

# PDFII / Nigerian Ports Authority

**Comparative Assessment of Tariffs/ Costs at Ports along the West** Africa Coast

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# **Report Approval**

Approval of the report must be done by the authorised representative of the beneficiary organisation:

Name:

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## Abbreviations

AEO	Authorised Economic Operator
ANLCA	Association of Nigerian Licensed Customs Agents
CBN	Central Bank of Nigeria
CCVO	Combined Certificate Value and Origin
CRFFN	Council for the Regulation of Freight Forwarding in Nigeria
DFID	Department for International Development
ECOWAS	Economic Community of West African States
ISPS	International Ship and Port Facility Security code
ITA	International Trade Administration
LAMATA	Lagos Metropolitan Area Transport Authority
LASWA	Lagos State Waterways Authority
LCCI	Lagos Chamber of Commerce and Industries
LPI	Logistics Performance Index
MAN	Manufacturers' Association of Nigeria
NCS	Nigeria Customs Service
NIMASA	Nigerian Maritime Administration and Safety Authority
NIWA	National Inland Waterways Authority
NPA	Nigerian Ports Authority
NRC	Nigerian Railways Corporation
NSC	Nigerian Shippers' Council
PAAR	Pre – Arrival Assessment Report
PMAESA	The Port Management Association of Eastern & Southern Africa
PMAWCA	Ports Management Association of West and Central Africa
ТАВ	Trading Across Border

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## **SECTION 1: EXECUTIVE SUMMARY**

#### **Overview**

The United Nations Conference on Trade and Development (UNCTAD) has identified the role of ports as central to economic growth. Furthermore, including under the Incoterms (International Commercial Terms) 2020 revision, the International Chamber of Commerce recognised the increasing migration to intermodal, door to door, logistics models. This clearly suggests that, in order to remain competitive and attractive, ports must perform as streamlined and efficient in-bound, out-bound and transit facilities with robust connectivity to national and cross-border hinterland regions.

As components of trade costs, port tariffs and other associated fees are important features of overall competitiveness. They are significant variables in the growth and competitiveness of the Nigerian Ports. In a bid to diversify the economy, the Nigerian government is taking strides to ensure Nigeria's ports are ready to play their part by ensuring that entry and exit of goods are not constrained, and that Nigerian ports are competitive and potentially preferred for goods entering/exiting and transiting the West African region. This would be partially achieved by ensuring that tariffs and associated costs of port services are viable and competitive.

Ports analysts have noted that competition between ports is undeniably increasing and has resulted to the adoption of strategies to improve port efficiency and capacity. Carriers, shippers and supply chain managers all seek efficiency and cost effectiveness in the transportation of cargo. As a result, port-related services that can help them save time and money have become increasingly important to them. It is recognised that, for many value chains, predictability is a more important imperative than cost. Thus, not only must port fees be competitive but port activities and processes must be streamlined and efficient.

The study, therefore, is aimed at analysing key data and to present a Comparative Assessment of Tariffs/Costs at Ports along the West African Coast. Through desk and literature reviews and engagement of port authorities on port operations, the study sought to;

- Present an overview on best practices for high achieving ports and economies identified to have made significant strides in economic growth and development as a result of efficient trade facilitation processes.
- ✓ Share findings from comparative analysis on ports operations and infrastructure at selected ports in West Africa, including the Lagos Apapa port, Nigeria.
- ✓ Conduct studies on port operations in Nigeria for the Lagos and Eastern ports (Onne, Calabar and Warri)
- ✓ Assess cost implications and its effect on competitiveness for ports particularly in Nigeria and the selected West African ports included in this study.

#### **Key Findings**

With reference to identified Key Performance Indicators to ensure equal standards of measurement and comparison, the study highlights findings on ports infrastructure and systems, tariffs, timescales and costs.

Comparisons were conducted between the Lagos Ports Complex, Nigerian Eastern Ports and identified West African ports; Tema, Cotonou, Abidjan, Dakar and Lomé.

The summary findings;

- Review of global indices for 'Ease of Doing Business'; 'Trading across borders', and the 'Logistics Performance Index', Nigeria is ranked among the least performing economies especially in relation to trade facilitation. Nigeria ranked 146 of 190 countries; 182 of 190 countries; and 110 of 160 countries respectively. Critical analysis identified factors such as high costs and time required for border and documentary processes as key contributors to low ranking.
- Port efficiency in countries identified to be higher performers and exhibit global best practices highlight contributing factors to improved processes for port operations. These include; development of enabling policies and strategies for trade facilitation in line with the World Trade Organisation – Trade

Facilitation Agreement (WTO – TFA), and improved technology and infrastructure of ports particularly for operations such as the 'Single Window' platform, security counter-measures and intermodal transport connectivity.

- In comparing the selected West African ports infrastructure and systems, existence of a Single Window platform and other enabling factors promoting port efficiency such as improved technology and less complex port procedures, contribute to competitiveness of the ports. Hence, the increased patronage of ports with such amenities. This was noted for Cotonou port, Benin- being a key competitor to Lagos port. There are, however, key development projects to improve competitiveness in these ports and increase functionalities which are mostly attributed to the government's willingness to improve port efficiency in the country. Despite similar efforts made by the Nigerian government to adopt trade facilitation policies and strategies, implementation has been slow, thereby affecting competitiveness of Lagos port in comparison with other West African ports.
- Assessing the Nigerian ports; Lagos, Onne, Calabar and Warri ports, Lagos Apapa port has been noted as the busiest port. Onne port, also a busy port, albeit with limited functions, as it is mostly suitable for export of oil and gas products although benefitting from its operation of a Free Trade Zone. Limited activities were noted in Calabar and Warri ports. Terminal Handling fees and costs for all Nigerian ports were noted to be fixed as published by the Nigerian Ports Authority (NPA). However, as highlighted by port users, there are charges which are not published by the NPA, and vary from port to port. These charges are mostly "negotiable", such as customs clearing fee. This suggests a concerning lack of transparency and cost predictability.
- On port costs analysis, particularly for the West African ports assessed, Lagos port was noted to be least competitive with highest costs. This was noted for port tariffs, freight rates and Terminal Handling Charges (THC) for imports and exports to selected countries, and the World Bank country analysis for the 'Trading Across Borders' indicator on border and documentary compliance for imports and exports.

#### Recommendation

In relation to the Lagos Ports Complex a key contributor to competitiveness is to ensure existence of improved infrastructure, predominantly intermodal connectivity utilising the railway network, and ensuring improved road's conditions and accessibility. This would impact and enable streamlining of internal ports procedures including a Port Community System or Single Window (preferably the latter, in line with the WTO Trade Facilitation Agreement).

In the case of the Nigerian Eastern Ports, infrastructural development such as dredging of sea beds to appropriate depths to enable free flow of vessels and encourage port activities is crucial. This would also be instrumental to addressing issues of over reliance on, and congestion at the Lagos ports.

Summary recommendation points are;

- Appropriate prioritisation of the implementation of the Articles within the World Trade Organisation Trade Facilitation Agreement including turning NPA (alongside Customs) into a trade facilitation body more so than a revenue generation one. Notwithstanding this, increased efficiency in holistic port operations, incorporating trade facilitation imperatives, would attract cargo to the ports and encourage profitability.
- Establishment of a multi-stakeholder Single Window platform to improve processes whilst encouraging transparency and reducing cost and bureaucracy.
- Prompt intermodal infrastructure development and implementation with maritime, rail and road linkages aimed at reducing road evacuation, reducing cargo release time and thus reducing overall supply chain cost whilst encouraging predictability.
- Overall enhancement of logistics competence including establishment of a Truck Management / Vehicle appointment system
- Capacity building for NPA personnel to enhance efficiency and strengthen human resources.
- Clear promulgation of port costs, fees and penalties. Encourage 'whistle-blowing' where unofficial fees are identified and / or claimed.

The study findings and analysis emphasise that no one recommendation, in isolation, will improve competitiveness of Nigerian ports. A holistic approach, adopting key best practice strategies is required to achieve required results.

The study also identified that cost is only one element of port competitiveness and, very likely, not the most important element. Predictability of transit time has become the prime feature of port selection both from the traders' and carriers' perspectives; this is a major factor to value chain competitiveness and efficiency.

## **SECTION 2: ADMINISTRATION**

## 2.1 Project Management

The project was managed by Crown Agents Nigeria Ltd in Nigeria. The team was made of Jon Walden (Lead Consultant), Mike Jukwe, Christopher Borha and Moses Oyebola (Support Consultants), and Maureen Ademola (Project Management and Admin Support).

## **SECTION 3: TECHNICAL REPORT**

## **3.1 OVERVIEW OF STUDY**

#### INTRODUCTION

Ports performance is pivotal to connecting countries and supply chains, whilst fostering economic growth (United Nations Conference on Trade and Development - UNCTAD, 2016). Due to the increasing competition between ports, strategies to improve efficiency and capacity of port operations, in order to attract carriers and shippers are being adopted by ports authorities globally.

In recognition of the importance of efficient management of port operations to economic growth and development, governments adopt measures to ensure negative factors, adversely affecting import, transit and export of goods, are mitigated.

Nigeria operates one of the major cargo ports in West Africa, playing an important role in trade and development in the region. The West African region recorded a total increased throughput from 105 million tonnes to 165 million tonnes between 2006 and 2012 (World Bank, 2016). This signifies increasing demand for trade facilitation supportive structures at ports and therefore increasing competitiveness to manage shipping demands.

In view of the objective for the Nigerian Government to diversify the economy, partially, through port reforms enabling non-oil exports to be competitive, there is a need to ensure Nigerian ports are competitive and the preferred option in the West Africa region.

The study assesses the Nigeria ports; infrastructure, systems and their relative effect on costs, in comparison with selected West African ports, to analyse factors that affect or influence competitiveness and to detail recommendation to improve efficiency and thus competitiveness.

**Study Aim:** To conduct assessments on port tariffs and associated costs with the aim of addressing issues affecting entry and exit of goods to and from Nigeria ports and proffering recommendations to improve competitiveness of Nigeria ports in comparison with other ports along the West African coast.

Key objectives of the study include:

- Outline global best practices on port operations, for example making references to Tangier port in Morocco, Singapore port, Algeciras port in Spain and Durban port, with emphasis on deployment of the single window/port community system, automated cargo operation and ISO certification.
- Assessments of operations and efficiency in selected West African ports; Dakar, Cotonou, Tema, Abidjan and Lomé.
- Cost overview (direct and indirect) of using Nigeria ports for Import/Export of goods, and relative impact of cost composition of goods on volume of business on the ports.
- Cost analysis of import/export of goods across the selected West African ports under review and the Nigerian ports.
- Outline short- and medium-term recommendations to improve competitiveness of the Nigeria ports, where appropriate in relation to the World Trade Organisation (WTO) Trade Facilitation Agreement (TFA) Category A, B and C. It is recognised that the TFA only covers regulatory formalities, but these have a direct impact on port efficiency.

#### STUDY APPROACH AND METHODOLOGY

#### Study Design

*Desk Reviews:* Baseline information was obtained by conducting research on existing literature and reports on port operations and performance particularly for global best practices and efficiency amongst the West African ports. This review included assessment of previous relevant studies, documented evidence and published data following expert reviews. Desk reviews were conducted also where ports were not physically visited or assessed, and lack of response to question guides to gain information on port operations. Materials and reports reviewed were appropriately cited and listed in the Reference section.

*Stakeholder meetings:* To obtain key operational and performance information on some of the selected ports, a stakeholder meeting was conducted with key officials of Port Authorities to harness details on the port infrastructure and operations contributing or affecting effectiveness and management. Key details on Stakeholder meetings were conducted with port authorities in Lagos – Nigeria, Durban – South Africa, Tema - Ghana and Lomé - Togo. The consultants sought to conduct stakeholder meetings in Dakar- Senegal, but efforts to coordinate this with the port authority officials proved futile.

*Surveys using questionnaires:* Key details on port operations and costing was assessed using structured questionnaires. This involved surveys to assess Port Annual Throughput, export/import tariffs, and cost implications on port users.

To assess implication of tariffs and costs on port usage particularly in Nigeria, structured questionnaires were designed to gain insights on 'port user' experience in the selected Nigerian ports; Lagos, Onne, Warri, and Calabar.

#### Sampling

In line with the Terms of Reference, ports were selected based on relevance to the study particularly for best practice reviews and comparative assessments within the West Africa region and Nigeria.

Key ports were also identified for field assessments and data collection, as agreed in the inception and checkpoint meetings.

- 1. An overview assessment on global best practice ports was conducted for:
- Algeciras port, Spain
- Singapore port
- Tanger Med port, Morocco
- Durban port, South Africa
- 2. Assessment and comparative analysis were conducted on these West African ports:
- Lomé port, Togo
- Tema port, Ghana
- Lagos port, Nigeria
- Abidjan port, Cote d' Ivoire
- Cotonou port, Benin
- Dakar port, Senegal
- 3. An overview of port operations and costs in Nigeria (both Lagos and Eastern ports) was conducted for basic infrastructure, functions and associated costs. The Nigerian Eastern ports assessed were Warri, Onne and Calabar ports.

#### Data Analysis

*Thematic Analysis:* Research questions were outlined to inform study designs. Analysis of findings were grouped using themes as outlined in the Terms of Reference and agreed during the inception phase.

*Comparative Analysis:* A side-by-side comparison of port operations, performance and costs was conducted using outlined criteria as identified from the Terms of Reference and study tools. To ensure triangulation of findings, different methods were adopted to carry out the study; desk reviews, stakeholder meetings and interviews and surveys.

Assessment of feedbacks from completed questionnaires were analysed for ports engaged.

To ensure validity and reliability of data, triangulation of findings was conducted by analysing details from desk reviews, stakeholder meetings and surveys conducted using structured questionnaires.

#### **Study Limitation**

- Findings from this study were reliant on accessible and available data during the period. Due to the sensitivity of the nature of the study, adequate information was not always divulged by the stakeholders involved.
- Administering questionnaires at the selected ports to gain information and insight of port infrastructure, systems, tariffs and costs, and cost drivers was agreed as the principal project tool. However, with few exceptions, Ports Management Association for West and Central Africa (PMAWCA) was unable to secure completed questionnaires. This study was to be implemented with the close support of Nigeria Ports Authority (NPA) Working Group and PMAWCA. However, the Crown Agents consultants had to resort to retrieving the requisite data utilising other secondary resources, such as published materials and desk reviews to collate required data and information. This resulted in a large amount additional time to distil and analyse the vast amount of data sourced and to validate such material. Careful analysis of information. A number of additional requests were made, outside the original terms of reference, and the consultants responded to these requests as much as possible. Where such requests were not appropriate to the study, for example requests for import duty rates, which are now harmonised in the Economic Community of West Africa States (ECOWAS) Common External Tariff so are not a competitive factor, this was duly explained.
- Desk reviews were expansive and only data which could be reasonably validated, from credible sources, has been included in this report. Any gaps in the analytical tables and/or text within the study are due to the limited reliable information on the particular data point concerned.
- Release of information: The majority of West African ports researched were reluctant to release what they considered to be sensitive data and / or background information. Many consider themselves to be in competition with Nigerian ports and, consequently, perceived a conflict of interest.

<u>Ethical consideration</u>. To ensure confidentiality and anonymity, as much as possible identity of respondents/interviewees has been withheld especially for port survey, and where individuals have not provided consent to disclose identities.

## **3.2 KEY FINDINGS AND ANALYSIS**

# **3.2.1** Performance indicators on ease of doing business and logistics performance index for countries assessed

The World Bank conducts the 'Ease of Doing Business' assessment annually, generating the ease of doing business scores of absolute levels of regulatory performance over time. This captures the gap of each economy from the best regulatory performance observed on set of indicators, across all economies for *Doing Business* (World Bank, 2019).

To further assess trade facilitation, competitiveness and correlation to the economy ease of doing business, this study would tease out and analyse data on ease of doing business scores, rankings and the *Doing Business* indicator ranking on Trading across borders for the countries being referenced in this study. Trading across borders takes into consideration Time and Cost to export products of comparative advantage and import auto parts (World Bank Group, 2019).

Other indicators considered for Ease of Doing Business analysis and rankings are: Starting a business, dealing with construction permit, Getting electricity, Registering property, Getting credit, Protecting minority investors, Paying taxes, Enforcing contracts, and Resolving insolvency.

Country/Economy	Ease of Doing Business Rank	Doing Business score 2019	Doing Business score 2018	Trading across borders rank	Trading across borders 2019	Trading across borders 2018
Global Best Practice Co						
Morocco	60	71.02	68.56	62	83.58	81.12
Singapore	2	85.24	84.97	45	89.57	89.57
South Africa	82	66.03	64.66	143	59.64	59.73
Spain	30	77.68	77.61	1	100	100
West Africa Countries	assessed					
Benin	153	51.42	51.29	107	68.94	68.94
Cote D' Ivoire	122	58.00	53.06	162	52.44	52.44
Ghana	114	59.22	57.16	156	54.84	52.32
Nigeria	146	52.89	51.52	182	23.08	19.93
Senegal	141	54.15	53.78	139	60.85	60.85
Тодо	137	55.20	48.88	129	63.66	63.66

#### Table 1: Ease of Doing Business comparison

Overall, Nigeria ranks among the lowest on the Ease of Doing Business at 146 and 182 for the Trading Across Borders ranking out of 190 countries assessed, although better than Republic of Benin, 153 in the region for Ease of Doing Business.

Singapore can be considered one of the best countries for Ease of Doing Business, but Spain is top on the Trading across Borders ranking. This implies there are other contributory factors aside from trade facilitation that may also influence ease of doing business in a country. Owing to the relatively good performance of Spain and Singapore in trade facilitation and doing business, this study further examines key competitiveness factors of their ports amongst others.

**Trading Across Borders** (TAB) rankings are used, globally, by potential investors, exporters and importers as a 'quick view' of how easy or difficult a market is likely to be. As such, the perceptions informed by this index have a significant impact.

Nigeria's score in Trading Across Borders improved marginally from 19.93 in 2018 to 23.08 in 2019 but the country still ranks very poorly against this indicator worldwide, 182<sup>nd</sup> out of 190 economies. The improvement in score over the year is an indicator of possible strategic strides being taken into consideration to improve trade facilitation in Nigeria. Subsequent sections in this study and report analyse country ports competitiveness factors and key development projects.

As a key index to assessing trade facilitation status and criteria in the different countries, the 'Trading Across Border' indicator ranking takes into consideration time and cost (excluding tariffs) associated with documentary compliance, border compliance and domestic transport – within the overall process of exporting or importing a shipment of goods (*See figure 1 below*).

#### Figure 1: Trading Across Border procedure

#### Documentary compliance

Obtaining, preparing and submitting documents during transport, clearance, inspections and port or border handling in origin economy

Obtaining, preparing and submitting documents required by destination economy and any transit economies

Covers all documents required by law and in practice, including electronic submissions of information as well as non-shipment-specific documents necessary to complete the trade

#### Border compliance

Customs clearance and inspections by customs

Inspections by other agencies (if applied to more than 20% of shipments)

Port or border handling at most widely used port or border of economy

#### Domestic transport

Loading and unloading of shipment at warehouse, dry port or border

Transport by most widely used mode between warehouse and terminal or dry port

Transport by most widely used mode between terminal or dry port and most widely used border or port

Traffic delays and road police checks while shipment is en route

Country/Ec onomy	Tradin g across board er (score )	Tradin g across board er (rank)	Time to export: Border complia nce (hours)	Cost to export : Borde r compl iance (USD)	Time to export: Docum entary complia nce (hours)	Cost to export: Docum entary complia nce (USD)	Time to import: Border complia nce (hours)	Cost to import: Border complia nce (USD)	Time to import: Docum entary complia nce (hours)	Cost to import: Documen tary complian ce (USD)
Spain	100	1	0	0	1	0	0	0	1	0
Singapore	89.57	45	10	335	2	37	33	220	3	40
Morocco	83.58	62	11	156	26	107	65	228	26	116
Benin (WA) <sup>1</sup>	68.94	107	78	354	48	80	82	599	59	110
Togo (WA)	63.66	129	67	163	11	25	168	612	180	252
Senegal (WA)	60.85	139	61	547	26	96	53	702	72	545
South Africa	59.64	143	92	1257	68	55	87	676	36	73
Ghana (WA)	54.84	156	108	490	89	155	80	553	36	474
Cote d' Ivoire (WA)	52.44	162	239	423	84	136	125	456	89	267
Nigeria (WA)	23.08	182	135.4	785.7	119	250	263.7	1076.8	144	564.3

Table 2: Trading Across Border analysis: Time and Costs for imports and exports

The ranking is based on 8 indicators for time and costs on imports and exports as seen in table 2.

TAB scores and rankings can be attributed to ports efficiency, which is an important determinant of shipping costs. Inefficient ports also evidence higher handling costs which are one of the components of shipping costs. Variations in port efficiency have been noted to be linked to excessive regulation, the prevalence of organised crime and the general condition of the country's infrastructure.

Table 2 also shows country's performance in relation to the World Bank TAB indicators, for comparator countries selected for this study. It is interesting to note that South Africa does not score too high for TAB, in spite of Durban Port being considered effective and competitive, particularly in relation to principal activities of automotive related imports and fruit/produce exports. This indicates that the relatively high costs of using South Africa's ports are outweighed by the efficiencies provided to port customers and the predictability delivered. Whilst relatively high port related costs may be an inhibitor for certain types of trades and cargoes, there is a strong assertion that predictability and reliability have become increasingly important parameters affecting choice of routings within supply chains.

Nigeria with the least score and ranking for TAB recorded highest time and costs for import and export of goods in relation to border and documentary compliance in comparison with other countries assessed.

#### Documentation procedure for Import and Export for ports and countries assessed

The required documentation for import and export of products provides insight on the processes in the different countries in relation to performance and ranking for the Trading Across Border indicator on Ease of Doing Business. Table 3 shows documentation required for import and export of goods, in order of TAB rankings for countries assessed in this study.

Country/Ec onomy	Export: Trade Documents	Import: Trade Documents	Export Products	Import Products
Spain	Packing List; Commercial invoice; CMR waybill; Intrastat	Packing List; Commercial invoice; CMR waybill; Intrastat	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	Parts and accessories of motor vehicles
Singapore	Commercial Invoice; Packing List; Export permit; SOLAS certificate; Bill of lading	Commercial Invoice; Packing List; Import Permit; SOLAS certificate; Bill of lading	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	Parts and accessories of motor vehicles
Morocco	Commercial invoice; Packing list; Certificate of origin; Customs Export Declaration; Etat de chargement du Transporteur; SOLAS certificate	Commercial invoice; Packing list; Customs import declaration; MCI notification; Delivery Order; Release Order; Import license (Engagement d'importation); SOLAS certificate; Bill of lading	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	Parts and accessories of motor vehicles

#### Table 3: Trading Across Border: Export and Import Documentation and Products

Country/Ec onomy	Export: Trade Documents	Import: Trade Documents	Export Products	Import Products
Benin (WA)	Commercial invoice; Electronic cargo tracking note (BESC); Export declaration; Certificate of origin; Single Pay Slip (BFU); Bill of lading; Phytosanitary certificate; Weight certificate; SOLAS certificate; Fumigation certificate	Commercial invoice; Certificate of origin; Bill of lading; Electronic cargo tracking note (BESC); Import declaration; Single Pay Slip (BFU); SOLAS certificate; Attestation of value	Cotton	Parts and accessories of motor vehicles
Togo (WA)	Commercial invoice; Export declaration; Carnet TRIE; Packing List; Single receipt document (DFU); Certificate of origin; Connaissement	Attestation of Value (ADV); Import license; Packing list; Commercial Invoice; Import declaration; Bill of lading; BESC; Single receipt document (DFU); Customs release order (Bon a enlever); Foreign exchange authorization; SOLAS certificate	Plastics and articles thereof	Parts and accessories of motor vehicles
Senegal (WA)	Bill of lading; Commercial invoice; Export declaration; Packing list; Certificate of origin; Insurance; Phytosanitary certificate; Engagement de change; Health certificate (certificat de salubrite); SOLAS certificate	Bill of lading; Commercial invoice; Pre-Import Declaration (DPI); Manifest; Cargo release order; Insurance; Foreign exchange authorization; Attestation of value; SOLAS Certificate	Fish & crustacean, mollusc & other aquatic invertebrate	Parts and accessories of motor vehicles
Ghana (WA)	Bill of lading; Cargo Release Order; Quality Control and phyto Certificate; Commercial invoice; Non-traditional export form; Export License; Export declaration; Packing list; Terminal handling receipt; SOLAS certificate	Bill of lading; Cargo Release Order; Delivery order; Commercial Invoice; Final classification and valuation report; Import Declaration form; Import License; Packing List; Technical Standard Certificate; Terminal Handling Receipts; SOLAS certificate	Edible fruit and nuts; peel of citrus fruit or melons	Parts and accessories of motor vehicles

Country/Ec onomy	Export: Trade Documents	Import: Trade Documents	Export Products	Import Products
Cote d'Ivoire (WA)	Commercial invoice; Bulletin de vérification de qualité (CCC); Bill of lading; Packing list; Certificate of origin; Export declaration; Phytosanitary certificate; Handling receipt; Delivery order; Inspection report; Loading permit (Mise a quai); SOLAS certificate; Attestation d'exportation et engagement de change	Commercial invoice; Packing list; Bill of lading; Certificate of origin; Terminal handling receipt; Inspection report; Insurance certificate; Cargo release order; Electronic cargo tracking note (BESC); Import Declaration Form; Import license; Final Classification and Valuation Report (FCVR); SOLAS certificate	Cocoa and cocoa preparations	Parts and accessories of motor vehicles
South Africa	Bill of lading; Cargo Dues Order; AGOA Certificate of origin; Commercial invoice; Customs Export Declaration (SAD 500); Packing list; SOLAS certificate; Landing order	Bill of lading; Cargo Dues Order; Commercial invoice; Customs import declaration (SAD 500); EUR 1 - Certificate of origin; Packing list; SOLAS certificate	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	Parts and accessories of motor vehicles
Nigeria (WA)	Bill of lading; Certificate of origin; Commercial invoice; Single Goods Declaration (SGD) Form C 2010; Nigerian Export Proceeds Form (NXP Form); Clean Certificate of Inspection (CCI); Packing list; Terminal handling receipt; Request for information (RFI); SOLAS certificate	Cargo Release Order; Combined Certificate of Value and Origin (CCVO)/Certificate of Origin; Commercial invoice; Exit Gate; e-Form "M" (valid for foreign exchange); Manufacturer's certificate of production or SONCAP ; Packing list; Payment receipt of customs fees and duties ; Pre-Arrival Assessment Report (PAAR); Single Goods Declaration (SGD) ; Terminal handling receipts; Product Certificate 1 (Unregistered Status) ; SOLAS certificate	Rubber and articles thereof	Parts and accessories of motor vehicles

Countries and economies with higher TAB scores and ranking present less documentation which is relative to the time for documentary and border compliance, as well as associated costs.

In general, more advanced economies tend to have minimal documentary requirements for exports and imports, like Spain and Singapore in Table 3 above. Over-bureaucratic procedures are a significant Non-Tariff Barrier (NTB) to Trade. Adopting a Single Window platform helps to streamline formalities and Nigeria is yet to implement this as compared to some of the other countries assessed in West Africa like Senegal, Republic of Benin and Cote D'Ivoire. Whilst plans are underway for the implementation of a Single Window, it is critical to firstly reduce documentary requirements and harmonise those which are essential prior to migrating to an electronic platform. The USAID NEXTT programme included an initiative with Central Bank of Nigeria (CBN) and Nigeria Customs Services (NCS) to reduce their respective document requirements. An initial success was to eradicate the requirement for the Combined Certificate Value and Origin (CCVO) documents. Unfortunately, this workstream was not completed before the project closed and it became evident that rather than remove the CCVO requirement it was replaced by a Certificate of Origin thus retaining the same number of documentations required. Documentation has a direct relationship to traders' costs, port efficiency and Ease of Doing Business ranking. To improve efficiency, reducing documentary requirements is recommended, provided the inter-agency willingness to cooperate is confirmed and the effort is coordinated by a single body, for example the Secretariat of the Presidential Enabling Business Environment Commission (PEBEC).

#### Country rankings based on the World Bank Logistics Performance Index (LPI) 2018

The International Logistics Performance Index (LPI) as reported by the World Bank is an interactive Benchmarking tool designed to measure how efficiently countries perform on trade logistics, using six indicators:

- 1. Customs
- 2. Infrastructure
- 3. International Shipping
- 4. Logistics Competence
- 5. Tracking and Tracing
- 6. Timeliness.

LPI is an important index as it compares countries overall logistic chain performance rather than just one element, such as ports, in isolation. 160 countries were studied and ranked in 2018 out of which, 14 in West Africa. Table 4 outlines LPI rankings for countries whose ports were assessed.

Country	LPI Rank	LPI Score	Customs	Infrastructure	International shipments	Logistics competence	Tracking and tracing	Timeliness
Benin (WA)	76	2.75	2.56	2.50	2.73	2.50	2.75	3.42
Cote d'Ivoire (WA)	50	3.08	2.78	2.89	3.21	3.23	3.14	3.23
Ghana (WA)	106	2.57	2.45	2.44	2.53	2.51	2.57	2.87
Morocco	109	2.54	2.33	2.43	2.58	2.49	2.51	2.88
Nigeria (WA)	110	2.53	1.97	2.56	2.52	2.40	2.68	3.07
Senegal (WA)	141	2.25	2.17	2.22	2.36	2.11	2.11	2.52
Singapore	7	4.00	3.89	4.06	3.58	4.10	4.08	4.32

#### Table 4: Country LPI ranking<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> \*Scores are out of a maximum of 5

South Africa	33	3.38	3.17	3.19	3.51	3.19	3.41	3.74
Spain	17	3.83	3.62	3.84	3.83	3.80	3.83	4.06
Togo (WA)	118	2.45	2.31	2.23	2.52	2.25	2.45	2.88

Nigeria ranks 110<sup>th</sup> globally in 2018, weighted down by the 'customs' indicator. Although improving customs efficiency is key, it needs to be complemented by other factors that will improve cargo evacuation time from the port such as functional infrastructure, for example intermodal access and upgraded security systems amongst others.

Nigeria performs worse than Cote d'Ivoire, Benin, and Ghana in the region, but higher than Senegal and Togo. The study sought to assess key competitiveness factors and structures at Dakar Port, Senegal during field visits. Dakar port authorities were not accessible and unavailable to engage with the consultants at the time of the study, hence attempts to engage in stakeholder meetings with the port authority personnel was not possible. Relevant details and data were sought through desk reviews on the Dakar port, Senegal. Senegal, however, was noted to be the first West African port to operate a Single Window, thus considered pioneer in trade facilitation in the region.

The Nigeria ranking is largely affected by the 'customs' score. Surprisingly, the infrastructure score is higher than some comparators. This could reflect the proportion of paved roads rather than the existence of intermodal connectivity, a crucial inhibitor to the efficiency of Nigeria's ports.

#### **3.2.2 Global best practices on Ports Operational procedures and systems**

To provide an overview of global best practices of port operations and practices, ports that have deployed practices such as single window<sup>3</sup>, port community system and/or automated cargo operation and/or have ISO certifications were identified for assessments and analysis and for recommendation in a bid to improve the competitiveness of the Nigerian ports.

Identified ports for best practice analysis include Tangier port - Morocco, Singapore port, Algeciras port - Spain and Durban port. The ports were assessed based on operational procedures, structures, and practices.

#### **ALGECIRAS PORT- SPAIN**

Located on the Strait of Gibraltar and seen as the leading port in the Mediterranean, Algeciras Port received over 28,000 ship calls in 2015 and handled 98.2 million tonnes throughput (ESPO, 2016). It is managed by Port Authority of Algeciras bay.

The Terminal building occupies 12,000m<sup>2</sup> and provides accommodation to commercial offices and premises including a shopping centre of about 7,200m<sup>2</sup>. Its quality of services has improved trade facilitation between Algeciras and North Africa, Morocco. Other amenities include, access to railway, good road networks, adequate car park facilities for up to 800 cars (APBA, 2019).

#### **Operations and Practices:**

Wide range of naval fittings and repair specialists and companies with extensive experience and the bay presents a conducive environment to ensure safety during repairs. Security standards are put in place by ensuring adherence to International code for Ship and Port Facility Protection (ISPFP) in compliance with International Safety of Life at Sea (SOLAS) convention. Key facilities include set up of a Container Security Initiative in collaboration with US custom services to combat illegal trafficking and prevent terrorism. This is in conformance with international security requirements including the IMO ISPS Code of Practice. Application of Megaport Initiative to detect radioactive hazards. Port police service monitoring the premises round the clock. Also, real time monitoring of port through Closed Circuit Television (CCTV).

#### **Strengths and Achievements:**

The development of strategies as a global maritime and logistics hub has been noted as a key driver to some of the successes recorded by the Algeciras ports authority. There are also plans to develop a Corporate Social Responsibility policy and guideline.

Other strategic ports development and operational strengthening approach include; Partnership with the EU and private sector – LNG, development of Environmental policy and receipt of ISO certification having passed Environmental Management System audit. Performance indicators are published annually, and Service Quality Perception Index is conducted regularly. Annual audit of financial accounts by external auditors. Set up of Technology Management and Innovation Program for improved coordination. The Algeciras Port Authority have led in setting up of a Teleport Port Community System, which is a single window approach. Now a member of International Port Community Systems Association (IPCSA) and the development of Teleport 2.0 focusing on services, processes and community collaboration to reach common goals.

As a result of development strategies and successes recorded by the Algeciras port, there has been increased employment locally. Algeciras is noted to be one of Europe's busiest ports having handled 107 million tonnes of cargo in 2018 – including a container throughput of 4.7 million TEU, 1.2 million vehicles and 338,499 ro-ro units. More than 5.9 million ferry passengers used the port in 2018 (LISW, 2019).

#### **Keys to Algeciras Competitiveness**

<sup>&</sup>lt;sup>3</sup> A facility that allows parties involved in trade and transport to lodge standardized information and documents with a single-entry point to fulfil all import, export, and transit-related regulatory requirements. If information is electronic then individual data elements should only be submitted once

- Geographically, an ideal transit port (for example, patronised by Maersk Line as a transit / feeder facility)
- Meets all international standards and protocols
- Enforced internal quality control and audit-based performance assessments
- Good intermodal connectivity

#### **DURBAN PORT- SOUTH AFRICA**

Africa's biggest and busiest container terminal, the Durban Container Terminal ranks among the top in the world and has a world class rail dual cycle operation on the container planning (Transnet, 2013). The Regulatory authority is Transnet National Port Authority.

The Port of Durban has 59 berths (not including fishing and ship repair) and an inner anchorage in the bay. Operating 24 hours a day, the entrance channel is 19 meters (62.3 feet) deep and 222 meters (728.3 feet) wide. Vessels up to 300 meters (984.2 feet) long and 37 meters (121.4 feet) wide can easily enter the port. The Port of Durban maintains wide-ranging ship repair facilities/ Container repair facility (World Port Source, 2019).

#### **Operations and Practices:**

The Port operates a common-user basis. It handles an average of 83,000 twenty-foot equivalent units (TEUs) containers each month and about 1.5million containers (TEU) per year at the Port of Durban Container Terminal, the largest container terminal in the southern hemisphere (WPS, 2019). All agencies in the port have their offices outside the port – this reduces congestion. There are no offices and no clearing agents within the port premises. There are Operations Centre monitors to check congestion and other problems in real time. Community and stakeholder engagement are considered very important – An annual Port Festival is held to embrace business and the local community.

#### **Strengths and Achievements:**

The Government of the Republic of South Africa (RSA) views the country's ports and terminals as key engines for economic growth. The first area of focus for Operation Phakisa, which was announced in June 2014, relates to maritime development of the 'Blue Economy'. There are four priority sectors for the Blue Economy: marine transport and manufacturing activities (coastal shipping, trans-shipment, boat building); offshore oil and gas exploration; aquaculture and marine protection services; and ocean governance.

The Government of RSA has consulted with 180 stakeholders in the four priority areas to develop detailed plans of action for each sector. Operation Phakisa complements U.S. interests in protecting fragile ocean ecosystems and generating economic development through the utilization of South Africa's abundant maritime resources. It is estimated that Operation Phakisa could create over a million sustainable jobs. Other projects include-deepening of the entrance channel and widen it from 122 to 230 meters; building a bridge into the port; creating a dedicated car terminal for automobile transit (International Trade Administration - ITA, 2018).

Over the past five years, Durban has recorded increasing number of automobiles exported by BMW and other car manufacturers producing for export; The Ports Authority alone employs 6,200 people at the Durban port. This figure is expected to rise to over 9,000 by 2018/19. Connected world trade systems require digitalisation (ITA, 2018).

#### Keys to Durban's competitiveness:

- Depth of the channels. There is a strategy called 'Big Ship Ready 2018-2028' currently being executed to ensure the port can handle vessels of the biggest size.
- Infrastructure: All Inland Container Depots are rail connected. The Port also cooperates with regional rail developments. Transnet takes a joined-up approach for their maritime and rail functions. Partnership is important and cooperation at African border level is important.
- All Agencies in the Port have their offices outside the Port. This reduces congestion and enhances efficiency and security.
- Multi-Purpose Port: The Port handles all categories of cargo, with a combination of automation and direct labour. There's also a new cruise Terminal.
- Port Services: Community and stakeholders' engagement is a priority and there is continuous improvement team as well as a Maritime Excellence Training Centre. There is a significant investment in Information Technology.
- Holistic supply chain awareness: Transnet recognises that it must configure operations to the principal economic entities it serves, such as the automotive and fruit sectors. Planning activities have a gearing towards supporting these large cargo volume sectors.

#### **SINGAPORE PORT**

Singapore is home to one of the busiest container hub ports in the world and connected to more than 600 ports in over 120 countries, with superior connectivity enabling goods to be transported quickly and efficiently around the world (Ministry of Transport Singapore, 2019). Its Regulatory body is Maritime and Port Authority of Singapore. The Port is ranked about 2nd largest globally. In 2015, more than 45 million tonnes of bunkers were lifted in Singapore. At any one time, there are about 1,000 vessels in the Singapore port (The Maritime Industry Knowledge Centre, 2019).

There are a wide range of marine services, from pilotage and towage to ship repairs and ship supplies, in the Port of Singapore. Vessels passing through the Singapore Strait are monitored by the Maritime and Port Authority's (MPA) Port Operations Control Centre, using the Vessel Traffic Information System (VTIS), which has the capability of handling up to 10,000 tracks at a time (The Maritime Industry Knowledge Centre, 2019).

#### **Operations and Practices:**

On average Singapore attracts 130,000 vessel calls annually. The quality, efficiency, competitiveness and reliability of its port and shipping services make it the preferred international port of call (Maritime and Port Authority Singapore, 2019). With the expansion of the terminal the port capacity will be increased by 50%.

The Port Operation Control Centres managed by MPA are equipped with state-of-the-art Vessel Traffic Information Systems. These systems integrate data from various sources (e.g. radars, Automatic Identification System, Harbour Craft Transponder System, Closed Circuit Television System and ship databases) to provide an accurate and comprehensive understanding of the shipping traffic in the port waters and the Singapore Straits. The MPA also posts circulars and notices to update the port and shipping community. This includes information on port, shipping and other MPA tariffs (MPA Singapore 2019).

#### **Strengths and Achievements:**

Singapore has an extensive network of Free Trade Agreements with more than 30 trading partners to enhance its access to major markets. This encourages companies across the logistics chain to operate from Singapore, as they know they can count on frequent and reliable connections to reach global markets quickly. In fact, high-frequency connections sometimes allow goods to reach their destination faster via Singapore than they would through direct shipments. The government recognizes the importance of including the private sector in policy decisions. To facilitate trade, Singapore launched the world's first National Single Window in 1989, which digitized and streamlined trade permit approval processes. As a result, permits could be approved electronically

using one e-document, within minutes. However, each shipment can involve many more parties and documents in the whole supply chain, from manufacturers to logistics companies, trade finance companies, and consumers. An enhanced National Single Window is currently in the works, in order to also integrate as many Business-to-Business transactions as possible into one single digital platform (Lam and Ramakrishnan, 2017).

There are estimated, more than 5,000 maritime establishments contributing about 7% to Singapore's gross domestic product and employing more than 170,000 personnel (The Maritime Industry Knowledge Centre, 2019). Singapore has become one of Asia's wealthiest nations, due in large part to its emergence as the highest-performing logistics hub in the region (Lam and Ramakrishnan, 2017).

#### Keys to Singapore Port competitiveness:

- Strong political will that Singapore, even as a small nation state, should be a lead transhipment hub
- Establishment of Single Window and electronic solutions for all trade related activities
- Establishment of technology-based solution for vessel and cargo management
- Optimum hinterland connectivity

#### **TANGIER PORT – MOROCCO**

The Tanger-Med port, which has been operating since 2007, capitalises on its strategic location on the Strait of Gibraltar in two ways. Firstly, it acts as a transhipment hub — a port where containers are transferred between vessels before travelling to other destinations. Secondly, it forms part of the Tanger-Med complex that includes four export-orientated free-trade zones, where customs duties are not imposed at import because all finished goods will be re-exported. (Financial Times, 2019). Regulatory body Tanger-Med Port Authority.

#### **Operations and Practices:**

In 2017, the port handled about 51 million tonnes of cargo (La Tribune, 2018). The port has a capacity for over 3million TEU. This is anticipated to rise to 8.2million TEU with the completion of the Tanger-Med 2 project. This would have a potential of making the port one of the largest transhipments' hub in the Mediterranean and Africa (Financial Times, 2019). The overall traffic volume handled in 2017 is 51,328,150 tons, total of 430,358 vehicles were handled at both vehicle terminals (Tanger-Med Special Agency, 2017).

#### **Strengths and Achievements:**

Tanger-Med is the linchpin of Morocco's policy of industrial development. The port complex possesses two container terminals, TC1 and TC2, with another two – TC3 and TC4 - recently being developed. There are automated terminal operations as part of the integrated IT system (Oxford Business Group, 2019).

Tangier port has led to successful creation of Special Economic Zone (SEZ) resulting in trade investments by automotive sector companies such as Renault and Ford. This has led to increased employments, market scale by increasing contractors as well as export capacity for produced cars. By capitalising on Morocco's proximity to Europe and the low cost of local labour, the port has attracted hundreds of foreign companies manufacturing goods for export to Europe from its free-trade zones. These are mainly in the automotive, aeronautics and textile sectors (PortSEurope, 2017). Renault has set up the largest car factory in Africa, with the capacity to produce 340,000 vehicles a year (Financial Times, 2019).

#### Keys to Tangier Port competitiveness:

- Strategic policy to ensure port operations support principal supply chain the automotive industry
- State of the art terminal operations, fully automated
- Establishment of Free Trade Zones which attract import and corresponding export traffic

#### Summary points: Ports Global best practice

#### **Key Points on Best Practices from countries assessed:**

- <u>Government involvement and commitment</u> in developing policies, plans and strategies to strengthen regulations for <u>Trade facilitation</u> and port operations has been noted to improve quality, efficiency, competitiveness and reliability of ports. An example is the 'Phakisa' – Blue Economy approach by the Government of RSA for Durban Port.
- Trade facilitation strategies include adherence and <u>implementation of the WTO TFA</u>; Establishing Single Window systems to increase efficiency in regulatory processing of consignments, reducing delays and corruption leading to optimal cargo release times.
- The <u>Free Trade Zone approach</u> has also been noted to increase competitiveness and attract increased investment and development, revenue and GDP as seen in the case of Tangier-Morocco and Singapore.
- Policies towards <u>attaining international standards and certifications such as ISO.</u>
- Infrastructural developments of the port facility; deploying technology such as the <u>Vessel Traffic</u> <u>Information Systems (VTIF) and other security measures</u> to also check congestion as well as encourage reliability for users of the ports. Lessons learnt from the Durban port review highlights <u>decongestion and regulation of port activities by ensuring agencies are located</u> <u>outside the ports</u>.
- <u>Access to intermodal transport such as rail services</u> have also been noted as an encouraging factor to increasing use of ports.

## 3.2.3 Infrastructure and Systems at West African ports

The Ports identified for review on infrastructure and systems, and how this enables port efficiency, competitiveness and user experience in West Africa were; Dakar, Cotonou, Tema, Abidjan, Lomé and Lagos. Figure 2 below shows locations on the map, of West African ports assessed.



Figure 2 : Map showing location of West African ports

#### PORT OF LOME, TOGO

#### A. General Information

Pioneering efforts at Port Building commenced in 1890. The current Port of Lomé was commissioned in 1968, even though the first ship docked at the port in 1967.

Current modernisation and expansion programs are in collaboration with Bolloré, an international terminal operator/ logistics services company and LPA.

#### Port details<sup>4</sup>

Water location: Bight of Benin Bay (Bay) Wiki: Contribute to wiki Anchorage depth: 14m - 15.2m Cargo pier depth: 9.4m - 10m Oil terminal depth: 14m - 15.2m

<sup>&</sup>lt;sup>4</sup> Port details extracted from Ports.com <u>http://ports.com/browse/africa/</u>

Dry dock: Small Harbour size: Very Small Railway size: Large Harbour type: Coastal Breakwater Max size: Up to 500 feet in length Repairs: Limited Shelter: Poor

#### B. Infrastructure

Two Seawalls and the deep berths protect the Port of Lomé from Siltation, resulting in significant cost savings from limited maintenance dredging

There are Quays for:

- Tow Boats
- Trawlers
- Oil Tankers
- Bitumen carriers
- A Jetty with 4 Berths for Conventional Goods
- An exclusively Container Jetty
- A separate Quay, 15 metres deep, that can accommodate ships carrying 7000 containers of 20 feet
- A new Lomé Container Terminal has 1000 metres of linear quay, depth of 17 metres and 5 Berths
- Complemented by modern Cargo Handling Plants and Equipment
- 86 hectares of space for storage and support services

The Port of Lomé has the capability of handling multiple ocean-going vessels concurrently.

#### C. Trade Facilitation

The port has a functional Single Window platform for foreign trade that enables customs licensed agents in the logistics chain to operate with speed and efficiency. This has resulted in improved clearance and release times.

The Customs Service is considered a partner to the port authority in this regard. Cargo examinations, when determined appropriate from a risk management perspective, are usually in the form of scanning rather than intrusive inspection.

There is an Internet based Port Information System for the real time exchange of ancillary information amongst the port community.

It was noted that the Single Window platform is operated by a private and independent Company, thus enhancing inter-agency cooperation and transparency. The following was noted by the World Bank on Doing business reforms;

- In 2017, Togo made trading across borders easier by implementing an electronic single-window system, which reduced the time for border compliance and documentary compliance for both exporting and importing.
- In 2016, Togo reduced the time for documentary and border compliance for importing by implementing an electronic platform connecting several agencies for import procedures and payments.

The average dwell time of cargo is 3 days. This significantly exceeds global practice guidelines but is considered good in the region.

#### D. Major Development Projects

1. Relocation of commercial activities outside port limits. This reduces congestion in the port and enhances security.

2. Establishment of Inland Cargo Depots closer to the final destinations for transit cargoes. This will reduce delays by conducting transit formalities once, and once only (as required by the WTO TFA) outside the port environs.

The major destination countries are: Burkina Faso, Niger and Mali

3. Rehabilitation of the moribund Railway System. The Port Authority recognises that 21<sup>st</sup> Century practice is to migrate cargoes from road to rail. This is for sound economic, security, efficiency and environmental imperatives.

#### E. Intermodal Operation

Cargo Evacuation from the Port is through Water (60 per cent) and Road (40 per cent).

#### Keys to Lomé Port competitiveness:

- Customer Focused and Quality Service business ethos.
- Flexible but published Pricing.
- Human capital development is a priority.
- Single Window platform deployed
- Strategic planning stretches to hinterland connectivity to attract transit cargoes
- Good stakeholder relations, for example with the Togo Customs Service. Exports are mainly agricultural commodities (coffee, cotton and cotton seeds, soy beans and wood)

#### **TEMA PORT, GHANA**

#### A. General Information

Tema, the largest Port in Ghana, was established as a General Cargo port in 1960. It principally handles Imports and Transit Cargoes. (The majority of exports are serviced by Takoradi Port)

There were minimal Investments in infrastructure for many years, until the World Bank funded 'Ghana Port Rehabilitation Project' in 1986.

A significant development was the conversion of the port from a General Cargo terminal to a container facility, through elimination of cargo transit sheds replaced by concrete container stacking areas. There was a significant response to the 'container revolution' of the 1970's.

A further Management reorganisation led to the Ghana Ports and Harbours Authority (GPHA).

An Export Free Zone was established in 2000.

Cargo handling operations were concessioned to private terminal operators in 2001, although the GPHA still operates a terminal that handles about 10 percent of the cargo throughput.

#### Port details

Water location: Gulf of Guinea (Gulf) Anchorage depth: 9.4m - 10m Cargo pier depth: 7.1m - 9.1m Oil terminal depth: 9.4m - 10m Dry dock: Medium Harbour size: Small Railway size: Medium Harbour type: Coastal Breakwater Max size: Up to 500 feet in length Repairs: Moderate Shelter: Good

#### B. Infrastructure and Systems

Despite establishing a functional ICT based Management regime through the Ghana Community Network (GCNET), the Port has had a limited success at implementation of a Port Community Network system. GCNET is well established but migration to a full International Trade Single Window has been challenging and, at the time of this study, a further contracting attempt for the Single Window had been terminated.

However, the Port is investing heavily in manpower development and training in ICT and maritime Disciplines. GPHA recognises the importance of staff training and knowledge development. It has also laid a foundation for future success through the integration of all its internal operations, using the Enterprise Resource Planning (ERM) application.

The Ghana 'Regional Maritime University' is now well established and attracts many regional students but funding for such students is often an issue. The syllabus available now includes wider options relative to the 21<sup>st</sup> Century practice of end to end supply chains.

Tema Port is located at Sea, hence has a negligible maintenance dredging cost, which is a major cost item in other West African Ports. However, capital dredging costs are significant due to subsea rock formations.

The Inland Container Depots (ICD) are located outside, but within the vicinity of the port environs. Outlying ICDs are planned. A University of Ghana study into ICDs in Ghana in 2014 clearly evidenced the economic benefit of using the ICDs for clearance and final release of cargoes (Nyantakyi, 2014).

#### C. Trade Facilitation

Like other West African Ports, Customs Authorities in Tema focus on revenue collection over trade facilitation. Whilst not unusual for developing and middle-income countries this can be counter-productive in relation to the overall cost of doing business and wider economic growth. It is anticipated that implementation of the WTO Trade Facilitation Agreement will, to some extent, address and equalise this focus.

Unilateral changes to established policies and procedures occur, for example stopping transit cargo operations to Togo, due to concerns over smuggling, without any advance consultation with affected parties.

In future, under the WTO TFA, Customs authorities will have to consult and give notice before implementing new requirements. GPHA gave the example of the planned first point of entry duty payment arrangement for transit cargoes. GPHA advised Customs this would cause very big problems at the port. The WTO TFA articles on the requirement for consultations and arrangements for transit cargoes would provide a defence against such actions.

The following were noted by the World Bank on Doing Business (DB) reforms;

**DB2019:** Ghana made importing easier by implementing a paperless customs clearance processing system.

**DB2017:** Ghana made trading across borders easier by removing the mandatory pre-arrival assessment inspection at origin for imported products.

**DB2016:** Ghana reduced the documentary and border compliance time for importing by developing electronic channels for submitting and collecting the final classification and valuation report.

**DB2015:** Ghana made trading across borders easier by upgrading infrastructure at the port of Tema.

#### D. Major Development Projects

There is an ongoing infrastructure expansion program.

Funded by APMT and Bolloré through a Special Purpose Vehicle (SPV) known as Meridian Port Holding. The SPV in turn established a terminal operations company, Meridian Port Services, in which Ghana Ports and Harbours Authority has a 30 per cent stake. This is an innovative structure for a public, private partnership in port operations which could be a good and secure model for NPA to consider.

#### E. Intermodal Operations

Tema is a unimodal port. The current narrow-gauge railway is not operating to the port. There is some rail connectivity for minerals to Takoradi. However, a new 'Ministry of Railways' has been established as the need for a Standard Gauge Railway system for freight is being prioritised by Government.

GPHA officials noted that **'Rail is the trump card for competitiveness'. It is recognised that rail 'extends the boundaries of the hinterland'.** The consultants consider this recognition is an important lesson.

#### Keys to Tema Port competitiveness:

- A Stable democracy, with deep social cohesion has provided Tema Port with a safe and conducive environment for 24/7/365 operations. This is a major comparative advantage over other sub regional ports.
- Safety and security delays and damage result in additional costs to business
- Cost / Value for money
- Productivity
- Competitive tariffs and marine charges
- Up to 30% discount on stevedoring for transit containers
- Good engagement with all port stakeholders and customers
- Flexibility on pricing
- Strategic plans rely on rail connectivity
- Use of Inland Clearance Depots, most clearance activities take place outside the port complex
- Deployment of ERM for sound internal management and governance
- Investment in human resource management and education

#### **APAPA PORT – LAGOS, NIGERIA**

#### A. General Information

Apapa Port popularly called Lagos Port Complex is located in the Apapa area of Lagos, South West Nigeria. The development of the port began in June 1921 with the construction of the first four of the deep-water berths with a total quay length of 548.64 metres and ultimate depth of 9.75 to 13.5 metres. The port also has a total of 21 Berths.

- The Lagos port has been noted to be one of the busiest ports in West Africa, with a combined capacity of 1.5 million TEU (Erabie, 2018)
- Apapa Port is a concessioned port with five Terminal Operators.

#### **Port details**

Water location: Bight of Benin Bay (Bay) Anchorage depth: 12.5m - 13.7m Cargo pier depth: 7.1m - 9.1m Oil terminal depth: 6.4m - 7.6m Dry dock: Medium Harbour size: Medium Railway size: Medium Harbour type: River Natural Max size: Over 500 feet in length Repairs: Limited Shelter: Good (Ports.com, 2018)

#### B. Infrastructure and Systems

Apapa Port is equipped with cargo handling equipment and personnel support facilities. It features a four-wheel gate of about 8 meters for oversize cargoes thereby allowing handling of such cargoes.

For improved operational activities and efficiency, the Landlord Port Model was introduced by the Federal Government and this later culminated in the concession of the terminals to private operators in 2006. Presently, the Lagos Port Complex has five (5) private Terminals with expert management and personnel with local and international experience in port operation. The Terminal Operators are: AP Moller Terminal Ltd. (APMT), ENL Consortium Ltd. (ENL), Apapa Bulk Terminal Ltd. (ABTL), Greenview Development Nigeria Ltd. (GNDL) and Lilypond Inland Container Terminal.

The Port also has two (2) Logistics bases- Eko Support Services Ltd. and Lagos Deep Offshore Logistics (LADOL) and eight (8) jetties. Sugar, salt and flour are produced in factories belonging to operators within the port. Lagos Port Complex is registered as an ISPS certified Port facility with the International Maritime Organization (IMO). The port offers 24hrs operation and efficient vessel turnaround time. All operational areas are guarded by both armed and unarmed security personnel, as well as with Closed Circuit Television (CCTV) for effective security management.

The concession process has resulted in vast expansion of Port infrastructure bringing about efficiency and improved productivity, in line with international best practices (Nigeria Ports Authority, 2017).

#### C. Trade Facilitation

Having ratified the WTO Trade Facilitation Agreement, the Nigerian Government aims to assure effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues.

The Nigeria government has also committed to establishing a Single Window platform. Other international best practices being introduced by the Nigeria Customs Service (NCS) for promotion of trade facilitation at the ports are:

- Aborting pre-shipment inspection policy and introducing destination inspection policy for imports. The NCS is
  in the process of procuring scanning equipment to ensure accurate and timely scan of containers on all import
  goods on arrival.
- The Central Bank of Nigeria (CBN) reviewed its transactions guidelines and replaced the Combined Certificate Value and Origin (CCVO), containing details for description of goods, port of destination, country of origin, date of shipment, country of supply etc., with a simpler certificate of origin in April 2017. The document is required for clearance of imported goods alongside other documents such as Bill of Lading, Commercial Invoice Exit Note, duly completed form 'M', Packing list, Single Goods Declaration and a Product Certificate. The issuance of the Certificate of Origin is to be completed within a maximum period of 48 hours from time of application.

 The NCS, as a partner agency of the NPA on clearance of goods, introduced the Pre-Arrival Assessment Report (PAAR) system in 2013 to replace the Risk Assessment Report (RAR) System, with the objective of facilitating trade and revenue collection. The NCS in collaboration with the World Customs Organisation are working to grant Authorised Economic Operator (AEO) status to importers and clearing agents who have maintained a satisfactory level of trade compliance. The NCS also maintains a Fast Track window through which select importers who have consistently exhibited integrity in their documentation and dealings with the NCS, may forward their cargoes directly to their warehouses where custom procedures such as examination and payments are undertaken. The Fast Track window allows importers bypass tedious port inspection processes and reduces cost associated with port storage and demurrage (International Trade Administration - ITA, 2018).

#### D. Major Development Projects

Key development projects include:

- Collaboration with private entities for rehabilitation of access roads, leveraging on Corporate Social Responsibility (CSR) strategy. The NPA has leveraged on a Public Private Partnership (PPP) approach for the reconstruction of access roads to the Apapa port. This collaboration is with the A.G Dangote group, and pan African conglomerate in partnership with Flour Mill, a leading Nigeria food company. The NPA and Flour Mill have financial outlay as their contribution, while the Dangote group is undertaking the construction. The project commissioned in 2018 is expected to be completed within 24 months (Famuyiwa, 2018).
- On Doing Business reforms, the World Bank noted that Nigeria reduced the time needed to export and import by implementing joint inspections, the Nigerian Integrated Customs Information System II (NICIS II) electronic system and around-the-clock operations at Apapa Port. The implementation of the NICIS II by the NCS has been noted to have increased Customs revenue by 14% in 2018 (Bivbere and Echenim, 2018).
- Establishment of policies in line with WTO TFA to improve effectiveness of port of operation such as the Single Window platform development. Although implementation strategies are underway, this is considered a milestone on governments commitment to establish the single window system which is key to improving competitiveness for Nigerian ports.

#### E. Intermodal Operations

Although the NPA reports that there are Rail, Water and Road connections (NPA, 2017), the rails and road infrastructure are ineffective resulting in congestion at the Apapa ports. With the Lagos Apapa port being the only port in Nigeria with rail connections, experts have argued that *the* lack of rail connectivity has contributed to congestion experienced at the seaports at Lagos as 95% of cargoes are evacuated by road, 2% by badge and 3% by rail (Babalola, 2018).

Effective intermodal connections have been noted to be a core inhibitor to competitiveness of the facility, with its relative impact on port operations; huge overhead costs incurred by importers and exporters. However, there are plans for construction of functional access rail services to also ease congestion within the Apapa port (Adenubi, 2018).

#### Keys to Apapa Port competitiveness:

- Although there has been noted set back with operational management and its effect on imports and exports at the Lagos ports, there has been increasing efforts to address some of the noted issues.
  - Collaboration among partner agencies, for example the NPA and NCS to implement best practices, to include the Fast Track window to reduce time and costs associated with clearance of imported goods.

- Improvement on clearance procedures and documentation. The introduction of a simpler Certificate of Origin to replace the Combined Certificate Value and Origin (CCVO) evidences the first stage of document reduction (although not correctly implemented)
- Improvement and reconstruction of access network to the port to check congestion. Repair and reconstruction of access roads and construction of rail network.
- Exploring PPP for developmental projects at the ports.
- The 2018 World Bank report on Ease of Doing Business ranked Nigeria 145 out of 190 economics. Although overall not a good score, Nigeria had moved up 24 spots from the previous year and was one of the top-10 most improved economies and top 3 improved sub Saharan countries. Taking into consideration 'Trading Across Borders'' and in line with some of the recent policy and regulation adjustments, the report stated:

"Sometime in 2017 and January 2018 respectively, the Revised Import Guidelines, Procedures, and Documentation Requirements under the Destination Inspection Scheme (Guidelines) were revised and then an addendum was added to the guidelines. Amongst other things, the guidelines now mandate all containerised cargo to be palletised, the Combined Certificate of Value and Origin (CCVO) has now been replaced with a single Certificate of Origin, and the NCS is now responsible for scheduling and coordinating the Mandatory Joint Examinations to ensure there is a single point of contact between importers and other regulators / officials. The documentation has also been reduced from ten to seven (in the case of exports) and fourteen to eight (in the case of imports)" (Price Water Cooper, 2018).

#### AUTONOMOUS PORT OF COTONOU, BENIN

#### A. General Information

The Autonomous Port of Cotonou consists of a deep-water harbour and has been noted to be one of the busiest seaports in West Africa, receiving high patronage from neighbouring countries including Nigeria. The port is managed by the Ports Authority of Cotonou, although have recently partnered with the Antwerp Port Authority 's Port of Antwerp International (PAI) to support modernisation of the port of Cotonou.

The deep-water port facilities were completed in 1965 and has facilitated trade for landlocked countries with a free trade zone in the city centre.

The port covers 400 thousand square meters, and its commercial quay contains four 155-meter berths, two 180-meter berths, one 220-meter berth for container vessels, and one berth for roll-on/roll-off cargoes (World Port Source, 2019).

#### **Port details**

Water location: Bight of Benin Bay (Bay) Anchorage depth: 11m - 12.2m Cargo pier depth: 9.4m - 10m Oil terminal depth: 9.4m - 10m Dry dock: Small Harbour size: Small Railway size: Large Harbour type: Coastal Breakwater Max size: Over 500 feet in length Repairs: Limited Shelter: Good

#### B. Infrastructure and Systems

World Trade Indicators report recognized the Port of Cotonou as 2007's third leading exporter in the region, largely due to growing re-exports to Nigeria. Major exports passing through the Port of Cotonou include kapok and cotton, and the major imports are cereals and gypsum for the agricultural and construction industries. Warehouses cover 57 thousand square meters and include a 65-thousand square meter container depot and a free zone for Mali, Niger, and Burkina Faso.

The Port of Cotonou handles an annual freight volume of around 12 million tons (Amao, 2017).

Cotonou is the largest city in the West African country of Benin and a major transport hub for trade with countries in the African interior including Burkina Faso, Mali, and Niger. The port has three container terminals, two of which are operated by France's Bolloré Group, with the third operated by APM Terminals, the terminal operating arm of Maersk Group. However, the port of Cotonou is considered to be one of the least-efficient ports in a region, where levels of port performance and productivity are in general notoriously low owing largely to poor logistical facilities. The Port Authority and Government of Benin is relying on the partnership with PAI to address infrastructural challenges affecting the ports efficiency.

Available equipment at the port include; Container gantries, dockside cranes, forklifts, mobile cranes, RoRo tugmaster etc. There are also container facilities and freight stations for 20ft and 40ft containers.

The port of Cotonou is ISPS (International Ship and Port Facility Security) compliant, with the Port Security Officer responsible for maintaining security levels. Video surveillance is under implementation and a container scanner has supposedly been purchased (Trigona, 2018)

#### C. Trade Facilitation

- Despite the gaps in logistics operation due to failing infrastructure in the Port of Cotonou, the port has been noted to be the preferred route for imports of goods to neighbouring countries including Nigeria. This has been attributed to less stringent port procedures and cheaper port tariffs. According to recent reports and studies, statistics has revealed that Cotonou Port, which is the closest to Nigeria, has been the highest beneficiary of the cargo challenge, with many Nigerian importers shipping their cargoes through the Cotonou port. (Salau, 2019).
- According to the World Bank on Doing Business reforms, in 2016 Benin made trading across borders easier by further developing its electronic single-window system, which reduced the time for border compliance for both exporting and importing.

#### D. Major Development Projects

- In partnership with PAI, the Port Authority of Cotonou plans to renovate the facility and guide expansion of the port.
- There are also expansion projects to increase cargo ship capacity involving; dredging and beaconing the access channel, dredging and widening the entry channel and inner harbour and extending the western harbour wall by 230 metres. Other works included construction of a huge 300 linear metre sand trap, extension of a quay and construction of two berths and road and parking facilities.

#### E. Intermodal Operations

There are rail and road intermodal operations at the port of Cotonou.
#### Keys to Cotonou Port competitiveness:

- Leveraging on PPP strategies for restructuring strategies to address issues affecting efficiency and optimal use of the port; addressing issues on shipping costs and poor logistical facilities. The Government of Benin has partnered with the International Finance Corporation (IFC, 2013) and the PAI.
- Despite the recorded low efficiency, the port of Cotonou has also been noted to have cheaper handling cost when compared to some neighbouring port, making it the port of choice for import route.

# PORT OF ABIDJAN, COTE D' IVOIRE

#### A. General Information

The Autonomous Port of Abidjan is a commercial port located in southern Abidjan, Côte d'Ivoire. It is a transshipment and intermodal facility and is managed as a public industrial and commercial establishment.

The Port of Abidjan opened in 1951 after the development of the Vridi canal, which enables deep-sea ships to use the port. It is the most important port in West Africa and the second most important in Africa after the Port of Durban. It is a major contributor to the economy of Côte d'Ivoire, and the greater part of the external trade of landlocked countries such as Burkina Faso, Mali, Niger, Chad, and Guinea also passes through it.

The port authority is known as the Port Autonome d'Abidjan. <sup>5</sup>

#### Port details

Water location: Gulf of Guniea

Anchorage depth: 20.1 - 21.3 meters Cargo pier depth: 7.1 - 9.1 meters Oil terminal depth: 9.4m - 10m Dry dock: Small Harbour size: Small Harbour type: Lake or canal Max size: Over 500 feet in length Repairs: Limited Shelter: Good (Searates, 2019)

#### B. Infrastructure and Systems

The Port of Abidjan has been noted to be West Africa's biggest, most modern port. With a central location and a welldeveloped infrastructure, it is a major point for trans-shipments to West and Central Africa over the Côte d'Ivoire's modern rail and road systems.

Covering water surface of 2500 acres and land area of 50 acres, Port of Abidjan facilities contain warehouses, specialized facilities for handling bananas, logs, and offshore tankers. The Côte d'Ivoire is the third largest cocoa bean exporter in the world. It's also an important distribution point for imports to Africa. Imports include foodstuffs,

<sup>&</sup>lt;sup>5</sup> Source for General Information: <u>https://en.wikipedia.org/wiki/Autonomous\_Port\_of\_Abidjan;</u> <u>https://www.searates.com/port/abidjan\_ci.htm</u>

machinery, equipment, pharmaceuticals, and manufactured goods going to the south. Exports include rubber, cotton, timber, fruit, fish, vegetables, and cocoa.

Quickly becoming one of West Africa's most important fishing ports, the Port of Abidjan includes fleets of trawlers and sardine and tuna fishing boats. Over 200 thousand tons of fish are processed there each year.

With a total of six kilometers of quay, the Port of Abidjan has 34 berths including berths dedicated for timber, cereals, fruits, petroleum products, and containers. Depth at the harbour's mouth is 10.5 meters, and the depth is 12.5 meters at the quays. The Port of Abidjan can accommodate vessels up to 260 meters long. The port contains 407.6 thousand square meters of open storage and 143.5 square meters of covered warehouses and sheds. Three berths specialize in container-handling, and one berth is devoted to roll-on/roll-off cargoes. All of the port's wharves are connected to the rail network (World Port Source, 2019)

The port conforms to the ISPS code. It offers a variety of related services, refining and industrial processing facilities. The leading companies operating at the port are SDV-SAGA (which employs over 4,000 people), SETV Terminal Operating Company Vridi, Sitrail and SIMAT.

#### C. Trade Facilitation

- There are non-tariff barriers for imports and exports.
- The port of Abidjan operates within the National Single Window platform for foreign trade. (Export Enterprises S.A, 2019)

## D. Major Development Projects

The port of Abidjan is undergoing expansion projects to include creation of a second container terminal to increase the port's cargo capacity; to host larger, new generation vessels, regardless of their size. Ultimately the expansion is targeted to accommodate ships carrying 14,000 containers (Kang'ereha, 2017).

#### E. Intermodal Operations

There are rail and road intermodal operations at the port of Abidjan.

#### Keys to Abidjan Port competitiveness:

- For strengthened coordination of port activities, there are strategies in place for the management and harmonisation of members of the 'Abidjan Port Place' comprising of the Port Authority, port and maritime operators- public and para public administrations (Customs Ministry of Foreign Trade, Ministry of security, Ministry of Agriculture etc) and other professional organizations operating in the maritime and port sector and also representatives of shippers from landlocked countries etc. This coordination is insured by the Abidjan Port Community (CPA) (Port of Abidjan, 2019).
- Other competitive factors for the Port of Abidjan are linked to the trade facilitation factors; non-tariff barriers and the Single Window platform, promoting efficiency in port operations.

#### PORT OF DAKAR, SENEGAL

#### A. General Information

The Autonomous Port of Dakar (French: *Port autonome de Dakar*, abbreviation: *PAD*) is a Senegalese public enterprise which is headquartered in Dakar, located in the east of city. As a result of its strategic position which gives it a sheltered harbour, it is now the third largest port in West Africa after the Autonomous Port of Abidjan and the Port of Lagos. It is also the ninth-largest port on the African continent.

The port has one of the largest deep-water seaports along the West African coast. Its deep-draft structure and 640foot-wide (200 m) access channel allows round-the-clock access to the port. Its current infrastructure includes tanker vessel loading and unloading terminals, a container terminal with a storage capacity of 3000 20-foot-equivalent units, a cereals and fishing port, a dedicated phosphate terminal and a privately-run ship repair facility. The port's location at the extreme western point of Africa, at the crossroad of the major sea-lanes linking Europe to South America, makes it a natural port of call for shipping companies.

The Senegalese government has established an independent entity to manage the port, namely the Société Nationale du Port Autonome de Dakar (SN-PAD) or Dakar Port Authority.<sup>6</sup>

# Port details

Water location: North Atlantic Ocean (Ocean) Anchorage depth: 14m - 15.2m Cargo pier depth: 4.9m - 6.1m Oil terminal depth: 4.9m - 6.1m Dry dock: Medium Harbour size: Medium Railway size: Large Harbour type: Coastal Breakwater Max size: Up to 500 feet in length Repairs: Moderate Shelter: Good

#### B. Infrastructure and Systems

The Container Terminal is not directly managed by the Governmental Port Authority "Port Autonome de Dakar" but is assigned to private Companies. Since January 2008, the container terminal is managed by Dubai Port World. The Container Terminal situated in the Northern Zone of Dakar Port covers an area of 24 ha and approx.700 meters of linear quay with three (03) berths dredged from 12 to 13 m. An up-to-date equipment is available for handling services including four (04) wharf gantry cranes (two of which Post-Panamax), four (04) Gottwald cranes on tyres, ten (10) yard gantry cranes, fifteen (15) reach stackers, four hundred (400) plugs and sockets for reefer containers. The annual traffic of around 300 000 TEUs, in constantly growing.

The total length of the piers is about 10 km for 40 available berths. The draught is between 10 and 13 meters. The Dakar Port also got a new Logistic Platform to improve their activities. The platform covers 21 hectares, there is 40 000 m2 of Warehouses, 750 parking places for trucks. The platform regroups also the offices of freight forwarders, customs, wholesalers etc.

Having understood the new security issues in the environment of the international maritime transports, the port committed itself in a vast program of tremendous changes.

With the ISPS code (International Ship and Port facilities Code) coming into force, the Port of Dakar had taken all financial and material steps to make the port installations and operations comply with the directives resulting from the SOLAS (Surface Ocean Lower Atmosphere Study) instructions.

For that reason, the Port developed a series of devices:

<sup>&</sup>lt;sup>6</sup> Source for General Information: <u>https://en.wikipedia.org/wiki/Autonomous\_Port\_of\_Dakar;</u> <u>https://dlca.logcluster.org/display/public/DLCA/2.1+Senegal+Port+of+Dakar</u>

- An aid to navigation device located at the port control (Vigie) and equipped with an AIS (Automatical Identification of Ships) system and a functional beaconing system.
- A waterplan and roads watch system equipped with radars, remote watch systems and nautical patrols
- A device to secure port access and premises with the development the first polyvalent aid centre equipped with high technology units. (Cochran, 2016)

#### C. Trade Facilitation

In 2016, Senegal became a signatory to the World Trade Organization's Trade Facilitation Agreement. With the support of the U.S. Agency for International Development (USAID), the Senegalese government has committed to meet some of the challenges associated with compliance with the agreement. These include;

- Implementation of a simple, transparent, equitable and less expensive import and export transit procedures, generating economic gains and opportunities while also ensuring the security of cross-border commercial actors.
- Capacity building for the Customs Department to conduct post-clearance audits, building trust between the department and trade operators (U.S Embassy Dakar, 2018)
- The port of Dakar operates a Single Window system called the ORBUS. The ORBUS Single Window is a joint online platform for public and private organizations that are involved in customs clearance formalities in Senegal.

## D. Major Development Projects

- In collaboration with the Dubai Port World and Port of Antwerp, there are plans to expand the port of Dakar with the aim of increasing annual capacity, as well as develop a logistics hub and free trade zone.
- There are also plans to expand and build a new railway line.
- The Senegalese government has signed agreements with the Japan International Cooperation Agency (JICA) to undergo port rehabilitation projects. The project is expected to make cargo handling safe, efficient and sanitary, while expanding the flow of goods to neighbouring Mali through Dakar Autonomous Port (JICA, 2017).

# E. Intermodal Operations

There are rail and road intermodal operations at the port of Dakar.

#### Keys to Dakar Port competitiveness:

- With an annual freight volume of 17 million tons, Dakar is one of the largest ports on the coast of West Africa. This port city is located at the crossroads of sailing routes between Europe and North and South America and southern Africa (World Maritime News, 2018).
- The Port of Dakar benefits from an exceptional location on the farthest point of the West African coast, true cross-roads for a number of maritime routes between Europe, North America, Latin America, and the African continent.
- With an access channel perfectly marked with buoys and constantly dredged, the Port of Dakar is situated in a 177-hectare body of water, with depths of between -10 and -13m. It offers an extensive area to move about, making certain manoeuvres possible without towing.

# Port Infrastructure and Economic Key indicator Comparison for the West African port assessed

Port efficiency is a key driver of economic development. Port infrastructure requires investment, continuous maintenance and up-grading if they are to remain competitive.

Due to increasing vessel size, climate change and existing structures moving beyond their intended design life, coupled with the complexities of technological advance, there is need to invest in port infrastructure and also to compare with other ports of the world to gain competitive advantage. In line with the terms of reference, an infrastructure review of selected ports in West Africa was carried out with a view to benchmarking NPA Performance with international best practice. The table below gives an overview of summary comparative analysis for infrastructure across the assessed West African ports.

The assessment also captures the World Bank rankings on Ease of Doing Business, Trading Across Boarder and Logistics Performance Index for these economies in relation to port performance and efficiency for the West African countries.

Indicator	Autonomous Port of Cotonou, Benin	Tema Port, Ghana	Abidjan port, Cote D' Ivoire	Dakar port, Senegal	Lomé Port, Togo	Port of Apapa, Lagos- Nigeria
Port Structure	Landlord Port <sup>7</sup> (Operation has been concessioned to private operators)	Landlord Port (Operation has been concessioned to private operators)	Landlord Port (Operation has been concessioned to private operators)	Landlord Port (Operation has been concessioned to private operators)	Landlord Port (Operation has been concessioned to private operators)	Landlord Port (Operation has been concessioned to private operators)
Security	100% Guaranteed. Government is in total control of security (There is agreement between Benin Republic Government and the Governments of landlocked countries which allows for free passage of cargoes in transit. This also eliminates extortions)	ISPS compliant. (All port installations are manned by 24- hour CCTV surveillance plus security personnel who monitor all port zones including entrance and exit gates on a 24-hour basis.)	ISPS compliant	ISPS compliant with automated systems for navigation monitoring and remote watch systems	ISPS compliant	ISPS compliant
Single Window Platform	Available. (All players in port operation including truck operators are integrated into single platform. This has grossly eliminated	Not Available (Plans in progress for Single Window platform)	Available	Available (There is a Single Window system called the ORBUS)	Available	Not Available (Plans in progress for Single Window platform)

# Table 5: Comparison of port operations and relative Country economic assessment in the assessed West African countries

<sup>&</sup>lt;sup>7</sup> Landlord ports are where the port authority owns only the basic infrastructure, leasing out to operators on a long-term concession basis, while retaining all regulatory functions

Indicator	Autonomous Port of Cotonou, Benin	Tema Port, Ghana	Abidjan port, Cote D' Ivoire	Dakar port, Senegal	Lomé Port, Togo	Port of Apapa, Lagos- Nigeria
	delays in cargo clearing / release and reduced turn-around time of vessels as well as cargo dwell time)					
Other factors for competitiveness	Less stringent port procedure and cheaper port tariffs	Establishment of a functional ICT based management system; internal operations, using the Enterprise Resource Planning (ERM) application; operating a paperless custom clearing system	Non-tariff barriers on imports and exports	Existence of automated equipment for surveillance and to improve security; implementation of simple and transparent, less expensive port procedures for imports and exports	Regulated and published pricing; and availability of internet-based port information system	Collaboration among partners (NPA, NCS) to implement best practices such as the Fast Track Window for imports; ongoing review of policies and procedures
Key development project	Renovation of facility; and port expansion	Port expansion; and establishment of a standard railway system	Port expansion	Port expansion; and development of new railway lines	Relocation of commercial activities outside the ports; rehabilitation of railway system	Leveraging on PPP strategies for rehabilitation of access roads and construction of railway lines.
Country- Doing Business Rank (2019)	153	114	122	141	137	146

Indicator	Autonomous Port of Cotonou, Benin	Tema Port, Ghana	Abidjan port, Cote D' Ivoire	Dakar port, Senegal	Lomé Port, Togo	Port of Apapa, Lagos- Nigeria
Country- Trading Across Border rank (2019)	107	156	162	139	129	182
Country- LPI (2018)	76	106	50	141	118	110

From Table 5 above, the following can be deduced as key observation and drivers for competitiveness:

- The governance structure of the ports is similar (Landlord Model) across West Africa, with most of the operations of the port concessioned to other private entities, thereby operating in a PPP manner.
- Most of the ports are either operating or in the process of operating the single windows system. Ghana and Nigeria had not operationalized the Single Window platform as at the time of study and as seen in table above.
- There are ongoing development projects in most of the ports to increase capacity and competitiveness, at varying levels. However, the level of development projects may be attributed to the commitment of the country government towards improving trade facilitation and economic growth. This is noted for expansion projects in Ports of Tema, Dakar and Abidjan.
- Port efficiency and its effect on time (for import and export procedures) and associated costs, can be seen to be dependent to a certain extent on improved structural facilities such as the Single window platforms or other automated systems applied to improve port procedures.
- As can be noted from the World Bank assessments on country economy, Ghana and Cote D'Ivoire rank better on ease of doing business. However, Benin and Togo are more competitive on trading across borders - taking into consideration time and costs associated with import and export procedures at the port. Finally, Cote d'Ivoire and Benin are better performing in West Africa on the Logistics Performance Index (LPI) which takes into account a holistic analysis of port related operations. In none of these rankings, Nigeria excels across the region or worldwide.
- Although the assessments take into cognizance the effects of port operations including time and costs on port efficiency and competitiveness, it is worthy to note that there are other social, political and economic factors that might affect organization of operations at the ports- which may not be sufficiently captured in the course of this study.

# 3.2.4 Nigeria Ports: Cost of using Nigeria ports

Nigerian Ports are Landlord Ports<sup>8</sup>, managed collectively by the Nigerian Ports Authority. The Authority handles marine services directly, while cargo handling services are provided by private terminal operators. Therefore, NPA port tariffs are uniform amongst the six ports managed by the Authority.

Major ports in Nigeria are the Lagos ports – Apapa and Tin Can, and the Eastern ports; Onne port in Rivers State, Warri Port in Delta State, Calabar port in Cross River state.

Details of the Lagos Apapa port is as outlined in the section above [3.2.3 Infrastructure and systems of selected West African ports]. This section focuses on the Nigerian Eastern ports to provide an overview on infrastructure and operations, as well as port tariffs. Assessment of the Nigerian Eastern ports became necessary during the course of the study to understand key drivers for selection of port use preference in Nigeria, as well as a situational analysis of the Nigeria port systems.

The Lagos Apapa port was however selected as the focus for this study, being the busiest port in Nigeria<sup>9</sup>, and noted to be the "economic door to the nation". The Lagos and Onne ports have also been noted to be most operating ports in Nigeria with others either less functional or inactive. The NPA are however leveraging on concessioning to reactivate less functional ports.

# 3.2.4.1 Nigerian Eastern Ports

The three Eastern ports assessed were, the Niger Delta ports - Warri, Onne Port and the Calabar port. The Delta and Onne Ports are located in the petroleum and natural gas producing Niger River Delta region of Nigeria.

The Delta Port in Delta State includes the ports of Warri, Burutu, Sapele and petroleum terminals at Escravos and Forcados.

The Onne port in Rivers State is located on Ogu Creek near the Bonny River, 19 km from Port Harcourt; the port area is located in three Local Government Areas of Rivers State. The Onne port consists of two major facilities, the Federal Ocean Terminal and the Federal Lighter Terminal. Onne port has been designated as an Oil and Gas Free Zone by the government of Nigeria. As an economic free zone and it serves as a hub port for oil and gas operations throughout West and Central Africa. The Onne port records high activity than other Eastern port and this has been attributed to its location in an Oil and Gas Free Trade zone, and with most of Nigeria's export being oil and gas products.

The Calabar port is located in the southeast corner of the country in Cross River State. The Port facilities are located 55 nautical miles up the Calabar River. **Key assessments conducted on the ports were; characteristics, tariffs and costs, port stakeholders, waterside port dues, road haulage costs and value-added services required. Findings are as outlined below and in tables 6 to 18.<sup>10</sup>** 

#### **Characteristics of Eastern Ports:**

The management type, port depth, types of cargoes handled, number of berths in the port, number of operators and range of vessels were investigated. The study noted that the three ports employ the 'landlord model' management concept, this follows a ports reform programme in 2003 aimed at increasing efficiency, the result was the concessioning of the terminals to private operators for a period of time. In the new arrangement NPA act as the landlord and provide

<sup>&</sup>lt;sup>8</sup> Mixed public-private approach where the port authority acts as regulatory body and port operations such as cargo handling is handled by private companies

<sup>&</sup>lt;sup>9</sup> <u>https://en.wikipedia.org/wiki/Apapa Port Complex</u>

<sup>&</sup>lt;sup>10</sup> See appendix C for questionnaire used for port assessment

common user facilities, technical oversight and other marine services whilst the private operators are involved in loading and offloading of cargoes.

Onne port, which is about 6.00 - 11.50 meters, is the deepest, followed by Calabar 6.2 metres and Warri 5.9 metres. It is instructive to state that none of the Eastern ports is deep enough to accommodate larger ocean-going vessels required to service a regional maritime hub. The resultant effect of the port depths in Calabar and Warri have contributed to low use or inactivity of the ports. [See table 18 below - Summary Assessment of structure and facilities in the Nigerian ports].

The two predominant types of cargo traffic in the Eastern ports are container and bulk with no Ro/Ro traffic, perhaps because the ports concerned service mostly oil exploration and exploitation activities. With regards to the number of berths, Onne port has the highest with 17, Warri follows with 15 and Calabar has 7. However, Warri has 35 registered private operators, while Onne and Calabar has 3 each. Across the 3 Eastern ports, the range of vessels calling are within 200 - 800 TEUs and 8,600 - 65,458 DWT. This size is relatively small when compared to some international ports such as the Asian ports which are served by 8,000 TEUs vessels.

Further investigation revealed that large vessels do not call at the Eastern ports due to limited cargo traffic, poor facilities, lack of maintenance dredging and inadequate commitment to measures that will ensure security, specifically the International Ship and Port Security Code (ISPS).

#### Port Tariffs and Costs for Imports and Export Cargoes:

Port tariffs and costs for imports and export cargoes are the stipulated fees to be charged by the port authority for the volume of cargo (Inward & outward) passing through the concessioned terminal. It is usually measured in TEUS, tonnes and units, payable by the operators. These rates are publicized and controlled by NPA as the applicable fees and charges for Nigerian ports. See table below on summary costs for exports and imports in Nigeria.

#### Table 6: Port Tariffs and Costs for Export/Imports

Cargo Type	Import Cost (USD)	Export Cost (USD)
1x20ft FCL General Cargoes Delivered to 100km point	\$80 FCL	\$ 47 FCL
1 Tone LCL Cargo Delivered to 100kmpoint	\$2.5	\$ 1.7 LCL
I general cargo (conventional) delivered to 100 km point	\$2.5 per ton	\$ 1.66 per ton

Tariffs are uniform across all ports assessed and are published. However, some indirect costs are neither published nor could be disclosed during the study.

For instance, answers to Questionnaires for Port Users analysed for this study, under 'Customs Clearing Fees' were 'Negotiable ' or 'No Standard'.

Another cost factor is 'un-receipted charges' which have been estimated to average US\$500 per consignment. It is further recognised that cargo congestion at the ports, and lack of efficient multi-modal cargo extraction options, regularly leads to additional cost element such as container rental, detention and demurrage charges.

Under the concessioning arrangement, the Terminal Operations are expected to collect the stevedoring component since they will handle the cargo. While NPA will collect Harbour Dues, Environmental Protection, Berth Rent and Ship Dues, the Stevedoring component applies at any non-concession area. The steps to be followed in raising provisional and final bills are:

- 1. Shipping Companies are expected to submit manifest within 48 hours, before the arrival of the vessel. Export manifests are to be submitted before the departure of the vessel.
- 2. Shipping Companies also submit hardcopies of Ship's Manifest to COPI which will in turn send a copy of the manifest to Commercial Services Department for the processing of provisional bills
- 3. Provisional bills are raised immediately on receipt of the manifest to enable shipping Companies to make payment before the arrival of vessel.
- 4. Presentation of NPA receipt as evidence of payment of Provisional Bills is required as condition for issuance of Vessel Berthing and Sailings Certificates.
- 5. Declared Tonnages/Ton is properly reconciled at the weekly Voyage Reconciliation Meetings (VRM).
- 6. All Ships' Provisional Bills is to be finalized within 7 days after completion of discharge and receipt of relevant source documents from Harbours Department.

#### **Stakeholders interviewed:**

The Port system consists of stakeholders such as: Shipping Companies, Terminal Operators, Freight Forwarders, Shippers/Traders and government regulatory agencies, e.g., Nigerian Maritime Administration and Safety Agency (NIMASA), Nigerian Shippers Council (NSC), Council for the Regulation of Freight Forwarding in Nigeria (CRFFN). These form the mix of stakeholders interviewed using the structured questionnaire and findings are presented in this section, as shown in Table 7 below. About 33% of the responses came from the shipping companies, 27% from shippers/traders, 17% from the freight forwarders and about 23% from NIMASA, NSC and CRFFN which form the safety, economic and freight forwarding regulators in the eastern ports.

#### Table 7: Stakeholders interviewed in the ports

Stakes in the Port Industry	Frequency	Percentage of respondents
Shipping Companies/lines	10	33.3
Freight Forwarders	5	16.7
Shippers/Traders	8	26.7
Others	7	23.3
Total	30	100.0

#### Waterside Port Dues:

The waterside port dues which comprises of the wharfage, pilotage, bunkers, towage services, mooring fees and stevedoring fees is fixed by the NPA and published for the compliance of the terminal operators. This was investigated during the study, the charges as presently implemented are contained in Tables 8 to 10 below. The wharfage charge for the different types of cargo is N13.00 per ton.

#### Table 8: Wharfage Charge

S/N	Types of Cargoes	Rate
1	Wharfage: Liquid Cargo	N13.00 per ton
2	Dry bulk	N13.00 per ton

The pilotage dues unit of measurement is Summer Dead Weight which is implemented in the Eastern ports.

Table 9: Pilotage Charge

S/N	Range of Vessels	Rate
1	0-100,000	USD6,800
2	100,000-200,000	USD10,200
3	200,000 and above	USD13,600

However, for Calabar QIT/Eket terminal offshore, it is about USD0.62-1.00, while in the Port Harcourt - aber base - Bonny - Okrika - Abonema - Soku etc is between USD0.32 - 0.82.

The towage fees are categorized on the basis of service description and measured per ton, in the Eastern ports of Nigeria. Four of such services were noted with different rates as indicated in Table 10 below. The rate ranges from USD400.00 - USD600.00.

#### Table 10: Towage Fee

S/N	Service Description	Rate
1	Attending to other moves within the ports	USD600.00
2	Assisting anchored ship to turn around	USD600.00
3	For hourly delay of tug by ship	USD400.00
4	Delay	USD400.00

As presented in Table 11 these include: bunkering, stevedoring and mooring charges: The bunkering charges is sectioned into two: Tropical West Africa N13.00 per tonne and Foreign USD2.1 per ton. Annual license fee is N1250/M3, and winning fee is N120/M3, ship dues for uncharted channels is USD1.28xGRT+81176. Tropical West Africa= 0.62xGRT+1176, Coastal= 0.44xGRT+1176 and port pier is N22per ton (import)s and N14 per ton (export).

#### Table 11: Other waterside charges

S/N	Other charges	Rate
1	Bunkering Charges (Tropical West Africa and Foreign)	N13.00 and USD2.1 per ton respectively
2	Annual license fee	N1250/M3
3	Winning fee	N120/ M3
4	Ship dues for uncharted channels	USD1.28xGRT+81176. tropical west Africa= 0.62xGRT+1176, Coastal= 0.44xGRT+1176

5	Port pier	N22per ton (import)s and N14 per ton (export).
6	Stevedoring charges: Offshore discharge, midstream, & offshore stevedoring charges	USD19.80, USD22.20 & N760.00 per ton respectively
7	Mooring charges	USD0.633 comprising of light dues USD0.34, refuse collection USD0.03 bilge collection USD0.065 and mooring USD0.198.

The stevedoring charges are classified into three: Offshore discharge USD19.80 per ton, midstream USD22.20 per ton and offshore stevedoring charges N760.00 per ton.

The mooring charges are determined on the basis of gross registered tonnage, as currently applicable in the Eastern ports it is USD0.633 comprising of light dues USD0.34, refuse collection USD0.03 bilge collection USD0.065 and mooring USD0.198.

Other regulatory intervention and costs include:

- I. Annual light dues Tropical West Africa (TWA) USD0.95GRT and Coastal USD USD0.85GRT.00-USD1084 GRT depending on the types of vessels.
- II. Port pier (liquid, dry bulk and general Cargo) import N22 per ton and export N14 per ton
- III. Annual Conservancy USD716
- IV. VAT is 5% of import.
- V. The customs clearance fee in the ports ranges from 25% 70% of the value of the goods depending on the goods types and age.

The above is further illustrated in table 12 below.

Table 12: Other regulatory interventions and charges

S/N	Regulatory interventions	Rate
1	Annual light dues TWA and coastal	USD0.95GRT and USD USD0.85GRT.00-USD1084 GRT depending on the types of vessels
2	Port pier (liquid, dry bulk and general cargo)	N22 per ton for import and N14 per ton for export
3	Annual Conservancy	USD716
4	VAT	5% of import.
5	Customs clearing fee	25-70% depending on goods types and age.

#### Road Haulage Costs per trucks:

The road haulage costs per truck from the Eastern ports to the hinterland has been greatly influenced by the port congestion and the poor condition of the roads to the hinterland, as presented in table 13. The estimated cost of hauling a Full Container Load over a distance of 20km, 100km, 500km and 800km above from any of the eastern ports is about N250, 000, N400, 000, N600, 000, and N800,000 respectively.

#### **Table 13: Port-Hinterland Haulage Costs**

S/N	Haulage Distance from the Port	Rate
1	Over 20km	N250, 000.00
2	Over 100km	N400, 000.00
3	Over 500km	N600, 000.00
4	Over 800km	N800,000.00

## Value Added Services Required in the Port for Cost Reduction and Efficiency:

Based on the aggregation of the opinion expressed by the respondents, the consensus is that the Eastern ports are not competitive as cargo traffic volumes are low and ship turn-around / dwell time record is poor. This is because the ports are faced with a number of challenges. The study investigated some value-added services the stakeholders would like to see in the port as a means of cost reduction and increased efficiency. Table 14 below shows the common challenges, on which improvement measures should be focused:

# Table 14: Value Added Services in Port for Cost Reduction and Efficiency

Value Added Services	Frequency	% of respondents
Provision of Pilot Cutter	5	16.7
Stable/Steady Electricity	3	10
Reduction/Refund of charges not rendered	5	16.7
Good port access road	6	20
Improving safety on high sea	4	13.3
Regular dredging of waterways	5	16.7
Elimination of piracy	2	6.7
Total	30	100

Majority of the stakeholders advocated for the following value-added services as follows; 16.7% for provision of Pilot cutter, 16.7% for reduction of port tariff and charges as well as refund of charges imposed on them for services not rendered by NPA, and 16.7% for regular drainage of waterways. Also, 20% of the stakeholders feel the access roads leading to the port need to be repaired as a means of enhancing easy access. While 13.3% of the respondents are of the opinion that safety on the high sea needs improvement, 6.7% advocate for the elimination of piracy and 10% for the stable/steady electricity, (through the provision of CCTV for adequate security, effective radio communication and adequate security to Mann the ports environment).

The study sought the opinion of the stakeholders as to the regulatory / government agencies interventions in the ports; the result is presented in table 15. As observed 20% of the stakeholders wanted the presence of customs, 20% wanted maritime authorities and another 20% wanted food and drugs agencies represented in the port. It is to be mentioned that 10% of the stakeholders required the police in the port thereby making the police the least required government

agency. One inference that could be drawn here is that the presence of multiple agencies, as it is currently experienced, will negate the principles of single window port community system and by implication lengthens the clearing procedure.

Agency	Frequency	% of respondents
Custom	6	20
Food & Drugs	6	20
Quarantine Services	5	16.7
The Police	3	10
Standards	4	13.3
Maritime Authority	6	20
Total	30	100.0

#### Table 15: Regulatory/ Public Agencies Interventions in Ports

Due to the significant commercial activity around the port there is the possibility of congestion. The Eastern ports are embedded in cities (Warri, Onne and Calabar), resulting in port and urban congestion. Port access from the land transport corridor is inadequate. Congestion leads to loss of valuable time and this has the capacity to reduce port efficiency. The result as shown in table 16 indicated that 90% of congestion in the Eastern ports occur landside. This is connected to the poor access roads to the port and the dominance of road transport as the means of evacuating cargoes from the port. Since the Shipping lines will face congestion costs, they pass these costs to the shippers and, consequently, the final consumers bear the cost of the congestion.

#### Table 16: Level of Port Congestion

Level	Frequency	Percentage of respondents
Sea side	3	10.0
Land side	27	90.0
Total	30	100.0

The ship turnaround and cargo dwell time at the ports are measures of port efficiency and for shipping lines this has become an increasingly important factor in deciding which port to call, an extra day at a port will cost more than USD35, 000 to a shipping line in relation to a 2,200 TEU Vessel. Global best practice requires that this should not be more than 72 hours. The situation in the Eastern ports was investigated. The result shows that ship turnaround time is about 8 days while cargo dwell time is about five days, neither of which is good enough to attract shipping companies, importers, transit operators nor exporters. Without improved port efficiency and increased exports, several coastal

countries in West and Central African could become "de facto" landlocked, having to bear approximately the same cost factors as a landlocked country.

#### **Total Cost of Using the Eastern Ports:**

Generally, the response to this segment is very poor for reasons of official secrecy; the interviewed persons were not well disposed to releasing information beyond the official rate published by NPA, which include: stevedoring fee USD7.41 and USD7.66 for import per ton in Intels and AMS terminal respectively and USD3.77. The respondents unanimously affirmed that there are costs which comprise of other agencies costs like Customs, quarantine among others and rates can vary from time to time. Whilst these rates are published in the respective agencies websites, the common determinants are: the types of cargoes and the terminal used for the import and export.

# **3.2.4.2** Summary estimated charges and operations at the Ports in Nigeria: Lagos and Eastern Port

Using structured questionnaires, information on costs and charges incurred by port users at the different ports assessed was derived. Responses from port users were analysed on associated costs and charges. Feedback presented different estimated rates as noted by the port users as well as where costs may need to be negotiated like for customs and agency fees. Data for costs and charges from port users were obtained at the Lagos, Onne and Warri port except for Calabar port where port user information of data was not obtained at the time of study. This could be attributed to inactivity at the port; hence port users could not be reached.

Respondents provided information to the best of their knowledge and based on their experiences. Hence the varying responses and notably unavailability of responses in some section.

Responses provided gave an insight on some cost implications associated with using the Nigerian ports.

Table 17: Summar	of charges at Nigeria	n ports, US\$. <sup>11</sup>
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Cost assessments at the Nigeria ports									
PORTS	Lagos (R1)	Lagos (R2)	Warri port	Onne port					
Freight Rates to/from selected ports (USD) 20ft to 40ft									
USA	4000		2,250 - 3,600	3,250 - 3,600					
EUROPE	4000		2,250 - 3,600	3,250 - 3,600					
ASIA	800		3,240 - 5,400	3,240 - 5,400					
	Agency Fees								
		Negotiable							
	Watersid	e Port Dues (USD)							
Wharfage									
Pilotage			2000 - 25000						
Bunkers									
Towage Services			925.6						
Mooring fees			250						
Stevedoring									
	Lan	d side Costs							
Terminal Handling	5	150							
Lift on/ Lift off									
	Custon	n clearance fees							
	Negotiable	Negotiable							
	Detention/c	lemurrage/quay re	nt						
	Other regulator	y interventions and	costs						
NAFDAC		80							
SON		20							
NDA		210							
	Whai	rf landing fees							
	Tran	sit fees if any							
	Road Haulage cos	t per truck over a d	istance						
20km	350	2100							
100km	1700	2800							
500km	3500								
800km and above	4200	4200							

Other analysis on port infrastructure, operations and throughput as collated using the questionnaires are outlined in the table below. With varying port depths and berths, Lagos is the only port handling cargo operations for Containers, Bulk and RO/RO (Roll on/ Roll off). Onne port recorded highest for Bulk (Metric Tons) dry and Liquid over the years for annual throughput. Lagos recorded the least ship turn-around time, estimated at 4 days but longer average cargo dwell time of about 16 days.

<sup>&</sup>lt;sup>11</sup> (R1- respondent 1, R2 – respondent 2). - Port users interviewed at the Lagos ports

For most of the cases with reference to Annual Throughput through the years, Lagos and Onne ports can be seen to be most competitive and active. This could evidently be as a result of the economic hub and functionality of the ports in Lagos and the Free Trade Zone in Onne ports.

	Port Infrastr	ucture and Opera	tions	
PORTS	Lagos (Tin Can)	Warri	Onne	Calabar
Port Management	Landlord	Landlord	Landlord	Landlord
Port Depth	11.5	5.9	6 to 11	6.2
	Type of Cargo	es handled/Operation	ns (%)	
Containers	*	*	*	1
Bulk	*	*	*	99
RO/RO	*	NA	NA	0
# of Berths	12	15	17	7
# of private operators	5	35	3	3
	Range of S	Size of vessels that ca	1	
TEUS	68 to 31600	750 to 4000	200 to 800	1000 to 2000
DWT	185 to 250	8600 to 20000	11402 to 65458	1000 to 2000
	Port Annu	ual Throughput (2014)		
Bulk (Metric Tons) Dry &				
Liquid	9,249,802	4,941,371	23,982,065	2,361,477
Containers (TEU)	891,638	2585	245996	120 TEU
RO/RO (Units)	237,928	NA	NA	NA
	Port Annu	ual Throughput (2015)		Γ
Bulk (Metric Tons) Dry &				
Liquid	9,140,393	3,879,835	23,163,294	2,127,378
Containers (TEU)	753,015	636	220889	371 TEU
RO/RO (Units)	124,841	NA	NA	NA
	Port Annu	ual Throughput (2016)		
Bulk (Metric Tons) Dry &				
Liquid	9,696,658		21,085,056	2,330,085
Containers (TEU)	639,923		241699	367TEU
RO/RO (Units)	104,574		NA	NA
	Port Annu	ual Throughput (2017)		
Bulk (Metric Tons) Dry &	0 74 4 500		24.050.004	0.407.000
	8,714,580	3,418,178	24,059,601	2,187,689
Containers (TEU)	//4,8/8	1/5	280638	
RO/RO (Units)	143,920	NA	NA • Dort (%)	NA
Trucele	Modal Split of Carg	so Evacuation from th	e Port (%)	100
	80		NA	100
Kall	NA 20	NA *		
Waterways (Barges)	20		NA	NA
Single Windows (Port	Depid	yeu reciniologies		
Community System	NA			
ISO Certification/Level	1			
Automated Cargo	Concessionairs			
Operations	Handle Cargo	Available	Available	Available
		Customs, Food &	Customs, Food &	Customs, Food &
	Customs. Food &	Drugs. Quarantine	Drugs. Quarantine	Drugs, Quarantine
	Drugs, Quarantine	services, The Police,	services, The Police,	services, The Police,
	services, The Police,	SON, Maritime	SON, Maritime	SON, Maritime
	SON, Maritime	Authority,	Authority,	Authority,
Regulatory/Public Agencies	Authority, Immigration	Immigration and Port	Immigration and	Immigration and
Interventions in the ports	and Port Health	Health	Port Health	Port Health
Level of port congestions	None	None	None	None
Average ship turn around				
time	4 days	2-6 days	7 days	7 days
Average cargo dwell time in				
port	16 days	7 days	7 days	7 days
* available in port no % figur	re provided			

#### Table 18: Summary Assessment of structure and facilities in the Nigerian ports: Lagos and Eastern ports

# 3.2.5 Cost Analysis for West African ports

The cost analysis for West Africa outlines assessments of costs associated with Tariffs and other associated costs for documentary and border compliance.

Analysis of port tariffs takes into consideration costs for General Cargo, Container, Liquid Bulk, Dry Bulk and Vehicle RoRo vessels, and multipliers for Gross Registered Tonnage (GRT), Length Overall (LOA) and Cubic Metres (CBM).

Other port charges as documented by the World Bank '*Doing Business*' report for the Trading Across Border indicators showed costs associated with documentation and other border compliance procedures that might influence port competitiveness. The indicators are also considered as factors that influence ease of doing business in those countries.

# Comparative Analysis of Port Tariffs in Apapa (Nigeria), Tema (Ghana), Lomé (Togo).

Appendix A, Tables I to V, outlines the findings from the detailed tariff/cost analysis of the different scenarios: General Cargo vessel, Container, Bulk Liquid, Dry Bulk and Roro vessels. A summary of such findings presented in Tables 19 and 20 below for Lagos-Nigeria, Tema-Ghana and Lomé-Togo ports where field assessments were conducted during the course of the study.

For the purpose of comparing Lagos ports to other ports in the region, Apapa Port was chosen as the representative of Lagos Ports given tariffs are uniformly set by the Ports Authority and Apapa has been noted to be the busiest port<sup>12</sup>.

The Port tariffs for five vessels, each carrying different cargo types, to each of the three regional Ports were compared. Table 20 shows the key multiplier components that make the overall tariff and contribute to the overall costs:

- 1. Gross Registered Tonnage (GRT) of the vessel is the multiplier of Ship Dues (GRT x Tariff = Ship Dues)
- 2. Length Overall (LOA) determines Towage Dues
- 3. Cubic Metres (CBM) of Cargo space is sometimes interchangeable with weight (Tonnage) to determine cargo dues based on the standard weight / measure ratio.

S/N	CARGO TYPE	VESSEL	GRT	СВМ	LOA	TONNAGE
1	GENERAL CARGO	MV TIAN OI	26770	89517	196M	14,100MT
2	CONTAINER	MV MOL DOMINANCE	39906	131959	261M	172 X 20', 139 X40'
3	LIQUID BULK	MT SEA	30241	100783	184M	20,487MT
4	DRY BULK	MV VOYAGER	32987	109707	190M	10,232MT
5	VEHICLE RORO	MV SILVER SOUL	42447	140132	184M	1793MT

#### Table 19: Ship information selected for analysis

<sup>&</sup>lt;sup>12</sup> <u>https://en.wikipedia.org/wiki/Apapa Port Complex</u>

Table 20 shows the Voyage Costs and reveals that:

- Voyage to Nigeria costs the least for General Cargo Vessels.
- Container Vessels pay less in Ghana.
- Lomé is significantly cheaper for Liquid and Dry Bulk, as well as Roll-On-Roll-Off (RORO) Vessels.

S/N	CARGO TYPE	VESSEL	NIGERIA	GHANA	TOGO
1	GENERAL CARGO	MV TIAN OI	199,048. 63	217,879. 07	120,359. 58
2	CONTAINER	MV MOL DOMINANCE	150,071. 68	117,906.88	128,406. 94
3	LIQUID BULK	MT SEA FRONTIER	183,886. 24	128,273.03	65,543.24
4	DRY BULK	MV VOYAGER	129,503. 35	72,687. 01	34,748.60
5	VEHICLE	MV SILVER SOUL	184,413.38	208,092.63	91,256.46

#### Table 20: Summary of port tariff simulation (USD)

#### Figure 3: Summary of port tariffs in Nigeria, Ghana and Togo



The results of the cost analysis on port tariffs for the ports of Lagos, Tema and Lomé are mixed as some ports are more competitive for some vessel type compared to others.

• Lomé has relatively lower Tariffs but charges more on containers than Tema. Port of Lomé is clearly more competitive Tariff wise in Liquid and Dry Bulk Cargoes, and significantly so in Roll -On Roll - Off Terminal.

It is noted that protection of Deep Berths from Siltation results in substantial cost savings from maintenance dredging, a major cost head in Apapa, coupled with the operational efficiency of its specialised Berths.

• Tariffs for Lagos are highest for Dry bulk, Liquid bulk and container compared to Lomé and Tema ports. However, Tema charges higher for General cargo and vehicles. Therefore, based on costs of tariffs, Lagos Apapa port is least competitive for dry bulk, liquid bulk and container vessels.

Unlike the other surveyed ports along the West African Coast, a major port cost in Nigeria is the capital and maintenance dredging of the Channels to ease the access to the ports that are located at a greater distance inland. For instance, in year 2016, NPA budgeted N45bn for dredging activities. This represent 54% of the total capital expenditure of the Port authority. This cost does not apply to the ports of Lomé and Tema which are located right on the sea.

## Import and Export costs Associated with documentation and border compliance procedures.

The Trading Across Border (TAB) indicator assessed in the World Bank *Ease of Doing Business* report 2019 outlined costs and time associated with documentary and border compliance procedures. Below is a summary analysis on time and costs for imports and exports for the assessed West African countries.

Country/Economy	Total Costs: Border and Documentary Compliance - Exports (USD)	TotalCosts:BorderandDocumentaryComplianceImports (USD)	Total Time: Border and Documentary Compliance - Exports (Hours)	TotalCosts:BorderandDocumentaryComplianceImports (Hours)	TAB rank
Benin	434	709	126	141	107
Тодо	188	864	78	348	129
Senegal	643	1247	87	125	139
Ghana	645	1027	197	116	156
Cote d' Ivoire	559	723	323	214	162
Nigeria	1035.7	1641.1	254.4	407.7	182

#### Table 21: Summary analysis of time and costs for import and export procedures on the WA ports

Table 21 shows Benin with its Cotonou Port having the most competitive port costs particularly for imports. This buttresses the earlier analysis and competitive factor also attracting routing of import good through the port whose final destinations are other neighbouring countries such as Nigeria.

The Nigerian ports present least competitive costs and time for port processes as seen in table 21 and figure 4 below. This could be attributed to infrastructural setbacks as highlighted in earlier sections and analysis.

#### Figure 4: Summary cost and time analysis for documentary and border compliance on the assessed WA ports



# Freight rates and Terminal Handling Charges at selected West African ports

It is essential to consider port costs and competitiveness in the context of end to end supply chains. Consequently, the consultants explored major carrier's freight rates for 20ft and 40ft FCLs into the region. The comparison covers quay to quay freight rates and arrival Terminal Handling Charges. From this analysis, it is apparent that rates are significantly higher when the Port of Discharge is Lagos. This may be a significant deterrent in patronising Lagos Ports and when considering investment in Nigeria as opposed to other nations in the sub-region. Appendix B is an example of a carrier's notice concerning congestion, one of the reasons for high freight rates. Freight rates are an important barometer of port efficiency and competitiveness as carriers will always ensure that the level of cost and fees, they incur are reflected in the levels of remuneration they require from the cargo owners / contracting party.

Summary tables below on freight rates and THC at the outlined ports show Lagos recorded highest freight rates and THC for both 20ft and 40ft, with Abidjan recording least freight rates and Cotonou, least THC on imports. It has also been noted that Cotonou presents a highly competitive port of preference to Lagos. High freight rates have a clear impact on competitiveness and are detrimental to inward investment and to overall export volumes and thus growth.

		POL		
	20' ft	Jebel Ali	Rotterdam	Shanghai
РО	Lagos	\$2,415.00	\$2,052.00	\$3,502.00
D	Dakar	\$1,813.00	\$1,036.00	\$2,976.00
Lome		\$1,622.00	\$1,214.00	\$2,656.00
	Tema	\$1,710.00	\$1,154.00	\$2,745.00
	Cotonou	\$1,568.00	\$1,057.00	\$2,641.00
	Abidjan	\$1,464.00	\$895.00	\$2 <i>,</i> 599.00

Figure 5: Freight Rates and Terminal Handling Charges to selected West African ports (USD)										
		POL			]			POL		
	20' ft	Jebel Ali	Rotterdam	Shanghai			40' ft	Jebel Ali	Rotterdam	Shanghai
РО	Lagos	\$2,415.00	\$2,052.00	\$3,502.00		РО	Lagos	\$3,682.00	\$2,635.00	\$5,403.00
	Dakar	\$1,813.00	\$1,036.00	\$2,976.00		D	Dakar	\$3,527.00	\$1,579.00	\$5,198.00
	Lome	\$1,622.00	\$1,214.00	\$2,656.00			Lome	\$2,822.00	\$1,988.00	\$4,638.00
	Tema	\$1,710.00	\$1,154.00	\$2,745.00			Tema	\$3,017.00	\$1,926.00	\$4,685.00
	Cotonou	\$1,568.00	\$1,057.00	\$2,641.00			Cotonou	\$2,730.00	\$1,696.00	\$4,498.00
	Abidjan	\$1,464.00	\$895.00	\$2,599.00			Abidjan	\$2,628.00	\$1,389.00	\$4,376.00

20' ft	THC Import	THC Import	Average
Lagos	\$218.50	\$218.50	\$218.50
Dakar	\$160.00	\$155.00	\$157.50
Lome	\$115.00	\$105.00	\$110.00
Tema	\$155.00	\$140.00	\$147.50
Cotonou	\$109.00	\$100.00	\$104.50
Abidjan	\$135.00	\$155.00	\$145.00

40'ft         THC Import         THC Import         Average           Lagos         \$327.75         \$327.75         \$327.75           Dakar         \$195.00         \$200.00         \$197.50           Lome         \$172.50         \$155.00         \$163.75           Fema         \$195.00         \$100         \$100           \$100         \$100         \$100         \$100           \$100         \$100         \$100         \$100           \$100         \$100         \$100         \$100           \$100         \$100         \$100         \$100				
Import         Import         Import         Import           Lagos         \$327.75         \$327.75         \$327.75           Dakar         \$195.00         \$200.00         \$197.50           Lome         \$172.50         \$155.00         \$163.75           Tema         \$255.00         \$260.00         \$257.50           \$255.00         \$145.00         \$150.00           Abidjan         \$175.00         \$200.00	40' ft	ТНС	THC	Average
Lagos       \$327.75       \$327.75       \$327.75         Dakar       \$195.00       \$200.00       \$197.50         Lome       \$172.50       \$155.00       \$163.75         Tema       \$255.00       \$260.00       \$257.50         \$255.00       \$260.00       \$257.50         Cotonou       \$155.00       \$145.00         Abidjan       \$175.00       \$200.00	10 10	Import	Import	/Weinge
Dakar         \$195.00         \$200.00         \$197.50           Lome         \$172.50         \$155.00         \$163.75           Tema	Lagos	\$327.75	\$327.75	\$327.75
Lome         \$172.50         \$155.00         \$163.75           Tema	Dakar	\$195.00	\$200.00	\$197.50
Tema         \$255.00         \$260.00         \$257.50           Cotonou         \$155.00         \$145.00         \$150.00           Abidjan         \$175.00         \$200.00         \$187.50	Lome	\$172.50	\$155.00	\$163.75
Cotonou\$155.00\$145.00\$150.00Abidjan\$175.00\$200.00\$187.50	Tema	\$255.00	\$260.00	\$257.50
Abidjan \$175.00 \$200.00 \$187.50	Cotonou	\$155.00	\$145.00	\$150.00
	Abidjan	\$175.00	\$200.00	\$187.50

Ghana THCs were introduced by shipping lines for all import in Summer 2016

# 3.2.6 Summary comparative analysis of Country Ports assessed

#### Post landing costs parameters for Nigerian and other selected ports for 20Ft FCL

Port post landing cost is one of the major considerations in measuring efficiency and choice decisions by the port users. This was computed for the current study and presented in table below.

Tables 22 to 24 below summarize the post landing costs in 10 ports in Nigeria, West Africa, North and South Africa, Asia and Europe. The parameters for comparing them are: terminal handling costs, agency costs, road haulage from the port to about 100Km radius, customs entry/clearance dues, informal fees, average clearance and release time, additional costs (indirect/transfer/stuffing and un-stuffing) and means of cargo evacuation from the port for 20ft FCL and 1tonne bulk cargo respectively. The data was acquired through desk review of best practice ports in Europe, Asia and Africa published and documented records of the ports, this was supported by questionnaire survey of Nigerian (Lagos, Warri, Onne and Port Harcourt) ports respectively.

# Table 22: Comparative Analysis of Post Landing Costs Parameters for 20FT FCL (USD) <sup>13</sup>

			COST PARAMETERS							
S/N	Ports on ToR	Terminal Handling	Agency Costs	Road Haulage to 100KM from ports	Customs Entry and Clearance	Informal Fees (not receipted)	Average Clearance Release Time	Additional Costs (indirect /transfer /stuffing and un-stuffing)	Means of Evacuation from the Ports	
1	Warri (NG)	\$80 & \$47 Imp & Exp	0.1 - 0.5%	\$1,111.1	25% - 70%	\$500	5 Days		Road	
2	Onne (NG)	\$80 & \$47 Imp & Exp	0.1 - 0.5%	\$1,111.1	25% - 70%	\$500	5 Days		Road	
3	Calabar (NG)	\$80 & \$47 Imp & Exp	0.1 - 0.5%	\$1,111.1	25% - 70%	\$500	5 Days		Road	
4	Lagos (NG)	\$80 & \$47 Imp & Exp	0.1 - 0.5%		25% - 70%	\$500	16 days		Rail, Road and Water	
5	Tema	\$36.38		\$1,666.6				\$151.99 and \$107.05 for Imp and Exp	Road and Rail	

<sup>&</sup>lt;sup>13</sup> \*Gaps are where no reliable data could be secured

6	Lomé	\$105				3 Days	60% Water and 40% Road
7	Algeciras (Spain)	\$293.69		\$67.78	-	1-2days	Rail and Road
8	Durban S/A	\$128.67				1 day	Rail
9	Singapore	\$206.95				1 day	Rail
10	Tangier (Morocco)	\$564.8		\$9441.78		1 day	Rail and Road

\*NB: The Values in this table was extracted from a review of the Eastern, Lagos and West African Ports Studies, internet sources, as well as published rates as it relates to the Nigerian Ports.

# Post landing costs parameters for Nigerian and other selected ports for 1 tonne bulk cargo

## Table 23: Comparative Analysis of Post Landing Costs Parameters for 1 Tonne Bulk Cargo.

			RS (USD)	s (USD)					
S/N	Ports on ToR	Terminal Handling	Agency Costs	Road Haulage to 100KM from ports	Customs Entry and Clearance	Informal Fees (not receipted)	Average Clearance Release Time	Additional Costs (indirect /transfer /stuffing and un-stuffing)	Means of Evacuation from the Ports
1	Warri (NG)	\$2.5 & \$1.7 Imp & Exp.	0.1 - 0.5%	\$1,111.1	25% - 70%	\$500	5 Days		Road
2	Onne (NG)	\$2.5 & \$1.7 Imp & Exp.	0.1 - 0.5%	\$1,111.1	25% - 70%	\$500	5 Days		Road
3	Calabar (NG)	\$2.5 & \$1.7 Imp & Exp.	0.1 - 0.5%	\$1,111.1	25% - 70%	\$500	5 Days		Road

4	Lagos (NG)	\$2.5 & \$1.7 Imp & Exp.	0.1 - 0.5%	<del>\$</del> 1,666.6	25% - 70%	\$500	16days		Rail, Road and Water
5	Tema	\$1.13 - 1.34						\$3.54 & \$2.53 Imp & Exp	Road and Rail
6	Lomé	\$1.50					3 Days		60% Water & 40% Road
7	Algeciras (Spain)	\$296.69			\$67.78	-	1 - 2 days		Rail and Road
8	Durban S/A	\$128.67					1 day		Rail
9	Singapore	\$310.12					1 day		Rail
10	Tangier (Morocco)	\$564.8			\$9441.78		1 day		Rail and Road

\*NB: The Values in this table was extracted from a review of the Eastern, Lagos and West African Ports Studies, internet sources, as well as published extant rates as it relates to the Nigerian Ports.

## FOREIGN CURRENCIES EXCHANGE RATE

Table 24: Currency conversion table based on 17th April, 2019

S/N	Currencies	Exchange rate	Value	
1	Nigerian Naira to Dollar	N360	N400,000= USD1,111.1	
2	Nigerian Naira to Dollar	N360	N600,000= USD1,666.6	
3	Euro to US Dollar	EUR 0.885	260 Euro= USD67.78	

4	Euro to US Dollar	EUR 0.885	100 Euro= USD112.92
5	Euro to US Dollar	EUR 0.885	500 Euro= USD564.6
6	SA ZAR to US Dollar	ZAR 0.071	1801 ZAR=USD128.67
7	SA ZAR to US Dollar	ZAR 0.071	2567ZAR=USD183.41
8	SGD to US Dollar	SGD 1.3530	280 SGD= USD206.95
9	SGD to US Dollar	SGD 1.3530	420SGD= USD310.43
10	Saudi R to US Dollar	0.2566R	35414R=USD9441.78

Observations from the record is that not all the information on the parameters (terminal handling charges, agency costs, road haulage from the port to about 100Km radius, customs entry/clearance dues, informal fees, average clearance and release time, additional costs (indirect/transfer/stuffing and un-stuffing) and means of cargo evacuation from all the port were readily available in clear or reliable terms. Some elements are either said to be negotiable, within percentage ranges or can only be supplied based on request, because it could vary from time to time, terminal to terminal or one shipping company to another, in such case it is left blank to avoid misinformation. Therefore, only reliable and verifiable figures obtained were presented in the table. Secondly, the currency denomination for the charges/dues across the ports also vary from one country to another, hence, this will make immediate comparison possible after conversion is made at exchange rates which may also vary from time to time.

The terminal handling charges of \$80 & \$47 for import and export of 20ft FCL<sup>14</sup> respectively is applicable in all Nigerian ports (Lagos, Warri, Onne and Calabar). For bulk cargo \$2.5 & \$1.7 per tonne for import and export general cargoes. At the West African ports level terminal handling charges are better at Tema port (\$36.38 for 20FCL container and \$1.13 per 1 tonne bulk cargo), followed by the Lomé ports (\$105FCL and \$1.50 per 1 tonne bulk cargo).

Agency fees in Nigerian ports are negotiable and could range from 0.1 - 0.5% depending on the CIF<sup>15</sup> and CIP<sup>16</sup> value of the goods and the negotiating skills of both parties. For most other ports in Africa, Europe and Asia reviewed, this could not be accessed as it is said to be only available on request. Road haulage fee to and from 100km radius of the ports is cheaper in the Eastern ports at \$1,111.1 compared to about \$1,666.6 for same distance in the Lagos ports. The disparity could be associated to the forces of demand and supply and the heavy traffic gridlock around the port areas which is more serious in Lagos port. Because of the publication of all approved fees, the customs entry/clearance fee which is between 25-70% is uniform throughout Nigerian ports. In Algeciras port, it is \$67.78, while in Tangier port it is about \$9441.78. The values for other West African and Singapore ports could not be obtained.

There are a number of informal (un-receipted) fees in almost all Nigerian ports which is associated with unofficial charges in other to facilitate documents processing and it is estimated to be about \$500 per 20ft FCL and 1 tonne bulk cargoes. On the part of other ports, this cannot be ascertained as it is not reported. The average Release Time of cargoes in Nigeria ports is longer (about 5 - 16 days), whilst it is shorter in Tangier, Durban, and Algeciras which have one day release time, this short release time could be attributed to subscription into single window clearing system, adoption of integrated transport system and relocation of agencies outside the port arena. This makes the post landing cost in the ports more competitive than the Nigerian ports. Additional costs (indirect/transfer/stuffing and un-stuffing) are obtainable for Tema port which are, \$151.99 and \$107.05 for export and import of 1 20ft FCL and \$3.54 & \$2.53 for 1 tonne bulk cargo import and export. This information cannot be obtained for the other ports. Since port traffic are destined to the hinterland, intermodal connectivity is necessary for an efficient evacuation, all Nigerian ports use road-based truck haulage as against better options of inland water and rail options which Singapore, Durban and Algeciras ports explored. The concentration of port related agencies in the port has expectedly heightened the congestion along the port corridors in Nigeria, increase delays and the associated costs.

Port studies on the overall efficiency have shown that, amongst the ports assessed, Singapore, Algeciras and Durban ports are the most competitive because they have 1 day release time, 24 hours operation, investment in single window technology, intermodal coordination in the movement of cargo from the port to the hinterland and clearance procedures, relocation of port agencies outside the port arena, and compliance with ISPS code/

<sup>&</sup>lt;sup>14</sup> FCL – Full Container Load

<sup>&</sup>lt;sup>15</sup> CIF – Cost Insurance and Freight

<sup>&</sup>lt;sup>16</sup> CIP – Carriage and Insurance Paid

guidelines on safety and security. While, the terminal handling charges of Nigerian and West African ports seems to be low at the superficial level, the issues of additional charges, informal fees, delay in cargo release and gridlock around the port arena eroded the gains of low terminal handling charges.

At the African level, Durban Port ranked first, because of the lowest terminal handling charges, single window technology for cargo clearance and the use of rail transportation for port-hinterland cargo haulage.

At the sub-regional level of West Africa, Lomé port ranked best because it adopted about 60% rail transport system in port-hinterland cargo haulage, 24 hours port operations, no reported case of informal (un-receipted charges), low terminal handling charges and 3 days cargo clearance release time-lag.

Within Nigeria, although all approved charges are uniform, \$80 and \$47 per tonne for import and export for 20ft FCL and \$2.5 and \$1.7 per tonne for import and export for bulk cargo seems to be very low, port congestion and condition of the port access in Lagos, Onne and Warri make Calabar port better and more competitive than others where the grid-lock is higher. This is because most activities take place within the port and the lack of single window platform approach in cargo clearance.

# **3.2.7** Recommendations for improving competitiveness for Nigeria ports

Below is a summary of recommendations to improve and increase the competitiveness of Nigerian Ports. It should be noted that these are not necessarily in priority order.

# **RED – NPA ACTION**

**GREEN – OTHER GOVERNMENT DEPARTMENT OR AGENCY** 

# BLUE – NPA AND OTHER GOVERNMENT DEPARTMENT OR AGENCY

S/N	Title of Recommendation	Time Scale	Effects/Results	Impact
3.1	Improving Customs / regulatory regime by implementation of the WTO Trade Facilitation Agreement. NPA to actively participate in the Nigerian National Trade Facilitation Committee to influence prioritisation	Short-term / medium term / long term in relation to the Category B & C commitments made to the WTO	NCS and the other regulatory authorities will have to operate to the TFA standard.	NCS and the other regulatory bodies will co-operate at a high level and NCS will balance revenue collection with trade facilitation. This will reduce clearance times, reducing the cost of importing. IMPORTANT NOTE: Even if clearance times are reduced, release times may not be unless infrastructure improvements are also realized.
3.2	Infrastructure – Prioritize road and rail intermodal connectivity. Introduce a port vehicle appointment system	Roads - immediate Rail - 5-year programme	Advocate for a more coordinated management and maintenance of the port access roads, with active Port Authority involvement Operationalise rail connectivity to the port complex as a priority in conjunction with NRC. Reduce overall congestion by rail	Port access is the lowest common denominator in the Lagos Ports Complex. Expediting the evacuation of cargoes by road and rail will significantly reduce the cost of doing business and increase overall competitiveness

			links from terminals to Inland Clearance Depots.	
3.3	Logistics Competence (In conjunction with 3.2 above)	Immediate	-Establish, as a matter of policy priority, a Truck Management System. This should include implementation of the Axle- Load and Vehicle Dimensions Regulations enacted by the Economic Community of West African States (ECOWAS) in 2011	Reduction in congestion in the port environs thus expediting the evacuation of import cargoes and improving access for export cargoes. Will reduce cargo detention / demurrage / rental costs thus enhancing overall competitiveness.
			-Advocate for the restoration of Pipelines integrity nationwide to enable the evacuation of Liquid Bulk products from the Ports through the pipeline network	
			-As an element of the above introduce a vehicle appointment system for all import and export related haulage.	
			-Improve clearance and release times by increasing competency of freight forwarders by implementation and enforcement of a Freight Forwarders Competency Certification process (aligned to the EAC model)	
3.4	Intermodal Operations (In conjunction with 3.2 and 3.3 above)	5 years.	<ul> <li>-Target reduction of cargo evacuation by Road by 50 percent in 5 years.</li> <li>-Evacuation by water, which has commenced, should grow by 25 percent in the stipulated time frame.</li> </ul>	As above (3.3)
			-Advocate for the restoration of Pipelines integrity nationwide to enable evacuation of Liquid Bulk through the Pipeline Network.	

			-Advocate for Public - Private Partnership in port-linked rail operations,	
3.5	Internal Connectivity	Immediate	By adapting full integration of its internal systems, NPA will be well positioned for direct connectivity to the Nigeria National Single Window. This could negate the requirement for an interim Port Community System to some extent. The NNSW will streamline processes and procedures for imports, exports and transit cargoes, resulting in cost reduction and reduced corruption	Streamlined NPA processes will reduce cost and aid ultimate connectivity to the National Single Window platform. This will increase competitiveness.
3.6	Customer Service	Immediate	Inculcate customer friendly approach in port and ancillary operations through community and stakeholders' engagement. This will facilitate identification of issues faced by stakeholders and addressing such issues	The Lagos Ports Complex will be more attractive to customers as a facility of choice.
3.7	Human Capital Development. Implement increased meritocracy-based career paths for NPA personnel. Enhance programmes for Continual Professional Development.	Immediate	-staff training and knowledge development, while already recognised, should be deepened with the adoption best practices from bench marked ports. -Consider attendance at Port Performance and Efficiency Programmes in Durban,	Staff professionalism, qualification and knowledge will lead to enhanced efficiencies thus improving port competitiveness. Staff will be motivated and enjoy enhanced job satisfaction.
3.8	Tariffs and port charges. Although there are fixed import and export charges published for reference, findings from the study noted there are indirect costs or charges not published and irregular as mostly subject to negotiation. A clear indication of	Short term/medium term	Clear, accurate and accessible information on port charges and tariffs would be made available to port customers.	Increase transparency and reliability as well as improve user experience. Increase competitiveness and preference of use by surrounding countries

charges (all costs) is instrumental		Encourage	accountability		on
in improving user experience of		Government	revenues	from	port
the Nigerian ports. An in-depth		charges.			
cost analysis should also be					
conducted to ascertain other					
factors influencing high costs of					
tariffs and charges on Nigeria					
ports in comparison with other					
West African ports. Based on					
trade corridors not just the ports					
in isolation.					

# **3.3 CONCLUSION**

The common factors in most competitive ports are not just low terminal handling charge, but more importantly, the time for cargo release, absence of additional/informal/corrupt charges, intermodal coordination for porthinterland cargo haulage, single window technology deployment and the relocation of major activities away from the port arena to minimize grid-lock. Therefore, to make Nigerian ports more competitive, they should be modelled against best performing ports in the following areas:

## Infrastructure

Investments should be made in different aspects of port infrastructure: the case of Durban 'Big Ship strategy to ensure the Port can handle the next generation of Very Large Container Carriers. Connecting the ports and Inland Container Depot (ICD) with rail network, multi-Purpose Port which can handle all categories of Cargo, with a combination of automation and direct labour are crucial activities. Adequate truck parks around the port, similar to the strategy pursued by Lomé port to curtail illicit and roadside parking, the port access should be rehabilitated and expanded to reduce the current traffic gridlock. All of these should be executed with a combination of appropriate technology, this will help make Nigeria's ports the preferred destination for carriers and cargo owners.

# Information Technology (IT) systems and Single Window Platform

Nigerian Ports should consider establishing a Port Community System / Community Information System similar to Tangier's PORTNET in which all port users, public and private sectors, are interconnected and linked electronically. However, this should be an integrated element of the over-arching National Single Window (NSW) programme. This IT system should be deployed in planning, arrival, operation and departure of vessels. Such a system has helped substantially to reduce the cost of doing business in the case in Durban Port. If a port system were to be developed and implemented outside the NSW the result could be a 'Double Window' which would be detrimental to trade facilitation and thus competitiveness, this must be avoided

Furthermore, similarly to operations in Durban and Lomé Ports, in which all Agencies involved in port operations have their offices outside the port compound, NPA should insist on relocation of the multitude of agencies operating in the Nigerian ports. This will not only reduce congestion in the port but also reduce human interface which facilitates corrupt practices which adversely impact competitiveness.

# Intermodal Connectivity (Functional Rail)

All the terminals and ICDs should be linked and equipped with rail facilities. This should be modelled after Durban port where the port is connected to an extensive railway network and, regionally, similar to neighbouring Lomé port where the moribund rail system is being rehabilitated to meet the 21<sup>st</sup> century standard (Standard Gauge Railway) linking with the land-locked country of Niger, thus encouraging transit cargo. This will allow for quick and high capacity evacuation of cargo, reduce transit time, haulage costs and traffic gridlock around the port and in the hinterland. It will also enhance supply chain security and provide considerable environmental benefits. NPA should work closely with NRC to implement this as a priority. Use of inland waterways for cargo evacuation should also be considered and operationalised where appropriate and beneficial.

# **Operation of Call Planning Office.**

Recognising Tangier's port arrangement, a Calls Planning Office should be established to interface with the Harbour Master and the Port Community to process operational information. This will allow for streamlined handling of ship calls, including allocation of berthing facilities, together with billing processes. The deliverables of this will be reduced ship turnaround team, cargo release time and, thus, reduced overall cost of doing business.

# **Elimination of All Illegal Charges**

In view of the reported additional / non-receipted charges in the ports, these should be declared illegal, an enforcement team should be instituted, and heavy penalties should be applied on non-compliant stakeholders. This will improve the image of Nigeria's ports, reduce the cost of doing business and enhance competitiveness.

# **Port Community Stakeholders**

Port Services Community and stakeholders' engagement as practiced in the Tangier port should remain the priority of the terminal operators and managers. There should be a continuous improvement team as well as a Maritime Excellence Training Centre, similar to the Ghana's Regional Maritime University, to train strategic and managerial staff and to conduct research in all aspect of ICD, port operations and supply chain management. This will encourage career development, overall professionalism, efficiency and will mitigate the high cost of overseas training.

# **Holistic Supply Chain Planning**

There should be holistic supply chain awareness, as it is practice in the Algeciras, Singapore ports. Information technology platforms must configure operations to the principal economic entities served, such as raw materials importers and produce exporters. Planning activities should be geared towards supporting these large cargo volume sectors. NPA strategic planning should recognise the Nigerian ports as interim transit points within end to end supply chains. 21<sup>st</sup> century international trade practice increasingly requires door to door logistics covered by through Bills of Lading to final destination, whether a consignee premises or an Inland Clearance Depot. Sound, holistic, supply chain planning will ensure that the ports in Nigeria cease being pinch, or delay, points in the overall logistics chain.

# Figure 6: Principal barrier to competitiveness


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# **APPENDIX A:** Simulation analysis

# TABLE I

### Simulation of General Cargo:

NAME OF VESSEL: MV TIAN OI: GRT: 26770, CBM: 89517, LOA: 196M, TONNAGE: 14,100MT, CURRENCY EXCH @ 3/3/2017; €1 = \$1.07, FCFA 627.27 = \$I, FCFA 671.18 = €1

PORT/ ITEM	NIGERIAN PORTS AUTHORITY (\$)		GHANA PORT (\$)		LOME PORT AUTHORITY (€)	
	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
CARGO DUES/ HARBOUR DUES	14,100 x 2.5	35,250.00	14,100 x 4.00	56,400.00	14,100 x 4.0551	57,176.91
ENVIRONMENTAL PROTECTION LEVY	14,100 X .10	1,410.00	14,100 x 0.05	705.00	-	-
STEVEDORING	14,100 x 7.41 (T.O)	104,481.00	14,100 x 10.40	146,640.00	14,100 x 2500FCFA = €3.73	52,593.00
BERTHING DUES	250	250.00			89517 x 0.007	626.62
LIGHT DUES/ SHIP DUES	26770 x 1.28	34,265.60	26,770 x 0.084	2,248.68	-	-
PILOTAGE DUES	-	-	20,000 -30,000= 836.16 + 25%	1,045.20	89517 x 0.0055 + 23.5	515.84

BERTH RENT	196 x 10days x 2	3,800.00	1 <sup>s⊤</sup> 24 hrs Subsequent hrs. in multiple of 12hrs. 9 days (18X386.36	771.68 6,954.48	89517 x 0.0050 + 23.5	471.09
TOWAGE DUES	2,000/tug 2,000 x 4	8,000.00	900.12 + 25%	1,125.15	89517 x 0.0090 + 81	886.65
MOORING DUES			231.82 + 25% X 2	579.56	89517 x 0.0007 + 23.5	86.16
ISPS IMPLEMENTATION/ MOWCA LEVY	14,100 x .10	1,410.00	14,100 x .10	1,410.00	5% of total Navigational charges (2586.36)	129.32
CONTIGENT DEP.	2% harbour dues + EPL + berth rent	809.20	-	-	-	-
5% VAT	-	9,372.83	-	-	-	-
CONVERSION OF \$ TO €	-	-	-	-	-	112,485.59 x 1.07
TOTAL	-	199,048.63		217,879.07		120,359.58

## TABLE II

### SIMULATION OF CONTAINER VESSEL:

**NAME OF VESSEL**: MV MOL DOMINANCE GRT: 39906 CBM: 131959 LOA: 261M TONNAGE: 172 X 20', 139 X40' CURRENCY EXCH @ 3/3/2017; €1 = \$1.07, FCFA 627.27 = \$1, FCFA 671.18 = €1

PORT/ ITEM	NIGERIAN PORTS AUTHORITY (\$)		GHANA PORT (\$)		LOME PORT AUTHORITY (€)	
	RATE AMO	DUNT	RATE AN	IOUNT	RATE AMO	DUNT
CARGO DUES/ HARBOUR DUES	20' X 172 x 80.00 40' X 139 x 160.0	13,760.00 22,240.00	20' x 172 x 45 40' x139 x 83.5	7,760.00 11,606.50	16,924MT x 4.4058	74,563.76
ENVIRONMENTAL PROTECTION LEVY	20' X 172 x 3.63 40' X 139 x 7.68	624 36 1,067.62	-	-	-	-
STEVEDORING	20' X 172 x 110 69 40' X 139 x 159.90 (T.O)	19,038.68 22,226.10	20' x 172 x 104.52 40' x 139 x 196.56	17,977.44 27,321.84	20' x <u>172x 85,000FCFA</u> (€126.82) 40' x139 x 95,000FCFA (€141.74)	21,813.04 19,701.86
BERTHING DUES	250	250.00			131959 @ 0.007	923.71
LIGHT DUES/ SHIP DUES	39906 x 1.28	51,079.68	39906 x 0.084	3,352.10	-	-
PILOTAGE DUES	-	-	20,000- 30,000=964.60+ 25%	1,205.75	131959 @ 0.0055 + 23.5	749.28
BERTH RENT	261 x 2days x 2	1,044.00	1 <sup>ST</sup> 24 hrs Subsequent hrs. i multiple of 12hrs. 1 day (2X771.68)	1,542.84 1,543.36	131959 x 0.0050 + 23.5	683.30

TOWAGE DUES	2,500/tug	10,000.00	1029.08 + 25%	1,286.35	131959 x 0.0090 + 81	1,268.63
	2,500 x 4					
MOORING DUES	-	-	321.88 + 25% X 2	804.70	131959 x 0.0007 + 23.5	115.87
ISPS IMPLEMENTATION/	172 x2.00	344.00	(172 +278) TEUS =	3,600.00	5% of total	187.04
MOWCA LEVY	139 x 4.00	556.00	450 x 8.00		Navigational charges	
					(2586.36)	
CONTIGENT DEP.	2% harbour dues + EPL +berth rent	774.72	-	-	-	-
5% VAT		7,066.52	-	-	-	-
CONVERSION OF \$ TO €	-	-	-	-	-	120,006 .49 @ 1.07
TOTAL	-	150,071.68	-	117,906.88	-	128,406.94

# TABLE III

### Simulation of Bulk Liquid:

**NAME OF VESSEL**: MT SEA FRONTIER **GRT:** 30241 **CBM:** 100783 **LOA:** 184M **TONNAGE:** 20,487MT, **CURRENCY EXCH** @ 3/3/2017; €1 = \$1.07, FCFA 627.27 = \$1, FCFA 671.18 = €1

PORT/ ITEM	NIGERIAN PORTS AUTHORITY (\$)		GHANA PORT (\$)		LOME PORT AUTHORITY (€)	
	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
CARGO DUES/ HARBOUR DUES	20,487 x 5.9	120,873.30	20,487 x 2.50	51,217.50	20,487 x 1.6617	34,043.25
ENVIRONMENTAL PROTECTION LEVY	-	-	20,487 x 0.5	10,243.50	-	-
STEVEDORING	-	-	20,487 x 2.50	51,217.50	20,487 x 788FCFA = €1.18	24,174.66
BERTHING DUES	250	250.00	-	-	100783 x 0.007	705.48
LIGHT DUES/ SHIP DUES	30241 x 1.28	38,718.48	30241. 0.084	2,540.24	-	-
PILOTAGE DUES	-	-	30,000 40,000= 1928.68 + 25%	2,410.85	100783 x 0.0055 + 23.5	577.81
BERTH RENT	184 x 4days x 2	1,472.00	1 <sup>ST</sup> 24 hrs Subsequent hrs. in multiple of 12hrs. 3 days (6X386.36	771.68 2,318.16	100783 x 0.0050 + 23.5	527.42

TOWAGE DUES	2,000/tug 2,000 x 4	8,000.00	3214.12 + 25%	4,017.65	100783 x 0.0090 + 81	988.05
MOORING DUES	-	-	1,004.64 + 25% X 2	2,511.60	100783 x 0.0007 + 23.5	94.05
ISPS IMPLEMENTATION/ CONTIGENT DEP.	5% of cargo dues & berth rent	6,117.27	20,487 x 0 .05	1,024.35	5% of total Navigational charges (2892.81)	144.64
5% VAT	-	8,465.19	-	-	-	-
CONVERSION OF \$ TO €	-	-	-	-	-	€61,255.36 @ \$1.07
TOTAL	-	183,886.24		128,273.03	-	65,543.24

# **TABLE IV**

Simulation of Dry Bulk:

**NAME OF VESSEL**: MV VOYAGER **GRT:** 32987 **CBM:** 109707 **LOA:** 190M **TONNAGE:** 10,232MT, **CURRENCY EXCH** @ 3/3/2017; €1 = \$1.07, FCFA 627.27 = \$I, FCFA 671.18 = €1

PORT/ ITEM	NIGERIAN PORTS AUTHORITY (\$)		GHANA PORT (\$)		LOME PORT AUTHORITY (€)	
	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
CARGO DUES/ HARBOUR DUES	10,232 x 1.89	19,338.48	10232 x 2.00	20,464.00	10,232 x 1.6617	17,002.51
ENVIRONMENTAL PROTECTION LEVY	10232 x 0.10	1,023.20	10232 x 0.05	511.60	-	-
MOWCA LEVY	10232 x 0.10	1023.20	-	-	-	-
STEVEDORING	10232 x 4.93 (TO)	50,443.76	10232 x 3.64	37,244.48	10,232 x 800FCFA = €1.19	12,176.08
BERTHING DUES	250	250.00	-	-	109707 x 0.007	767.95
LIGHT DUES/ SHIP DUES	32987 x 1.28	42,223.36	32987 x 0.084	2,770.91	-	-
PILOTAGE DUES	-	-	30,000 40,000= 964.60+ 25%	1,205.75	109707 x 0.0055 + 23.5	631.11

BERTH RENT	190 x 8days x 2	3,040.00	1 <sup>s⊤</sup> 24 hrs Subsequent hrs. ir multiple of 12hrs. 7 days (14X386.36)	771.68 5,409.04	109707 x 0.0050 + 23.5	572.04
TOWAGE DUES	2,000/tug 2,000 x 4	8,000.00	1029.08 + 25%	1,286.35	109707 x 0.0090 + 81	1,068.36
MOORING DUES	-	-	1,004.64 + 25% X 2	2,511.60	109707 x 0.0007 + 23.5	100.29
ISPS IMPLEMENTATION/ CONTIGENT DEP.	2% of Harbour Dues + Envtal Protection Levy + berth rent	468.03	10232 x 0 .05	511.60	5% of total Navigational charges (3139.75)	156.99
5% VAT		3,693.72	-	-	-	-
CONVERSION OF \$ TO €	-	-	-			€32,475.33 x \$1.07
TOTAL	-	129,503. 35	-	72,687.01	-	34,748.60

## TABLE V

Simulation of Vehicles Ro/Ro:

**NAME OF VESSEL**: MV SILVER SOUL **GRT:** 42447 **CBM:** 140132 **LOA:** 184M **TONNAGE:** 1793MT, **CURRENCY EXCH** @ 3/3/2017; €1 = \$1.07, FCFA 627.27 = \$I, FCFA 671.18 = €1

PORT/ITEM	NIGERIAN PORTS AUTHORITY (\$)		GHANA PORT (\$)		LOME PORT AUTHORITY (€)	
	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
CARGO DUES/ HARBOUR DUES	Car 1120 x 27.50 Bus 648 x 45.00 Truck 24 x 187.00	30,800.00 29,160.00 4,488.00	Car 1120 x 26.50 Bus 648 x 59.00 Truck 24 x 82.00	29,680.00 38,232.00 1,968.00	* 44, 800 x 1.6617	74,444.16
ENVIRONMENTAL PROTECTION LEVY	1792 x 2.25	4,032.00	-	-	-	-
STEVEDORING	Car 1120 x 17.59 Bus 648 x 31.73 Truck 24 x 68.63 (TO)	19,700.80 20,561.04 1,647.12	Car 1120 x 49.92 Bus 648 x 99.32 Truck 24 x 155.48	55,910.40 64,359.39 3,731.52	1793 x 2500FCFA = €3.72	6,669.96
BERTHING DUES	250	250.00	-	-	140132 x 0.007	980.92
LIGHT DUES/ SHIP DUES	42447 x 1.28	54,332.16	42447 x 0.084	3,565.55	-	-

PILOTAGE DUES	-	-	30,000 40,000= 1157.00 + 25%	1,446.25	140132 x 0.0055 + 23.5	794.23
BERTH RENT	184 x 2days x 2	736.00	1 <sup>s⊤</sup> 24 hrs Subsequent hrs. ir multiple of 12hrs. 2 days (4X386.36	771.68 1,533.44	140132 x 0.0050 + 23.5	728.13
TOWAGE DUES	2,000/tug 2,000 x 4	8,000.00	1229.28 + 25%	1,536.60	140132 x 0.0090 + 81	1,348.74
MOORING DUES	-	-	450.32 + 25% X 2	1,125.80	140132 x 0.0007 + 23.5	121.59
ISPS IMPLEMENTATION/ CONTIGENT DEP.	5% of cargo dues & berth rent	2,222.50	car 1120 x 2.00 bus 648 x 3.00 truck 24 x 4.00	2,240.00 1,944.00 48.00	5% of total Navigational charges (3973.61)	198.68
5% VAT	-	8,483.76	-	-	-	-
CONVERSION OF \$ TO €	-	-	-	-	-	€85,286.41 @ \$1.07
TOTAL	-	184,413.38		208,092.63	-	91,256.46

## **APPENDIX B:** Sample Port congestion Notice



Friday August 3, 2018

Dear Esteemed Customer,

# TINCAN CONGESTION NOTICE

We acknowledge the current congestion situation at Tincan Island Container Terminal (TICT) leading to delays in shipment delivery. In this light, kindly contact our local office on cargo delivery issues as per details below.

### CMA CGM Nigeria

Customer Service E-mail: <u>Lgs.customerservice@cma-cgm.com</u>

We would like to thank you for your support.

With regards, CMA CGM NIGERIA

### **APPENDIX C: Questionnaires**

These questionnaires were designed after agreement on content during the inception phase. The consultants prepared versions in English and French. PMAWCA undertook to distribute the documents and to obtain the competed responses from the subject ports. Unfortunately, PMAWCA were unable to meet their commitment and the consultants had to identify as much of the content as possible from other sources. This was a constraint to the project.

# **Questionnaire for Port Users (TEMPLATE)**

What is your Stake in the	Port indu	ustry	
Shipping Company/Line			
Terminal Operator	$\square$		
Freight Forwarder	$\mathbb{H}$		
Shipper/Trader			
Others		Please specify your interest	

Please complete the information below on charges in the port as applicable to you:

On the average how much do you pay for the following services in Nigerian Ports:

	Freight rates to / from selected ports (USD)
	Port 1Jebel Ali
	Port 2Rotterdam
	Port 3Chinese Port
	Agency Fees
	- wharfage pilotage bunkers towage services mooring fees stevedoring
	Land side Costs: Terminal handling Lift on / lift off
	Customs clearance fees
	Detention / demurrage / quay rent
	Other regulatory interventions and costs
	Wharf landing fees
	Transit fees if any
	Road haulage cost per truck over a distance of 20km 100km
	500km 800 km and above
	Any other costs:
State	Other Value Adding Services you would like to see in your port for cost reduction and efficiency:
(a)	(b)
(c)	(d)
(e)	

# **Questionnaire for Ports (Template)**

Name of Port
Port Management Type
Port Depth (Metres)
Types of Cargoes handled/ operations (%) :
Containers Bulk RO/RO
Number of Berths
Number of Private Operators
Range of size of vessels that call: from to (TEUs)
fromto(DWT)

### Port Annual Throughput

Cargo Type	2014	2015	2016	2017
Bulk (Metric Tons)				
Containers (TEUs)				
Ro/Ro				

### Modal Split of Cargo Evacuation from The Port (%):

Trucks ------ Rail ------ Waterways (Barges) ------

### Port Tariffs and Costs for Exports / imports

Cargo Type	Import Cost (USD)	Export Cost (USD)
1x 20ft FCL General Cargo delivered to 100 km point		
1 Tonne LCL Cargo delivered to 100 km point		
1 General Cargo (conventional) delivered to 100 km point		

# **APPENDIX D:** Presentation at Inception Meeting



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### ACTIVITIES (1)

- Initial meetings / Briefing NPA Management
- Establish / brief NPA assigned working group
- Identify stakeholders
- Agree scope for assessment and design
   assessment material
- Compile and submit inception report
- Communicate with selected comparison ports

Ø

#### ACTIVITIES (2)

- Visit two selected West African ports
- Visit one global best practice port
- Request and review tariff and operational methodologies from selected ports
- Checkpoint Update meeting
- Receive, review, analyse and collate responses and findings
- Document findings and recommendations
   for NPA

#### ACTIVITIES

# Ø

- Submit draft report to NPA and PDF
- Project team / NPA / PDF workshop to discuss, develop and finesse final report
- Submit final report

### **OUTPUT 2 ACTIVITIES**

**CROWN AGENTS** 

Ø

### OUTLINE METHODOLOGY

- Baseline study of costs / tariffs at Lagos Ports for Exports / Imports
- Interview stakeholders to substantiate costs
- Questionaire to selected regional and best practice ports to determine tariffs and costs for Exports / imports
- Visit selected ports
- Interview stakeholders at selected ports to substantiate costs
- Desk analysis of findings
- Compare Lagos Port costs with those of selected regional ports
- Compare Lagos Port costs with those of selected best practice ports
- Compare with World Bank LPI and IFC Ease of Doing Business reports

NIGERIA STAKEHOLDERS	STAKEHOLDERS IN EACH PORT	Ø
	Port Authority	—
• NDA	Maritime authority	
• NSC	Terminal onerators	
• NIMASA		
• NCS	<ul> <li>Califiers</li> <li>Levistic annuiders / forcielt ferroradars / alexing</li> </ul>	
PMAWCA (regional)	<ul> <li>Logistic providers / freight forwarders / clearing agents</li> </ul>	
• LCCI	Regulatory authorities (Customs Standards	
• MAN	Security, Health)	
NACCIMA	Exporters	
CRFFN     NRC / ROAD OPED ITOPE	Importers	
NRC / RUAD UPERATURS     ECOMAS 2 (ranional)	Shipper's Councils	
	Road / rail operators	
	DMAN/CA (for Most Africa Darte)	
	· FWAWCA (IDE WEST AITILG FOILS)	
NATURE OF PORT COSTS - PMAWCA DEFINITION FOR DISCUSSION	COST ELEMENTS	Ø
	Freight rates to / from selected ports	
	• Agenry	
Port Costs are the monetary measure of what port users' pay to the     Port Authority Terminal Operators and other aprillagy convice	Waterside / wharfeage / nilotage / hunkers / towage	
providers for using facilities and services of a port.	services	
Port Cost is an important component of total Transport Costs.	Stevedoring / mooring	
<ul> <li>For seaborne trade, transport cost is extremely important; and it is made up of:</li> </ul>	Lagos wharf landing fees? / Port Dues	
	Terminal handling	
	<ul> <li>Customs clearance + regulatory interventions</li> </ul>	
	Lift on / lift off	
	• Detention / demurrage / quay rent	
	Iransit fees	
	<ul> <li>Road / rail haulage to ???</li> </ul>	
		6
	BEST PRACTICE PORTS SELECTED FOR COMPARISON	-
	1. Tangier	
	2 Singanore	
3. Cotonou	3 Algarerias	
4. Abidjan		
5. Lome	4. Odičali	
	Selection of 1 port for visit	

#### BASIS OF COMPARISON

Ø



- 2. Import 1 Tonne / 1 cbm LCL Cargo, delivered to 100 km point
- 3. Import 1 Tone / 1 cbm General Cargo (conventional) delivered to 100 km point
- 4. Export 1 x 20ft FCL General Cargo, origin 100 km
- 5. Export 1 Tonne / 1 cbm LCL Cargo, origin 100 km
- 6. Export 1 Tonne / 1 cbm General Cargo (conventional), origin 100 km.

# THE AIM

TO ENABLE NIGERIA PORTS TO BECOME THE FACILITY OF CHOICE, IN THE WEST AFRICA REGION. FOR IMPORT, EXPORT AND TRANSIT CARGOES WHETHER CONTAINER, BULK, RO / RO......





# **APPENDIX E: PROJECT IDENTIFICATION AND CONTACT DETAILS**

1. PDF II Project Code:	PDF II 041 NPA CA2	
2. Project Title	Comparative Assessment of Tariffs/Costs at Ports along the West African Coast	
3. Type of Project:	Structural Policies	
4. Beneficiary Organisation: The Nigerian Ports Authority		

**5. Name and title of the beneficiary organisation representative:** Mrs Hadiza Bala Usman, Managing Director (MD), Nigerian Ports Authority (NPA); Dr Abubakar Dantsoho, SA to the MD, NPA

6. Phone number and email address of the beneficiary organisation representative:

0803 468 3229, hadizabalausman@yahoo.com; 0810 000 0002 abudantsoho@yahoo.co.uk;

7. Name of the person or organisation that will deliver services to the beneficiary:

Jon Walden, Crown Agents: Johnson Odede, Acting Country Director, Crown Agents Nigeria

**8.** Phone number and email address: Jon.Walden@crownagent.co.uk; Johnson.Odede@ng.crownagents.com, Tel: +234 (0)803 470 4830



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