



National Maritime Authority

a global perspective



Secretariat of the Navy - Mexican Navy.
Mexican Navy Strategic Research Institute.

Secretary of the Navy.
Admiral Vidal Francisco Soberón Sanz.

Under Secretary of the Navy for Management.
Admiral José Luis Vergara Ibarra.

Dean of the Naval University.
Admiral Luis Orozco Inclán.

Director of the Mexican Navy Strategic Research Institute.
Viceadmiral José Ricardo Gómez Meillón.

Maritime Authority, a global perspective

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The content of this publication reflects the authors’ points of view which neither the Mexican Navy High Command, nor the Mexican Navy Strategic Research Institute necessarily agree with.

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PROLOGUE

Through the History of Mexico as an independent nation, its geographical location has been visualized as a great potential, as well as its bi-oceanic condition. Great wealth and opportunity underlies in the seas that surround it, a fact that will continue strengthening it as a world logistics platform, as well as a country with a true maritime calling.

The sectors that have the sea as a common element, such as those whose activities are focused on fishing, oceanographic research, nautical tourism, shipping, exploration and oil production as well as the coastal communities involved in this sphere. They need an environment of safety for its productive development. This has the goal to reach a greater economic growth and to generate wealth with positive effects that represents: economic revenue, creation of jobs and identification of new markets and commercial partners; but, mainly the real perception of stability as a nation with a continuous growth.

Current challenges demand innovative actions that are translated in the maintenance and improvement of conditions for the development of society.

In this sense, last July 17th, the Mexican Government with the approval of the Honorable Congress of the Union laid out a reallocation of functions within the Federal Public Administration; among them, that the Secretariat of the Navy (SEMAR) would take the role of the National Maritime Authority.

This is about a Maritime Authority that exercises the chief of the Federal Executive power through SEMAR, with a direct coordination with personnel of the National Merchant Marine, with the absolute support of the Naval Commands in functions of a coast guard.

This organizational outline will strengthen the maritime and port safety and security of Mexico. This will allow us to be at the stature of the most developed and safest ports of the world. This step will not be firm without the active participation of the Merchant Marine in the maritime shipping and without the modernization of the country with state-of-the-art ports: our window with the whole world. Thus, the presidential initiative determined that social economic activities will continue being coordinated by the Secretariat of Communications and Transportation, connection of interaction with the maritime productive sector.

The need to face illegal activities deserves a special mention, especially people or criminal groups that seek to benefit illegally through the maritime

infrastructure and the sea itself. To do so, it is necessary to carry out actions not only within SEMAR's scope, but also those to achieve a real control in this sphere to contribute in the strengthening of Rule of Law.

This new responsibility, and how it is planned to assume it, is the result of the need that the country has to strengthen itself in the maritime environment, from its nature and capabilities until the position that it seeks to project. For this end, it is imperative to know the experiences and international references of maritime and port protection, as well as the control and security through the Captain of the Ports' Offices; emphasizing that the characteristics of Mexico will define the specific actions to be carried out.

As for the International Maritime Organization (IMO), it is necessary to adopt the guidelines that it establishes with the objective to make seas a safer environment, making the enforcement of the existing legislation a commitment; since it contributes to have a more organized trade that favors competence and stability in the exchange of goods and services among nations. At the same time, to fulfill the regulations stated guarantees the current and future sustainability of the seas for their use and exploitation.

Without question, this cluster of variables represents a great challenge that becomes exponential when integrating in this relation the value of life and physical integrity of each person that carries out his/her activities in the sea. For this reason, it is necessary to provide the human resource with the necessary infrastructure and training, as well as the permanent will to act in order to safeguard human life at sea. To that effect, SEMAR does this vital function through the National Search and Rescue System.

The previous has been a long process that has allowed us to do a prospective of the Mexico that we want; the analysis has indicated us the needs, priorities and opportunities to carry out a strategic planning, and to give our constituents and to the maritime sector, the certainty that our function as a National Maritime Authority will mean a better safety, security and confidence in Mexico.

The moment is unique. The effort is necessary. The Mexican society deserves it and the current conditions for those of us who integrate the Secretariat of the Navy indicate us that it is one of the best contributions that we can do for the construction of a strong and reliable State, which safely navigates towards the consolidation of the national maritime power.

ADMIRAL
VIDAL FRANCISCO SOBERÓN SANZ
SECRETARY OF THE NAVY

INTRODUCTION

On June 17th, 2017, the commencement of the National Maritime Authority under the command of the Federal Executive Branch and exercised by the Secretariat of the Navy, marked a cornerstone for this Institution which as part of diverse activities carried out the International Seminar “National Maritime Authority, a Global Perspective”.

This book embraces the convergence of topics that were of great interest to different governmental bodies, the private sector and international organisms as well. Global and national matters were developed in three keynote speeches and three discussion boards.

The first discussion board was introduced by the distinguished intervention of Mr. Kitack Lim, Secretary General of the International Maritime Organization (IMO) with the Keynote Speech “IMO Current Outlook, Perspectives and Challenges in the Globe”, in which the importance of keeping in mind aspects such as the fact that billions of people worldwide rely on maritime transport, its effectiveness as a means of moving merchandise, its unquestionable nature as the world commerce main axis and the equilibrium required for keeping and restoring health and biodiversity in the oceans.

Within this realm, the opening of the first discussion board entitled “The National Maritime Authority and its contribution to Maritime Development” took place. Participants from different Secretariats like Communication and Transport, Economy, Foreign Affairs and the Navy lectured on fundamental issues related to the new National Maritime Authority. The lectures aimed at the search for a perfect equilibrium counting on the joint collaboration of the merchant community as well as taking goal-oriented steps so as to have Mexico become an efficient and global logistic platform for the maritime transportation of merchandise as per taking full advantage of its geographical location by means of an effective port infrastructure, the maximization in the use of means and counting on an innovative commercialization process.

The second Keynote Speech was presented by Admiral Vidal Francisco Soberón Sanz, Secretary of the Mexican Navy, entitled: “The Exercise of the National Maritime Authority and its importance for the development of Mexico”, speech within which the relevant role of our country -as an actor with global responsibility- was highlighted as Mexico is an active participant in a wide series of international agreements related to the global-wide concern about seas, ecosystems and biodiversity. The speech

made some special emphasis on the responsibility of safeguarding life at sea, an undoubtedly top priority for a coastal State.

After the second keynote speech, the discussion board entitled “Port Development, Maritime Industry and National Maritime Authority as contributors to National Growth” took place; with the participation of both the Director of the International Maritime Law Institute (IMLI), and representatives from the Direction of Maritime Territory and Merchant Navy in Chile, as well as Panama Maritime Authority.

This discussion board focused on the concerns regarding not only the incapability but also the immaturity of international law in general, and specifically the law of the sea as for actually reverting the degeneration of the planet’s ecological health, since the “International Law” continues to be the main channel to govern the oceans by means of establishing a sustainable and effective framework of regional and global accomplishment.

Engineer Carlos Fanta de la Vega, a retired Rear Admiral from the Chilean Navy and “President of the Asia-Pacific Agreement for Ship Control by the Port State Control”, participated with the keynote speech under the title “Regional Agreements of Ship Control by the Port State Control, its contribution and effective support to the Maritime Authority in a Three-Oceanic Country”, emphasizing on the remarkable opportunities Mexico counts on as per its privileged geographical location.

The development of the third discussion board addressed the following topic: “Antagonisms that defy port and maritime security”, with the participation of representatives from the United States Coast Guard (USCG), the Argentinean Naval Prefecture, the World Maritime University (WMU-Malmö, Sweden) and the Panama Canal Authority.

To address the issue, it started with the importance of taking care of global threats as a defying challenge for maritime security and port facilities, as well as the way in which the majority of the institutions in charge of safety and security in this area at a global level perform an array of functions and also have the need to continue to train their personnel, including a complete and comprehensive professional formation in compliance with established international standards; all of it meant to the assurance of the highest competitiveness under optimal security conditions not only for human life, but also for economic activities and environmental preservation.

By means of this publication, the Secretariat of the Navy managed to find the right time and place to have the convergence of different areas arise: the academic and the practical field; security and safety; the need

to observe regulations; the importance of supporting maritime commerce; keep the governmental and private spheres balanced and synchronized in order to generate wealth, safeguarding human life, the health of the seas, as well as maritime means and port infrastructure safety.

The general context turned out favorable to support the National Maritime Authority compromise, now working through this institution, in order to work side by side with those in charge of developing activities along the Mexican Marine Zones as for the sector regulation to the benefit of users in terms of safety, security and preservation of the maritime environment.

ADMIRAL
LUIS OROZCO INCLÁN
PROVOST OF THE NAVAL UNIVERSITY

MASTER LECTURE

IMO CURRENT OUTLOOK, PERSPECTIVES AND CHALLENGES IN THE GLOBE

PH. D.
KITACK LIM

SECRETARY GENERAL OF THE INTERNATIONAL MARITIME ORGANIZATION (IMO)

Mr. Kitack Lim was born in Masan, Republic of Korea. He obtained a Bachelor's degree in Nautical Sciences from the Korean Maritime and Oceanic University, in Busan. He became a naval officer and worked at the International Maritime Transport Company. He joined the Korean Maritime and Port Administration while he was studying at the Graduate Management School, Yonsei University, where he obtained a Master's Degree. Besides, he also obtained a Master's Degree in Maritime Administration from the World Maritime University and a Ph.D. in International Law from the Oceanic and Maritime University of Korea.

As part of the delegation from the Republic of Korea, he participated in diverse activities aimed at fostering maritime safety through the efficient application (in both his country and other Member States of the Asian region) of the International Maritime Organization current agreements. He was appointed President to the Flag State Implantation Subcommittee and President to the Tokyo Memorandum of Understanding towards the Ruling State of Port.

He was General Director to the Maritime Security Policy Office at the Secretariat of Land, Transport and Maritime Matters; afterwards he was appointed Main Maritime Attaché from the Republic of Korea Embassy in London and then, Deputy Permanent Representative before the International Maritime Organization as the head of the Korean delegation in all of the assignments performed by the Organization. Once this assignment was completed, he was once again appointed as General Director to the Maritime Security Policy Office at the Secretariat of Land, Transport and Maritime Matters.

He was named Commissioner of the Maritime Security Tribunal in Korea. He also took charge as President of Busan Port Authority and Secretary General of the International Maritime Organization.

It is a pleasure to have the opportunity to share my ideas on the current situation of the International Maritime Organization (IMO) and the challenges it has before it. I wish to thank the Mexican government for inviting me to this beautiful country and being such a generous host. On behalf of the IMO, I also wish to thank Mexico for its constant and prolonged commitment with this Organization, in line with a country that has a dynamic infrastructure of maritime transportation. Geographically, Mexico is lucky to have two long littorals, opened to two of the largest oceans in the world; an advantage it has benefited from to develop maritime commercial ties with partners worldwide.

Before addressing in detail the key issues IMO faces, in general, I would like to set forth the importance of maritime transportation in the world today, and the great relevance it has towards the labor of the Organization. For me, one of the most important issues to be always remembered is the fact that millions of people worldwide directly depend on maritime transportation even though they don't always realize. Maritime transportation, being the most efficient means to move merchandise in terms of costs, and the most efficient in terms of fuel, constitutes the main axis of world commerce. Therefore, maritime transportation is a key component in any economic growth program and sustainable future. However, maritime transportation also needs to be sustainable, which means that maritime transportation activities must be in balance with the capability of the oceans to maintain their health and biodiversity in the long term.

To a large extent, the function of the IMO is to make sure that maritime transportation continues to contribute to world economy without altering that delicate balance. National governments all over the world have the obligation to create a regulatory framework that allows this to happen, which they do through the IMO. At IMO, governments turn that obligation into something more tangible. In fact, they transform it into a regulatory imperative. Through IMO, member states, civil society and the sector itself work together to ensure that maritime transportation contributes firmly and continuously to green economy and sustainable growth. The success of this process is visible in more than 50 international instruments adopted by IMO, which together shape a regulatory framework that ensure maritime transportation be safe, protected, and compatible with the environment.

As an organization, IMO has good reasons to be proud of its contributions to channel the sector through regulations to make it safer, greener, and cleaner. I will not enumerate all the achievements, but think about crude oil washing, inert gas systems, the construction of double-hulled tankers, the severe control over dirty water discharge and garbage from all vessels, and the endless navigation regulations which has permitted to drastically reduce the number of collisions and running agrounds. The list goes on and

on. Recently, through the IMO, measures to reduce levels of harmful sulfur, nitrogen, and greenhouse gases from vessels have been established. All this has huge benefits on the environment, world population and human health.

Allow me to go into more details. I would like to begin with two issues which might be the most important in terms of environment. These are: the reduction of harmful emissions and the way to manage invasive species. Something these two issues have in common is that even though the enormous progress achieved, both are pending matters. In regard to emissions, it is important to remember the IMO has elaborated and adopted a series of measures aimed to control emission from the maritime transportation sector. Thanks to the IMO, international maritime transportation has been the first sector subject to world energy efficiency measures and obligations, whose end is to address greenhouse gases.

However, IMO has been working on that and is advancing on new measures that will have to be considered. Compulsory compilation and notification of data on the use of fuel oil by ships with gross tonnage greater than 500 will allow having a solid statistic base when the corresponding regulations are objectively, transparently, and inclusively discussed at the Marine Environment Protection Committee (MEPC). In addition to that, the IMO member states have told the world they will elaborate an integral strategy to reduce greenhouse gases from vessels, beginning with the initial strategy which will be adopted next year. Don't be mistaken, in 2018, the world will be keeping a close eye on the IMO, so something solid will be looked for, a strategy that resists the strict and exhaustive scrutiny by the public. Next year, the world will be expecting the IMO member states to fulfill their obligations.

Regarding greenhouse gases, allow me to thank the IMO member states again for confirming that in 2020 the obligatory reduction of sulfur in fuel oil used by vessels worldwide will be implemented. This is something we can be proud of as an Organization, and it is an excellent example that the IMO's normative work has a deep and beneficial impact that goes beyond the maritime transportation sector. In relation to ballast water management, it was very satisfying that, last June, MEPC could adopt a practical implementation calendar so that vessels would fulfill the agreement on ballast water management, which will come into force in less than three weeks. Such a moment represents an important step towards the solution to a problem that has been as one of the main ecological threats for more than 30 years.

Greenhouse gases, reduction of sulfur in fuel oil used by vessels, and ballast water management are three recent examples of how the IMO is responding to environment issues. We could also add the adoption of the Polar Code, our participation in the Global Alliance on Marine Litter, and our outstanding roll in projects such as GloMEEP, GloFouling, and GMN initiative.

Thanks to the opportunities new technology offers, maritime transportation is at the age of a new era. Emerging technologies related to energy and fuel use, vessel automation, materials and construction and many other issues will permit the emergence of a new generation of ships with important improvements in all IMO's fields of competence. In fact, I believe technology and data use are key elements for a safer and more sustainable maritime transportation future, which is essential to one of the main IMO responsibilities, «safety».

Nevertheless, technological innovations not only bring up challenges but also opportunities; and their inclusion in the regulatory framework has to be carefully examined. We should consider advantages and consequences within the safety and security field, the impact on the environment and international commerce, the possible costs for the sector, and in particular, consequences for the personnel onboard and ashore. So, how to incorporate new technology into the regulatory framework is a key issue for IMO. On the IMO's agenda, for example, are topics focused on the future such as cyber security, electronic navigation, modernization of maritime distress and safety communications, and the growing possibility of autonomous ships.

Regarding this last issue, during the last meeting of the Maritime Security Committee, crucial steps were taken to agree on the initiation of an exploratory study to determine how to incorporate the operation of autonomous ships in safety, protection, and environment protection conditions into the IMO's instruments, highlighting the need of taking into account human factor aspects in all future regulations.

Given the rapid technological advances, we witness, in those spheres, it is absolutely right that the IMO adopts an anticipatory attitude and plays an important role towards these issues. IMO regulations on maritime transportation can give a concrete direction to the elaboration of innovating technical solutions. In response to IMO's regulations, new technologies have already incorporated important positive changes in how ships are planned, built, and operated; contributing to a more efficient and interlinked world supply chain. At the same time, the recent changes in the principles on which regulations are based –which have moved from a prescriptive character to objective- based mode, foster innovation and ensure ships are built in such a way that even under an inadequate maintenance program they can still be safe during all their life.

During the last Maritime Security Committee sessions a milestone was reached, consisting in confirming that the tanker-and-bulk carrier-building regulations initial verification audit, presented by 12 classification Corporations, had satisfactorily come to an end. This completes the first step in the adoption of concrete measures after several years of hard work

for the implementation of more adequate objective-based norms for technological development within the IMO regulatory framework.

One of the major advantages of the IMO's regulatory regime is its global nature and neutrality. This means that ships have to comply with the same technical rules and norms wherever they operate and regardless the flag they fly. If regulations are properly implemented through cuts or one-sided prescriptions, nobody will take advantage of situations. This implementation undoubtedly pertains to the IMO member states though the Secretariat also does its job through mechanisms such as the Member States Audit Plan and the wide Technical Cooperation Program.

The IMO's Technical Cooperation Program, which emphasizes on helping developing countries, can be seen as a central element in the Organization's respond to the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Objectives. This Agenda calls upon all countries to eradicate poverty and achieve sustainable development all over the world by 2030. The Sustainable Development Objectives are perceived as an opportunity to transform and better the world without putting anybody aside. As a UN's family member, IMO actively works towards the 2030 Agenda for Sustainable Development and two annexes. In effect, the majority of the 2030 Agenda elements will come true if there is a sustainable transportation sector that supports world commerce and facilitate global economy, with the possibility of relating some aspects of the Organization to the majority of the different sustainable development objectives.

The Organization's strategic plan, recently elaborated, whose adoption is programmed for the next IMO Assembly sessions in November 2017, will permit the Organization to establish direct links among our strategic principles as well as concrete measures in order to show our contribution to the implementation of the 2030 Agenda for Sustained Development. With this, I go back to the observations formulated earlier, this is to say, to the millions of people worldwide that depend on a safe, clean and well-protected maritime sector. Sea lines provide a reliable and cost-effective means of transportation which facilitates commerce and contributes to generate prosperity among nations, thus, helping lift people out of poverty all over the world.

Finally, IMO helps ensuring that maritime transportation can lend a hand with this task. The IMO global-character regulatory framework supports technology boost and encourages innovation, allowing the sector to thrive and meet its demands and society changing expectations.

DIAGNOSTICS, CHALLENGES AND OPPORTUNITIES FOR THE NATIONAL MARITIME AUTHORITY

VICE ADMIRAL
JORGE MANUEL SAINZ ZAMORANO

GENERAL DIRECTOR OF PORT CAPTAINS AND MARITIME MATTERS

He holds a Bachelor's Degree in Engineering in Naval Sciences from the Heroic Mexican Naval Academy and a Specialty in Naval Command, as well as a Master's Degree in Naval Administration from the Center for Higher Naval Studies. He completed a course in Naval Intelligence and Military Instruction at the US Navy Intelligence Training Center, Pacific in San Diego, Cal. The Course in Advanced Logistics at the US Defense Department Training Center in Battle Creek, Michigan; Master's Degree in Strategic Studies in International Security at the National Defense University in Washington, D.C.

He has performed diverse assignments within units and establishments from the Mexican Navy, say: Commander of three surface units: Patrol Vessel "Cabo Corrientes" and Oceanic Patrol Boats "Vallarta" y "De la Vega"; Junior officer on nine different vessels of the Mexican Navy. Subsection Chief of Protocol and Military Ceremony at the Second Section of General Staff; Director of Maintenance to Establishments and Naval Facilities at the General Adjunct Directorate of Engineering and Maintenance; Chief, Informatics Department at the Centro de Estudios Superiores Navales; Director of Protocol, Social Communication Unit; Section Chief of the Staff in the Tenth Naval Zone and the Second Regional Naval Zone; Member of the Special Studies Commission of the General Staff; Naval Attaché in Mexico's Permanent Mission before the United Nations Organization; Administrative Interim Chief in the Second Naval Region; Commander of the Gulf Auxiliary Fleet, the Gulf Naval Force and the Caribbean Sea; General Deputy Director of Security and Social Welfare; Commanding Inspector in the Second Naval Region and professor onboard the Tall Ship Cuauhtemoc, the Heroic Mexican Naval Academy and the Centro de Estudios Superiores Navales.

He has obtained the following Decorations: Perseverance from Sixth to First Class; Naval Teaching Merit First Class; and the Medal granted by the Community of Military and Police Advisors from the United Nations Organization.

The Government of the Republic proposed to transform Mexico into a global logistics platform. This large investment project represents an important economic growth that demands, at the same time, the strengthening of security and protection of our seas and port operations. Hence, for a long time and based on the “National Infrastructure Program”, Mexico invests in port infrastructure achieving, among other strategic objectives, more modern and efficient ports in addition to the investment in the largest port infrastructure in the last 100 years in the port of Veracruz.

In order to increase the safety and protection of the country's productive activities and the flow of maritime trade at the same time, Maritime Administration was restructured in Mexico. As of June 17, 2017, maritime protection was increased by adding the attributions of the Captain-of-the-Port Offices to the means of the Secretariat of the Navy, acting as a Coast Guard. In Mexico, the National Maritime Authority is the body responsible for the Maritime Administration for compliance with national and international provisions on safety, maritime protection, and prevention of marine pollution from ships.

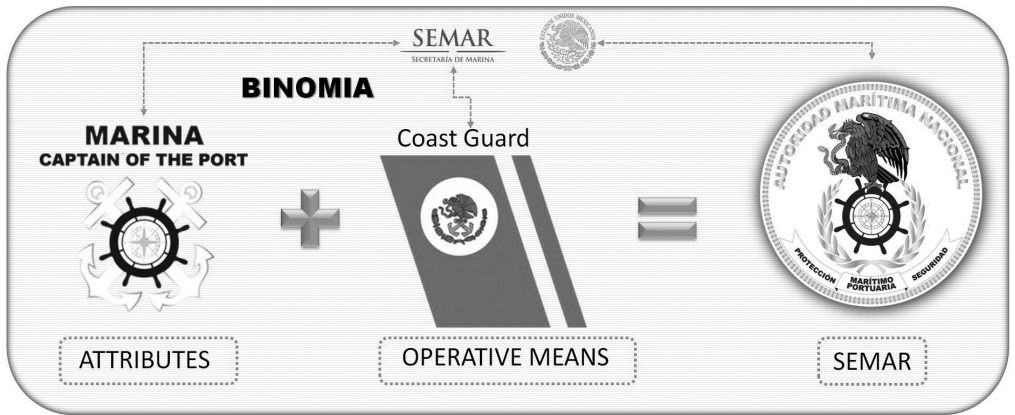
The Federal Executive Branch exercises the National Maritime Authority in the Mexican marine zones through the Secretariat of the Navy, without affecting the attributions of other agencies, in order to: perform any act on behalf of the Mexican State in its territorial waters; to take measures to safeguard against any threat that may affect ships and port facilities; to take the necessary measures to ensure compliance with the national legal order; and to take measures to safeguard human life at sea.

The National Maritime Authority has the attribution by law to execute the actions of the Mexican State to ensure compliance with national and international regulations in this area, fulfilling its three roles: Flag State, Port State and Coastal State. The model of maritime administration adopted in Mexico is similar to other Latin American countries, as the International Maritime Organization (IMO) gives Contracting States the flexibility to manage maritime affairs in accordance with their own organization and national legislation in order to comply with international provisions.

On June 17, 2017, the following was received from the Communications and Transport Secretariat (SCT): 98 active and 5 inactive Captain-of-the-Port Offices, which included 836 properties; 298 vehicles, 173 vessels, 729 maritime signals, 7 beacon vessels and 96 weather stations. These material resources were integrated to the infrastructure that the Secretariat of the Navy has in its deployment of Naval Commands with ships and aircraft in coast guard functions. In addition, 1,009 jobs were transferred as well as a budget to be exercised as of December 31, 2017, for 34.7 million

NATIONAL MARITIME AUTHORITY

AS OF JUNE 17TH, 2017, MARITIME PROTECTION AND SAFETY IN MEXICO WAS INCREASED



MONOLITIC AND STRONG AUTHORITY

pesos. Situation that requires more investment in the short term in order to provide port authorities with means to enable the Maritime Authority to exercise effectively in matters of port security and maritime security, maintenance of the rule of law and the exercise of sovereignty.

The National Maritime Authority identifies the following challenges:

- To provide services to the national and international port maritime community, in an efficient, timely and transparent way, through the country's Captain-of-the-Port Offices, by means of a continuous improvement based on human values and applicable institutional regulations.
- To exercise, as a National Maritime Authority, State policies under a legal framework that promotes and guarantees free enterprise, legal security, competitive market structure, and sustainable growth and development of the ports of Mexico.
- To have trained and motivated personnel with better income and benefits, according to the responsibilities they perform; in addition to adequate facilities for the fulfillment of their functions, equipped with state-of-the-art technology and operational means to fulfill their tasks.
- To strengthen the National Pointing Signaling to ensure safety in navigation, in accordance with national and international standards and to establish expedite reporting mechanisms that allow real-time information flow of "warnings to seafarers" when alterations occur to the signaling of the coastal strip and harbor enclosures.
- To consolidate the presence of the National Maritime Authority in Mexican marine areas to ensure the application of the rule of law. The Navy Secretariat maintains the commitment to continue increasing the operational response capability with ships of the Mexican Navy that have effective technologies and in functions of a coast guard.
- To have a National Maritime Authority to consolidate a highly competitive port system that affirms the experience of the Merchant Navy and naval personnel. A National Maritime Authority backed up by the Coast Guard, which allows us to be at the height of the most developed ports in the world.
- To achieve, in the country's port facilities, the shaping of the figure of "National Maritime Authority", which is institutionally recognized by the national and international port maritime

community and whose work joins the synergy of building a Mexico with safe and green ports.

- In the medium term, to consolidate a Mexican society linked to the sea, with a culture responsible for compliance with national and international regulations on prevention for safeguarding human life at sea and a maritime port community that, in harmony with the preservation of the environment and the use of modernized port infrastructure, exploits the maritime resources of the country and the ocean of prosperity offered by the Mexican marine areas.

In the exercise of the new National Maritime Authority in Mexico, we consider it an area of opportunity to carry out an assessment of our needs under a selective approach in accordance with the IMO audit plan. This, with the purpose of conforming the maritime profile of the country to the international maritime safety and security standards.

With the entry into force of this reform, in Mexico there is only one coordinating body of the other “public authorities” which will strengthen maritime and port security and safety as well as the protection of the marine environment - in the terms established by the Conventions adopted within the IMO - without this being countered by the exercise of powers that other legal provisions confer to other agencies of the Federal Public Administration related to this matter.

From the first day that this responsibility was assumed, we have set ourselves to become a firm, effective and transparent authority: to generate trust and respect, both for the SCT personnel who were assimilated by SEMAR, and for the users of the services that provide the Captain-of-the-Port Offices as well as all members of the national and international maritime community who are subject to the exercise of authority that has been transferred to SEMAR. The National Maritime Authority represents a benefit for both the Mexican State and the international community, as it ensures safe, protected and efficient maritime transport in clean seas.

MARITIME COMMERCE EXPECTATIONS AND THEIR CONTRIBUTION TO NATIONAL DEVELOPMENT

M.A.

GUILLERMO MALPICA SOTO

GENERAL DIRECTOR OF INTERNATIONAL SERVICE COMMERCE AND
INVESTMENT, SECRETARIAT OF ECONOMY

He holds a Bachelor degree in Economics from Las Americas University, Puebla and a Master's Degree in International Studies from the Monterrey Institute of Technology.

He has been Advisor in Economy matters from Mexico's Permanent Mission before the World Commerce Organization in Geneva and responsible for economic matters in the Secretariat of Economy Office for the North America Free Trade Agreement in Ottawa.

His duties at the General Directorate of International Service Commerce and Investment include the negotiation, follow up and diffusion of topics related to commerce of services and investment in bilateral, regional and multilateral treaties.

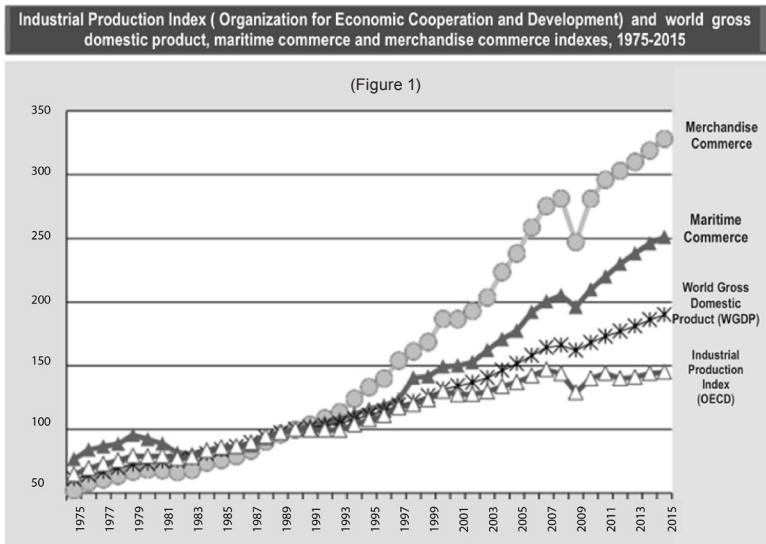
His most recent negotiations are: The Additional Protocol to the Pacific Alliance Realm Agreement and the Transpacific Association Treaty. In regards to the negotiation of reciprocal promotion and protection agreements, there have been included those with Turkey, Haiti, Saudi Arabia, Qatar and the Philippines.

He has also had participations as a lecturer in conferences and seminars in different cities around Mexico, the United States, Canada, Costa Rica, China, Chile, Colombia, Ecuador, Sweden and Santa Lucia. He has also written articles and book chapters about both commerce of services and investment.

One of the objectives of the Sub-secretariat of Economy is the design of the country's trade policy by means of international trade agreement negotiation, follow-up and diffusion of the same. Mexico has had a very dynamic international trade negotiation policy for more than twenty years that has led the country to gradually liberate our market and to find markets in other countries for services and goods.

This policy of trade liberation has been successful because it has modernized Mexican economy beyond increasing the flows of trade and investment. Currently, international trade represents 63% of the country's gross domestic product with almost a total of 800 thousand million USD in foreign trade a year, almost 500 thousand million USD in foreign investment since 1999 up to now. 60% of our middle-class population places the nation as the fifteenth largest economy of the world, thirteenth exporter country of the world and the first in Latin America, the fifth foreign investment recipient among emerging countries and the second in Latin America.

The latter goes hand in hand with maritime trade development. There are similar trends among goods trade growth, maritime trade and global GDP increase, which shows a clear correlation among these variables (Figure 1).

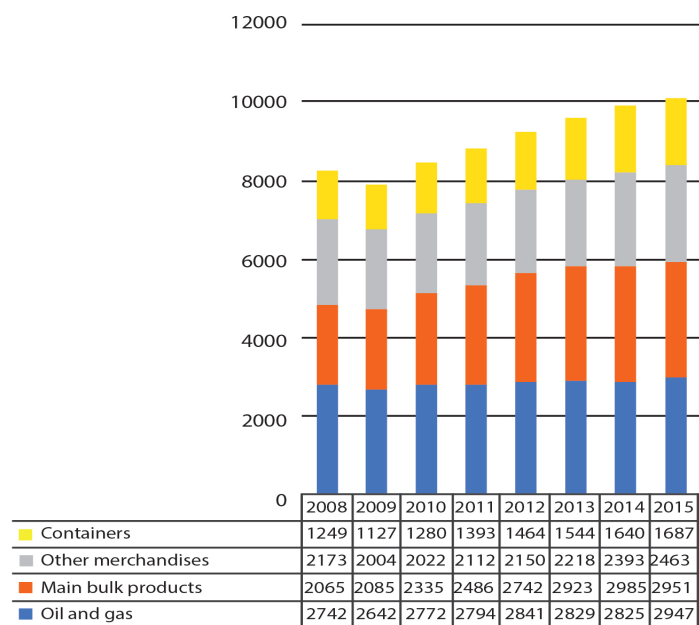
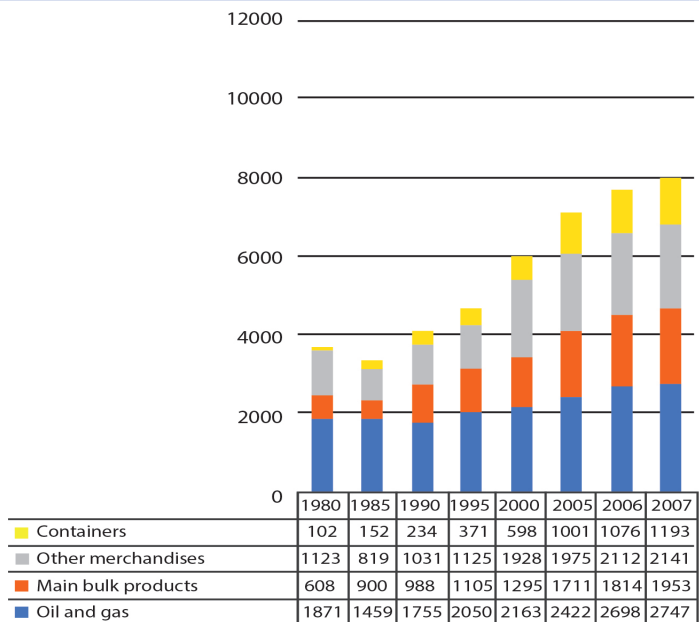


Source: UNCTAD. Review of Maritime Transport 2016.

Note: 1990=100 Indexes calculated on the base of GDP, merchandise commerce in dollars and maritime commerce in metric tons unit.

Maritime trade is the center of development due to its dual nature. In addition to being an important service sector, it also facilitates the development of other sectors of the economy. In 2015, 80% of global goods trade was done by sea. This year, for the first time, more than 10

International maritime commerce. Selected years
(millions of loaded tons)



Source: UNCTAD. Review of Maritime Transport 2016

(Figure 2)

thousand million tons of goods were transported by sea. The participation of maritime trade represents in terms of value, not in terms of volume, 55% to 66% of global trade. In 2015, the global fleet grew 3.5%.

All of this clearly shows the advantages of maritime goods trade in respect to other means of transportation of the world and of the country. The volume and capacity of storage of ships is a clear advantage before other means of transport. A large cutting-edge container ship can transport up to 18,500 TEU, equivalent to transporting the same load in approximately 9,000 tractor-trailer trucks or several train convoys.

This allows the sector to have an advantage in freight charges as a preferred means of transport, with the additional extra element that this means of transportation is safe and stable in its conditions of service and in the versatility of products and transportable goods. Later we will see the main ports and this versatility in goods and materials that are transported, besides additional advantages in coverage and insurance.

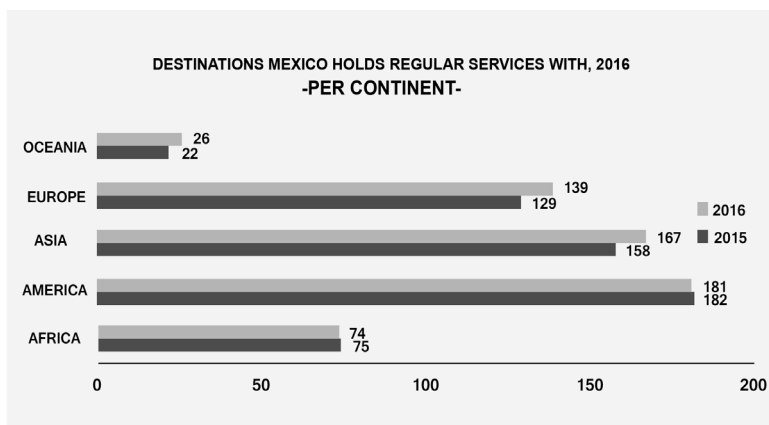
Here are some figures on what has been transported in terms of dry cargo: by 2015 dry cargo shipments accounted for 70% of maritime trade volumes while the rest consisted of tanker trade, including crude oil, oil products and gas. Figure 2

In Figure 3, we can see that regarding the places per continent with which Mexico performs the exchange by sea, the main destinations are America and Asia. This is so because the countries with which we have greater trade are mainly the United States and China, being Oceania the continent that occupies the last position.

Figure 4 shows the amount on the cargo –ocean and coast navigation– that has been mobilized in Mexico and its relation with the growth of trade in the country in the last thirty years; this is something that in the field of maritime transportation, the Ministry of Economy is responsible for.

All of this has allowed Mexico to be a state that uses its very high potential for maritime connectivity: we are connected to 153 countries and 587 destinations on the five continents, through 142 regular shipping service lines - which represents a broad range of options to choose from importers and exporters of goods in terms of ports of origin and destination, shipping lines and operating costs. This scenario of growth and development of maritime-commercial connectivity, both national and worldwide, allows us to identify that we are at the forefront of this commercial activity.

Mexico has opted for the opening of its trade policies for years, a consistent fact over the last decades. Due to this, we now have a network of enviable treaties with the rest of the countries that allows us to have access to a



CONTINENT	DESTINATIONS 2015	DESTINATIONS 2016	NOMINAL DIFFERENCE	VARIATION %
AFRICA	75	74	-1	-1.3
AMERICA	182	181	-1	-0.5
ASIA	158	167	9	5.7
EUROPE	129	139	10	7.8
OCEANIA	22	26	4	18.2
TOTAL	566	587	21	3.7

(figure 3)

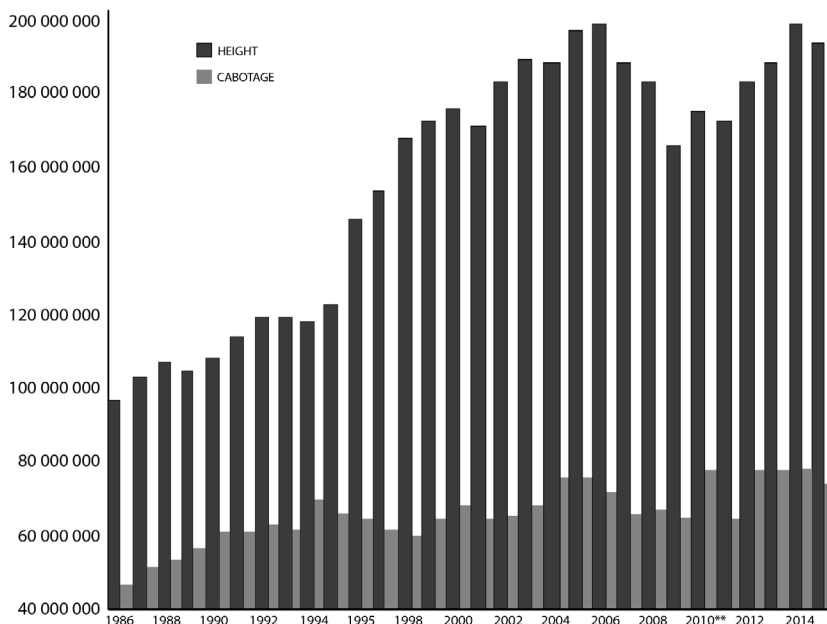
Source: SCT. Servicios de Transporte Marítimo Regular in México 2016.

more than 1.1 billion potential consumer market, with huge importance in services trade, GDP and job generation. This has repercussions on the development of small and medium-sized enterprises in general.

Trade is perceived as a driving force in regional competitiveness, for that matter, the activity of the Ministry of Economy is inscribed in the pillar delineated by the National Plan of Development as the guiding axis number five, inserting Mexico in the international panorama as a relevant actor; Mexico as a global player.

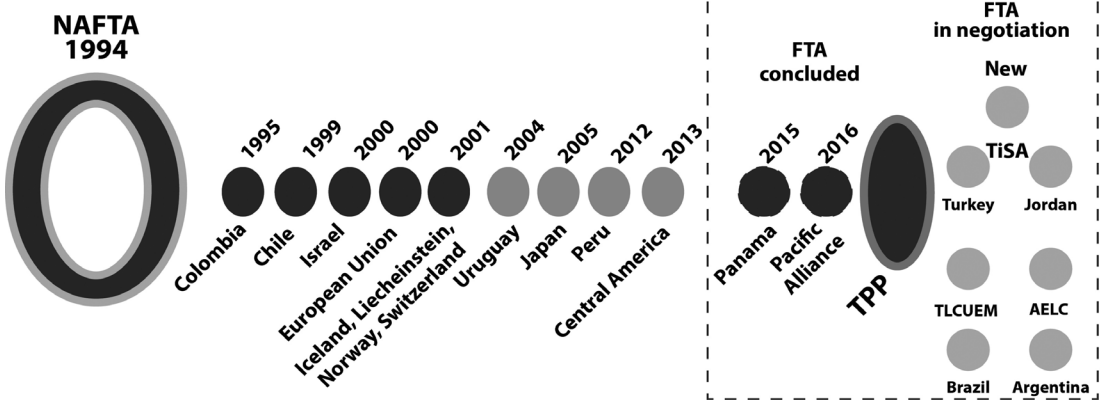
The network of treaties that we have in force in the world can be shown before the international community, we enjoy preferential trade treatment in 46 countries -through ten free trade agreements- with a more than 1.1 billion potential consumer market, plus other agreements of previous generation as the Economic Complementation Agreements (ECAs) that we made in the eighties within the framework of the Latin American Integration Association (LAIA).

YEARS	HEIGHT	CABOTAGE	HEIGHT+ CABOTAGE
1986	95,063,729	46,358,824	142,312,553
1987	102,389,824	51,253,757	153,643,581
1988	106,902,108	53,439,625	160,341,733
1989	104,359,802	56,348,540	160,708,342
1990	107,916,654	61,222,901	169,139,555
1991	113,508,599	60,774,099	174,282,698
1992	118,983,912	62,844,597	181,828,509
1993	118,859,624	61,563,793	180,423,417
1994	117,687,007	69,449,970	187,136,977
1995	122,301,089	65,651,286	187,952,375
1996	145,556,116	63,960,263	209,516,379
1997	153,396,281	61,340,756	214,737,037
1998	167,421,433	59,896,861	227,318,294
1999	172,461,135	64,167,670	236,628,805
2000	175,571,749	68,071,581	243,643,330
2001	170,870,959	64,183,281	235,054,240
2002	183,333,682	65,210,487	248,544,169
2003	189,078,532	67,591,061	256,669,593
2004	188,200,258	67,280,476	255,480,734
2005	197,552,164	75,549,273	273,101,437
2006	198,276,124	71,319,733	269,595,857
2007	188,121,925	65,276,493	253,398,418
2008	182,963,360	66,829,076	249,792,436
2009	165,826,333	64,520,242	230,346,575
2010**	175,189,789	65,885,488	241,075,277
2011*	171,986,730	64,377,947	236,364,677
2012	183,699,929	70,891,511	254,591,440
2013	188,233,734	70,473,341	258,707,075
2014	198,871,310	78,044,595	276,915,905
2015	193,401,582	73,807,195	267,208,777



(figure 4)

Source: SCT. Anuario estadístico del transporte marítimo.



Preferential access to **46** countries
58% Global GDP - 41% global trade - 1,162 million potential consumers



Consolidation of preferences with FTA partners and access to **9 new markets**

Agreements: 12 free trade - 46 countries - 29 ARPP
 6 of economic complementation - 3 partial scope

(figure 5)

Source: OMC (International Trade and Market Access Database, abril 2016) y FMI (World Economic Outlook abril 2016).
 NAFTA: North American Free Trade Agreement. FTA: Free Trade Agreement.

In addition to this, we take part in partial scope agreements in Latin American forums aimed at protecting both international investments in Mexico and Mexican investments worldwide and we also have bilateral investment treaties with twenty nine of these Agreements for the Reciprocal Promotion and Protection of Investments.

On figure 5 we can see the agreements –such as the one with Panama- that during this administration have been concluded. The Realm for the Pacific Alliance Agreement is in fact a convergence exercise of international trade regulations among Mexico, Peru, Colombia and Chile. We already had bilateral agreements with each of these countries; however, we are now aimed at achieving a better and stronger economic integration within the region – not only commercial. The Trans Pacific Partnership Agreement (TPP) has been considered the most modern agreement of the latest 20 years worldwide; incorporating 12 countries –six of which Mexico had not had any previous trade relationship at all in the past, and including countries long commercially related to Mexico such as: United States, Canada and Japan.

We already know the story behind the TPP: It was signed, and during the ratification process developed by each of the participant countries and by the time the federal administration was in transition, the United States decided not to continue with its participation within the Treaty. What actions is the Secretariat of Economy taking in this regard? We continue to have the negotiations agreed; last August 21st, we came back from Washington, DC after completion of the first round aimed at modernizing the North America Free Trade Agreement (NAFTA) which is a top priority in the negotiations.

On the other hand, we are also carrying out measures for strengthening the current agreements we have been part of since the year 2000, for instance: Agreements signed with the European Union, the Free Commerce European Association; Brazil and Argentina, as well as ongoing negotiations we expect to have concluded by the end of this presidential administration.

Some other agreements have also been initiated and despite not being as dynamic as the ones I have mentioned before, they are undoubtedly important. Under these agreements we can mention the following: Agreements with Jordan, Turkey and the Agreement on the Commerce of Services which is under negotiations by 24 countries in Geneva and represents diverse interests in the service areas (port services and maritime transport).

Except from the Free Trade Agreement with Israel, it is commonly found that the agreements count on two to six chapters related to service trade and investment. In some other cases as in the agreement with the Free Trade

European Association (with four of the countries that are not members of the European Union), we can see important sections oriented to maritime transportation; and most recently with the Pacific Alliance as a serious and committed effort with our Latin American partners in an attempt to deepen and strengthen our relationships in maritime transportation.

Another remarkable chapter relates to the temporary entry of business people (business men and operational personnel), since this leads to ease commerce. This situation has permitted us to have a highly dynamic consultation and feedback scheme along with diverse institutions from the Federal Government. At the Directorate General I am honored to lead, we rely on a group of multiple investment services that accompanies, advises and nourishes us with its wide experience on negotiation processes before, during and after the meeting rounds we take part in.

We were missing the link with the Secretariat of the Navy as a result from the authorities it has inherited, taken or formalized derived from the change in the applicable law in June 2017. In the coming negotiations, we will incorporate not only the experience but also the supplies of the Secretariat of the Navy. On regards to international commercial negotiations of maritime transport services, port services, among others, they will support us in enforcing the current law regime in our country so as to have the negotiations run the best way possible and identify potential trade barriers faced by our Mexican service suppliers abroad.

Within the chapters related to cross-border service trade, the Directorate General I lead is aimed at providing juridical certainty to service providers and consolidating the current openness present in all countries. In order to fulfill this objective, we must be clear about what the current legal realm in each of the countries is (including ours) and on the other hand, count on the legal knowledge applicable to future trade agreements. This is an important issue; since as any country opens any sector, this liberation represents a new level of autonomous openness and becomes an international engagement: There will be no way back in the future for any liberation that has been made in a sovereign way. It is our duty to guarantee competence and transparency mechanisms for all the global players involved.

This is a very brief panorama regarding the normal structure of the chapters devoted to services related to maritime commerce as well. We have general regulations on non-discrimination which are well known in the arena of goods, national treatment, treatment to the most favored nation, conditions for not imposing barriers to access the markets and finally, specific conditions for not demanding the local presence in the case of services that can be provided across the border.

This is, in a few words, the relevance of the activities performed at the Secretariat of Economy and its interaction with maritime and port activities at an international level. What do we want to do? Serving Mexico with a strategic vision from the Secretariat of Economy, since every time we go through international trade negotiations, counting on a strategic vision, allows us to place Mexico as a global actor, which is how we want to present Mexico internationally.

The number one priority for the coming months –up to the end of this year, 2017- is the conclusion of the modernization of the North American Free Trade Agreement; an undoubtedly very important exercise. The United States of America is our main commercial partner and throughout the last 23 years our role as buyers or suppliers of goods has transformed into the shared production of multiple products. In order to have the production process completed, some of the regional North American products cross the border up to 11 times; from this point of view, it is not possible to talk about a product manufactured in Mexico or in the United States, but about goods regionally produced in North America. We must continue to preserve such a level of integration which activates the participation of Mexico within the global chains of value.

Latin American countries have never stopped to deepen the economic integration with the countries belonging to the Alliance of the Pacific; and on the other hand, agreements with Brazil and Argentina are both a major priority to this administration. Our relationship with Europe is going through the necessary and corresponding modernization processes of the agreements.

In regards to the Asia-Pacific region before the scenario derived from the non-ratification of the TPP, the rest of the 11 countries are working altogether for the recovery of the already negotiated arrangements. During the last meeting that brought together the leaders belonging to this alliance an important decision was made: The figure of Associated State was incorporated to the Pacific Alliance. These associated States will be initially Australia, New Zealand, Canada, and possibly Singapore –all of them TPP members. The idea would be to negotiate agreements as the Pacific Alliance group with each of these countries aiming at incorporating these TPP rules in the Latin American environment. Mexico owns a leading position within the Pacific Alliance and is now interacting with its Asia-Pacific partners once the US has abandoned the TPP negotiations.

OPPORTUNITIES FOR MARITIME TRANSPORTATION GROWTH IN GLOBALIZATION TIMES

ARCHITECT

FERNANDO HUMBERTO GAMBOA ROSAS

GENERAL DIRECTOR OF PROMOTION AND PORT ADMINISTRATION
SECRETARIAT OF COMMUNICATIONS AND TRANSPORTATION

He holds a Degree in Architecture from the National Autonomous University of Mexico and counts on studies in Ergonomics at Ibero-American University in Mexico, as well as “Urban and Social Development” at Sussex University in the United Kingdom.

With a long career in the federal public service, Architect Gamboa has been Subdirector of Patrimonial Planning and Control at the National Fund for Tourism Promotion; Executive Director in ProMexico; Advisor as General Director in the Economic Affairs and International Cooperation Unit at the Secretariat of Foreign Affairs; Head Consul at the Mexican Consulate in Oxnard, California. He has written and coordinated diverse journalistic columns and books.

He is now the General Director of Promotion and Port Administration at the General Coordination of Ports and Merchant Navy of the Secretariat of Communications and Transportation.

Even after centuries, humanity has not changed much even though the undeniable advances in technology, communications, medicine, physics and biology. Even with all this evident accumulation of knowledge, human beings still get together in cities; earlier around fire, today, together and separated by television. Small groups still eat together but separated by cellular telephones. We still try to keep informed, earlier by the newspaper, now, by social networks. In a nutshell, we are doing and hoping for the same. We live in couples - with someone of the same or different gender. We have children. We look for a job. We want a better home, a better future. We want the same as those 13th century colonizers.

Of course, the needs of every society change according to the level of development these societies have. For example, for a Swede or a Norwegian, global warming, sexual diversity, individual rights, ethics, happiness and satisfaction –all intangible goods– are clearly urgent issues. For an emerging society such as Burundi, Syria, or remote locations in Mexico or Brazil, daily survival, endemic health, access to jobs, and infrastructure –all tangible goods– are greater needs than for Europe. Comparing developments among societies is not worth the risk; however, we can find some elements that affect us all; understanding that each society system is characterized by a specific set of values and hierarchies which determine human, cultural and social meaning.

It is something common to say that global economy is an element of constant and permanent change, that geopolitics has always wanted to foresee changes and pave the way. The little success achieved allows us to see that history is a transformation of interactions that always becomes chronicles and almost never future. The recent Brexit outcomes; the surprising elections in the Unites States, Austria, and France; and violence in Paris or Brussels allows us to assure that most of us have been totally wrong about what we understand as progress. The way globalization permits us to understand Internet, social networks and smartphones is still a utopia threatened by isolationism, racism, exclusion, and denigration by next-door neighbors. In other words, we have put off the future.

Let me make a geographic stop here: even though a change in the country's surface, area and borders, language, currency, laws, religion, and political system may seem remote to whom were born, including myself, in the American Continent during the 20th Century and live in the 21st Century, big areas on the planet have changed over the last hundred years. Some countries have disappeared and others have emerged. Migration has skyrocketed due to permanent wars in big populated spots. The UN recognizes 192 countries; however, state and country are not synonyms. A state is that with a population, government, and territory. A nation is that that concentrates culture, traditions, and idiosyncrasy. The Kurdish

nation spans several countries including Iraq, Iran, Syria, Azerbaijan; it is known as Kurdistan. Another example is Israel. A Young state with a millenary nation, which spans wide areas on the planet.

Why do I mention all this? Human beings have divided the world, we are dividing it, we have created boundaries, and thus, we have invented destinations. Behind these destinations is commerce. Therefore, in an increasingly globalized world, though the continuous threats, commerce and investments demand certainty and clear operation rules. So, free trade agreements that nations generate, look for, and agree coincide with the search for equal formats in business practices. They should be fair in terms of international competition and incorporate sustainability elements – elements that did not exist recently.

World commerce and ports are key elements in today's economy. These new realities, these constant changes force us to contemplate, under a new light, little-taken-care-of or clearly inexistent past issues such as global warming, water, air and land preservation, proper garbage management, and animal care. These are challenges that cannot be ignored. Climate change, though there are some irresponsible denials, cannot be ignored; it does not have a passport or nationality. The environmental norm is not optional. It is compulsory.

Regarding port sector, though pessimism prevails among many friendly nations, world commerce will continue to grow. This is showed by commercial flows along the two largest oceans that Mexico luckily has access to. In the 70's, commerce in the Atlantic Ocean was greater than that in the Pacific Ocean. Today, the latter is more than four times greater than the first one. Currently, the 10 main ports in terms of container cargo are in Asia (7 in China, 1 in Singapore, 1 in Korea, and 1 in the Arab Emirates).

The formula may look misleadingly easy. If the population grows, demand grows, and supply grows. Reality is more complex than that. We know that 80% of the merchandise is transported by sea. So, the bigger the ships are, the more the ports have to modernize their facilities, accelerate their protocols, adjust their efficiency standards, reduce their loading and unloading times, and adopt international regulations. But merchandise does not move itself. Money gets to where financial gains are guaranteed, where equal and clear tariff rules exist, and where last-generation environmental regulations are respected. In other words, increase in the movement of cargo is generated in ports that have updated free trade agreements.

Mexico, with its 12 trade agreements with more than 45 countries, is the most opened nation to foreign investment in Latin American. The adjustment and update of NAFTA, first signed by Mexico, shows the

importance of Mexico in the region. Without this agreement, it would be impossible for Mexico, not having an own automotive brand, to be the fourth light-car exporter in the world. If the financial goals signed are reached, Mexico could be the second world exporter by 2020. What is the vision of Mexican ports? The first vision is clear: those nations that have littoral on both sides, have a privileged position and a huge advantage over the rest of the nations that should be exploited.

President Enrique Peña Nieto's statement is clear and urgent. "Turn the ports into Mexico's doors to the world and transform our country into an efficient global logistic platform between both oceans and the continent, taking advantage of our excellent geographical position." To that end, since the very beginning of this administration -2012- we have been committed to care for port saturation and double operational capability this year, which was of 260 million tons, to reach more than 520 million tons in 2018. By the end of 2017, we will be reaching 470 million tons. At the same time, the Infrastructure National Plan is the most ambitious in the last decades, reaching a public investment of more than 66 billion pesos, out of which, 80% comes from the private, national and international sectors. This endorses trust towards our country.

We have initiated the construction of five new ports and finished four, Matamoros, Tuxpan, Seybaplaya and Ciudad del Carmen. The process has been put off for a long time, more than 20 years. The new port of Veracruz, Mexico's emblematic port and melting pot of our Mexican identity, with a new private financial scheme, is on schedule with more than 400 hectares for logistical activities totally constructed. Also, the Transportation Logistics Care Center has been finished with a parking lot for 650 vehicles. The construction of the double-track, 20-kilometer long rail beltway is missing only 3.5 kilometers. There is also the longest breakwater in Latin America – 4.3 kilometers long. There is also the dredging of the new navigation channel, the turning basin, the landfill, the public tenders for four new terminals for fluids, containers, agricultural bulk, minerals, and multi-purpose ones, which would permit the arrival of the first ship before the end of 2018.

It is important to mention that this enlargement area was originally part of the Veracruz Reef System and Rasmar site. Therefore, all the construction process has always observed the successful preservation of sea species, which were rescued using sediment anti-dispersion mesh and applying the later existing environment techniques. This port will allow the arrival of eighth generation vessels, the largest in the world.

If not enough, we have initiated the works in the second year. Because of the budgetary reduction, we had to tailor a new financial strategy so

that the 80% of the investment came from the private sector. Fortunately, the trust placed in the government and its agencies allowed the different interests to align, and the breakwater is practically ready. The dredging in process is carried out by the world's largest dredger, Marco Polo. The concrete pile placing and landfill for land reclamation has been approved by COFECE – tendered and adjudicated last week. The commitment of receiving the first vessel before the end of this administration has been ratified.

Also during this administration, and for the first time, we have been given the Green Port Certification by the Eco Ports, located in Rotterdam, Netherlands, and approval by Loyds Register, located in London, for two Mexican ports, Ensenada and Lazaro Cardenas. They are the second and third ports in the American continent that have received this European certification just behind the Santa Maria Port in Colombia. In addition to that, the 16 Mexican federal ports have already been certified by the Federal Environmental Protection Advocate as “level 1 clean industry.” The port of Manzanillo has also received its first certification as “Clean Port.”

Friends, as we have stated that “childhood is destiny”, allow me to say that “location is destiny.” The three zones in America have evident asymmetries. Mexico works as a link, hinge, axis, union, and transition among the regions. Therefore, it is natural to see ourselves as a pass and space of development in the region. Let us remember that the enlargement of the Channel of Panama is modifying the current flows. Several Caribbean countries are modernizing and updating their ports, and the inevitable insertion of Cuba into the region will have an impact in the transit of cruisers and vessels.

For all I have shared, informed, and discussed in this meeting, I appreciate and recognize the effort of the Mexican Navy and the great idea of carrying out this reunion in Veracruz – the oldest port in the Continental America. I also thank you for inviting us to share these national efforts in the maritime and port sectors.

I close my participation with a phrase from the Spanish poet, Leon Felipe, “Important is not arriving first, but together and in a timely fashion.”

PROJECTION OF MEXICO'S IMAGE THROUGH ITS PARTICIPATION IN THE MARITIME SCENARIO

M.A.

ALONSO FRANCISCO MARTÍNEZ RUÍZ

DEPUTY LEGAL CONSULTANT,
SECRETARIAT OF FOREIGN AFFAIRS

Law Master's Degree by ITAM with a diploma (ITAM) and Master's Degree (University of London) in International Public Law. Member of the Mexican Foreign Service since 2004. He currently serves as Deputy Legal Adviser "B" of the Secretariat of Foreign Affairs and is a member of the Legal and Technical Commission of the International Seabed Authority. In the Secretariat of Foreign Affairs, he has also been Director of International Law and Litigation in Legal Consulting, Director of Human Legal Affairs in the Permanent Mission to the OAS and Consul of Legal Affairs in New York. Previously, he worked as an investigative assistant for Professor Hermilo López Bassols for the preparation of the book "International Contemporary Public Law and Basic Instruments".

The Secretariat of Foreign Affairs, while driving the foreign policy of Mexico in marine and maritime matters, has acknowledged that international legal and political development of the law of sea is essential to our national interests. Mexico is a leading actor in these forums due to our country's extent of coastline: with about 3 million square kilometers of sovereignty and jurisdiction, it holds a privileged geographical situation as a coastal state in between the Pacific and the Atlantic Ocean, with a high potential in exploration and preservation of live natural resources, abundance of hydrocarbons available in the Mexican marine zones and mining power for a promising future industry.

In addition to this, there are some other fundamental factors of internal development such as the promotion of foreign trade and investment, as well as the generation of conditions that lead to the technological development of the country, in combination with the creation of national capabilities.

These advantageous conditions provide the country with the responsibility for protecting the marine environment, subject to parameters of sustainability in all the national activities at sea, thus assuring the ecological equilibrium in our planet. Therefore, based on these requirements derived from our location and interests, Mexico plays a key role in the development of international guidelines related to the Law of the Sea aimed at supporting sustainable development.

Mexico actively participated at the United Nations Convention on the Law of the Sea (UNCLOS) -an extraordinarily wide, complex and ambitious Treaty- that aims at sea and seabed topics. The participation of our country in the negotiations of this instrument was truly relevant and counted on the participation of very important diplomats, for instance: Mr. Jorge Castañeda, Mr. Alvarez de la Rosa, and Mr. Antonio Gómez Robledo, among others.

One of the most important contributions made by our country was related to the legal realm that establishes the exclusive economic zone (EEZ). This contribution was accompanied by both the previous adoption of the enacting 1976 decree related to the exclusive economic zone and the bilateral negotiation of marine boundaries with both Cuba -in 1976- and the United States -in 1978- which let Mexico meet necessary requirements so as to have the Exclusive Economic Zone established within the UNCLOS.

One of the issues Mexico had a relevant role at, was the establishment of the international seabed as the common patrimony of humankind, which provides the States with the possibility of receiving the benefits of the resources located at the abyssal plains, cold hydrothermal vents and submarine

crests. The participation of Mexico in the development of the international guidelines contained within UNCLOS has let it continue to hold a relevant role in all of the organs that the convention itself has established.

Mexico pushed forward the participation of Mexican experts at the Commission of the Limits of the Continental Shelf (CLCS); it carried out presentations aimed at recommending the external limits of the continental shelf both within the western and the eastern polygons in the Gulf of Mexico. Such presentations are the result of coordinated activities with the Secretariat of the Mexican Navy, the Mexican Secretariat of Energy (SENER), the National Institute for Statistics and Geography (INEGI) and the Mexican Geological Service; all of them led by the Secretariat of Foreign Affairs, also counting on the support of Dr. Galo Carrera Hurtado. Under the terms proposed, the CLCS also recommended the extension of the continental platform along the western polygon; and nowadays it has been set under analysis the presentation of the extension of the eastern polygon.

Along with this exercise and in accordance with its duties, the Secretariat of Foreign Affairs has led the negotiations related to the delimitation of the continental shelf that our country carried out with the United States on regards to the western polygon in the year 2000; and on the other hand, the negotiations held with Cuba and the United States regarding the eastern polygon have been concluded with the recent signing (in January, 2017) of bilateral agreements. Derived from these agreements, internal law processes are expected to take place in each country; after its completion we will be able to say that the Gulf of Mexico counts on the delimitation, certainty and recognition of boundaries.

Mexico actively participates at the International Seabed Authority, by supporting and pushing forward the equilibrium between investment possibilities in minerals at the zone, and environmental protection. This way, we take part in both the fulfillment of the regulations for prospecting and exploration of the polymetallic modules, polymetallic sulphur and ferro-manganese crests rich in cobalt. On the other hand, it's worth mentioning that we are currently collaborating with the creation of the exploitation rules applicable to all these minerals.

Undoubtedly, with this we not only seek for the sustainable development of mineral marine resources, but also recognize the potential that the State may have, considering that Mexico counts on the closest position to the zone where these resources are located (the Clarion-Clipperton zone) where there are already people in charge of the exploration area, just 20 km from Mexico's Exclusive Economic Zone. The latter makes Mexico have a coastal State interest in the adoption of international legislative measures

aimed at preventing any environmental damage during exploration and exploitation of resources as well as the compensation measures to be applied so as to prevent any harm to our seas.

Mexico is actively involved in new Law of the Sea developments, and currently plays an important role in the task for the elaboration of a legally binding instrument complementary to UNCLOS on the maritime biodiversity beyond the limits of national jurisdiction. Our country's participation was crucial in concluding the thematic package on the negotiation of this instrument that seeks to regulate the use of genetic resources in the international seabed, through a principle of normative development that at the same time promotes investment, recognizes that the benefit of such resources has to be for all the countries and for all humanity in general - according to their status as common heritage of humanity.

We are looking forward to having zonal management mechanisms, and specially, to establish protected marine areas, for which it is encouraged that there is full agreement with other zonal management measures such as the especially complex marine areas of the Convention of the International Maritime Organization (IMO), the particularly sensible biological areas of the Biological Biodiversity Convention and the areas of special ecological importance of the International Seabed Authority.

Another key issue is to regulate that all activities should be based on environmental impact assessments, not only on the impact of the activity itself but also on the broad environmental impact assessments that take into account the different marine activities that are carried out. Finally, and very important for our country, it is that every economic development in these zones is accompanied by the creation of national capabilities, and in particular, by international cooperation for the promotion of the capabilities of the developing countries, as well as the exchange of technology. The negotiations concluded with a positive recommendation to move forward to a negotiating conference for an instrument, which is expected to be carried out at the upcoming general assembly.

Taking into account that the UNCLOS is the Constitution of the seas that establishes the legal framework of every activity at sea, it contains the relationship between that instrument and the regulatory standards established by the International Maritime Organization (IMO). The IMO actively participated in the negotiation of UNCLOS and implicitly refers to it in various resolutions. Although there is only one explicit reference in article VIII, article II, there are several resolutions that refer to the competent international organization taking into account its international mandate as a UN specialized agency on navigation and pollution matters caused by ships or oil spills.

UNCLOS is a referential instrument and requires States to take into account and ensure compliance with the international rules and regulations developed within the IMO on design, construction, provision and refurbishing of ships; prevention of collisions at sea; designation of sea routes; setting of traffic separation resolutions; identification of safety zones around artificial islands, facilities and structures; safety at sea; prevention, reduction and control of pollution from ships; and prompt notification to coastal States whose littoral or secondary interests may be affected by incidents, including maritime accidents.

In the Secretariat of Foreign Affairs, we support the efforts of the Secretariat of the Navy, together with other agencies of the Federal Executive, to participate actively in the IMO, based on our commitment with the Organization's objectives: to promote cooperation between States and the industry of the Maritime transport, to improve maritime safety and prevent marine pollution. Through more than 60 years of participation in the IMO, Mexico has maintained a steadfast and constant presence in the Council of the Organization, assuming its commitment with the fulfillment of the international standards of protection and security of the maritime transport, of the human life at sea and of the marine environment, as well as endorsing their interest in contributing to the education and training of seafarers in the region.

In this regard, and in full harmony with its commitment to the 2030 Agenda and the Paris Agreement, Mexico gives the highest priority and support to IMO initiatives so that it can achieve its objectives. An example of such commitments is that we work in a committed way with the Mexican Navy and the Transportation and Communication Secretariat (SCT, by its acronym in Spanish) promoting Mexico to the IMO Council for the 2018-2019 period, during the elections to be held next November 2017, where we hope to count on the support of the member countries in recognition of the role of Mexico in the Organization and the important advances that our country has made in defending and safeguarding our marine space, matching the IMO's own efforts to increase the standards of maritime and port safety and security for further innovation as well as fostering cooperation among member States in all those important aspects that form part of the development agenda from our nations.

Finally, I would like to highlight that in Mexico, the Federal Oceans Act was adopted in 1986. It is an instrument through which various resolutions of UNCLOS are incorporated into the Mexican legal system, and it even includes –more than twenty times– a referral to the regulations of such federal law. However, after 31 years of its effective date, all regulatory efforts are still pending. In this sense, in the Ministry of Foreign Affairs, we consider it is essential to make an analysis of the study of the

regulation of the Federal Oceans Act, taking into account the internal regulatory developments in Mexico through the various legislations that have been adopted related to maritime issues and thus, the full normative compatibility between the UNCLOS and the Mexican law will be reached.

MASTER LECTURE

THE EXERCISE OF NATIONAL MARITIME AUTHORITY AND ITS IMPORTANCE FOR THE DEVELOPMENT OF MEXICO

ADMIRAL
VIDAL FRANCISCO SOBERÓN SANZ
SECRETARY OF THE MEXICAN NAVY

He is an Engineer in Naval Sciences graduated from the Heroic Mexican Naval Academy. His academic background is integrated by different postgraduate studies; among them: the specialty in Submarine Weapons in Cartagena Murcia, Spain; specialty in Naval Command; Master's in Naval Administration and National Security at the Center for Higher Naval Studies; as well as the Staff Course at the U.S. Naval War College; and Human Rights Diploma Course at the Human Rights National Commission.

During his professional development, he had different charges on board the Mexican Navy ships: Minesweeper "16", Transport ship "Usumacinta", Coastguard "Ignacio Luís Vallarta", Coastguard "Ignacio de la Llave", Destroyer "Netzahualcoyotl" and Training Tall Ship "Cuauhtemoc"; as well as Executive Officer of the Third Fleet of Oceanic Ships; Executive Officer of the Naval Sector of Coatzacoalcos, Fleet Commanding Officer at the Pacific Naval Force; and Commanding Officer of the Naval Sector of Matamoros, Tamaulipas.

His qualities as military sailor have led him to have positions as Aid-de-camp of the Chief of Naval Operations; Principal of the Destroyer School; Technical Director of the Directorate General of Naval Communications; Private Secretary and Chief of Aids of the Secretary of the Navy; Naval Attaché in the Republic of Panama concurrent in Nicaragua and Costa Rica; and President of the Special Studies Commission of the General Staff of the Mexican Navy.

He has been awarded with the Decorations of Perseverance for 10, 15, 20, 25, 30, and 35 years, as well as the Exceptional Perseverance Decoration, Third Class for 40 years of service; the Second Class Naval Merit Decoration granted by the Spanish Government; and the National Maritime Service Decoration in the degree of Distinguished Services "Admiral Christopher Columbus", granted by the Government of Panama.

Maritime condition in Mexico

Mexico is a bi-oceanic country that holds a privileged geographical situation as per its access to the Pacific Rim, the Gulf of Mexico and to the Caribbean Sea. We count with more than 11-thousand-kilometer-long coast line, whereas both the territorial sea and the Exclusive Economic Zone extend to more than three million square kilometers, which represents 1.5 times the surface of the national territory, and almost 1.3 times the extension of the Mediterranean Sea. Due to its coastal extension, our country is ranked in the 10th., position worldwide and 9th., as per the length of its Exclusive Economic Zone.

The population inhabiting coastal states reaches 57 million people who contribute with 40% of the national gross domestic product (GDP). On the other hand, we count on a wide range of resources and marine ecosystems; situation that positions us 12th., among the best endowed countries within the worldwide maritime sphere. This wealth and diversity undoubtedly contribute to the economic growth. All along the littorals we may also find abundant coral reefs, coastal lagoons or estuaries where different protected natural areas (ANP, as per its acronym in Spanish) have been established, thus contributing to the preservation of marine species that inhabit in them.

On the other hand, the modernization of the country demands for the increase of energy capabilities, as well as the maritime drilling and production of hydrocarbons. Seeking for more and larger sources of this element, we have been carrying out searches on the oil or gas required to meet our energetic needs. Mexico is one of five-main oil producers from maritime platforms worldwide. This group of countries stand for 43% of worldwide oil production on the high seas.

With the Energy Reform undertaken during the current presidential administration, the Mexican Government seeks for reactivating the oil dynamism that has always characterized our country and thus go forward extraction procedures in these areas.

The ports and terminals distributed along our two littorals project us as a world class logistic platform; this situation has situated us among the economies with the largest amount of commercial relations around the world, thus having the possibility of reaching a wide range of markets and being recognized as a highly competitive partner for the production and export of goods and services with multiple strategic alliances leading us to become the sixteenth economy worldwide.

Mexico: an actor with global responsibility

Being aware of the global concerns related to the protection and sustainability of the oceans and its resources, food supply, carbon dioxide emissions, the

increase in ocean temperature, ocean acidity, environmental pollution, restoration of fish stock, among others, it is mandatory to include within the maritime policies all the local and regional programs and regulations that the Mexican Government has recently recognized and ratified.

Counting on the thorough conviction and commitment for actively participate with the maritime community and in accordance with the Mexican foreign affairs policy, Mexico has joined and signed a series of international treaties related with commonly shared concerns about the seas, its ecosystems and biodiversity. Some of these treaties are: the 2030 Agenda for Sustainable Development; MARPOL Annex IV, Paris Agreement and Aichi Biodiversity Targets.

Regarding the preservation of the marine environment, the Mexican Secretariat of the Navy, based on its Law on Disposals along the Mexican Maritime Zones and the response strategy for hydrocarbon spills, committedly contributes to preserve the seas clean. On the other hand, we are thoroughly committed to comply with the International Agreement for the Control and Management of Ballast Waters and Vessel Sediments (BWM) aimed to prevent, diminish and eliminate the transference of both pathogen agents and damaging aquatic organisms.

It is also worth mentioning that as part of the Mexican State's commitment, we count on the Inter Secretarial Commission for the Sustainable Management of Seas and Coastline (CIMARES). This institution is formed by ten State Secretariats as well as some decentralized organisms belonging to the Public Federal Administration and is aimed to the formulation and the implementation of the national policies oriented to the planning, ordering and sustainable development of these regions along the Mexican territory. To the fulfillment of its goal, CIMARES is working on the project named «National Policy for the Seas and Coasts in Mexico», a comprehensive document that seeks for stopping and reverting the damage that our seas have been subject to throughout decades and thus foster its current and future development.

As a coastal State, we foster the creation, functioning and maintenance of a national maritime search and rescue service that guarantees the safeguard of human life at sea, by the location of people, rescue, medical assistance, maritime and air evacuations and support to vessels, thus giving an immediate and effective response. Because of this, we are responsible for the “SAR” operations, using the means, ships, vessels, aircraft and personnel available by means of a deployment of the Maritime Search Rescue and Surveillance Stations (ENSAR) integrated to the Global Maritime Distress and Safety System that corresponds to the growing demand of assistance at sea.

Starting from our capabilities on matters of search and rescue, Mexico intends to assume greater responsibilities in the global environment, reason why, and in accordance with other coastal States like Chile and Peru, among others, it is evaluating the possibility to broaden the range of our area of responsibility for maritime search and rescue, currently limited to our Exclusive Economic Zone.

For biennial 2017-2018, Mexico has the Secretariat General of the Operational Network for Regional Cooperation of Americas Maritime Authorities (ROCRAM, by its acronym in Spanish) we will focus on the harmonization and coordination of common work among the member countries, through technical cooperation activities so that ROCRAM can be recognized as a landmark for experience, exchange and cooperation before the global maritime community, based on the guidelines of the International Maritime Organization (IMO).

Mexico keeps as a priority the strengthening of cooperation with regional Maritime Authorities, by establishing different collaboration agreements for information exchange and direct coordination with agencies and institutions with attributions on the matter. All of our actions are focused on a single objective: to increase maritime security and protection, as well as to promote pollution prevention in our seas.

Exercise of the national maritime authority

The Mexican State has made a great effort and investment to increase the flows of cargo and operations at the Mexican ports, having as an objective to duplicate cargo movement for 2018. Therefore, for the Mexican Government, it was extremely important that security kept up with this growth, having to safeguard the exercise of the National Maritime Authority and that its capabilities contribute to provide the conditions for the national maritime development, being the Federal Executive Power responsible for the Maritime Administration for the fulfillment of the resolutions on this matter. Recently, a structural reform established that administrative trade activities, port promotion and development, and in general every productive business and economic-resource activity should remain under the supervision of the Secretariat of Communications and Transportation (SCT).

In this sense, the Federal Executive transferred attributions to the Secretariat of the Navy (SEMAR) to exert the National Maritime Authority in order to guarantee the fulfillment of the international instruments, regional agreements and national legislation in maritime issues, with the purpose of increasing security and protection of productive activities to increase the flow of maritime trade.

Derived from the latter, this authority is exercised since 2017 June 17th through the binomial composed of the attributions of the Captain of the Port's Offices, and the operational means with which the Mexican Navy performs its coast guard functions. Through the firm, transparent and efficient exercise of the National Maritime Authority, we generate maritime port protection and security for strategic development.

With this same objective, based on different collaboration agreements, there are 14 Unified Centers for Maritime and Port Protection (CUMAR), which is an inter-agency coordinating group between the Secretariat of the Navy and all the authorities and other agencies whose responsibilities converge in the port facilities (customs, agriculture, healthcare, migration, etc.), to guarantee the necessary security conditions at ports, the application of the ISPS Code, the maritime activities, the administration, port operation and administration, as well as effectively understanding maritime and port incidents.

This way, to the date, the participation of the naval personnel has increased at the ports of the country through 22 Naval Units for Port Protection (UNAPROP, by its acronym in Spanish), allowing a greater security and response capability to any maritime or port incident.

The CUMAR is presided by the Naval Command of the jurisdiction in which the port is. The Naval Command will be the president; the Captain of the Port, the vice president; plus, three representatives from the Naval Command and three from the Captain of the Port's Office. Its main function is to establish maritime and port security and protection through the adoption of the corresponding measures for the enforcement of the regulations, security measures and actions to keep the levels of port facility protection.

Thanks to the systems and pieces of equipment that we count on, and the collaboration instruments with other national and foreign agencies, we keep the maritime domain awareness (MDA) through the permanent monitoring of what is going on in the Mexican maritime zones, as well as in the maritime and port environment, in order to carry out the risk and threat analysis that may have an impact on the security, protection, economy and environment of the country, and to have the possibilities of responding on a timely basis.

At the Mexican Maritime Zones, the National Maritime Authority is present with the purpose of maintaining the Rule of Law, and has an important operational response capability thanks to the ships and aircraft of the Mexican Navy in their Coast Guard functions, which are units with state-of-the-art technology and trained personnel.

Maritime development

The empowerment of the national maritime development is closely related to the exercise of the National Maritime Authority. With an effective National Maritime Authority that does concrete actions that guarantee security and protection, the Mexican State creates conditions that favor a substantial maritime development in the economic, social and environmental fields through local and foreign investment in fishing, tourism, trade and port infrastructure, respecting the environment and with seafarers well prepared and trained.

This sustainable development provides world-class standards in the merchant and fishing fleet, guidelines for energy efficiency, employment of new technologies in port operations, maritime traffic control mechanisms, and tourism fostering in the coastal regions; in addition to promoting the active participation of women in the maritime sector, labor certification of the personnel and improvement of human health.

The integral port infrastructure provides piers, port services, terminals and safe and efficient facilities to ease the trade of goods via the sea. At the same time, the Mexican naval industry fosters job generation through the construction of ships for the civilian and naval sectors, which constitute economic revenue that directly and indirectly benefits the country.

The education and training of the naval personnel are essential to strengthen the maritime vocation of the new generations. For this purpose, we count on the Naval University (UNINAV) and the Education and Training Trust for the National Merchant Marine Personnel (FIDENA, by its acronym in Spanish), where naval and merchant people are trained and educated at professional, technical-professional and postgraduate levels.

As part of our country's commitment to foster national education and international cooperation, Mexico implements educational and training programs for all seamen and seawomen, through regional training programs to promote innovation; academic, scientific and technological research; with the purpose of achieving an integral maritime education of quality, strengthening social and economic development.

With maritime and port security and protection, synergies that thrust development are generated and competitiveness and sustainability of the sector are increased. Thus, Mexico is making an effort so that security and protection can effectively evolve in favor of national development, and consequently, at international level, safeguarding maritime interests and contributing to its strengthening.

Conclusions

Mexico has a broad maritime potential thanks to its privileged geographic situation, reason why we keep a constant commitment with the international maritime community by promoting sustainable development and the culture of clean seas, supported by the exercise of the National Maritime Authority, facing the challenges and defies with global responsibility, thus contributing to maritime development and strengthening national progress.

Within the framework of the «World Maritime Day», we add up to the global synergy in which shipping represents a fundamental route for the exchange of goods and services among States, making this activity a driver of economic development, cooperation, wellbeing and harmony among countries. Hence, we direct these actions with conviction and effort to promote and create at all times: safe shipping, protected and efficient in clean oceans, shaping the solid base that will be the new history of the exercise of the National Maritime Authority in Mexico.

Once again, my recognition to every attendee who honor us with their presence at this International Seminar, and especially to the distinguished personalities who gave greater prominence to this event.

Thank you very much for your attention.

INTERINSTITUTIONAL COORDINATIONS OF THE CHILEAN NAVY AS A COAST GUARD FOR EXERCISING ITS PORT AND MARITIME AUTHORITY

CAPTAIN

PEDRO MARCOS VALDERRAMA CARRILLO

CHIEF TO THE OFFICE OF ADMINISTRATION CONTROL OF THE MARITIME
TERRITORY AND MERCHANT NAVY FROM CHILE

He studied at the Naval School “Arturo Prat” of the Chilean Navy, where he graduated as Littoral Midshipman. He’s a littoral specialist in Maritime Administration Implementation Engineering. He has a Master’s in Environmental Management from the Development University; a Diploma Course in Business Administration and Managing from the Magallanes University; and one in Private Maritime Security from the University of the Sea. He also took the Course on Information from the Naval War Academy, among other studies in Chile, Panama and Brazil.

During his professional career, he has served in different Captain of the Port’s Offices, Maritime Governing Offices, the Maritime Issues and Aquatic Environment Directorate, and currently at the Directorate General of Maritime Territory and Merchant Marine, standing out his performance as Captain of the Port at Port Williams, Coronel – Lota, Talcahuano and Valdivia; Maritime Governor of Aysén and Port Montt. Additionally, he was Chief of the Aquatic Environment Preservation and Pollution Fight Office.

He has served on different surface units, being Commanding Officer of the LEP “Ona” and LSG “Hallef”. He totals fifteen years of command, in which he has led important groups of people who work to provide a maritime public service of excellence.

Currently, he is Chief of the Managing Control Office of Directemar, being one of the direct counselors of the Director General and in charge of the internal audit plan of the national maritime organization.

In the first place, on behalf of Rear Admiral Guillermo Lüttges Mathieu, I would like to express my gratitude for the invitation made to the Chilean Maritime Authority. Unfortunately and due to previously arranged duties, Rear Admiral Guillermo Lüttges could not attend this important event; however I am glad to bring his salutes and express his gratefulness to you for having considered Chile to take part in this remarkable Seminar.

Our topic is “**Interinstitutional coordinations of the Chilean navy as a coast guard for exercising its port and maritime authority**”, provided that both the Maritime Authority and the Maritime Administration from Chile are under the responsibility of the Chilean Navy.

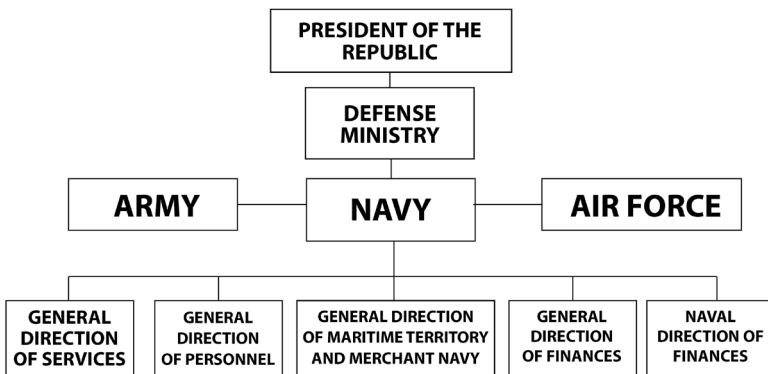
The themes will be addressed as follows:

1. A description of the Chilean National Maritime Authority
2. The maritime scenario
3. Areas of action, and some final thoughts

As for being part of the Chilean Navy, which itself is one of the three branches aimed at national security purposes, we depend on the Secretary of Defense which is subordinate to the President of the Republic.

We can see here a graph that presents in detail the macro organizations of our Navy. These organizations are coordinated through the Navy Chief of Staff and with the following: General Directorate of Services (in charge of our supplies); General Directorate of Personnel (in charge of human resources); General Directorate of Maritime Territory and Merchant Navy (DIRECTEMAR, as per its acronym in Spanish); General Directorate of Finance (coordinating financial resources); the Naval Operations Command (which concentrates the use of force); and of course the General Directorate of Maritime Territory and Merchant Navy, which is the National Maritime Authority. (Figure 1)

INSTITUTIONAL ORGANIZATION CHART

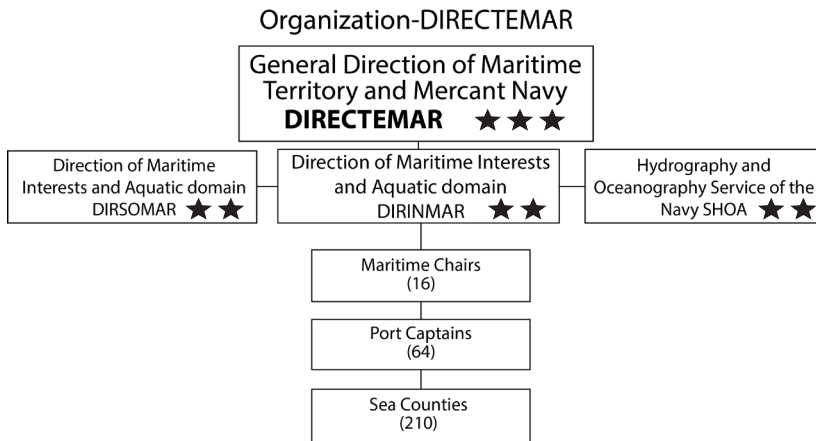


(Figure 1)

This way, our country is capable of bringing together both the naval power and the maritime service aiming at achieving the maritime power that would meet our country’s needs for protection and development.

The General Directorate of Maritime Territory, which henceforward I will call DIRECEMAR (as per its acronym in Spanish), is envisioned to be a “world class public maritime service” and its mission –which relies on the organic regulations- is “the fulfillment of laws and international agreements inserted within national law on behalf of the State of Chile in order to: protect human life, provide protection to navigation, preserve the aquatic environment and the marine natural resources and finally oversee the whole range of activities carried out within its jurisdiction area; all these aimed at influencing and directly contributing to the maritime development of the country.

This scheme currently followed by DIRECTEMAR, is under the command of a Rear Admiral and counts on three Technical Directorates, say: Protection and Maritime Operations (DIRSOMAR, as per its acronym in Spanish) commanded by a Rear Admiral LT; Maritime Interests and Aquatic Environment (DIRINMAR, as per its acronym in Spanish) and also led by a Rear Admiral; the Navy Hydrographic and Oceanographic Service (SHOA, as per its acronym in Spanish) under the command of a Rear Admiral; and finally, in the territory, it is distributed in 16 Maritime governmental bodies – 14 of which are continental, Easter Island and Antarctica-, 64 Captain of Port’s Offices and 210 Sea Municipalities. (Figure2)



(Figure 2)

The Directorate for Protection and Maritime Operations is responsible for the Maritime Search and Rescue Service and addresses this Navy wide and top priority duty through DIRECTEMAR. In case human or material resources from the General Directorate of the Maritime Territory and Merchant Navy are insufficient, the rest of the components within the Navy are immediately activated and provide DIRECTEMAR with any support required.

The Navy Meteorological Service counts on a double function which consists on: Supporting the activities of our fleet and grant a public service by issuing and disseminating meteorological forecasts regarding the maritime area.

The Maritime Inspection Service: Brings into compliance both all of the international agreements and Flag-related regulations applicable to vessels navigating in cabotage and the regulations added by the Flag State when so done in international service.

The Maritime Signaling Service: we hold full responsibility for more than 2000 signals distributed along our coastline and Antarctica and about which we count on maintenance, development and modernization plans.

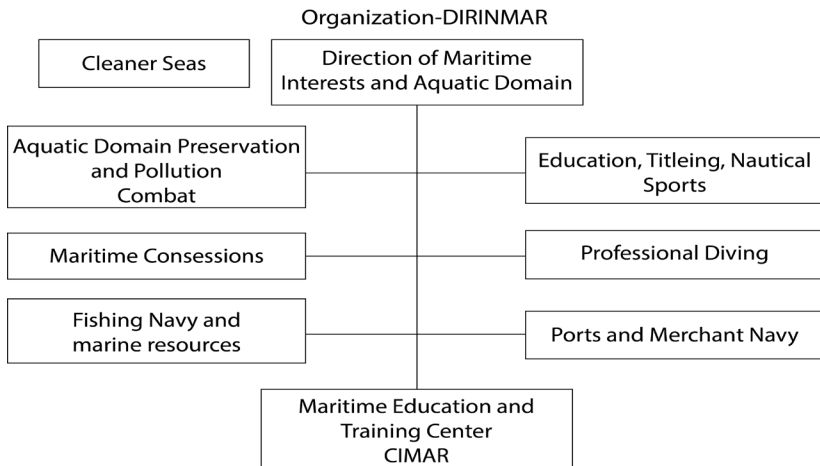
The Pilotage and Practical Service: its origin is based on the commercial need for securing the vessels and the cargo. We have observed that the Practical not only counts on the international dimension (which is at the service of good commerce), but also covers its nature as a link in the chain of maritime protection in which the individuals are meant to protect the public, vessels, water ways, ports and the marine ecosystem.

The Maritime Police Service: it is aimed at maintaining the order, protection and discipline within the vessels, littorals, port facilities and shipyards.

The other Technical Directorate counts on a direct relationship with maritime interests, which we have defined as: “All those assets and activities that are linked together or necessarily performed at sea, whose purpose is to encourage the development, prosperity and wellbeing of the people by the coast”.

The Directorate of Maritime Interests and the Aquatic Environment: It counts on a Department for the preservation of the Aquatic Environment and fight against pollution. Six years ago, Chile created the Secretariat of the Environment, so we have regulations to share. We are co-supervisors of all the environment managerial instruments, environmental regulations and resolutions ordered by the Environmental Evaluation System, as well as for the control imposed by the Environmental Superintendency. On the other hand, all the aspects associated with international agreements strongly related to vessels continue to be an exclusive and excluding duty under the responsibility of the Maritime Authority. (Figure 3)

Maritime Concessions: under the command of the Secretariat of National Defense, we are responsible for managing the territory along the coastline. It is an undoubtedly complex assignment since it refers to a highly treasured



Technical Organization in Matters of fisheries, Ports, Coastal Borders, Maritime personnel qualification and Aquatic Domain Preservation

(Figura 3)

territory as per its capabilities of bringing together diverse activities from inland to the coast, say: development, industrial, real state, recreational or observation doings.

Fishing Marine and Marine Resources Audits: the Fishing Law that depends on the Secretariat of Economy in our country, within article 172 has appointed both the Chilean Police Force and us to be co-auditable. Therefore, we only audit but do not impose any sanctions; we officially inform either the corresponding Civil Courts or the National Service of Fishing and Aquaculture (SERNAPESCA, as per its acronym in Spanish).

Department of Education, Maritime Entitling and Nautical Sports: We provide the public (from High Sea Captains to the most modest collector on the shore; thus including the whole range of coastal maritime personnel) with the categories and the registration they may require.

Regarding the nautical sports arena, we also provide the public with the corresponding registration and we also regulate their activities by classifying them in: Bay Patterns, Coastal Patterns and High Sea Patterns. After many years of having shellfish gatherers and sports and commercial divers, professional diving in our country arose as a result of the development of both salmon and mussel growing. An intermediate category –called intermediate diver– was created in order to address maintenance and cleansing functions at salmon-growing centers. The purpose of this category is the compliance with all the sanitary and hygiene regulations imposed by the sensitive salmon market.

Ports and Merchant Navy: They are devoted to the revision of maneuvering studies for authorizing the presentation of port-operator studies.

Since the number of vessels continues to increase every day, and given that the infrastructure cannot grow at the same pace as the number of vessels does, it is necessary to verify maneuvering feasibility at all times, not leaving behind safety criteria as established within ROM regulations.

Finally, the Center for Maritime Instruction and Training (CIMAR, as per its acronym in Spanish) is a school established by the International Maritime University in our country. It was the first Institute in Chile to lecture all of the IMO courses that in the past were not given by any other organisms; nowadays they do, so all of those courses regulated by DIRECTEMAR that are not imparted, can be taken at CIMAR on a subsidiary basis.

Navy Hydrographic and Oceanographic Service: it counts on an Oceanographic Department, and besides the high-scale physical oceanographic and biodiversity study it carries out, it also bears the Tsunami Alarm National System –information technology containing all the statistics and data corresponding to all the hydrographic, oceanographic and radiographic studies completed up to date.

The Executive Secretariat of the National Oceanographic Committee: this committee joins together the scientific, university, private and public communities towards oceanographic research. Their scientific activities are mainly performed onboard the hydro-oceanic fishing vessel AGS “Cape Horn”.

Hydrography Department: its main product is the nautical cartography (electronic and printed formats) along with other publications related to supports to navigation.

Instruction Department: it provides the Officers with formation courses, among which the most remarkable ones are: “Naval Engineering Specialty in Hydrography and Oceanography, course Class A”; Course on Hydrographer-Oceanographer Mechanics for Sailors and Technicians.

Services to Third Parties: this has to do to the provision of services and sales of products to the general public.

In land, our Navy is divided in 5 naval zones, 16 Maritime Governances (according to the distribution seen in graphics) under Chief commands (Operational Command), but not in their decisions of Authority and Maritime Administration where by law they are autonomous (they depend on DIRECTEMAR). However, they depend on and are subordinate to their own Naval Zone Commander in chief as for: Command, Control, Coordination, Sustaining and Support.

4170 officials are meant to be exclusively part of maritime activities from the 22500 officials that the institution has (Navy of Chile). However, as I previously stated, Commands of Naval Zones support directly their Maritime Governors with all available resources in cases when a SAR emergency is activated, a catastrophe, a great accident or when a contamination accident occurs.

As for resources, we have 04 High Seas Patrol vessels (built in the country), 05 General Services Patrols, 01 Cargo Ship, 01 Toll Ship, 19 general services boats, 04 coastal vessels, 48 small fast boats for rescue and interdiction and 12 other multi-purpose small boats.

As for Naval Air and Maritime Units, the ones in blue carry out the main naval roles, but eventually, they also support maritime functions. The ones in red are designated to Surface Units and Land Repairs, for main maritime roles 24/7. At the end, we have 35 aircrafts, where we can find 02 P-3, 03 CASA-295 and 02 P-111, for air exploration; then moving to the 07 new P-68 for coastal patrol, 07 Cougar Helicopters of which 02 are configured for SAR operations and 14 light and medium for maritime operations for Naval Zones, Maritime Governances or Units, for search and rescue tasks, support to maintenance of maritime signalization, support to extreme zones, and for Maritime Law Enforcement and costumes, too.

Our projection in the use of means, from the interior. We see our maritime space from the Range towards the sea since we have a jurisdiction over navigable lakes and rivers, plus the territorial sea and the contiguous zone, where full exercise of the rule of law of the coastal state is not met, but in aspects such as customs where the means of coastal scope operate. And in high seas, which is the maritime space where Chile is present with the capabilities of the Navy.

The legal framework that we have is mainly the Organic Law of DIRECTEMAR from 1953; the Navigation Law is the one that orders the navigation in Chile and all ship owner regime. The Law of Merchant Marine Promotion, points out that Chile is not a tremendous economy of consumption, we are 17 million and some, and we are for the air lines, a terminal country. Whoever brings cargo to Chile normally takes something different from Chile, but he or she does not have the guarantee to take a full load back. Therefore, Chile is a terminal country and that made the government of that time to create a Law of Merchant Marine Promotion, and it was not to be liked by the Merchant Marine. There are at least $\frac{3}{4}$ of ships from national shipowners with convenience flags, but there is an important amount of ships, around 40 are hoisting ensigns in international routes to satisfy our own needs for this terminal country condition, far away from the centers of consumption and international trade.

The Regulations of the Maritime Search and Rescue Service, Supreme Decree N° 1190 of 1976, creates the Search and Rescue Districts within the same jurisdictions of the Naval Zones. Here we have another powerful interaction; the Navy understands that in peacetime, one of its main roles is Search and Rescue. In addition, this organization takes care of the emergencies derived from hydrocarbon spills. Although in my country, everyone who operates with hydrocarbons has OSR contracts and there are enterprises in charge of this. We understand that in containment, the first stage has to be immediate since the damage increases, and in the fact that we have to exercise a faster and subsidiary action to avoid environmental damages in order to become even greater.

The Law on Environmental Requirements regulates everything related to the Evaluation on Environmental impact of any public or private venture, and establishes the relevance of projects where they are set under evaluation before the Service of Environmental Evaluation, in the form of a Study on Environmental Impact or Declaration of Environmental Impact, until the Resolution of Environmental Qualification may be obtained or not. The latter, is the one which will be audited by the Superintendence of Environment, supported by and in coordination with the Maritime Authority, as long as it is related to projects executed at sea, rivers or navigable rivers, coast or if they are a direct or indirect source or potential source of sea contamination.

And then, the Law that Penalizes the Illegal Trafficking of Drugs and Psychotropic Substances, the General Law for Fishing and Aquaculture and the Law about Maritime Grants, in which we have diverse administrative and customs obligations, but in which, unfortunately, the effort done has not had special allowances of resources from any type of organization.

Regarding our international responsibility for maritime search and rescue, with a S.A.R. area of 26,476,005 km², we are the fifth largest area assigned to a State by the IMO. Bordering with Peru, France (Tahiti), New Zealand and Argentina (the latest ones we share some area with) having the same combined effort that each summer period we jointly carry out in the Antarctic Zone. Towards the fishing inspection and administration process, since 2006 Chile promoted and ratified the agreement with the South Pacific Fishing Regional Organization, along with Australia, Belize, Colombia, China, Ecuador, Cuba, Peru, Australia, Nueva Zealand, among others, aimed at managing the fishing capture and the effort of Jurel resource given its life cycle throughout the Pacific Ocean zones.

In addition, recently in 2016, we entered the New York Agreement on “Straddling Fish Stocks and Highly Migratory Fish Stocks”, and for several years we have been part of the “Convention for the Conservation of Antarctic Marine Live Resources (CCAMLR)”.

Chile's foreign trade is based on its commercial exchange, which is in a 95% carried out through maritime transport; thus, we are the third user of the Panama Canal, due to the need of taking our production to the Asian market and Oceania, North America, South America, Europe and Africa.

The rest DIRECTEMAR's relationships, as shown in the graph, is with the Executive B, through the Ministry of Defense; with the Legislative Power, for all matters concerning the processing of laws and incorporation to Treaties, Agreements or amendments mainly from the IMO and the ILO We also have an interactive relationship with the Judicial Power, since as Maritime Police DIRECTEMAR assists Civil and Special Tribunals (such as Family, Labor and Environmental) and also the Judges of Warranty, that deal with criminal matters.

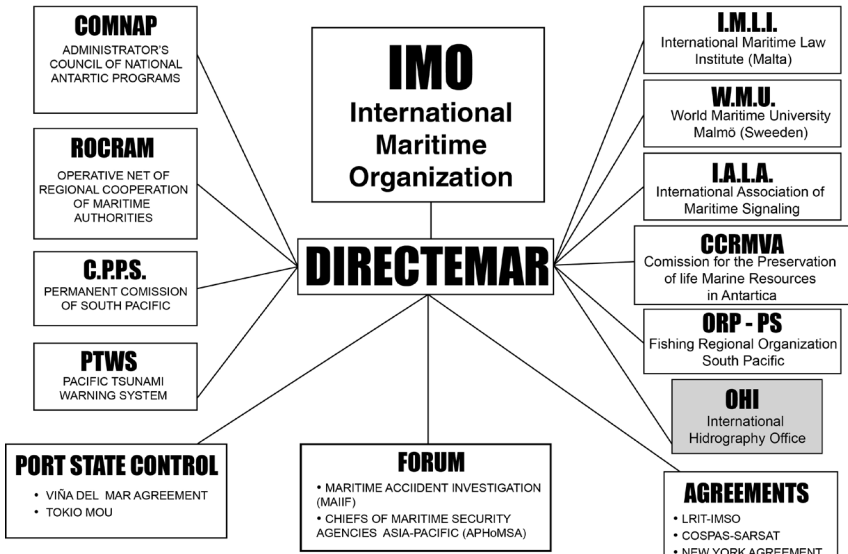
The ministries we are closely related to are those regarding Environment (already explained); Public Works as per the development of constructions such as ports, bridges, among others; the Ministry of Economy as per fishing and aquaculture; the Ministry of Labor since in my country, labor demands are higher than those enforced by both labor law and international regulations. Consequently we are co-supervisors of these norms.

And also with the Ministry of Defense for coastal boarder administration; the Ministry of Foreign Affairs due to all of our international activities and the interests of the country at sea; with the Ministry of the Interior on regards to public security and finally, with the Ministry of Transportation due to coastal shipping and the navigation along the southern zone of connectivity of multi-insular Chile.

On the other hand, DIRECTEMAR establishes relations with unions and associations of industrial and artisanal fishermen from the Merchant Navy; port industry, maritime entities, academic and technical organizations, as well as with economic groups, where ship agencies, ship manufacturers, port operators, maritime service companies, users and individuals are.

In the international scenario, of course, we have a long relationship with the IMO, the Maritime Authorities Operational Network for Regional Cooperation, with the South Pacific Permanent Commission, with the Pacific Tsunami Warning System (PTWS). Besides, we also have established strong bounds with the International Maritime Law Institute in Malta; the World Maritime University in Malmö (Sweden); the International Association of Maritime Signaling and the International Hydrographic Office (Monaco); the Viña del Mar Agreement and the Tokyo MOU as Port State Control Memoranda of Understanding, Forums and Agreements (figure 4).

International Domain Relations



(figure 4)

As for the areas of action, we dream of having: **safer, better mapped and cleaner oceans.**

In the area of maritime security and safety, we commit to safeguard human life at sea -as our main activity and committed action-, maritime safety and maritime police.

And right before getting to the final thoughts I would like to mention the following:

- DIRECTEMAR, as a public service and national maritime authority, is, within its jurisdiction, the regulatory and supervisor body, which at its level it centralizes and facilitates the development of the national maritime activity.
- DIRECTEMAR, meets various legal regulations and international agreements that range along broad areas of action, say: Safeguard of life at sea, maritime police and the preservation of the marine environment.
- Maritime activity keeps a steady growth trend, which implies an increasing demand for tasks and commitments that DIRECTEMAR must inevitably fulfill.
- The broad area of responsibility assigned requires the use of a large amount of human, material and financial resources that allow us to provide a modern, timely and efficient public service that satisfies the expectations of maritime users.

- DIRECTEMAR's interaction with the rest of the Navy, the State Powers, Ministries, autonomous bodies, the Public Prosecution Authorities and the Court of Auditors, as well as national and international maritime players, is based on a correct jurisdiction and competency harmony, which set the laws and regulations in force.
- Lastly, DIRECTEMAR based on the recognition of the nature that every national reality presents is willing to share its experiences, either at the end of IMO cooperation programs, ROCRAM or bilaterally.

Thank you for your kind attention.

IMPULSE TO THE ECONOMIC GROWTH OF PANAMA THROUGH THE REGISTRY OF SHIPS

M.A.

TOMÁS MANUEL ÁVILA MANZANARES

GENERAL SECRETARY MARITIME AUTHORITY OF PANAMA

He holds a degree in Law and Political Sciences from the University of Panama. He has postgraduate studies in Public Law and a Master's degree in Commercial Law, both from the Science and Technology Latin American University.

With 23 years experience, he has stood out in the branch of Administrative Maritime Law, offering his legal services to an important group of builders and consultants in the registration of ships, and has been a remarkable foreign counselor in financial transactions of ships in banking system representation and international financiers in Asia and the Middle East.

As a member of the Maritime Law Panamanian Association, he worked as president of both the National College of Lawyers and the Commercial Law Association.

He was founder of the attorney's firm Avila & CO specialized in maritime and corporate law at an international level. In addition to this, he worked in other attorney's firms like: Quijano & Asociados, Arias B. y Asociados, Bufete Illueca.

He took part in the activities organized by the then National Maritime Commission. This resulted in the enactment of the Law Decree of 1998 that the Panamanian Maritime Authority created. He also contributed in the drafting of the Maritime Labor Code and took part in representation of the builders sector in discussions at the International Labor Organization. He was called to work in the drafting, discussion and the Executive Organ, to enact the Laws of Maritime Updating.

On behalf of Panama Maritime Authority and its administrator, Mr. Jorge Barakat Pitty, we want to express our appreciation for this invitation. We are very pleased to be for the first time in Veracruz, Mexico as well as impressed by the facilities of this Heroic Mexican Naval Academy, where we will share with you our experiences.

The Republic of Panama owns the leadership as the main recipient of foreign investment in Central America; in this respect, in 2016 Panama recorded US \$ 5.89 billion, equivalent to 45% of foreign direct investment in Central America. According to World Bank figures, Panama's GDP growth in 2016 was 4.9%, one of the highest ones in the region. As an example, we can indicate that Paraguay had 4.1%, Costa Rica 4.3%, Mexico 2.3% and Brazil -3.6%. Since 2010, we have maintained the investment grade according to Standard & Poor's agencies: BBB stable, Fitch Ratings: BBB stable and Mood's: Baa2 stable.

According to the World Bank, the 2016 logistical performance index places Panama No. 1 in Latin America and 40th worldwide, followed by Chile at position 46, Mexico at 54 and Brazil at 55. However, these data are not to my liking since Panama is ranked very low; in this sense Germany, Holland and Singapore should be taken as a reference, since they have the highest rates of performance worldwide. According to the World Economic Forum, Panama is in the 6th., position as per the quality of airport infrastructure and 7th., in port infrastructure worldwide too.

In an attempt to understand what Panama has done to the benefit of the merchant marine, it is important to mention that the tertiary sector contributes largely to Panama's gross domestic product (83%), mainly derived from the export of services and also due to the fact it has a productive profile very different from that of our Central American neighbors. In this tertiary sector is where the merchant marine plays a major role with its contributions.

There are few State institutions that on a yearly basis have to make a contribution of great importance to the economy of the country: the first one is the Panama Canal that contributes 1.6 billion dollars a year; secondly, the Maritime Authority, which provides \$ 120 million dollars, half of which is obtained from vessel registration. In this regard, I would like to point out that Panama is not the only beneficiary of the business, the beneficiaries of this business are all our clients since the operating expenses of a ship are kept low, they may reduce by half the distance between the Pacific and the Atlantic, and can bear a flag that allows them to contract work force from any country.

Why is Panama the world leader in ship registration? And why the most important shipping companies and boats have chosen the Panamanian pavilion? It is because of the characteristics of our registry. We have 18% of the world's merchant fleet and 220 million gross tons of registry; having been able to maintain this leadership since 1993. This is an achievement but at the same time a great challenge since many countries would like to take part of or all of this success, for this reason we keep constantly reinventing ourselves in order to meet the needs of our users and the maritime sector in general.

What can we identify as Panama's success as a registry? We think along with and talk with our users, we keep private companies as partners in this business. We also count on a structure called Security of the Maritime Authority in Panama (SEGUMAR), which is the Technical Office of Documentation for Ships, which works 24 hours a day 7 days a week; and as part of our competitiveness we offered our users, through these difficult times (after the events that took place in 2008, the international maritime industry has not been able to recover completely), up to a 100% discount of the yearly rate as per the registration. In addition to this, we offer discounts to both Eco ship and Green ship, which are vessels focused on reducing air pollution and the conservation of the marine environment; this also applies to Grupo Económico or Flotas - with 60% discount on their annual rate - I am referring to groups that count on more than 15 ships. Finally, there is a very special 15% discount for ships that have not had any detention from the Port Ruling State in 24 months.

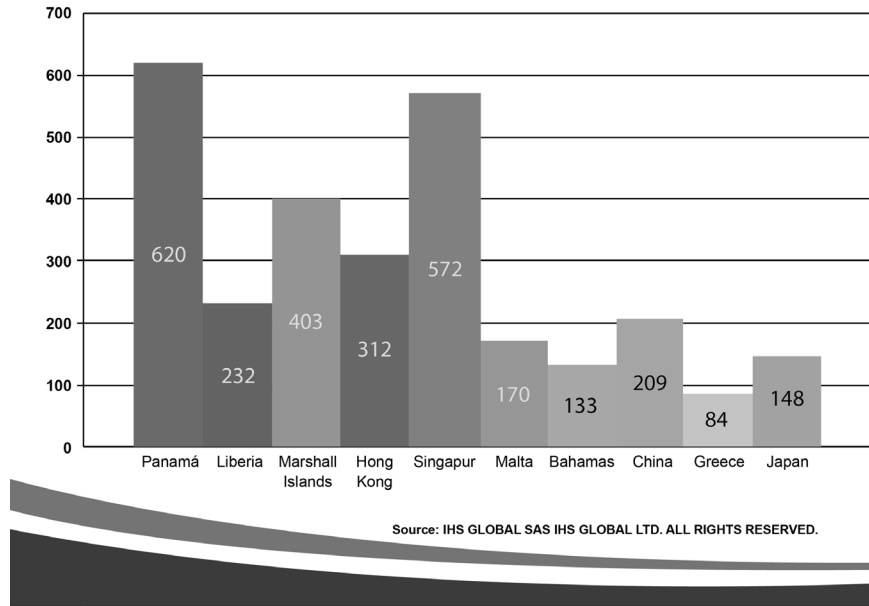
We also have ISO 9001:2008 certification, which was obtained prior to the voluntary IMO audit in 2008.

As an antecedent of the registry of ships, we can indicate that Panama has taken part for 100 years in the business of the registry, which started in 1917, unlike our closest competitor, Liberia, that began in 1948 and in the third position, the Marshall Islands that started in 1988. The registry of ships in Panama is backed by the government and since it is a state entity, we have no problem with the registrations that are granted to private entities but certainly, being a state registry we have been able to solve, at a diplomatic level, problems with our ship owners: this cannot be done by any private company. For this reason, we have a large number of naval mortgages registered in the Panamanian registry; in 100 years, there has been no case of fraud, and this is known and honored by the specialized international banking which asks ship owners - specifically - to register their ships in Panama.

We are on the white list of the Tokyo and Paris Memoranda of Understanding and we are also cooperating members of the Tokyo Memorandum of Understanding, situation that keeps us at the forefront of compliance with the international conventions governing navigation in the world.

In the following table, we can see the perspective of the ships that are under construction because the tendency is to keep the age of the fleet low, that is why the time of international registrations are the new building ships. In this regard, the age of the Panama fleet is 16, Liberia 10, Marshall Islands 8, Greece 21 and Japan 21 years old.

PROJECTION OF PARTICIPATION IN THE MARKET OF NEW SHIPS
CONSTRUCTION OF PANAMA AND ITS COMPETITORS
YEAR 2017-2020



We want 620 ships by 2020, Singapore has become number 5 competitor on the list -which also has a very significant number- and offers companies to settle in the country counting on 20 years of income revenue tax exemptions. Panama has an incentive law but it is not that interesting.

For the projection of the Panamanian merchant marine world, wide, we have regional documentation offices for seafarers in New York, Miami, London, Pireos, Dubai, Seoul and Manila; in addition, provisional licenses can be made in each of the Panamanian consulates. The definitive license must be issued at a regional office, we currently have 620 thousand licenses in force around the world. The Panama Maritime Authority also has offices to serve clients in the Gulf of Mexico, Panama, Pireos, Istanbul, Singapore, two in Korea (Seoul and Busan), two in Japan (Tokyo and Imabari); and in Miami and New York to serve the cruise industry.

On June 17th., this year Panama established a format of diplomatic relations with the People’s Republic of China, and broke relations with China-Taiwan; this gave us access to a much larger market. Personally, I

am in charge of opening the consulate in Shanghai, which in addition to being a Consulate, it will count on a regional office and a SEGUMAR.

The human element is one of the pillars of the maritime industry; as a result, Panama complies with the MLC 2006 and STCW78 agreements and we invite the foreign training centers to certify and acquire Panamanian licenses, thus encouraging the need or the desire to work aboard Panamanian ships.

We have a system for the issuance of licenses called Web Base, designed to avoid forgery of licenses; the document has 32 security points and the system has different barriers that protects us from cyber-attacks. In addition to this, we are working on the automated flow of the consulates in order to allow payments to be made with credit card, among other advances.

Bilateral international cooperation agreements are very important to us as a registry, therefore we subscribed to bilateral agreements and technical cooperation with other maritime administrations and formed both academic and strategic alliances. Finally, we have the Law of Promotion to Naval Financing that aims at improving investment conditions in maritime matters through fiscal, labor, and immigration incentives; as well as financing in construction or repair of containers, ships, shipyards and offshore wind farms.

THE IMPORTANCE OF INTERNATIONAL MARITIME LAW IN THE EXERCISE OF THE PEACEFUL USES OF THE SEA: AN ACHILLES HEEL

PROFESSOR
DAVID J. ATTARD

DIRECTOR OF THE INTERNATIONAL INSTITUTE OF MARITIME LAW

He is a well-known Law graduate in Malta, England and Wales. He is a member of the Middle Temple in London. He taught International Public Law at the University of Malta. He has been a Professor of International Law at the University of Rome; guest investigator at Oxford University; scholar of Fulbright, at Yale's Law School; he was a guest professor at the University of the Sorbonne from Paris. He was named the first holder of the Environmental Diplomacy Chair of the Program of the United Nations for the Middle East. He has been the Director of the Maritime Law International Institute of the International Maritime Organization.

He has contributed with various publications, among them the book "The Exclusive Economic Zone in International Law"; he was rewarded with the Paul Guggenheim Prize, in Geneva; through Malta's Government, he proposed measures to protect the world weather to the United Nations, his proposal gave rise to the United Nations Convention about the Global Weather Protection. He performed as a Special Advisor of the General Secretary of the International Maritime Organization in London and as a Special Legal Advisor of the Executive Director of the program of the United Nations for the Environment in Nairobi.

He has obtained various awards, like the French honor of Chevalier dans l'Ordre National of the Legion D'Honneur by the president of the French Republic, the National Order of Merit by the President of Malta, the Order of Isabel la Católica by the King of Spain; and the Order of the Merit of the Italian Republic.

He was a member of the Group of Experts of the European Union in Maritime Politics. He elaborated the Green Book of the European Union about Maritime Politics. Moreover, he was a member of the Managerial Committee for Human Rights in Strasbourg. He was named Pro-chancellor and President of the Council of the University of Malta; and Chancellor of the University by the President of Malta. He was also elected Judge in the International court for the Law of the Sea, in Hamburg.

I wish to thank and congratulate the Mexican Navy and in particular the Minister of the Navy Admiral Vidal Francisco Soberon Sanz for giving me the opportunity to speak on the importance of international maritime law in exercising the peaceful uses of the sea.

It is my view that the proceedings of this Seminar will contribute greatly to the progressive development of the Law of the Sea which is of vital importance to the regulation of human activities on the oceans. May I make the usual proviso that my comments this afternoon are of a purely personal nature.

Distinguished Guests, the oceans and seas cover up to 72% of the face of our beautiful planet. For centuries these waters have provided humanity with a vital source of nutrition and an important means of transportation. Until the middle of the last century the Law of the Sea essentially divided the oceans into three zones: Internal Waters wherein the coastal state enjoys sovereignty; the Territorial Sea, with a limit of 3 nautical miles, wherein the sovereignty of the coastal State applied but was limited by an important legal institution that is the right of innocent passage of ships registered in any state to enjoy the innocent passage; beyond the Territorial Sea, the Law of the Sea established the High Seas which are open to all States, whether coastal or landlocked wherein all States enjoy the so called High Seas Freedoms particularly those of navigation, communication, and fishing. No state could validly purport to subject any part of the High Seas to its sovereignty. This legal regime for centuries provided the legal stability and security which was necessary for the performance of activities at sea.

These longstanding arrangements were challenged mainly after World War II due to the growing States' economic interests in the ocean resources both living and non-living. In this respect, particularly significant was the action undertaken by President Truman of the United States when in 1945 he issued the Proclamation with concerning the natural resources of the sub-soil and seabed of the continental shelf. This claim, which contradicted the High Seas Freedom of access to resources, was designed to subject the natural resources of the sub-soil and seabed of the continental shelf beneath the High Seas, but contiguous to its coasts, to the jurisdiction and control of the United States. Simultaneously, the Proclamation sought to protect the status of the superjacent waters wherein the freedoms of the high seas would continue to be enjoyed by all States. Nevertheless, this unilateral legislative act meant that high seas freedoms would be subject to the exercise of coastal states' exploration and exploitation rights. Indeed rules were later established by the first United Nations Conference on the Law of the Sea, as reflected in the 1958 Convention on the Continental Shelf, to ensure that these rights did not infringe or result in any unjustifiable interference with navigation and freedoms of the high

seas. This arrangement represented an early legal balance between coastal economic activities and high seas freedoms.

The Truman Proclamation had a catalytic effect with respect to the legal regulation of economic activities at sea. Other States sought to protect their economic interests by extending their maritime jurisdiction. Indeed it was in Latin America that the reaction was the strongest. States were primarily interested in protecting not only the non-living marine resources found in the continental shelf but also the living resources found in the waters above.

The contemporary arrangement of the said balance is the Exclusive Economic Zone. I vividly recall when undertaking research at the University of Oxford, in the 1980s for my book on the Exclusive Economic Zone that Mexico was one of the earliest States which demonstrated its readiness to contribute towards the regulation of marine resource exploitation. The Mexican Executive, in its proposed 1945 amendment to the Constitution, Article 27, held that: “direct dominion over the continental shelf and the submarine terraces belongs to the nation . . . the waters of the seas over the continental shelf and submarine terraces are also the property of the nation . . .” It may be reasonable to regard this Mexican initiative, which went beyond the Truman Proclamation as it covered the Water Column, as an early precursor of the Exclusive Economic Zone.

Indeed at this stage permit me to record my admiration for one of the most prominent law of the sea experts Ambassador Jorge Castaneda y Alvarez De La Rosa whose work ensured the establishment of an EEZ regime, reflected in Part 5 of the United Nations Convention of the Law of the Sea, which managed to balance on the one hand the economic aspirations of coastal states, particularly developing ones, as reflected in the recognition of the sovereign rights of the coastal state for the purpose of exploring and exploiting, conserving, and managing the natural resources and economic activities; and on the other hand, the right of all States to enjoy the freedoms of navigation, communication and other international lawful uses of the sea.

As of the 23 May 2017, the 1982 United Nations Convention on the Law of the Sea was adhered to by an impressive 168 States. This general support, in my view, elevates the Convention and its rules to a superior status. It can be appropriately described as the constitution of the oceans with which all rules of international maritime law need to be consistent. In fact some would argue that in the light of this general State practice supporting the rules of the Convention, it is likely that even non-State parties (unless they are persistent objectors) are bound by its provisions. The 1982 United Nations Law of the Sea Convention therefore, represents a

major achievement and remains the foundation upon which contemporary international maritime law is built.

It is, however, to be observed that the Convention, like any other legal instrument, has its deficiencies which need to be addressed in order to ensure that the Law of the Sea effectively regulates maritime activities in the 21st century. In the first place, one has to note the formidable burdensome amendment procedures found in the Convention. In practice, these make it difficult to incorporate new rules into the Convention or revise existing ones. This obstacle presents a great challenge when adopting rules to regulate contemporary maritime activities.

Moreover, the matter is further complicated by the fact that many of the problems which today challenge the stability of International Maritime Law were largely unknown to the drafters of the Convention. The Convention, for example, does not deal with major environmental threats to our oceans which are mainly emanating from the intensified economic activities of humanity.

This grave situation was reflected in the deliberations of the important United Nations Ocean Conference, held in June 2017, which agreed upon measures designed to reverse the decline of the oceans' health. Given the magnitude of the problems, it is not surprising that the Ocean Conference called for over 1,300 commitments to action.

It is significant that possibly one of the greatest environmental threats to humankind and future generations is that of Climate Change. Anthropogenic Climate Change, which is largely a consequence of the fossil fuel burning utilized in the process of economic development, poses a great challenge to the health and productivity of the oceans. A quarter of the CO₂ released into the atmosphere by humanity is absorbed by the Oceans. There can be no significant protection of the marine environment unless we are able to combat effectively the negative effects of climate change. Regrettably, we are losing the race against ocean warming. As the former United Nations Secretary-General Ban Ki-moon has noted:

“Climate change poses a great challenge for the health and productivity of the oceans. The science is clear: humans have caused changes to the climate system that are linked to the warming of oceans.”

Climate Change is leading to ocean acidification thereby producing further negative pressures on the replenishment of fisheries stocks. Ocean warming leads to sea level rise. The Intergovernmental Panel on Climate Change predicts that a one-metre sea-level rise, by the year 2100, will lead to devastation in many coastal States with low lying areas and heavily populated coasts.

For years I have been greatly concerned with the inability and immaturity of international law generally, and the law of the sea in particular, to effectively reverse the degeneration of the planet's ecological health which continues to escalate not improve; and yet international law, in my view, remains the main avenue to saving the oceans through the establishment of effective and sustainable regional and global ocean governance regime. Let me refer to some of the contemporary threats to the oceans' well-being which I am confident you will find of great concern.

If one considers the current situation of fisheries, there is clear evidence that humanity is leading to a catastrophe. A direct use of the oceans is fishing for food and nutrition security, for the sustenance of livelihoods, and for revenue generation in particular for developing States. The Food and Agriculture Organization has assessed that 31.4% of marine fisheries in the world are overfished, 58.1% are fully fished, and 10.5% are under fished. The Organization has worked hard to produce agreements, policies, and guidelines; recommend conservation and management measures; and provide technical and capacity building assistance to ensure that fisheries are exploited at a sustainable level. Nevertheless, we continue to witness decreasing stock levels with too many vessels chasing already depleted stocks. This competition has contributed to increased levels of illegal, unregulated and unreported fishing activities which plague the sustainability of fisheries, and causes great economic harm particularly to developing States and their efforts to feed their peoples. The Director-General of the Food and Agriculture Organization has alarmingly noted that illicit fishing may account for some 26 million tonnes of fish a year; or more than 15% of the global total annual catch valued at between 10 to 23 billion US dollars.

Maritime activities also face new severe threats to the peace, good order and security of the oceans. Over the past decades, the international community has witnessed an unacceptable resurgence of the scourge of piracy. Today, vast and strategic, areas of the oceans have become unsafe due to the piracy threat which has a negative consequence on international trade and the wellbeing of seafarers. Experience in combatting contemporary piracy, such as that found in offshore Somalia, has demonstrated the weakness of the 1982 Convention provisions dealing with piracy.

In a number of enclosed and semi-enclosed seas, we are witnessing the exodus of thousands of desperate human beings who attempt to cross the seas in unsafe vessels hoping for a better future in prosperous States. This phenomenon has led to an epidemic of illegal and corrupt trade in human trafficking which has led to thousands of deaths and threatens the safety of navigation. The International Organization for Migration reports that over 60,000 migrants have died at sea in the last twenty years; this year in

the Mediterranean alone over 1,985 have already been reported dead. The 1982 Convention does not deal with this problem.

Consequently, although the 1982 Convention on the Law of the Sea represents a major achievement, its difficult amendment procedures have led the international community to develop legal responses outside the Convention. We now witness the adoption of a multitude of legal instruments under the aegis of the United Nations and other international organizations. Paramount in this effort is the work of the International Maritime Organization. Over the past decades, it has adopted over 50 international maritime conventions and literally hundreds of prescriptions and guidelines to ensure safe, secure and efficient shipping on clean oceans. It is significant that the safety and environmental Treaties adopted by the International Maritime Organization cover a remarkable 90 per cent of the tonnage of the worlds' commercial fleet. Today IMO has become the leading institutional source of international maritime laws. This commendable success is largely due to the leadership which each Secretary-General has demonstrated and the desire to ensure that International Maritime Law is updated to deal with the contemporary challenges facing maritime activities.

This formidable corpus of rules outside the 1982 Convention has become of vital importance to ensure the performance of activities at sea. It represents the hard facet of the law of the sea. It does, however, have a weak underbelly. The multitude of binding and non-binding legal instruments regulating ocean activities has led to a fragmented and delicate approach to Ocean Governance. Clearly, there is a pressing need to produce a sustainable, holistic, and effective ocean governance regime.

Currently, apart from the annual general discussion at the United Nations General Assembly on ocean affairs and the law of the sea, there is a lack of a regular comprehensive interdisciplinary and inter-sectoral reflection on how to address holistically the ocean governance challenges. In my view, a new policy that adopts an integrated and cross-sectoral approach at all levels of ocean governance is necessary in order to achieve a more effective governance regime for the oceans, which will enable the international community to achieve the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development.

I therefore support the proposal presented by Mr. Yohei Sasakawa, President of The Nippon Foundation, to the Ocean Conference to set up an Intergovernmental Panel on Ocean Governance which will report, through the United Nations Secretary-General, to the United Nations General Assembly. It will be responsible for inter alia: ensuring a cross-sectional and integrated policy on global ocean governance;

recommending decisive action to enhance global ocean governance by engaging the intergovernmental and interagency efforts as well as those of all stakeholders; monitoring the implementation by States of the international rules relating to global ocean governance; providing assistance and training to States to ensure that they are able to implement the rules of global ocean governance by incorporating them into national legislation; encouraging research relating to global ocean governance; engaging all stakeholders such as non-governmental organizations and the private sector in the process of ocean governance; encouraging the development of regional and national approaches to ocean governance; advising and providing solutions to problems of global ocean governance that are currently not being addressed; and make proposals with respect to future uses of the oceans. Throughout its work, the Panel will endeavour to ensure the achievement of 2030 Sustainable Development Goals.

The Panel will take major decisions at Plenary Sessions of government representatives, and would be expected to make recommendations to the United Nations General Assembly to call upon States to take actions to ensure effective global ocean governance. Given the enormity of the problems and the relatively limited resources available, it may advise the United Nations General Assembly on the priority of actions to be taken and achieving efficient coordination of the multitude of global ocean governance processes.

The Panel will seek the advice of experts from various disciplines specially designated by States, intergovernmental organizations, and authorised stakeholders. It will meet on a regular basis to ensure it monitors continuously developments in global ocean governance. Its tasks will be coordinated by a Secretariat which may be assisted by the Division for Ocean Affairs and the Law of the Sea as it already plays a central role in supporting the work on global ocean governance of the United Nations General Assembly.

Over the past months, the IMO International Maritime Law Institute together with the Nippon Foundation has, with fifty-eight eminent experts from different disciplines, undertaken a wide ranging 3 volume Report on Global Ocean Governance. It is designed to assess the current state of the international regime regulating ocean governance and provide reliable knowledge to enable the formulation of proposals of a cross-sectoral, sustainable and comprehensive nature.

It is my conviction that once published, the Report will assist policymakers in their efforts to develop an international strategy designed to develop a holistic approach to global ocean governance which rigorously pursues the achievement of the 2030 Sustainable Development Goals, particularly Goal 14.

I am also pleased to report that IMLI has established, with our sister organization the World Maritime University, a Master of Philosophy Programme in International Maritime Law and Ocean Policy. The main goal is to train Government officials to ensure that they have the expertise to participate in the construction and implementation of a new ocean governance regime in accordance with the United Nations 2030 Agenda for sustainable development.

I now wish to address your attention to what I consider to be an Achilles Heel of International Maritime Law which risks destabilizing the security and stability of this body of hard law. I will refer to the experience of the International Maritime Organization. However, my observations are also applicable to the legal prescriptions of other international bodies such as those adopted by the Food and Agriculture Organization to which I referred to earlier.

The remarkable success of the International Maritime Organization in adopting treaties and other legal prescriptions is threatened by the fact that the Organization has virtually no enforcement powers and therefore it is incumbent upon Member States to implement and enforce its IMO prescriptions generally by incorporating them into their domestic law. This may ensure that the relevant obligations can be enforced by the municipal legal system.

This reality has been very pertinently pointed out by Secretary-General Kitack Lim in his address to last year's IMLI academic class "...developing and adopting Conventions is an empty exercise unless the requirements of those Conventions are properly and effectively implemented..."

The process of incorporation of international legal provisions into domestic law is very much dependant on whether governments have the necessary legal expertise, who can counsel them on the advisability of adhering to the said instruments and to draft the necessary legislation which will ensure that the said rules are enforceable by the domestic courts.

In the 1980s it became evident that many Member States, particularly developing States, lacked the necessary legal expertise to advise the drafting legislation which implements IMO rules. It would appear that the problem still persists today. Recently the International Maritime Organization has conducted a major program to enhance States capacities to implement and enforce its international legal instruments. In an audit of over 67 member States, it was observed that:

"...many developing countries did not have the adequate maritime legislation in place to implement IMO conventions and found it difficult to cope with

amendments to these conventions and especially those brought into force through the tacit amendment procedure”.

Pacta sunt servanda, is a well-known principle of international law, codified in the Vienna Convention on the Law of Treaties. Furthermore, short comings or lacunae in a State’s domestic law are no defence for the non-performance of international obligations.

In this respect, the International Maritime Law Institute was established in 1988 by the International Maritime Organization in Malta to train lawyers to ensure that Governments have the necessary expertise to advise on the implementation and enforcement of international maritime rules. Over the past 28 years over 881 alumni from 139 States and territories have successfully trained at IMLI.

A particular feature of the IMLI program is the requirement that a participant has to prepare a draft text incorporating the provisions of an international treaty into national law. However, given the magnitude of the problem, the some 35 lawyers that graduate annually from IMLI is simply not sufficient. More and more investment in capacity building is essential. If the future law of the sea, however well designed, is to be successful, States must have the expertise to implement and enforce it. IMLI, at the request of IMO, launched in October 2016 the Master of Humanities (M.Hum.) program in International Maritime Legislation. This program stems focuses on the need of States to have trained specialists who will effectively ensure that the country’s national legislation complies with incorporates rules adopted by IMO and other international organizations.

It is gratifying to see the demand for our training continues to grow. This year we have managed to obtain funding for over 45 participants in the forthcoming academic year. It is my great pleasure to announce that we have accepted 2 legal officers from the Mexican Navy to attend the LL.M. program commencing next October. Both are very strong candidates with rich educational and experience backgrounds. I am confident they will do well.

I wish to conclude on a positive note by praising the achievements of Lieutenant Liliana Diaz Medina, who last May, obtained her IMLI Master of International Maritime Law with distinction and was awarded by the Secretary-General the prize for the best dissertation entitled: ‘The Effectiveness of Current International Ship-Boarding Provisions to Combat Crime at Sea’. My staff and I look forward to further consolidating our cooperation with the Navy of Mexico.

Thank you very much.

KEYNOTE SPEECH

THE REGIONAL AGREEMENTS OF SHIP CONTROL BY THE PORT STATE CONTROL, ITS CONTRIBUTION AND EFFECTIVE SUPPORT FOR THE MARITIME AUTHORITY OF A TRI-OCEANIC COUNTRY

REAR ADMIRAL

CARLOS ARTURO FANTA DE LA VEGA

DIVISION CHIEF OF THE SHIP'S OVERSIGHT BY THE PSC, DIRECTEMAR, CHILE
PRESIDENT OF THE ASIA-PACIFIC AGREEMENT, TOKIO MOU

He graduated from the Naval Academy "Arturo Prat". He is a specialist in Naval Engineering and sub-specialist in scuba-diving and rescue. He holds the Staff Course and is also a logistics teacher. He owns a Master's degree in Naval and Maritime Sciences, Administration and Logistics, as well as postgraduate studies in Defense Systems Administration and Maintenance at the University of Manchester. He also has postgraduate studies in Administration of Defense Resources from the Postgraduate School in Monterrey, California, United States of America.

He has served as a teacher at the Naval Academy, Naval War Academy and the National Academy for Political and Strategic Studies.

His prior assignments include Planning Department Chief in the General Service Office. Deputy Chief of the Chilean Naval Mission in London and Adjunct Naval Attaché to the United Kingdom; Deputy Director of the General Service Office and Director of the Navy's Naval Systems Engineering Office.

The scope of this text is to present the points of view of the main actors in the national and international maritime environment, in regard to the challenges of their environment and the opportunities that come up for the development of nations. Its objective is to analyze diverse national and international experiences in order to strengthen the National Maritime Authority.

First of all, I would like to thank the Mexican Navy and its Institute of Strategic Research (INNIVESTAM) for the invitation to share, with you, this exciting topic and to examine how the efficient implementation of the Port State Control (PSC) jurisdiction can contribute effectively to the planned objective for the seminar; this, in terms of visualizing and facing challenges and opportunities that contribute to strengthen the National Maritime Authority.

Secondly, I think that a look into the exercised jurisdiction by the Port State Control and the existing regional agreements at a worldwide level can contribute to enrich the current seminar if we consider what the International Maritime Organization considers in regard to this jurisdiction: «While the UNCLOS defines the jurisdiction of the flag State, coastal State, and Port State Control; the IMO tools specify how such jurisdiction should be exercised in order to guarantee the compliance of safety and security rules about pollution in the maritime sector. The flag State is the main accountable actor for abiding to those rules. However, one of the most important characteristics of the evolution of the IMO's work in the last three decades is the jurisdiction's progressive increase of importance by the Port State Control»[Consequences of the UNCLOS for the IMO from January 30th, 2014, created by the IMO (LEG/MISC/8)].

In this text, first of all I will mention how the maritime transportation constitutes the backbone of trade and world globalization, and how the International Maritime Organization also constitutes a world and international-standards body which is not only essential but also indispensable. Later on it is specified how the Maritime Administration and its National Maritime Authority implement seamlessly the international standard in order to be safer and more sustainable, in its triple role of Coastal State, Flag State and Port State Control (PSC).

Afterwards, I will analyze how the regional agreements of ship control by the PSC were being managed and what their real contribution was to IMO's international objectives and to each country's specific national objectives. Finally, I will discuss how the jurisdiction by the PSC has achieved real and positive effects in the maritime world, looking at the near future, pointing out some challenges and opportunities that we visualize and which SEMAR should tackle in its role as National Maritime Authority.

The maritime transportation, oceanic destination of Mexico

There is no question that the maritime transportation is the backbone of trade and the globalization in a planet covered by oceans. Mexico is an essentially maritime country with a tri-oceanic horizon: The Pacific Ocean and the Atlantic Ocean through the Caribbean Sea. This Mexican maritime will, is manifested by President Enrique Peña Nieto in his speech for the commemoration of the 100 years of the Mexican Navy, in which he expresses: «We are convinced that Mexico's development and its projection towards the future goes through the impulse of our maritime sector»; it is also manifested in the public maritime policy proposed by Vice Admiral Rubén Alfonso Vargas Suarez, he said: «Mexico, the sea is the way, I am sure».

The IMO and its essence as an international body.

The international character of maritime transportation has proved with facts that the actions and measures for having a safe, secure, clean and sustainable international maritime sector are more efficient if they are done in a conceived world international regulatory frame and condoned by the International Maritime Organization, instead of depending on the unilateral action of each country without having any coordination with the rest. Precisely, the regional agreements of ship control by the Port State Control contribute to the essence of the IMO covering the seas where the international maritime transportation is there: three out of the nine regional agreements of oversight by the PSC are directly linked to Mexico. For its effective performance, the IMO has promoted the adoption of more than 50 treaties and protocols, as well as more than 1000 codes and recommendations about maritime safety and security, pollution prevention and other related regulations. Regional agreements of ship control by the PSC have shown to be an effective tool, for the effective implementation of all the current regulations in this performance and the adoption of treaties and regulations by the IMO.

The IMO, a responsible and sustainable maritime transportation

Objective 14 of the UN Sustainable Development Agenda for 2030 (ODS 14) establishes: «Conserve and use oceans, seas and marine resources in a sustainable way for sustainable development». Such objective came into force January 1st, 2016 and rules along with other 16 objectives and the programs of international development for the next 15 years. It has to be pointed out that regional agreements of oversight of ships by the PSC got together (May 2017) in a joint ministerial conference, under the slogan of: «Safeguarding a responsible and sustainable maritime transportation».

The Maritime Administration, its triple role.

A comprehensive Maritime Administration requires the exercise (in a balanced and coordinated way) of its jurisdiction in its triple role as a Coastal State, Flag State and Port State Control. First of all, the jurisdiction as a

Coastal State arises from the need of the State to legislate over its territorial sea, sea bed and sea subsoil, continental platform and contiguous zone, as being completely sovereign over that maritime jurisdiction. [Maritime Authority as the main government body and other bodies related, such as agriculture, customs, health, international police, fishing, among others].

Secondly, the jurisdiction as the Flag State arises from the need that the State can recognize that a ship flies its flag and maintains a visible responsibility for guaranteeing the fulfillment of recognized regulations by this State. [Control, inspection, certification and oversight of major and small vessels (by the State of Registry of a vessel or administration)].

Thirdly, the jurisdiction as the Port State Control arises from the need to verify that ships which dock voluntarily to ports and sail in a region have to obey the demanding safety conditions by the treaties of such region. They have as a main objective to safeguard human life at sea and the protection of the marine environment. [Oversight of foreign vessels that voluntarily arrive to ports and facilities outside the coast of a State].

Regional agreements: their preparation and contribution

Regional agreements are promoted by the IMO through its resolution A.682 (17) of 1991, which recognizes the importance of the contribution done through regional cooperation, having the Assembly of the IMO invite the governments to establish regional agreements about the application of oversight measures by the Port State Control. Thus, the following regional agreements or MoUs have been established in time: Paris MoU, Viña del Mar MoU, Tokio MoU, Indian Ocean MoU, Mediterranean Sea MoU, Caribbean Sea MoU, Abuja MoU, Black Sea MoU, Riyadh MoU. The objectives originally drafted for these regional agreements have consolidated as an effective regime of ships oversight, and it is a powerful network of interregional actions to seize sub-standard ships to carry out maritime traffic in their own regions.

They have promoted grading and equality in conditions among participants of the maritime activity in a world level. At the same time, the current nine regional agreements today have strengthened the so called circle of accountability that involves all maritime users: charterers, flags, recognized organizations, maritime operators, maritime authorities, insurance companies, financial institutions, shipyards, marine products manufacturers, centers of maritime instruction, port authorities and security organizations, among others. At the same time, regional agreements have contributed to safeguard a responsible and sustainable maritime transportation, joining efforts through an effective and worldwide recognized tool. In this way, it allows to improve maritime safety, protection of the marine environment and working conditions of the people of the sea on board.

It is in line with what was said by the general secretary of the UN during the UN Conference about Oceans: «Improving the health of our oceans is proof of multilateralism where we cannot allow ourselves failure». Among all the different contributing activities of the regional agreements of oversight by the Port State Control, we can mention the following:

- Support to the effective implementation of Agreements of the IMO/ILO
- Goals of inspections prioritized by risk systems of ships, companies, flags and recognized organizations.
- Production of procedures, guidelines and harmonized guides.
- Protection of all regions and seas of the world, minimizing the operation of sub-standard ships.
- Annual execution of Joint Concentrated Inspection Campaigns (JCIC's). Transparency and public information with the industry and maritime users.
- Permanent execution of technical collaboration and training programs. Development and promotion of the Code of Best Practices established through the MEPC.4/Circ.2.
- Development of strategic plans.
- Optimization of auditory results by the IMO.

Port State Control: Its jurisdiction and effects

The continuation of maritime accidents, despite having the regulatory effort done, made evident that some Flag States or their representatives, including known organizations, ship-owners, charterers, and also ships did not meet the expectations, in some way, of international regulations that the countries previously approved in the IMO. This determined that the most effective way was a mutual control, exercised by the States on ships from other flags with standardized and globally accepted procedures, promoting the creation of regional control agreements by the Port State Control.

The Port State Control is not and cannot be the substitute of the responsible exercise of Flag States in their main responsibility. It has become a second line of defense that effectively contributes to comply with the current standards by Flag States and their recognized organizations. The PSC oversees that foreign landfall ships abide by the accepted international regulations of a State. This contributes to the safety of human life at sea and to the prevention of marine pollution. The desired effect is to deter or to prevent the operation, in jurisdictional waters, of ships with foreign flags potentially dangerous, of low standard material or with a crew with a poor professional level.

For an effective implementation, the regional agreements are essentially based in the following regulation IMO/ILO called Relevant Instruments: The

International Convention for the Safety Of Life At Sea (SOLAS 1974/88), The International Convention on Load Lines (Load Lines 1966/88), The International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 and 1997 amended (MARPOL Convention 1973/78), The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978 in its amended form (1978 SCTW Convention), The International Regulations for Preventing Collisions at Sea (COLREG 1972), The International Convention on Tonnage Measurements of Ships (1969 Tonnage Measurements of Ships Convention), The International Convention on Civil Liability for Oil Pollution Damage, 1969 (1969/92 CLC), The International Convention on the Control of Harmful Anti-fouling Systems in Ships (2001 AFS Convention), Maritime Labour Convention (2006 MLC), Ballast Water Management Convention (2004 BWM).

Looking to the Future: some challenges and opportunities.

The suitable implementation of the Port State Control jurisdiction integrated with the Flag State jurisdiction and the Coastal State, demands some challenges and opportunities that we can synthesize in the following aspects:

- As for a planned and sustained availability of resources in time:
To have a financial planning of high level and enough resources to maintain a national maritime infrastructure and an appropriate, efficient and correctly sustainable human capital in time; as a basic pre-requisite for fulfillment of its jurisdiction as PSC and integrated in its triple role of the Maritime Administration of the State.
- As for new conventions, codes and associated regulations:
Regarding its implementation: New conventions and codes have increased the scope of inspections done by PSC. It demands for major human capital and training for inspectors. Examples of recent conventions: MARPOL Annex VI, BUNKERS Convention, AFS Conventions, MLC Convention, PAL Protocol, WRC Convention, BWM Convention. Examples of recent codes: III Codes, Stability Code, ISMBC Code, ESP Code, Noise Code, OO.RR Code, IGF Code, Polar Code.

Regarding its ratification: To crystallize the ratification of appropriate instruments of the regional agreements that Mexico has not ratified yet, highlighting the Maritime Labour Convention MLC 2006, and the MARPOL Convention Annexes III, IV and VI – among others-.

- As for the increase of environmental requirements:
The efficient application of a sustainable environmental policy for the industry of maritime transportation is a daily and permanent challenge

for the supervision by the PSC. The new legislation in the environment sphere like BWM, AFS, MARPOL Annex VI Conventions, among others; they demand to continue with the effort and contribute with the prevention and control of contamination from ships.

- As for the increase of administrative load:
The continuous increase of certification numbers and minimum required documents during the inspection (more than 120) has had an effect in the increase in the administrative load of inspectors. This requires an effort for its reduction, in order to focus in operational and technical aspects that allow to improve even more the quality and efficiency of inspections. The use of electronic certifications contribute to the reduction of the displayed administrative load, and its implementation in regional agreements, along with its application by all countries, which must be in accordance with IMO FAL.5/Circ.39/rev.2.
- As for optimizing transparency and the implementation of the Best Practices, Communication and Collaboration with the Industry Code:
It is required to continue with the effort that allows guaranteeing the effective adoption of the Best Practices Code, which provides guidelines referred to standards of integrity, professionalism and transparency in inspections. (MSC-MEPC.4/Circ.2 of year 2007). Likewise, it is necessary to develop and maintain activities and exchanges with the IMO, organizations and groups of interest that belong to the so called circle of maritime accountability. Some examples about it: Inclusiveness in strategic planning and national politics; participation in activities of technical collaboration; execution of forums with the industry.
- As for the focus of the human element and operational requirements:
The human element continues being the first cause of maritime accidents and incidents. It is necessary to maintain a continuous effort of oversight operational requirements during inspections. Consequently, both aspects must be essential in the educational and training processes of our inspectors.
- As for the use of new technologies for the fulfillment of regulations:
Technology continues developing rapidly and it demands from us to be focused on its innovative application. Some examples are: electronic navigation systems, integrated systems, cyber security, communication systems. Likewise, the exchange of information and data base systems require the promotion of a more intelligent use of information, including the most effective information systems of the agreements, OIT, GISIS and EQUASIS. On the other hand, there are new opportunities and risks in the oversight with the development of

these new technologies, which have powerful effects in the inspection systems, especially in what has to do with new support equipment and elements to optimize inspections.

- As for the effective alignment with IMO's strategic planning:
The IMO published its strategic planning for the 2016-2020 period and published its High profile Action Plan for the Organization and its priorities for the Biennium 2016-2017. According to such High profile regulation, it is recommendable to align the strategy and national politics of the Mexican Maritime Administration with the mission, tendencies, development and displayed challenges in such documents of the IMO's High Profile.
- As for the incentive, recruitment, and training of inspectors.
It is necessary to have short, medium and long term plans that boost the admission and recruitment of new inspectors, creating drill, training and education plans with appropriate programs of technical collaboration, basic and advanced courses, seminars and exchanges, among other activities. It is strongly recommended to participate in collaboration programs with other regional agreements of ship control by the PSC and its members.
- As for preparing IMO audit, executing training and detailing the national strategy:
Mexico has to execute the IMO audit in 2022. It is suitable to plan the activities of the next five-year period of Mexico's Maritime Administration to ensure the even and timely implementation of IMO applicable instruments, starting in the short run, the training process of inspectors [especially IMO courses 3.09 and 3.22] and detailing the National Strategy among other essential aspects.
- As for the incorporation to the technical/maritime management organization of Asia-Pacific:
Taking into account the geopolitical/ocean-political vision of Mexico, it is seen as an opportunity to join in organizations of maritime management of Asia-Pacific. Mexico has expressed its interest in being a global actor in the world scenario, with an area of strategic action aimed at consolidating an alliance with Asia-Pacific. In this regard, the Asia-Pacific Agreement for Ship Control by the Port State Control or Tokio's MoU and APHOMSA (Asia Pacific Heads of Maritime Safety Agencies), appear to be two organizations that can be considered in this vision.

In essence, we can see that the visualized challenges can become a real opportunity so the new Maritime Authority recently conformed

in Mexico, can continue to improve and safeguard a responsible and sustainable maritime transportation throughout time. This way, Mexico can contribute to improve the safety of ships, crew and loads, and also contributes to count on better security within the marine environment.

Final thoughts

Thank you for your invitation, and to the distinguished audience for the opportunity to share with you the new challenges that the National Maritime Authority faces, and at the same time, to be able to communicate what we are doing now in the regional activity of ship control by PSC and how we are looking at the global future beyond the horizon. A future with the vision of efficiently eliminating sub-standard ships of our seas, a future with the belief that we can prevent efficiently maritime accidents; a future where we will carry on respecting the environment, a future where we will continue appreciating even more the lives of men and women that live and work on board ships.

INTERNATIONAL THREATS AS A CHALLENGE FOR MARITIME AND PORT SECURITY

REAR ADMIRAL
LINDA LEE FAGAN

DEPUTY COMMANDER FOR OPERATIONS, POLICY, AND CAPABILITIES.
UNITED STATES COAST GUARD

Rear Admiral Fagan holds a Bachelor's Degree in Marine Science from the U.S. Coast Guard Academy, a Master's Degree in Marine Affairs from the University of Washington, a Master's Degree in National Security Strategy from the Industrial College of the Armed Forces. Her awards include the Defense Superior Service Medal, Three Legions of Merit, the Meritorious Service Medal and the Arctic and Antarctic Service Medal.

She has been the First District Commander, Commander, Sector New York, Deputy Director of Operations for Headquarters, U.S. Northern Command. She also served on board the USCGC Polar Star, performed Marine Inspector positions in Puget Sound –Washington, Mobile– Alabama, y New Orleans–Louisiana. She served as Chief of Port Operations at Marine Safety Office Savannah, and as Executive Officer–Marine Inspection in Rotterdam. She also served as Executive Assistant to the Commandant and Vice Commandant and Division Chief of the Foreign and Offshore Compliance Office. Rear Admiral Fagan owns both extensive interagency as well as intergovernmental experience. She has worked with both the International Maritime Organization and the International Labor Organization on flag state and port state issues, including the development of the International Ship and Port Security Code, and the Consolidated Maritime Labor Convention.

Rear Admiral Fagan serves as the U. S. Coast Guard Deputy Commandant for Operations, Policy & Capabilities, where she is responsible for establishing and providing operational strategy, policy, capability and resources to meet national priorities for U. S. Coast Guard missions, programs and services.

Thank you for your very kind introduction. It is a great honor and a privilege for me to participate in this seminar; I truly appreciate the invitation to be with you this week and the support from the Mexican Navy in hosting this very important seminar. My topic today is “International threats as a challenge for maritime and port security”.

In a connected world where people, goods, finances and ideas cross borders to improve our lives, maritime security is a critical and often overlooked subject and one worth discussion at this gathering. I would like to lay out 3 pillars that have helped the USCG to successfully combat maritime threats in the over 227 years we have served.

1. We continually push out our maritime borders to confront threats as far away from the homeland as possible.
2. We utilize our limited assets to combat the greatest threats through a risk based decision making process.
3. We develop and evolve key partnerships with other government agencies, industry and international partners.

The threats that challenge maritime port security are diverse, persistent, interrelated, and powerful. The Coast Guard addresses these challenges through a multilayered strategy of maritime governance that allows us to push the maritime border as far from our shores as possible. The unique aspects of the maritime domain, and the challenges associated with it, require a global layered approach leveraging geographic and functional layers by cooperating nations.

Our layered security approach employs a maritime governance model and shares responsibilities with partners in order to provide a credible deterrence while employing risk-informed decision making. With a layered approach, we can extend our maritime borders and address threats as far away as possible before they arrive on the shores of the United States.

Prevention and response operations are conducted on land, at sea, and in the air to project credible deterrence and minimize existing vulnerabilities in the maritime transportation system. These operations are conducted to weaken the ability of antagonists to carry out successful attacks and to help recover from attacks that may occur. The Coast Guard strives to balance security and response actions with the need to minimize disruptions to the flow of maritime commerce and goods. With limited assets to conduct these operations, we target areas of highest risk. The Coast Guard utilizes a risk informed decision making process to decide when and where to conduct operations and which units to utilize in the conduct of those operations.

The Coast Guard also works in partnership with a variety of entities to address vulnerabilities to the maritime transportation system. The maritime commons and approaches are large, diverse, and complex and they are critical to the health and wellbeing of the global maritime community. These partnerships stretch across international, national, state, and local entities, both within the United States and abroad. Mitigating vulnerabilities and potential consequences while staying abreast of emerging threats is a complex and challenging process which requires outreach and active partnerships across the international domain. These partnerships are engaged to leverage across all levels of the organization from their very most senior person on the cabinet of the Coast Guard –Admiral Zukunft– and down to the deck plates, including young petty officers and junior officers at the port level engaging with their piers across the mission set.

I will give you two examples on how we leverage these authorities and the risk based decision in two actual cases that occurred recently in the United States. The first will be a stowaway example and how we actually used notification and information to address some maritime threats. In July, a ship's crew found 3 stowaways on board and notified the Coast Guard's National Response Center, a centralized center or clearing house for information, to come in and then be evaluated from a risk context. The National Response Center is the designated point of contact for oil, chemical, radiological, biological releases anywhere in the United States as well as taking the initial report of any suspicious activity or security breaches within the US ports.

Once the National Response Center received the information, Coast Guard members worked in contact with our US Customs and Border Protection service and the vessels operators to redirect the vessels movement and conduct necessary searches and investigations prior to the vessels arrival within the port it had intended on calling. As an example of the great relationships in information exchange between key regulatory agencies within the US, we were able to adjudicate and leverage this information and action seamlessly in a very timely and responsive manner to ensure the threat is addressed while allowing the cargo and goods to continue to flow into the port. This helped ensure that the border is pushed out as far out as it's reasonable for the circumstances; therefore we are not dealing with the concerns while having the ship alongside the pier.

Here is another example relating to cargo. In this example, we were able to make a risk informed decision to execute our authorities and keep a vessel offshore to reduce risk to the public. In January the Coast Guard was notified that the container in a vessel in the US water might be carrying illicit materials. The Captain of the port used his authority to hold the vessel outside the port, denying the vessel access to the port it had intended to call. The Coast Guard mobilized a response team to board this vessel offshore,

along with other local and Federal Agencies; we all came together to ensure that the vessel and its cargo did not pose an actual threat to the US and to the port. This response was timely, effective, and seamless because we continue to exercise this coordination of our security plans and are routinely in communication with our other industry and governmental partners. Therefore, when an actual threat presents itself, it is not the first time that we have coordinated the information exchange and actions that are required in an actual incident from January.

I wanted to touch briefly on cyber as we have not talked much on cyber over the last two days. About two months ago, Maersk, a large global shipping line, was the subject of a major activist attack that severely disrupted their operations worldwide; it had impacts in Europe, North America and Asia. So as I raise this, sometimes those within industry, and even within government; we think “this can’t happen to us,” but I assure you it can, and it is just a matter of time. The Coast Guard is working to protect our maritime critical infrastructure from a broadening array of cyber threats to our national security and economic prosperity, and in the same ways as more traditional threats, the cyber environment requires us to build and maintain partnerships and use risk based decisions.

There are numerous areas where this vessel’s system may be at risk. If it is connected to a computer, it has the potential for cyber risk or a cyber-attack, and I assure you if it is a fairly new piece of equipment, it is likely connected to the internet in some way or form. Most of the suppliers of new equipment like the ability to monitor things such as both energy and engine efficiency, and also have the ability to monitor that equipment once it’s been installed. If that computer is connected to the internet, the system is at risk; and as I said, modern ships are global, they’re mobile, and the industrial control systems are definitely at risk to those that may have ill intent.

At port level, systems that could potentially have cyber security risks include, but are not limited to, access control, security cameras, identification badge readers, passenger security screening equipment, process monitors, and controls such as those that monitor flow rates, valve positions, and tank levels. Systems that control vital cargo machinery at the ship-shore interface such as cranes, manifold, and loading arms are all vulnerable, and as I said, there’s quite a bit on the Maersk attack out in open source that does a good job of conveying the scope of the impact of a fairly simple malware attack. The Coast Guard is working with the maritime industry to reduce connecting impacts to the maritime transportations system; that is to say impacts that threaten people, property, and the environment. By reducing the potential impacts, we reduce risks and push the threats further out. We are developing voluntary guidelines and suggestions to pose to the vessels and facility operators, and show how they might mitigate this risk.

I also wanted just to touch on one final thought and this might be a little bit of a look inside the United States Coast Guard and how we have inculcated institutional integrity. We realized early on that ports are places where there's a large financial transaction with significant top financial risks and impacts, and our young men and women are out interacting with ports and the community each and every day. So be to ensure that every one is honest and transparent. We, and the US Federal government, have a number of requirements for Federal Officials serving in roles of responsibility that help ensure that this is the case, and I'd like to highlight a couple of examples.

Financial disclosures: each member -myself included- is required to complete a very detailed personal financial disclosure which is then externally audited. In fact, it is provided to the public via a federal website, so anyone can look and see what my financial earnings and wealth look like, using transparent methods to see where each member is financially.

Second, all federal employees, civilian, military, truly anyone that works in the federal government in a role of responsibility is required to take annual training that talks about what gifts are given out to you, what to accept or not, where the rules and lines are in regards to interaction within the industry and those we are regulating.

Finally, I'm going to touch on anchor values. As I toured your naval museum, I found your core values and pillars are very comparable to ours; there is a great alignment. For us it is Honor, Respect and devotion to Duty; for you it is Loyalty, Patriotism, Honor. Your sense of service and pride in the naval organization that you are all representing is a corner stone for the work force as to how to conduct yourselves in all threats and all hazards environment. This system continues to build pride and confidence from the public that we all serve as a result of this transparency and our culture. We serve the public, and public service is a public trust, and it requires integrity and loyalty to the systems of law and regulations as well as ethical standards that are put in place to ensure that the good of the nation is maintained over the good of any private gain. It is with this approach that we continue to want to earn the trust of our partners. We have the trust and confidence of the United States, and I am certain that with your pillars you will continue to gain and maintain the same trust and confidence of the public you serve in your new roles, that you will all be assuming as the national maritime authority.

In closing, the Coast Guard looks forward to working with our western hemisphere maritime partners to continue to succeed in the future. In particular, we are proud to work with our partners in the Mexican Navy in SEMAR as you expand your maritime authorities and update regulations,

work to develop and refine your training programs for offshore platforms, vessel facilities, inspections, port passenger vessel inspections, develop your maritime investigation program, coordinate and work to develop your new Captain of port responsibilities as well as other traditional activities.

We have a rich tradition of conversations and information exchange; I look forward to continuing that. I also congratulate you on your new authorities, I'm confident of the many successes you will have. There will be many more successes as you work into the future. This is not the beginning of our conversation, but an ongoing and very robust conversation, and I am very thankful to have been able to participate in the last couple of days.

Thank you very much for inviting me to speak, I look forward to the ongoing exchange in conversations.

Thank you for your hospitality,

Gracias.

THE MARITIME AUTHORITY OF ARGENTINA, ACTIONS TO ENSURE MARITIME AND PORT SECURITY

PREFECT GENERAL
LUIS ALBERTO ZECCHIN

DIRECTOR OF PLANNING AND DEVELOPMENT OF NAVAL PREFECTURE

He holds a Bachelor's Degree in Maritime Security from the Maritime Security University, Institute of the Argentinean Naval Prefecture. He also holds a Bachelor Degree in Political Science and Government from the National University of Lanus, Buenos Aires. He has been ISO 900 lead Auditor. His courses include Energy Efficiency, Specialization in Naval Engines, Staff Course, and Superior Course. He graduated with honors from different Formation Institutes of the Argentinean Naval Prefecture.

He has served as Chief of the Navigation Security Sector, Sub-officer School Instructor of the Argentinean Naval Prefecture Formation Institutes, Chief of the Prefecture, San Pedro, Buenos Aires province, Control and Management Division Chief of Navigation Security Police Office. Chief of Port State Control of Ships; liaison Officer to the U.S. Coast Guard, International Affairs Secretary, Prefect of Lacustrine Zone and Comahue, Neuquén province; Chief of the Nautical Sports Department, Director of the Argentinean Naval Prefecture Formation Institutes; Education Director; Secretary General of the Argentinean Naval Prefecture and Director of Environmental Protection. He is currently serving as Director General of Planning and Development.

The Naval Prefecture of Argentina is a bicentennial character institution, genuinely integrated to the homeland security system in agreement with the current legal framework; concurrently, it is responsible for more than 90% of the tasks that correspond to the maritime management of Argentina; this statement is supported in a domestic legislation that defines the amplified and homogenous profile of its responsibility.

Character and Organization

The Naval Prefecture of Argentina is the security force through which the National Executive Branch exercises as police of the navigation security service, the service of public order security and prevention police, protection police of the environment and natural resources preservation, judicial police, migratory, health and custom auxiliary police, and the navigation administrative jurisdiction.

It is the enforcement body of international agreements related to human life security at sea, prevention and struggle with the pollution caused by vessels, and technical and legal matters in accordance with what is set by the approved laws currently ruling the Republic of Argentina.

The Prefecture depends on the Ministry of Security of the nation and its superior leadership is in charge of the national naval prefect, who assists the authority of the National Executive Power in all matters relating to organization, preparation, position, administration, justice, government and discipline of the Argentinean Naval Prefecture. The national naval deputy prefect is the one who, in turn, assists the national naval prefect carrying out the highest level of supervision of all the activities of the organization.

In addition, the Prefecture has three bodies of higher coordination: the General Directorate of Planning and Development, the General Directorate of Security and the General Directorate of Logistics.

The Prefecture has adopted a structure that meets the concept of centralization regulation and executive decentralization to fulfill its assigned mission: organized by a general secretariat, twelve directorates and three regions strategically located throughout the territory of Argentina.

This organizational structure responds not only to a wide geographical area of activity characterized by particular local problems, but also to the vast functional spectrum of high technology applicable to a changing environment by the increasing technological development. Within this context, the safety of human life and goods in waters, ports and coasts is the ultimate goal of this Maritime Authority.

Mission

The Prefecture plays the role of police for navigation security, police for environmental protection and conservation of natural resources, judicial police, auxiliary fishing police, customs, immigration and health police; and the exercise of administrative jurisdiction of navigation.

Vision

The Argentinean Naval Prefecture will consolidate, develop and strengthen its leadership as Maritime Authority; strengthen the fulfillment of responsibilities arising from the assigned mission; enhance their participation in regional and international cooperation areas; maximize the human factor and the efficient management of technological, material, financial and economic resources; guarantee the sustainability of transport and trade by water.

Strategic axes

The Prefecture develops its functions around four strategic axes that comprise its essence, namely:

- Security of navigation, inland and maritime waterway transport
- Environmental protection and conservation of natural resources
- Maritime and port infrastructure protection
- Public security

Risks and threats

The challenges that are present in a globalized world acquire the most varied characteristics. The Maritime Authority is one of the agencies of the Argentinean State that is devoted to face the diverse risks and threats that affect maritime protection in a broad sense. In this way, it works to reduce the incidences derived from navigation to guarantee the sustainability of the aquatic environment, to prevent the illegal exploitation of the resources of the sea and to assist the population when natural catastrophes happen.

Regarding crime prevention in its domain, it focuses its efforts on combating drug trafficking, terrorism, human trafficking, irregular migration, smuggling of immigrants, trafficking of dangerous materials (chemical, biological and nuclear), smuggling and other economic crimes.

Actions for the fulfillment of strategic objectives

The Republic of Argentina, due to its position and geographical characteristics, is located in front of a vast sea connected with the interior of its territory by two extensive rivers, suitable for commercial and sports navigation.

The Argentinean Naval Prefecture -as the National Maritime Authority -has the responsibility of acting as the “navigation security police” in such areas and all those inherent functions to the flag State and the ruler State

of the port; covering a wide spectrum of activities that are centralized in the vessel, the navigating personnel and the navigation itself as a technical fact. For this purpose, it verifies the safety conditions, carries out the inspection and safety certification of the ships according to the parameters established in the international conventions ratified by Argentina and the complementary national regulations.

By virtue of the Flag State, it grants the use and ceasing of flag to the Argentinean ships; it approves and technically supervises the construction, modification, repair, dismantling and extraction of ships, security and rescue elements. It also determines the freeboard and the gross tonnage and grants the national and international certificates of security; after an analysis of the result of the relevant technical inspections.

As for the granting of the use and ceasing of flag to Argentinean ships, the Prefecture carries out the National Ship Registry, which includes registration of licenses and registration of domain and other real rights and charges on them, in order to protect them and to give security and efficiency to the transactions that are carried out on them. In addition, it records and enables the personnel on board and land of the national merchant navy. It endorses their titles by granting them international validity, grants the corresponding embarking document and assigns the security provisions to the ships in order to ensure the operation of their emergency services.

As the only national institution with specific powers regarding safety of navigation, this Maritime Authority implements functions related to the control of the sea, developing strategies to provide security to human life and maintain a permanent presence along the Argentinean seaboard. It also manages the “Maritime Traffic Service” which provides traffic control as well as the exchange of associated information between coast stations and ships and, if necessary, regulates the movement of such traffic in order to consolidate navigation safety, especially in areas of high density, in areas that present difficulties to navigation or where hazardous cargo transportation could take place.

This task is fulfilled uninterruptedly, addressing and managing the “Communications Service for the Safety of Navigation and the Safeguarding of Human Life at Sea”. To this end, it has coastal stations, members of a network through which more than half a million of communications are made per year, only related to fishing vessels operating within the exclusive economic zone of Argentina.

In this regard, the Prefecture has developed an important tool that allows it to meet its task: the «Coast Guard System». This system allows knowing

the last position given by ships, thanks to the combination of information by the Automatic Identification System (AIS), Fishing Control Satellite System, Long Range Identification and Tracking System, and the monitoring of the Prefecture's Coast Guard. The system, denominated MIRA onboard the coast guard ships, consists of an informatics system, which integrates RADAR and AIS to deliver a precise surface panorama and improves surveillance and monitoring activities at sea. This application, developed on a GIS System (Geographic Information System), allows optimizing the management of control, tracking and support to ships entering ports or navigating in maritime, fluvial or lacustrine areas.

On the other hand, in response to the custody and security policies at sea, the Prefecture is in charge of the Search and Rescue Coordinating Sub-centers within the framework of the International Convention on Maritime Search and Rescue (Hamburg, 1979), ratified by Argentina through Law No. 22.445.

During the first semester of 2017, the Prefecture has carried out 256 search and rescue operations, from which 8 were air evacuations. In addition to that, the Prefecture has also carried out 374 Maritime Assistance operations. Given the diversity of functions, the Maritime Authority personnel training is a key issue. In this context, the training of these personnel is an answer to the need of professional and integral formation that responds to established international standards. It also ensures a high level of competitiveness in optimal security conditions for human life, economic activity, and environment care.

This formation of high quality and updated excellence closely related to the Prefecture's mission and function must also be observed in the field of public security and in aspects such as the judicial, customs, fishery, migration, and sanitary police, as well as navigation administrative jurisdiction and environment police in national waters.

These concepts constitute a pillar of the University Institute for Maritime Security. Under the command of the Argentinean Naval Prefecture, it ensures access to its academic proposals in terms of high education, without any kind of discrimination, thus contributing to augment maritime knowledge in its personnel and general society.

Regarding fluvial traffic, in particular the Paraguay- Panama hydro-via, where the Argentinean jurisdiction covers 2,556 kilometers out of 3,442, the Prefecture activates the necessary mechanisms to facilitate navigation and international commerce within an adequate security and environment protection framework, contributing to reduce navigation time and transportation costs.

On the other hand, because port waters are usually restricted and dangerous, the Prefecture also acts as navigation security police, controlling port transit, demanding a strict observation of applicable rules and regulations.

Regarding the exercise of the ruling port State, the Prefecture observes the Viña del Mar Agreement, agreed among Latin American Maritime Authorities in compliance with the measures provided by the International Maritime Organization to coordinate ship control at regional level in order to efficiently meet international security regulations. The secretariat and the information center of this system (CIALA) are supported by the Prefecture in accordance with the issues established by Maritime Authorities of the region when they signed the agreement.

Under this framework, boardings are carried out on international maritime navigation ships, which come into national ports, and in case deficient conditions are detected, ships are requested to carry out the necessary repairs before they continue their voyage.

Regarding environment protection and natural resources conservation, this maritime authority deals with the adopted norms, preventing ships 'oil and other hazardous substances from polluting fluvial, lacustrine and maritime waters.

In relation to fishing control, the Prefecture deals with maritime hunting and fishing and contributes to observing national laws and regulations that govern this activity.

The Fishing Federal Regime regulates the activities in the nation's jurisdictional waters, that is to say, up to 200 nautical miles. The exercise of the police functions related to fishing activities is materialized through preventive repressive patrolling in our jurisdictional waters, with actions and tasks aimed at using minimum violence, maximum efficiency and low cost; employing well-trained personnel to carry out police procedures observing strict protocols that facilitate the action of justice and that guarantee the observance of the right of defense.

Police procedures carried out in the exclusive economic zone constitute a particular and sensible operational activity towards the relationships among the states, thus, the Prefecture carries out these procedures with extreme prudence, reasonability, gradualness and adaptation of means, observing current international rules and regulations at all times. The Prefecture's Coast Guard zealously guards the outer limit of the Argentinean exclusive economic zone the 365 days of the year in order to detect the entry of unauthorized foreign fishing vessels into Argentinean jurisdictional waters, thus, meeting the function of preserving the nation's fishing resources.

Recently, the UN Commission on the Limits of the Continental Shelf adopted by consensus the recommendations on the Argentinean presentation regarding the extension of its continental shelf – beyond the 200 nautical miles – to a distance of up to 350 nautical miles.

In this regard, as a coastal state, it has sovereignty rights to explore and exploit its natural minerals and other non-living resources from the seabed, as well as living organisms of sedentary species. Such rights are exclusive; that is to say, if it doesn't exploit the continental shelf or its natural resources, nobody else can without its express consent.

Even though such rights affect neither the juridical condition of subjacent waters nor the air space above such waters, and its exercise does not affect navigation or other rights and liberties of other states, it is essential to materialize effective custody of such resources through National Maritime Authority surveillance operations.

In this regard, The Argentinean Naval Prefecture – as part of the State's security system – controls and watches the exclusive economic zone and the continental shelf. Prevention and protection of maritime wealth and spaces demand great economic, logistics, and human efforts by the state, and in particular by the institution. However, the exercise of rights inherent to national sovereignty is enough reason to take care of that.

Maritime and port infrastructure protection

Before transnational crime organizations threats, the Prefecture enforces the International Ship and Port Facility Security Code, which has been a national-level authority since 2004, in order to create spheres of control in ports that safely contribute to economic and commercial development. Within these spheres, the Prefecture works to ensure safe maritime transportation, safe port facilities, and safe influence zone, avoiding felonies such as drug dealing, human trafficking, terrorism, smuggling, migrant smuggling, etc.

With a group of auditors, it carries out risk assessments and works on analysis and endorsement of port facilities plans and training for different port sectors. Thus, it fosters continuous improvement in contingency plans, adjusting them to the growing safety needs.

The prefecture actively participates in different international events, ratifying the integration and cooperation at regional and international level in the matters related to security of ports and vessels. In addition, it aids those countries that require it, concerning the training of personnel involved in maritime and port security.

Another important aspect is its participation in the International Reciprocal Visits Program on Port Security matters, carried out by the United States Coast Guard. This program aims at sharing experiences, suggestions and best practices regarding the implementation of the ISPS Code.

Finally, the Prefecture meets functions of public security in the areas mentioned in the preceding paragraphs and in any other places of the national territory where the National Executive Branch - through the Ministry of National Security - makes it available.

In this sense, the implementation of the Operational Borders has meant an extension of the scope of responsibility assigned to the institution in order to increase the surveillance and control of the terrestrial, fluvial and air space of national jurisdiction in the northeastern borders and northwest of the Argentinean Republic, as well as the apprehension and trial of illegal raiders. This is the exercise of police power, aimed at maintaining public order and internal security.

In the international context, the Argentinean State has been a member of the International Maritime Organization (IMO) since 1953 and is part of the “B group” of countries, given its long history and integration with the maritime community. For this reason, the Prefecture maintains the commitment to accompany and assist the Argentinean delegation within this organization, with the firm objective of unifying criteria and achieving adequate levels of maritime safety, port and environmental protection.

Since 2009, this institution has permanently had a senior officer as technical advisor to the Argentinean representative to the IMO. In addition, members of this Maritime Authority have chaired committees and subcommittees currently exercising a chief officer, the vice-chair of the Maritime Safety Committee.

The Argentinean Naval Prefecture participates in other international organizations such as the Committee of Experts on the Transport of Dangerous Goods and the Globally Harmonized System of Classification and Labeling of Chemicals (UNECE) and the International Telecommunication Union (ITU) where he advises the Argentinean delegation to the IMO of the joint IMO/ITU group of experts on maritime radio communication issues.

About the International Mobile Satellite Organization (IMSO), the Prefecture is the international coordinator of the Long-Range Vessel Identification and Monitoring System (LRIT). As responsible for the operation and maintenance of this system, it integrated this tool to other technologies as one of the fundamental pillars within the system of positioning and ship positioning.

In relation to the Common Market of the South (MERCOSUR), the Prefecture participates in the meetings of “Ministers of the Interior and Security of Mercosur” and of “Heads of Police and Security Forces of Mercosur and Associated States”.

The Prefecture also participates in the meetings of the “Interpol Regional Office for South America” on topics related to its specific role. It is also part of the Operational Network for the Cooperation of Maritime Authorities of the Americas (ROCRAM), which is the regional body through which maritime authorities act in different levels of cooperation. The institution held the (rotating) secretariat in the biennium 2010-2011. It should be noted that during the fourth ordinary meeting of the ROCRAM (1992), the Latin American Agreement on Vessel Control was approved by the Port State (Viña del Mar Agreement).

Conclusion

The Argentinean Naval Prefecture contributes to ensuring maritime safety, port and environmental protection, conservation of natural resources and public safety, facilitating international shipping in safer conditions.

Through its permanent actions, the national maritime authority directs its efforts towards the performance of functions that are considerably heterogeneous and which are aimed at fulfilling strategic objectives with a multidisciplinary content. It has a high technical and professional specialization that is complemented by the deployment of means and advanced technology. This has allowed the Argentinean State to be recognized within the concert of nations with an extensive maritime tradition.

This demonstrates the benefits of having a multifunction agency; an agency that brings together the different tasks of the maritime administration exercise in relation to maritime and port security in order to generate a better platform to face the threats in an agile and efficient way.

We are convinced of the need for all Maritime Authorities to join forces in order to deal with transnational organized crime, materialized through drug trafficking, terrorism, human trafficking and smuggling of migrants.

IMPACT OF MARITIME SECURITY IN RISK PREVENTION AND REDUCTION

PH. D.

MAXIMO Q. MEJIA JR.

DIRECTOR OF PHD PROGRAM AND HEAD OF MARITIME LAW & POLICY

He is a Doctor in Philosophy from the University of Lund. His dissertation was on “Law and Ergonomics in Maritime Security.” He holds a Master’s in Marine Safety Administration from the World Maritime University; a Master’s of Arts in Law and Diplomacy at Fletcher School. He also has a Bachelor’s Degree in Engineering from the University of Lund and a Bachelor’s Degree in Science from the United States Naval Academy.

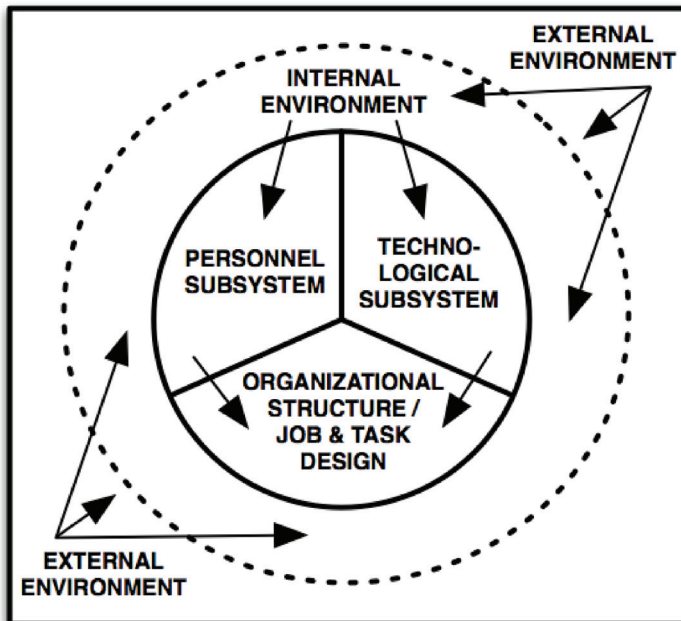
He serves as Director of PhD Program and Head of Maritime Law & Policy at the World Maritime University, where he was a member of the resident faculty. He was the Commanding Officer of Port State Control Office Manila. He served as Commander of the Coast Guard Station Iligan; Deputy Executive Director of the Presidential Task Force on Maritime Development, and Assistant Chief of Staff for Navigation Safety. Professor Mejia has also been a lecturer and speaker in more than 30 different countries in all of the world’s continents except Antarctica. He is author and co-author of more than 60 published papers, editor and co-editor of 7 books. Doctor Mejia’s focus areas of search and teaching are maritime policy, maritime labor law and policy, human factors and security-related issues. He also serves as an Associate editor of the WMU Journal of Maritime Affairs.

He served as Administrator of the Maritime Industry Authority in the Philippines. Dr Mejia was chief architect and implementer of a comprehensive reform of the country’s maritime education, training, and certification system as well as other wide-ranging maritime safety improvement programs. Lloyd’s list included Dr. Mejia on its list of the world’s Most Influential People in the Shipping Industry.

Before discussing the impact of maritime security on risk prevention and reduction, it is very important to briefly discuss how risk prevention and reduction have evolved during the twentieth century in the context of a more fundamental concern that is: maritime safety.

As we all know, the international legal framework promoting maritime safety is rooted in the disaster of the Titanic, and from there we have seen different versions and iterations of the SOLAS Convention. The common theme really, among these different versions, is a great reliance on science and technology to reduce risks. The idea was that if we equip the ship with science and technology, then it would be unsinkable. In fact, decades after the first conventions were adopted at IMO, there was still a great deal of frustration because of the number of significant and major maritime accidents that were being reported in the world's seas, and this sent the maritime sector into a soul-searching phase when it asked itself, "we have all this technology, we have these wonderful conventions, so why do the ships keep sinking?"

The answer to the question was, that while the industry was focusing heavily on science and technology, it paid little attention to another very important part of the ship, and that is the human element. Indeed, studies in the 1970s and 1980s began to reveal that at least 80% of accidents involving ships are directly related to human error. This led to a paradigm shift in the 1980s.



Looking at the ship as a socio-technical system, composed of a personnel subsystem (i.e., the crew) a technological subsystem (i.e., the equipment and systems on board), attention must be given to joint design. Otherwise, if one subsystem is designed without regard to the other subsystem, then the end result is an unsafe ship. In other words, we could have the most advanced ship in the world, technologically speaking, but if people are not properly trained and qualified or still do not perform their duties properly on board the ship, then that brand new and advanced ship is no safer than any rusty bucket out there.

Meanwhile, accidents still continued to occur. After much frustration, this eventually resulted in the introduction of risk-based decision making as a mandatory activity or exercise on board ships. This was introduced by way of the ISM Code. This is simply a background that I wanted to establish as to how maritime safety concerns were tackled in terms of risk reduction and prevention on board ships. Having laid out that background, we can now focus on reviewing the impact of maritime security.

What is the impact of maritime security on risk reduction and prevention on board ships? To answer this, we will have to revisit the manner by which IMO traditionally approached maritime security issues. The traditional approach at IMO was basically to avoid the issue of security as much as possible. The most significant reason for this stance was that the mandate of IMO as an organization centered on the prevention and reduction of safety-related accidents – not to security-related issues. Weighing almost as heavy as this, however, was that fact that security was seen as a very politically charged issue – something perhaps better suited to the United Nations Security Council. An example of the traditional approach is the IMO's action as a result of the Santa Maria incident of 1961. The Santa Maria was a Portuguese trans-Atlantic passenger liner that was hijacked by Portuguese political dissidents demanding the ouster of the Estado Novo government. The incident resulted in the death of one officer on board the ship. Despite the great tension created by this loss of life and the fact that the Santa Maria, with 600 passengers and 300 crew, went missing for a fortnight, no mandatory international maritime instruments or standards were adopted at IMO.

This approach began to change in the 1970s and 1980s when so-called liberation movements began to carry out terrorist attacks. While most attacks were on land and air, these eventually also spilled over into the maritime industry. The most prominent maritime security incident took place in 1985, when Palestinian Liberation Front operatives hijacked the Italian cruise ship Achille Lauro. This marked the beginning of a paradigm shift because unlike the Santa Maria incident, the Achille Lauro resulted in some very important initiatives at IMO, most prominently the International

Convention for the Suppression of Unlawful Acts against the Safety of Navigation (SUA Convention) of 1988. This effectively defined the offense of unlawful acts against of safety of navigation. IMO remains very careful about the political implications of delving into security-related territory by giving the terrorism-related convention a name or title that has ostensibly nothing to do with terrorism.

While the IMO defined the offense through the SUA Convention, the associated measures that were developed for the prevention and reduction of maritime security risks were not mandatory. These measures came in 1986 by way of MSC Circ. 443, which were intended to assist IMO member states in reviewing and strengthening port and onboard security. MSC Circ. 443 saw the introduction, albeit on a non-mandatory basis, of maritime security-related risk, threat, and vulnerability assessments on board ships. Nonetheless, as it turns out, these measures would eventually find themselves in a mandatory instrument some fifteen years later as a consequence of the 9/11 terror attacks against targets in the United States.

The 9/11 attacks resulted in a UN Security Council resolution, and subsequently an IMO assembly resolution, both in 2001, calling for the development of measures to protect ships and people from threats of maritime security. This culminated in the adoption of the International Ship and Port Facility Security (ISPS) Code. There is a clear thread between the Achille Lauro and the 9/11 incidents because the mandatory ISPS Code is actually based on the non-mandatory MSC Circ 443.

The ISPS Code, just like MSC Circ 443, centers on the development of a shipboard/port facility security system, particularly the ship/port facility security plan and its associated ship/port facility security assessment. Conducting a security assessment involves risk identification that will form the basis for the development of security measures in the ship/port facility security plan.

One of the most relevant questions to ask in terms of maritime security today is whether the industry has been successful in promoting maritime security through an instrument that requires a formal exercise of risk prevention, and reduction measures on board the ship. Has the ISPS Code been successful? Has the ISPS Code achieved its desired result, which is maritime security, the status of being protected against illegal acts such as piracy, armed robbery, terrorism and maritime violence through measures taken by maritime administrations of ship owners and operators, port facilities, offshore installations and other maritime organizations?

One way to answer this and to measure the effectiveness of the ISPS Code is to look at the outcomes and outputs. The outputs are more easily measurable; these are the most tactical elements of implementing the ISPS Code. This

may involve, for example, a statistical analysis of port state control inspection reports to study whether ISPS-related non-conformances are increasing or decreasing. However, such statistical analyses might shed light only on very superficial manifestations in terms of the effectiveness of the ISPS Code. One might argue that the outcomes, i.e., the more strategic elements of the ISPS Code's objectives would be more instructive. Do we have an improved maritime security situation today? Are we safer? Does shipping feel more secure nowadays?

Based on the answers and results, we might look to an analysis that will answer further questions. Are we seeing the development of a maritime safety culture on board ships? An extremely difficult question to answer relates to whether and how many terrorist attacks have been prevented or averted because of ISPS. Is management more committed to security today? Again, very difficult to answer. Perhaps on paper yes, but in practice, are they?

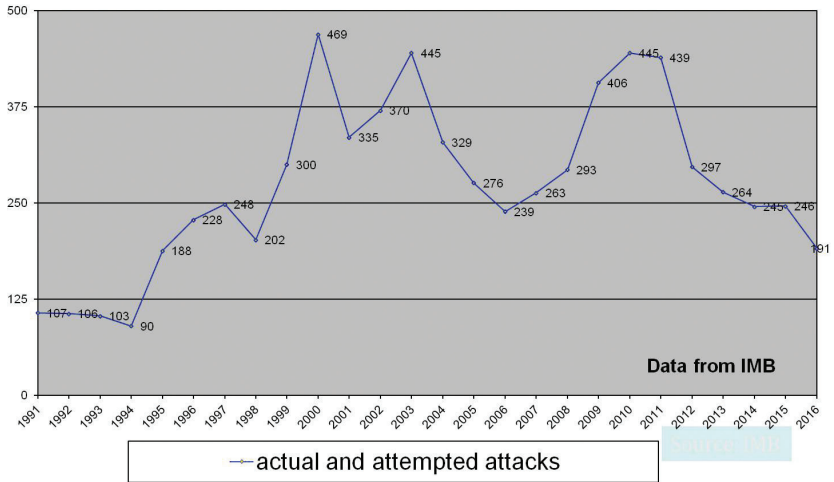
It is very difficult to evaluate success, because there is no acceptable model or formula that can be used to evaluate, predict, or calculate how many incidents the Code has prevented. Is the fact that there are no major maritime terrorist events a sign of success? We probably should take it that way although in fact, it is very difficult to give a scientific basis to such a conclusion if we simply review statistics related to maritime terrorism. A review of the database will show that most maritime attacks on record are related not to terrorism, but to civil war and similar domestic strife. (Figure 2)

Statistics for piracy and armed robbery attacks are much more readily available, thanks to organizations such as the International Maritime Bureau (ICC-IMB) and the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP). We have seen many ups and downs, referring to the number of attacks and attempted attacks around the world.

The problem of piracy and armed robbery against ships reached their highest levels off the coast of Somalia in 2011 and 2012, and subsequently experienced a decline in the number of attacks. Even Southeast Asia has experienced these reductions. (Figure 3)

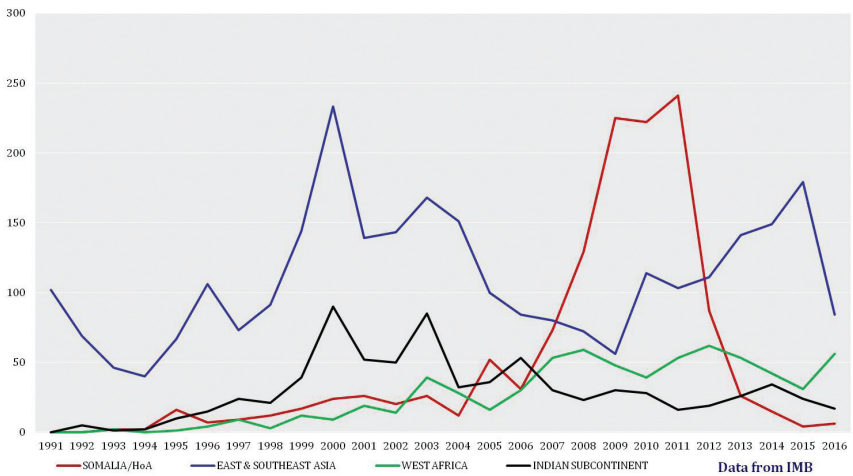
Going back to risk prevention and reduction – we could say that the problems of maritime security (the risk that 9/11-type terror attacks might spill over into the maritime, and also the real risk of piracy and armed robbery against ships) have led to the increased application of principles of risk prevention and reduction, and risk-based decision-making in the maritime industry. This is evident, not only in the ISPS Code, which arguably embodies this approach more than any other instrument. The industry has developed

Piracy attacks worldwide (1991-2016)



(Figure 2)

Piracy attacks worldwide (by region)



(Figure 3)

Maximo Mejia 22-23 august 2017 Veracruz, México.

security for its ships against piracy and armed robbery. A security culture seems to be evolving on board ships, thanks not only to ISPS but also the new maritime security training requirements in the STCW Convention's 2010 Manila Amendments. One can even see examples of this in real life. Some of you may have read the case of the luxury cruise ship *Sea Princess*, which was transiting through waters off Somalia. The cruise ship undertook a ship security exercise that began to worry the passengers. When in fact the crew explained to the passengers what was taking place, it became very clear that a security culture was developing on board the ship.

So, where does this leave us in terms of maritime security concerns? We are seeing some manifestations of success, or at least utility, in risk prevention and reduction measures, albeit without the benefit of a sound scientific basis. It is obvious that we still need to conduct more studies and research on this. We are definitely seeing some success, though there is no room for complacency. History has shown us that as soon as the world forgets that maritime violence is a threat, then they will start to rise again in different parts of the world. Transport will still be used as a vector for terrorism, though this is not visibly apparent in the shipping sector today. Alas, only in this month of August 2017, we have seen three high profile vehicular attacks, one in France, one in the United States, and one in Spain. In the rest of the world, at least fourteen cars and pickup trucks were used in bombing attacks, again all of which took place only in the first three weeks of August.

Let us heed the warning carried in the phenomenon of the unrocked boat. There is a tendency that long periods of being free of serious incidents – whether related to safety or security – would lull us into complacency and a false sense of contentment that could eventually lead us to a consistent reduction in the levels of safety and security.

I wish to end with an attempt to connect my presentation with the theme of today's World Maritime Day, that is, Connecting, ships, ports and people. I would argue that the ISPS Code, which promotes maritime security, embodies this connection. Within the context of a mandatory international legal framework, it is the first one that actually brought together ships (and shipping companies), ports, and people (seafarers); united and connected through the three principal personalities of the ship security officer, the port security officer, and the company security officer.

Thank you for inviting me to participate in this important event. I am deeply grateful for the warm hospitality of the Mexican Navy. Indeed, the memory of this visit will remain embedded in my heart for a long time to come.

PANAMA CANAL, ITS EXPANSION AND IMPACT ON THE INTERNATIONAL MARITIME TRADE

M. A.

OSCAR EUCLIDES BAZÁN VELASCO

VICE-EXECUTIVE PRESIDENT FOR COMERCIAL PLANNING AND DEVELOPMENT

He holds a degree in Business Administration from the University of Panama. He completed his postgraduate studies in Strategic Management and a Master's in Maritime Administration and Marketing at the Latin American University of Science and Technology in Panama.

He served as an official spokesperson and active participant in the development of the Panama Canal Expansion Project's Outreach Program, the most transcendental and historic project of the Panamanian nation.

He has participated as speaker in numerous courses, seminars, forums, congresses and conferences of the maritime industry, transport and logistics, both in Panama and internationally.

He has taught at different public and private universities nationwide. He is an active member of the Panamanian Association of Supply Chain Executives.

Currently, he is executive vice president of Commercial Planning and Development for the Panama Canal.

Panama is a pivotal player in everything taking place within the regional and continental arenas due to the fact that it is an access point that facilitates the transit of vessels through an interoceanic way. Today, it is my turn to share with you a bit of history in this regulatory context, part of what the maritime activity is from the commercial point of view. Before I begin, I would like to present some of the profile of this country that made the decision to extend the canal - through a referendum in 2006 - that after 12 years has had a positive impact.

Panama had a 19 billion dollars GDP and after those 12 years we have actually reached an economy of 56 trillion dollars. This is not something for us to show off about, Commandant Linda Fagan said that we are officials and that we must be transparent with the citizens who chose us and who we are serving to. When we show these figures, the most important thing is to demonstrate that there is an improvement in the quality of life of my fellow citizens; well-being that is not only said but also worked out to be generated.

The main problem we face nowadays is not the planning but the execution of what is projected: Why the widening of the channel? This was really a project motivated by a stringency of demand that forced us to do it “either you expand or die”. Imagine a country with an economy (12-years ago) of only \$19 billion dollars, taking up a \$5 billion dollar project, equivalent to 20% of what the country produces. One has to visualize such a decision.

We were just about to reach the maximum capacity of the Canal and we knew that if we did nothing, then we would eventually go down in history as a Canal that simply crosses small ships: that was the “x-ray” picture we put ourselves through. However, by analyzing the period from the early beginnings of the Canal in 1914 to 2017 we can see that the number of transits has been fairly stable since the 70’s, and the reason for this is that the average size of the ships has been growing, transits have been maintained and tonnage has increased. What did this enlargement imply? The difference consists in the following: In the past, a panamax vessel, which could scarcely transport 5,000 TEUs today this can be multiplied by 3. This capacity makes brings competitiveness not only to the Canal, but also to the whole region including Mexico.

From the year 1939, the Americans thought about expanding the Panama Canal and excavations began. At that time, they still had not won World War II and their aspirations were to pass the aircraft carriers from one place to another. At the end of World War II and having positioned themselves on European territory, it was no longer necessary to expand the canal so the excavations remained there unworked for more than 70 years. These same excavations are the ones that the Panamanian State decided to make use of in order to expand the canal and they are the ones we know nowadays.

The expansion of the canal lasted for 8 and a half years; after that time, it was possible to see large vessels pass through it. One of those was the Chinese ship COSCO Shipping Panama, a 9,200 TEUs vessel; Mers vessels with a capacity of 4,800 TEUs. On the opening day we had a ceremony with visitors from 36 different countries and more than 60 correspondents, there was an attendance of 39 thousand people on such a significant day for the Panamanian people. Yesterday, a ship that sailed from the Samsung Heavy Industry of Korea traveled through the Panama Canal; it crossed 6 ports in northeastern Asia and left Shanghai direct to Panama carrying 14,891 TEUs - which represents 80% of the capacity of the ship-.

This transformation of the maritime industry leads us to think and digest what is happening. What is the future impact? For us, the expansion of the canal suggests that there are duties and responsibilities; this expansion lets us read that scale economies will continue to develop. Why? Because the objective is to have the cargo transported from its point origin to its destination at a lower cost per unit. There is more transshipment activity, new routes, new goods, new commodities that are already offered, but that also impose additional capacity needs not only container terminals, but also in railroads, vehicles and multipurpose port terminals.

In this context there are opportunities of all kinds, maritime industry, auxiliary, energy, logistics, added value, among many others. When I started in this industry, 40 years ago, only those that were related to cargo transportation were close to the ports, today they are not. This has become common thing and everything forming part of the supply chain is involved in one way or another with transportation.

The Panama Canal continues to be the dominant route or the most important one in the American Continent, however, everything that is originated in northeast Asia and whose destination is the US East Coast has begun to reach Mexican ports. The other important routes are the North-South ones: One that goes to the US East coast and another one that goes to Europe. There are also other outstanding routes such as the West coast route of Central America and the East coast route of the United States and Canada.

Against whom does the Panama Canal compete? If you see this graph, we can see that from the end of the century the cargo was a constant domain. We can recall that in 1982 the APL shipping company had the boldness to build a larger ship, with a breath that exceeded the limits imposed by the Panama Canal. With 110 meters of breath, this ship would not be able to transit through the canal and started unloading operations in the ports of the West coast, hence the name postpanamx-neopanamax.

This began to reduce the flow of cargo, and active ports in the East coast of the United States began to raise and to add up to the tonnage. Thus the Canal in Panamanian hands designed a strategy to recapture that cargo. The result of these actions was that there was a dominion up to the years 2009-2010 of all the cargo from northeastern Asian to these places.

However, why is the canal limited? Because the ship building industry decides to design larger ships, which starts a race to increase the tonnage of the ships. I read yesterday that the shipping company CMA CGM has just put an order of 9 ships to a Mexican shipyard with 22,000 TEUs capacity, in other words, this is a topic that continues to change and imposes us to see that there are challenges we have to be ahead from and there are others to be addressed. On the other hand, that is not the only competition that the Panama Canal faces, given the limitation of being able to accommodate larger vessels, a competitor has arisen capturing some of our routes: The Suez Canal. According to the figures, in 2009 we began to lose clients and they began to capture our market, due to the inability of the Panama Canal to transit greater tonnage or larger vessels.

When experts from the shipping industry began to see the expansion of the Panama Canal to be a reality, several consultants made studies: Drewry Shipping Consultants with information from the Boston Consulting Group concluded that there would be a shift –a change in captured tonnage on the West coast of the United States to production centers on the East coast of the United States- and the change was going to take place gradually; initially it was estimated to be at 10% in both the medium and long terms- and the cargo would be totally balanced.

We see this as follows: There is a trend in the Midwestern states of the USA that goes down to the south, an overall area that generates 15% of US GDP. That 15% was going to suffer a significant change in its transport, and we have seen it, this begins to be so as a result from the expansion of the Canal where the territorialities of the cargo start to be seen. Traditionally the cargo of the Panama Canal was all generated from the Mississippi River to the East; now with the expansion of the Canal and with the advantages offered by scale economies and the reduction of costs per unit of transportation, it has been possible to capture 7 states on the West side of Mississippi River. We have seen an increase in the tonnage that moves the Panama Canal, we have significantly modified it from one year to another. One of the things that we begin to see and to feel in a very detailed manner is the connectivity of online services through the Canal.

However, we had to see if there was going to be a scoring of the load when the Panama Canal was opened; we expected to have large ships. What was going to happen? Would there be a significant transformation in

the industry? That was a topic for analysis and research. We did a deep research of the fleet's composition from each of the market's segments, to each of the 9 types of ships and not only to the container ships. We had to see what would be the migration of the load to neopanamax ships that were using the Canal's route and which also were working in the import and export markets.

In this research, it was concluded that 14 out of the 31 current services existing before the expansion of the canal were going to stay as panamax services, and later, we were going to see a migration or scoring of 15 services to neopanamax services, for a grand total of 29 services through the canal. The interesting point is that we grew from 12 million TEUS capacity to 16 million TEUS, in both directions in just about 13 months. We cannot unlink totally the long routes because our region –including Mexico– is subject of observation and feeder ships to ports are the ones that in some way they connect or interrelate with the canal, the region and with some other ports of Central America, Mexico and with the north of South America. In light of this, we do not only see the sector of container ships, we see and analyze all other sectors but also the ones oriented to the oil industry.

You know that the USA in 2010 stopped to be a simple importer in order to become a net exporter of hydrocarbons; their great power comes with schist gas –better known as Shelf gas–, it has almost all USA mined. However, it was believed that the Obama's administration would not permit the construction of terminals of natural liquefied gas and its first period 5 terminals were approved, 2 of which are already working – out of the 31 that have the potential to grow.

This modifies all consumption patterns and all source patterns about energy issues. Some people may wonder why crude oil does not rise, and the answer to this is because there is not a cleaner fuel to start focusing on. With the implementation of the ECA zone in 2020, all ships will have to integrate or to be designed for using a cleaner fuel. In some way, the change will be done as fretting challenge to use this type of fuel.

Mexico has become an important client and not a user. In the Panama Canal– we have learned to differentiate what a client and what a user is. The client is the country; the user is the maritime operator. Mexico has had a transformation in the manufacturing area. In 2011 three important factories decided to install themselves in the country and in October 2014, they started to export massively from Mexico. The production at that time was 664 000 units for exports; last year, they ended up with 2 million units for exportation; by 2020, there will be 15 manufacturing factories in the

Middle East, USA and Europe, with an export capacity of 5 million units. In other words, the importance that Mexico has in terms of manufacture and the potential in foreign trade is remarkable.

This way, the canal plays an important role because there is an important inflow related to cargo that is moved by railroad, a load that is transported from Veracruz through Tuxpan, from Altamira, to the markets of higher consumption. Also, the Canal is also an incentive to this volume of exportation; we have seen the biggest ship ever built to move vehicles, the Target, which already navigates regularly and calls to Lázaro Cárdenas port. In tourism, passengers also have a new destination; this is important because it redesigns the entire route and brings attraction, makes Mexico an important destination for tourism purposes.

What boosts all of these? In the last 19 years, the welfare of our Latin American region has been an important element for this:

1. The reduction of poverty rate and the increase of the middle class has been significant.
2. The population is growing at an average rate of 19% per year; in other words, Latin American population for the year 2030 is going to reach 700 million inhabitants; when in 1995 including the USA and Canada, we were 725 million inhabitants. This says that there is a captive market which we have to maintain and whose demands must continue to be met.

The Importance of Mexico to Panama

Mexico had not been ranked within the first 15 places of importance to our country and since last year, it ranked within the top ten on our list, Why? This is basically so because there are 3 things taking place in Mexico:

1. Natural liquefied gas starts to become an important commodity.
2. Vehicles exports increased.
3. Semi heavy industry goes back to Mexico and the Panama Canal supports it by identifying those flows.

In this way importation is made easier, there is cost reduction and a platform designed for the exports of the region which promotes interregional trade. Finally, I want to leave the message that inefficiency is our cancer. If we can harmoniously manage exporters, benefit shipping companies, operators, importers, and thus solve inefficiency, we will count on a chain of supplies working in favor of the population. Connectivity plays an important role and related to that, there are new markets that you already know. There has been a discussion about ships, ports and people in this presentation. It is at ports where the activity of Panamanian State take

place. Nowadays, we see that there are ports aimed at finished products that rank between 2 to 5 million. In Latin America there are 6 ports and 3 in Panama. By 2040 the number of ports from 2 to 5 million is going to grow to 12 million; those from 5 to 10 million will grow to 14 million; and there will only be 3 ports above 10 million.

We are talking about of barely 22 years and 3 ports that will surpass that amount: 2 in Panama and 1 in Mexico. It is important to take note.

I would once again like to express my gratefulness to the Mexican Navy and to all of its officers here today and to the ININVESTAM organization committee. You have been such great hosts.

Thank you.

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