



Role of the Shipping Industry in the Maritime Regulatory Process: Case for Nigeria

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Abstract:

The maritime industry is adjudged the safest and more environmentally friendly mode of transportation. The industry's safety is regulated internationally by the International Maritime Organization (IMO) and other United Nations agencies related thereto. In the Nigerian context, the regulatory and standards implementation aspects are domiciled with the Nigerian Maritime Administration and Safety Agency (NIMASA) and other related agencies. In this paper, the critical roles of the shipping industry players in the maritime regulatory process at the international and national scenes are identified and discussed to elucidate the appropriateness and adequacy of the levels being played with a view to encouraging more participation for the advancement of maritime safety and environmental protection. How these roles played out in the Nigerian context currently and in the near future especially regarding emerging technological developments, were emphasized; the weaknesses identified and proactive solutions proffered through human capacity development and more integration of efforts between industry and relevant government agencies. Also, the impact rigorous regulatory regime on maritime safety and environmental protection were ex-rayed. Positive trends were indicated in the aspects of ship losses, number of accidents at sea and severity, number of oil spills and the quantity spilled, lives lost at sea, number of piracy incidents and increment in the pool of skilled seafarers. To sustain this trend, it is recommended that regulatory agencies must collaborate with the industry to evolving an efficient legal framework, acquire necessary assets and expertise, and increase maritime domain awareness (MDA) in tandem and pace with the regulatory agencies of the international community.

Key words: Environmental protection, Maritime Domain Awareness (MDA), Maritime safety, Regulatory regime, Shipping industry, Standards

I. INTRODUCTION

*Whosoever commands the sea commands the trade; whosoever commands the trade of the world commands the riches of the world and consequently the world itself*¹ The shipping industry is seen to be amongst the safest and more environmentally friendly form of commercial transport. Despite the rigours and the physical risks involved, the industry's commitment to safety has pervaded all aspects of shipping operations in the deep seas. This informed why the industry was amongst the very first to adopt widely accepted and implemented safety standards. The shipping industry is international in nature, and as a consequence, the safety of the industry is regulated by various United Nations agencies particularly the International Maritime Organisation (IMO), which had developed a comprehensive framework of global maritime safety regulations in conformity with the policy objectives of the United Nations, and in cooperation and agreement with other UN agencies like the International Labour Organisation (ILO). In Nigeria, the apex regulatory and promotional agency of the shipping industry is the Nigerian Maritime Administration and Safety Agency (NIMASA). It was created in 2007 from the merger of the National Maritime Authority (NMA) and Joint Maritime Labour Industrial Council (JOMALIC), and subsequently the abolition

of the office of the Government Inspector of Shipping (GIS) which was created from the Merchant Shipping Notice, and which functions and powers were transferred to NIMASA. NIMASA was established primarily for the administration of maritime safety, seafarers' standards and security, maritime labour, shipping regulation, promotion of commercial shipping and Cabotage activities and pollution prevention and control in the marine environment [1]. In particular to the subject of discussion, the Agency is mandated to regulate and promote issues bothering on the safety, security, pollution and labour [2]. The Agency also implements international standards of the IMO and the ILO that have been domesticated by Nigeria. The Nigerian shipping industry had been bedevilled with incapacitation in terms of active participation not only in the regulatory process, but even in the light of acquiring and participating actively in the technical and freight market aspects of the industry nationally and internationally. To incentivise the industry in this space, the Coastal and Inland Shipping (Cabotage) Act was promulgated in 2003. Identification of the inability to access finance by the operators in the industry prompted the provision in this Act for a Cabotage Vessel Financing Fund (CVFF) in Section 42 which would be derived from 2% surcharge on all contracts involved in coastal trade and other tariffs, fines, fees and licences under the Act. This fund is collected for the purpose of promoting the development of indigenous ship acquisition capacity by providing financial assistance to Nigerian operators in domestic coastal shipping. The good intention of this Act itself, had suffered some setback as a reported sum of between ₦40bn to ₦50bn realized from the

¹ Judicious and Select Essays and Observations by the Renowned and Learned Knight Sir Walter Raleigh, upon the First Invention of Shipping, H. Mosley, 1650 as quoted in Stopford, M., *Maritime Economics*, 3rd ed, 2009

fund over a decade from its establishment has not been dutifully utilized thereby, failing to enhance the much needed capacity to participate in the industry by the indigenous operators locally and internationally [1]. The puzzle imminent in some minds is what must be the actual problem hampering the growth of the maritime sector in the country; what has been the role of the shipping industry nationally and internationally in the regulatory process; would giving more prominent role to the industry enhance more effective implementation of the emanating standards giving way for a better holistic maritime industry and a safer maritime environment? This paper aims to address these issues by discussing the maritime regulatory process with special emphasis on the role of the shipping industry internationally and Nigeria in particular.

II. OVERVIEW OF THE MARITIME REGULATORY PROCESS

The shipping industry regulatory process is often dominated by the priorities of the stakeholders in the process- the current 172 (including the Cook Islands) member states of the IMO, ILO, International Chamber of Shipping (ICS) and the International Shippers Federation (ISF), International Association of Classification Societies (IACS), World Shipping Council (WSC), etc, Regional bodies and Memorandum of Understandings (MOUs). The responsibility of collating, aggregating and coordinating the “many interests and gaining agreement to a consistent body of maritime laws” fall to the United Nations. The United Nations Convention on the Law of the Sea (UNCLOS 1982) sets the broad framework, whilst the task of developing and maintaining workable regulations within this framework is delegated to two agencies of the United Nations – the IMO and ILO. The IMO is responsible for regulations on ship safety, pollution and security, while the ILO is responsible for the laws governing people on board ships. These two organisations produce conventions which became law when they are enacted by each maritime state [3]. Other major stake holders in the regulatory process are the classification societies otherwise referred to as Recognised Organisations (ROs). They assist the “maritime regulators in making and implementing maritime laws with a technical, human and environmental face [3]. In addition, they develop technical standards in their own right and award certificates which are required by the insurance underwriters. The classification societies are the shipping industry’s system of regulating the technical and operational standard of ships. They do so by making rules for ship construction and maintenance, and issue certificates to reflect compliance. Other key players in the regulatory process at the international stage are the regional bodies such as the European Maritime Safety Agency(EMSA), regional MOUs on port state control, ICS/IFS, WSC,the International Association of Independent Tanker Owners(INTERTANKO), the International Group of Protection and Indemnity Clubs(P & I), Charterers, Banks and other Financial Institutions etc. At the national level, the key players are the Nigerian Ports Authority (NPA), National Inland Waterways Authority (NIWA), the Nigerian Shippers Council (NSC), NIMASA and the Council for the Regulation of Freight Forwarding in Nigeria (COREFFN).These organisations assist in the implementation of IMO and ILO regulations on maritime safety and environmental protection; as well participate in the process of evolving the regulatory instruments through

active participation in the activities of the relevant committees and sub-committees of the two UN agencies.

III.THE SHIPPING INDUSTRY & THE REGULATORY PROCESS-INTERNATIONAL ENVIRONMENT

i. *The International Association of Classification Societies (IACS).*

The main role of the classification society is to “enhance the safety of life and property at sea by securing high technical standards of design, manufacture, construction and maintenance of mercantile and non-mercantile shipping”². In addition to their role as regulators, the major classification societies also represent the largest single concentration of technical expertise available to the shipping industry internationally and locally. They also have very outstanding role in advising ship owners on technical issues; as well undertake technical inspection works on behalf of governments. The chairman of IACSS, in presentation in 2008 to the Singapore and Hong Kong Association of Ship Owners, succinctly described the importance of the classification societies such:

*“Where class plays a role is in its ability to translate safety and environmental objectives into regulation and standards drawing upon our unique technical competence and the experience collected by following the ship throughout its life cycle...class has assumed the role of...a competent technical body playing an independent role while maintaining the trust and confidence of the of all stakeholders.”*³

The priorities of class and IACS are therefore, to maintain existing trust and confidence so far cultivated foster a focus on quality and competence, reinforce its role as a “maritime technology bank”⁴, as well positioning itself uniquely to provide realistic insights while utilising feedback from the dozens of ships in operation. The role of the classification societies are therefore, seen in developing the rules (to include new initiatives and the updating of existing rules), and the application of the rules to the practical ship building and shipping activities. They do this by agreeing on Unified Requirements (URs) as rules and regulations which are arrived at through extensive research and development, and service experience; and which undergo constant refinement based on additional research or practical experience [4] Again, Classification societies have become involved in the Flag state regulations, as Government representatives. Most areas of this delegated responsibility are in Tonnage Measurements, Load Lines, MARPOL, SOLAS and IMO Standards in the movement of dangerous goods. The international community, expressed through governmental representation at the IMO, determines the acceptable risk levels in respect to the conduct of maritime transport and evolves standards prescriptively or goal-based. IMO is expected to establish broad based requirements while the Classification Societies would develop detail Rules that would enable the Industry to meet with the goals [4]

² Stopford, M (2009), Maritime Economics, *The Classification Societies Today*, p. 660

³ Svenson, T.E. (2008), *Regulatory developments now and in the future*

(<http://www.dnv.com/industry/maritime/publicationsanddownloads/publications/dnbulk...15/02/2011>)

⁴ A term coined by CCS Li Kejun

ii. **The International Chamber of Shipping/International Shippers Federation (ICS/ISF)**

The ICS is the principal trade association for ship owners and operators which representation covers regulatory, operational and legal issues while ISF is the international employers' organisation for ship owners concerned with labour affairs and training issues. These two organisations represent this sector of the industry to national governments and internationally at IMO and ILO, and other relevant bodies. Their consistent role in the regulatory process is through the promotion of ratification of IMO/ILO conventions by governments; participate in the formulation of IMO/ILO regulatory instruments through active participation in the deliberations of IMO/ILO committees and making presentations to sub-committees of developed global consensus on issues within their domain. This is illustrated in figure 1 for ICS.



Figure.1. The Role of ICS in the Maritime Regulatory Process [5]

Specifically, ICS aims at promoting the “interests of ship owners and operators in all matters of shipping policy and ship operations”, with concerns bothering on “...technical, legal, employment affairs and trade policy issues that impact on international ship operations” [5]. ICS, as representative of the ship owners in consultative capacity with various intergovernmental shipping regulatory bodies like the IMO, maintains a global regulatory framework for the international shipping industry. It was established in 1921. The ISF was established in 1909 and depicts the “identity used by ICS when acting as the international employers’ association for ship operators” [5]. Its principal regulatory focus is on global issues concerning labour and training in the shipping industry. For example, the ISF represented the employers throughout the deliberations at IMO that led to the adoption of STCW amendments, made publications of guidelines on the STCW Convention including the “Manila Amendments” and assist shipping companies to comply with current requirements that has to do with maintaining individual seafarers’ rest hour records with the development of its Watchkeeper-3 computer programme.

iii. **The World Shipping Council (WSC)**

The WSC is the umbrella organisation for the Liner Shipping companies. The 29 Liner shipping companies represented by the

WSC carry approximately 90% of the worlds `containerized ocean traffic. It was originally formed to interface with the US government on behalf of the international liner shipping industry, but later worked to be granted a consultative status by the IMO after the attacks of September 11, 2001. It supports the IMO in evolving regulations bothering on safety, security and the maritime environment. For example, it filed a proposal in 2017, on behalf of its members, to the IMO for consideration as the IMO develops a comprehensive strategy for Greenhouse Gas emission [6] The WSC partners with governments and other stakeholders in the shipping industry to collaborate on actionable solutions to challenging problems to the international shipping industry. Presently, the WSC is involved in the development of legislative instruments to improve air quality through reduction of Air emissions (being the first organisation to endorse proposals for stringent international controls addressing nitrogen oxides (NOx), sulphur oxide (SOx), and particulate matter (PM) emissions from ships.), vessel discharges, invasive species, marine life and habitats, recycling, reuse, and waste management, the reduction of marine noise and other issues relating to human health and the environment.⁵ Other areas the WSC is actively involved include the establishment of a convention on cargo liability; enhanced customs information; an international technology standards for containers; and the development and advancement of policies for a modern and efficient maritime transportation infrastructure.

iv. **International Association of Independent Tanker Owners (INTERTANKO)**

INTERTANKO is the umbrella organisation representing the independent tanker owners with the goal of ensuring safe, responsible and competitive transportation of oil. Membership is open to independent tanker owners and operators. It works closely with industry counterparts including the Oil Companies International Marine Forum (OCIMF), Chemical Distribution Institute (CDI), Society of International Gas Tanker and Terminal Operators (SIGTTO), International Association of Class Societies (IACS), International Group of P&I Clubs, the Port State Control MoUs, US Coast Guard, European Commission and others on issues bothering on technical, legal and commercial affecting Tanker owners and operators globally [7]. It is a non-governmental organisation with observer status at the IMO, the United Nations Conference on Trade and Development (UNCTAD) and the International Oil Pollution Compensation Funds (IOPC).

INTERTANKO initiated the regulatory process in IMO with regards to Material Safety Data Sheets (MSDS), and had raised concerns that the new SOLAS regulation does not provide for any defence mechanism in the event that ships do not receive the required MSDS or when the format and/or the content of the MSDS are not adequate.

v. **The International Group of Protection and Indemnity Clubs (P & I)**

The P & I clubs are associations of ship owners formed in the interests of pooling risks to third party liabilities; and serve to provide maximum financial protection to club members in the face of daunting risks as well to represent their collective interests in international fora, most notably at the IMO.⁶

⁵See: <http://www.worldshipping.org/industry-issues/environment>
⁶ Joseph E. Vorbach (2001): *The Vital Role of None-Flag State Actors in the Pursuit of Safer Shipping*, Ocean Development & International Law, 32:27-42, Taylor & Francis 0090-8320/01

Although individually competitive, they bring together the collective influence of the mutual clubs as a force for security and stability in international maritime trade.⁷ The P & I group represents about 90% of the world's oceangoing tonnage covering most types of vessels to discuss with governments, law makers and other regulatory stake holders on issues that bother on the ship owners' liabilities to ensure the availability of adequate and sustainable insurance for such liabilities, and to help to drive and shape effective and balanced policies and regulations governing such liabilities⁸. The involvement of private institutions (such as the P & I) in the regulatory process can have substantial benefits for those institutions. Once regulation is perceived as more than simply a relationship between government and ship owners, then such intermediate 'stakeholders' become viewed as an essential part of it. This can give them opportunities to make substantial input into the policy process and regulatory design.

vi. *The Charterers*

The Charterers in many ways play a role in the regulatory process with indirect relationship with the class. Charterers base their decision in choosing vessels on the knowledge, experience, market factors and the relationship they may have forged with the various ship owning companies. By discriminating in favour of well-built and maintained ships, they help in the regulatory process and in trying to achieve this; they may need to engage the services of classification societies in order to get more information. In recent years, significant efforts were made by charterers (particularly the oil transportation companies) to refine shipboard inspection procedures, foster greater co-operation including the exchange of information and to extend the vetting process into the offices of the ship owning and operating companies[8].

vii. *Banks and other Financial Institutions*

Banks and other financial institutions can play a role in the shipping industry regulation by encouraging higher standards of marine safety through discrimination against sub-standard ships with low safety rating during loan acquisition processes. Insurance companies should impose higher premiums for un-classed ships or those with unsatisfactory safety records

IV. Nigeria's Maritime Regulatory Environment

i. *Legal and Regulatory Framework*

The Nigerian maritime regulatory framework revolves around Acts related to the shipping industry enacted nationally and other international standards ratified by her. Legal and regulatory framework as relating the maritime industry is provided in:

❖ *The Nigerian Maritime Administration and Safety Agency (NIMASA) Act 2007*: The NIMASA Act was established with the vested responsibility of overseeing and ensuring the development of the shipping industry and regulating matters relating to the merchant shipping and seafarers in Nigeria [9]. Other statutory functions of the Agency include implementation of IMO Conventions ratified by Nigeria, administration ship registration and licensing [9].

❖ *The Coastal and Inland Shipping (Cabotage) Act 2003*: The Cabotage Act of 2003 was enacted to stimulate and encourage the growth of the participation of Nigerians in the

domestic coastal trade. The Act prohibits the use of foreign vessels in domestic coastal trade in order to promote the development of indigenous tonnage. As stated earlier, the Act establishes a Cabotage vessel Financing Fund (CVFF) to promote indigenous participation especially in building vessel acquisition capabilities through the provision of financial assistance to operators in the maritime sector. Specifically, the Cabotage Act precludes a vessel other than a vessel wholly owned and manned by Nigerian citizens, built and registered in Nigeria from engaging in the domestic coastal carriage of cargo and passengers within the coastal territorial inland waters, or any point within the waters of the exclusive economic zone of Nigeria [9]. The objectives of the Cabotage Act are to "ensure national sufficiency in tonnage capacity, shipbuilding and seafarers capabilities; acquire the technical know-how in ship management, shipbuilding and ship manning; enhance the earnings and conservation of foreign exchange for the country; preserve the internal and economic security of the nation; and create employment in the maritime industry" [2].

❖ *Nigerian Ports Authority (NPA) Act 1999*: The NPA Act was established to among others, empower the Authority to enact port regulations and bye-laws as well monitor and enforce them to ensure safety and security of operation of vessels in the Nigerian territorial waters. The Act also empowers the Authority to be responsible for issues that pertain to marine incidents and pollution.

❖ *Merchant Shipping Act, 2007*: The Merchant Shipping Act was enacted to make provision for merchant shipping in Nigeria. It allows ships registered in Nigeria to operate to the exclusion of others except those that have statutory exemptions. Article 20 of this Act empowers the Minister of Transport to "make regulations relating to the procedure for the registration of Nigerian ships" [10].

❖ *The National Inland Waterways Authority (NIWA) Act of the National Assembly, CAP 47, Laws of the Federation of Nigeria (LFN), 2004 (Decree No. 13 of 1997)*: NIWA previously the Inland Waterways Department of the Federal Ministry of Transport, was established with the primary responsibility to "improve and develop Nigeria's inland waterways for navigation"⁸. The Act gave the Agency the role to provide regulation for inland water navigation, develop indigenous technical and managerial skills necessary for active participation in inland waterways transportation.

❖ *Nigerian Shippers Council (NSC) Act, 2004*: The NSC was established by an Act Cap. N133 LFN in 2004 "...to provide a forum for the protection of the interest of shippers in matters affecting the shipment of imports and exports to and from Nigeria..."⁹ Other subsidiary legislations that follow this Act are the Nigerian Shippers' Council (Freight Stabilization Fees) Regulations 1995, the Nigerian Shippers' Council (Local Shipping Charges on Imports and Exports) Regulations 1997, the Nigerian Shippers' Council (Inland Container Depot) Regulation 2007, the Nigerian Shippers' Council (Container Freight Station) Regulation 2007, the Nigerian Shippers' Council (Port Economic Regulator) Order 2015 and the Nigerian Shippers' Council (Port Economic) Regulation 2015.

⁸ See: <https://niwa.gov.ng/about-us/>

⁹ See: <https://www.shipperscouncil.gov.ng/legal-framework>

⁷ See: <http://www.igpandi.org/>

❖ **National Assembly Senate and House of Representatives Committees on Marine Transport:**

The Maritime Transport Committees of both chambers of the National Assembly of Nigeria rely on informed suggestions from other stakeholders in the maritime sector at public hearings and other means as veritable instruments in the law making process. These committees facilitated the enactment of bills such as the NIMASA Act, Cabotage Act, and the Act establishing the Council for the Regulation of Freight Forwarding in Nigeria etc. Other bills in the making process are the Port and Harbour Bill, Chartered Institute of Shipping of Nigeria Bill, Maritime Zone Bill and the Nigerian Merchant Navy Security and Safety Corps Bill.

ii. **Current Regulatory Developments in the Nigerian Maritime Industry**

Currently, there are some bills that have been passed and those before the National Assembly undergoing legislative processes that according to NIMASA [2] may reshape the outlook of the maritime industry with time when passed into law. Majorly, these include:

❖ The passing of Anti-Piracy Bill presented to the National Assembly in 2018, and which incorporates the relevant sections of the IMO's International Convention for Safety of Life at Sea, 1974, and its Protocol of 1988 (SOLAS) and the International Convention for the Suppression of Unlawful Acts at Sea (SUA) evolving a more comprehensive approach to dealing with menace of sea piracy, Armed robbery and other related crimes in the Nigerian coastal waters.

❖ The Establishment of the Nigerian Marine Development Bank Bill; the Deep Offshore and Inland Basin Production Sharing Contract (Amendment) Bill 2016; the Inland Fisheries Act (Amendment) Bill 2017; and the Cabotage Act (Amendment Bill) 2017.

❖ The continuous review of the Merchant Shipping Regulations including trends in the development of international maritime standards and protocols to include Safety of Life at Sea (SOLAS) Protocol of 1988; Marine Pollution (MARPOL) Convention of 1973/78; Marine Pollution (MARPOL) Protocol of 1997; International Convention on Load Lines of 1966 (LL66); Load Lines Protocol of 1988 (LL PROT 88); International Regulations for Preventing Collision at Sea 1972 (COLREG 72); International Convention on Standards of Training, Certification and Watch keeping for Seafarers of 1978 (STCW 78) and its mandatory codes; and the Nairobi International Convention on the Removal of Wrecks, 2007.

V. Nigerian Shipping Industry Regulatory Role In The Near Future

As earlier indicated, NIMASA is the statutorily designated Government Agency charged with the responsibility under the Merchant Shipping Act 2007 and the NIMASA Act 2007 to implement and enforce international regulatory instruments of the IMO and ILO that have been ratified by Nigeria. The future industry regulatory role has to consistently follow the evolving trend in the dynamics of international maritime legislation with regards to emerging technological developments in ensuring better safety of lives at sea and protection of the maritime environment. The major areas of focus of the industry in the near future shall especially as it affects Nigeria, include but not limited to the:

i. **Amendment to the Convention on Facilitation of International Maritime Traffic 1965 (FAL) expected to have entered into force on 1st January 2018**

The industry should in collaboration with the relevant agencies of Government, ensure the speedy ratification and implementation of the areas in the convention that has been amended to include notably, the mandatory requirements for the electronic exchange of information on cargo, crew and passengers which should be in place as from the 8th of April, 2019. Other standards introduced include shore leave and access to shore side facilities for crew without discrimination. Failure on the part of State parties is expected to be reported to the IMO accordingly. [2] The amendments also recommended standards and practices on how stowaways should be treated with references to the relevant provisions of the International Ship and Ports Facility Security (ISPS) Code. The amendment requires National governments to translate into their legislations grounds to allow for prosecution persons whose conduct relate to such acts, including those who aid and abet such actions.

ii. **MARPOL Annex VI Amendment expected to have entered into force on 1st March 2018**

At its 70th session, the IMO Marine Environmental Protection Committee (MEPC) adopted amendments to Chapter 4 of annex VI of the International Convention for Prevention of Pollution from ships (MARPOL) and new Regulation 22A on collection and reporting of ship fuel oil consumption data [2]. Vessels of 5000 gross tonnage and above are required under this amendment, to collect fuel consumption data and forward same to national administrations which in turn, would forward same to the IMO after issuance of statement or certificate of compliance. Such transmissions to the IMO shall form the basis for the Secretary General to produce annual reports to the MEPC summarizing the data collected, the status of missing data and such other relevant information that may be requested [2].

iii. **Amendment to MARPOL Annex 1 (IOPP) certificate and MARPOL Annex V (HME Products) expected to have entered into force on 1st March 2018**

Amendments were also adopted at the 70th session of the MEPC to MARPOL Annex 1 to update form B of the supplement to the International Oil Pollution Prevention (IOPP) certificate in relation to segregated ballast tanks, and to MARPOL Annex V related to products which are Hazardous to the Marine Environment (HME) and form of Garbage Record Book. These amendments provide criteria for the classification and declaration by the shipper of solid bulk cargoes as harmful to the marine environment if these are classed as harmful and not discharged.

iv. **Amendments to the IMSBC Code expected to have entered into force on 1st January 2019**

In the Amendments to the International Maritime Solid Bulk Cargoes (IMSBC) Code, the shipper is mandated to ensure that a test is conducted on the solid before shipment and the test results so declared. The shipper is also required in the Amendments to declare if a solid bulk cargo other than grain, is harmful to the marine environment

v. **STCW Polar waters emergency training on passenger ships expected to have entered into force on 1st July 2018**

The IMO's Maritime Safety Committee (MSC) at its 97th session adopted the amendment of the STCW and its related Code. The amendments include the mandatory minimum training requirements for masters and deck officers on ships operating in

Polar waters and an extension of emergency training for personnel on passenger ships.[2]

vi. Amendments to the ESP Code (2011) expected to have entered into force on 1st July 2018

The amendments to the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers (ESP), 2011 were adopted under the SOLAS Convention by the IMO Maritime Safety Committee at its 97th session. These provide requirements for an elaborate inspections programme during surveys of single hull and double hull tankers and bulk carriers, and ensuring renewal of same annually or intermediately. Other notable international regulatory updates include the amendments to the SOLAS Convention entering into force on the 1st January 2020 wherein the IMO's MSC adopted amendments to regulation II-1/3-12 on protection against noise; regulation II-2/10 on fire fighting and regulation XI-1/2-1 on harmonization of survey periods of cargo ships not subject to the ESP Code; amendments to the 2008 International Code on Intact Stability (IS Code) entering into force on 1st January 2020 relating to ships engaged in anchor handling, lifting and tending operations; amendments to MARPOL Annex VI on 0.50% global sulphur limit by the IMO's MEPC expected to enter into force on the 1st January 2020; and the Ballast Water Convention which has been in force since 8th September, 2017, and which requires Ships to manage their ballast water to ensure the removal, render harmless or avoid the uptake or discharge of invasive aquatic species [2].

VI. IMPACT OF REGULATION ON THE SHIPPING INDUSTRY

i. Reduction in the Number of Ship Losses

Regulation has relatively reduced the loss through sinking of ships. Most losses are ships damaged and "written off" by the hull insurers as being beyond economical repair - described by underwriters as "total constructive losses".¹⁰ Figures 2 and 3 cover the entire global shipping industry and indicate the steady improvement in safety performance over a decade. Even as the long down trend seems encouraging, more has to be done to improve on the overall safety of vessels through support and encouragement from the international regulatory bodies such as the IMO/ILO in technical and human resource development to flag states and the industry.



Figure.2. Total Ship Losses in Declining Trend (Source: Lloyd's List Intelligence Casualty Statistics. Analysis: AGCS)

¹⁰ See: <http://www.marisec.org/shippingfacts/safety/principal-regulations.php>

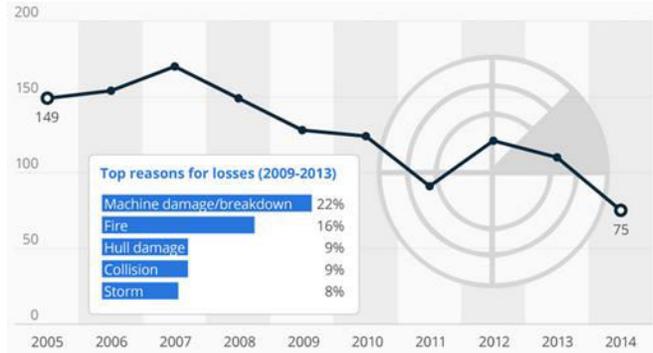


Figure.3. Reasons for Losses and Total Number of Ships Lost at Sea (2005 – 2014) (Source: Allianz Global Corporate & Specialty)¹¹

The construction of the vessel with regard to materials, technology and expertise employed may not be the only focus when it comes to safety and environmental protection, but the experience of the crew, training and emergency preparedness also plays key roles. Flag states, Port states and the industry need to be encouraged to enforce Standards in this regard to sustain this declining trend in Ship losses.

ii. Reduction in the Number of Accidents at Sea

The figures from insurance claims for third party liability, such as incidents involving personal injury, cargo damage, pollution, or damage to property (e.g. other ships or port equipment) indicated that accidents involving ships at the high seas is on the decline. The figures have been produced by the UK P&I Club, which insures around 20% of the world's ships, and take account of changes in the number of ships entered in the Club.¹²

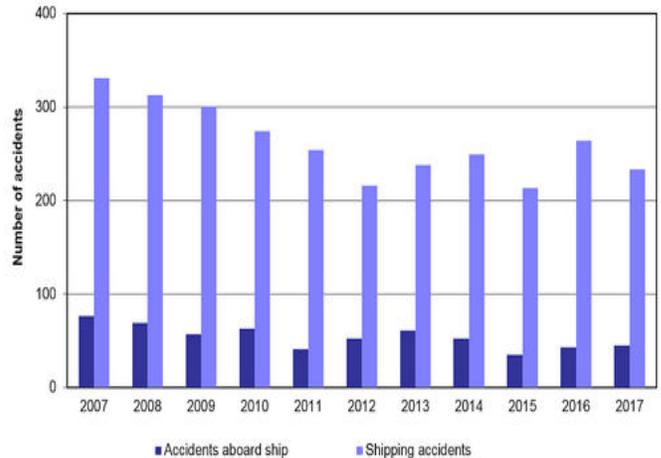


Figure.4. Accidents aboard ship and shipping accidents, 2007–2017 [12]

Most shipping accidents involve Tankers and are the biggest environmental polluters compared to other types of vessels. Consequently, more attention has been given to tragic accidents involving tankers over the decade. Regulatory developments in this regard have positively influenced the trend. Navigational accident rates for Aframax tankers have been shown to have accent on regulation influence over the period 1978–2003 by Eliopoulou and Papanikolaou (2007) and IMO (2008) [14],

¹¹ See: <https://gcaptain.com/infographic-ship-losses-reach-10-year-low>

¹² See: <http://www.marisec.org/shippingfacts/safety/principal-regulations.php>

[15]. This effect was made noticeable with a phase-lag in relation to the years of their implementation [13]

iii. Reduction in the Number of Oil Spills and Quantity of Spilled Oil

The amount of oil spilled by ships varies from year to year and figures for a particular year can be distorted by a single large incident. However, in general terms, shipping has shown a marked downward trend in the amount of oil spilled each year as a direct consequence of rigorous regulatory regime. Figure 5 shows data from the International Tanker Owners Pollution Federation (ITOPF) indicating the number of medium sized (7-700 tonnes) and large spills (>700 tonnes) caused by tankers spanning over four decades, and over which period the incidence of large spills from tankers reduced. Similarly, Figure 6 shows same trend in the quantity of oil spilled over the period from same source. These are happening even as the worldwide trade on oil and gas products increased tremendously.

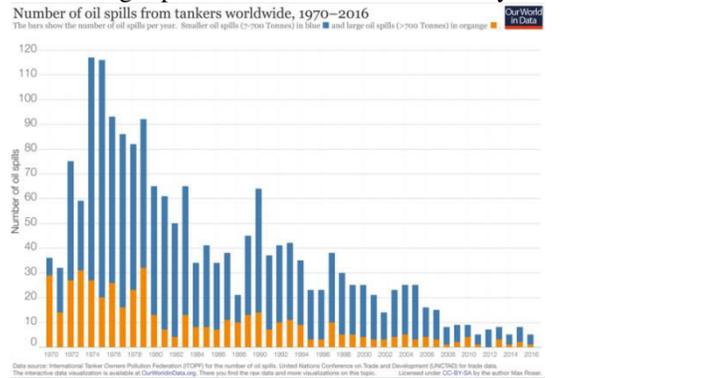


Figure .5. Number of medium sized (7-700 tonnes) and large spills (> 700 tonnes) caused by tankers, 1970-2016¹³[16]

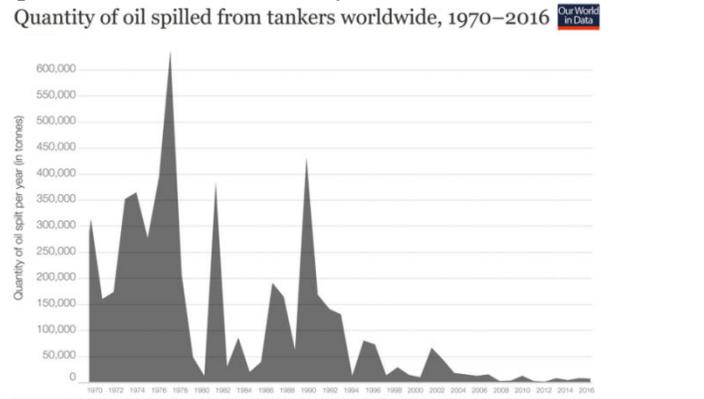


Figure.6. Quantity of Oil spilled from Tankers worldwide, 1970 – 2016 [17]

iv. Reduction of Number of Lives Lost at Sea

As in all transport sectors, lives are sadly lost as a result of accidents at sea. Disappointingly, there has been a rise in fatal accidents in the last two years, although the loss of life in shipping is in fact relatively modest, and the overall trend is one of reduction in the number of fatalities, which is all the more impressive in view of the growth in the number of ships in the world fleet. The European Maritime Safety Agency (EMSA), in its Annual Review of Marine Casualties and Incidents 2018, stated that reported casualties had stabilized around 2,300 per

¹³ See: Max Roser (2017), “Oil Spills”, [Online], Available on: <https://ourworldindata.org/oil-spills>

year since 2014 [18]. The report however, stated that the number of very serious casualties has been steady over the past five years with 2.9% reported to be very serious. In 2017, the report indicated that 2.2% of the reported marine casualties were very serious, 23.6% serious, 58.4% less serious and 17.9% were marine incidents as demonstrated in Figure 7[18].

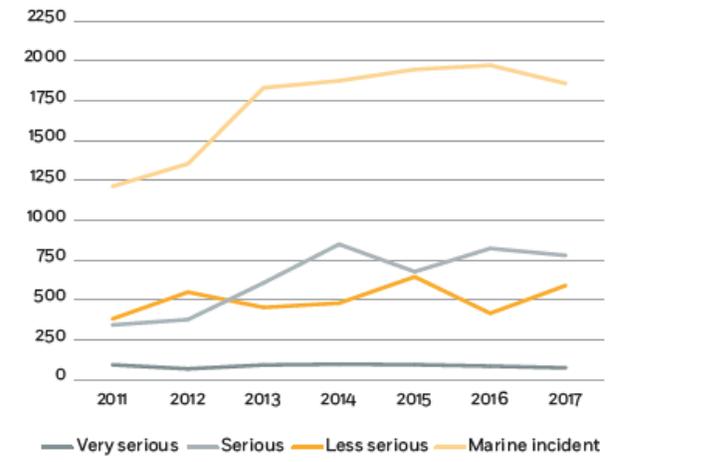


Figure.7. Number of marine casualties and incidents per severity [18]

v. Reduction in the Number of Piracy Incidents

The first global geospatial piracy incidence analysis done by the United Nations Institute for Training and Research (UNITAR) with data primarily from the IMO Global Integrated Shipping Information System (GISIS) from 1995 to 2013 revealed the developmental trends of geospatial patterns and severity of reported piracy incidents [19]. The analysis indicated a significant reduction in the number of pirate attacks, and the reduction in the median distance from point of attack reported to the nearest coast from 400km in 2010 to less than 50km in 2013, thus indicating a reduction in the radius of successful pirate activities [19]. Again, the International Chamber of Commerce (ICC)-International Maritime Bureau (IMB) Piracy and Armed Robbery against Ships Report for the period 1 January – 30 June 2018 indicated a downward trend as illustrated in figure 8 with a total of 107 incidents being reported to the IMB Piracy Reporting Centre (PRC) [20]. Regulatory impact on this trend cannot be wished away as increased international cooperation in the enforcement of maritime laws has seen significant improvement in maritime security. These efforts shall remain vital to addressing national, regional and international threats to security threats in the maritime domain.

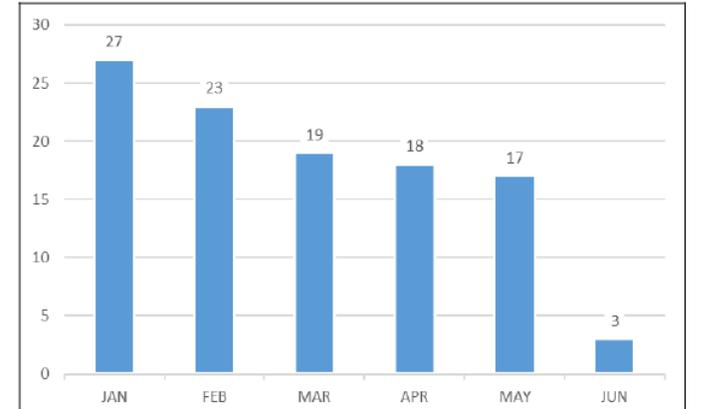


Figure .8. Monthly comparison of incidents during January – June 2018 [20]

vi. *Increased Pool of skilled labour*

International regulatory instruments such as the International Safety Management Code (ISM) and the International Convention on Standards of Training, Certification and Watch-keeping of Seafarers (STCW) and its related STCW Code are developed and enforced to enhance the welfare and skills of seafarers which is crucial to the development of the shipping industry. Effective enforcement of these standards with provision for opportunities for education of maritime professionals (that understand the happenings in their waters, what to do about it and have response assets at their disposal that would serve to detect, deter, and where necessary interdict maritime crime) would enhance safety in the industry [20].

VII. REGULATORY CHALLENGES IN THE NIGERIAN MARITIME ENVIRONMENT

In the Nigerian maritime regulatory environment, challenges are very obvious in the near future as it is presently especially in the policy context. It is difficult to predict functional future policies of the national government and that of the international regulatory agencies such as IMO and ILO. However, in Nigeria, potential exists for regulatory developments that might affect the shipping industry such as the petroleum industry governance bill (PIGB) which seeks to bring under one law the various “legislative, regulatory, and fiscal policies, instruments and institutions that govern the Nigerian petroleum industry”[2]. The full implementation of this law is expected to increase investments in the shipping industry thereby increasing Cabotage activities and increased international maritime trade.

VIII. CONCLUSION AND RECOMMENDATIONS

The litany of industry participation in the maritime regulatory process as reviewed above points to the fact that IMO’s outputs in legislations and codes are products of the contributions of all stakeholders in the regulatory process, especially the shipping industry. Internationally, the various components of the shipping industry ranging from the classification societies to organised associations representing the various segments of the industry play significant roles and participate actively during the maritime law making process through expert contributions and assisting flag, port and coastal states in implementation to ensuring safe, secure operations and environmental protection. The impact of rigorous regulatory regime on the maritime safety and environmental protection have been ex-rayed indicating positive trends in the aspects of ship losses, number of accidents at sea and severity, number of oil spills and the quantity spilled, lives lost at sea, number of piracy incidents and increment in the pool of skilled seafarers. In Nigeria, NIMASA plays a significant role in the implementation of domesticated international rules, the Cabotage Act and other related laws. NIMASA’s capacity to effectively do this is largely dependent on its ability to collaborate with interdepartmental agencies to enforce laws within the maritime domain in cooperation with the international community. Again, NIMASA would have to, in collaboration with the local shipping industry, acquire necessary assets and expertise, evolve well-developed, inclusive and efficient legal framework which would allow the various government agencies involved in maritime enforcement to work effectively together, assigning responsibilities and authorities in tandem with the

international maritime bodies like the IMO, for effective delivery in its mandate. In doing so, it must work to increase the Maritime Domain Awareness (MDA) on the part of all stakeholders in the maritime industry through enhanced maritime governance. Consequently, it would be to the best interests of the regulatory bodies and the industry that this symbiotic relationship be sustained to ensure “*safe, secure and clean ocean*” - the “*common inheritance of mankind*”.

IX. REFERENCES

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