CONFEDERATION OF TANZANIA INDUSTRIES (CTI)

FINAL REPORT

FOR

A SITUATION ANALYSIS REPORT TO EXAMINE THE CHARGING PROCEDURES OF WHARFAGE CHARGES FOR CARGO PASSING AT DAR ES SALAAM PORT

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October, 2014

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Executive Summary

The Dar es Salaam port is the country's major port which handles over 90% of all import and export trade; majority of the cargos handled are for domestic consumption (71%) and the remaining traffic about 29% of the total cargo is for transit to the other landlocked countries(2012 TPA statistics). DSM port is equipped with different types of cargo handling facilities; these facilities handle containers, general cargoes, petroleum, liquid bulk, dry bulk, and vehicles. The facilities are integral parts of the port, with the exception of the container terminals which is operated under the concession agreement between the Tanzania Ports Authority (TPA) and the Tanzania International Container Terminal Services (TICS). However, TPA still handles some of the containers and other cargo such as general cargo and fuel. The port has five major terminals divided into two categories; the bulk liquid cargo and the dry cargo terminal, these terminals are: the container terminal operated by TICS, the container terminal operated by TPA, Bulk liquid terminal, general cargo terminal and the passenger terminal.

The port also serves the six landlocked countries (Zambia, Malawi, DR Congo, Burundi, Rwanda and Uganda). The DSM port is a starting point for two major transportation corridors; Central corridor served by TRL railway line (1.0m gauge) and DSM corridor served by TAZARA railway line (1.067m gauge). Currently the DSM Port performs the role of both a landlord and an operator; as the operator the port handles one container terminal and the other terminals and as the landlord has sub-contracted (concessioned) the container terminal being handled by the Tanzania International Container Services (TICS). As the owner, DSM Port is tasked with the functions of promoting the use, improvement and development of other manor ports and their hinterlands (TPA, 2012).

Following the economic liberalization and privatization of the 1990s; the performance of Port of Dar es Salaam has improved substantially and became one of the most efficient port in the whole or Sub-Sahara Africa (World Bank 2012). The reforms went hand in with the increase in economic activities that increased trade and traffic through the Port; consequently the port existing facilities could not support the increased trade and the earlier improved performance started to deteriorate gradually, and by the mid 2000's the performance was very weak. The deterioration of the Tanzanian's port services, especially the Dar es Salaam Port resulted in long delays at anchorage, long dwell time, long ship turnaround, corruption and high cost of port service charges as compared to other competitor ports (World Bank 2012). These port challenges are believed to have added the

cost of doing business in the country and constrain the growth of the Tanzania manufacturing sector and industrial growth and therefore prompted the Confederation of Tanzania Industries (CTI) to conduct this situation analysis study to document how port charges (wharfage) are being estimated in DSM port as compared to other neighboring ports. The study also aimed at collecting views from port users regarding the quality of port services with the view of proposing practical measures to the government of Tanzania on how to improve the DSM port services.

Both primary and secondary data/ information were collected in this study; whereas Primary information were gathered from major port actors (both public and private) such as Port terminal operators, Port services providers, regulating organs, importers, exports, transporters, shipping companies, clearing and forwarding agents and other logistical agents. Additional information was also collected from the same type of Port actors in Mombasa in Kenya and Beira in Mozambique. Secondary information was collected from online sources (various websites), Ports annual reports, past studies and various reports.

Study Findings

- Regarding the base for calculating wharfage charges at DSM port; the study finds that DSM port applies an ad valorem system (CIF value) and the weight, volume or size system in estimating wharfage charges for cargo passing at the port. However, the ad valorem system (CIF value) is the dominant system, while Mombasa Port only applies weight, volume or size system. At the same time Beira Port does not charge wharfage fee for cargo except for bulk liquid cargo using an ad valorem system (FOB and FAS). The FOB and FAS ad valorem wharfage charges for bulk liquid cargo at Beira are comparatively higher than DSM and Mombasa Port.
- The other key finding is that both methods being applied to estimate Wharfage charges at DSM port (ad valorem and weigh/size system) for general and containerized cargo applies comparatively higher rates and therefore makes the port wharfage charges comparatively higher than Mombasa. These findings are not different from the earlier findings by the World Bank that came to a conclusion that Wharfage charges and other costs make DSM Port an expensive destination port.
- Most of the interviewed Port users are not happy with services provided by the main port service providers (TPA, TICS, TRA and ICDs etc); their perception is that the services are comparatively expensive and un-transparent (e.g. corridor fees), inefficient, obscured by corruption and bureaucratic, weak customer care, unnecessary delays, conflict of interests for players in the port and generally the port faces weak governance structure and lack of innovations. However, the Minister's current efforts to reform the port management is encouraging, although the

sustainability of such personal efforts which is not institutionalized is still questionable.

- The analysis of basic indicators finds that, at the moment DSM port does not reach the set benchmarks and international standards; this is manifested by inability of the port to reach the set performance benchmarks by the regulator (SUMATRA) such as the dwell time, ship and cargo turnaround time and other set indicators by the port itself and the international benchmarks; this can be attributed to lack of substantial investments in terms of necessary port infrastructures and lack of proper regulations. However, it is encouraging to find that the recent reforms have been improving the port performance and the set bench marks.

Recommendations

From the analysis and findings of this study, it is recommended that :

1. The fact that wharfage charges being applied in DSM port seem to be above its neighbor Mombasa and the fact that the ad valorem system is the old system of wharfage charge estimation and most advanced ports have abandoned it. There is a need for Port stakeholders (including CTI) to submit their request to the regulator (SUMATRA) so that TPA justifies the formula and the bases for wharfage charges estimation using the ad valorem system unlike its neighbor ports who apply the weight, volume or size system.
2. Regarding port services; most of the major interviewed port users perceived that the port quality of services as weak and therefore they are not happy with the port services provider (TPA, TICS, TRA, and ICDs). CTI needs to work with the regulator (SUMATRA) and the responsible government institutions(PMO, BEST-AC and the responsible Ministry) and advocate for port services improvement; if not, the port is likely to lose its regional competitiveness in facilitating regional trade to the land locked countries such as Ruanda, Burundi, Zambia, Malawi and DRC.
3. CTI should discuss with the Permanent Secretary of the Ministry of Transport and Communication (Port improvement committee chairman) regarding the plan to revive the *port improvement committee* which according to port stakeholders does not seem to work as planned before. This is because the committee used to meet regularly and provide an avenue for sorting out port challenges. There is also a need for CTI to forge a link and become one of the port improvement committee member where CTI can advocate for reforms at the port and push for wharfage charging system review if the current formula is not justifiable.

1.0 Background

The economic reforms of the 1990s marked the turnaround in the growth of the economy as the reforms went hand with the increase in economic activities that scaled up trade and traffic in all the Ports. The reforms (privatization and liberalizations) also improved the performance of all the ports including DSM whose performance improved substantially and became one of the most efficient in the Sub-Sahara Africa. However, the increased trade and traffic in the country and in the neighboring land locked countries increased pressure on port facilities and consequently the port existing infrastructure could not support the increased trade and the earlier improved performance started to deteriorate gradually and by the mid 2000's the performance was very weak(World bank 2012). The deterioration of the Tanzanian's port services, especially the Dar es Salaam Port resulted in long delays at anchorage, long dwell time and ship turnaround, corruption and high cost of port service charges as compared to other competitor ports such as Mombasa, Beira and others (World Bank, 2012). According to the World Bank study of 2012; when comparing the total cumulative costs of the port of Dar es Salaam and Mombasa, in terms of the delays and additional monetary costs, DSM port is extremely higher by **74** percent of container import value (World Bank 2012). This means that port users at DSM Port have to pay comparatively higher fees than in Mombasa port operators for their services. Moreover, the inefficiency in delivering port services was believed to impose additional cost to importers using the DSM port. However, the 2013 new World Bank sponsored global study - *Logistic Performance Index Survey (LPI)* ranked Tanzania as the best route for transit goods in the region; this was after the fast-tracked reforms at the DSM Port to improve cargo handling business in 2013. All in all, the port still faces a number of challenges (such as comparatively higher wharfage charges) believed to constrain the growth of the Tanzania manufacturing sector and industrial growth and therefore prompted the Confederation of Tanzania Industries (CTI) to conduct a situational analysis study to document how port charges (wharfage) are being estimated in DSM port as compared to other neighboring ports. The study also aimed at collecting views from port users regarding the quality of services at the DSM port with the view of proposing practical measures to the government of Tanzania on how to improve the DSM port services. This is done in the auspices of creation of a conducive business environment in Tanzania; specifically for Tanzania manufactures so that they become competitive in the domestic, regional and international markets.

1.2 Objectives of the assignment

The main objective of the assignment was to prepare a situation analysis report that document the best way of calculating port charges for improving business environment and enhance competitiveness of domestic industries; more specifically to:-

- Review bases for calculating wharfage (port) charges in DSM Port
- Compare export and import charges in Dar es Salaam, Mombasa and Beira ports and their calculation methods
- Recommend the best practice methodology to be used in calculating port charges and fees for the port of Dar es Salaam.

1.3 Scope of the Assignment

Based on the Scope of work (SOW), this report highlights on how wharfage Port charges are determined at the DSM port, reviews the performance of the port in the past 10 years and provides the view of the port users on the quality of the services provided at the port, makes a comparative analysis of the wharfage port charges in the three ports (DSM, Mombasa and Beira), the best practices on how port services charges (Wharfage charges) are determined in other ports in the other parts of the world and finally documents issues that the industrial users thought that they were major constraints for the industrial development in the country and hence need more research or advocacy by CTI and other stakeholders so that the business environment is improved.

2.0 Methodology

This situation analysis report benefited from both primary and secondary data/ information. Primary information was collected from major port actors (both public and private) such as Port terminal operators, Port services providers, regulating organs importers, exports, transporters, logistical organizations and clearing and forwarding agents. Additionally, supplementary information was also collected from the same type of Port actors in Mombasa in Kenya and Beira in Mozambique. Secondary information was collected to supplement primary information and were collected from on line sources (various websites), Ports annual reports, past studies and various reports.

2.1 Sources of data

In documenting the port situation, several Institutions were visited and interviewed in Dar es Salaam, Mombasa and Beira. These institutions in DSM were drawn from the following major targeted stakeholders, namely: The Tanzania Port Authority (TPA), the Tanzania Revenue Authority (TRA) - Custom department, Tanzania Freights and Forwarders Associations (TAFFA), Tanzania Manufacturers and producers etc. Other institutions that were visited to get their views included: BEST-AC, Tanzania Shipping

Agents Associations (TASAA), and Tanzania Chamber of Commerce and Industries (TCCIA).

2.2 Types of data/information

The Table below provides a summary of types of data and sources of information for the study; such data and information were collected or reviewed in all the ports (DSM, Beira and Mombasa:

Table 1: Types of data/information and Sources

Sn	Type of data	Data Sources in Tanzania	Sources in Kenya	Sources in Mozambique
1	Port Performance and operations	TPA Annual reports, various websites	KPA Annual reports, various websites	Cornelder de Mozambique (CdM) Reports
2	Port Charges	TPA hand book and tariff book	KPA hand book	CdM Charges hand book
3	Wharfage charge calculation method	TPA Hand book	KPA Hand book	CdM Charges hand book
4	Quality of Port services	TAFFA, TASAA, Importers, SUMATRA, TPA, TCCIA, and exporters	KAM, Importers, exporters, clearing agents	Importers, exporters, Port brokers, Beira Port services Providers

3.0 Port Performance

This section provides an overview of the performance of the DSM, Mombasa and Beira Ports in terms of traffic, productivity and perception of the quality services.

3.1 Introduction

Globally the Maritime Industry is one of the most dynamic and important economic activities of the modern world. According to the International Maritime Organization (IMO), approximately 90% of all global trade is carried by sea. Worldwide shipping activities underpin the world economy as the most efficient, safe and environmentally friendly method of transporting goods around the globe. However, the maritime industry performance is affected by a wider range of the global economic transport networks and other facilitation logistics; these may include railways and road networks, regulations, custom rules, clearing and forwarding procedures, bureaucracies, handling, goods storage systems, and other transport logistics and related services from road and rail freight to warehousing and terminal operations along with all the many necessary support functions. In Tanzania the underperformance of the railways has been one of the contributing factors for the port congestions and poor port service provision at DSM port. This section covers the background information and performance of the 3 ports-DSM, Mombasa and Beira. The analysis of Port performance will cover

areas such as shipping traffic volume, port productivity (ship turn around, container productivity) and dwell time. The section will also capture the perception of the DSM port users on the quality of services provided by the port operators.

3.2 Dar es Salaam Port Performance

Dar es Salaam Port is Tanzania's major port managed by the Tanzania Ports Authority (TPA). TPA was established by the Ports Act No. 17 of 2004 as a Landlord Port Authority. TPA owns major sea ports such as Dar es Salaam, Tanga, Mtwara, and many other minor ports such as; Kilwa, Lindi, mafia, Pangani, and Bagamoyo. TPA also owns lake ports in Lake Victoria such as Mwanza North and South Ports, Nansio, Kemondo Bay, Bukoba and Musoma. On Lake Tanganyika; are Kigoma and Kasanga Ports, and on Lake Nyasa are Itungi, Kiwira, Manda Liuli and Mbamba Bay Ports (TPA, 2013).

Dar es Salaam as the Tanzania's major port handles over 90% of all import and export trade; it handles transit traffic of about 29% of the total cargo (2012 statistics). DSM port is equipped with different types of cargo handling facilities. These facilities handle containers, general cargoes, petroleum, other liquid bulk, dry bulk, and vehicles. These facilities are integral parts of the port, with the exception of the container terminals which is operated under the concession agreement between the TPA and the Tanzania International Container terminal Services (TICS), the majority of the cargos handled are for domestic consumption (71%). However, TPA still handles some of the containers and other cargo such as general cargo and fuel. The port has five major terminals divided into two categories; the bulk liquid cargo and the dry cargo terminal, these terminals are: the container terminal operated by TICS, the container terminal operated by TPA, Bulk liquid terminal, general cargo terminal and the passenger terminal.

The port plays a vital role in the contribution to the economy by being the gateway for international trade that attracts corporate tax paid by importers and exporters. The port also provides sources of knowledge to the public and is a tool for international cooperation, tourism and more importantly due to its strategic location it has been a source of attraction for transit trade within the East and Central African region, industrial location such as food processing, iron and metal industries, chemical and manufacturing industries and mining.

The port also serves the six landlocked countries (Zambia, Malawi, DR Congo, Burundi, Rwanda and Uganda). The DSM port is a starting point for two major transportation corridors; Central corridor served by TRL railway line (1.0m gauge) and DSM corridor served by TAZARA railway line (1.067m gauge). Currently the Port performs the role of both a landlord and an operator; as the operator the port handles one container terminal and the other terminals and as the landlord has sub-contracted (concessioned) the

container terminal being handled by Tanzania International Container Services (TICS). As the Port owner, DSM Port is tasked with the function of promoting the use, improvement and development of other manor ports and their hinterlands (TPA, 2012). However, following the economic reforms all marine transport issues in Tanzania are regulated by the Surface and Marine Regulatory Authority (SUMATRA). SUMATRA effectively came into force in 2004 after the SUMATRA Act was passed by the Tanzania Parliament. The figure below show the Dar es Salaam Port

Figure 1: Dar Es Salaam Port

3.3 Port stakeholders Analysis

In its daily operations the port collaborates with various actors, the major stakeholders play major roles of providing port services such as government revenue collections, quality inspection and assurance, storage of goods, security, and facilitation of migration services and clearance of goods. The stakeholders can be categorized as public, private and specialized agencies that deal with the quality and standards, regulation of aspects of imported and exports goods. These stakeholders are shown in the table below:

Table 1: Port Stakeholders Analysis

SN	Type of the Institution	Public	Private	Agency or regulating organs
1	Tanzania Revenue Authority	√		√
2	SUMATRA	√		√
3	Clearing and Forwarding Agents (C&FA)		√	
4	Tanzania Shipping Agents Association		√	
5	Inland Containers Depots (ICDs)		√	
6	Cargo freight Stations (CFS)		√	
7	Road Transports (TATOA)		√	
8	Railway Transporters (TAZATA and TRL)	√		√
9	Inspection Agencies (SGS and Interteck)		√	
10	Tanzania Bureau Standards (TBS)	√		√
11	Tanzania Food and drugs Authority (TFDA)	√		√
12	Ministry of Agriculture food security and cooperatives (MAFC),	√		

13	Ministry of Livestock Development	√		
14	Ministry of Natural Resources and Tourism	√		
15	Tanzania Radiation Commission	√		√
16	The Chief government Chemistry	√		√
17	Tanzania International Container Terminal Services (TICS)		√	
18	Ministry of Home Affairs (Migration Police force)	√		
19	Other Government departments	√		

Understanding the role of each stakeholder above is very important for the analysis of quality of port services and measures to be taken to improve port performance. Again the presence of big number of port stakeholders has implications and poses a number of challenges in term higher costs to port users, management, coordination, regulation and measures to improve port quality of services. This is because over the period the DSM port services performance has significantly been affected by the quality of services of these key players such as the Custom department of the Tanzania Revenue Authority (TRA), Railway Authority (TRL and TAZARA), the International Container Terminal Services (TICS), ICDs, Clearing and Forwarding agents and the regulating organs. For instance, as shown in the summary of burning issues from port users below; most of the concerns in the port relate to the delays in port clearance process, this is attributed to the inefficiency in the Ports itself and TRA-custom department and railway authority; these in turn affect the quality of port services in terms long dwell time and ship turn round and other productivity agreed benchmarks.

Although the marine transport sub-sector and therefore the Port is legally supposed to be regulated by the Surface and Marine Transport Authority (SUMATRA); the discussion with SUMATRA indicated that up to the present juncture they are not able to regulate the port effectively due to legal challenges confronting the regulator's powers in the industry, hence a need to sort out the legal issue between SUMATRA and the Ministry; this needs urgency since the absence for legal mandate of the regulator to performed his regulatory functions at the port negatively affect the sub-sector performance substantially. According the port procedures the above stakeholders are supposed to meet regularly under the '*port improvement committee'.* The committee is supposed to be chaired by the Permanent Secretary of the Ministry of Transport. This committee was formed in 2012 to solve the port congestion and other problems. However, the discussion with the key stakeholders indicated that the committee does not meet regularly as planned before; this has once again been the source of deterioration of port services due to inadequate of avenue for stakeholders to air and discuss burning issues at the port. There is a need to

revive the committee meetings so that stakeholders can meet and resolve issue arising at the port on daily bases.

The shipping statistics for 2012/13 for DSM port indicate that on average traffic has been increasing at the rate of 3.7% per year. However, for the deep sea vessels, the ship calls have decreased at the rate of 1 percent; this trend has been attributed to the use of bigger vessels by shipping lines so that they reap the economies of scale benefits that has been associated with bigger deep sea vessels (TPA, 2013). Coastal vessels recorded an increasing trend of 4.7 per annum over the past ten years. Overall cargo traffic has been increasing at 9.8% per annual for the period 2003 to 2012. Over the same period, imports and exports increased at the rate of 10.5 % and 9.5 % respectively, and at the same time transshipment has been decreasing at the rate of 10.9 percent per annum due to increase in competition from other neighboring ports among other reasons. Domestic cargo handled has been increasing at 7.9% per annum while transit traffic has been increasing at 16.5 %.

Table 2: Port performance: Container traffic

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Domestic	89,373	100,432	111,602	106,914	137,485	157,700	163,025	186,328	202,908	242,386
Transit	78,425	98,892	117,126	135,333	167,680	196,653	174,297	227,26o	276,645	302,402
Transshipment	18,319	27,790	29,661	30,453	28,815	19,195	16,416	7,946	10,428	6,498
Total	**186,117**	**227,114**	**258,389**	**272,700**	**333,980**	**373,548**	**353,738**	**421,534**	**489,981**	**556,286**

Source: TPA- DSM Hand book 2013

The significant increase in transit traffic implies that DSM port services are highly demanded by the neighboring countries and this also means that Tanzania needs to tap this opportunity by improving port services and increase port contribution in the economy. Studies have indicated that this is an area that the country has not done to its best. However, to realize the opportunities associated with the strategic location of the DSM Port, it requires substantial investments in the port in terms of infrastructure, human capital and reforms to remove the current red tapes.

3.4 Cargo off- take

Cargo off take from the port is normally done by three modes of transport namely; by road, railway and by pipeline. For about 10 years DSM port has been experiencing a decline in cargo cleared by railway from 17.4% in 2003 to 1.3% in 2012 and for containers from 10.2% to 0.3% over the same period. Both TAZARA and TRL underperformed in terms of cargo off – take from the Port. Unsatisfactory performance of the railway in terms of cargo off – take from the Port undermined the efforts of the Port to improve dwell time (SUMATRA, 2013). This has been the main contributor for deterioration of quality of port services.

Table 3: Dry Cargo clearance by transport mode (containers)

Mode of	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012

transport										
Road	74,015	84,879	103,452	110,767	140,562	113,310	131,422	201,098	222,723	255,727
Railways	9,951	9,164	9,556	8,786	8,958	6,852	3,267	1,032	1,695	649
Grand total	83,066	94,043	113,008	119,553	149520	120,162	134,689	202,130	224,418	256,376
% share										
Road	**89.1**	**90.3**	**91.5**	**92.7**	**94.0**	**94.3**	**97.6**	**99.5**	**99.2**	**99.7**
Railway	**10.9**	**9.7**	**8.5**	**7.3**	**6.0**	**5.7**	**2.4**	**0.5**	**0.8**	**0.3**

Source: TPA- DSM Hand book 2013

The statistics above explains one of the major contributing factors for the observed high container dwell times (9 days/container) in the port, ship turnaround, Port congestion increases in shipment cost at DSM port and escalating cost of transport in the country as the railway transport which is a cheap model of clearance is not available; instead road transport taking the lead share as witnessed by an increase in its share from 89.1% in 2003 to 99.7 in 2013. Looking at other indicators shown below, we can partly understand why port users are not happy with the port services. The port productivity indicators are provided below to provide a picture of how DSM port has been performing in the past 10 years.

3.5 Port Productivity Indicators: Ship Turnaround Time

Ship turnaround time is the total time spent by a ship in port; Components of ship turnaround time include the following aspects: Ship waiting time, Berthing/un-berthing time, Berth time (Service time). The waiting time is normally a small proportion of turnaround time. However, when berth time is reduced, it can substantially reduce ship turnaround time and reduce shipping costs. The berth time depends on the quantity of cargo a vessel has to load or discharge, the type and characteristics of a vessel, the type of port equipment and other resources used at berth/ port.

Table 4: Ship turnaround time (days/ship)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Container Vessels	1.1	1.5	1.9	2.9	6.2	10.5	8.2	6.3	6.8	8.5
Conversional Vessels	3.5	4.3	3.8	4.1	4.6	3.8	3.8	4.0	3.9	4.4
Bulk Liquid tankers	2.1	2.7	3.1	3.8	5.7	6.9	6.2	18.8	21.1	4.0
Overall	**2.2**	**2.8**	**2.9**	**3.6**	**5.5**	**7.1**	**6.1**	**9.7**	**10.6**	**5.7**

Source: TPA- DSM Hand book 2013

For container vessels turnaround started deteriorating during the congestion period (2007-2009) because port congestion adversely affected the quay operations due to lack of space. However, bulk liquid recorded comparatively higher turnaround then the rest of the vessels because of the weak berthing facilities and low pumping rates. But after the SBM repair the bulk liquid cargo turnaround declined significantly. The TPA overall Ship turnaround time target is 4.0 days/ship; but, as seen in the table the target was reached between 2003 and 2006 but according to the current statistics it has never been reached since then. All in all, the DSM port did not reach the regulatory benchmarks of 3 days/ship. This target for general cargo was set by SUMATRA and as indicated above the

regulator cannot enforce these benchmarks due legal challenges SUMATRA is facing at the moment. According to SUMATRA this challenge has also denied them the power to regulate the fees charged by the terminal operators (TPA and TICS).

The other related key indicator is the *Truck turnaround time*. This is the time between the vehicle's arrival at the terminal entrance gate and its departure from the terminal exit gate. It measures the terminal's service quality to road transport operators. This indicator is used to assess the port services speed and increase port service efficiency and reducing waiting hours and congestion at entry/exit gates. According to the TPA statistics, the DSM port truck turnaround time is still very high as it ranges between 3-5 hours as compared to target of 1 hour because of the delays during scanning operations, gates layout, and in availability of modern equipments for loading and un-loading containers and bulk cargo.

The other key port indicator is the *Crane productivity*. Crane productivity measures handling rates of a crane (container moves/crane - hour); high crane productivity results in better ship turnaround time. TPA is using this indicator to measure the performance of the privately run Container Terminal (TICS) in order to measure their efficiency and achieve its maximum utilization and meet appropriate international standards. Since 2003 the crane productivity has been averaging at the rate of 22 moves per hour; this is below the TPAs set performance target of 25 moves per hour. However, the international standards for crane productivity is between 30 to 40 moves per hour (MPH) with many advanced ports able to achieve a rate of at least 45 MPH. Crane productivity rate depends on many factors; including layout of the terminal, its facilities, type of ships handled, interfacing with yard gantries/tractors, proximity and stacking of the containers and loading/unloading sequence planning.

3.6 Full Import container dwell time and Berth Occupancy

Container dwell time is the period (in days) containers stay at the terminal. Dwell time for DSM port is calculated on imports, exports and empties. Dwell time greatly influences terminal capacity of any container terminal. Increase in dwell time is the main course for port congestion, increase in shipping cost such as storage costs and other port inefficiencies such as rent seeking behavior and corruption. Overall dwell time increased substantially between 2003 and 2008 but decreased from 2009. The Port did not attain the international standards and regulatory benchmark on dwell time set by the regulator (SUMATRA) for import containers of 7 days. The table below show full Import container dwell time 2003 -2012.

Table 5: Full Import container dwell time 2003-2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Domestic Containers	16.7	16.6	19.7	19.7	17.3	22.0	17.8	12.3	8.8	7.3
Transit Containers	12.4	17.7	27.8	24.4	22.0	29.3	21.6	16.3	17.1	14.4
Overall	**17.0**	**17.1**	**20.2**	**22.2**	**19.8**	**25.4**	**18.8**	**13.9**	**11.5**	**9.6**

Source: TPA- DSM Hand book 2013

The decrease in dwell time from 2009 to 2012 was due to, among others the reforms done at the port leading to the decisions such as to establish ICDs and allow some containers to be transferred to ICDs and ICT application in clearances; the other reasons included increase in importers' awareness to clear their cargo in time and the presence of port improvement committee that meets regularly to discuss port challenges. However, the discussion with port users during this study noted that this committee does not meet in regular schedules as planned before something which is believed to have worsened the port services due to lack of avenue to air the current burning issues at the port. Such kind of port users' forum are very fruitful in Beira and Mombasa where port users meet every week and at the same time port operators meet every day to discuss issues and plans for the next day. There is a need to revive the port improvement committee and performed its role as planned before, but also strengthening the regulator's (SUMATRA) role is also important. Other measures may include improving railways capacities, reducing cargo weighing points (this will be implemented in the SCT), Check points and road blocks along highways will further improve container and other cargo dwell time especially for transit cargo.

Apart of port service indicators, worldwide ports measure port utilization rates. The most common utilization indicators collected include: *Berth occupancy and Storage utilization*; these indicators measure port facilities utilization intensity; percentage of actual use of resources and maximum possible use of those resources over a period of time. Berth occupancy is the ratio of time the berth is occupied by a vessel to the total time available in that period. High berth occupancy (above 70%) is a sign of congestion and hence decline of quality of port services, while low berth occupancy (below 50%) indicates underutilization of resources. The table below show DSM port general cargo berth occupancy, container and liquid cargo berths occupancy for 2003 - 2012.

Table 6: Berth Occupancy 2003 -2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
General Cargo berths	32.4	46.6	32.7	43.6	47.2	47.2	51.1	47.2	43.3	47.9	43.9
Container Berths	48.5	46.3	53.8	59.2	71.2	88.7	83.2	80.3	83.0	89.1	**70.3**
Build liquid (KOJ)	-	-	83.0	89.0	78.1	79.4	88.9	90.8	91.8	87.3	**85.9**
Overall	**40.5**	**46.5**	**56.2**	**63.9**	**65.5**	**71.8**	**78.4**	**72.7**	**72.7**	**74.8**	**63.9**

Source: TPA- DSM Hand book 2013

Normally port berths are occupied differently according to vessel types. Looking at the table above, we find that on average general cargo berths were lowly occupied (below 50%) whereas container and bulk liquid cargo were over occupied (above 70%) indicating an over utilization or technically they were congested meaning that more berths for containers and bulk liquid cargo are still needed. It is encouraging to find that the port master plan targets for more berths construction to decongest the port. However, there

are other measures to reduce congestion at the DSM port, these may include investing in ICT for easy communication, clearance of cargo and transfer of information between port users, construct more terminals, and increase port users knowledge and information sharing.

3.7 Perceptions on DSM Port services and charges

One objective of this study was to collect the perception of port users on the quality of services, infrastructure and charges being applied in the Dar es Salaam port. The table below provides a summary of the perceptions of port users on the quality of services provided by various port service providers.

Table 7: Port users' perception on services, infrastructure and charges at DSM Port

SN	ITEM	GENERAL COMMENTS
1	Port services	➢ Poor Services due to lack of capacity and equipments to handle the large cargo ➢ Slow services, a lot of corruption, poor customer care, ➢ Bureaucracy by TRA, ICD and TPA and TICS ➢ Collusion for major players (TPA, TICS, TRA, Shipping lines, ICDs) to delay cargo clearance for the sake of more charges. ➢ ICDs deliberately delays handling and clearance processes leading high demurrage and storage charges ➢ No clear clearance procedures, delay in clearances, ➢ The port faces a Conflict of interest by operators e.g. the port (TPA as a landlord and operator); for instance all goods must go through ICD so that TPA and ICDs make money ➢ Lack of financial services at the port: only one bank branch for payments leads to the long queue ✓ Too many institutions working at the port; this adds cost to importers and exporters ✓ TPA normally introduces new charges without consulting the port users (e.g. MAFC for fumigation and corridor levy meant for transit goods, but all port users pay it) ✓ In theory the port operates for 24 hours all 7 days. But in practice only 5 days excluding the weekends and the public days. The other port operating institutions don't operate in 24 and even weekend or public days. ✓ All verification and inspection is done at the ICDs at importers cost in terms of demurrage, removal and handling charge, but for bulk cargo would have been done at the importers premises. ✓ The Port face same governance challenges as other sectors of the country ✓ Port services affected by weak services from other operators such as the Railways, Customs Authority (TRA), and TICS, and ICDS. ➢ Services improving with the new minister's efforts, but not the port itself ➢ New Port management will improve port services
	Port infrastructure	➢ The integrated system (TRA-TANCIS and TPA systems) are not working well causing delays in clearance and higher storage charges; clearance days should be increased from 7 to 10 until when the systems works well ➢ The Port lacks storage space as more space is allocated for containers and not for general cargo ➢ TPA and TICS equipments are very old and outdated, leading to delay in services ➢ The port operators do not have enough and modern handling equipments
	Port charges (wharfage)	➢ Wharfage charges calculations is based on CFI value and not weight as other big ports ➢ Some charges such as corridor fees, MAFC charge are introduced without informing the port stakeholders. ➢ Wonder why Ports Wharfage charges based on CIF value and not weight, volume or type of goods used as a base for estimation for wharfage charges ➢ Too many port charges. As there are more than 16 types of charges as many institutions (regulators) levy charges on the same imported commodity. ➢ DSM is said to have higher freight charges than Mombasa. For instance, due to congestion in peak time (October to December) shipping lines increase charges due to

		delays in leading to higher waiting charges in DSM port ➢ The Regulator (SUMATRA) is not interested in improving port services as they get a lot of money from these charges that result from port inefficiency (*conflict of interest*). e. g SUMATRA charge fee per containers charged to the shipping companies and to the TPA (double payments) ➢ TRA and TPA use correct official exchange rate while TICS use very high and un-transparent rate ➢ Wharfage charges at DSM are comparatively higher than Mombasa and other ports such as Durban ➢ Corridor levy was meant for transit goods but currently even domestic importers pay it; we have complained but no changes.

Looking at the summary above, we find that most of port users are not happy with quality of port service at DSM port (i.e. Most of the interviewed key port users (96%). The above perceptions are not new as many studies came up with same views. Moreover, these views relate to the port performance indicators above as the port does not seem to reach any of the set benchmarks by the port itself, the regulator (SUMATRA) and the international benchmarks(standards). Some of the critical burning issues related to delays in clearance of goods leading to escalating storage charges, lack of modern facilities due to poor port infrastructure, higher and un-transparent exchange rate being applied by TICS, corruption, corridor levy meant for transit goods but being applied to all importers including domestic importers, bureaucracies, lack of transparency, comparatively higher port charges (wharfage) than other competitive ports such as Mombasa and Beira. As seen in the sections below; this study also noted that the high wharfage charge at DSM port is due to the ad valorem system being applied for estimating wharfage charges; unlike its neighbor port - Mombasa that uses volume and weight of imports and exports. However, qualities of services concerns were also raised in Mombasa and Beira although they were of the lower magnitude. Given the reforms and investments being implemented in the other competing ports; DSM may lose its competitiveness if the planned reforms and investment in the Port Master Plan and BRN are not implemented. The current Transport Minister's efforts to reform the port are also an encouraging situation for port improvement in future, although they are regarded as a one- man effort which is not institutionalized.

3.8 Mombasa Port

Mombasa is the Principal Kenyan sea port and comprises of Kilindini Harbor and Port Reitz on the Eastern side of the Mombasa Island and the Old Port and Port Tudor north of the Mombasa Island. Kilindini is naturally deep and well sheltered and is the main harbour where most of the shipping activities take place (KPA, 2013). It has 21 water berths, two oil terminals and safe anchorages and mooring buoys for sea-going ships. The Port of Mombasa not only serves Kenya but is also the main gateway to the Eastern African hinterland countries of Uganda, Rwanda, Burundi, DRC and Southern Sudan. The port is managed and operated by the Kenya Ports Authority (KPA); a semi-autonomous

government parastatal. KPA also manages the small sea ports of Kiunga, Lamu, Malindi, Kilifi, Mtwapa, Funzi, Shimoni, and Vanga. KPA launched its 25 year Master Plan and Strategic Plan in 2005 which aimed at transforming the port into an E-Port and landlord port by 2010. The port is equipped to handle a wide range of cargoes including dry bulks such as grain, fertilizers, cement and soda ash and liquid bulks such as crude oil and oil products as well as bagged products (coffee, tea, sugar, etc), break-bulk (iron and steel, timber),motor vehicles, machinery – and containerized cargo. The port handled 21.9 million tons of cargo in 2012, up from 19.9 million tons handled during the same period in 2011. Imports made up 85.5 percent of all traffic volume. Total imports grew by 10.6 percent, posting 18.73 million tons in 2012 from 16.9 million tons in 2011. Mombasa's Container traffic went up by 17.2 percent to 903,443 twenty-foot equivalent units (TEUs) in 2012, up from 770,804 TEUs handled in 2011. Uganda remains the most frequent destination of goods arriving in Mombasa, taking up 73.1 per cent share of the total transit traffic from the port

3.9 Beira Port

Beira is the second largest city in Mozambique after Maputo. It lies in the central region of the country in Sofala Province, where the Pungue River meets the Indian Ocean. Beira Port acts as a gateway for both the central interior portion of Mozambique as well as the landlocked nations of Zimbabwe, Zambia and Malawi. Beira was originally developed by the Portuguese Mozambique Company in the 19th century, and directly developed by the Portuguese colonial government from 1947 until Mozambique gained its independence from Portugal in 1975. The port is concessioned to Cornelder de Mozambique who operates the port. Cornelder was formed as a joint venture between Cornelder Holding sa, based in Rotterdam who owns 67 % of all shares and Mozambique Port Authority - CFM who owns 33 % of all the shares; the joint venture was formed in October 1998. The management of Beira Port is divided in two parts whereby the container and General Cargo Terminals are being run by Cornelder de Mozambique (CdM) while the fuel terminal is still under CFM. The Beira Port Photo is shown in the figure below.

Figure 3: Beira Port

The port is directly linked to the hinterland (Zimbabwe and Zambia) by road and rail networks, and currently by road only to Malawi. However, the Sena railway line linking Beira with Malawi and the Tete Province is currently being rehabilitated. A pipeline constructed in 1960 links the port with Zimbabwe and Beira Port also has direct sea links to Europe, Asia and the world at large. Beira port has a total of 11 berths stretching over a total length of 1994 meters, excluding berth number 1, which is reserved as a fishing harbor. Beira is 319 km from the Zimbabwe border at Machipanda and 685 km by road from Malawi via Nova Vanduzi. The port handles a variety of cargo from break bulk, neo bulk including petroleum products

3.10 Port Performance: comparative analysis

The main objective of any port is to provide high quality services to all port users and therefore must always aim to achieve higher efficiency by minimizing time spent by vessels in the ports and hence minimize costs. Ports have to create tools that will help in undertaking the right decisions at the right time for measuring performances and improving quality of services as well as deciding on investments needed. These tools for analyzing port performance and quality of services include the **Port Performance Indicators**. These are benchmarks that can be applied to assess the performance or quality of services provided at any port. All ports have their own benchmarks, but worldwide the most common performance indicators/benchmarks include:

- Operational indicators
- Financial indicators.

These indicators are normally quantified using mathematical models and the quality of these indicators depends largely on the correctness and reliability of the required information/data.

The most common Operational indicators include: **service, output (Production), utilization and productivity.** Service indicators measure the quality of service provided

to customers – ship owners, ship operators, importers, transport operators, etc. We shall show an example of how the ports performs using the output indicators, specifically on the berth output (number of containers handled per year). Lack of availability of data limit the analysis of all port performance based on the above indicators. We will highlight a few performance indicators of the three ports using the output indicator. The output indicators measure the level of activity of the business during a period of time, but do not indicate the efficiency of the business. One of the output indicators collected by all the 3 ports includes *Berth output* – total tonnage of cargo handled at berth (cargo traffic, cargo throughput). Due to data limitation, we will show the container handled over the period 2001 – 2012, hence If we take the *Berth output* **indicator which refers to the** total tonnage of cargo handled at berth (e.g. container, cargo traffic, cargo throughput) for all the ports we find the situation shown in the table below:

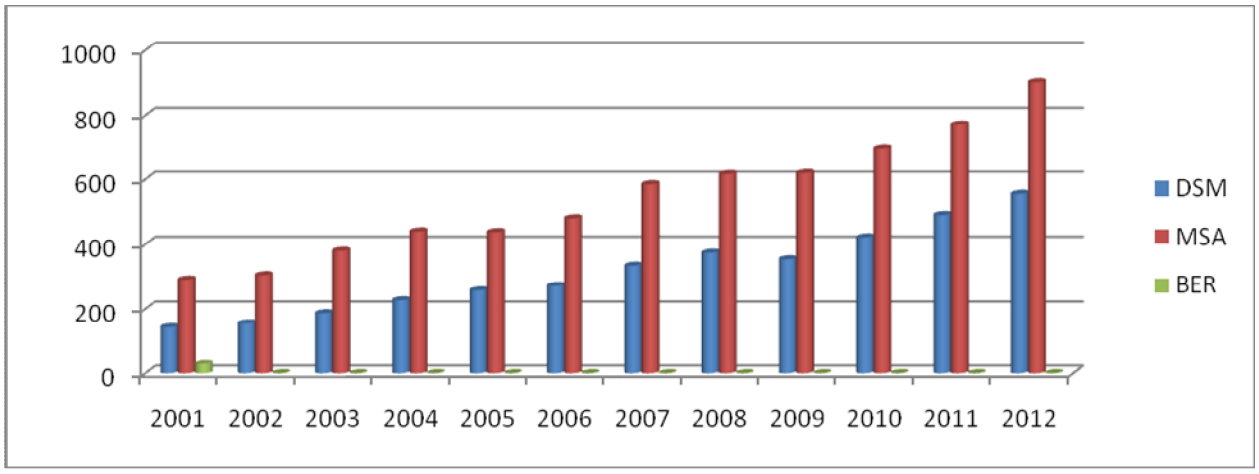
Table 8: Container traffic (in '000' TEUs) for DSM, Mombasa and Beira Ports

Port	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
DSM	142	154	186	227	258	272	334	374	354	421	489	556
MSA	291	305	380	439	437	479	585	616	619	696	771	903
BER	30	29.1	40.8	46.8	54.3	54.2	71.1	85.7	94.3	105.2	160.2	170.6

Source: KPA, TPA and Cornelder de Mozambique sa, 2014

All the port experienced an increasing trend in container traffic between 2001 and 2012; this is attributed to the increase in economic activities in the respective countries and the hinterland countries. All the three ports experienced a high growth rate in container traffic and Mombasa taking the lead with container traffic almost twice that of DSM port and 5 times the BEIRA traffic. All these three ports have low containers traffic when compared to the Durban traffic that recorded the container traffic of about 2.3 million in the past five years. The same message is shown in the figure below:

Figure 3: Container traffic (in 000'TEUs) in DSM, Mombasa and Beira 2001 -2012



Note DSM- Dar Es salaam. MSA- Mombasa, BER- Beira Port

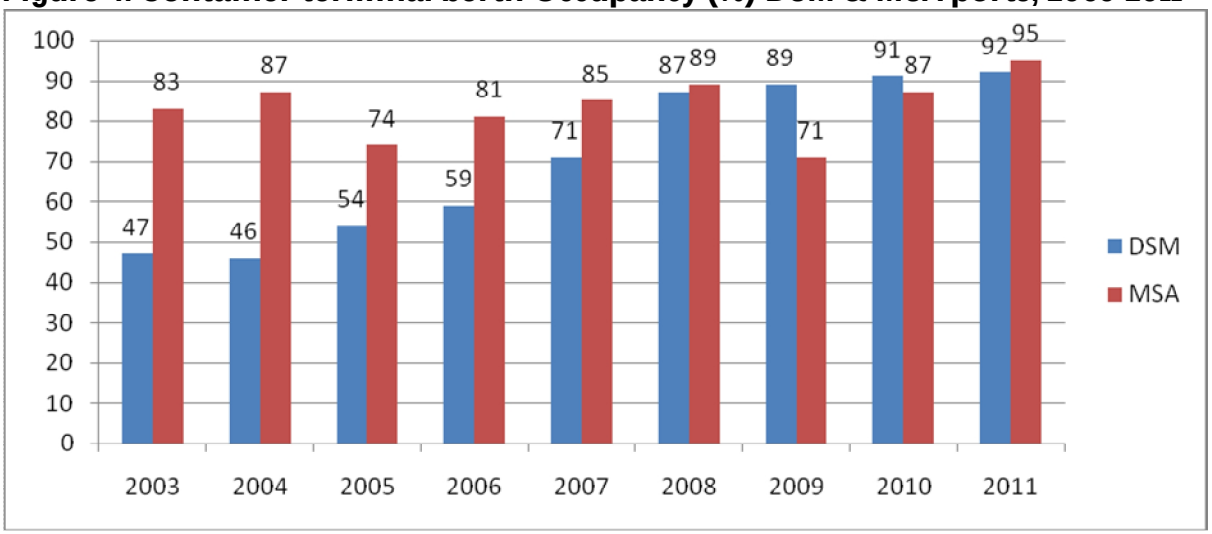
The high growth in traffic indicated above has resulted in Port congestion challenges in some of the years. Port users in Mombasa and DSM port indicated that the increase in traffic has increased port congestions**.** The table below shows that both DSM and Mombasa face congestion problem as the berths were utilized above their average berth occupancy (i.e. above 70 percent).

Table 9: Container terminal berth Occupancy (%) DSM & MSA ports; 2003-2011

Port	2003	2004	2005	2006	2007	2008	2009	2010	2011	Average
DSM	47	46	54	59	71	87	89	91	92	**71**
Mombasa	83	87	74	81	85	89	71	87	95	**84**

Port average berth occupancy between 2003 and 2011 was 71 % and 84 % for DSM and Mombasa respectively; both ports berth occupancy were above 70% indicating an over utilization or technically they were congested meaning that more berths are still needed. Mombasa indicates higher berth occupancy than DSM port meaning that over the period Mombasa experienced comparatively higher port congestion for containers than DSM. The container terminal berth occupancy for DSM and Mombasa is shown in the figure below:

Figure 4: Container terminal berth Occupancy (%) DSM & MSA ports; 2003-2011



The picture shows that since 2009 container traffic between the two ports took the same shape and increased significantly causing congestion and wiped the big difference that existed in the past years (2001- 2007)

Despite the challenges indicated above DSM port still has a comparative advantage among the three ports because of its strategic location of being near the landlocked countries; such comparative advantage exist to serve the northern corridor countries such a Ruanda and Burundi may be lost to Mombasa Port and in the southern to Beira for

countries such Zambia and Malawi. Dar still has an advantage to serve these countries because of its strategic location where goods do not need to pass in other countries to reach the final destinations. The table below show the southern corridor distances.

Table 10: Southern Corridor: Distance in Km Vs estimated cost of Road Transport

Ports	**Lusaka (Zambia)**	**Lubumbashi**	**Blantyre (Malawi)**	**Lilongwe (Malawi**
Beira	1,054	1,600	812	950
Durban	2,380	2,611	2,323	2,678
Dar es Salaam	**1,985**	**2,290**	**2,031**	**1,667**
Road Transport cost per ton/km (US$ 13/Ton/Km				
Ports	Lusaka (Zambia)	Lubumbashi	Blantyre (Malawi)	Lilongwe (Malawi
Beira	137	208	106	124
Durban	309	339	3o2	348
Dar es Salaam	**258**	**298**	**264**	**217**

As seen in the table above, Beira has an advantage in the southern route because of its short distance and low cost of transport to cities such as Lusaka, Lubumbashi, Blantyre and Lilongwe in Malawi. However, goods passing via Beira port have to pass in one or more than one country something that may increase other un-estimated cost such as insurance and safety that are not forecasted in the indicated costs. The northern and central corridor distances and number of borders between the ports is indicated below.

Table 11: Northern and Central Corridor: Distance in Km Vs Number of borders

Port	**Kampala**		**Kigali**		**Bujumbura**	
	Distance	**Number of borders**	**Distance**	**Number of borders**	**Distance**	**Number of borders**
DSM	**1,912**	**1**	**1,546**	**1**	**1,640**	**1**
Mombasa	**1,149**	**1**	**1,683**	**2**	**2,120**	**2**

As seen above DSM has a comparative advantage in terms of shorter distances for road transport of cargo to cities such as Kigali and Bujumbura, but not for Kampala, hence, it not surprising to find Mombasa handles many transit goods to Kampala because of the shorter distance and number of borders. The distance advantage need to be maintained by lower port clearance and logistical cost that may partly be attributed to improved quality of port services. DSM port needs to improve its quality of services so that it doesn't lose the transit goods to countries such as Ruanda, Burundi, Malawi, Zambia and DRC where DSM port has a comparative advantage over its competitors such as Mombasa and Beira.

4.0: Overview of the Port charging systems and procedures

This section provides an overview of the port charging system particularly how wharfage charges are being determined in the three visited ports. Port charges are fees collected from ship and cargo owners to settle the cost of constructing, maintaining, and operating the navigation facilities in berths, docks, and terminals as well as the cost of providing

various services, including piloting, docking, supplying water, handling freight, and arranging services through agencies. Port charges vary depending on whether the ports and docks are under state, municipal, or private ownership and management. They may vary in different ports of one country and even at different docks of the same port. Basic port charges include handling dues, lighthouse dues, dock fees, anchorage dues, berth dues, wharfage, mooring charges, storage, pilotage, tugboat fees, customs duties, sanitation dues, and freight dues.

According to the Tanzania Port Authority (TPA), the DSM port tariffs are determined by the committee that is charged with the tariff matters but have to be approved by the regulator (SUMATRA). These tariffs are levied with respect to the services provided to various stakeholders such as the shipping lines, importers and exporters within the country and internationally. These services are shown in the table below:

Table 11: Port stakeholders and services

Port stakeholders	Services
Shipping Companies through Tanzania Shipping and Agents and Associations (TASAA)	Pilotage, Dockage, buoyage, tug services, mooring and unmooring vessels, stevedoring operations, supply of fresh water to vessels and garbage disposal
Importers and exporters (local and international) through Tanzania Freight and Forwarders' Association (TAFFA)	Loading and discharging operations, shore handling, storage operations, repair and weighing/measuring of packages, removal, container stuffing and stripping, corridor fees, and other regulatory fees

4.1 How Port charges are determined in Tanzania

According to SUMATRA's tariff regulation procedures, all tariffs related to marine services have to follow approval procedures that require Port operators to submit their request to the regulator (SUMATRA) and seek an approval before operation. In this respect, when the port wants to review its tariff rates; TPA will submit its request to the regulator (SUMATRA) who will organize a stakeholder's public hearing meeting where TPA will present its proposal for fees/charges review and all stakeholders will air their views on the request. After the public hearing the SUMATRA management will compile the comments from the public and submit to the SUMATRA board of Directors for approval before application. However, some of the current charges did not pass through this approval process because they were fixed before the regulator coming in operation in 2004. Moreover, the legal challenges stated above constraint the regulator to question the based for such applicable fees and regulate the port services accordingly.

Importers and exporters in DSM port normally pay the following charges: cargo handling charges, removal, storage and additional storage charges (Demurrage charge), wharfage charges. However, there are regulation charges levied on certain commodities that require inspections or services from regulating organs such as Tanzania Bureau standards, Tanzania Food and drug Authority, SUMATRA fees, weight and measures, Tanzania Atomic agency fees, Ministry of Agriculture Food Security and Cooperatives, Ministry of Livestock development for livestock imports and exports. Other fees include the recently introduced levy- corridor fees; this was targeted for transit goods but port users do complain that currently all importers pay it. The visit in all the three ports indicated that all the 3 ports users pay a number of charges levied to shipping companies, importers, exporters; at the same time some port include port charges that are not indicated in the their port operation documents (hidden charges). According to the Terms of references this study provides a highlight of port charges and services offered in the 3 ports and concentrates more on wharfage charges and its method for calculations in DSM port and makes a comparison with the neighboring ports of Mombasa and Beira.

4.2 Wharfage charging systems at DSM, Mombasa and Beira Ports

This section provides a snapshot of the comparison of wharfage charging systems in the three ports. *Wharfage fees are* charges levied by a pier or wharf owners for handling incoming or outgoing cargo passing over the wharves, jetties and buoys (for fuel) belonging to the port owners. The world wide practice indicates that some ports levy wharfage fees on all commodities passing in the port, others on certain types of goods while others don't charge, but such charges are combined with other fees. For instance the DSM and Mombasa ports apply Wharfage fees on all goods passing on the port while at Beira, the operator - Cornelder de Mozambique do charge wharfage fees on only for liquid cargo. However, some ports have comparatively higher rates while others have lower rates depending on the number of factors such as the cargo volume passing at the port, type of cargo and social and economic factors considered in setting the fees; the below sections show how wharfage charges are being applied in all the studded ports (DSM, Mombasa and Beira).

4.3 Wharfage charging systems at DSM Port

All port charges including Wharfage fees paid at the DSM Port by exporters and importers are indicated in Clause 29 of the Tanzania Port Authority Port charges book. Clause 29 states that; '*Wharfage charges shall be raised on all cargo passing over the quays, wharves, jetties and buoys belong to the Authority*'. Further the clause reads as quoted '***for the purpose of assessing wharfage charges, the values of commodities shall be deemed to be the values accepted by the Customs & Excise Department and declared on the relevant documents as defined in TPA Regulations subject to a minimum value of USD 200.00 and a maximum value of USD 2500.00 per Harbour***

Tonne or part thereof. Wharfage charges on cinema films shall, however, be assessed on the print value of the film *(TPA tariff book pg 64*). Looking at table 12 below, the rates are indicated as: for domestic imports (including bulk oil) the applicable charge rate is ***1.6% of the value (ad valorem-CFI value)***; where the ad valorem value is the value of the commodity as declared by the importer and accepted by the Customs & Excise Department of the Tanzania Revenue Authority while for transit goods the rate is ***1.25 percent (%) of the value of the commodities (1.25% ad valorem)***; this has always been a source of problem as the value declared by the importers may differ with the customs authorities estimated value leading to many import tax assessment appeals.

Applying the same clause 29 of the TPA charge book for export commodities; all commodities including, bulk oils are charged at the rate of 1 percent; while for transshipment a 0.8 % ad valorem wharfage charge is being applied. However, other commodities imported or exported are charged per harbor tones as follows: Lubricant and fuel oils including petrol and benzene supplied to vessels for their own use, by pipelines are charged at USD 2 per harbor tone. Bullion, currency notes, registered envelopes (not handled by TPA) are charged at USD 2, Molasses in bulk is charged 1% ad valorem, while goods landed and re-shipped not covered by import or shipping documents are also charged at USD 2 per ton. Secret cargos (both domestic and transit cargo) are charged per harbor tone in United States dollars as follows: for domestic general cargo USD 12 while transit general cargo is charged in USD 1o per harbor tone. The table below shows wharfage charges for cargo passing at the DSM port; also note that other sea ports such Tanga and Mtwara have their own specific charges which are indicated in the TPA tariff book of 2013

Table 12: Wharfage charging system and rates for Dar es Salaam Port

1	***Wharfage charges: Are raised on all cargo passing over the quays, wharves, jetties and buoys belonging to the Authority.***		
2	➢ **The basis for Wharfage determination/assessment:** the values of commodities as accepted by the Customs & Excise Department and declared on the relevant documents as defined in TPA Regulations subject **to a minimum value of USD 200.00 and a maximum value of USD 2500.00 per Harbour Tonne or part thereof**. ➢ The bases for cinema films: the print value of the film. ➢ The charge also include a VAT charge on top of the fee		
3		**Applicable Wharfage rates in DSM**	**Rate -USD**
	a	**Imports (including Bulk Oils) n.o.e**	
		Domestic	1.6 % ad valorem
		Transit	1.25 % ad valorem
	b	**Exports (including Bulk Oils) n.o.e**	
		Domestic and Transit	1.0%
	c	**Transshipment and over-landed** cargo-charged once	0.8% ad valorem
			Rate - USD

	d	**Dhow cargo per harbour tonne or part thereof:**	2.0	
	e	Lubricating and fuel oils (including Petrol, Benzene, etc.) supplied to vessels for their own use, by pipeline or ship or by other means per deadweight tone or part thereof or-	2.0	
	f	Bullion, specie, currency notes, postal stamps, registered envelopes and embossed revenue postal stationery (not handled by the Authority):		
		Bullion, per US$ 200 value of part thereof	3.00	
		Specie, currency notes, postal stamps, registered envelopes and embossed revenue, postal stationery per harbour tone or part thereof:	3.00	
	g	Molasses in Bulk	1.0% ad valorem	
	h	Goods landed and reshipped not covered by import or shipping documents **per ton (USD)**	2.00	
	i	**Secret Cargo**	**Rate per Harbor Tonne of part thereof - USD**	
		(i) Domestic General cargo	12.00	
		(ii)Transit General cargo	10.00	
			Rate per TEU - USD	
		iii) Domestic Containers	**250.00**	
		(iv) Transit Containers	**200.00**	
4		**Containerized Transit Traffic**	**Rate per containers unit of -USD**	
			Up to 20ft	**Over 20ft**
		FCL Containers – Imports	**240.00**	**420.00**
		FCL Containers – Exports	**160.00**	**280.00**
		Note: Wharfage charges collected on shut-out cargo already in the port shall not be refunded.		

Source: TPA Tariff book 2012

From the table above, we see that the ad valorem system is being applied for estimating wharfage charges for most of the goods passing at DSM port. However, the same TPA tariff book also indicates that for domestic and transit containers- a *weight/volume* system of charges is being applied to determine the wharfage port charges as follows: domestic containers USD 250 per TEU and for transit containers USD 200 per TEU. However, transit containers are charged as follows: For transit 20 and 40 feet import- FCL containers, the rate is USD 240 and USD 420 is being charged respectively. For 20 and 40 feet exports containers i.e. -FCL export containers, USD 160 and USD 280 is charged respectively.

From the above table, we can conclude that the DSM port applies both value (ad valorem charging system) and volume or weight of the commodity system to arrive at the

wharfage charges for import, export and transit goods. The volume or size system is being applied for containerized goods while the value system is being applied non containerized cargo or general cargo (import, export and transit). This means that most of the domestic imports, exports and transit general cargo; the value of the commodities (ad valorem) is being applied to determine wharfage charges.

A quick comparison of the Wharfage charges between Mombasa and DSM port indicates that since the DSM wharfage charge are based on value for commodities in most of commodities; the DSM charges seems to be comparatively higher than the Mombasa wharfage fees. A further analysis indicates that if the minimum per harbor tone is applied then the DSM charge becomes exorbitantly higher. As seen in table 13 below , Mombasa applies only volume or weight of the commodity system to arrive at the wharfage charges. It is important to also note that both methods have their advantages and disadvantages as far as the final charge the Port operators, importers; exporters and final consumer's welfare are concerned. Wharfage charges are levied by the port operator to cover for services cost for the port infrastructures and for further port investments. Hence port operators do set port charges, including wharfage charging systems with respect to several socio-economic factors. These factors may include:

I. Port revenue maximization objective,
II. Port cost structure (economies of scale)
III. Competition level among neighboring ports,
IV. Future Infrastructural need of the port

The discussion with the TPA, CdM and KPA indicated that all the above factors played a role when setting the wharfage charges for the port services in DSM, Beira and Mombasa.

4.4 Wharfage charging system at Mombasa Port

The Kenya Port Authority fees guide book *provides for the wharfage fees for Mombasa Port in Section III of port charges. Clause 15 for Mombasa Port charges states that 'wharfage charges shall be raised on all cargo, including empty containers passing over the quays, Wharves, jetties, buoys and other installations within the port within the harbour limits except for transshipment cargo'*. The charges shall be levied as indicated in the matrix below:-

Table 13: Wharfage charges, rates and charging system at Mombasa Port

Sn	Item	Rate per Unit	
		20'	40'
15.1	Domestic and Transit full containers both import and Exports	$70.00	$105.00
15.2	Domestic and Transit empty containers both import and exports	$30.00	$45.00
15.3	In addition to the above ,containers holding in whole or in part dangerous cargo dangerous cargo		

	shall be surcharged at 10% of the rates in clause 15.1 &clause 15.2	
		Rate per ton OR Part Thereof
15.4	Domestic and transit dry general, dry and liquid bulk cargo both imports and exports, leaving or entering the Port on a truck, train or **e**quivalent mode of transport.	$5
15.5	Dry Bulk or Liquid Bulk Cargo handled via conveyors or pipeline from /to the vessel to /from an existing liquid facilities within the port or a storage facility outside the port	**$2.20**
15.6	Bunkering vessels in port area via pipeline or truck	**$0.50**
15.7	Dry or Liquid Bulk Cargo handled through private jetties or buoys	$ 1
15.8	Dry General cargo handled through private jetties or buoys	$ 2
15.9	**Self Propelled Units (Import or Export) handled directly or indirectly**	**Rate per Unit**
	Saloon, Station Wagon, Van, CUV not exceeding 1.5 Metric Tones	**$65.00**
	Station Wagon, Pick-up, SUV, CUV not exceeding 5 Metric Tones	**$80.00**
	Mid-sized Truck, Minibus, Tractor not exceeding 15 Metric Tones	**$120.00**
	Bus, Truck, Fork Lift, Construction/Industrial vehicle over 15 Metric Tones	**$180.00**
	Road Trailers with tractor	**$190.00**
	Road Trailers without tractor ➢ Trailer and/or vehicles loaded on top of other units shall be charged as individual units ➢ General Cargo loaded on any unit shall be charged at appropriate General Cargo Rate	**$180.00**
15.10	Dangerous cargo shall be surcharged at **10%** above rates in **clause 15.4 to 15.5**	

Source: KPA, 2013

From the above table we see that the wharfage charges for containerized goods; the charge is such that for the 20 feet domestic and transit full containers import and export the wharfage charge is USD 70.00 and USD 105.00 for 40 feet containers. However, for domestic and transit empty containers both imports and exports 20 feet containers $30.00 is being charged, and $45.00 for a 40 feet container. Additionally, containers holding in whole or in part dangerous cargo attract a surcharged of the rate of 10 % above the normal charges indicated in clause 15.1 and 15.2. Domestic and transit dry general, dry and liquid bulk cargo both imports and exports, leaving or entering the port on a truck, train or equivalent mode of transport is charged at $5.50 per ton. At the same time dry bulk or liquid Bulk cargo handled via conveyor or pipeline from/to the vessel to/from an existing liquid facilities within the port or a storage facility outside the port is charged at $2.20 per tone while a $0.50 per tone wharfage charge is being levied on all bunkering vessels in the port area via pipeline or truck.

The Mombasa port charges book also indicate that dry or liquid Bulk cargo handled through private jetties or buoys are charged at $1.00 per ton while dry General Cargo

handled through private jetties or buoy is charged per ton rate of $2.00. The Kenyan Port Authority tariffs indicated above under clause 15.9 also show that self propelled units (i.e. import or export) handled directly or indirectly, the rate per unit ranges between $65.00 for Saloon, Station Wagon, Van, CUV not exceeding 1.5 Metric tons and $185.00 for Road Trailers with a tractor. On top of the above charges, the clause above also states that trailers and/or vehicles loaded on top of the other units shall be charged as individual units; the same applies for Cargo loaded on any unit is charged at an appropriate general cargo rate as indicated in the clauses in the above table.

The table above indicates that unlike the DSM wharfage charging system that apply both weight/volume and ad valorem system for some imported and exported commodities to arrival at the wharfage charge; *the Mombasa charging system is based on the weight/volume or size of the commodities imported and exported for both domestic and transit cargo. The Mombasa charging system does not have the minimum and maximum value whereas DSM has a fixed maximum value of USD 2,500.00 per harbor tone of which an importer/exporter can pay. Despite this maximum per harbor tone fixed as a threshold value; the formula results into extremely higher wharfage charges and makes DSM Port an expensive destination when it comes to comparative wharfage fees as seen in the examples below.*

4.5 Wharfage charging system at Beira Port

In the course of preparation of this situation analysis report, we also paid a visit to Beira port. All the major ports in Mozambique (Maputo, Beira and Nacara) have been privatized (under the concession agreements). The Beira port is concessioned to a private company- Cornelder de Mozambique (CdM) who operates and manages all the 5 terminals of port except the fuel terminal. The Cornelder de Mozambique tariff book of 2012 provides details of all tariffs and charges for all cargo passing at Beira Port including bulk liquid cargo that passes through the fuel terminal operated by the Mozambique port authority (CFM). Section 2.7 of the Beira Port Tariff Book states that '***For Taxation of wharfage the values considered for calculation of wharfage are the FOB value of import cargo, and FAS value of export cargo. For transshipment of international general cargo wharfage is only applied once, and this on the inbound movement*'. The same section also provides that 'the calculation of wharfage is done on ad valorem bases**. The percentages applied to wharfage charges at Beira port are shown in the table below:

Table 14: Wharfage charging system and applicable rates at Beira Port

SN	item	Wharfage charge applied
1	Import transit general cargo	1.70% ad valorem

2	Import national liquid cargo	1.70% ad valorem
3	Export transit general cargo	0.90% ad valorem
4	Export national liquid cargo	0.90% ad valorem

Source: CdM tariff Book 2012

From the table above, we see that unlike the DSM and Mombasa port where wharfage charges is being applied to all cargo (general, liquid and containers) passing through the port; Beira port does not charge wharfage fee for import and export containers and domestic general cargo; instead wharfage charge is being applied only for import transit general cargo, import national liquid cargo, export transit general cargo and export national liquid cargo. Up to the visit time at the Port, the CdM marketing department confirmed that up to now ***wharfage charges are only levied in liquid cargo passing at the port.***

4.6 Wharfage charges in DSM, Mombasa and Beira: a comparative analysis

The message provided from the three tables above is that each port has its own bases for estimating wharfage charges in their respective ports. The table below provides a summary of the wharfage charging system for DSM, Beira and Mombasa. Durban Port has been added for comparison reasons to just to show how the other large Indian Ocean sea ports charge wharfage fees. Moreover, Durban is the biggest port in the eastern African side of the Indian Ocean, therefore can provide a good comparison.

Table 15: Wharfage charging systems in DSM, Beira, Mombasa, Zanzibar and Durban

SN	Name of the Port	Method of Wharfage estimation	Goods attracting wharfage charges	Type of operator
1	Dar es Salaam	Ad valorem and volume &weight	All imports, exports and transit goods	Public and Private
2	Mombasa	Volume, weight and size	All imports, exports and transit goods	Public
3	Beira	Ad valorem (FOB and FAS)	Only liquid cargo	Public and Private
4	Zanzibar	Volume, weight and size	All imports, exports and transit goods	Public
5	Durban	Volume, weight and size	All imports, exports and transit goods	Public and Private

From the table above, we note that DSM and Beira Ports apply ad valorem charging systems for wharfage charges for some commodities, while Durban and Mombasa port applies volume and weight of cargo to arrive at the wharfage charges. The literature indicates that both Mombasa and Durban used to apply the ad valorem system in estimating wharfage charges, but later embarked in the volume or weight/size system after registering many complaints from their customers as the system on average results

into comparatively higher wharfage charge rates than the weight, size or volume system. The literature also indicated that the value system is an old charging system and many ports in the world have abandoned it and instead use the size, volume or weight of cargo to arrive at the wharfage charges for all cargo.

Since wharfage charges are levied in all the 3 ports in bulk liquid cargo we will make a simple comparative analysis of which port charges a higher charge by giving a few examples. From the earlier analysis above, we note that both DSM port and Beira apply the ad valorem system for charging wharfage charges while Mombasa use the volume or weight system. The table below shows the wharfage charge for a 100,000 tones of bulk liquid cargo (e.g. Petrol) whose value is USD 130 mill.

Table 16: Wharfage charging system in DSM, Beira and Mombasa

Port	Charging system (fuel cargo)	Charging rate	Estimated Wharfage charge
Dar es Salaam	Ad valorem (CIF)	1.6% of 130 mill	$208,000.00
Beira	Ad valorem (FOB)	1.7% of 130 mill	$210,000.00
Mombasa	Weight/volume	$0.5 per tone (100,000)	$50,000.00

From the above example we find that using the weight system (tones of fuel) Mombasa charges a lower wharfage fee ($50,000) for 100,000 tones of fuel cargo followed by extremely higher charges in Dar es Salaam port ($208,000) and Beira Port $210,000. From this hypothetical example we find that the two ports applying the ad valorem system charges higher wharfage charges. *From this example we can concluded that the ad valorem system results into higher charges.* The other example would be for self propelled units such as cars. If we take an example of domestic imported second hand cars; the table below provides examples for wharfage charges for DSM and Mombasa port while Beira port will not be included as they don't charge for other commodities apart of liquid cargo.

Table 17: Comparison of wharfage charges for vehicles imported via DSM and Mombasa.

SN	Type of Motor vehicle	Weight	Value of the vehicles (hypothetical value)	Port and wharfage charges	
				Dar es salaam (1.6% of CFI value)	Mombasa (Fixed rate based on weight)
1	Saloon, station wagon, van, CUV	Below 1.5 metric tonnes	$5000	$80	$65
2	Station wagon, pickup, SUV, CUV	Below 5 metric tones	$10,000	$160	$80
3	Bus, truck, Forklift, construction/Industrial vehicle	Over 15 metric tones	$30,000	$480	$180
4	Road Trailers with tractor		$15,000	$240	$190

For the first categories of motor vehicles indicated above, the importer pays $80 in DSM port and $65 for Mombasa port; in this case the DSM wharfage rate is higher by 19 percent. For the second category of imports (station wagon, pickup, SUV, and CUV not exceeding 5 tones) whose value is estimated at $10,000. The wharfage charge is $80 and $160 for Mombasa and DSM respectively; meaning that the DSM charger is higher by 100 percent, while in the 4th category (Road Trailers with tractor) the charge is such that the importers using the Mombasa port will pay $190 which is the highest wharfage charge in Mombasa while in DSM $240 will be paid. Once again the DSM charge is higher by 21 percent. *From these hypothetical examples we find that the differences in the amount of wharfage charges between the two ports is the result of the charging system whereby Mombasa has a fixed wharfage charge rate based on weights/size for motor vehicles and equipments passing at the port and DSM apply the ad valorem system; with the ad valorem system, the higher the value of the import/export the higher the wharfage charge*. These results should be interpreted with caution as there are many factors to consider before we conclude that DSM port is an expensive port, although basing on wharfage charging system DSM seems to have extremely higher charges than Mombasa. However, the World Bank study came to this conclusion after comparing the two ports on several factors. The results may also not mean that importers will always prefer Mombasa to DSM because Importers consider many factors before making a choice of port of disembarkation for cargo among others is the proximity to the importers location, how significant the shipment cost to the total import bill, security of the cargo imported etc. However, the message from the examples above is that given the complaints from port users on the wharfage charging system the port stakeholders need to sit down and discuss with port operators and assess whether the DSM port wharfage charging system is still an optimal method; at the same time the regulator (SUMATRA) need to be conversant on how the bases for charges were arrived at (how the formula and percentages arrived at)

Another example that can be sited relates to how containerized cargo passing at both DSM and Mombasa are being charged; i.e. for the 20(TEU) and 40 feet containers. The table indicated below, however, does not include wharfage charges being applied at Beira port since Beira does not charge wharfage fees on containers; as shown above only liquid cargo attract wharfage charge at Beira Port.

Table 18: Wharfage charges for containers at DSM and Mombasa Ports

	Wharfage charge for	**Dar es Salaam**		**Mombasa**	
SN	Container type	**20' (TEU)**	**40'**	**20'**	**40'**
1	FCL transit containers - import	240	$420	$70	$105
2	FCL Transit containers -export	160	$280	$70	$105
3	Domestic containers	250	$500	$70	$105

Note: 20' and 40' refers to the twenty and forty fee volume containers

Once again the table indicates that the DSM port wharfage charges are comparatively higher for both 20 and 40 feet import and export domestic transit containers. For instance Item 3 for domestic containers, for a 20 and 40 feet USD 250 and $ 500 respectively is being charged as wharfage fees in DSM but for the same size of containers USD 70 and $105 is paid in Mombasa. This means that for both types of containers the DSM charge is higher by an average of $162 or 72% higher i.e. For a 20 feet container and more than 3 times for a 40 feet container. The story is the same for FLC transit import and export containers. Transit containers are charged at $240 and $420 for 20 and 40 feet respectively; this is contrary to the Mombasa flat rates (for domestic and transit import and exports) of $70 and $105 for 20 and 40 feet containers respectively.

From the above analysis we can conclude that wharfage charges are comparatively higher in DSM than in Mombasa for all cargo (e.g. motor vehicles, liquid and containers). This is because the DSM port charging system (ad valorem) makes wharfage charges higher as the higher the value for imports the higher the wharfage charges the importer pays. As the charging system makes the port's wharfage charges comparatively higher than other ports; higher wharfage charges was a source of complaints in many advanced ports such as Durban who abandoned the system in the past. Beira port only charge wharfage fees for liquid cargo, but using the ad valorem (FOB and FAS); however, their charge rate is comparatively higher than DSM as they charge 1.70 % of import transit liquid cargo and 0.90 % for transit and national liquid cargo. The DSM ad valorem system has a minimum and maximum value; these threshold levels are still high and don't give the port any advantage and when they are applied makes the port wharfage fees even higher than its competitors like Beira and Mombasa Ports whose charging system does not have the threshold value.

4.7 Other key issues

During the discussion with some of the port users a number of issues and concerns were a raised; these related to the Single Customs Territory (SCT), Harmonization of regional port charges, power challenges, role of Port regulators in improving port quality of services and regulatory mechanism for port charges.

The single customs territory is a continuation of the EAC Customs Union through removal of the trade restrictions including minimization of internal border controls. The SCT advantages include: reduction of administration costs and regulatory requirements, facilitate free movements of goods, labour, services and capital, promotes foreign, domestic and cross border investments etc. Stakeholders expressed their worry that there will be loss of jobs to Tanzanians as well as loss of revenue. Experience from the other countries is that although a few jobs may be lost, this may be offset by wider market for

jobs/services created by SCT established and therefore provide opportunities for partner states members to create business partnership avenues that cut across all the countries. Therefore, all Tanzania businesses can strategically form joint venture with other partner states businesses and benefit from SCT; hence SCT may in future provide wider business opportunities although in the short run there may be adjustment costs leading to job cut/loss. The analysis also indicates that all member states port actors still have similar worries; these worries are born from the fact that there was no proper preparation for stakeholders and no correct information was provided before SCT establishment. However, it's encouraging to find that there are many awareness sessions being organized to educate all stakeholders, especially, clearing and forwarding agents who seem to worry about their jobs being taken by other member states, but still institutional and legal matters need to be resolved; these related to insurance, finance and clearing procedures and legal recognition of these new stakeholders as port operators.

The other issues raised by Industrial stakeholders interviewed include the power challenge. Frequent power cuts affect productivity and increases production cost for Tanzania manufacturers. The study noted that the power instability is a common problem in all the visited ports (Beira and Mombasa). It is encouraging to find that of recent government efforts are stabilizing the power production and availability in the country. CTI can play a role in advocating for reforms in the energy sector for instance reforming the Tannesco so that their role is minimized such that they are only involved in production and leaving transmission and distribution roles to other players.

5.0 Key issues for CTI advocacy

- ✓ Improving Port services: revive the port improvement committee and meet regularly as planned before, so that port challenges are shared and dealt among stakeholders
- ✓ Advocate for Government of Tanzania to continuously invest in Port infrastructures, railways and ICI networks as planned in the BRN where the financing systems would be through the use of infrastructural bonds and PPP modes.
- ✓ Need for the Port outsourcing some of the services which the port does not have a comparative advantage in provision such as repair for port equipments, and the container terminal currently being run by the TPA, this will avoid the conflict of interest, unlike the current situation whereby the port is a landlord to TICS and a terminal operator hence competing with its tenant
- ✓ Need for CTI participation at the EAC meetings so that they can understand and lobby for issues in the interest of Tanzania manufacturers.

- ✓ CTI needs to be pro-active and working close to responsible government institutions such as the TRA, TPA and BEST and bring up stakeholders concerns.
- ✓ Need for CTI to discuss with the regulator to perform his regulatory functions in port services and reform the wharfage charging system(change from ad valorem to weight, volume/size system)

6.0 Study Findings

- **DSM port applies both ad valorem system (CIF value), volume or size system in estimating wharfage charges for cargo passing at the port while Mombasa only applies volume, size or weight system; at the same time Beira only charge wharfage fee for bulk liquid cargo using ad valorem system (FOB and FAS).**
- **Both methods used to estimate Wharfage charges at DSM port (ad valorem and weigh/size system) for general and containerized cargo makes the port wharfage charges comparatively higher than Mombasa; this is despite of the DSM port having a threshold value of $2,500 per harbor tone. Comparing Beira and the EAC major ports (DSM and Mombasa); Beira apply the same ad valorem system as DSM port (but based on FOB and FAS) for only liquid cargo and its wharfage charge rate is comparatively higher rate than DSM port. These findings are not different from the earlier findings by the World Bank that Wharfage charges and other costs make DSM Port comparatively an expensive destination port.**
- **Most of the interviewed Port users are not happy with services provided by the main service providers at the port (TPA, TICS, TRA and ICDs etc); their perception is that the services are comparatively expensive, inefficient, obscured by bureaucracy, lack of customer care, unnecessary delays and conflict of interests for players in the port. However, the Ministry's current efforts to reform the port management is encouraging, although the sustainability of such personal efforts which is not institutionalized is still questionable.**
- **The perceived weakness in quality of port services is manifested in the inability of the port to reach the international standard indicators and agreed bench marks such as the dwell time, ship and cargo turnaround time and other set indicators by the port itself, the regulator (SUMATRA) and the international benchmarks; this can be attributed to lack of substantial investments in port infrastructure and lack of proper regulation in the port resulting into problems such as bureaucracies at the port, congestion, low ICT**

application leading to manual clearance processes, weak customer services by port services providers and lack of knowledge by the port users.

7. 0. Recommendations

- The study has found that DSM port, although applies both ad valorem, weight, size and volume; in most cases wharfage charges are estimated using the ad valorem system that make the charge extremely higher than its neighbor port- Mombasa. Understanding the factors and the formula used to determine the charge is important. There is also a need for stakeholders to work with the regulator (SUMATRA) so that TPA justifies the bases and the wharfage formula as most developed ports have embarked in the new system of estimating wharfage fees based on weight, volume and cargo size.
- Most of the interviewed major port users perceived that the port quality of services is weak and therefore they are not happy with the port services providers (TPA, TICS, TRA, and ICDs). CTI can work with the regulator (SUMATRA) and the responsible government institutions(PMO, BEST AC and the responsible Ministry) to push for the port and other stakeholders to improve their services; if not the port is likely to lose its regional competitiveness in facilitating regional trade to land locked countries such as Ruanda, Burundi, Zambia, Malawi and DRC.
- The Government promises through BRN and the current Minister's effort to reform the port by changing the Port management is encouraging but such efforts need to also extend to improving port services by removing the current red tapes and increase investments in infrastructure at the port and railways as planned in the BRN and the port master plan.
- CTI should discuss with Permanent secretary of the Ministry of Transport on issues related to improving port services and revive the *port improvement committee* and forge the link to become one of the port improvement committee members where they can advocate for reforms to improving port services and review the wharfage charging system if the current formula is not justifiable.

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Appendix 1: List of consulted institutions

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18	Dolores Ng''wandu	Manager , Tarrifs,Competition & Consumer Affairs: Surface and Marine Transport Regulatory Authority (SUMATRA)	Dores.ng'wandu@sumatra.or.tz +255 754 382 445
19	Charles J Ngaluko	Research and Development Officers: Surface and Marine Transport Regulatory Authority (SUMATRA)	charlesngaluko@yahoo.co.uk +255 713 341 225
20	Shose Shirima	Tanzania Breweries Ltd (TBL)	Procurement officer
21	Elias Abbasy	Revenue officer: Zanzibar Ports Corporation	+255 777 477 173

Appendix 2: Terms of reference (TOR)

i. Desk review of the operation and the performance of TPA (hard copies and online sources)

ii. Interview TPA senior officials and other port stakeholders in order to get views on charges and fees that are charged by TPA.

iii. Compare the performance of TPA with another competitor ports like Beira and Mombasa especially on the basis for calculating port charges

iv. Visit Mombasa and Beira ports to study methods they use to calculate port/wharfage charges and other fees

v. Facilitate a joint stakeholders' meeting to discuss findings of the draft study report and collect comments to improve the Draft report.

vi. Recommend best practice methodologies used in calculating port charges in Tanzania.

vii. Suggest advocacy strategies to reverse the situation observed making the port uncompetitive when compared to the neighboring ports.

Appendix 3: container storage charges in DSM and Mombasa Port

SN	**Storage charge for containers in Mombasa**		**Rate per day**	
	Container type		**20'**	**40'**
1	Domestic import containers	**First 4 days**	Free	Free
		5 to 7 days	$30	$60
		8 to 15 days	$35	$70
		16 t0 24 days	$40	$80
		Over 24 days	$45	$90
2	Domestic export containers		**20'**	**40'**
		First 9 days		
		Thereafter up to the date vessel is berthed	$20	$30
3	Transit Import containers	**First 9 consecutive days**	free	free
		10 to 11 days	$30	$60
		12 to 18 days	$35	$70
		19 t0 24 days	$40	$80
		Over 24 days	$45	$90
4	Transit export containers	**First 15 consecutive days**	free	free

		Thereafter up to the date vessel is berthed	$16	$24

SN	Storage charge for containers in Dar es Salaam		Rate per day (TEU)	
	Container type		**20'**	**Over 20'**
1	Domestic FCL import containers	**For first 7 days after ship completes discharge or container landed**	Free	Free
		For the next 14 days (8-21)	20	40
		Thereafter till delivery	40	80
2	Domestic FCL export containers	**First 7 days including Sundays and public holidays from the day of acceptance of the container by the Authority in the harbor area**	**free**	**free**
		Thereafter until shipment	16	32
3	Transit Import containers	**First 15 consecutive days after ship completes discharge or container is loaded**	**free**	**free**
		For the next 6 days (from 16 -21)	20	40
		Thereafter until final delivery	40	80
4	Transit export containers	**First 21 days**	free	free
		Thereafter until shipment	16	32