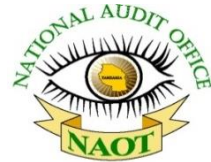




THE UNITED REPUBLIC OF TANZANIA
NATIONAL AUDIT OFFICE



**PERFORMANCE AUDIT REPORT ON THE MANAGEMENT OF SURVEYS AND
INSPECTIONS OF VESSELS IN MARITIME TRANSPORTATION**

The Surface and Marine Transport Regulatory Authority



A REPORT OF THE CONTROLLER AND AUDITOR GENERAL

March, 2017

THE UNITED REPUBLIC OF TANZANIA



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PREFACE

The Public Audit Act No. 11 of 2008, Section 28 authorizes the Controller and Auditor General to carry out Performance Audit (Value for-Money Audit) for the purposes of establishing the economy, efficiency and effectiveness of any expenditure or use of resources in the Ministries, Departments and Authorities, Local Government Authorities and Public Authorities and other Bodies which involve enquiring, examining, investigating and reporting, as deemed necessary under the circumstances.

I have the honour to submit to His Excellency the President of the United Republic of Tanzania, Dr. John Pombe Magufuli and through him to the Parliament a Performance Audit Report on the Management of Surveys and Inspections of Vessels in Maritime Transportation. The report contains conclusions and recommendations that directly concern the Ministry of Works, Transport and Communication (MoWTC) and Surface and Marine Transport Regulatory Authority (SUMATRA). MoWTC and SUMATRA have been given the opportunity to scrutinize the factual contents and comment on the draft report. I wish to acknowledge that the discussions with MoWTC and SUMATRA have been very useful and constructive.

My office intends to carry out a follow-up at an appropriate time regarding actions taken by the audited entities in relation to the recommendations in this report. In completion of the assignment, the office subjected the report to the critical reviews of the following experts namely, Dr. John Layaa and Capt. Ibrahim Bendera, who came up with useful inputs on improving the output of this report.

This report has been prepared by Mr. Bhourat Kombo - Team Leader, Ms. Yuster Salala, and Mr. Staford Kazyoba under the supervision and guidance of Mr. James Pilly - Assistant Auditor General and Ms. Wendy Massoy - Deputy Auditor General.

I would like to thank my staff for their devotion and commitment in the preparation of this report. My thanks should also be extended to the audited entities for their fruitful interaction with my office.



Prof. Mussa Juma Assad
Controller and Auditor General
United Republic of Tanzania
March, 2017

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LIST OF ABBREVIATIONS

DMI	: Dar es Salaam Maritime Institute
IMO	: International Maritime Organisation
MSCL	: Marine Services Company Limited
MoWTC	: Ministry of Works, Transportation and Communication
MRCC	: Marine Rescue Coordination Centre
MV	: Marine Vessel
NAO	: National Audit Office
SMM	: Safety Management Manual
SUMATRA	: Surface and Marine Transportation Regulatory Authority

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GLOSSARY

<i>"Ship"</i>	means a floating vessel which is self-propelled and capable of carrying passengers or cargo. Also it includes every description of vessel used in navigation.
<i>"Small ship"</i>	means a ship of less than 24 metres in length or less than 50 gross registered tonnage;
<i>"Vessels"</i>	Refers to both ships and small ships operating in Tanzania Rivers, lakes and sea
<i>"Adequate plans"</i>	means plans for surveys and inspections of vessels that cover all items as described under Section 225 of the Merchant Shipping Act No 21 of 2003. Also cover all items as described in the survey and inspection checklist for all vessels operating in Tanzania.

EXECUTIVE SUMMARY

Surveys and inspections of vessels are very important in ensuring safety in maritime transportation if they are well managed. Survey of vessels is carried out for the purpose of awarding certificate while inspection is for the purpose of compliance with safety standards. In light of that, the Surface and Marine Transport Regulatory Authority (SUMATRA) has been mandated to ensure safety in maritime transportation through surveys and inspections of vessels. SUMATRA is under the Ministry of Work, Transport and Communication (MoWTC) which is mandated to oversee performance of the authority.

Based on risk of occurrence of maritime accidents and incidents caused by inadequate surveys and inspections of vessels, the National Audit Office (NAO) decided to carry out performance audit on how SUMATRA and MoWTC effectively manage surveys and inspections of vessels.

The overall objective of the audit was to assess whether the Ministry of Works, Transport and Communication (MoWTC) and Surface and Marine Transport Regulatory Authority (SUMATRA) effectively manage surveys and inspections of vessels to ensure safety in maritime transportation in Tanzania mainland.

The scope of audit covered a period of five financial years from 2011/2012 to 2015/2016. Similarly it covered issues such as planning, implementation, monitoring and evaluation of surveys and inspections activities.

The audit team used three methods of data collection which are interviews, document reviews and physical verification. Interviews were conducted with different officials from MoWTC, SUMATRA and MSCL. Furthermore various documents were reviewed in order to understand how surveys and inspections of vessels are managed. Moreover the audit team conducted physical verification to some vessels at Tanga, Mwanza and Dar-es-salaam to look at compliance with safety standards.

Main Audit Findings

The following were the main audit findings observed during the audit:

Absence of Data Base to Accommodate Registration of Small Ships

Audit noted that SUMATRA did not establish registers for small ships. As a result two or more different small ships were given the same number. On the other hand there are dormant ships but SUMATRA did not de-register them due to the fact that the owners of ships did not notify the registrar of ships for de-registration.

Inadequate Survey and Inspection Plans

Audit noted that the set targets of surveys of small ships shown in Annual Performance Agreements between the Ministry of Works, Transport and Communication and SUMATRA reflected in Annual Plans were underestimated. The set targets of surveys of small ships were below the number of small ships identified through census conducted in 2012.

Surveys and Inspections were not Risk Based

SUMATRA did not use risk based approach in planning and conducting surveys and inspections of ships. On the other hand, they did not establish a profile which pinpoints risk areas in territories of Tanzania waters.

Inadequate Coverage of Surveys and Inspections Checklists

The audit noted that surveys and inspections of ships and small ships were conducted without using the checklists. The review of files of 38 ships operating in Mwanza for the period from 2011/2012 to 2015/2016 showed that no checklist for inspections was filled by surveyors. Similarly, was the case for small ships operating in that region.

In Tanga region, 19 checklists were filled during the period of audit which is less than 10 percent of 202 small ships operating in the region. They focused on few items in the checklist such as lifesaving appliances and fire fighting equipment.

Inadequate number of small ships surveyed and inspected

It was noted that SUMATRA conducted surveys and inspections for less than 20 percent of small ships operating in Tanzania mainland according to census conducted in 2012. Specifically in 2012/2013 number of small ships not surveyed and inspected were 80.06 percent while the following financial year rose to 84.99 percent. On the other hand in 2015/2016 number increased to 87.86 percent.

Implementation of Surveys and Inspections of Vessels were not Assessed

SUMATRA did not conduct assessment on the implementation of surveys and inspections of both ships and small ships. Also the Annual Performance Reports under the scope of audit did not show measures taken for inadequate coverage of surveys and inspections of small ships operating in Tanzania mainland.

Inadequate Enforcement of Safety Standards

SUMATRA did not give stop orders and penalties to most of defaulters of safety standards from 2011/ 2012 to 2014/2015 until 2015/2016 when they started. However in 2015/2016 only 1.85 percent of defaulters were penalized.

Inadequate Monitoring on Surveys and Inspections of vessels

It was noted that from 2011/2012 to 2015/2016, Ministry of Works, Transport and Communication did not conduct monitoring on safety issues in maritime transportation particularly on surveys and inspections as implemented by SUMATRA. Also the Ministry of Works, Transport and Communication did not evaluate performance of SUMATRA regarding implementation of the strategic objective of reducing accidents to zero for ships and by 50 percent each year for small ships.

No Action Taken by MoWTC as a result of monitoring SUMATRA's performance

It was noted that MV Vero, MV Juliana, MV Norris and MV ST Mathew were given safety certificates while they had not rectified deficiencies observed during surveys and inspections. However the Ministry of Works, Transport and Communication did not take any action when SUMATRA issued safety certificates to those ships.

This resulted to non-compliance with safety standards which triggers the increase of marine accidents and leads to unsafe maritime transportation.

Main Audit Conclusion

Generally, SUMATRA and MoWTC did not effectively manage surveys and inspections of vessels which were operating in Tanzania mainland such that more than 50 percent of small ships did not comply with safety standards. Ultimately SUMATRA targets of reducing accidents were not met since marine accidents and incidents were often occurring. This contributed to risk of making maritime transportation in Tanzania mainland unsafe.

Recommendations made

Recommendations to the Surface and Marine Transport Regulatory Authority (SUMATRA)

SUMATRA should:

- 1) Ensure that all small ships are licensed and registered timely and the database are established and maintained.

- 2) Assess its capacity in terms of human resources and facilities against its responsibility for the purpose of bringing to light, whether or not they need capacity building and in which areas.
- 3) Establish computerized system for documentation of maritime activities such as registration of ships, register for small ships, records of surveys and inspections for both ships and small ships, non-compliance of safety standards and so on.
- 4) Establish coordination mechanisms with Fisheries Department in order to cover fishing vessels for surveys and inspections.
- 5) Make assessment on implementation of set plans for surveys and inspections of vessels.
- 6) Ensure surveyors are qualified and well trained as per requirements of sub sector and also are sufficient for attending available vessels.

Recommendations to the Ministry of Works, Transport and Communication

The MoWTC should:

- 1) Assess its capacity in terms of human resources with respect to overseeing SUMATRA's execution of its responsibility.
- 2) Prioritise to carry out monitoring and evaluation on the performance of SUMATRA specifically on surveys and inspections of both ships and small ships.
- 3) Establish proper reporting mechanisms which will ensure delivery of information from SUMATRA regarding safety management in maritime transportation.

CHAPTER ONE

INTRODUCTION

1.1 Background

Safety management in maritime transportation is important and if well managed can save peoples' lives, reduce injuries and loss of properties (cargo) by reducing the number of accidents. In this regard, the Surface and Marine Transport Regulatory Authority (SUMATRA) which is under the Ministry of Works, Transport and Communication (MoWTC) has been mandated to oversee implementation of safety management in maritime transportation through surveys and inspections of vessels.

Survey of vessel is a detailed examination, done by Surveyor for the purpose of determining its current condition and seaworthiness. In particular to determine if the vessel is safe to use in conditions for which it was designed, and what maintenance and repairs are required or likely to be required in the future. Likewise, inspection of vessel refers to examination of the vessel for the purpose of enhancing compliance with safety standards. Both survey and inspection of vessels if properly conducted can help to reduce non-compliance of safety standards. Ultimately it can reduce the number of accidents and incidences in maritime transportation.

1.2 Motivation of the Audit

The Audit was motivated by the following factors:

- a) According to a report on "Identifying Transport Potential Development Areas" by Bureau for Industrial Cooperation¹ (2011) submitted to SUMATRA, there were poor and unsafe boats that were frequently used to transport passengers within the lakes which posed a high risk to life and properties of passengers.
- b) Similarly, according to a report of SUMATRA explaining 'why marine accidents will always increase,' marine accident will always increase due to the fact that:
 - Vessels are overloaded with passengers and cargo;
 - Most of the vessels do not have the required standards; and
 - Vessels are operated with unqualified and inexperienced staff.

¹ The cooperation is from Tanzania

- c) Moreover, the Guardian Newspaper on 6th September 2011 reported that marine industry operators have to create the culture of inspecting speed boats, particularly those plying between Dar es Salaam and Zanzibar in order to reduce the number of accidents. Most of these accidents are a result of lack of inspections supposed to be carried out by SUMATRA.
- d) According to SUMATRA reports² marine accidents and incidents that occurred in Tanzania within eight years showed that the number of fatalities is decreasing. However there was a risk of occurrence of marine accidents and incidents due to inadequate surveys and inspections of vessels. **Table 1.1** shows marine accidents and associated fatalities from 2009 to 2016.

Table 1.1: Marine accidents and incidents that occurred in Tanzania (2009-2016)

Year	Number of marine accidents and incidents	Number of person rescued	Number of person died	Number of person involved in distress
2016	11	103	10	112
2015	20	729	43	772
2014	25	246	51	297
2013	24	273	60	333
2012	21	713	154	867
2011	24	2281	209	2490
2010	33	318	64	382
2009	19	288	52	340

Source: SUMATRA marine accidents and incidents reports

- e) Furthermore, report on Trends, Causal Analysis, and Recommendations from 14 Years of Ferry Accidents (2016)³ by *Worldwide Ferry Safety Association* showed that, 232 ferry accidents occurred over the 14-year period from 2000 to 2014. By a conservative tally based on news reports, 21,574 lives were lost, an average of 130 deaths per incident and 1,541 deaths per year. The accidents reported occurred in 43 different countries around the world, with three countries—Bangladesh, Indonesia, and the Philippines—responsible for almost 50 percent of all accidents. Even more striking, the five countries of Bangladesh, Tanzania, Indonesia, Senegal, and the Philippines were responsible for almost

²SUMATRA marine accidents and incidents reports (2009-2016)

³Data presented in this report cover the whole part of Tanzania.

two-thirds of all fatalities in the 14-year period (Table 1.2). According to the report, Tanzania had 15 percent of proportion of ferry fatalities in the 14 year period (World Bank 2015).

Table 1.2: Proportion of ferry fatalities occurring in top 5 countries

S/N	Country	Proportion of ferry fatalities (%)
1	Bangladesh	23
2	Tanzania	15
3	Indonesia	11
4	Senegal	9
5	Philippines	8
6	All others	34

Source: Worldwide Ferry Safety Association (2016), Trends, Causal Analysis, and Recommendations from 14 Years of Ferry Accidents.

1.3 Design of the Audit

1.3.1 Objective of the Audit

The overall objective of the audit was to assess whether the Ministry of Works, Transport and Communication (MoWTC) and Surface and Marine Transport Regulatory Authority (SUMATRA) effectively manage surveys and inspections of vessels to ensure safety in maritime transportation.

The specific objectives of the audit were:

- i. To determine whether SUMATRA sets adequate plans for surveys and inspections of vessels.
- ii. To assess whether SUMATRA adequately implements plans for surveys and inspections of vessels.
- iii. To assess the extent to which SUMATRA enforces compliance with safety standards through surveys and inspections of vessels.
- iv. To assess the extent to which MoWTC conducts monitoring and evaluation on issues of safety in maritime transportation.

1.3.2 Assessment Criteria

Assessment criteria were drawn from various sources such as SUMATRA Corporate Strategic Plan (2013/14-2017/18), Government Notice No. 494 of 2010, Good Practice, Merchant Shipping Act No. 21 of 2003 and its Regulations.

The assessment criteria covered: planning of surveys and inspections; implementation of plans; enforcement of safety standards; and monitoring

and evaluation of survey and inspection activities on vessels as shown here under:

- i. Adequacy of plans for surveys and inspections of ships;
 - Section 20(1) of the Merchant Shipping Act No. 21 of 2003 requires SUMATRA to establish and maintain a register of ships for all registrations of ships in Tanzania.
 - According to SUMATRA corporate strategic plan 2013/2014-2017/2018 SUMATRA is required to set plans for surveys and inspections of vessels.
 - Based on good practises SUMATRA is supposed to develop survey and inspection plans by prioritizing resources on risk areas.
- ii. Implementation of plans for survey and inspection of ships;
 - According to section 225 of the Merchant Shipping Act No.21 of 2003, Surveyors appointed by SUMATRA are supposed to carry out surveys of:
 - a) the hull and machinery of ships;
 - b) the equipment on board, including tackle and appurtenances;
 - c) the life-saving, fire-fighting and other safety equipment of on board;
 - d) the radiotelegraphy and radiotelephony installations on board; and
 - e) the stowage and manner of loading of ships' cargoes and the stowage of dangerous goods.
 - SUMATRA Strategic Plan 2013/14-2017/18 Section 7.4.3 requires SUMATRA to carry out annual performance assessment.
- iii. Enforcement of requirements of safety standards in maritime transportation; and
 - According to section 230(2) of Merchant Shipping Act No.21 of 2003, When the corrective actions are not taken within a reasonable period of time as a surveyor may specify, the surveyor shall at the expiration of that period, notify the registrar of ships who may on receipt of such notification suspend the validity of the particular certificate issued to the ship and give notice of any such suspension to the owner and to the surveyor who in turn shall notify the master.
- iv. Monitoring and evaluation on issues of safety in maritime transportation.
 - The Instrument vide the Government Notice No. 494 of 2010 requires the MoWTC to monitor and evaluate the performance of transport sector including SUMATRA.
 - According to section 5 of the Merchant Shipping Act No.21 of 2003, MoWTC shall give directives to the registrar of ships regarding safety in maritime transportation.

1.3.3 Scope of the Audit

The main audited entities were the Ministry of Works, Transport and Communication and the Surface and Marine Transport Regulatory Authority.

The audit focused on issues such as planning, implementation of plans, enforcement of safety standards as well as monitoring and evaluation of surveys and inspections of vessels.

Three regions namely Dar-es-Salaam, Mwanza and Tanga were covered. Priority was given to these regions as they have a lot of maritime transportation activities and tremendous survey and inspection activities.

The audit covered a period of five financial years from 2011/2012 to 2015/2016 because during this period, SUMATRA introduced second corporate strategic plan (2013/14-2017/18) which aimed at reducing accidents and incidents to zero for ships and by 50 percent each year of small ships. However during this period there were more marine accidents and incidents occurred than expected.

1.3.4 Methods Used for the Audit

Three main methods were used for data collection. These were document reviews, interviews and physical verification.

Document Review

The audit team reviewed various documents in order to understand management of surveys and inspections of vessels to ensure safety in maritime transportation as shown in **Appendix A**

Interviews

This method was used during the audit for the purpose of obtaining more information and clarification in some of the areas which the document reviewed did not provide sufficient information. Different Officials were interviewed according to their responsibilities as indicated in **Appendix B**

Site Visits and physical observation

The team conducted site visits to some areas with the view of identifying the possible risks on management of surveys and inspections of vessels. The visits sought to assess the extent of compliance with safety standards. The audit team visited Mwanza, Tanga, and Dar es Salaam to assess how SUMATRA conducted

surveys and inspections of vessels in order to ensure they comply with safety standards.

1.4 Data Analysis

The collected data were analysed qualitatively using content analysis supported by quantitative data. Also the audit team categorized and made sense of the essential meanings of the data given. Furthermore, the processed data were presented in tables, figures and explanations at least to provide a picture on how SUMATRA and MoWTC manage surveys and inspections of vessels.

1.5 Data Validation Process

SUMATRA and MoWTC, which are directly concerned with this report, were given the opportunity to go through the draft report and commented on the figures and information being presented. They confirmed on the accuracy of the figures used and information being presented in the audit report. Furthermore, the information was crosschecked and discussed with experts on the management of surveys and inspections of vessels to ensure validation of the information obtained.

1.6 Standards Used for the Audit

The audit was done in accordance with International Standards for Supreme Audit Institutions (ISSAIs) issued by the International Organization of Supreme Audit Institutions (INTOSAI). These standards require that the audit is planned and performed in order to obtain sufficient and appropriate evidence to provide a reasonable basis for the findings and conclusions based on the audit objectives.

1.7 Structure of the Report

The remaining part of the report covers the following:

Chapter two: provides detailed account of the system and processes for the management of surveys and inspections of vessels in Tanzania mainland, whereby the responsibilities of different key players in the surveys and inspections of vessels are described.

Chapter three: presents the audit findings on the planning, conducting and reporting the results of surveys and inspections of vessels. Furthermore it presents the audit findings on the extent of monitoring and evaluation of survey and inspection activities.

Chapter four: provides audit conclusions on the objectives of the audit based on the finding.

Chapter five: outlines audit recommendations for implementation in order to improve the situation.

CHAPTER TWO

SAFETY IN MARITIME TRANSPORTATION

2.1 Introduction

This chapter presents legal framework; roles and responsibilities of the key stakeholders involved in managing safety in maritime transportation; regulation of maritime safety and security in Tanzania; and survey and inspection processes.

2.2 Legal Framework

Safety in maritime transportation is managed through surveys and inspections of vessels. In Tanzania surveys and inspections of vessels are regulated by the following laws and regulations:

Table 2.1: Legislation governing surveys and inspections of vessels

Name of Legislation	Focus of the legislation regarding surveys and inspections of marine vessels
The Merchant Shipping Act No. 21 of 2003	<ul style="list-style-type: none">• The Merchant Shipping Act No.21 of 2003 was established to repeal the Merchant Shipping Act, 1967 and Inland Waters Transport Ordinance.• It provides provisions on appointment of surveyor and also how surveys and inspections of vessels should be conducted.• Empowers the minister of the MoWTC to give the registrar of ships any directives concerning marine safety regardless of being stipulated in the act or regulation.• Moreover it gives mandate to SUMATRA to enforce compliance of safety standards.
Small Ships Local Cargo Ship Safety; Small Ship Safety Surveys and Inspections For Vessels Engaged on Local and Coastal Voyages Inland Waters Regulations of 2004.	<ul style="list-style-type: none">• It is a regulation of 2004 formed from the merchant shipping act of 2003 it covers general provision on certification, surveys, construction and equipment of ships.• It provides conditions and procedures for issuing certificates of seaworthiness, life savings arrangements and appliances,• Also it prescribes issues regarding safety of navigation, fire protection and certificate of competency and manning.
The Merchant Shipping (Registration of Ships and Licensing of Vessels) Regulations of 2005.	<ul style="list-style-type: none">• This regulation stipulates procedures for registration and licensing of Tanzanian vessels of less than 50 GT.• The regulation specifically provides details to be recorded in register, certificate to be issued on

Name of Legislation	Focus of the legislation regarding surveys and inspections of marine vessels
	registration of ships, period of licence, and renewal of licence and termination of licence.
The Instrument vide the Government Notice No. 494 of 2010.	<ul style="list-style-type: none"> This instrument requires the MoWTC to monitor and evaluate the performance of transport sector including SUMATRA.

Source: Laws, regulations and Government Instruments

2.3 Policy Framework

In Tanzania, transport sector is governed by National Transport Policy, 2003. Safety in road transport is regulated by National Road Safety Policy, 2009. However, in maritime transportation there is no specific policy that regulates the sub sector.

2.4 Roles and Responsibilities of Key Players in Management of Safety in Maritime Transportation

2.4.1 Ministry of Works, Transport and Communication

The following are the responsibilities of the Ministry:

- a) To formulate sectoral policies;
- b) To oversee implementation of sectoral policies, the objectives being to ensure and enhance performance of sector, and also to provide optimal contribution to national social economic development. This ministry's goals are summarized by the vision and mission statements as follow:

Vision:

To have high quality, safe, efficient, cost-effective and self-sustaining transport and meteorology, infrastructure and services that adequately facilitates social-economic development of Tanzania by the year 2025.

Mission:

To facilitate provision of an economic, safe and reliable transport and meteorology that meets the needs of the Public through development and implementation of appropriate sector policies, strategies and standards.

2.4.2 Surface and Marine Transport Regulatory Authority (SUMATRA)

The SUMATRA Act No.9 of 2001 sets out the following as roles of the Authority:

- a) Taking into account the need to regulate safety and security in the transport sector;
- b) Protecting the interests of consumers; and
- c) Enhancing public knowledge, awareness and understanding of the regulated sectors including:
 - i. the rights and obligations of consumers and regulated suppliers;
 - ii. the ways in which complaints and disputes may be initiated and resolved; and
 - iii. The duties, functions and activities of the Authority.

Appendix C shows SUMATRA organisation structure that provides divisional arrangement of the authority.

2.4.3 Marine Services Company Limited

MSCL is a Public Company which provides transport services in the great East African lakes, namely Victoria, Tanganyika and Nyasa with foreign voyages to Mpulungu in Zambia, Bujumbura in Burundi, Kalemie, Uvira, Baraka in Congo and Nkata Bay in Malawi.

To ensure that movement of vessels is accident free, the Marine Superintendent Department are required to ensure the following are in place;

1. Surveys of vessels are done according to rules and regulations for issuance of relevant certificates,
2. Rehabilitation of vessels,
3. Preventive maintenance programs on machineries and hull for ships, and
4. Training program for seafarers.

2.4.4 International Maritime Organization (IMO)

As a specialized agency of the United Nations, IMO is the global standard-setting authority for the safety, security and environmental performance of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.

In other words, its role is to create a level playing-field so that ship operators cannot address their financial issues by simply cutting corners and compromising on safety and security performance.

2.4.5 Ship Owners

According to Merchant Shipping Act No. 21 of 2003, Section 229(1); the owner and master of every ship to which this section applies is supposed to ensure that:

- a) After any survey has been completed, no material change is made to the structure, machinery and equipment of the ship without the approval of the Registrar of Ships, except by direct replacement, and
- b) Whenever an accident occurs to a ship or a defect is covered either of which affects the safety of the ship or the efficiency or completeness of the ship, including its structure, machinery and equipment;
- it is reported at the earliest opportunity to a surveyor or a proper officer; or
- if a Tanzanian ship is in a port outside Tanzania, it is reported to the appropriate authorities of the country in which the port is situated

2.5 Maritime Safety and Security Regulation in Tanzania mainland

The process of registration involves the observance of the requirements and formalities prescribed under the Merchant Shipping (Registration of Ships and Licensing of Vessels) Regulations, 2005. The regulations set among other requirements, the qualifications for owning, registering and licensing of Tanzanian ships. In addition, due regard must be given to a number of international conventions issued under IMO regulatory regime. In pursuing regulatory function, SUMATRA performs the following roles:

- a) Registering and licensing ships,
- b) Overseeing manning of vessels, qualifications and training of seafarers,
- c) Surveying and inspecting of vessels and issuing the relevant safety certificates including;
 - Appointment of surveyors
 - Flag state activities
 - Port state activities
- d) Measuring the tonnage of ships,
- e) Marking of ships i.e. load lines, and
- f) Ensuring that unsafe ships do not operate due to;
 - Unsuitability for its purpose of machinery or equipment.
 - Under manning.
 - Overloading or unsafe or improper loading.
 - Any other matter relevant to the safety of the ship.

2.7 Maritime Safety Management System

The Safety Management System ("SMS") provides the framework for compliance with the International Safety Management Code. It is a written system of safety protection policies and procedures to be followed by vessel and shore-based personnel, with specific record keeping, reporting and internal audit requirements, which is meant to enable the company to uncover and correct safety deficiencies before they result in a casualty. It must ensure compliance with applicable mandatory rules and regulations, and must take into account applicable guidelines and recommended standards. The Code contains specific functional requirements for an SMS. It must contain:

- a) safety policy;
- b) instructions and procedures to ensure safe operations in compliance with relevant international and flag state legislation
- c) procedures for reporting accidents and non-conformities with the SMS and the Code;
- d) Procedures for internal audits and management reviews.

It should be specific to a type of vessel, and may be kept in manual form ("Safety Management Manual" or "SMM"), a copy of which must be kept aboard of each vessel.

Figure 2.1 shows links between MoWTC, SUMATRA and ship owners in the system of safety management in marine transportation in Tanzania mainland.

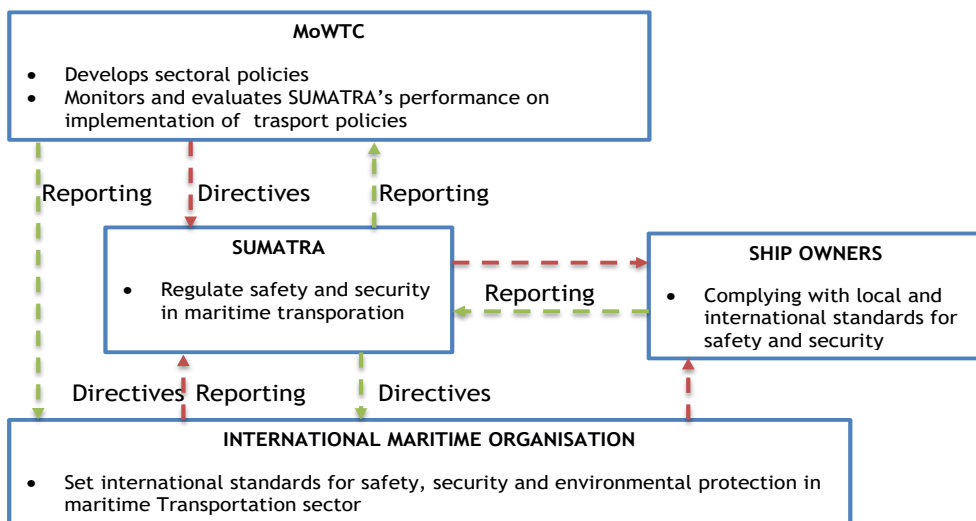


Figure 2.1 *Links between key players on safety management in Maritime Transportation*

2.8 Processes of Survey and Inspection of Vessels

2.8.1 Survey of Vessels

SUMATRA conducts survey for the purpose of awarding certificates such as seaworthiness to the ship operators. Survey is done by using checklists as guidance of the process. There are specific checklists for small ships and ships. Each checklist shows various components to be looked out. Appendix D shows checklist for survey of small ships and ships.

Ships shall be subjected to the following kind of surveys as specified here below:

- i. An initial survey before the ship is put in service;
- ii. Renewal survey once every 12 months; and
- iii. Additional surveys, as occasion arises.

During the course of survey, the surveyors appointed pursuant to Merchant Shipping Act No. 21 of 2003 section 378 shall carry out duties of surveys for:

- a) the hull and machinery of ships;
- b) the equipment of ships, including her tackle, and appurtenances;
- c) life-saving, fire-fighting and other safety equipment on board;
- d) the radiotelegraphy and radiotelephony installations on board; and
- e) the stowage and manner of loading of ships' cargoes and the stowage of dangerous goods.

2.8.2 Inspection of Vessels

Inspection is also done using checklist as guidance of the process for the purpose of ensuring compliance with safety standards. There are two kinds of inspections which are safety and security. Likewise, there are two kinds of checklists which are for small ships and ships. **Appendix E** shows checklists for inspections of small ships and ships.

Inspections of vessel safety systems include the following:

- Hull inspection to ensure seaworthiness of vessel.
- Main/auxiliary power inspection to ensure safe and operable machinery for vessel propulsion and emergency power.
- Boiler inspection to ensure that it is structurally sound with operable safety devices.
- Electrical systems inspection to ensure satisfactory installation of wiring and equipment.

- Lifesaving systems inspection to ensure satisfactory and adequate means to abandon ship.
- Fire fighting systems inspection to ensure fixed and portable devices are suitable for the intended space and type of fire.
- Navigation inspection to ensure adequacy and operation of navigation equipment.

Figure 2.2 shows paradigm presentation of Surveys and inspections processes of vessel as detailed in **section 2.8.1** and **2.8.2** respectively.

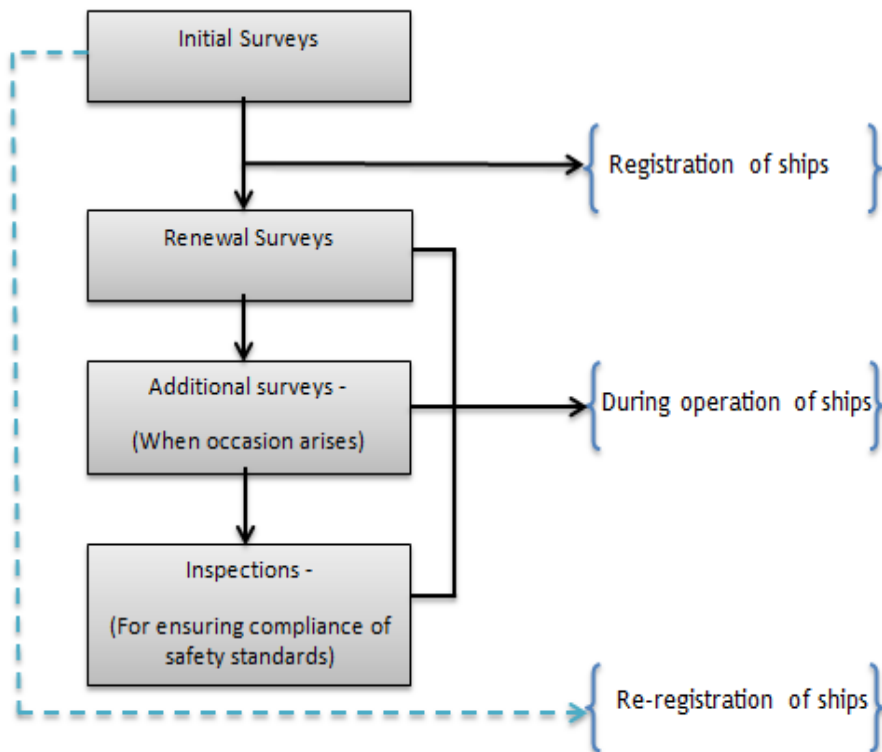


Figure 2.2: Survey and Inspection Processes

CHAPTER THREE

FINDINGS

3.1 Introduction

This chapter presents findings of the audit which address the audit questions stated in Chapter One of this audit report. The findings of this audit covered four major parts which provide insights regarding management of surveys and inspections of vessels in Tanzania:

- Plans for survey and inspection of the ships;
- Implementation of plans for survey and inspections of ships;
- Enforcement of requirements of safety in maritime transportation; and
- Monitoring and evaluation of the survey and inspection.

3.2 Plans for Survey and Inspection of Vessels

3.2.1 Absence of Data Base to Accommodate Registration of Small Ships

Section 20(1) of the Merchant Shipping Act No 21 of 2003 requires SUMATRA to establish and maintain a register of ships for all registrations of ships in Tanzania.

The registrar of ships was expected to issue licences for small ships after being satisfied on the assessment of the application of licence. In the process of licensing, the registrar of ships was supposed to record in the register the following details:

- The licence number of the ship;
- The date of licensing;
- The date of expiry of licence.
- Ship details such as a description, the overall length and name; and
- Name and address of every owner of the ships and a declaration by every owner.

The review of the documents revealed that SUMATRA maintained a register of ships which captured all the information stipulated by the law. However, during the review of the ship register it was found that, SUMATRA did not deregister ships that ceased to operate or for any other reason such as sinking of the ship. Other circumstances which may accelerate deregistration can be application by the owner, change of ownership without notifying the registrar of ships, when a ship is no longer eligible for registration, when a ship is destroyed (shipwreck, demolition, fire and sinking), when a registered fishing vessel which has been licensed

ceases to be licensed for a continuous period of 6 month or more. According to SUMATRA management, this was because the owners of those ships did not notify the Registrar of Ships for deregistration. **Appendix F** shows list of dormant ships and small ships.

Similarly, it was found that SUMATRA did not establish and maintain a register of small ships.

During interviews with SUMATRA officials (and site visits), it was revealed that SUMATRA captured information regarding small ships when their surveyors visited various sites to carry out inspections. According to the SUMATRA officials, surveyors assigned registration numbers to newly identified small ships and recorded the numbers in Local Safety Certificates. Based on interviews, SUMATRA considered the Local Safety Certificates given to ship owners as register for small ships. Also this information was not compiled in a book or database for reference. This is contrary to the requirements of the licensing process as stipulated in the Merchant Shipping (registration and Licensing) Regulation, 2005.

Furthermore, the review of SUMATRA budget (2013/2014) revealed that, in the year 2012 SUMATRA carried out census for small ships operating in the Indian Ocean and inland water in Tanzania mainland. The purpose of the exercise was to develop database of small ships and inform owners SUMATRA's intervention programs such as safety campaigns and inspections. At the end of exercise, 30,866 small ships were identified, however neither database nor register were established and maintained.

SUMATRA management informed the audit team that, since life span of small ships was considered to be short and owners of small ships did not voluntarily request for surveys, SUMATRA preferred not to establish register for small ships.

Lack of registers and weak licensing process for small ships led to the following:

- i. SUMATRA issued the same registration number to two or more different small ships as shown in **Table 3.1**.

Table 3.1: Small ships with the same registration number

S/N	Registration number	Name of ship	Date registration
1	TAN0001	LADY DIANA 4	16.APRIL,12
		LADY DIANA	09.MAY,13
		MV.DELGADO	27.OCTOBER,14
2	TAN00013	MV.KIJISEHEMU	26.MAY,15
		FIBRE	10.MAY,12
3	TAN008	MV. PEPI	08.MAY,12
		MV.ZABAR JADA	02.MARCH,15
4	TAN00015	MV.MTELEZI	26.MAY,15
		KAMCHEZO	10.MAY,12
5	LND 001	MV. MAPUJU	Not provided
		MV. MTANENA	Not provided

Source: *Local Safety Certificates and Regional list of registered vessels (2011/2012 to 2015/2016)*

- ii. SUMATRA did not know the exact number of small ships operating in Tanzania mainland for each year. For instance, according to a list of licensed small ships in Tanga (2011/2012-2015/2016), In 2011/2012 the last registration was TAN0105 for Lady Diana-4. However, during 2015/2016 the last registration was TAN0062 for MV. Maisha Popote which was expected to be higher than previous years. Weaknesses in record keeping made SUMATRA unable to retrieve survey reports and seaworthiness certificates as shown in **Appendix G**.
- iii. Lack of register for small ships led to ineffective planning of surveys and inspections of small ships. That is to say, SUMATRA prepared unrealistic plans for surveys and inspections of small ships because the numbers of registered small ships as one of significant inputs for planning were not accurate.

3.2.2 Inadequate Survey and Inspection Plans

According to SUMATRA corporate strategic plan 2013/2014- 2017/2018 SUMATRA is required to set plans for survey and inspection of marine vessels.

Interviews with SUMATRA officials showed that, SUMATRA conducted surveys and inspections of ships. In this regard, the MoWTC and SUMATRA entered into agreement where both parties set targets on performance of various activities. However, the audit noted that the set targets of surveys of small ships shown in Annual Performance Agreements and reflected in

SUMATRA's Annual Plans were under-estimated. That is, the set targets of surveys for small ships were below the number of small ships identified through census conducted in 2012. In addition, the set targets of surveys for small ships in 2015/2016 decreased by 40 percent compared to previous financial year. SUMATRA did not substantiate the decrease in planned number of surveys. **Table 3.2** shows percentage of small ships not covered in survey and inspection plans.

Table 3.2: Percentage of small ships not covered in planning of surveys

Financial Year	Planned number of surveys as per Annual Performance Agreements	Number of small ships as per Census(2012)	Variance	Small ships covered in planning (%)	Small ships not covered in planning (%)
2015/2016	2760	30,866	33,626	9	91
2014/2015	4,600	30,866	26,266	15	85
2013/2014	4,400	30,866	26,466	14	86
2012/2013	Not provided	30,866	N/A	N/A	N/A
2011/2012	Not provided	-	-	-	-

Source: Auditors' analysis

Based on analysis from **Table 3.2** it was revealed that from 2013/2014 to 2015/2016 more than 85 percent of small ships were not covered in plans for surveys and inspections. The audit team was limited to make analysis for 2011/2012 and 2012/2013 since SUMATRA did not provide data for surveys which were supposed to be conducted in that period. This was due to the fact that the Annual Performance Agreement tool was not yet established.

Under-estimation of the set targets for surveys and inspections in the Annual Performance Agreement was caused by SUMATRA being unable to establish and maintain database for small ships. This could be the basis in the planning for surveys and inspection of small ships. Furthermore, under-estimation of the set targets was caused by lack of assessment and evaluation on the performance regarding the set targets.

Consequently, more than 80 percent of small ships were not surveyed and inspected as shown in **Table 3.4**. Equally, the intended purpose of the census conducted in 2012 was not met (refer to **Section 3.2.1**).

3.2.3 Survey and Inspection were Not Risk Based

Based on good practises SUMATRA is expected to develop survey and inspection plans by prioritizing resources on risk areas.

SUMATRA is expected to carry out risk assessment to ascertain risk areas and maintain risk profile for those areas. The assessment of risk areas could be based on various factors such as the number of operating ships, non-compliance with safety standards and number of accidents and incidents occurred in the respective areas. However, interviews with management of SUMATRA revealed that SUMATRA did not use risk based approach in planning and conducting surveys and inspections of ships and small ships. Similarly, SUMATRA did not establish profile which pinpoints risk areas in territories of Tanzania waters.

This was because SUMATRA did not conduct risk assessment to identify risk areas. Risk based approach in surveys and inspections could help the Authority to allocate properly limited resources in order to maintain safety in maritime transportation. For example, **Table 3.3** shows allocation of surveyors in regions by comparing to number of small ships as per census (2012).

Table 3.3: Number of small ships compared with number of surveyors

Region	Number of small ships per census (2012).	Number of surveyors
Mwanza	15,148	1
Tanga	202	1
Lake Tanganyika	1,619	1

Source: Census of small ships (2012) and staff list

Table 3.3 reveals that Mwanza region was allocated with one surveyor who seemed to be overworked. Whereas regions such as Tanga had 202 small ships and was allocated with the same number of surveyors.

The audit team found that, in the financial year 2015/2016 SUMATRA conducted 684 surveys while there were 15,148 small ships in Mwanza according to census conducted in 2012. This implies that almost 95 percent of small ships operating in Mwanza were not surveyed and inspected.

3.3 Conducting Surveys and Inspections of Vessels

3.3.1 Inadequate Coverage of Surveys and Inspections Checklists

According to Section 225 of the Merchant Shipping Act of 2003, Surveyors appointed by SUMATRA are supposed to carry out surveys of:

- a) the hull and machinery of ships;
- b) the equipment of ships, including tackle, and appurtenances;
- c) the life-saving, fire-fighting and other safety equipment of ships;
- d) the radiotelegraphy and radiotelephony installations of ships; and
- e) the stowage and manner of loading of ships' cargoes and the stowage of dangerous goods.

Surveyors are required to use checklists that cover all the necessary elements when conducting surveys and inspections for both ships and small ships. It was observed that SUMATRA developed checklists for inspection and survey of ships and small ships (see **Appendix E** of this report).

However, interviews with SUMATRA officials revealed that inspections of ships and small ships were conducted without using the checklists. Likewise, the review of files of 38 ships⁴ operating in Mwanza for the period from 2011/2012 to 2015/2016 showed that no checklist for inspections was filled by surveyors. Similarly, small ships operating in Mwanza were also inspected without using the checklists.

In Tanga region, 19 checklists were filled during the period of audit which was less than 10 percent of 202 small ships operating in the region. Furthermore, there was an incident where checklist dated 17/01/2016 for a vessel named High Bury with licence number Z.1085 was signed by officer in charge who at that day was not working at SUMATRA Tanga⁵. This implies that the checklists were not used and filled during the inspections rather filled in later as an act of trying to comply with the requirements.

⁴MV Wankyo, MV Victoria, MV Umoja, MV Serengeti, MV Butiama, MV Clarias, ML Maindi, MT Ukerewe, MT Nyangumi, MV Wimbi, ML Linda, MV Sengerema, MV Sabasaba, MV Nyerere, Rescue Boat II, MV Misungwi, MT Munanka, FB Matara, FB Chaha, MV Nyanginyama, MV Nyakibalya, MV Super Samar, FB Mugendi, MV Orion, MV Orion II, MV Thor, MV Juliana, MV Bijli, MV Nyehunge, MV Nyehunge I, MV Nyehunge II, MV Jubilee Hope, Coke, RV Jumuiya, MV Sant Methew, MV Upendo, MV Vero, MV Luxury II

⁵ The letter dated 19 January 2016 with reference number PCF.NO.00310 shows that, the officer was required to report to the new station Tanga on Monday 25th January 2016.

Furthermore, interviews with SUMATRA officials revealed that when surveyors conducted surveys and inspections of small ships they focused on few items in the checklist such as lifesaving appliances and fire fighting equipment. Other important items such as pollution prevention equipment, machinery/electrical and navigation aids were not dealt with. **Appendices D and E** show other important parts which were not checked when surveys and inspections of small ships were carried out.

SUMATRA officials informed the audit team that, they did not use checklists for inspections of small ship and ships because they were too detailed. Thus checklists for inspection of small ships and ships did not suit the purpose of inspection of ensuring compliance with safety standards.

This had impact on the quality of inspections, for instance, interviews conducted at Kasera cluster port with captains and small ship owners revealed that surveyors did not check on the condition of hull of the small ships. Also the level of non-compliance of surveyed small ships operating in Tanzania during the scope of audit on average was more than 50 percent.

3.3.2 Inadequate Number of Small Ships Surveyed and Inspected

The review of census of small ships (2012) and Annual performance reports from 2011/2012 to 2015/2016 revealed that SUMATRA conducted surveys and inspections less than 20 percent of small ships operating in Tanzania. **Table 3.4** indicates coverage of surveys and inspections for small ships in Tanzania.

Table 3.4 Extent of small ships which were not surveyed and inspected

Year	Census of small ships (2012)	Surveys and inspections	Small ships surveyed and inspected (%)	Small ships which were not surveyed and inspected (%)
2011/2012	-	4,825	N/A	N/A
2012/2013	30,866	6,156	20	80
2013/2014	30,866	4,634	15	85
2014/2015	30,866	4,502	15	85
2015/2016	30,866	3,748	12	88

Source: Auditors' analysis

Table 3.4 shows that, numbers of small ships not surveyed and inspected by SUMATRA were increasing from year to year. For example in 2012/2013 number of small ships not surveyed and inspected was 80 percent while

the following financial year rose to 85 percent. On the other hand in 2015/2016 number increased to 88 percent.

The audit team found inadequate coverage of small ships for surveys and inspections was caused by following reasons:

- Inadequate planning for surveys and inspections of ships. More than 85 percent of small ships were not covered in the plans;
- SUMATRA did not have adequate human capacity to survey and inspect vessels according to the management of SUMATRA. The review of SUMATRA Corporate Strategic Plan(2013/2014-2017/2018) showed that the numbers, level of competencies and qualifications of SUMATRA staff responsible for maritime surveys (surveyors) and inspections (inspectors) at the time of this audit was below the requirements of the sub-sector;
- At the time of this audit, SUMATRA did not carry out assessment and evaluation on the performance of surveys and inspections of ships and small ships;
- Most small ships operated in cluster ports which are not regulated(refer **Appendix H** for more details);and
- Lack of coordination between SUMATRA and Fisheries Department. Section 10 of the Fisheries Act requires Fisheries Department to issue licence to fishing vessel after being awarded seaworthiness certificate by SUMATRA. However, according to SUMATRA officials, Fisheries Department issued licences without considering seaworthiness certificates.

As a result of inadequate implementation of surveys and inspections,

- Non-compliance of safety standards by small ships in the period of audit on average was more than 50 percent. This implies that the risk of occurrence of accident was high regardless of decreasing trend of accidents as shown in **Figure 3.2**.
- There was loss of revenue which could be collected in form of renewal survey fee and licence fee for small ships which were not surveyed by SUMATRA within the period of audit. Since the census of small ships did not provide many details such as length and types of the identified small ships, the audit team assumed that all small ships analysed in **Table 3.5** were propelled by machines and their length is 4 metre. Therefore, **Table 3.5** shows revenue lost close to **US\$ 2.1 million** (i.e. more than TZS 4.5 billion) which could be collected for unsurveyed small ships from 2012/2013 to 2015/2016.

Table 3.5: Loss of revenue due to renewal surveys fee and licences fee

Year	Number of Unsurveyed Small Ships	Renewal Survey Fee (US\$)	Licence Fee (US\$)	Total Amount (US\$) A*(B+C)
	(A)	(B)	(C)	(D)
2015/2016	27,118	\$10	\$10	542,360
2014/2015	26,364	\$10	\$10	527,280
2013/2014	26,232	\$10	\$10	524,640
2012/2013	24,710	\$10	\$10	494,200
Total				2,088,480

Source: Auditors' analysis

- Also the set targets prescribed in SUMATRA's Strategic Plan 2013/14-2017/18 of reducing accidents and incidents to zero for ships and by 50 percent for the targeted number of small ships for every year were not achieved. However, during 2012/2013 there were 24 accidents and incidents of small ships according to MRCC. This contradicts the Strategic Plan which shows 10 accidents and incidents which were used as baseline in setting strategic objective of reducing accidents of small ships. **Figures 3.1 and 3.2** show number of accidents and the set targets from financial year 2011/2012 to 2015/2016 for ships and small ships respectively.

Number of Accidents and Incidents vs Targets Set (Accidents reduced to zero) for Ships

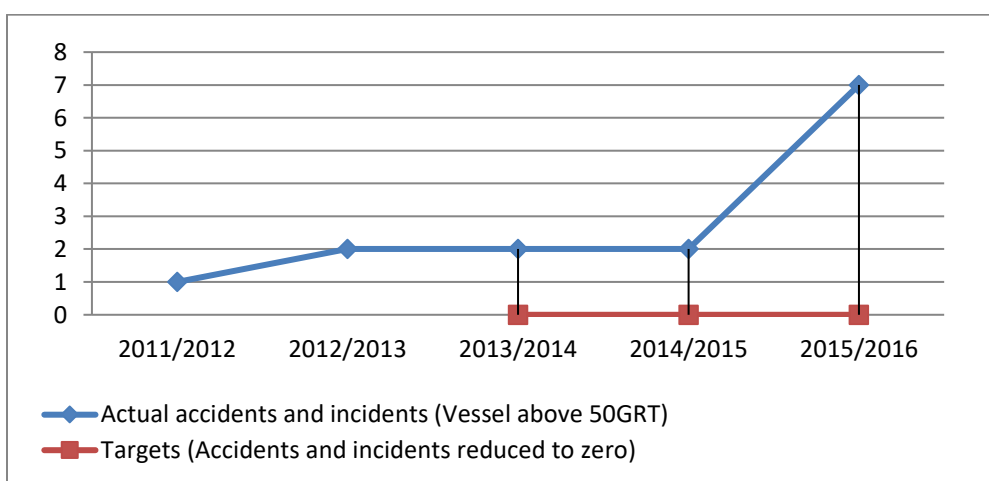


Figure 3.1 *Number of accidents and incidents and Set target(Accidents reduced to zero) for ships*

Number of Accidents and Incidents vs Targets Set (Accidents reduced by 50%) for Smallships

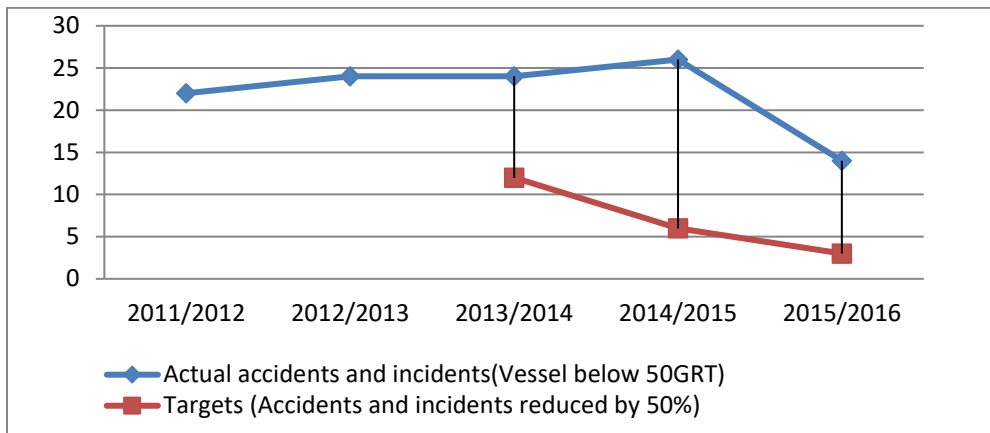


Figure 3.2 *Number of accidents and incidents versus Set targets (Accidents reduced by 50 percent every year) for small vessels*

Figure 3.1 indicates that number of accidents for ships increased yearly up to 7 accidents as at 2015/2016. This is contrary to set targets which aimed at reducing number of accidents for ships to zero. Similarly, **Figure 3.2** shows that the set target to reduce number of accidents of small ships by 50 percent each year was not achieved regardless of decreasing trend of accidents. In 2015/2016, accidents number was supposed to be reduced to 3. However, 14 accidents occurred during that financial year. This implies that accidents of small ships during 2015/2016 increased by 11 accidents above the expected number.

3.3.3 Implementation of Surveys and Inspections of Vessels are not Assessed

Section 7.4.3 of SUMATRA Strategic Plan (2013/14-2017/18) requires SUMATRA to carry out annual performance assessment of its activities.

The review of SUMATRA Annual Performance Reports of 2011/2012 to 2015/2016 showed that SUMATRA carried out assessment on compliance with safety standards for small ships. However, SUMATRA did not conduct assessment on the implementation of surveys and inspections of both, ships and small ships. In addition, SUMATRA did not make assessment on compliance of safety standards for registered ships which operate in Tanzania.

This was caused by SUMATRA's inadequate plans for surveys and inspections. During the period of audit, SUMATRA did not set plans which cover all identified small ships as per census of small ships conducted in 2012. This could help them to compare with actual surveys and inspections in order to assess their performance.

Lack of assessment on implementation of surveys and inspection of vessels resulted into the following:

- The set target (surveys and inspections) prescribed in Performance Agreement between SUMATRA and MoWTC decreased by 40 percent in 2015/2016 compared to 2014/2015 financial year. Rather it should be increased at least to cover 30,866 small ships identified through census conducted in 2012;
- Coverage of small ships in plans were low compared to census conducted in 2012 (see **Section 3.2.2**); and
- Decrease of number of surveys and inspections of small ships from year to year (see **Section 3.3.2** for details).

3.4 Enforcement of Requirements of Safety in Maritime Transportation

3.4.1 Inadequate Enforcement of Safety Standards

According to Section 230(2) of Merchant Shipping Act No.21 of 2003, when the corrective actions are not taken within a reasonable period as a surveyor may specify, the surveyor at the expiration of that period is supposed to notify the registrar of ships who may on receipt of such notification suspend the validity of the particular certificate issued to the ship and give notice of such suspension to the owner and to the Surveyor who in turn shall notify the master.

The review of notifications of non-compliance from 2011/2012 to 2015/2016 given to small ships operators showed that SUMATRA did not give stop orders and penalties to most of defaulters of safety standards. **Table 3.6** explicitly shows stop orders and penalties issued by SUMATRA to the operators who did not comply with the laws and regulations in the sub-sector.

Table 3.6: Stop Orders and Penalties Given to Defaulters of Safety Standards

Year	Number of Small Ships Not Complying with Safety Standards	Number of Sanctions Given		Level of Enforcement (%)	
		Stop orders	Penalty	Stop orders	Penalty
2015/2016	1,667	0	31	0	1.85
2014/2015	1,663	17	0	1.02	0
2013/2014	2,933	0	0	0	0
2012/2013	4,161	159	0	3.82	0
2011/2012	2,513	0	0	0	0

Source: Auditors' analysis

From **Table 3.6** SUMATRA did not penalize defaulters from 2011/ 2012 to 2014/2015 until 2015/2016 when they started. However in 2015/2016 only 1.85 percent of defaulters of safety standards were penalized. Similarly, SUMATRA used to give stop orders to the defaulters of safety standards which are still minimal as shown in the **Table 3.6**.

Inadequate enforcement of safety standards was caused by lack of assessment by SUMATRA regarding compliance with safety standards and action taken to reduce the problem.

The following are impacts of inadequate enforcement of safety standards:

- a) The review of SUMATRA Annual Reports from 2011/2012 to 2015/2016 indicated that non-compliance with safety standards to the surveyed small ships was still a problem. **Table 3.7** shows the extent of non-compliance with safety standards by small ships.

Table 3.7: Non-compliance with Safety Standards

Financial year	Number of Surveys and Inspections (A)	Number of Local Safety Certificates issued (B)	Non-compliance with Safety Standards (%) $(1 - B/A) \times 100$
2015/2016	3,748	2,081	46
2014/2015	4,502	2,839	37
2013/2014	4,634	1,701	63
2012/2013	6,156	1,995	68
2011/2012	4,825	2,312	52

Source: Auditors' analysis

Analysis from **Table 3.7** shows that the trend for non-compliance with safety standards was fluctuating. That is in 2011/2012 non-compliance

level was 52 percent then gone up to 68 percent in 2012/2013. While in 2013/2014 non-compliance went down to 63 percent. In 2014/2015 the non-compliance was at 37 per cent which represented the best results for period covered. Lastly, in 2015/2016 non-compliance level went up again to 46 percent. In addition, in 2015/2016 SUMATRA carried out fewer surveys and inspections compared to other year. This implies, at that level of coverage, that non-compliance with safety standards was generally more noticeable when SUMATRA conducted more surveys and inspections.

- b) Furthermore, some vessels operating in Lake Victoria did not comply with safety standards and yet were given safety certificates by SUMATRA besides their deficiencies. **Appendix I** provide detailed explanation regarding vessels given safety certificates with deficiencies to rectify.

3.5 Monitoring and Evaluation of the Surveys and Inspections

3.5.1 Inadequate Monitoring and Evaluation of Surveys and Inspections of vessels

The Instrument vide the Government Notes No. 494 of 2010 requires the Ministry responsible for transport to monitor and evaluate the performance of transport sector including SUMATRA.

The Ministry developed an Annual Performance Agreements with SUMATRA as tool to monitor performance of SUMATRA in 2013. This tool required SUMATRA to submit to the MoWTC Performance Reports on quarterly basis. According to the agreements, the ministry was supposed to acknowledge receipt of the reports and give comments on the progress reports.

However, review of documents covering the period between 2013/2014 and 2015/2016 revealed that neither quarterly progress reports were submitted to the MoWTC nor comments were prepared by the ministry as feedback to SUMATRA.

Further review of records showed that the MoWTC wrote to SUMATRA on 27th February 2017, giving comments in response to the quarterly progress report that SUMATRA supposedly submitted to the MoWTC covering the period ending on 30th September 2016 (i.e. first quarter of 2016/2017). However, neither MoWTC nor SUMATRA presented the said progress report for verification.

According to review of the Ministry Annual Progress Reports from 2011/2012 to 2015/2016, the MoWTC did not conduct monitoring of safety issues in maritime transportation particularly on surveys and inspections as implemented by SUMATRA for the all the years in the scope of this audit. Also the MoWTC did not evaluate performance of SUMATRA regarding implementation of the strategic objective of reducing accidents and incidents to zero for ships and by 50 percent each year for small ships.

The following are reasons for inadequate monitoring and evaluation of safety issues conducted by SUMATRA:

- a) The MoWTC had inadequate capacity in terms of human resources in safety and environment division. They had only eight staff while their need was twenty two in that division to address the problem. **Appendix J** provides details on staffing level of the safety and environment department. Interviews with MoWTC officials indicated that, the MoWTC did not get endorsement from PO-PSM to recruit when they their request.
- b) The review of the Ministry's Annual Progress reports of 2011/2012 indicated that monitoring and evaluation of safety issues was not done due to lack of funds. However, the MoWTC did not prioritise monitoring activities that ensure safety in maritime transportation. For example, the review of Annual Progress from 2011/2012 to 2015/2016 showed that no fund was spent for monitoring activities in transport safety and environment division.

The following were the impacts of inadequate monitoring and evaluation:

- SUMATRA did not achieve the set goal to reduce the number of maritime accidents and incidents to zero percent for ships and ten percent for small vessels.
- SUMATRA offered safety certificates while the operators had not rectified the deficiencies as shown in **Appendix I**.
- MoWTC endorsed a decrease in targeted number of inspections from 4,600 in 2014/2015 to 2,760 in 2015/2016 without justification from SUMATRA as explained in **Section 3.2.2** of this report.

3.5.2 No Actions Taken by the Ministry as a Result of Monitoring SUMATRA's Performance

According to Section 5 of Merchant Shipping Act No.21 of 2003, MoWTC is supposed to give directives to registrar of the ships regarding safety in maritime transportation.

The review of Survey and Inspection Reports together with ship files revealed that, MV Vero, MV Juliana, MV Norris and MV ST Mathew were given safety certificates while they had not rectified deficiencies observed during surveys and inspections. **Appendix I** provides more details regarding above mentioned ships which were allowed to operate with deficiencies. Furthermore, the MoWTC did not take any action when SUMATRA wrongly issued safety certificates to those ships. Likewise, the MoWTC did not take measures regarding the extent of actions taken by SUMATRA to the defaulters of safety standards (refer **Table 3.6**).

The reason given by the MoWTC for not taking actions regarding SUMATRA's failure to conduct proper inspections and surveys of ships is weak reporting arrangement between MoWTC and SUMATRA regarding safety in maritime transportation as explained in **Section 3.5.1**.

CHAPTER FOUR

CONCLUSIONS

4.1 General Conclusion

Generally, SUMATRA and MoWTC did not effectively manage surveys and inspections of ships as well as small ships which were operating in Tanzania during the time of this audit. Ineffective surveys and inspections led to non-compliance with safety standards to the extent that marine accidents and incidents were often occurring. This contributed to risk of making maritime transportation unsafe, contrary to the mission of MoWTC which aimed at facilitating provision of an economic, safe and reliable transport.

4.2 Specific Conclusions

The following are specific conclusions of the audit:

4.2.1 Inadequate Plans for Surveys and Inspections of vessels

SUMATRA does not adequately plan for surveys and inspections of both ships and small ships. More than 85 percent of small ships were not covered in the plans of surveys and inspections. Likewise, SUMATRA neither use risk based approach in planning of surveys and inspections of vessels nor during implementation of the set plans. This is partly caused by SUMATRA not establishing and maintaining adequate records for ships and small ships.

4.2.2 Inadequate Implementation of Plans for Surveys and Inspections of Vessels

SUMATRA does not adequately carry out surveys and inspections of the vessels. Almost 80 percent of small ships were not covered during surveys and inspections. In addition, checklists for inspection of ships and small ships were not fully used during inspections as SUMATRA focused on a few items in the checklist. Moreover, SUMATRA does not assess the implementation of surveys and inspections.

4.2.3 Inadequate Enforcement of Requirements of Safety in Maritime Transportation

SUMATRA does not adequately enforce compliance with safety standards to the extent that from 2011/2012 to 2014/2015 no penalty was given to the defaulters except in 2015/2016 where 1.85 percent of defaulters were penalized. Similarly, SUMATRA does not stop defaulters of safety standards from operating. SUMATRA managed to stop less than 4 percent of the

defaulters under the scope of audit. This poses more risk on non-compliance with safety standards as manifested by more than 50 percent of surveyed small ships not complying with safety standards.

4.2.4 Inadequate Monitoring and Evaluation of the Surveys and Inspections of Vessels

The MoWTC does not conduct monitoring and evaluation on performance of SUMATRA particularly on implementation of surveys and inspections of vessels. Furthermore, MoWTC does not take corrective actions to SUMATRA when compliance of safety standards is not achieved as per set targets.

CHAPTER FIVE

RECOMMENDATIONS

5.1 Introduction

This chapter presents recommendations to SUMATRA and MoWTC on what should be done to improve weakness presented in findings chapter of this audit report.

The recommendations given need to be implemented by responsible parties so as to ensure surveys and inspections of vessels are effectively managed. This will contribute to safety in maritime transportation by reducing maritime accidents and incidents, and increase compliance with safety standards.

5.2 Recommendations to the Surface and Marine Transport Regulatory Authority (SUMATRA)

SUMATRA should:

- 1) Ensure that all small ships are licensed and registered timely and the data base are established and maintained.
- 2) Assess its capacity in terms of human resources and facilities against its responsibility for the purpose of bringing to light whether or not they need capacity building and in which areas.
- 3) Establish computerized system for documentation of maritime activities such as registration of ships, register for licensed small ships, records of surveys and inspections for both ships and small ships, non-compliance with safety standards and so on.
- 4) Establish coordination mechanisms with Fisheries Department in order to cover fishing vessels for surveys and inspections.
- 5) Make assessment on implementation of set plans for surveys and inspections of vessels.
- 6) Ensure surveyors are qualified and well trained as per requirements of the sub sector and also are sufficient for attending available vessels.

5.3 Recommendations to the Ministry of Works, Transport and Communication (MoWTC)

The MoWTC should:

- 1) Access its capacity in terms of human resources with respect to overseeing SUMATRA's execution of its responsibility.

- 2) Prioritise monitoring and evaluation on the performance of SUMATRA specifically on surveys and inspections of both ships and small ships.
- 3) Establish proper reporting mechanisms which will ensure delivery of information from SUMATRA regarding safety management in maritime transportation.

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10. SUMATRA "second corporate strategic plan for the period 2013/14-2017/18"
11. SUMATRA *"Annual Budgets of 2011/2012 to 2015/2016"*
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15. URT (2005) The Merchant Shipping (Fees) Regulation of 2005
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17. International Convention for the Safety of Life at Sea (SOLAS). *"May 2011 Amendments, Entry into force:1 January,2013"*

APPENDICES

Appendix A : Documents reviewed during the audit

S/N	Document reviewed	Reason(s)
1	Budgets of MoWTC, SUMATRA, and MSCL (2011/12-2015/16).	To understand the allocation of funds for survey and inspection activities.
2	Performance Reports of MoWTC and SUMATRA (2011/12-2015/16).	To assess the performance and implementation status of planned inspection activities concerning control of safety in maritime transportation.
3	Monitoring and Evaluation Reports by MoWTC, SUMATRA, and MSCL- (2011/12-2015/16)	To find out if the responsible authorities adequately monitor and evaluate the activities related to safety in maritime transportation sector.
4	Survey and Inspection reports-(2011/12-2015/16).	To find out the items covered in the checklist during survey and inspection activities. Also to identify recommendations given to the defaulters and to determine the extent of non-compliance with safety standards.
5	Ship register books	To know the extent of registered and licensed vessels in order to make comparisons with number of inspections carried out.
6	Notifications of non-compliance - (2011/12-2015/16)	To understand the extent of non-compliance with safety standards.
7	Accidents and incidents reports-(2011/12-2015/16)	To find out the extent of marine accidents and incidents in the country.
8	MoWTC and SUMATRA strategic plans	To understand strategic objectives and challenges in the sector.
11	Checklists for survey and inspection of vessels	To understand procedures for conducting surveys and inspections of vessels. Also to understand minimum items to consider during survey and inspection.

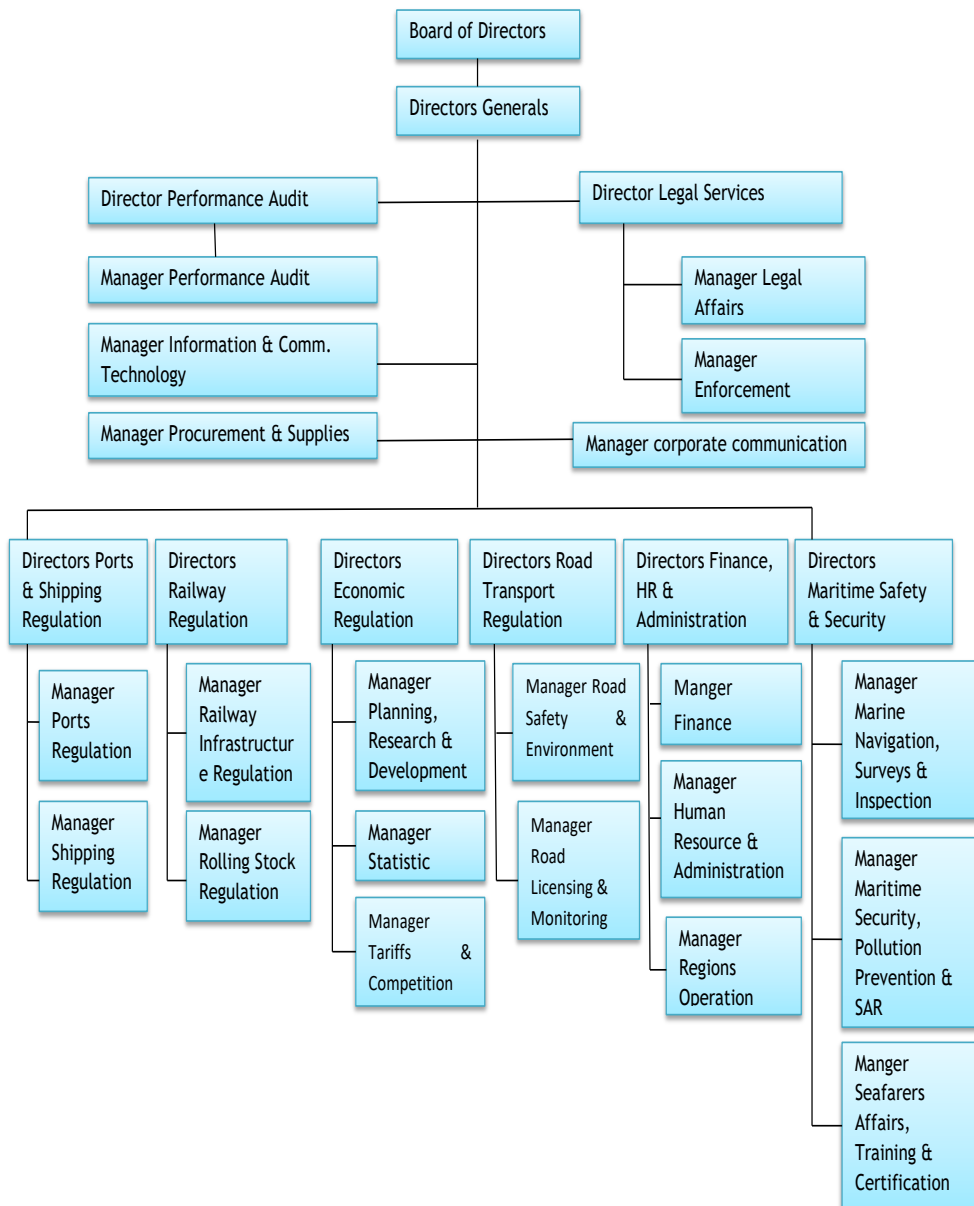
Source: Auditors' analysis

Appendix B: Officials interviewed during the audit

Location	Officials Interviewed	Reason(s)
SUMATRA	Director, maritime safety and security	To understand their effort in implementing the control measures to prevent accidents caused in marine transportation.
	Manager, marine navigation, surveys and inspections	To understand the process of surveying and inspecting vessels/ships.
	Manager, seafarers affairs, Training and Certification	To assess the extent seafarers are technically equipped to minimize marine accidents
	Surveyors/inspectors	To understand how surveys and inspections are conducted. To identify challenges faced during execution of surveys and inspections.
MoWTC	Director Safety and environment division	To understand how the MoWTC monitors and evaluates performance of SUMATRA regarding surveys and inspection of vessels.
	Transport officers	To understand the implementation of monitoring activities of surveys and inspections.
MSCL	General Manager	To understand how ship operators maintain and comply with safety standards
	Superintendent officer	To understand how ship operators maintain and comply with safety standards

Source: Auditors' analysis

Appendix C: Organisation structure of SUMATRA



Appendix D: Checklist for survey of small vessels and registered ships

RECORD OF EQUIPMENT AND VESSEL INFORMATION

Name of Vessel	Type of Vessel	Port of registry	Length(m)	Date of Build	Identification Number
	FERRY BOAT		45.00		

Certificate	Date of issue	Date of expiry	Issuing Authority
Insurance			
Registration			
Safe manning			

Fire fighting	No/Type	Condition	Location
Fire & safety plan			
Fire pumps (hand)			
Fire pumps(mechanical)			
Portable extinguishers			
Fixed extinguishing system:			
Components			
Fire buckets			
Sand boxes			
Hydrants			
Hoses fittings and nozzles			

Equipment	Number	Type/Condition	Location
Anchors			
Anchor cables/chains			
Bilge pumps			
Winches			
Cranes			
Derricks			
Towing equipment			
Ropes and lines			
Collision mat			
Gangway			
Fenders			
Boat hook			
First aid kit			
Binoculars			

Waste containers			
Heaving line			

Axe			
Torch			
Navigation Equipment	Number	Condition	Location
Navigation lights			
Sound signals			
Shapes			
Radar			
Compass			
GPS receiver			
Echo Sounder			
EPIRB			
Communication Equipment			
Nautical Publications			
Logbook			

Location of passengers on specific decks and spaces in maximum loaded condition				
Deck / space	1 st Deck	2 nd Deck	Crew Rooms	Total
Maximum No. of persons				

Freeboard determined in accordance with 4.1 of the Regulations				
Minimum freeboard, equivalent to:				
Number of passengers				
Cargo (tonnes)				

Life-saving Equipment	Number	Type / condition	Location
Lifejackets			
Lifeboats			
Life rafts			
Launching arrangements			
Floatation devices			
Lifebuoys			
Flares-Parachute			
Flares-hand-held			
Smoke signals			

Emergency communications			
Radar transponder/reflector			
Rescue boat			
Life raft/lifeboat equipment			

Machinery / Electrical	Power kW	Type / condition	Location
Main machinery			
Main generator			
Emergency generator			
Main steering gear			

Auxiliary steering gear			
Switchboard			
Shore connection			
Batteries			
Signal light switches			
Accommodation / safety	Condition	Comment	
Escape routes			
Washrooms			
Toilets			
Galley			
Mess room			
Water tanks			
Heating / Cooling ventilation			
Berth / locker			
Access to accommodation			
Lighting			
Machinery guards			
Guard rails			
Non-slip surfaces			
Ladders / companionways			
Noise insulation / protection / notices			
Foam floatation materials: density			

Issued at:.....
(Place of issue of certificate)

On:
(Date of issue).....

(Signature of authorized official issuing the certificate)

(Seal of the issuing authority, as appropriate).

GUIDANCE FOR SURVEYORS IN INSPECTIONS/BOAT CHECKLIST-SMALL BOATS

SURVEY FORM-(SMALL BOATS)

Name of Vessel	Type of Vessel	Port of registry	Reg. Number	Date of Build	Gross Tonnage	Lengt	Breadth	Cargo Tones

1. Owner & Address + Telephone
2. Surveyed at: Place Date
3. No. of Crew No. of Passenger:

Certificate	Number	Date of issue / Place
Registration(SUMATRA)		
Seaworthy Cert.		
	Number	Condition
Fire fighting equipment(extinguishers)		
Communications equipment-radio, Cell		
Navigation equipment-torch,		
Distress signals:		
Parachute		
Hand held		
Smoke signals		
EPIRB		
Life Saving Appliances:		
Lifejackets		
Lifebuoys		
Damage Control		
Pollution Prevention equipment		
Hull external		
Keel		
Stern		
Free board		
Planting/Planking		
Floors		
Beams		
Hatches		
First aid kit		
Anchor, Cable and boat hook		
Machinery/electrical	Power HP/kW	Type/ Condition
Machinery		
Batteries		

SURVEYOR:

.....
.....

Appendix E: Checklists for inspections of small vessel and registered ships.

UNITED REPUBLIC OF TANZANIA
S U M A T R A

For Competitive, Efficient, Quality and Safe Transport Service
Surface and Marine Transport Regulatory Authority
Mamlaka ya Udhhibiti Usafiri wa Nchi Kavu na Majini

CHECKLIST FOR INSPECTION OF REGISTERED SHIP WHILE IN SERVICE

Ship's Particular

1. Name of the port of inspection.....
2. Port of Registry.....
3. Name of owner.....
4. Name of ship.....
5. Former ship's name.....
6. Ship's official number.....
7. Ship's IMO number.....
8. Ship's call sign.....
9. Built.....
10. Ship's particulars: Loa.....Breadth.....Depth.....Draft....GT.....NT.....
11. Type of ship.....
12. Operation status of ship.....

General information

1. Status of safety certificate.....
2. Status of other certificates and documents.....
Status of crew certificate including medical fitness
certificate.....Condition of life saving appliances and
arrangements.....
3. Number of lifejackets.....Number of lifebuoys.....

Condition of fire fighting equipment and systems

4. Condition of fixed fire system.....
5. Fire plan and number and type of fire extinguishers.....
6. Condition of fire man's outfit and fire axe.....
7. Number and condition of sand buckets and fire blankets.....
8. Condition of fire flaps.....

Condition of communication equipment

9. Condition of marine radio /GMDSS equipment.....
10. Number and condition of distress signals.....
11. Condition of SART/EPIRB/AIS/LRIT.....

Condition of navigation equipment

12. Condition of radar set(s).....

13. Number and condition of compass (es).....
14. Number and condition of GPS.....
15. Number of navigation charts and publications.....
16. Condition of deck logbook and entries.....
17. Condition of rudder angle indicator.....
18. Condition of whistle and emergency alarm.....
19. Condition of line throwing apparatus.....
20. Number and condition of distress signals (parachute, hand flare, smoke).....
21. Number of statutory publications (acts, Regulations, Merchant shipping notice etc).....

Condition of hull and deck

22. Condition of draft and loading mark.....
23. Condition of anchors and chains/ropes.....
24. Number and condition of ramps.....
25. Condition of windlass and capstan.....
26. Number and condition of mooring ropes and heaving lines.....
27. Condition of fair leads.....
28. Condition of deck fittings and machinery.....
29. Condition of pilot ladder.....
30. Condition of ventilators, air and filling pipes, scuppers, freeing ports etc.....
31. Condition of gangway and accommodation ladder.....
32. Condition of marine waterproof torch/spotlight/search light.....

Condition of population system

33. Condition of engine room logbook and entries.....
34. General cleanness of the engine room.....
35. Condition of main engines.....
36. Condition of auxiliary engines.....
37. Condition of boilers.....
38. Condition of pumps and piping system.....
39. Condition of bilge alarm and system.....
40. Condition of steering system.....
41. Condition of steering gear.....
42. Condition of main switch board.....
43. Condition of lighting system including emergency lighting.....

Condition of accommodation

44. General condition of crew accommodation.....
45. General condition of signage.....
46. General condition of galley.....
47. Condition of first aid kit.....

Result of Inspection or survey

1. Oral warning given to operators.....
 2. Notification(s) served.....
 3. Improvement Notice served.....
 4. Prohibition Notice served.....
 5. Imposed fines collected.....
- Responsible government officers informed of any prohibition imposed.....

Inspected by:
name.....Signature.....
Designation:.....Date.....

UNITED REPUBLIC OF TANZANIA
S U M A T R A

For Competitive, Efficient, Quality and Safe Transport Service
Surface and Marine Transport Regulatory Authority
Mamlaka ya Udhhibiti Usafiri wa Nchi Kavu na Majini
SMALL VESSEL INSPECTION CHECKLIST

General information:

1. Name of the Port/Landing Site (Mwalo) of inspection.....
2. Name of
Owner.....
3. Name of vessel.....
4. Vessel's unregistered license No
5. Vessel's Particulars: Loa..... Breadth Depth..... Draft..... GT.....
6. Type of Vessel:

Specific Information for all vessels

1. Status of Local Safety Certificate: Current
2. Number of life jackets..... Number of Lifebuoys.....
3. Number and Type of Fire Extinguishers.....
4. Number of Bailers (Water Buckets) on board.....
5. Number and condition of Sand buckets and blankets.....
6. Condition of paddles(Kasia) on board: Good ☐ Bad ☐
Briefly explain if ticked Bad above:
.....
.....
7. Condition of anchors and chains/ropes: Good ☐ Bad ☐
Briefly explain if ticked Bad above:
.....
.....
8. Condition of Hull: Good ☐ Bad ☐
Briefly explain if ticked Bad above:
.....
.....
9. Condition of Marine Waterproof torch/ spotlight/Search Light: Good ☐
Bad ☐
10. Condition of magnetic compass: Good ☐ Bad ☐
11. Briefly explain if ticked Bad above;
.....
.....
12. Condition of Global Position System (GPS).....
13. Condition of
Radar.....
14. Condition of Echo sounder/hand lead line.....
15. Condition of communication facilities.....

16. Crew number and qualification.....

Specific information for motor vessels:

1. Condition of water pump.....
2. Condition of Sand buckets.....
3. Condition of fire blankets.....
4. Condition of outboard/inboard engines.....

Specific information for sailing:

1. Condition of sail
2. Condition of sail arrangement

Results of inspection or Survey:

1. Oral warning given to operators.....
2. Notification(s) served
3. Improvement notice served
4. Prohibition Notice served
5. Imposed fine collected
6. Responsible government officers informed of any prohibition imposed

Inspected by: Name:Signature

Designation;date.....

Appendix F: List of Dormant Ships

The following is list of dormant ships:

Name of Ship	Type	Registration	Date of registration
Dar es Salaam			
Highlander	Fishing	10120	1998
Heatha	Fishing	10121	1998
Banuso III	Fishing	10076	1991
Titli	Cargo	10123	1998
Hazhara	Passenger	10125	1999
Andrea	Fishing	10130	2000
Ocean crest	Fishing	10132	2000
MT Beacon	Cargo	10135	2002
MT Mashalah	Cargo	10156	2002
Black Tiger	Cargo	10168	2007
ikoiko	Cargo	10138	2006
MV Angle (tone 40)	Cargo	10168	2008
Mwanza			
kipepeo	Passenger	MZ/P/024	2008
RV Uvumbuzi	Research	MZ/P/036	2009
RV Hammarkop	Research	MZ/P/37	2009
Indian ocean			
Ushirika	Cargo	10022	1969
Crete	Cargo	10024	1968
Zambia Challenge	Cargo	10023	1967
MV north trader	Cargo	10025	1968
ShazaLindi	Fishing	10026	1968
Abbas	Cargo	10027	1968
MV Munir	Cargo	10028	1968
MV Obus	Cargo	10028	1969
Twiga	Cargo	10029	1969
MvUjamaa	Cargo	10031	1970
MvKoroshos	Cargo	10032	1971
MvMtwara	Cargo	10033	1972
MvChamwino	Cargo	10034	1972
MvKolekole	Cargo	10035	1973
Mv Papa	Tug boat	10036	1974
MvChuchunge	Tug boat	10037	1974
MvLindi	Cargo	10038	1975
MvNguru	Tug boat	10039	1975
MvMwenge	Cargo	10040	1976
Tug Chaza	Tug boat	10041	1976
MT Hodari	Motor tanker	10042	1977
Tug kongoni	Tug boat	10043	Not provided
Tug Nguva	Tug boat	10044	Not provided

Name of Ship	Type	Registration	Date of registration
Tug nyati	Pilot boat	10045	Not provided
MvJitegemee	Cargo	10046	Not provided
MvRuvu	Cargo	10048	Not provided
Tug kahawa	Tug boat	10051	Not provided
Tug Simba	Tug Boat	10053	1983
MvNdovu	Floating crane	10054	1984
MT BpUshirikiano	Tanker	10056	1988
MFV Seashore 1	Fishing	10115	1985
MFV Dhabian	Fishing	10059	1988
MvOtan	Fishing	10060	1990
Ferry Alina	Ferry	10062	1990
MV Lengo	Cargo	10063	1990
TwigaExtobago	Cargo	10064	1990
MvAwamu	Cargo	10065	1990
MvUchumi	Cargo	10066	1990
MvMzalendo	Cargo	10067	1990
MFV Safina	Cargo	10068	1990
MvKaskazi	Cargo	10069	1990
Mv Dar	Cargo	10070	1990
Mv Canadian Spirit	Passenger	10071	1991
MFV sayeda	Fishing	10072	1991
Tusk 1	Patrol Boat	10073	1991
MvKibua	Fishing	10074	1991
MFV saladina	Fishing	10075	1991
MFV Mama Otan	Fishing	10077	1994
MV Butterfly	Passenger	10078	1992
MvZaniship 1	passenger	10079	1990
MFV Ngulangula	Fishing	10083	1992
MFV Ngisi	Fishing	10084	1992
MFV Maristella	Fishing	10086	1992
MFV Marietta	Fishing	10087	1992
MvKalypso	Cargo	10089	1992
MvKalypso II	Cargo	10094	Not provided
MFV Chant Des Sireness	Fishing	10095	1993
MFV Arusha	Fishing	10098	1994
MT DK II	Tanker	10102	1994
MFV Connie	Fishing	10112	1996
MvBulkis	Cargo	10116	2007

Appendix G: Weakness on Hard Copy Documentation System

Name of ship	Items	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
MV. UPENDO	Surveys	Not surveyed	Surveyed on 16/10/2012	Not surveyed	Missed survey report	Surveyed on 26/3/2016
	Seaworthiness certificates	Not issued	Issued on 21/10/2012	Not issued	Issued on 2/3/2015	Issued on 4/4/2016
MV JUBILEE HOPE	Surveys	Not Surveyed	Not Surveyed	Not Surveyed	Missed survey report	Annual(1st): Survey on 28 & 30/09/2015 2ndly: Surveyed on 09/11/2015
	Seaworthiness certificates	Not issued	Not issued	Not issued	Issued on 30/10/2014	Issued on 02/12/2015
MV THOR	Surveys	Annual (1st): surveyed on 03/07/2011	Annual (1st) Surveyed on 03/07/2012 2ndly: 21/05/2013	Not surveyed	Missed survey report	Annual (1st): Surveyed on 06/01/2016 2ndly: 5/02/2016
	Seaworthiness certificates	Issued on 27/07/2011	Issued on 04/06/2013	Not issued	Issued on 27/01/2015	Issued on 06/05/2016
MV UMOJA	Surveys	Surveyed on 22/07/2011	Surveyed on 20/07/2012	Not Surveyed	Surveyed on 09/11/2014	Missed survey report
	Seaworthiness certificates	Issued on 29/07/2011	Issued on 27/07/2012	Not issued	Not issued	Issued on 27 January 2015
MV ORION II	Surveys	Surveyed on 18/02/2012	Surveyed on 31/01/2013	Surveyed on 25/09/2013	Missed survey report	Annual (1st) Surveyed on 22/10/2015 2ndly: Surveyed on 10/11/2015
	Seaworthiness certificates	Issued on 08/03/2012	Missing Seaworthiness certificates	Issued on 18/10/2013	Issued on 21/10/2014	Issued on 08/12/2015

Appendix H: List of unregulated Cluster Ports

S/N	Name of the Cluster Port	Region
1	Mkwaja	Tanga
2	Petukiza	Tanga
3	Maboza	Tanga
4	Moa	Tanga
5	Jasin	Tanga
6	Kipumbwi	Tanga
7	Pangani	Tanga
8	Kasera	Tanga

Appendix I: List of Ships with Deficiencies that were Given Safety Certificates

The following are vessels which did not comply with safety standards but they were given safety certificates:

Name of the Vessel	Snags observed	Date of Survey Report
MV VERO II	<ul style="list-style-type: none"> Machinery parameter indicators at bridge and engine room need further services to make them function accurately The vessels was not manned with competent crew was not provided with on board vessel distress signals, such parachute rocket, smoke signals and hand flares The vessel did not conduct emergency drills at regular interval and be recorded accordingly. 	21/10/2015
MV Wanko	<ul style="list-style-type: none"> Ships document, including stability information book, safety certificates, crew's certificates and filling systems was not kept on board Machinery indicator parameter at bridge and engine room needed appropriate service Bottom hull has not been serviced and be inspected by Authority's surveyors before the next annual survey The master did not carry out emergency drills at regular intervals and were not appropriately recorded The vessels were not manned with competent crew, with valid certificates in accordance with safe certificate. 	07/01/2016
MV Juliana	<ul style="list-style-type: none"> Unpainted deck cargo floor Engine reading gauges were not working. 	19/11/2016
MV ST. Mathew	<ul style="list-style-type: none"> Hydraulic oil leakage Rotating belt of the general service pump guard were not installed. 	18/11/2016
MV Upendo	<ul style="list-style-type: none"> The ship will be docked for under water inspection as soon as the dock is free Diesel generator and starboard main engine parameters were not functioning. 	26/3/2016
MV Jubilee	<ul style="list-style-type: none"> Moreover the vessel is restricted to trade in Tanzania waters it has to undergo bottom hull services before the next annual survey 	09/11/2015

Source: Survey reports

Appendix J: Staffing level of Transport Safety and Environment Division

Staffing level of Transport Safety and Environment Division

Post	Current	Need
Director	1	1
Assistant Director	0	2
Principal transport officer I	0	2
Senior Transport Officer I	1	2
Transport Officer I	1	2
Transport Officer II	1	2
Principal Environmentalist I	0	1
Senior Environmentalist I	0	1
Environmentalist I	0	1
Environmentalist II	0	1
Accountant	1	1
Secretary	2	2
Driver	1	3
Office Attendant	0	1
TOTAL	8	22

Appendix K: Responses of SUMATRA and MoWTC on Recommendations Given

Part A: SUMATRA's Responses on recommendations given

A: Overall Responses

SUMATRA appreciates the work performed by auditors and is fully committed to implement the auditors' recommendation. Most of the issues reported by auditors' had already been identified by SUMATRA; and the Authority is already in the process of implementing ISO based quality management system designed to enhance efficiency and effectiveness of all its operations.

B: Specific Responses

No.	Recommendation (s)	SUMATRA's Comment(s)	Action(s) to be taken	Timeline
1.	Ensure that small ships are licensed and registered timely and the data base is established and maintained.	SUMATRA takes note of the Auditors' recommendation and will improve register books both electronically and hard copy; and create data base for boats	Develop permanent registers (data base) for boats in maritime regions	By June 2017
			Improve electronic Maritime Safety Management Systems (MSMS) to include registration, surveys and inspections of boats.	In the financial year 2017/2018 (Dar es salaam and Pwani will be taken as pilot regions)
			Take actions against boats operating without safety certificates, including implementing penalties	In the financial year 2017/2018
			Develop a data base for boats	Continuous
			Will improve electronic MSMS to include boats registration ,surveys and	In the financial year 2017/2018 (Dar es salaam and Pwani will

No.	Recommendation (s)	SUMATRA's Comment(s)	Action(s) to be taken	Timeline
			inspections and develop a hard copy versions of registers for boats	be taken as pilot regions)
2.	Assess its capacity in terms of human and facilities against its responsibility for the purpose of bringing to light whether or not they need capacity building and in which areas.	SUMATRA has engaged consultant EY consultant to review staffing needs and organization structure	Will consider the consultant recommendations for implementation	In the financial year of 2017/2018
3.	Establish computerized system for documentation of maritime activities such as registration of marine vessels, records of surveys and inspections for both ships and small ships, non-compliance of safety standards and so on	SUMATRA takes note of the Auditors recommendation and will improve the existing electronic MSMS to include small ships for registration, survey and inspections	SUMATRA will improve the MSMS system for registration, survey and inspections of small ships	In the financial year 2017/2018 to start with two regions, Dares salaam and Pwani as pilot
4.	Establish coordination mechanisms with Fisheries in order to cover fishing vessels for surveys and inspections	SUMATRA coordinates its activities closely with Fisheries Department countrywide through meetings ,workshops seminars and joint inspections on matters related to safety of boats and ships	Conduct meeting with Fisheries Department, on matters related to Safety operation of boats and regular joint inspections and awareness meetings in the cluster points	In the financial year of 2017/2018
5.	Make assessment on implementation of	SUMATRA assesses and	Will improve assesses and	Quarterly basis

No.	Recommendation (s)	SUMATRA's Comment(s)	Action(s) to be taken	Timeline
	set plans for surveys and inspections of maritime vessels	evaluates performance of Surveys and Inspections for marine vessels on quarterly basis	evaluates of performance of Surveys and Inspection for marine vessels on quarterly basis	
6.	Ensure surveyors are qualified and well trained as per requirements of the sub sector and also are sufficient for attending available marine vessels	SUMATRA takes note of the Auditors	Will include to its annual training programs plan to train surveyors	In the financial year 2017/2018

Part B: MoWTC's responses on recommendations given

A: Overall Responses

The Ministry of Works, Transport and communication (Transport Sectors) appreciates the work performed by the auditors and is committed to implement auditors' recommendations.

B: Specific Responses

No.	Recommendation (s)	MoWTC's Comment(s)	Action(s) to be taken	Timeline
1.	Access its capacity in terms of human resources with respect to overseeing SUMATRA's execution of its responsibility.	<ul style="list-style-type: none"> There are vacant posts which need to be filled. Currently there are only 8 staff under the directorate of Transport Safety and safety and Environment to take care of Railways, Marine Air and Roads transport while their need is 22. Due to budget sealing, no fund is set aside for this activity Ministry takes note of the auditors' recommendations 	<ul style="list-style-type: none"> Recruits officers to fill the vacant posts set aside fund from other charges (OC) for this activity 	By June 2018
2.	Prioritise monitoring and evaluation on the performance of SUMATRA specifically on surveys and inspections of both ships and small ships	<ul style="list-style-type: none"> Due to budget sealing, no fund set aside for this activity The ministry takes note of the auditors' recommendation and will prioritise as recommended 	<ul style="list-style-type: none"> Set aside fund from other charge under the Ministry Budget 2017,18 for this activity Prioritise monitoring and 	From 2017/2018 onwards

No.	Recommendation (s)	MoWTC's Comment(s)	Action(s) to be taken	Timeline
			evaluation as per available fund	
3.	Establish proper reporting mechanisms which will ensure delivery of information from SUMATRA regarding safety management in maritime transportation.	<ul style="list-style-type: none"> • Reports are submitted in quarterly basis and evaluated. However not all reports were available to auditors as all documents and files were in transit to new offices in Dodoma • Ministry takes note of the auditors' recommendations 	<ul style="list-style-type: none"> • Improve reporting mechanism by establishing electronic means of communication 	By 2017/2018