



**Rear Admiral Dr. Amarulla Oktavian, S.T., M.Sc., D.E.S.D.**  
Commander of Naval Command & Staff College - Indonesian Navy

## Abstract

Since the establishment of IORA (1997) and IONS (2008), the maritime security of the Indian Ocean has become of the members' priorities. Maritime security cooperation concept is based on the increase of the quantity and quality of maritime security threats, both traditional and non--traditional. In the last decade, maritime security has shifted more to facing non--traditional threats that utilize marine resources illegally as well as marine ecosystem pollution. Maritime security cooperation is one of the solutions to strengthen sustainable maritime development. It could be done through bilateral, regional and global frameworks by involving navies and coast guards of coastal states in the region. This initiative is in line with the maritime agenda in marine and ocean resources Conservation and Use in order to achieve sustainable development (SDG 14). Based on its Global Maritime Fulcrum and Ocean Policy, Indonesia has proposed initiatives to establish maritime security cooperation to eradicate IUU Fishing and to prevent pollution at sea, in which both are very relevant to be further developed in the Indian Ocean region to realize common mindset, attitude and action through strategic partnership frameworks in efforts to achieve sustainable development in the maritime domain.

**Keywords:** - IORA, IONS, SDGs, Maritime security cooperation

## 1. Introduction

As a concept, maritime security came to be after the 11 September 2001 terrorist attack in New York, the United States. In the beginning, the concept was closely connected to the increasing traditional threats of piracy and terrorism, as seen in Somalia (Gulf of Aden) in the years of 2008 until 2011. In the current decade, however, the concept of maritime security has shifted to facing non--traditional threats of illegally utilizing maritime resources and pollution at sea, in line with the concept of Blue Economy.

In order to fulfil the requirements of the blue economy concept, activities must present social and economic benefits for both current and future generations, as well as able to heal, protect and guard the diversity, productivity, resilience, core function and intrinsic values of marine ecosystem, based on clean technology, and renewable energy to cut down waste and promote recycling. Hence, the United Nations and some countries, including Indonesia, have formulated their national policy on the maritime.

In 2015 the United Nations agreed upon the Sustainable Development Goals (SDGs), a framework of action formulated for the world's post--2015 development agenda. As a country

situated strategically in the region, Indonesia continues to strengthen its national maritime development by encouraging all countries in the Asia Pacific region to work together to eliminate IUU Fishing and prevent pollution on marine ecosystem by formulating a maritime agenda that represents one of the goals of the SDGs; SDG 14, which is conserve and sustainable use of the oceans and seas and marine resources for sustainable development.

On regional and global level, Indonesia is consistent in raising the maritime issue as a crucial element in the efforts to achieve sustainable development. In the 2014 East Asia Summit in Myanmar, President Joko Widodo presented the five pillars of Indonesia's Global Maritime Fulcrum, which are (1) Development of maritime culture; (2) commitment to protect and manage marine resources by focusing on developing marine food sovereignty by developing fishing/seafood industry with fishermen as its main pillar; (3) Commitment to promote the development of maritime infrastructure and connectivity by establishing sea toll, sea ports, logistics and shipping industry, as well as maritime tourism; (4) Through maritime diplomacy, Indonesia invites all partners to cooperate in the maritime domain; and (5) As a country connecting two oceans, Indonesia is obligated to develop its maritime defense.<sup>1</sup>

The follow up to the pillars of the Global Maritime Fulcrum was formulated in the Indonesia's Ocean Policy (2016); to realize sustainable development through different forms of economic activities that should be able to fulfil the needs of current and future generations. Therefore, economic development must be implemented based on sustainable development principles that (1) resource utilization should not exceed the regeneration capacity and innovation pace of natural and non--natural resources (renewable and non--renewable), and it should

not destroy the sustainability of natural resources; (2) resource utilization should not sacrifice the needs of future generation (quality and quantity); and (3) for resource utilization with unknown or unidentified impacts, the practice should be done carefully and supported by trusted scientific research.<sup>2</sup>

Maritime security cooperation is paramount, not only among navies but also with coast guards and other maritime agencies. As a country strategically situated in the Indian Ocean, Indonesia has the obligation to encourage other countries in the region to cooperate in the efforts to eradicate IUU Fishing and to prevent pollution at sea. In managing these threats, Indonesia has formulated its ocean policy on Defense, Security, Law Enforcement and Safety at Sea to uphold sovereignty and law, defend the country's territorial integrity from threats, challenges, obstacles and disturbance in its waters. Therefore, Indonesia implements the strategy of enhancing its active role in maritime defense and security cooperation on regional and international level.<sup>3</sup>

In the area of Maritime Diplomacy, Indonesia's foreign policy is aimed to optimize existing marine potentials to fulfil national interest in line with national regulations and international law through the strategy of enhancing leadership in various maritime cooperation on maritime issues in the bilateral, regional and multilateral levels.<sup>4</sup>

The establishment of IORA with its 21 member countries and seven dialogue partners opens significant opportunities to develop and increase mutual beneficial cooperation through partnership, interoperability and sustainability approach based on the spirit of multilateralism. The cooperation should abide upon the principles of sovereign equality, territorial integrity, political independence, non--interference, peaceful manner and beneficial.

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1 Oegroseno, Arif Havas, Indonesia's Maritime Identity and Its Aspirations of Becoming a Global Maritime Fulcrum,  
2 Presidential Decree of the Republic of Indonesia Number 16, Indonesian Ocean Policy, Coordinating Ministry for  
Maritime Affairs Republic of Indonesia, 2017, p. 45  
3 Ibid., sup--chapter 5.2. (d)., p. 26  
4 Presidential Regulation Number 16 Year 2017 on Indonesia Ocean Policy, Attachment I of sub--chapter 5.7. (a)., p. 32

## 2. Academic Perspective on Maritime Cooperation and Sustainable Use of Marine Resources

Maritime security cooperation, either to manage the threat of IUU Fishing or to ensure sustainable use of marine resources, is based on the universal role and function of the navy based on Ken Booth's Trinity theory<sup>5</sup>, which consists of the military, constabulary and diplomacy role of navies. These common functions, especially for the constabulary function and supported by the diplomacy role, bring about simplicity in formulating cooperation framework with other countries, both bilateral and multilateral. Moreover, IORA countries share a common geographical position against their source of marine resources, the Indian Ocean; another factor supporting the development and strengthening of maritime cooperation. Alfred Thayer Mahan (1660--1783)<sup>6</sup> explained that sea power of a country is influenced by its geography, physical conformation, extent of territory, population, character of the people and policy support from the state. Mahan also explained how limited land and good weather would compel the people to focus their activities at sea. It is an obligation for IORA countries to protect the Indian Ocean from threats that undermine marine resource protection as well as cause pollution at sea, both individually and through cooperation.

Maritime security cooperation could be formulated in the form of strategic partnership. This form of cooperation evolved from previous form of partnership, from "conference diplomacy" of the 19th century, "the era of international organization" in the 20th century, and finally in the 21st century it is known as "summit diplomacy". In this second decade of the 21st century, we are now looking at the emergence of

"strategic partnership", a relation that combines flexibility and deep rapprochement, which has become a supplement for multilateral negotiations on important global issues.<sup>7</sup> As a part of foreign policy, strategic partnership has the role to increase cooperation among states sharing common goals. A crucial and common thing in fostering and enhancing the strength of a partnership is an institutional element that binds the willingness to commit on a long term relations among partner states. Strengthening cooperation also requires the support of a Standard Operation Procedure (SOP) equipped with interoperability system capability, which is a unit able to provide service to and accept service from a different system or unit, allowing both parties to operate effectively together.<sup>8</sup> Interoperability allows navies in the region to operation together in accordance to necessity. Requirements for interoperability among regional navies in return produces harmonization with political advantages. It will not conflict with any international policy of any state, considering the area of cooperation formulated in the SOP could be applied in general by all members of IONS. Such cooperation should also be supported by information sharing, assistance readiness and training of VBSS team, along with information support from merchant ships passing through the Indian Ocean region.

In regards to protection of the marine ecosystem, Hugo Grotius presented his *mare liberum* theory to the world that viewed marine ecosystem utilization activities as part of freedom of the sea.<sup>9</sup> Freedom that is not regulated and protected, however, will evoke environmental destruction and pollution at sea. In light of this reality, IMO has issued regulation on preventing various types of marine environmental pollution; MARPOL Convention 73/78. It regulates member states' obligations and responsibilities to prevent pollution and the dumping of chemical waste or

5 RAN, Australia Maritime Doctrine, RAN Doctrine 1, first edition, 2000, p. 57

6 Mahan, A.T., *The Influence of Sea Power Upon History*, New York: Little Brown Company, 1983, p. 29

7 Czechowska, Lucyna., *The Concept of Strategic Partnership as an Input in The Modern Alliance Theory*, Nicolaus Copernicus University in Toruń, Poland, 2013, p. 37

8 Gause, Kenneth., et. al, *U.S. Navy Interoperability with its High--End Allies*, Center for Naval Analysis, Virginia, p. 3

9 Djalal, Hasjim., *Perjuangan Indonesia di Bidang Hukum Laut*, Sinar Grafika: Jakarta, 1992, p. 14

goods from vessels at sea. The Protocol of 1978 includes an additional regulation, Tanker Safety and Pollution Prevention (TSPP), which aims to increase the safety of tanker vessels and implement prevention and controlling regulation on vessel-sourced sea pollution, especially tanker vessels, through modification and additional guidance. Another important obligation is the reporting of accidents at sea involving chemical and dangerous substances. The governments of member states are required to formulate instructions on the report making based on guidelines available in the Annex Protocol I.<sup>10</sup>

### Naval Cooperation

Maritime cooperation is the most effective and efficient means to resolve maritime security issues by conducting joint and coordinated operations in the Indian Ocean region. Since IORA was established in 1997, it is the only regional organization in the Indian Ocean. It was established based on the pillars of economy, maritime security and safety, education and culture, with cooperation priorities on: (1) maritime security and safety; (2) trade facility; (3) fishery management; (4) natural disaster risk management; (5) academic and science and technology cooperation; and (6) cultural exchange and tourism. Beyond these priorities, IORA has also raised two cross cutting issues, which are blue economy and women empowerment. Pressing cooperation includes on maritime safety and security in line with the concept paper of Maritime Security IONS Working Group presented during the 2016 IONS and the formulation of the standard operation procedure for maritime security cooperation to tackle threats of IUU Fishing and pollution at sea in the Indian Ocean region.

#### 3.1. Cooperation on IUU Fishing

Indonesia's active role in combating IUU Fishing is reflected through its resolution proposal

for maritime connectivity in order to achieve sustainable development, which was adopted by the 71st UN ESCAP meeting in Bangkok in 2015. The resolution invited countries in the Asia Pacific region to combat IUU Fishing; a way to point out the importance of maritime issues in achieving sustainable development. The SDGs, especially goal 14, clearly recognized that IUU Fishing is a serious threat upon sustainable development in the region, and therefore UN ESCAP encourages: (1) Asia Pacific nations **to strengthen cooperation on maritime transportation connectivity** in order to facilitate the achievement of sustainable development; and (2) for regional countries to take on further steps in combating IUU Fishing, to ensure long term conservation and sustainable utilization of marine resources and ecosystem, and to underline the importance of regional and global efforts and cooperation in tackling IUU Fishing.<sup>11</sup>

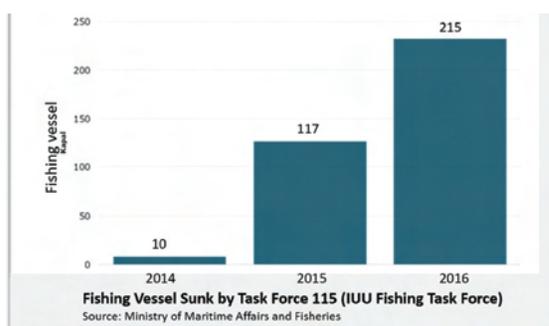
In the Indian Ocean region, maritime security cooperation in combating IU Fishing could be conducted through maritime diplomacy strategy for the sustainable protection of marine resources. The Indonesian government has issued a policy on eradicating IUU Fishing, which is the Presidential Decree Number 115/2015 as the legal basis for the establishment of Task Force 115, a task force with the main goal of combating IUU Fishing. Task Force 115, headed by the Minister of Maritime Affairs and Fishery, is a joint team with members from the Indonesian Navy, National Police, Ministry of Maritime Affairs and Fishery, Indonesia Coast Guard (Bakamla), and the Attorney General's Office. It focuses on law enforcement, in which its duties include (1) determining area of operations; (2) conduct operations and monitoring; (3) conduct search and investigation on fishery-related criminal acts; and (4) establish command and control center.

10 Sejarah Konvensi Maritime Pollution, <http://www.maritimeworld.web.id/2011/04/sejarah--konvensi--marpol--memahami--isi.html>, accessed on 3 October 2018

11 United Nations, Supplement No. 19, Economic and Social Commission for Asia and the Pacific (Annual Report 9 August 2014--29 May 2015), p. 20

12 Widodo (VADM), <http://satgas115.id/category/publikasi--satgas115/>, accessed on 5 October 2018

In the beginning, synergy was the task force's biggest challenge. In order to overcome this issue, Task Force 115 formulated its SOP and also designated its Command and Control Center. The latter is manned by personnel from different agencies (blended personnel), an effective solution that was also implemented onboard patrolling and operating ships, allowing better legal processing from start to finish. As the Commander of Task Force 115, the Minister of Maritime Affairs and Fishery has the authority, command, and control upon the elements of the task force; determines the target of the law enforcement operations; instructs the task force elements to conduct law enforcement operation and report on the development of duties and tasks to the President of the Republic of Indonesia every three months or according to necessity. The Task Force Commander is assisted by special staffs, expert team, and a secretariat in conducting her duties and functions.<sup>12</sup> Since its establishment, the task force has showed significant results in combating IUU Fishing.



On diplomacy, Indonesia organized a convention through Regional Conference on the Establishment of a Regional Prevention against IUU Fishing and Its Related Crimes periodically. The conference has been organized twice, the first in Bali on 19 May 2016, and the second in Yogyakarta on 12--13 October 2016. Indonesia also organized the Symposium Fisheries Crime (Fish CRIME) in 2016 by the Ministry of Maritime Affairs and Fisheries, which is a form of maritime diplomacy that falls into the typology of cooperative maritime diplomacy. This type of maritime diplomacy is Indonesia's effort to cooperate with countries in combating illegal fishing crimes. The regional cooperation mechanism of ASEAN+China could also be Indonesia's important forum to achieve its

maritime security interest; to establish regional stability. The forum could become Indonesia's maritime diplomacy media to discuss IUU Fishing issue, and especially to address the formulation of a Code of Conduct as a norm on the conduct of parties in the region. Thus, once realized, the Code of Conduct could be considered as one of Indonesia's maritime diplomacy achievements in establishing regional peace and security stability. As ASEAN's largest country, the Indonesian government could utilize this opportunity not only for its own national interest, but also for the common interest. By continuing its support and respect upon norms of international law, including UNCLOS 1982, and through active diplomacy, it is hoped that the Code of Conduct could be formulated as soon as possible by referring to existing international law. On a global scale, the Indonesian government expresses its commitment to eradicate IUU Fishing.

Indonesia has also conducted bilateral cooperation to combat IUU Fishing with a number of countries, for example Malaysia (RMN and MMEA) and Singapore (RSN and Police Coast Guard). Bilateral cooperation is important as it allows involved agencies to develop common action pattern and harmonization in managing illegal fishing activities, followed by agreement on effective law enforcement process that would eventually create deterrent effect on the perpetrators of illegal fishing activity.

### 3.2. In the Face of Pollution at Sea

Environmental pollution is a sensitive issue and has become the benchmark of modernization and the cooperative level of a state. It could even influence aspects of sustainable development. Pollution knows no state boundaries, and therefore wastes from neighboring states, either domestic or industry, could accumulate in the border area. In regards to pollution at sea, the issue covers pollution and waste, marine biota, research activities, natural resource exploration, including sea sand, lead, or fossil fuel/natural gas, as well as other activities related to maritime security issues.

Sources of sea pollution includes industrial waste, sewage, urban stormwater, shipping, agriculture and cultivated fishery. The main pollutants in wastes cover sedimentation, coliform, toxic metals, chemicals, pesticide, exotic organisms, pathogen organism, garbage, and other oxygen depleting substances,<sup>13</sup> while oil spill and ship accidents are usually caused by the operations of tanker vessels, maintenance and docking, loading and unloading terminals at sea, and fuel tanks.

Sea pollution is harmful not only to the environment, but also upon health, social issues, finance and economy. Direct impacts on organisms are lethal or sublethal, pushes the migration of marine biota, and the destruction of an ecosystem. Hence, marine pollution could be related to criminal acts if there is negligence and omission on the cause of pollution as well as ship accidents and offshore gas and fuel installations.

In order to prevent environmental pollution at sea, the United Nations and IMO have issued a number of conventions and international regulations, including (1) United Nations

Convention on the Law of the Sea 1982; (2) International Convention for the Prevention of Pollution from Ships 1973 and the 1978 Protocol (MARPOL 73/78); (3) International Regulations for Preventing Collisions at Sea 1972 (COLREGS); (4) International Convention for the Safety of Life at Sea 1974 (SOLAS);<sup>14</sup> (5) Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (1972) The Oslo Convention; (6) Convention for the Prevention of Marine Pollution from Land-based Sources (1974) The Paris Convention; and (7) Convention for the Protection of the Marine Environment of the North-East Atlantic (1992) The OSPAR Convention.

It is crucial to have maritime security cooperation in the Indian Ocean region to prevent and manage pollution at sea. The cooperation should establish an immediate response system upon pollution and oil spill at sea that is efficient, robust, and compatible for sustainable development. Bilateral and/or regional maritime cooperation could involve navies and coast guards by using an integrated information, research and expertise approach.

Together with the Philippines and Japan, Indonesia have conducted Maritime Pollution Exercise or MARPOLEX to prevent environmental pollution and oil spill. This joint exercise reflects significant efforts in supporting regional cooperation mechanisms to ensure skill and readiness through interoperability among states in tackling pollution and oil spill. Conducted since 1981, MARPOLEX is conducted biennially.<sup>15</sup>

#### **4. Cooperation among Regional Navies and Coast Guards**

In the face of complex and turbulent maritime security dynamics, each and every country in the Indian Ocean region faces maritime threats, both traditional and non-traditional. Therefore, maritime security among regional navies and coast guards is the most effective and efficient way to resolve maritime security issues. The existence of IORA and IONS provides countries in the region the opportunity to develop cooperation to allow states to eradicate threats at sea, especially IUU Fishing and pollution at sea.

The Global Maritime Fulcrum vision (2014) and the issuance of Indonesia Ocean Policy (2015) have pushed the rapid development of Indonesia's implementation of its maritime security measures and activities. The condition is

13 Ainsley, Henry., IWCZMB, Marine Pollution, National Environment and Planning Agency, p. 3

14 Aston, James., Management Status: Shipping and oil spills, Australian Government: Great Barrier Reef Marine Park Authority, 2006, p. 11

15 Marine Pollution Exercise (Marpolex) 2017Marpolex Planning and Signing Conference, <https://coastguard.gov.ph/index.php/transparency/2015--score--card/marc--2/11--news/1351--marine--pollution--exercise--marpolex--2017--marpolex--planning--and--signing--conference>, accessed on 4 October 2018

supported with the acknowledgment of Indonesia's Badan Keamanan Laut (Bakamla) as the country's representative in the Heads of Asian Coast Guard Agencies Meeting (HACGAM). Bakamla is the agency that coordinates coordinated and joint operations among maritime security agencies, including the Indonesian Navy, National Police, Ministry of Maritime Affairs and Fishery, Ministry of Transportation, and Customs. Coordinated and joint operations involve not only vessels but also personnel/officers from all of the mentioned agencies on each operating ships. Hence, this national--level maritime security cooperation allows Indonesia to fully optimize its utilization of personnel, ships and maritime patrol craft from each agency at one time under a single command. In the ASEAN level, regional police agencies have established a permanent cooperation body; the ASEANAPOL. It provides an organizational framework to facilitate constabulary activities in the ASEAN regional level.

Both models could become a guidance to the establishment of bilateral and multilateral maritime cooperation among Indian Ocean navies and coast guards. Common geography is a good argument to develop regional maritime security cooperation as the countries are geographically situated in the same region of water, which is blessed with a wealth of marine resources. The existence of an institution to accommodate cooperation among Indian Ocean navies and coast guards would facilitate law enforcement at sea in the region. In the end, it could improve and strengthen regional maritime security.

Indonesia should encourage IORA member states to conduct more maritime security cooperation, especially among navies and coast guards. Intensive cooperation among these maritime security forces is aimed at improving the quality of information sharing and joint patrol in facing non--traditional maritime threats.

Such cooperation requires commitment to develop naval and coast guard interoperability in the region, which will allow faster and easier communication and coordination process in

every operation activity in facing maritime threats, especially IU Fishing and pollution at sea, as a basis to formulate an SOP.

Looking at the success of Task Force 115 in deploying personnel, ships and maritime aircraft, cooperation among navies and coast guards of the Indian Ocean region could model such practice by having interagency joint personnel onboard ships conducting joint operations at sea.

## 5. Conclusion

Maritime security cooperation to safeguard the Indian Ocean's maritime ecosystem must be realized. The existence of IORA and IONS provides regional member states the opportunity to conduct such cooperation, supported by common characteristics shared by countries in the region.

Indonesia has showed its commitment in combating IUU Fishing as a realization of the Global Maritime Fulcrum vision. Existing national regulations provide maritime agencies the required legal basis to prevent and combat illegal fishing in Indonesian waters as well as to conduct bilateral and regional cooperation using the Task Force 115 model of coordinated and joint patrols and operations to combat not only IUU Fishing but also pollution at sea.

Synergy is key in regional maritime cooperation among Indian Ocean states. A number of suggestions could be presented to assist regional countries in preparing the required steps in developing maritime security cooperation, which are: improvement of personnel capabilities, improvement and maintenance of maritime information management system, utilization of existing technology, cooperation on education and training, formulation of SOP and required supporting system, and working together under the coordination of IMO.

Regional maritime security cooperation could involve navies and/or coast guards in the form of bilateral and/or regional strategic

partnership. The cooperation could include joint and coordinated operations with the deployment of combined personnel of existing maritime security forces. Interoperability is crucial in ensuring the success of such operations, in which an integrated use of ships, maritime aircraft and personnel would facilitate and improve communication and coordination process in combating IUU Fishing and pollution at sea.

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