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Achievements of the Nigerian Maritime Administration and Safety Agency in relation to Port Reception Facility Availability and Adequacy in Nigeria: How?

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This paper unfolds how the Nigerian Maritime Administration and Safety Agency (NIMASA) have recorded achievements in Nigeria in relation to the availability and adequacy of a Port Reception Facility (PRF) as required by relevant International Maritime Organization (IMO) regulations. In this paper, semi structured interviews were conducted and importantly, a case study approach was also adopted focusing on the Nigerian Maritime Sector (NMS) situation and lessons from European Union (EU) experience was equally adopted. The paper observes that there is a strong relationship between the situation in the EU and Nigeria in relation to implementation of International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78 and the adequacy of PRF in particular. One of the main the reasons for the strong relationship between the situation in the EU and Nigeria can be traced to the fact that both have followed related IMO directives, regulations and circulars to a larger extent. Although, the issue around the complexities and lack of collaborations among the countries under African Union cannot be overlooked, but this issue was well managed by the Nigerian Flag State Administration that is the Nigerian Maritime Administration Safety Agency (NIMASA). Therefore, Africa Union should encourage synergetic processes among its member states to tackle marine environment related menace and learn from the European Union in this regards.

Keywords: Port Reception Facility; International Maritime Organization; International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78; Nigerian Maritime Sector; Achievements

1.0. Introduction

The discourse around the need for putting in place an ideal Port Reception Facility (PRF) at port, terminal, shipyard and offshore installation is over five decades. The International Maritime Organization (IMO) through Marine Environment Protection Committee (MEPC) during second session in November 1974 discussed submissions on PRF by United State of America (USA), Japan, International Chamber of Shipping (ICS) and Oil Companies International Marine Forum (OCIMF). The first working group on a PRF was established in 1975 during MEPC third session with the main objective to study the requirements and limitations imposed by the International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78 with respect to the provision of PRF for wastes containing oil, noxious chemical substances, sewage and garbage from ships (Mikelis, 2012; Ball, 1999).

There is no iota of doubt that marine litter/waste emanates from several sources and shipping activities in particular. These marine litters have the tendencies of causing tremendous environmental, social and economic impacts by preventing easy passage of vessel and pose threat to local marine resources, human life and safety, if not properly disposed or when discharged directly to the sea. Thus, the rationale for provision and adequacy of **PRF** by **Nigerian Ports Authority (NPA)** and **Nigerian Maritime Administration and Safety Agency (NIMASA)** respectively at port, terminal, shipyard and offshore installations become inevitable mainly to guarantee cleaner oceans through proper waste management plan and subsequently to remove harmful substances as described in Article 2 of MARPOL Convention. This is necessary to preserve local marine resources and human life **without causing undue delay to ship**, as required by the MARPOL 73/78 and in line with the decision of MEPC 42 session in 1988 and MEPC 44 session in year 2000 (MEPC 83.(44). Then, PRF typically can be referred to any fixed, floating or mobile facility capable of receiving the MARPOL 73/78 wastes/residues/oily mixture/garbage generated from ships (dry bulk or liquid bulk cargoes) and fit for that purpose (IMO, 2018; and Merchant Shipping Act, 2007). Moreover, the type and size of the facility depends on the needs of the ships visiting a port.

The paper is divided into five sections and the first is the introductory section. The second section presents the methods of data collection. The third section delves into the cases of the Nigeria and EU respectively. This is necessary to depict the relationships between the EU and Nigeria in terms of the extent to which Port Reception Facilities have been available and adequate. The fourth section emphasizes the rationale for action plans to tackle any alleged inadequacy of reception facility, including assessing the outcome of the action plans on any alleged inadequacy of reception facility and benefits of reception facilities in practical terms. The fifth section, which is the final section, is the conclusion and recommendations part of the paper.

2.0. **Methods of Data Collection and Analysis**

The objective is to unfold how the Nigerian Maritime Administration and Safety Agency (NIMASA) have recorded achievements in Nigeria in relation to the availability and adequacy of a Port Reception Facility (PRF) as required by relevant International Maritime Organization (IMO) regulations. In this paper, semi structured interviews were conducted and importantly, a case study approach was also adopted focusing on the Nigerian Maritime Sector (NMS) situation and lessons from European Union (EU) experience was equally adopted.

In a specific term, the paper depicts the case of European Union and subsequently the case of Nigeria through a critical review and semi structured interviews where necessary for the purpose of showing the relationships between the both cases and lessons to be learnt using primary and secondary sources (Lawal et al, 2013; Lawal, 2012). The paper further reveals on one hand the action plans to tackle the inadequacy of PRF, if occurs, and likely benefits of PRF when adequately put in place, on the other relying on secondary data. The secondary data are information generated from published materials such as journals, documentary evidences and so on (Lawal et al 2013).

Having discussed the method of data collection, the next section unfolds the case of European Union and Nigeria in section three. This is necessary for the purpose of simplicity and clarity on one hand and to show relationship between EU and Nigeria, on the other. Meanwhile, section four delves into actions to be taken in tackling the case of inadequacies in a proper context and benefits of PRF.

3.1.The Case of European Union

It is vital to mention that the European Union (EU) has put in place a Directive (EU) 2019/883 on PRF for the Delivery of Waste from Ships mainly to enhance effectiveness of PRF. The Directive 2019/883 amending Directive 2010/65/EU and repealing/revoking/annulling Directive 2000/59/EC (EU Monitor, 2019); though its article 4 focused on issues related to adequacy of PRF for example (European Union 2016). In addition to this, Union has put in place stricter norms and prohibition for the discharges of waste from ships at sea and bans discharges of waste water from open loop scrubbers and certain cargo residues in their territorial waters in accordance with Directive 2000/60/EC. Importantly, the Unions also adopted the revised Consolidated Guidance for PRF for providers and users in line MEPC.1/Circ.834/Rev.1).

Yet, discharges of waste at sea still persist. This was partly because of inadequacy of PRF, insufficient enforcement, member states developing different interpretations to some EU directives (for example 2000/59/EC) on the subject. Greatly, because of inconsistencies of some EU directives with MARPOL Convention framework (adequacy of the facilities, advance waste notification, and mandatory delivery of waste to PRF), this is coupled with lack of incentives to deliver the waste onshore, thus, causing a great impact on environment, social and economic (EU Monitor, 2019). This has led to introduction of framework/evaluation of the Regulatory Fitness and Performance Programme (REFIT Evaluation).

The essence of REFIT Evaluation is to encourage harmonization of related concepts and to enhance full alignment with the MARPOL Convention in order to avoid unnecessary administrative burden on both ports and port users. In this way, Directives 2005/35/EC, 2008/56/EC, 2008/98/EC were introduced and harmonized for the purpose of meeting Sustainable Development Goals. In my own view, this is capable of removing unnecessary administrative burdens for ships and ports. Subsequently, the earlier mentioned directives scopes were equally extended to cover discharge norms via prevention actions/principles, polluter pays' principle, management principle and adoption of waste hierarchy, which calls for the reuse and recycling of waste over other forms of waste recovery and disposal using separate collection of waste system.

In 2017, Regulation (EU) 2017/352 was introduced, which among other things provide rules on the transparency of charging structure applied for the use of port services, consultation of port users and handling of compliant procedures. The EU Commission is expected to engage in a continuous evaluation of all its related regulation and expected to submit the results of such evaluation on best waste prevention and management practices on board ships by 28th June, 2026, as contained in Article 23 Review (1). Thus, the need for notification of the delivery of waste to PRF via standard format (form) in line with Article 6 of Directive (EU) 2019/883) become evitable. This form should be retained on board the ship along with the appropriate Oil Record Book, Cargo Record Book, Garbage Record Book or Garbage Management Plan as required by the MARPOL Convention see Annex V Regulation 9. The form shall contain the following details that centers on Ship Particulars, Port and Voyage Particulars and Type and Amount of Waste and Storage Capacity respectively (See EU Monitor, 2019).

Ship Particulars:

a. Name of the ship:
b. Owner or operator:
c. IMO Number:
d. Distinctive number or letters:
e. Maritime Mobile Service Identity (MMSI) number:
f. Gross tonnage:
g. Type of ship (oil tanker, chemical tanker. Bulk carrier, container, passenger ship, Ro-ro (used to transport all wheeled cargo), other cargo ship and other (to be specified)

Port and Voyage Particulars:

a. Location and terminal name:
b. Last port where waste was delivered:
c. Arrival date and time:
d. Date of last delivery:
e. Departure date and time:

f. Next port of delivery

g. Last port and country:

h. Person submitting the form if other than master:

i. Next port and country (if known):

Type and Amount of Waste and Storage Capacity details:

a. Waste to be delivered (m^3):

b. Maximum dedicated storage capacity (m^3):

c. Amount of waste retained on board (m^3):

d. Port at which remaining waste will be delivered:

e. Estimated amount of waste to be generated between notification and next port of call (m^3).

The next subsection delves into the case of Nigeria mainly to show the relationship between European Union approaches and Nigeria's implementation patterns/styles, including lessons to be learnt.

3.2. The Case of Nigeria

In effort to implement the content of related MARPOL Convention and its Annexes that are related to provision of PRF by NPA and supervision of adequacy of PRF by NIMASA; the Nigeria Government through the country's Flag State Administration for the past ten years had commenced the implementation processes via ratification and domestication, and putting in place the Generated Marine Waste Reception that is Regulations 2012.

Generally speaking, the Merchant Shipping Act was divided into four (4) parts: 1. objective and application; 2. port waste reception; 3. offshore waste reception and 4 enforcement part respectively. Specifically, the Merchant Shipping Act part I and II covers objectives, application, requirement to provide adequate port waste reception facilities, direction to provide adequate waste reception facilities, requirement regarding waste management plans, approval and implementation of waste management plans, power of agency to direct the preparation of waste management plans, direction to implement a waste management plan, pre-arrival

notification, delivery of ship-generated waste, delivery of cargo residues, funding of port waste reception facilities, and exemption (Merchant Shipping Act, 2007).

Part III entails requirement to provide adequate offshore waste reception facilities, agency to license waste management organizations, offshore collection of ship-generated waste, offshore receipt of cargo residues, collection of waste from offshore installations, notification for the collection of offshore waste, funding of offshore waste reception facilities, general guide to developing charges for offshore waste reception and calculation of charges (Merchant Shipping Act, 2007).

Part IV centers on non-compliance or suspected non-compliance, offences, offences by body corporate, inspection and detention of Nigerian Ships, inspection and detention of ships other than Nigerian Ships, enforcement of detention, interpretation and citation (Merchant Shipping Act, 2012). It is vital to mention that these regulations do not apply to any warship; naval axillary or other ship owned or operated by a State and used for the time being, only on Government non-commercial use. Similarly, these regulations do not apply to fishing vessel and recreational craft authorized to carry or designed to carry not more than twelve (12) passengers, as contained in regulations 9 and 12 (See Merchant Shipping Act, 2007).

Even though, regulations were put in place by IMO and the Flag State Administration (NIMASA) had domesticated related regulations through Ship Generated Marine Waste Reception, which is contained in Regulation 2012, the knotty question has remained the extent to which those regulations have been translated into practice? In the past, I have identified factors that might affect effective implementation of regulations within Marine Environment domain in a general term. These factors are complexities of the Nigerian environment, system failures and rivalry among Government Implementing Agencies (GIAs) because of undue recognitions among the GIAs, duplications of regulations at national levels and lack of political will among others see (Lawal and Adeyanju, 2018; Lawal et al, 2013; Lawal, 2013 (a) and Lawal, 2013 (b)).

Apart from the recent development where Oil Producers Trade Section (OPTS) and NIMASA had conflict of interest emanating from misinterpretation of regulations, which could have been used towards the country's benefits. In the past, the Nigeria Government through NIMASA, NPA, National Oil Spill Detection and Response Agency (NOSDRA) and other related agencies such Department of Petroleum Resource (DPR)) had

overcome all the challenges identified in the above in regards to implementation of Ship Generated Marine Waste Reception via a specific channel:

1. Domestication of related Annexes of MARPOL 73/78 Convention.
2. Championing the process of collaboration and in particular embracing synergic approaches among all the relevant GIAs.
3. Encouraging stakeholders' engagement.
4. Training and re-training of personnel involved in the implementation processes through workshops, seminars and conferences.
5. Availability of qualified personnel with specific role to prevent conflict or ambiguity, including access to necessary facilities that will enhance effective performance.

Therefore, the functions or roles of IMO, Flag State and Reception Facilities Unit are discussed subsequently. For the purpose of clarity, the role of IMO, NIMASA and PRF Unit in the implementation processes is further considered.

Role of IMO

IMO does not act as an enforcement Agency in response to allegations of inadequacy of port waste reception facilities. Nevertheless, the obligation for states to report alleged inadequacies to IMO remains of value. IMO is in a unique position to raise matters of concern with national administrations.

Role of NIMASA

There are measures that the Flag Administration should take to ensure that its ships comply with the requirement of MARPOL 73/78. Apart from ensuring adequacy of PRF, the flag state should:

1. Provide advice to ships plying its waters;
2. Examine on-board arrangements (Safety and counter pollution) during inspections; and
3. Investigate infringement; and prosecute offenders.

Role of the PRF Unit

1. Regular inspection of PRF to ensure provision and availability to ships visiting the Nation's Port without causing undue delay and report to IMO;

2. Quarterly inspection of PRF at all the nation's sea ports (Lagos, Port Harcourt, Warri, Calabar and Bonny Island);

3. Collation and analysis of MARPOL 73/78 wastes data on monthly basis;

4. Enforcement of recommendations from inspection of PRF at the nation's sea ports;

5. Inspection of reception facilities at the terminals and private jetties, shipyards, coastal industrial outlets and harbors to ensure regulatory compliance;

6. Enforcement of recommendations from inspection of PRF; and

7. Appraisal and Approval of Garbage Management Plan (GMP).

The next section unfolds action plans designed mainly to tackle the situation of inadequacy of reception facilities, if occurs, and likely benefits of putting in place adequate reception facilities.

4. Action Plans to Tackle any Alleged Inadequacy on Reception Facility

In October 2006, MEPC 55 session approved an Action Plan to tackle any alleged inadequacy of PRF, which might be seen as a major impediment to overcome in order to achieve full compliance with MARPOL. The Plan was developed by the Sub-Committee on Flag State Implementation (FSI) in order to contribute to the effective implementation of MARPOL and to promote quality and environmental consciousness among administrations and shipping. The Plan contained work items that aim at improving the provision and use of adequate PRF, including work items relating to:

- Reporting requirements;
- Provision of information on PRF;
- Identification of any technical problems encountered during the transfer of waste between ship and shore and the standardization of garbage segregation requirements and containment/control identification;
- Review of the type and amount of wastes generated on board and the type and capacity of PRF;
- Revision of the IMO Comprehensive Manual on PRF. This Manual among other things will provide guidance on the provision of PRF for ship-generated waste, as part of the implementation of the International Convention

for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto MARPOL 73/78 (IMO, 1999). Although the first manual in this regards was developed in March 1992 at 32 session of MEPC, approved at MEPC 35 session on March 1994, published in 1995 and reviewed in 1999 and updated in 2016 with the tittle 'port reception facility: how to do it' (IMO, 2016); and

- Development of a guide to good practice on PRF for the providers and users. The Guide to Good Practice was intended to be a practical users' guide for ships' crews who seek to deliver MARPOL residues/wastes ashore and for port reception facility providers who seek to provide timely, efficient port reception services to ships (IMO, 2009). The guide itself was made available since 2006 and it can be downloaded on GISIS website of IMO. We would argue that an effective implementation of the content of Convention related to PRF can be achieved when manual on PRF and the guidelines for ensuring adequacy are applied correctly (IMO, 2009).

In addition to the above, the followings were incorporated to achieve effective implementation of related regulations and thus, making a robust reception facility reality:

- As part of the activity to support achieving an effective Action Plan, a standard Advance Notification Form was developed to enhance the smooth implementation and uniform application of this requirement, thus minimizing the risk of a ship incurring delay.
- In addition to the above, a standard Waste Delivery Notification form was equally developed to provide uniformity of records throughout the world. This is necessary to achieve standardization around the world.

Source: IMO, 2019

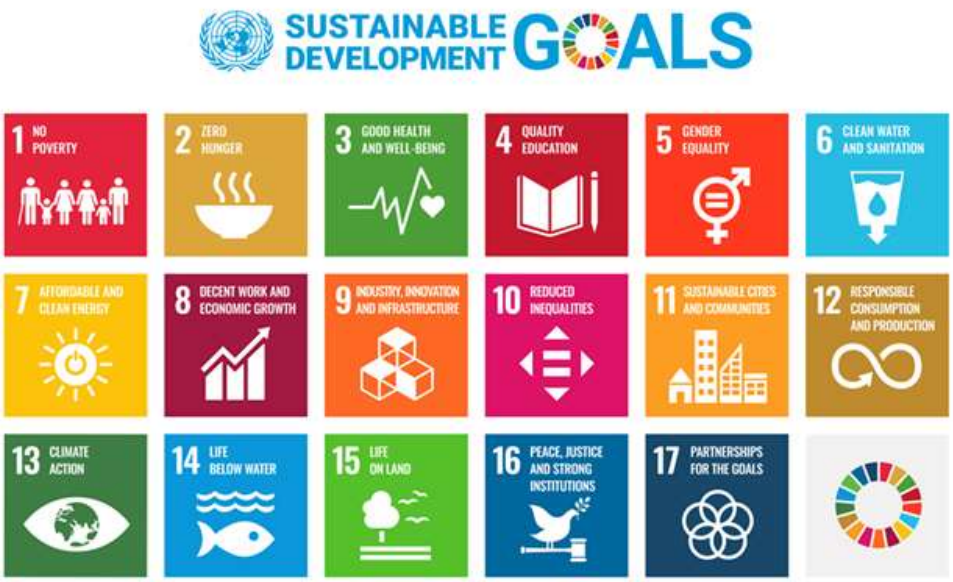
Outcome of the Action Plans on any alleged inadequacy related to PRF

- MEPC 61 agreed to the proposals for the revision of the IMO Comprehensive Manual on PRF under the Integrated Technical Co-operation Programme (ITCP) (IMO, 1999). In the same manner, MEPC 61 also approved the Plan of Assistance and Training on PRF for Developing Countries and endorsed it as a priority theme for the ITCP biennium 2012-2013.

- Two major events are planned. The International Organization for Standardization (ISO) 21070, Management and handling of shipboard garbage, published in 2011, addressed the requirements of several work items including the segregation of garbage on-board ships. Members of the FSI correspondence group contributed to the work of ISO. ISO further proposed to develop a standard for the receipt in ports of garbage that has been segregated onboard.
- ISO with input from individual delegates of FSI is contributing a new standard for the design, construction, equipping, management and operation of PRFs. ISO 16304: 2013/2018 - Marine Environment Protection -Arrangement and Management of Port Waste Reception Facilities.

Source: Mikelis 2012 p.35; https://www.iso.org>obp; European Union, 2016

I would further suggest that the principle of sustainable development goals should be embraced to achieve Cleaner Ocean and agenda 14 is relevant to the sector (See Figure on Sustainable Development).



Source: Morton et al, 2017

The above table confirms the relevant and connection of Ministry of Marine and Blue Economy to the Global Goals popularly known as Sustainable Development Goals and Goal 14 in particular (Life below Water), which is pertinent to us (NIMASA, NPA, MAN, NSC, and NIWA). According to Lawal (2012, 2013a, 2013b and 2014) Sustainable Development Goals can be achieved by embracing principle of being proactive rather than

being reactive, as prevention is better than cure, which can be achieved through a robust application of related policy such as Environmental Impact Assessment (EIA).

Importantly, the Minister of Marine and Blue Economy has equally mandated all the Agencies CEOs under his supervisions to deliver not only the related Sustainable Development Goals alone and but also to deliver the recent ministerial KPIs/deliverables (such as develop and implement national policy on Marine & Blue Economy, deployment of an effective security architecture for the Exclusive Economic Zone and promote indigenous participation in Maritime Sector in line with Cabotage Act 2003) by signing performance bonds from 2023 - 2027 (See Egole, 2023). The benefits of PRF are discussed next.

Benefits of PRF

The benefits of port reception facilities cannot be fully appreciated without understanding in a general term, the potential and responsibilities of all parties (ships, ports and companies). For the purposes of simplicity, the responsibilities of all parties (ships, ports and companies) are shown below in a tabular form.

S/N	Ships	Ports	Companies
1	Declaring the volume of waste to be discharged	To develop waste reception facilities.	Signed a contract with the port for receiving, transporting and treating waste from the ship.
2	Singing contract with the port for receiving and treating waste.	Signed a contract with ships for receiving and treating the waste.	Receipt of expenses for receiving and handling according to regulations

3	Coordinating and facilitating for the reception of waste.	Collecting waste from ships in accordance with regulations.	The companies should identify gap(s)/difficulty related to translating regulations into practice.
4	Pay the fee	Singing contract with the ports that have been licensed to support the process and keep your records.	Singing contract with the companies that have been licensed to support the process and ensure that proper documentation is adhere to.

Therefore, one of the main benefits of PRF is to prevent or mitigate the impacts of marine environment pollutants from ships deliberating discharging waste into the sea. In order to fully tap into the benefits of PRF, it should be provided at the following ports:

- Sea port and terminals entertaining ships with sludge tank;
- All ports which have ships generating oily bilge water and other residue that cannot be discharged into the sea;
- All ports which are loading crude oil;
- All ports loading and discharging bulk cargo in respect to oil residue from combination carriers;
- All ports and terminals in which 1000 Tonnes/ day oil other than crude oil is loaded; and
- All port having ship repair yards and providing tank cleaning facility.

Source: NIMASA, No Date

5. Conclusion and Recommendations

The paper deduces that EU Member States were operating as a team through a strong regional arrangement by issuing out directives pertinent to MARPOL Convention but Nigeria operates on its own without documented Directives that can be traced to Africa Union or West Africa, as part of regional arrangements. Frankly speaking, all the achievements recorded by Nigeria Government remain the singular effort of the country stride towards ratifying, domesticating, implementing IMO Conventions and the same is the situation in Ghana for example.

Meanwhile, the cases of Nigeria and EU as discussed in section three remain the examples of good practices. In the past, the Netherland has been described as one of the best countries in the world in managing the environment but presently, it is now Sweden, follow by Japan, Norway, Switzerland, Denmark, Finland, Germany and Netherlands respectively (See Volunteer FDIP, 2024). Therefore, it is vital to unfold what makes these eight aforementioned countries to be the best in managing the environment. Few things that are common to all the best eight countries earlier mentioned are their mindset, eagerness and commitment towards implementation of related regulations on one hand and readiness in promoting sustainable solutions to improve the environment condition for example mitigating pollution of all types and adopting green technology techniques, on the other. The examples of worst countries in terms of managing the environment are Pakistan, Afghanistan, and Sudan among others (See Werft, 2017). The good news is that Nigeria is far from the worst countries but rather Nigeria is closer to the identified best countries in terms of its commitment towards implementation of related regulations but there are needs for an improvement.

The Nigerian Government through NIMASA has been able to achieve greatly in managing marine environment because of pivotal role played by the NIMASA Management through effective domestication processes, embracement of synergic approaches, engagement of stakeholders via brainstorming exercises/workshops and robust supervision of the operators among others. While other Government Implementing Agencies (GIAs) within the Ministry of Marine and Blue Economy remains very supportive in providing functional services. For examples NPA through Africa Circle provides PRF, NIMASA still inspects adequacy of PRF being a regulatory agency/Flag State Administration, as inadequacy of PRF has been identified by IMO in the past from

some countries (IMO, 2018). The Maritime Academy of Nigeria is the only approved government training institution mandated to assist efficiently in the areas of providing standards of training and development where necessary in line with the contents of International Convention on Standards of Training, Certification, and Watch-keeping (STCW) 1978 as amended.

In view of the above conclusion and the research findings in particular, this paper suggests the following recommendations among other things:

1. Flag State, Port State and port reception facility personnel should be trained continually beyond learning on the job. This is necessary to meet the challenges of technological development and innovation. Presently, wastes are being used to generate electricity in some part of the world at the moment. It should be equally noted that even though MARPOL does not contain any requirement for the treatment of ship generated wastes/residues once received in a port reception facility, and it contains only requirement for the discharge (IMO, 2016). Moreover, the *Guidelines for ensuring the adequacy of port waste reception facilities* (resolution MEPC. 83(44)) reflects that the facilities provided by the port should allow for the ultimate disposal of ships' waste to take place in an environmentally appropriate way. In this context, the use of IMO Comprehensive Manual is highly recommended, as it explicitly elaborates on the further downstream management of wastes and residues once received ashore.
2. There is a need for a robust collaboration among the African countries in the area of managing/solving/tackling likely marine environment menace in particular. Therefore, Africa Union should encourage synergetic processes among its member states to tackle marine environment related menace and learn from the European Union in this regards.

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