghana Ports and Harbours Authority:

CORPORATE HEADQUARTERS PORT OF TEMA

The Director General The Director of Port

Ghana Ports & Harbours Authority

Ghana Ports & Harbours Authority

P. O. Box 150 P. O. Box 488

Tema – Ghana Tema – Ghana

Tel: 233-0303-202631-9 Tel: 233-0303-204385-8

Fax: 233-0303-202812 Fax: 233-0303-204136

Website: www.ghanaports.gov.gh E-mail:tema@ghanaports.net

E-mail: headquarters@ghanaports.net

PORT OF TAKORADI GOLDEN JUBILEE TERMINAL

The Director of Port The Terminal Manager

Ghana Ports and Harbours Authority

Ghana Ports and Harbours

Authority

P. O. Box 708 Private mail Bag

Takoradi – Ghana Tel: 233-0303-200656

Tel: 233-03120-24073 Tema - Ghana

Fax: 233-03120-22814 Fax: 233-0303-200705

E-mail: takoradi@ghanaports.net

TEMA FISHING HARBOUR OUAGADOUGOU OFFICE

THE GENERAL MANAGER THE REPRESENTATIVE (GPHA)

Ghana Ports and Harbours Authority OFFICE NATIONAL DES PORTS DU GH

Tema Fishing Harbour 1440 IMMEUBLE OBOUF

P. O. Box 289 AVENUE KWAME NKRUMAH

Tema – Ghana 11 BP 276 CMS OUAGADOUGOU 11

Tel: 233-0303-203976 BURKINA FASO

Fax: 233-0303-203980 Tel/Fax: 226-50301201

E-mail: portsghana@mail-bf.com

| THIRD SCHEDULE: STEVEDORING CHARGES |
|-------------------------------------|
| |

| 3C0000 | C. CONTAINERS | CONTAINER UP | CONTAINER |
|--------|-------------------|--------------|----------------|
| | | TO 20 FT. IN | ABOVE |
| | | LENGTH | 20 FT. BUT NOT |
| | | | MORE THAN 40 |
| | | | FT. IN LENGTH |
| | | PER UNIT | PER UNIT |
| 3C1000 | 1. | US\$ | US\$ |
| | IMPORT/EXPORT/RE- | | |
| | EXPORT | | |
| 3C1001 | Stuffed Container | 82.69 | 156.19 |
| 3C1003 | Empty Container | 65.63 | 118.13 |

SCHEDULE OF TARIFF APPLICABLE POST CONCESSIONING:

ASPECTS OF CARGO DUES CHARGEABLE BY NPA (NIGERIAN PORT AUTHORITY)

Bills Raised Within NPA includes

- 1. Ship Dues
- 2. Cargo Dues
- 3. Miscellaneous Bill and Charges
- 4. Oil Terminal Charges
- 5. Berth Rate
- 6. Environment Protection Levy

SCHEDULE OF APPLICABLE TARIFF POST CONCESSIONING:

CARGO DUES – CHARGEABLE BY CONCESSIONAIRES

DOLLARS (\$)

| S/NO | TYPE OF OPERATION STEVDORING | FOREIGN | |
|------|------------------------------|----------|----------|
| | | IMPORT | EXPORT |
| 4 | Containers/TEU | 20' 40' | 20' 40' |
| | Laden | 90' 130' | 70' 100' |
| | Empty | 19' 32' | 16' 28' |

Tariff of APM Terminals Liberia Ltd.

Version: 1.0

Issue Date: 1 February 2011

Rates for Stevedoring

- a) The rate for transhipment, as mentioned under Clause 2.2.1, is only applicable for cargo which enters and leaves the Terminal by sea, passing over or by/through public-use facilities only, on or through bill of lading.
- b) The charges for 'Import/Export', 'Empty Inspection' and 'Gate Charge' as per the below table are payable by the vessel owner, operator, charterer or agent whose vessel calls at the Port.
- c) The charge for 'THC' as per the below table is payable by the owner or agent of the cargo handled at the Terminal.

| Stevedoring Tariff in USD per | Import/Export |
|-------------------------------|---------------|
| unit | |
| 20' Export Dry Full | 175 |
| 20' Import Dry Full | 175 |
| 20' Export/Import Dry Empty | 35 |
| 40' Export Dry Full | 240 |
| 40' Import Dry Full | 240 |
| 40' Export/Import Dry Empty | 56 |